

INTERNATIONAL PROPERTY RIGHTS INDEX

# 2010 REPORT



Study conducted by Victoria Strokova, 2009 Hernando de Soto Fellow  
with contributions by: Barun S. Mitra; Deborah Espinosa and Renée Giovarelli; Leon Louw; Joseph Quesnel;  
Andrea Rondón García, Luis Alfonso Herrera Orellana, and Tomás A. Arias Castillo; Carlos Ignacio  
Gutiérrez and Alberto Saracho; Tim Wilson; and Waldemar Ingdahl



A Project of the Property Rights Alliance

# 2010 IPRI PARTNER ORGANIZATIONS



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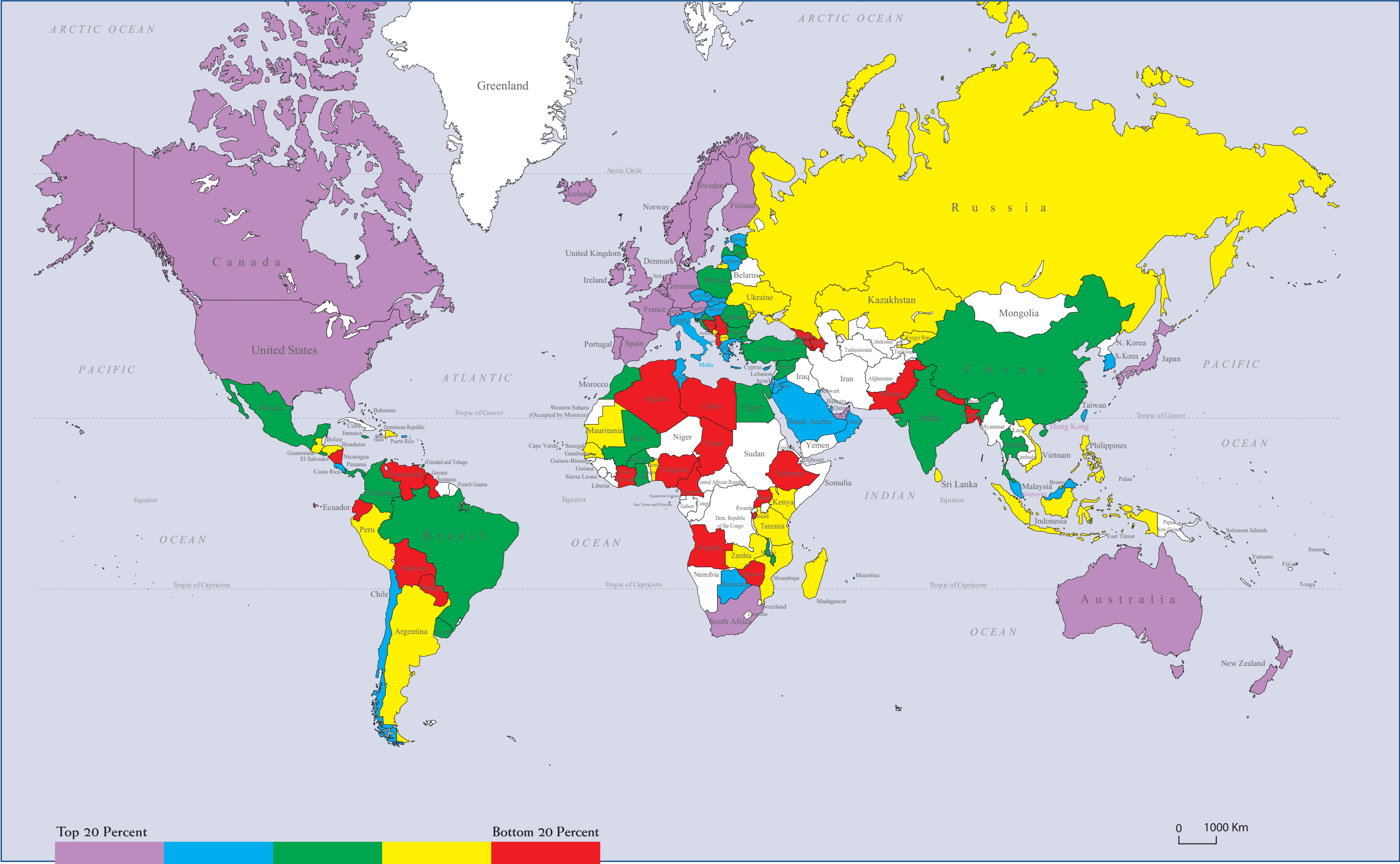


A Project of the Property Rights Alliance

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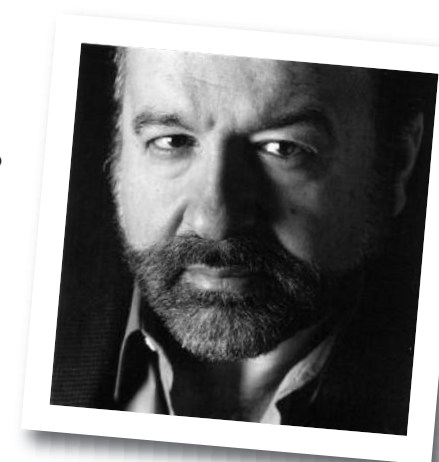
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## LETTER FROM HERNANDO DE SOTO



In 2007, the Property Rights Alliance, under the Hernando de Soto Fellowship program, released the first *International Property Rights Index* (IPRI). The Report aims to create the most comprehensive and detailed evaluation of private property rights worldwide. The 2007 IPRI scored and catalogued the state of physical and intellectual property protection in 70 countries. Now in its fourth edition, the IPRI has grown to include careful examination of 125 countries.

Each year it becomes more apparent that economic well-being is inextricably tied to the protection of legal property rights. The 2010 IPRI again demonstrates a strong correlation between countries that enjoy the most economic prosperity, and those countries that feature robust property rights systems. The fourth edition of the IPRI reveals encouraging signs of improvement in some countries, while also bringing attention to disturbing trends in others. As a result of four years of data collection, we can now see a more nuanced picture of the state of property rights in each of the scored countries.

While the importance of property rights to economic health is more widely understood than ever before, considerable room for improvement remains. Generally, the developing world suffers from weak protection of physical and intellectual property rights. It is essential to extend these protections to all people, but most especially those in dire economic circumstances. Efforts such as the IPRI help educate politicians, academics, and entrepreneurs about the serious need to promote property rights worldwide.

The production of the IPRI requires collecting and making sense of vast amounts of data. This task is made all the more difficult in countries plagued by informal market activity – the very countries that need property rights protection the most. I congratulate de Soto Fellow, Victoria Strokova, for her tireless work to develop, research, and produce the 2010 edition of the *International Property Rights Index*.

Warmest regards,

Hernando de Soto  
President of the Institute for Liberty and Democracy  
Lima, Peru

## LETTER FROM THE EXECUTIVE DIRECTOR OF THE PROPERTY RIGHTS ALLIANCE

As has been stated many times before, the importance of individual property rights is immeasurable. In a time when excessive governmental regulation in the private sector further infringes upon our right to private property, it is important to bring light to this issue and make known the repercussions that these regulations have on personal liberty.

The Property Rights Alliance (PRA), in collaboration with our international partners, is proud to present the fourth edition of the *International Property Rights Index* (IPRI). The purpose of the IPRI is to measure the level of property rights in countries across the world and to highlight the importance of property rights in securing the economic well-being of these countries. Now, more than ever, the issue of property rights must be emphasized to ensure that policymakers around the world make decisions which further the protections of property rights, both physical and intellectual. By doing so, economic success is ensured.

Economic well-being and property rights are positively correlated. This correlation is due to the fact that innovation and investments grow the more the citizenry is assured of the protection of their property. In countries where there are low levels of property rights, many innovators move to developed countries with a broader private sector. The movement of these innovators discourages economic growth in the countries from which these people migrate. It is important that lawmakers in developing countries begin to understand the immutable link between economic growth and property rights to ensure a healthier economy, domestically and internationally, in the future.

As many people across the globe are continuing to see their basic property rights stripped away from them in the shadow of a global economic crisis, we hope that this year's IPRI will be a useful device to politicians, academics, and think tanks to advocate for reforms that will positively affect the global populace by ensuring basic property rights.

We would like to thank all of the partners and other contributors for all of the hard work that they put into the development of the 2010 IPRI. Additionally, I would like to thank the author of this year's index, Victoria Strokova, for her time and dedication to the success of this project.

We would also like to give a special thank-you to Hernando de Soto whose commitment to furthering the cause for property rights has inspired PRA's Hernando de Soto Fellowship program. His vision has helped make the 2010 IPRI possible.

Best regards,



Kelsey Zahourek  
Executive Director of the Property Rights Alliance  
Washington, DC

## FOREWORD

*By Barun S. Mitra, Liberty Institute (India)*

The crisis that has shaken the financial world over the last two years is ascribed to many failures – from easy money, human greed, or a lack of government oversight to the lethal financial derivatives created by financial whiz kids. While relevant, much of the public discourse has ignored a fundamental cause of the present economic woes. In my view, this financial crisis is the consequence of distorting or altogether disconnecting the relationship between property and ownership.

A modern economy is built on clear ownership of property whether tangible or intangible – be it land, shares, or intellectual property. It requires a commonly accepted form of documentation of that ownership, an easy method of trade of ownership and transfer of property, and an unencumbered market where the transactions can be undertaken leading to the discovery of the price of the asset concerned. Once that chain of ownership is lost, it becomes almost impossible to assess the real value of the asset.

Hernando de Soto, the noted economist who unveiled the secret of property in his book *The Mystery of Capital*, recently wrote:

Look around: everything of economic value that you own – house and car titles, mortgages, checking accounts, stocks, contracts, patents, other people's debts (including derivatives) – is documented on paper. You are able to hold, transfer, assess and certify the value of such assets only through documents that have been legally authenticated by a global system of rules, procedures and standards. Ensuring that the relationship between those documents and each of the independent assets they represent is never debased requires a formidable system of legal property rights. That system produces the trust that allows credit and capital to flow and markets to work. (De Soto, 2009)

The first time bomb that exploded in the dramatic chain of events leading to the financial crisis was the U.S. housing market. It had long been in a boom phase supported by public policy aimed at widening home ownership and facilitated by an elaborate network of financial institutions. Whether owned by the U.S. government (such as Ginnie Mae), implicitly supported by it (such as Fannie Mae and Freddie Mac) or entirely private, these institutions created an ever more elaborate chain of securities that funneled savings from across the world into securities that were issued against mortgages taken out by U.S. homeowners.

Originating in single, often modest loans taken by U.S. families, these mortgages were packaged by banks into so-called MBSs (Mortgage-Backed Securities). Beginning in a small town in Texas, for example, a retail bank would bundle its mortgages and transfer them to a regional office. Within days, often hours, the paper would find its way to New York where one of only six rating agencies would slice the bundles into layers of securities. The rating agencies would determine what proportion of the securities should be rated AAA (the safest, with correspondingly low interest rates) based on statistics of housing loans over the earlier decade and how the remaining paper should be pegged down the ladder of safety – and up the ladder of return.

Thus rated, the paper would be offered to buyers across the world – whether banks, hedge funds, or pension funds. Having traveled at the speed of the Internet from a U.S. suburb to a small town in Germany, the securities were essentially 'virtual' in nature. The savings institution in Germany had no way to assess the risk underlying the paper it owned except via the rating stamped on it in New York. This risk assessment was frozen in time and in turn derived from a series of historical default rates generated during a period when U.S. home prices were on a steady upward path. When the downward slide began as often happens with all asset booms, there were no reliable mechanisms to reassess the risk underlying the securities.

The current financial troubles illustrate the tragic consequences if the relationship between property and ownership is blurred. For instance, the stock market operates on the basis of the continuous disclosure of financial performance of companies and has the facility to trade such information in comparison to other assets. These institutions allow for the price of the asset to be discovered. If the chain of ownership is lost, it becomes almost impossible to assess the real value of the asset. This is precisely what happened with the MBSs.

It seems quite clear that the political attempt to promote housing in the U.S. and easy money policy stimulated the growth of new financial derivatives by repackaging many doubtful mortgages. As on earlier occasions when snake oil charmed the investors of the 19<sup>th</sup> century or the seduction of the French by the Louisiana Company in the 18<sup>th</sup> century, the housing boom in the U.S. in the early 21<sup>st</sup> century apparently created such a sense of euphoria among investors that they failed to keep tabs on the paper trail of ownership. Thus, investors lost track of the real value of the underlying assets. But unlike in the previous centuries, today, real estate is a much smaller part of the broader economy. Also, the world economy is presently much more integrated and, therefore, dispersed and diverse. Consequently, the world economy seems on a recovery course in less than two years despite the economic turmoil.

While world attention is focused on the economic situation in the U.S. and other developed countries, the situation also underscores the perpetual economic crisis in many developing nations and poor communities. In these societies, recognition of property rights and respect for ownership are weak, and a title document is often non-existent. Typically, these are places where informal economic activities dominate. But the consequences are very similar in both – lack of credit. The ironic problem of the poor is not that they do not have assets; instead, they are unable effectively to capitalize their assets. The present crisis demonstrates that the rich are equally vulnerable to being unable to capitalize their assets if they lose their connection to the real economy and the clear titles that it requires.

Fortunately, the developed countries that have a well established system of property rights are in a much better position to deal with the present turmoil. Despite all the talk of this being the most serious economic crisis since the great depression of the 1930s, one has not seen the streets of London or New York lined with the unemployed or impoverished outside soup kitchens. The enormously larger capital base in these countries today enables them to tide over the crisis with very little disruption. The problem seems to be that even these relatively small disturbances in an otherwise tranquil and predictable economic environment greatly magnify the perception of these disruptions, as the former stands out sharply in contrast to the latter.

Unfortunately, by this very similar process of perception, the perpetual economic crisis in poor countries where millions of people struggle to survive in an informal economic environment are seen as the norm rather than the exception. Unlike their counterparts in developed countries, the poor in less developed nations are paying a very real price for their inability to grow out of the informal economy – at times paying even with their lives.

A critical component of a functioning and stable system of property ownership is the property registration system. Typically, the government is the sole agency that surveys property, registers ownership, and issues the title deed. In such a monopolistic environment, it is not surprising that many governments tend to behave as rent seekers viewing the property registration system as a way to maximize revenue. By contrast, the registration system should be an instrument for providing protection, facilitating transaction of property, and enabling its capitalization. The present crisis in the rich world and the perpetual crisis in the poor world should encourage us to look for alternative ways of recording property.

For instance, all property, particularly tangible physical property like land and structures on it, is situated locally. Could the local community, with the support of agencies like banks and insurance companies, and private surveyors undertake the process of recording and registering property in a more efficient manner? One of the additional advantages of such a

localized approach would be for local people to gain a much better understanding of the need for recording and formalizing property ownership.

The present economic crisis, with its root in housing and property, provides a very good opportunity for people in rich and poor countries to take a fresh look at the significance of property rights and to renew our appreciation of a system of formal ownership of property. The 2010 *International Property Right Index*, a unique comparison of some of the key parameters measuring different aspects of property rights, therefore, acquires special significance in the current economic environment.

I hope future issues of the IPRI report will explore the possibility of including new parameters to better capture the information regarding recording and registering property and make it even more relevant for the people across the world.

#### Reference List

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We are particularly thankful for the continual intellectual and financial assistance of Grover Norquist and the Americans for Tax Reform Foundation (ATRF). Their support for the Hernando de Soto Fellowship program was instrumental in making the annual publication of the *International Property Rights Index* (IPRI) possible. Much is owed to the staff at Americans for Tax Reform (ATR) for all their assistance throughout this project.

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We appreciate the continued support and commitment of our partner organizations and welcome all our new partners.

Many individuals have contributed to this project in a variety of ways. To those not mentioned above, we are thankful for your support and effort.

**Victoria Strokova**, 2009 Hernando de Soto Fellow, Property Rights Alliance

**Kelsey Zahourek**, Executive Director, Property Rights Alliance

## PREMISE OF THE HERNANDO DE SOTO FELLOWSHIP PROGRAM

The *International Index of Property Rights* (IPRI) is a product of the efforts of the Washington, DC-based Property Rights Alliance (PRA). The PRA is dedicated to the protection of property rights (physical and intellectual) in the U.S. and around the world. The PRA is an affiliate of the taxpayer advocacy organization, Americans for Tax Reform (ATR).

Despite the growing accessibility of international data and research regarding property rights, existing indices and studies traditionally focus on either the physical or intellectual aspects of property rights. Additionally, most global indices are dedicated to broader topic areas instead of a focused debate on property rights. However, noted exceptions include the Heritage Foundation/Wall Street Journal *Index of Economic Freedom* and the Fraser Institute *Economic Freedom of the World*, which do address property rights, although in the context of assembling a larger snapshot of each country. To overcome the consequent lack of a more broadly defined property rights gauge, the PRA introduced the Hernando de Soto Fellowship in 2006. The annually offered fellowship provides continuous data development and concept improvement for the annual publication of the *International Property Rights Index*, presented here in its fourth edition<sup>1</sup>.

## ABOUT THE AUTHOR

Ms. Victoria Strokova received a Master of Public Policy degree, with honors, from the Harris School of Public Policy Studies at the University of Chicago. During her graduate studies, she worked with the Enterprise Initiative, a research program that supports rigorous methods to examine the complex process of wealth creation and the role of enterprise in alleviating poverty. Her other research pursuits include studying the relationship between competition law and trade liberalization and the impact of regionalization on free trade. Her master's thesis explored recent developments in the U.S. housing market.

In addition to her wide-ranging research experiences, Ms. Strokova has worked with grassroots organizations aimed at increasing property rights protections and fighting eminent domain abuse. In 2006, she was selected for a highly competitive Charles G. Koch Summer Fellowship, during which she expanded her understanding of the importance of property rights for freedom and prosperity. Ms. Strokova has a keen interest in advancing property rights in her native Russia as well as the rest of the world.

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Mr. Alberto Saracho is Fundación IDEA's founding Executive Director and is currently its President. Before coming to Fundación IDEA, Mr. Saracho worked as a researcher at Harvard University's Mexico Project. Specifically, he worked on the report *Going Local: Decentralization, Democratization, and the Promise of Good Governance*. At Fundación IDEA, Mr. Saracho works on private sector development policy. He has worked on projects for the OECD, the Inter-American Development Bank, and USAID. His work includes papers and reports on SME policy, the informal economy, innovation, and intellectual property. Mr. Saracho holds a Master in Public Policy degree from the Harvard Kennedy School and a BA in Political Science and Public Administration from Mexico's Universidad Iberoamericana.

**Joseph Quesnel**

Mr. Joseph Quesnel is a Policy Analyst at the Frontier Centre for Public Policy. His career in journalism included several stints at community newspapers in Northern Ontario and completed internships at CFRA 580 AM and the Cable Public Affairs Channel. For two years, he covered House standing committees, as well as Senate committees. Currently, Mr. Quesnel writes a weekly column in the *Winnipeg Sun* and contributes to the *Taxpayer*, the flagship publication of the Canadian Taxpayers Federation. Mr. Quesnel is a graduate of McGill University, holding a BA in Political Science and history and a Master of Journalism degree from Carleton University in Ottawa.

**Tim Wilson**

Mr. Tim Wilson is the Director of the Climate and Trade Unit at the Institute of Public Affairs. Previously, he worked as a Trade and Senior Communication Consultant for ITS Global and SDA Strategic and as a Project Manager (Development) for the Australian APEC Study Centre. He has studied IP at the WIPO Academy, as well as Global Health Diplomacy and the WTO and International Trade and Development at the Institut de Hautes Études Internationales et du Développement. Tim is a member of DFAT's IP Industry Consultative Group. Mr. Wilson has a Masters of Diplomacy and Trade and a Bachelor of Arts from Monash University. In 2009, he was recognized by the *Australian* as one of the 10 emerging leaders of Australian society.

## ABOUT THE 2010 INTERNATIONAL PROPERTY RIGHTS INDEX

This report presents the fourth edition of the *International Property Rights Index (IPRI)*.

The IPRI is an annual study that compares countries in terms of their protection of property rights – both physical and intellectual. Like previous editions of the IPRI, the 2010 report seeks to investigate the effects of a country's strong legal and political environment, recognition, and enforcement of physical and intellectual property rights on the economic development of a country. This year's report compares 125 economies using these three variables as core components and ranks them accordingly.

Because of the expansion of some of the underlying data sources as well as the authors' efforts to collect some of the missing data, this year's index welcomes the addition of the following 10 countries: Georgia, Ghana, Côte d'Ivoire, Kyrgyz Republic, Libya, Oman, Puerto Rico, Saudi Arabia, Senegal, and Syria. Being both geographically and economically diverse, these countries significantly contribute to the comprehensiveness of the index. The addition of these countries, however, to some extent hinders a direct comparison of the IPRI rankings in this report to last year's report. The reader is reminded that some changes in relative positions of the countries could reflect changes in the sample of countries instead of substantive changes within a country's property rights regime. To enable assessing changes in countries' performance, the authors present new tables showing the changes in absolute scores for the IPRI and its components ([Tables 5-8](#)).

Since its inaugural publication in 2007, the authors have focused on identifying the data sources that best represent the strength of a nation's property regime while keeping in mind the necessity for consistency of the index. The 2010 index overwhelmingly uses the same components and data sources as the 2009 index and maintains consistency with the previous editions through using the same weighting scheme. Additionally, an extensive analysis of the previous years' data has been done to identify any issues that could hamper the comparison of scores across years. Specifically, where it was possible, previous years' scores were recalculated to account for any subsequent changes in data sources or methodology.<sup>2</sup>

In performing these changes, the authors ensured that the recalculated rankings were not too different from the original rankings. While leaving the rankings mostly unaffected, these adjustments allow following changes in a country's performance more precisely. Utilizing these new data, this year's report presents a new section featuring profiles of each country covered in the index (Appendix I). Country profiles provide the historic progression of the IPRI scores and its components, point to any advances or regressions, and show strong or weak points in countries' property rights. These country profiles replace the section in the previous editions of the IPRI dedicated to special country cases.

The gender equality component represents a significant change from last year's IPRI. Because of a lack of updated data, the sample of countries covered has been restricted to non-OECD countries. The total number of countries scored for this component is 80 this year, which represents a small decrease from last year. The authors believe, however, that the issue of gender equality is especially relevant to developing countries where large disparities in land rights continue to exist and large improvements in their property rights remain to be realized. Therefore, the focus of this component on non-OECD countries is appropriate.

In addition to providing a quantitative measure of the protection of property rights, the report highlights various aspects of property rights through case studies. This year, the authors have collaborated with the IPRI's partner organizations to identify issues that need further elaboration in the index. The case studies present an opportunity to draw attention to aspects of property rights that even the most comprehensive index might not be able to address. They also highlight the developments in property rights in various regions of the world with the aim of providing clear and compelling evidence for the positive role that property rights play in economic development. The 2010 report contains six case studies on physical and intellectual property rights contributed by the IPRI partner organizations as well as a guest case study on gender equality and property rights.

The 2010 IPRI builds on the previous editions to provide an even more comprehensive measure of property rights. Despite significant improvements over the years, there continue to be data limitations and challenges with data collection and interpretation. We are confident that future editions of the report will address and progressively overcome these issues.

## PARTNERS

We express our sincere gratitude to our partner organizations for their commitment and dedication towards ensuring and furthering property rights in their respective countries and around the world. We thank our partners for providing the feedback and ideas that allowed us to identify areas for improvement and make the index an even more useful tool in advancing property rights.

This year, we have partnered with the following organizations:

### **Adriatic Institute for Public Policy (AI) – Croatia** [www.adriaticinstitute.org](http://www.adriaticinstitute.org)

The Adriatic Institute is an independent, free market think tank founded in 2004 in Rijeka, Croatia. AI is dedicated to advancing economic freedom and advocating free market reforms in Croatia and southeast Europe. AI promotes innovative thinking, advancing principled and pro-growth solutions that have been successfully implemented in Eastern Europe's post-communist countries. With its engaged advisors and research fellows, AI has dedicated resources to sponsoring research, conferences and strategic events that augment the competition of ideas by featuring experts in fields ranging from economics to security.

### **Albanian Socio Economic Think Tank (ASET) – Albania** [www.aset-al.org](http://www.aset-al.org)

The Albanian Socio Economic Think Tank is a non-profit organization established in 1999. Its goal is to promote economic development and social welfare. ASET has developed more than 30 projects in cooperation with different national and international organization such as the Government of Albania, various Albanian ministries, World Bank, SOROS Foundation, U.S. Embassy, IFAD, GTZ, SEED, and GDN, among others.

### **Alternate Solutions Institute – Pakistan** [www.asinstitute.org](http://www.asinstitute.org)

Alternate Solutions Institute is Pakistan's first free market think tank. It is an independent, non-profit, non-governmental, educational research entity, established for the "welfare of the people by the people," based on mutual help and cooperation free from any political or partisan influence. The guiding philosophy of the Institute is based on the values of limited government, rule of law, protection of property rights, market economy, individual freedom, and private initiative.

### **Asociación de Consumidores Libres – Costa Rica** [www.consumidoreslibres.org](http://www.consumidoreslibres.org)

The Asociación de Consumidores Libres is a non-profit organization created to defend the rights of consumers to freely choose. Its goal is to defend at all costs consumer rights against

the state, producers, and manufacturers. The Asociación de Consumidores Libres defends the right to trade, which includes the right to purchase goods and services from any bidder, regardless of race, religion, nationality, or any other characteristic.

### **Austrian Economics Center (AEC) – Austria**

AEC promotes the ideas of the Austrian School of Economics. Its main goal is to help create a free, responsible society. The Center addresses questions concerning economic and social politics by offering studies and solutions on a scientific basis. AEC's goal is to improve public understanding of the key economic questions needed to promote a free society.

### **Bishkek Business Club – Kyrgyz Republic** [www.bdk.kg](http://www.bdk.kg)

Bishkek Business Club is a public association founded as a non-profit, non-governmental organization. The Club seeks to radically improve the business environment in the Kyrgyz Republic and change Kyrgyzstan into a major dynamic business center. The Club strives to help the citizens of the Kyrgyz Republic to access better social, information, technological, and economic world systems. The Club endeavors to become a credible organization that will have an impact on regional strategic solutions.

### **Cathay Institute for Public Affairs – China** [www.jiuding.org](http://www.jiuding.org)

The Cathay Institute is a free market organization in China that conducts research on free enterprise issues in China and around the world.

### **Center for the Dissemination of Economic Knowledge for Freedom (CEDICE) – Venezuela** [www.cedice.org.ve](http://www.cedice.org.ve)

Founded in 1984, CEDICE is a non-partisan, non-profit private association. It is dedicated to the dissemination, research, education, and promotion of free market ideas, individual liberty, and limited government. CEDICE promotes individual initiative, democracy, and property rights and

conducts activities conducive to better understanding of the free market system and free and responsible societies.

#### **Center for Entrepreneurship and Economic Development (CEED) – Montenegro**

The Center for Entrepreneurship and Economic Development was formed in 1993 to support entrepreneurship and economic development. The Center understands the importance of applying proven international business development concepts to the local environment. The Center's activities include training and facilitating business start-ups, business consulting, research, and creating policy analysis recommendations.

#### **Center for Free Enterprise (CFE) – South Korea** [www.cfe.org](http://www.cfe.org)

Established in 1997, the Center for Free Enterprise propagates research, education, and publications to diffuse classical liberalism and market principles throughout Korea. CFE has also come to act as the medium for market economists of Korea to inform the people of Korea of their principles and research.

#### **Center for Institutional Analysis and Development (CADI) – Romania** [www.cadi.ro](http://www.cadi.ro)

The Center for Institutional Analysis and Development is a research, outreach, and consultancy center promoting the institutions underpinning economic and civil liberties. CADI evolved as an umbrella think tank for libertarian, classical liberal, neoconservative, and other branches of the center-right. CADI's activities range from public debates and workshops to syndicated publications in support of public policies.

#### **Center for Liberal-Democratic Studies (CLDS) – Serbia** [www.clds.org.rs](http://www.clds.org.rs)

CLDS is an independent think tank that studies policy, publishes public policy proposals, and organizes seminars and lectures on policy issues as part of its mission to influence the public discourse and issues in Serbia.

#### **Center for Mozambican and International Studies (CEMO) – Mozambique**

CEMO is a newly constituted non-profit association that promotes in-depth analysis and discussion on public policy strategies surrounding governance and development. It seeks to advance knowledge sharing in the areas of science and technology, politics, economics, culture, and society. The Center's mission is to contribute to the socio-economic development of Mozambique and to produce innovative thinking in our society through research, debates, surveys, and analysis of public policies.

#### **Center of Research for Development (CIDAC) – Mexico** [www.cidac.org](http://www.cidac.org)

CIDAC is a not-for-profit think tank that undertakes research and proposes viable policy options for Mexico's economic and democratic development. The organization seeks to promote open, pluralistic debate in the pursuit of rule of law and democracy, market economy, social development, and strengthening Mexico-U.S. relations. CIDAC offers the results of its work to the general public with the objectives of enriching the public debate and contributing to relevant decision making in the country.

#### **Le Centre Des Affaires Humaines (CEDAH) – Burkina Faso** [www.cedahburkina.com](http://www.cedahburkina.com)

The CEDAH is a free market educational and research public policy think tank founded in 2007 in Burkina Faso. The CEDAH is an independent, non-profit organization with no affiliations to any political party. The mission of the CEDAH is to propose original and innovative solutions for crafting efficient public policies, using successful reforms applied elsewhere as models. The CEDAH studies how markets function with the aim of identifying the mechanisms and institutions that foster prosperity and the long-term welfare of all individuals who make up our society.

#### **Centre for Civil Society – India** [www.ccs.in](http://www.ccs.in)

The Centre for Civil Society is an independent, non-profit research and educational organization devoted to improving the quality of life for all citizens of India by reviving and reinvigorating civil society.

#### **Centre for Policy Research (CPR) – India** [www.cprindia.org](http://www.cprindia.org)

CPR is an independent and non-partisan research institute, think tank, and one of the 27 national social science research institutes recognized by the Indian Council of Social Science Research (ICSSR) of the Government of India. Its main objectives are to provide thought leadership and creative solutions to address pressing intellectual and policy issues. CPR is recognized for its multi-disciplinary approach and unique blend of scholarship and practical expertise.

#### **Centro de Investigaciones de Instituciones y Mercados de Argentina (CIIMA-ESEADE) – Argentina** [www.ciima.org.ar](http://www.ciima.org.ar)

CIIMA is the Center for Research on Institutions and Markets of Argentina, a public policy think tank part of the ESEADE Graduate School in Buenos Aires. Its mission is to evaluate and to promote the institutions that allow markets to properly function with a focus on to property rights, contracts, and individual freedom.

#### **Civita – Norway** [www.civita.no](http://www.civita.no)

Civita strives to increase consensus on important market economy principles and their implications on welfare, freedom, and democracy. Civita is also dedicated to promoting personal responsibility and civil society through research and exposition, publications, seminars, conferences, and general information to inform the public audience.

#### **Competere – Italy** [www.competere.eu](http://www.competere.eu)

Competere is an Italian think tank that promotes greater market freedom and individual liberty to create prosperity for individuals and for their community. Its purpose is not only to spread the values of liberalism but also to develop and implement classical liberal politics to contribute to the betterment of the Italian economy by creating a more competitive market with less state presence, a more qualified young workforce, and a flexible labor market. Competere's projects focus on the urgencies and problems of companies operating in the Italian and European markets.

#### **EBI Think Tank Institute (EBI) – Mongolia** [www.ebi.mn](http://www.ebi.mn)

EBI, founded in 2008, is a non-profit, non-partisan think tank based in Ulaanbaatar whose mission is to discover, develop, and support "intellectual entrepreneurs" who can advance the Institute's vision of a society of free enterprise and development of democracy. EBI strives to achieve its mission by identifying, recruiting, training, and placing young outstanding people in politics and government to increase the number and effectiveness of public policy leaders.

#### **Eudoxa – Sweden** [www.eudoxa.se](http://www.eudoxa.se)

Eudoxa is a think tank based in Stockholm, Sweden. Its main focus is to explain the cultural impact of emerging technologies by integrating research with classical free market ideas and dynamist thoughts of experimentation, innovation, and decentralization.

#### **European Coalition for Economic Growth (ECEG) – Austria** [www.e-growth.eu](http://www.e-growth.eu)

ECEG acts as a European net hub, and cooperates extensively with more than 100 public policy organizations. It promotes the ideas of free market economics, the Austrian School of Economics and public choice as viable economic alternatives in Austria and Europe not only by means of a public think tank but also as an academic institute. Additionally, ECEG addresses questions relating to public economic illiteracy, economic and social politics, and offers scientific studies and solutions to help improve public understanding of the key economic questions involved in promoting a free society.

#### **F.A. Hayek Foundation (FAHF) – Slovakia** [www.hayek.sk](http://www.hayek.sk)

FAHF, founded by a group of liberally oriented Slovak economists, has as its core mission the establishment of a tradition of liberal thinking in Slovakia. From this liberal tradition, the foundation seeks to offer practical reform proposals for market solutions to economic and social problem. FAHF seeks to widen and propagate classical liberal ideas in the reform process throughout Slovakia, provide a platform for the exchange of opinions of experts and the broader public, and further develop basic liberal ideas and values.

#### **F.A. v. Hayek Institute – Austria** [www.hayekinstitut.at](http://www.hayekinstitut.at)

The F.A. v. Hayek Institute was founded in 1993 to commemorate the work of Nobel Laureate Friedrich August von Hayek and to promote the ideas of the Austrian School of Economics. It is a private and independent academic research institution. The Institute cooperates extensively with other like-minded think tanks, and it organizes academic conferences, seminars, and lectures tackling current economic issues.

#### **The Free Market Foundation – South Africa** [www.freemarketfoundation.com](http://www.freemarketfoundation.com)

The Free Market Foundation is an independent, non-profit policy organization founded in 1975 to promote and foster an open society, the rule of law, personal liberty, and economic and press freedom as fundamental components of its advocacy of human rights and democracy based on classical liberal principles.

#### **Friedrich Naumann Foundation – Germany** [www.freiheit.org](http://www.freiheit.org)

The Friedrich Naumann Foundation is an independent, non-profit, and non-governmental organization that is committed to promoting liberal policy and politics. Originating in Germany, the Foundation promotes freedom in human dignity as the ultimate precondition of a society where people can live freely and in peace. The Foundation supports various projects in cooperation with partner organizations in Africa and is also active in over 50 countries worldwide.

#### **Frontier Centre for Public Policy – Canada** [www.fcpp.org](http://www.fcpp.org)

The Frontier Centre for Public Policy is an independent public policy think tank based in western Canada. Its mission is to develop and popularize policy choices that will help Canada's prairie region live up to its vast but unrealized economic potential.

**Fundación Atlas 1853 – Argentina**[www.atlas.org.ar](http://www.atlas.org.ar)

Fundación Atlas 1853 is a non-partisan non-profit organization established in 1998. Its mission is to lead the change towards an open society based on the defense of individual freedom, the existence of institutional limits to government action, the market economy, private property, free enterprise, and the rule of law.

**Fundación IDEA – Mexico**[www.fundacionidea.org.mx](http://www.fundacionidea.org.mx)

Fundación IDEA is a recently created, non-profit, and non-partisan research center located in Mexico City. Its mission is to conduct independent research, analysis, and evaluation of public policy in Mexico and other developing countries. It seeks to generate policy recommendations to improve policies and programs that can improve equality of opportunity through economic development, education, and poverty reduction.

**Fundación Libertad – Argentina**[www.libertad.org.ar](http://www.libertad.org.ar)

Fundación Libertad is a non-profit organization whose objective is to promote liberal ideas in the social field by means of research and diffusion of public policies related to socioeconomic and business areas. Fundación Libertad was created in Rosario in 1988 by a group of businessmen, professionals, and intellectuals, and it is supported by more than 200 private companies. Its activities include courses, lectures, seminars, researches, publications, and also an important presence in the media through its own columns and programs.

**Fundación Libertad – Panama**[www.fundacionlibertad.org.pa](http://www.fundacionlibertad.org.pa)

Fundación Libertad is a non-profit organization established in the Republic of Panama in 2001. Its mission is to spread and defend individual freedom principles and promote a society of free and responsible citizens.

**IMANI Center for Policy and Education – Ghana**[www.imanighana.org](http://www.imanighana.org)

IMANI, founded in 2004, is an African based non-profit, non-governmental organization dedicated to educating society on the principles of a free economy and fostering public awareness of important policy issues concerning business, government, and civil society. Through seminars, publications and articles, IMANI and its international partners seek to promote enlightened inquiry based on sound values and scholarship.

**The Initiative for Public Policy Analysis (IPPA) – Nigeria**[www.ippanigeria.org](http://www.ippanigeria.org)

IPPA is a public policy research institute in Nigeria. Founded in 2001, IPPA's focus is on the principles and institutions

underlying a free and open society, specifically in Africa and Nigeria. IPPA conducts research and advocacy on public policy issues, including development economics, trade, entrepreneurship, property rights, education, environment, health, and security.

**Institut Constant de Rebecque – Switzerland**[www.institutconstant.ch](http://www.institutconstant.ch)

The Institut Constant de Rebecque is an independent, non-profit think tank in Switzerland. The Institut Constant de Rebecque promotes a climate of opinion favorable to individual growth, private initiative, and free enterprise through a network of thinkers, researchers, and young scholars. To that end, the Institut develops innovative and sustainable solutions to current challenges and broadens the public debate.

**Institute for Democracy and Economic Affairs****(IDEAS) – Malaysia**[www.ideas.org.my](http://www.ideas.org.my)

IDEAS is Malaysia's first think tank dedicated to promoting market-based solutions to public policy challenges. IDEAS is an independent, non-profit organization. As a cross-partisan think tank, it works across the political spectrum. IDEAS' purpose is to advance market-based principles by working with an extensive network of experts who share its ideals.

**The Institute for Free Enterprise (IUF) – Germany**[www.iuf-berlin.org](http://www.iuf-berlin.org)

IUF is Germany's free market think tank. The Institute works towards policy change by developing concepts for reforms with local and international experts. Those ideas are then proposed to policy makers, thereby challenging the interventionist mindset.

**Institute of Future Studies for Development (IFD) – Thailand**[www.ifd.or.th](http://www.ifd.or.th)

The Institute of Future Studies for Development is a non-profit academic research organization that aims to stimulate a long-term vision for the holistic development of Thai society, especially in the field of economics, human resource, and national development.

**Institute for Market Economics (IME) – Bulgaria**[www.ime.bg](http://www.ime.bg)

Established in 1993, IME is the first and oldest independent economic policy think tank in Bulgaria. Its mission is to elaborate and advocate market-based solutions to challenges citizens of Bulgaria and the region face in reforms. IME provides an independent assessment and analysis of the government's economic policies and strives to be a focal point for an exchange of views on market economics and relevant policy issues.

**Institute of Public Affairs (IPA) – Australia**[www.ipa.org.au](http://www.ipa.org.au)

The IPA is an independent, non-profit public policy think tank, dedicated to preserving and strengthening the foundations of economic and political freedom. Since 1943, the IPA has been at the forefront of the political and policy debate, defining the contemporary political landscape. The IPA supports the free market of ideas, the free flow of capital, a limited and efficient government, evidence-based public policy, the rule of law, and representative democracy.

**Instituto de Libre Empresa (ILE) – Peru**[www.ileperu.org](http://www.ileperu.org)

ILE was founded in 1998 and is a non-profit Peruvian think tank based in Lima, which advocates a system of free enterprise under the values and virtues of limited government, private property rights, and free markets.

**Instituto Liberdade (IL-RS) – Brazil**[www.il-rs.org.br](http://www.il-rs.org.br)

The Instituto Liberdade do Rio Grande do Sul (IL-RS) is a Brazilian private non-profit organization think tank whose major purpose is to foster the research, creation, and dissemination of educational and cultural assets. IL-RS achieves its goal by displaying to all individuals the advantages of an organized society based on the principles of individual rights, limited and representative government, and respect for private property rights, contracts, and free initiative.

**International Policy Network (IPN) – United Kingdom**[www.policynetwork.net](http://www.policynetwork.net)

IPN's work is guided by a belief that free enterprise and its supporting ideals (especially property rights, markets, and the rule of law) are able to harness human potential better than any other arrangement and are the best way to address the poverty and tragedy faced by many people in the world. IPN undertakes ongoing work on public policy in the areas of health, environment, economic development, trade, accountability, creativity, and innovation.

**International Research Foundation (IRF) – Oman**[www.irfoman.org](http://www.irfoman.org)

The International Research Foundation is an independent, non-profit economic think-tank with emphasis on the Arab world, which focuses its research and public affairs agenda on a collegial basis, relying on the input of its research staff, its editorial board and Senior Fellows. IRF's vision is to promote growth through economic freedom, and its mission is to measure, research and communicate to a regional and global audience the impact of competitive markets on the welfare of individuals.

**Iraq Institute for Economic Reform (IIER) – Iraq**[www.iier.org](http://www.iier.org)

The Iraq Institute for Economic Reform is an independent research institute based in Baghdad. Its mission is to assist Iraq in its transition to a modern market economy by promoting reform based on sound research and case studies. IIER seeks to structure a system of formal property rights and to assist in the development of an effective civil society by promoting vigorous public debate among stakeholders about the future of Iraq.

**Jerusalem Institute for Market Studies (JIMS) – Israel**[www.jims-israel.org](http://www.jims-israel.org)

JIMS is an independent, non-profit economic policy think tank whose mission is to promote social progress in Israel through economic freedom and individual liberty. Founded in 2003, it has quickly become one of Israel's most successful non-profit economic policy think tanks. JIMS regularly publishes influential economic policy papers and editorials, runs a number of innovative private educational projects, and administers a unique public opinion survey called the Israel Panel Study of Opinion Dynamics (IPSOD).

**Liberales Institut – Switzerland**[www.libinst.ch](http://www.libinst.ch)

Founded in 1979, the Liberales Institut pursues as its mission the research and dissemination of ideas of freedom. The Institut advances the Swiss tradition and culture of individual liberty, peace, openness, and political diversity, and it furthers the development of the liberal intellectual tradition.

**Libertad y Desarrollo – Chile**[www.lyd.com](http://www.lyd.com)

Libertad y Desarrollo is a private research and study center – a think tank – independent of any political, religious, business, and government affiliations. The institute is dedicated to the analysis of public policies and to promoting the values and principles of a free society. To achieve this objective, Libertad and Desarrollo is organized around core pragmatic activities.

**Liberty Institute – India**[www.indefenceofliberty.org](http://www.indefenceofliberty.org)

Liberty Institute is an independent think tank dedicated to empowering the people by harnessing the power of the market. It seeks to build understanding and appreciation of the four institutional pillars of a free society – individual rights, rule of law, limited government, and the free market. The Institute undertakes a number of activities, among them research and advocacy on public policy issues. It organizes conferences and seminars, and it has a publications program. The Institute is working on a range of public policy issues, including economic development and trade policy, energy

policy and environmental quality, education and health policies, democracy and governance reforms, and intellectual property rights and innovation, among others.

#### Limited Government – Nepal

[www.lgn.org.np](http://www.lgn.org.np)

Founded in 2007, Limited Government is an independent, non-partisan, non-profit research and educational institute. Its mission is to facilitate and elevate the debate on the ideas of liberty among opinion-leaders and civil society by cultivating a climate of ideas that advocates for free market public policy reforms.

#### The Lion Rock Institute – Hong Kong

[www.lionrockinstitute.org](http://www.lionrockinstitute.org)

The Lion Rock Institute was founded in 2004 and is a public policy think tank advocating free market solutions for Hong Kong policy challenges. It espouses open and free markets, property rights, small government, low taxes, and minimal restrictions on the business environment to create the best environment for freedom and prosperity.

#### Ludwig von Mises Institute – Poland

[www.mises.pl](http://www.mises.pl)

Ludwig von Mises Institute is an independent and non-profit center for research and education based in Poland. The main purpose of the Mises Institute is to raise social awareness of the economic processes and basic institutions of a *laissez-faire* economy. We also promote relations based on free will and peaceful cooperation between individuals. The Mises Institute draws from the tradition of the Austrian School of Economics, writings of classical liberalism, and libertarian political thought.

#### Minimal Government Thinkers, Inc. – Philippines

[www.minimalgovernment.net](http://www.minimalgovernment.net)

Minimal Government Thinkers, Inc. is an independent think tank advancing five core principles: small government, small taxes, free markets, rule of law, and personal responsibility. It believes that society will be more peaceful and dynamic if individuals, parents, firms, and their voluntary organizations will assume more individual and voluntary responsibility for their lives, their families, and their communities.

#### The Nassau Institute – The Bahamas

[www.nassauinstitute.org](http://www.nassauinstitute.org)

Founded in 1995, The Nassau Institute is a think tank that promotes capitalism and free markets. Its mission is to formulate and promote public policies for The Bahamas based on the principles of limited government, individual freedom, and the rule of law. The Nassau Institute encourages the revival of historical research promoting the free and

enterprising commonwealth and countering the political philosophy of statism in all its forms.

#### New Economic School (NESG) – Georgia

[www.nesg.net](http://www.nesg.net)

NESG is a not-for-profit institution oriented towards creation of public opinion, based on classical liberal economic thought. Its main ideas are methodological individualism, personal freedom, and limited government. NESG's activities include dissemination of economic knowledge through seminars, conferences, publishing, translations, public lectures, etc. It is involved in the public policy development process through organizing meetings, seminars, participating in debates, government commissions, inviting international experts, etc.

#### New Zealand Business Roundtable – New Zealand

[www.nzbr.org.nz](http://www.nzbr.org.nz)

The New Zealand Business Roundtable is an organization comprising primarily of chief executives of major business firms committed to contributing to the development of sound policies that reflect overall national interests. It is founded on the belief that a healthy, dynamic business sector and open and competitive markets are fundamental to the achievement of a prosperous economy and fair society.

#### OHRID Institute for Economic Strategies and International Affairs – Macedonia

[www.oi.org.mk](http://www.oi.org.mk)

The OHRID Institute is an independent, non-profit think tank. It is committed to providing balance to the policy discourse in Macedonia by conducting economic policy research, promoting private sector and free market reform, and acting as a "watchdog" on government activities to ensure accountability. It strives to contribute to Macedonia's development into a market-based democratic society.

#### Pal-Think for Strategic Studies – Palestine

[www.palthink.org](http://www.palthink.org)

Pal-Think for Strategic Studies is an independent, non-profit, non-political, non-governmental, and non-sectarian think tank that aims to stimulate and inspire rational public discussions and consensus for the well-being of Palestinians and the Region. Pal-Think was established in 2007 in Gaza-Palestine by a group of Palestinian researchers and community activists who have intimate relations and diverse knowledge of the Middle East, its current problems, potentials, and possibilities

#### Polish-American Foundation for Economic Research and Education (PAFERE) – Poland

[www.pafere.org](http://www.pafere.org)

PAFERE is an independent, non-governmental organization

dedicated to free market education and promotion of economic freedom, free trade, and private property. It also studies the relationship of ethics to economics and the development of economic sciences. PAFERE's main objectives are to propagate basic economic knowledge and the understanding of relationships between ethics and economy, to promote research on free market economics, and to expose economic myths and fallacies.

#### Timbro – Sweden

[www.timbro.se](http://www.timbro.se)

Since 1978, Timbro has advocated for free markets, free trade, and free societies. Timbro's mission is to originate, promote, and disseminate ideas and issues supporting the principles of free markets, free enterprise, individual liberty, and a free society.

#### The Ukrainian Reform Support Foundation – Ukraine

[www.ufpr.org.ua](http://www.ufpr.org.ua)

The Ukrainian Reform Support Foundation is a public non-profit organization founded in 1993 with the objective of encouraging economic reforms in Ukraine in the direction of the creation of an economically efficient, self-governed Ukrainian society and democratic Ukrainian state.

#### The Zambia Institute for Public Policy Analysis (ZIPPA) – Zambia

Founded in 2004, ZIPPA is an independent, non-political, and educational research institute. Its mission is to promote wider appreciation of the key role free markets and competition play in economic development. ZIPPA undertakes and supports research on economic matters and public policy, comments on legislation related to economic and social matters, and organizes discussions and debates on economic and social issues. It strives to spread the principles of free markets by holding seminars, workshops, and conferences, by publishing and distributing books, journals, and pamphlets, and by networking with like-minded people and organizations in Zambia and internationally.

## CHAPTER I: INTRODUCTION

**"If history could teach us anything, it would be that private property is inextricably linked with civilization."**

—Ludwig Von Mises

Property rights play an important and often overlooked role in the creation of prosperity. Firmly established property rights allow for individuals to enjoy the fruits of their labor thoroughly and to create incentives to use resources efficiently. However, as Milton Friedman poignantly noted, "The preservation of liberty, not the promotion of efficiency, is the primary justification for private property. Efficiency is a happy, though not accidental, by-product – and a most important by-product because liberty could not have survived if it had not also produced affluence."<sup>3</sup> Indeed, there has been growing recognition of property rights as fundamental human rights.

Whereas property rights were acknowledged in the Universal Declaration of Human Rights in 1948,<sup>4</sup> it was not until recently that property rights gained the attention of policy makers around the world. The work of Hernando de Soto has been instrumental in bringing into focus the problems that the poor in the developing world face in exercising their property rights. The 2008 report by the U.N. Commission on Legal Empowerment of the Poor, chaired by de Soto and former U.S. Secretary of State Madeleine Albright, unequivocally reaffirmed that property rights are human rights.<sup>5</sup>

The Commission's Working Group on Property Rights further highlighted the importance of property rights beyond the role they play in economic activity. Karol Boudreaux, a member of the Working Group and a contributor to the 2008 IPRI report, maintains, "Secure and accessible property rights provide a sense of identity, dignity, and belonging to people of very different economic means. They create reliable ties of rights and obligations among community members as well as a system of mutual recognition of rights and responsibilities beyond the local community" (Boudreaux, 2008). Moreover, Boudreaux stresses, "For many poor individuals and the communities in which they live, the relationship with property is more than just an aggregate of occupied and used plots. It is the very expression of a way of life, and one that they should have the opportunity to improve by virtue of their own efforts" (Ibid.). Boudreaux's observation demonstrates the complexity of property rights that transcend pure economic justification.

While the non-economic aspects of property rights are equally important, this report focuses on the economic benefits resulting from the protection and enforcement of property rights. In economic sense, property rights are characterized as holding exclusive authority to determine how a resource is used (Alchian, 2008). Armen A. Alchian, an economist who significantly contributed to the economics of property rights, noted that this definition of property rights does not necessarily preclude government or public ownership. However, private property rights possess additional features. Specifically, they allow for exclusive rights to the services of the resource (e.g., to collect rental income) and the right to exchange the resource at mutually agreeable terms (Ibid.). These additional qualities of private property rights empower individuals to seek the most efficient use of the resources they possess and to better their life through mutual exchange with others.

Many studies have attempted to determine the benefits of strong property rights at an individual or community level. This report seeks to determine the consequences of ensuring property rights on a macro level. Do societies that respect property rights perform better than those that disregard property rights? Do countries that provide the legal framework for enforcement of property rights have better economic outcomes? A cross-country study like this one allows one to establish empirically what role property rights play in economic development.

Certainly, such an approach is not without limitations. There are many factors that affect the effectiveness of a property rights regime. The choice of aspects to include in this study represents a significant trade-off between a more detailed and nuanced approach and the comprehensiveness of this study. The factors chosen for this study allow us to capture important differences in the provision and enforcement of property rights among as many countries as possible. Finally, the reader is reminded that it remains a challenge to differentiate causal effects in a multi-country setting. However, we remain confident that this difficulty will be overcome as more data become available for future editions of the IPRI.

## CHAPTER II: PROPERTY RIGHTS AND ECONOMIC DEVELOPMENT

A well-functioning property rights regime allows for economic assets to be productive by reducing transaction costs and encouraging the creation of surplus value that can be reinvested without fear of expropriation. The link between secure property rights and economic development lies in the ability of the property rights system to infuse what Hernando de Soto called "dead capital" into the formal economy. Many developing countries' experiences, however, illustrate the difficulty in creating and maintaining a property rights system that works for all citizens. It is, therefore, even more important to continue to highlight the benefits of property rights regimes that facilitate economic growth and development.

### Private Property Rights

Economists have identified at least four ways that insecure property rights negatively affect economic activity. Professors of Economics and Political Science at the London School of Economics Tim Besley and Maitreesh Ghatak have recently summarized these four aspects. First, insecure or weakly enforced property rights increase the risk of expropriation, which diminishes incentives to invest and to produce. Second, insecure property rights decrease productivity by necessitating the need to defend property. Third, insecure property rights fail to facilitate gains from trade (i.e., if property rights are not full or entirely secure, assets sometimes cannot be transferred to those who can use them most productively). Finally, property serves as an important tool in supporting other transactions such as obtaining financing via its role as collateral (Besley & Ghatak, 2009).

Hernando de Soto's pioneering work documenting the amount of "dead capital" – assets that cannot be represented in the formal economy or used for collateral – in the developing world spurred an increasing interest in property rights. Governments around the developing world are presented with a puzzle on how to convert dead capital into viable economic assets that can put their countries on a path toward prosperity. One of the answers lies in ensuring that the poor can register their assets within a formal property rights system with minimal transaction costs. As de Soto discovered, there is still ample work that needs to be done in eliminating these hurdles.

Finally, no property rights system can operate in a vacuum without full support of the legal and judicial system aimed at enforcing property transactions. An institution with a strong rule of law and independent judiciary void of corruption and political instability provide the environment for a formal property rights system to flourish.

While property rights hold the key to economic prosperity and growth, it is important to keep in mind that many other social institutions play a significant role. In particular, a well developed banking system to provide the capital necessary to infuse the economy is largely complementary in the development process. Recent microfinance efforts have been successful in bringing loans to the poorest in developing countries. But a sophisticated financial system is needed to bring these economies into the integrated world market.

### Intellectual Property Rights

The modern economy relies not only on physical property rights but also intellectual property rights (IPRs). Intellectual property rights are exclusive rights over creations of the mind. These include inventions, literary and artistic works, and symbols, names, images, and designs used in commerce.<sup>6</sup> The world economy has come to depend on IP goods – from airplanes to business software, and from pharmaceuticals to cell phones.

In many ways, intellectual property rights play a similar role to physical property rights. Secure intellectual property rights create incentives for innovation just as secure property rights create incentives for production. Similarly to physical property rights, IPRs reduce transaction costs. For example, trademarks signal information about the quality of products, which reduce consumer search costs (Baroncelli, Krivonos, & Olarreaga, 2004).

The challenge of protecting intellectual property rights, however, is even more daunting compared to physical property rights because theft of IPRs is facilitated by their own intrinsic qualities. Therefore, countries with weak IPRs require substantial resources to build an effective enforcement system of IPRs. While some countries may feel this investment is beyond their means, they need to realize that an effective IPR system is an important ingredient for long-term economic success. In addition to spurring domestic innovation, strong intellectual property rights increase incentives for foreign direct investment (Branstetter & Saggi, 2009), which in turn also leads to economic growth (Saggi, 2002).

## CHAPTER III: INDEX COMPOSITION AND COVERAGE

This chapter presents the concept behind the *International Property Rights Index*, the three core components, and the 10 variables used to compile it. It also includes detailed explanatory notes on the methodology employed and the country set of the IPRI 2010. Finally, it points out some of the limitations of this study and presents future considerations.

### The Concept

The goal of any index is to develop a gauge by which one can compare countries or other jurisdictions. The IPRI develops such a measure for property rights. To conceptualize property rights for the purposes of this study, the authors reviewed a wide range of literature on property rights. Additionally, the authors sought suggestions from experts and practitioners in the field of property rights to finalize the set of core categories (hereto referred to as “components”) as well as variables (“sub-components”) that make up those components.

The following are the three core components of the IPRI:

1. Legal and Political Environment (LP)
2. Physical Property Rights (PPR)
3. Intellectual Property Rights (IPR)

Harold Demsetz defined property rights in his seminal work on the theory of property rights in 1967 as follows:

Property rights are an instrument of society and derive their significance from the fact that they help a man form those expectations which he can reasonably hold in his dealings with others. These expectations find expression in the laws, customs, and mores of a society. An owner of property rights possesses the consent of fellowmen to allow him to act in particular ways. An owner expects the community to prevent others from interfering with his actions, provided that these actions are not prohibited in the specifications of his rights. (Demsetz, 1967)

Demsetz is among the many scholars to point out the role of laws and mores of society as crucial to understanding property rights. Therefore, the Legal and Political Environment (LP) was found to be an essential part of any property rights system. The index includes several measures of the legal and political environment despite the fact that they measure much broader aspects than just property rights.

The other two components – physical and intellectual property rights – reflect the two forms of property rights, both of which are crucial to economic development. The variables included in these two categories account for both *de jure* rights and *de facto* outcomes of the countries considered.

### Variables

The 2010 IPRI is comprised of a total of 10 variables, which are divided into the three main components: Legal and Political Environment (LP), Physical Property Rights (PPR), and Intellectual Property Rights (IPR). Despite a large number of property rights related variables considered by the authors, the final IPRI study focuses only on core factors that directly relate to the strength and protection of property rights. The final ranking is very similar to the alternative rankings calculated with other factors included. Finally, preference was given to the variables that were available for a greater number of countries and were updated on a regular basis to ensure that the resulting scores were comparable across countries and years.

Of the 10 variables incorporated into the index, the *Registering Property* variable is made up of two sub-variables. In sum, the IPRI comprises 11 data points for each country.

Figure 1: Structure of the IPRI

1. Legal and Political Environment (LP)
  - Judicial Independence
  - Rule of Law
  - Political Stability
  - Control of Corruption
2. Physical Property Rights (PPR)
  - Protection of Physical Property Rights
  - Registering Property
  - Access to Loans
3. Intellectual Property Rights (IPR)
  - Protection of Intellectual Property Rights
  - Patent Protection
  - Copyright Piracy

### Legal and Political Environment (LP)

Even the most comprehensive *de jure* property rights cannot be enforced unless a strong rule of law and independent judiciary are present to enforce them. Furthermore, political stability and lack of corruption allow for a property rights regime that does not discourage economic transactions related to property. Therefore, these four sub-components constitute the Legal and Political Environment (LP) component.

#### Judicial Independence

This variable examines the judiciary's freedom from influence by political and business groups. The independence of the judiciary is a central underpinning for the sound protection and sovereign support of the court system with respect to private property.

Source: *World Economic Forum's 2008-2009 Global Competitiveness Index*

#### Rule of Law

This variable measures the extent to which agents have confidence in and abide by the rules of society. In particular, it measures the quality of contract enforcement, police, and courts, as well as the likelihood of crime and violence. The variable combines several indicators, including fairness, honesty, enforcement, speed, and affordability of the court system, protection of private property rights, and judicial and executive accountability. This variable complements the judicial independence variable.

Source: *World Bank Institute's 2009 Governance Matters*

#### Political Stability

The degree of political stability crucially influences one's incentive to obtain or to extend ownership and/or management of property. The higher the likelihood of government instability, the less likely people will be to obtain property and to develop trust in the validity of the rights attached.

Source: *World Bank Institute's 2009 Governance Matters*

#### Corruption

This variable combines several indicators that measure the extent to which public power is exercised for private gain. This includes petty and grand forms of corruption, as well as 'capture' of the state by elites and private interests. Similarly to the other variables in the LP component, corruption influences people's confidence in the existence of sound implementation and enforcement of property rights. Corruption reflects the degree of informality in the economy, which is a distracting factor to the expansion of respect for legal private property.

Source: *World Bank Institute's 2009 Governance Matters*

### Physical Property Rights (PPR)

A strong property rights regime commands the confidence of people in its effectiveness to protect private property rights. It also provides for seamless transactions related to registering property. Finally, it allows access to credit necessary to convert property into capital. For these reasons, the following variables are used to measure private physical property rights protection (PPR).

#### Protection of Physical Property Rights

This variable directly relates to the strength of a country's property rights system as it reflects experts' views on the quality of judicial protection of private property, including financial assets. Additionally, it encompasses professionals' opinions on the clarity of the legal definition of property rights.

Source: *World Economic Forum's 2008-2009 Global Competitiveness Index*

#### Registering Property

This variable reflects businesses' point of view on how difficult it is to register property in terms of the number of days and procedures necessary. According to the source of this information, the variable records the full sequence of procedures necessary to transfer the property title from seller to buyer when a business purchases land and a building. This information is critical because the more difficult property registration is, the more likely it is that assets stay in the informal sector, thus restricting the development of the broader public's understanding and support for a strong legal and sound property rights system. Moreover, registration barriers discourage the movement of assets from lower to higher valued uses. This variable reflects one of the main economic arguments set forth by Hernando de Soto.

Source: *The World Bank Group's 2009 Doing Business Report*

#### Access to Loans

This variable is included in the IPRI because access to a bank loan without collateral serves as a proxy for the level of development of financial institutions in a country. Financial institutions play a complementary role, along with a strong property rights system, to bring economic assets into the formal economy.

Source: *World Economic Forum's 2008-2009 Global Competitiveness Index*

### Intellectual Property Rights (IPR)

The IPR component evaluates the protection of intellectual property. In addition to an opinion-based measure of the protection of IP, it assesses protection of two major forms of intellectual property rights (patents and copyrights) from *de jure* and *de facto* perspectives, respectively.

#### Protection of Intellectual Property Rights

This variable contains opinion survey outcomes reflecting a nation's protection of intellectual property; therefore, it is a crucial aspect of the IPR component. Expert participants in each country were asked to rate their nation's IP protection, scoring it from "weak and not enforced" to "strong and enforced."

Source: *World Economic Forum's 2008-2009 Global Competitiveness Index*

#### Patent Protection

This variable reflects the strength of a country's patent laws based on five extensive criteria: coverage, membership in international treaties, restrictions on patent rights, enforcement, and duration of protection.

Source: *Ginarte-Park Index of Patent Rights (2005)*

#### Copyright Piracy

The level of piracy in the IP sector is an important indicator of the effectiveness of the intellectual property rights enforcement in a country. Information for this variable was collected from the International Intellectual Property Alliance's (IIPA) submission to the *Special 301 Report*, prepared by the U.S. Trade Representative in the context of its annual review of countries' intellectual property practices. It contains information on the piracy level for copyright-protected industries, including Business Software and Records & Music. Because this variable reflects *de facto* outcomes based on 'hard data,' it rates a country according to its effectiveness in protecting IPR. Data from the IIPA was supplemented with the most updated available statistics from the Business Software Alliance.

Source: *International Intellectual Property Alliance's 2009 Special 301 Report, Sixth Annual BSA and IDC Global Software Piracy Study (2008)*

### Explanatory Notes on Methodology

The overall grading scale of the IPRI ranges from 0 to 10, with 10 representing the strongest level of property rights protection and 0 reflecting the non-existence of secure property rights in a country. Similarly, each component and variable is placed on the same 0 to 10 scale.

For the calculation of the final index score, the variables within each component are averaged to derive the score for each of the three components. The final overall IPRI score is itself the average of the component scores. During construction of the index, a number of weighting methods for the components were tried. These were based on the authors' subjective views as well as to account for the different variances within each variable. However, the choice of the weighting method had little impact on the final rating and ranking of the countries. Thus, for reasons of simplicity and objectivity, the final numbers presented in this report are the result of a simple average calculation. It combines available variables into the three component area ratings, which in turn are averaged into the final IPRI score. However, the authors do not wish to imply that all components and areas in the index are of equal importance. Thus, readers who prefer to weight the variables in a different manner are invited to do so.

The 10 variables included in the IPRI stem from different sources. Most of them can be easily normalized to the IPRI's 0-10 scale. To combine variables that did not come in an indexed form, we applied the following standardization formula:

$$\left\{ \frac{X_{max} - X_i}{X_{max} - X_{min}} \right\} * 10$$

$X_i$  represents the individual country's value of the factor involved, while  $X_{max}$  and  $X_{min}$  were set at the maximum value for that factor within the original sample of countries in 2007 and zero, respectively. This method was used to standardize the *Registering Property* variables in the PPR component.

This rescaling procedure, while similar, is slightly different than that which was employed in the previous years. Previously, the maximum value for each of the factors was allowed to change with changes in the sample of countries. This year, it was anchored to the benchmark value in the sample of countries in the 2007 IPRI report. This change allows for a more objective comparison of countries from year to year. Previous years' data were rescaled, and scores were recalculated to account for this change. It is important to note that the recalculation of previous years' scores for PPR as well as IPRI had a very minor effect on rankings for those years.

### The Countries

The 2010 *International Property Rights Index* ranks a total of 125 countries from around the world, which includes 10 more countries than in 2009. The selection of countries was determined by the constraint of available data only. Covering 97 percent of the world's Gross Domestic Product, these countries differ substantially in economic performance and market structure. For means of comparison, the economies included in the IPRI were assigned to seven geographic regions, which include the following: Latin America and Caribbean, Western Europe, Central/Eastern Europe and Central Asia, Middle East/North Africa, Africa, Asia and Oceania, and North America.

It is important to note that the number of countries covered by the IPRI's different data sources ranged significantly. Therefore, the authors were provided with significant variation in the number of potential countries to be included in the IPRI. To be considered for the final IPRI ranking, a country's data needed to be represented in a minimum of one half of the included variables per category, although in most cases countries exceeded this threshold. Consequently, there are some countries that do not enter any of the final country sets of the index's three components and some that met the threshold of only one or two of the components. The countries that qualified for all three categories are the 125 included in this report.



### Limitations and Future Considerations

Several things must be kept in mind when understanding the conceptualization and outcomes of the IPRI. First, the IPRI ranking covers a relatively large number of nations from greatly varying economic, political, and cultural backgrounds. Consequently, many of the countries' idiosyncratic characteristics with respect to property rights protection and strength cannot be considered here.

None of the data used for the construction of the IPRI is generated by the authors themselves but was instead collected from third-party sources such as the World Bank, World Economic Forum, and trade groups. While this allows the study to refrain from any potential bias, it limits the ability of the authors to reconstruct any missing data. The problem of missing data becomes serious when the variable that is missing is not highly correlated with the ones that are available. In those cases, a country's score can be not as representative as those countries with all data available. Moreover, changing data availability from year to year can result in changes in scores that are not related to the actual changes in the situation with property rights. The authors tried their best to point out any such cases throughout the report and particularly in the country profiles (Appendix I).

This study remains constrained by the availability of intellectual property rights data, especially by the lack of data on trademarks. Last year, trademarks were dropped as one of the sub-components because of the lack of updated data. This year, the authors were not able to find good substitute data. However, the authors remain confident that in future years reliable data will be available because of development of new databases by authoritative sources. Additionally, the IPR data can significantly benefit from better measures of enforcement efforts in the area of intellectual property rights. Similarly, the PPR component could also be improved by including more 'hard data' on the security of property rights. These remain the areas with the most potential for further improvement of the data underlying the IPRI.

Finally, this year the authors were able to start using time-series aspects of the IPRI data. However, the nature of institutions is such that effects of their changes might not be felt in the outcomes of interest for many years. Additionally, lack of updated data on economic outcomes significantly interferes with this analysis. The authors hope that these constraints will be overcome in the future and that the theoretical relationship between property rights institutions and economic well-being can be tested empirically in a more robust way.

## CHAPTER IV: RESULTS

This chapter presents the results of the 2010 IPRI. After a short overview of data and outcomes, the complete 2010 IPRI scores and rankings are presented according to various criteria. In addition, changes in scores from last year are shown. Finally, the relationship between scores on the index and countries' economic well-being is presented.

### Data and Outcome Characteristics

The IPRI's 2010 outcomes are mainly based on data obtained from currently available authoritative sources. Most of these sources derive their data from opinion surveys. Generally, experts in their respective fields participated in these surveys, and the resulting rating in the form of a numeric factor is based on their judgment. Thus, it must be emphasized that, based on these sources, a country that ranks worst or best in the IPRI is not necessarily the one with the strongest or weakest property rights; instead, these rankings are based on which country is *perceived* to be the worst or best. Nevertheless, the authors view the expert surveys to be a good and reliable source of judgment related to a country's *de facto* characteristics instead of some measure of what laws and practices may exist in statute only.

Several variables in the IPRI are based on 'hard data.' For example, the numbers of procedures and days necessary to register property, while also based on surveys, are not based entirely on perceptions but on estimates of actual procedures involved. Moreover, estimates of the level of piracy are based on actual economic data. However, the index will benefit from more hard data. A future plan for the index is to obtain more data based on this kind of solid information. For example, it would be valuable to include measures of property rights enforcement or the extent of formalization of property rights based on actual data instead of expert opinions. Future Hernando de Soto fellows will concentrate on seeking and including the most comprehensive and up-to-date sources for additional information on property rights protections.

In analyzing the final outcome of the scoring process, the reader is presented with two related but ultimately different measures of property rights protection throughout the sample: ordinal and cardinal. The scores are presented in such a way that the reader can easily compare countries according to how they rank relative to each other, as well as how well they score compared to each other (and relative to the 0-10 scale). The authors hope that while the relative ranking proves useful, it is the score itself that provides the most useful measure of how well a country protects property rights.

### IPRI Ranking

The 2010 *International Property Rights Index* (IPRI) contains the ranking of 125 economies, which represents 97 percent of the world Gross Domestic Product (GDP). [Figure 2](#) and [Table 1](#) present the ranking by highest to lowest scoring and scores by country, respectively.

It is important to note that because of the expansion of the country coverage this year, the rankings in the 2010 report are not directly comparable to the rankings in the 2009 report. Therefore, the authors will primarily focus on discussing the score changes instead of the ranking changes from 2009. A more detailed overview of the countries' score changes for the IPRI and their components can also be found in Appendix I.



**Table 2: Top 10 by Component (Number Indicates Rank)**

IPRI	LP	PPR	IPR
Finland (1)	Finland (1)	Norway (1)	Denmark (1)
Denmark (2)	New Zealand (2)	Finland (1)	Finland (1)
Sweden (2)	Sweden (3)	Sweden (3)	United States (1)
Netherlands (4)	Denmark (3)	Netherlands (3)	Japan (4)
Norway (5)	Switzerland (5)	Denmark (5)	Switzerland (4)
Switzerland (5)	Iceland (6)	Singapore (5)	Austria (4)
New Zealand (5)	Netherlands (6)	New Zealand (7)	Sweden (4)
Singapore (8)	Singapore (6)	Australia (8)	Netherlands (8)
Australia (8)	Luxembourg (6)	Iceland (8)	Germany (8)
Austria (8)	Norway (6)	Switzerland (10)	Belgium (10)
		Australia (6)	

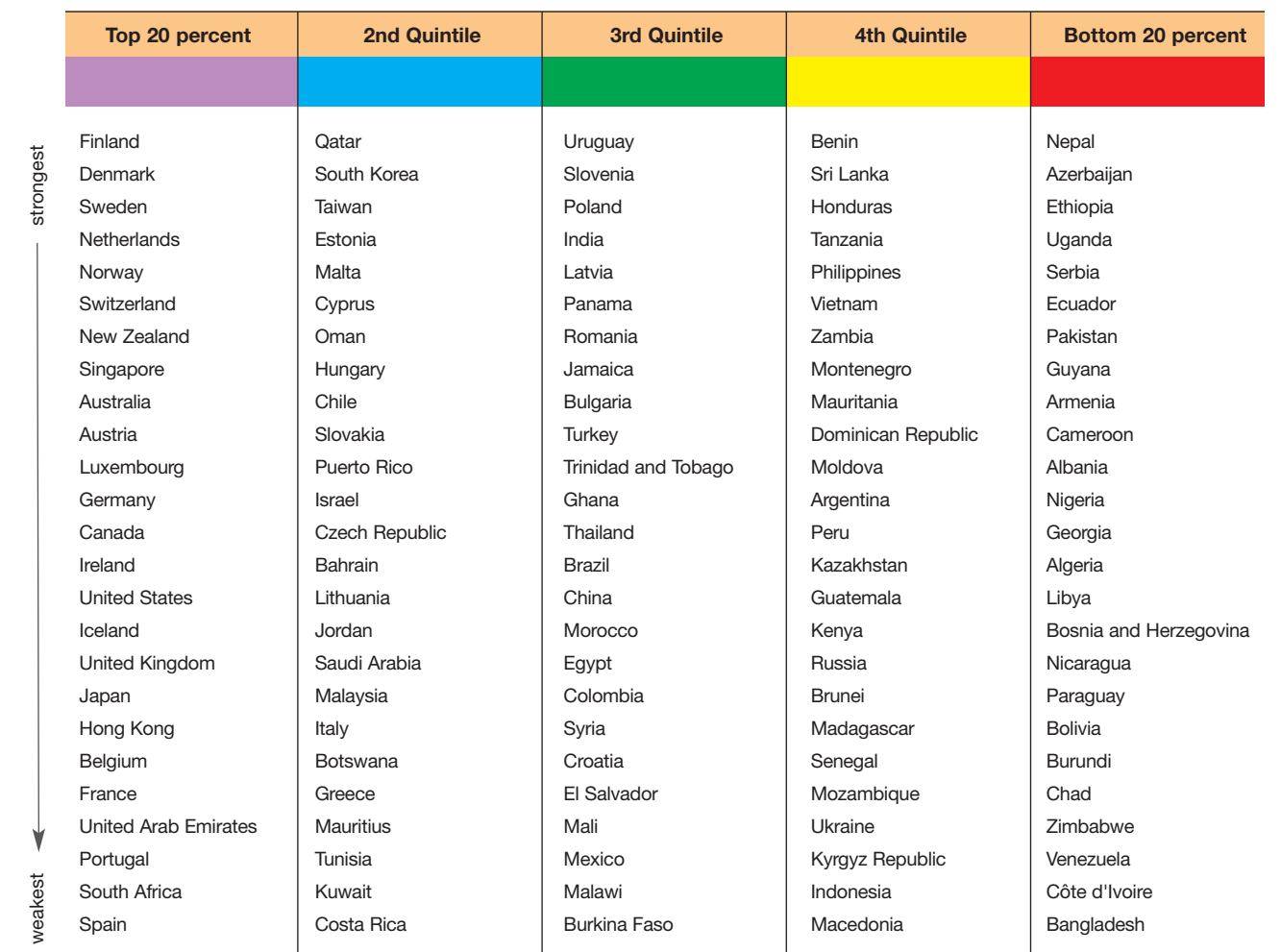
**Table 3: Bottom 10 by Component (Number Indicates Rank)**

IPRI	LP	PPR	IPR
Bosnia and Herzegovina (116)	Nicaragua (112)	Burundi (116)	Serbia (116)
Nicaragua (116)	Cameroon (112)	Côte d'Ivoire (116)	Bosnia and Herzegovina (117)
Paraguay (118)	Bangladesh (112)	Algeria (116)	Guyana (117)
Bolivia (119)	Kenya (112)	Nicaragua (116)	Azerbaijan (119)
Burundi (120)	Bolivia (112)	Chad (120)	Montenegro (120)
Chad (121)	Kyrgyz Republic (117)	Libya (121)	Libya (120)
Zimbabwe (121)	Ecuador (118)	Bolivia (121)	Albania (122)
Venezuela (121)	Paraguay (119)	Uganda (123)	Bangladesh (123)
Côte d'Ivoire (124)	Pakistan (120)	Bangladesh (124)	Armenia (124)
Bangladesh (125)	Burundi (120)	Brunei (125)	Georgia (125)
	Venezuela (122)		
	Zimbabwe (123)		
	Côte d'Ivoire (124)		
	Chad (125)		

Finland leads the country list a fourth year in a row with a score of 8.6 out of a possible 10. This is despite the fact that it scored 8.7 last year. In 2010, its score returned to the level found in the 2008 and 2007 reports. Overall, the Scandinavian countries continue to dominate the top of the rankings with Denmark and Sweden occupying the second position with a score of 8.5. Norway takes fifth place with a score of 8.3. Other countries in the top 10 (see [Table 2](#)) are Western European countries, including the Netherlands (8.4), Switzerland (8.3), and Austria (8.2). New Zealand (8.3) outranks its counterparts from the Asia and Oceania region; both Australia and Singapore have a score of 8.2.

At the bottom of the ladder are Bosnia and Herzegovina (3.6), Nicaragua (3.6), Paraguay (3.5), Bolivia (3.4), Burundi (3.3), Chad (3.2), Zimbabwe (3.2), Venezuela (3.2), and Côte d'Ivoire (3.1). Bangladesh scored the lowest among all countries again with a score of 2.9 (see [Table 3](#)). It does, however, present an improvement from last year's score of 2.6.

**Figure 3: IPRI Ranking by Quintile**



[Figure 3](#) presents the IPRI rankings by quintile. The color prism relates the quintiles to a specified color: purple for the top quintile, blue for the second quintile, green for the third, yellow for the fourth, and red for the bottom quintile. This year, countries are evenly distributed among quintiles with 25 countries in each. Additionally, the map on IPRI's distribution, displayed in the inside cover of this report, indicates which country belongs to which quintile. Again, because of the increased country coverage this year, it is difficult to compare directly any changes in quintile position from last year to this year.

**Table 4: Summary Statistics**

Indicator	Mean	Median	Deviation	Minimum	Maximum
<b>IPRI</b>	<b>5.5</b>	<b>5.2</b>	<b>1.5</b>	<b>2.9</b>	<b>8.6</b>
LP	5.2	4.7	1.9	1.6	8.9
PPR	6.0	5.9	1.3	3.4	8.6
IPR	5.1	4.8	1.8	1.8	8.5

Table 4 presents summary statistics for the 2010 IPRI and its component scores. Despite an improvement in some of the scores at the bottom of the IPRI ranking, there remains a large disparity between the highest and worst performing countries.

This year's highest score in any one of the core components is Finland's score of 8.9 in Legal and Political Environment (LP). The lowest score in any of the core components is 1.6 in Chad's LP score. The highest mean score component is Physical Property Rights (PPR) at 6.0.

**Ranking by Index Core Components**

This index is comprised of three core components that can be used independently to assess a country's performance. This section presents and discusses countries' performance in each core component of the index.

Tables 2 and 3 also show the top 10 and bottom 10 countries for each of the IPRI's components. The top 10 lists, generally, are more homogenous than the bottom 10 with Finland ranking first in all three components. Denmark, the Netherlands, Sweden, and Switzerland also place in the top 10 in all three components. Importantly, the only country that places in the top 10 in one of the components while not being in the top 10 of the IPRI ranking is the United States. Its score of 8.5 places it in the top of the IPR component ranking, while its overall IPRI score of 7.9 places it at only 15th place in the overall IPRI ranking.

The bottom 10 lists are much more heterogeneous. Chad ranks the lowest in the LP component, Brunei in the PPR, and Georgia in the IPR component. Both Brunei and Georgia are new countries to the IPRI report.

Figures 4, 5, and 6 give a complete rank ordering of the entire 125 country set according to the three core components of the IPRI.

**Changes in Scores (2009-2010)**

As was mentioned previously, a direct comparison of the rankings between 2009 and 2010 is hindered by the fact that 10 countries were added to the ranking in 2010. As a result, some changes in ranks could reflect changes in the population of countries instead of the countries' performance compared with last year. To facilitate comparison of the results between 2009 and 2010, the authors compiled Tables 5-8, which present the changes in scores for the IPRI as well as their components.

The countries that have improved their IPRI score the most since 2009 are a diverse group of countries. These include Montenegro, Azerbaijan, Zambia, Romania, Bangladesh, China, Egypt, Bosnia and Herzegovina, Albania, and Macedonia. Unfortunately, the following countries experienced a retreat in property rights: Chile, South Korea, Italy, Germany, Israel, Thailand, Iceland, Malaysia, Algeria, and Mauritania

**Figure 4: Ranking by LP Score**

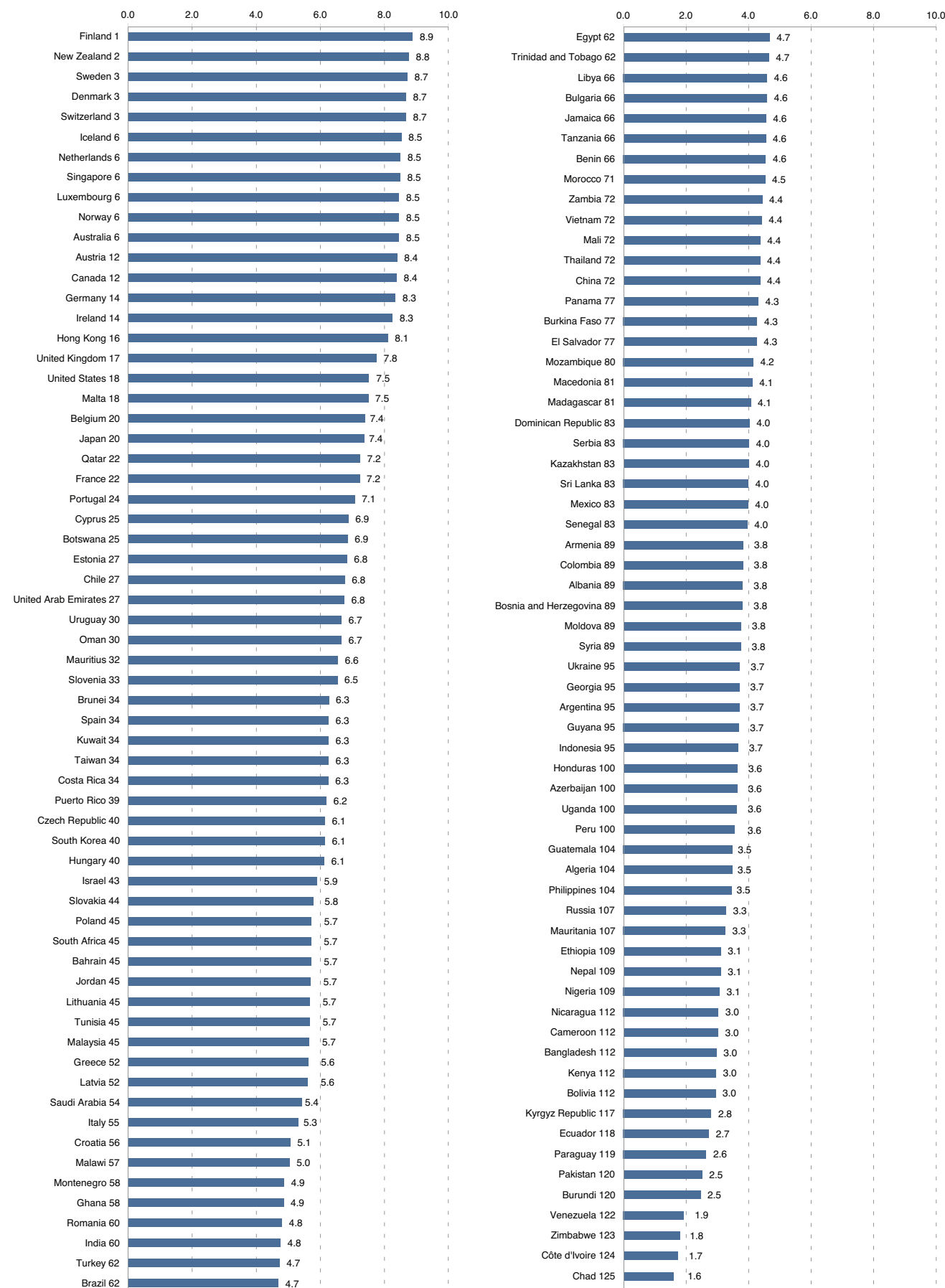


Figure 5: Ranking by PPR Score

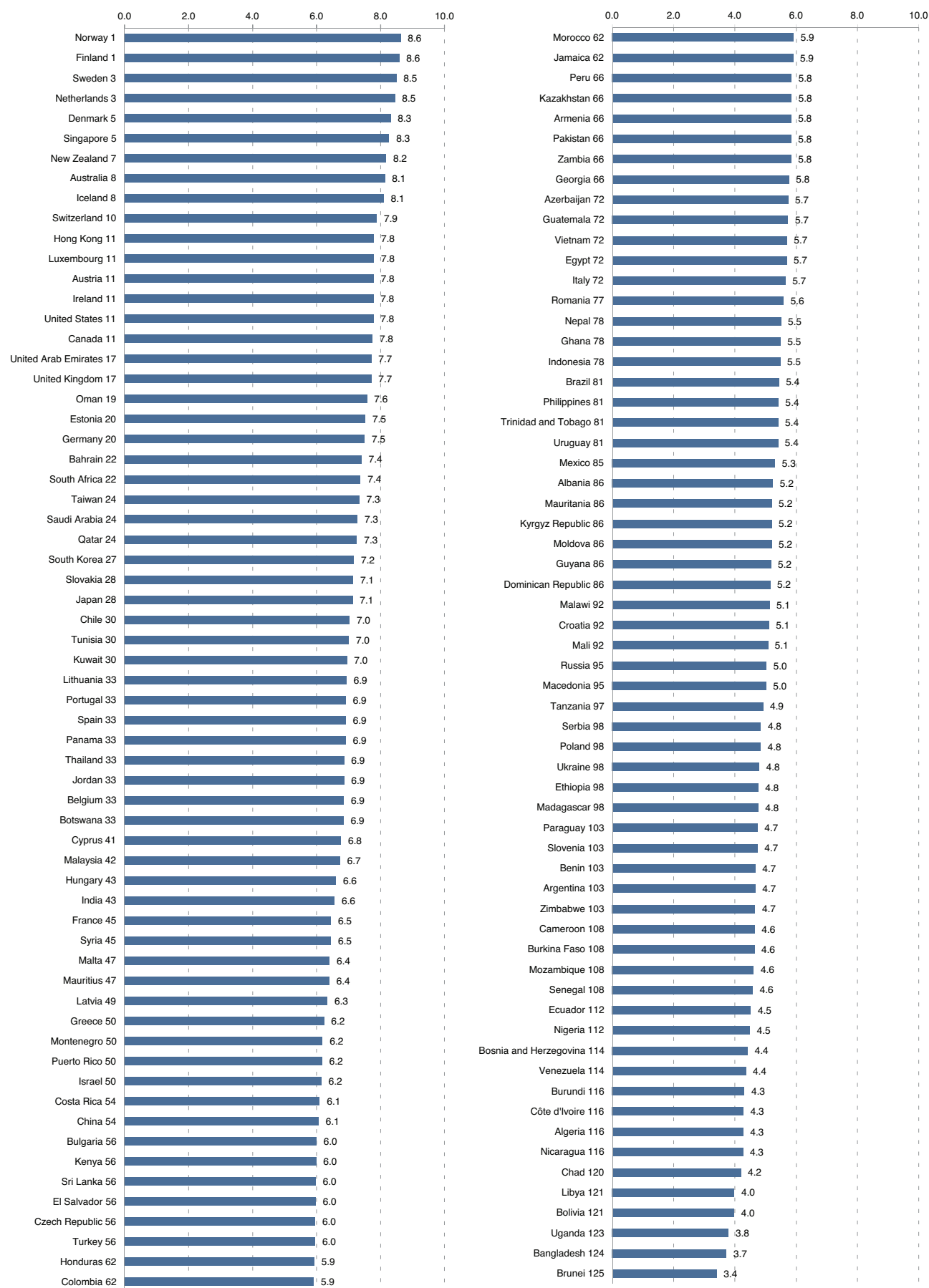
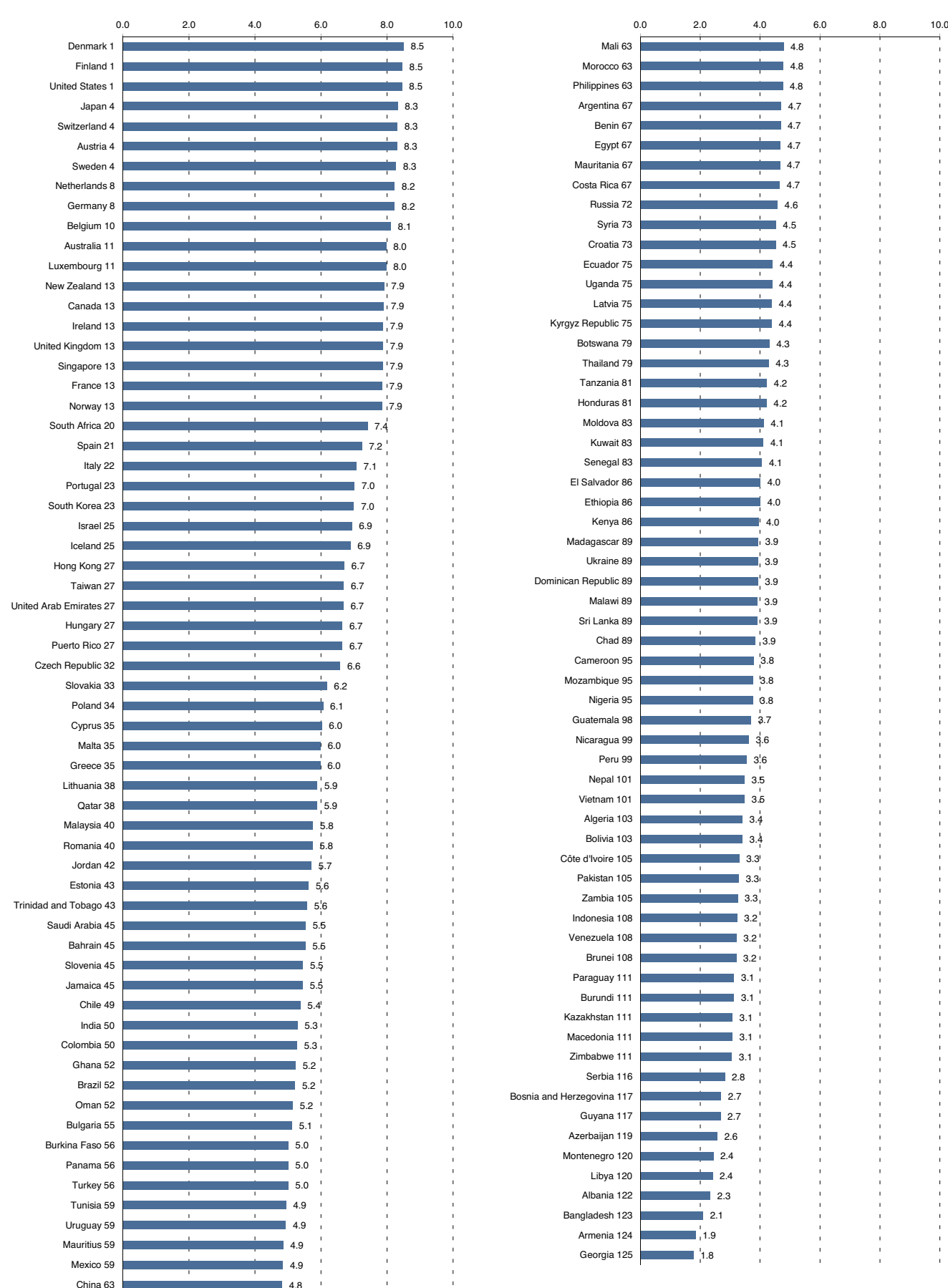


Figure 6: Ranking by IPR Score



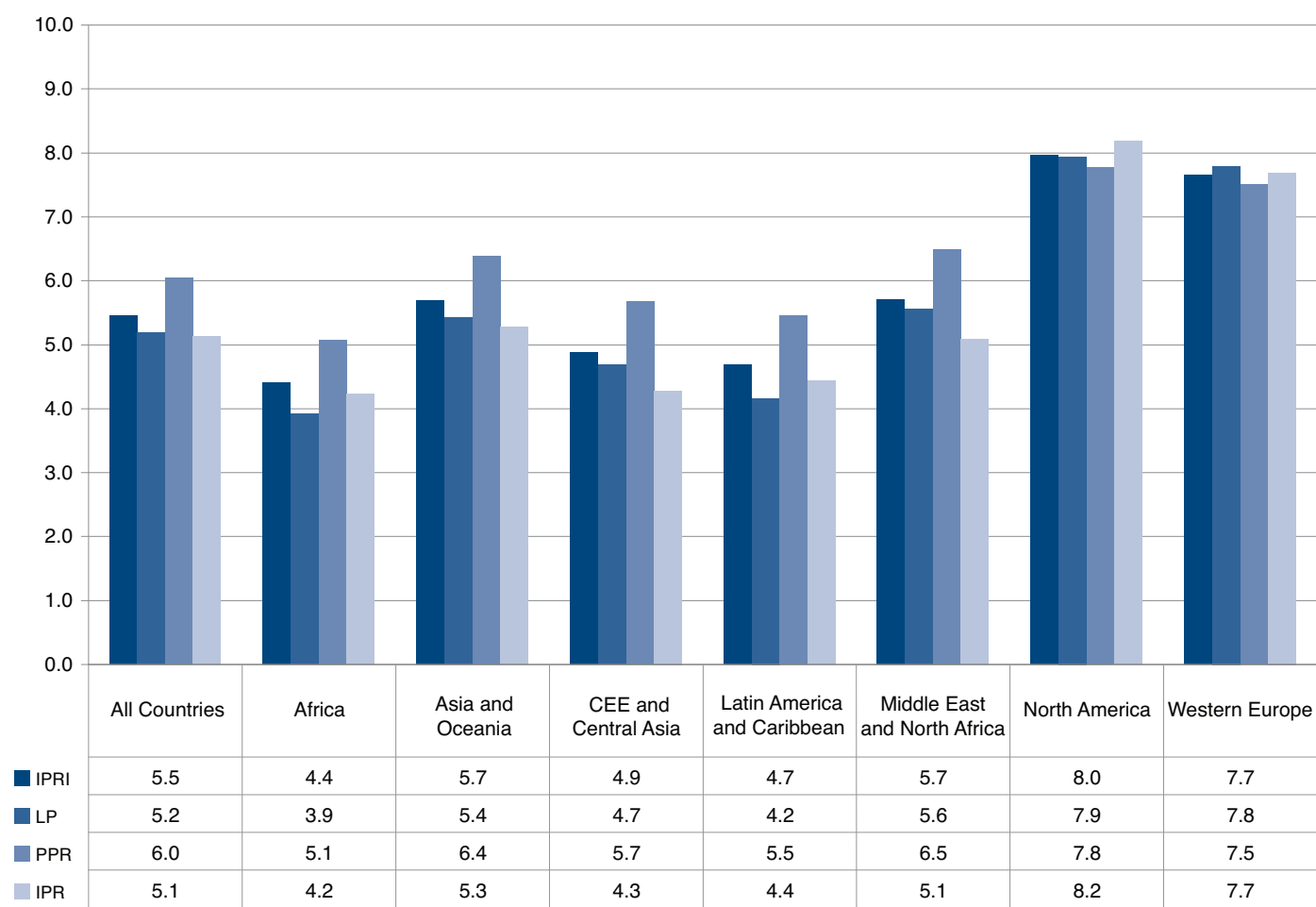




### Regional Distribution of IPRI

Figure 7 presents the average scores by region and component in the 2010 IPRI report. Since 2009, some changes have been made to regional assignments of countries to reflect economic and cultural ties better. The most noted change is Mexico's reassignment from North America to Latin America and Caribbean. Mexico is not only culturally closer to Latin America and Caribbean, but removing it from North America allows us to see clearly North America's strongest position in all three components. Similarly, Malta was reassigned to Western Europe from its former position in the Middle East and North Africa. Appendix III presents the updated regional assignments.

Figure 7: Average Scores by Region and Component



### IPRI and Economic Outcomes

The underlining assumption of this study is the correlation between an effective property rights regime and its significant impact on the economic performance of a country. In fact, we find that according to the distribution of average income among countries in the IPRI quintiles, the countries with stronger property rights scores tend to be the nations with higher per capita incomes. The countries with weaker property rights scores have lower per capita incomes. Additionally, countries with stronger property rights regimes attract more foreign direct investment (FDI). Finally, developing countries with stronger property rights have higher per capita GDP growth than those that fail to respect property rights. This observation is especially important considering the role that property rights can play to alleviate poverty.

Figure 8: Average Per Capita Income by IPRI Quintile

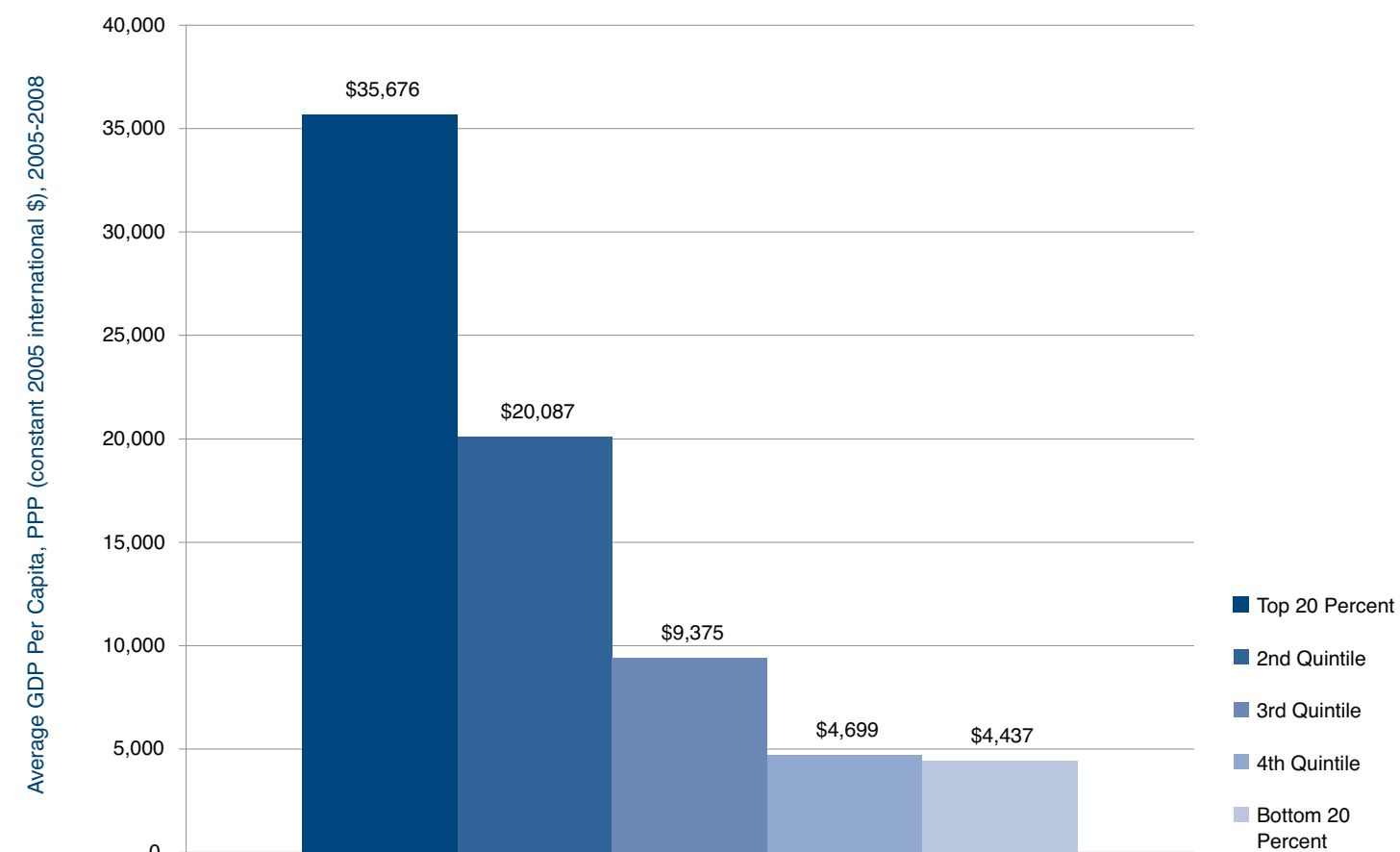
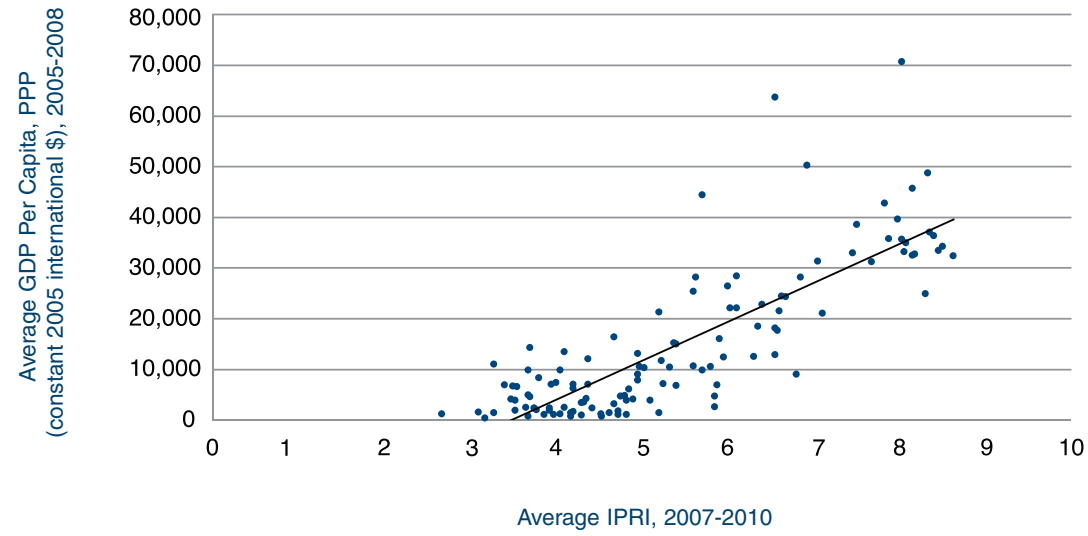


Figure 8 illustrates that, on average, countries in the top quintile of IPRI scores enjoy a per capita income of eight times that of their counterparts in the bottom quintile.<sup>8</sup> Calculations for Figure 8 are based on the averages of the IPRI scores for 2007-2010 and corresponding data on average GDP per capita in PPP terms for years 2005-2008. Using averages allow us to establish a more robust relationship between property rights and income, which might fluctuate because of economic cycles and other exogenous impacts. The same pattern is observed when using only the last year of the IPRI scores and GDP per capita data.

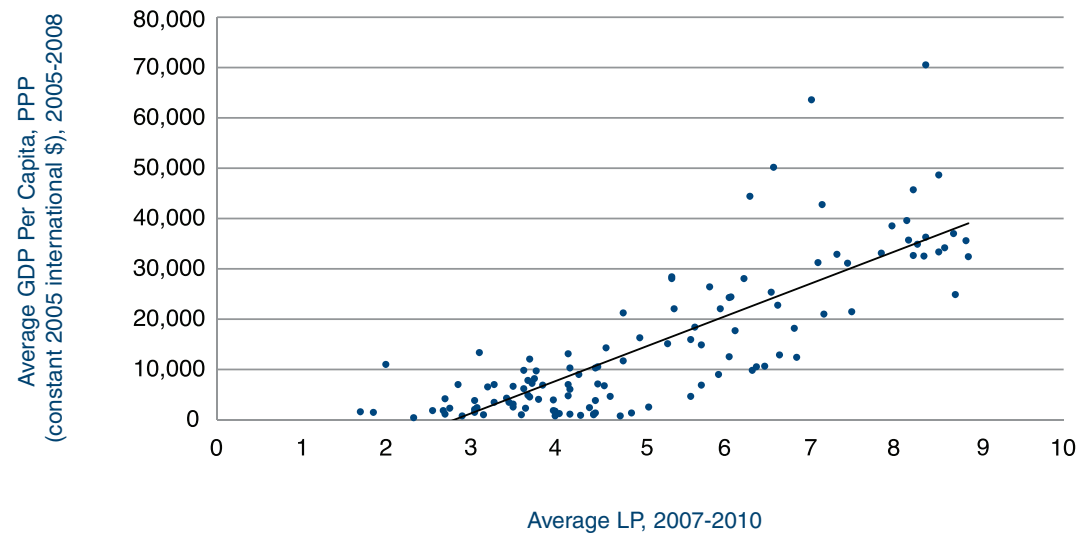


Figure 9 presents the relationship between the IPRI scores and GDP per capita. The IPRI score is overwhelmingly positively related to GDP per capita. We observe that the countries with stronger property rights protection are among the countries with higher GDP per capita income as compared to the countries at the bottom of the IPRI ranking. A similar relationship is observed for the IPRI's core components (Figures 10-12).

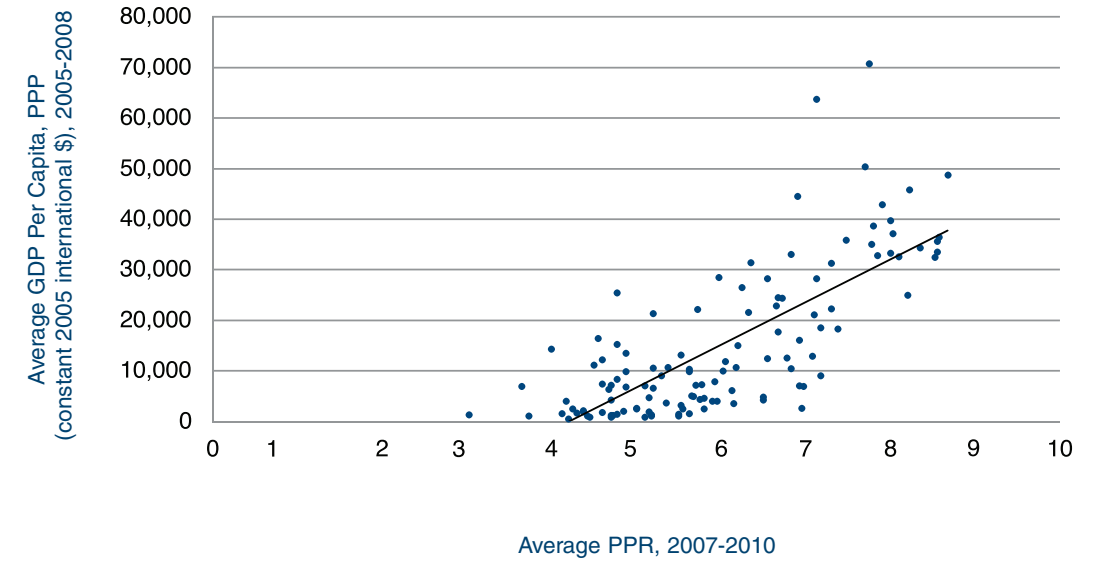
**Figure 9: Relationship between IPRI and GDP Per Capita**



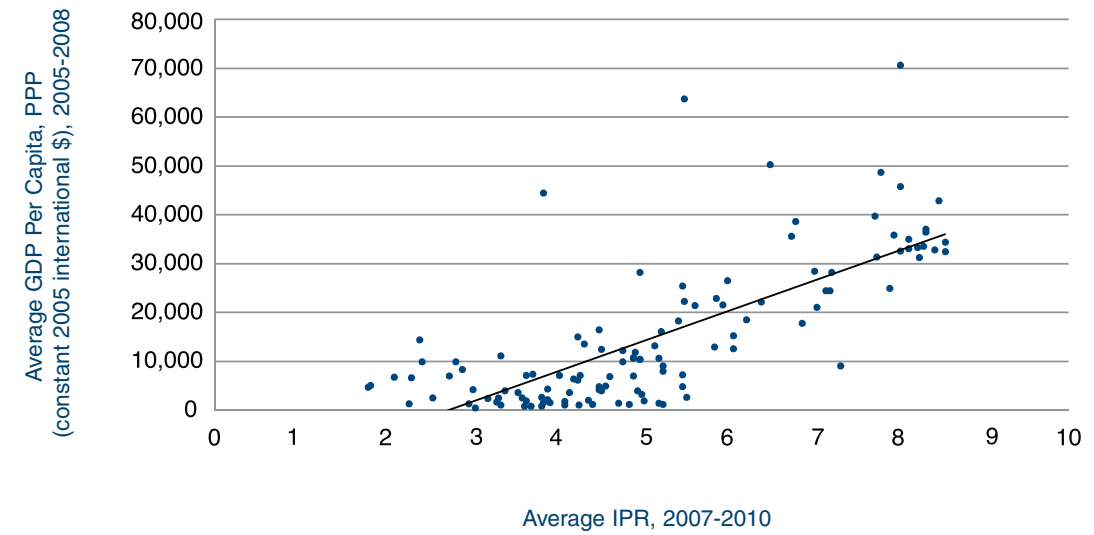
**Figure 10: Relationship between LP and GDP Per Capita**



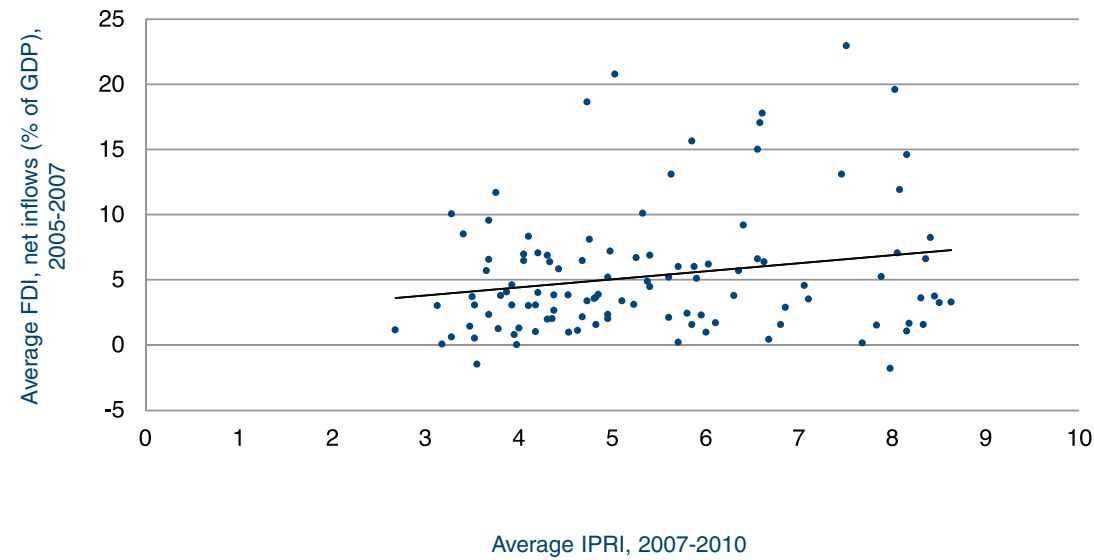
**Figure 11: Relationship between PPR and GDP Per Capita**



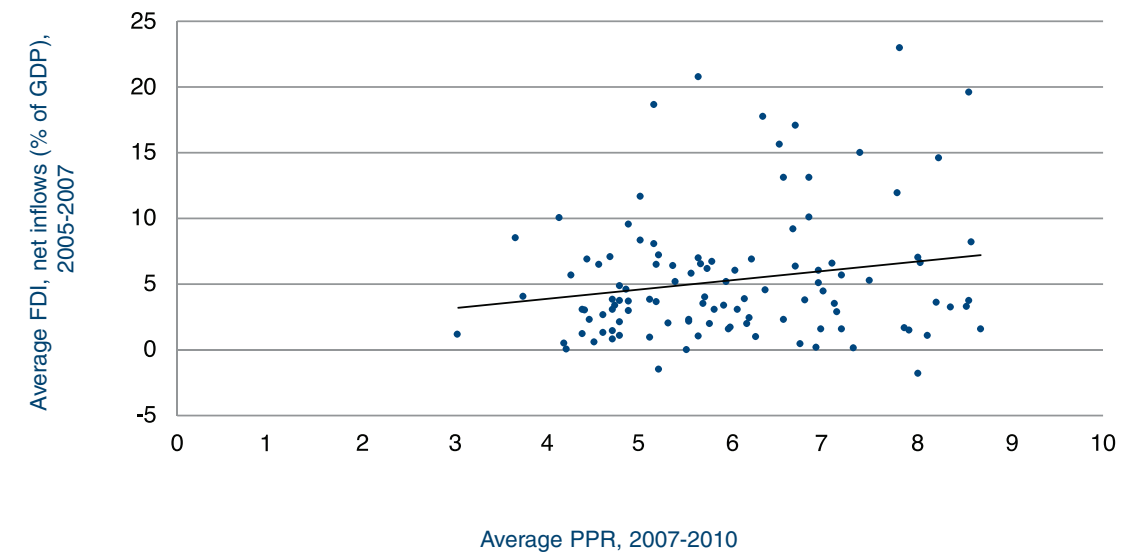
**Figure 12: Relationship between IPR and GDP Per Capita**



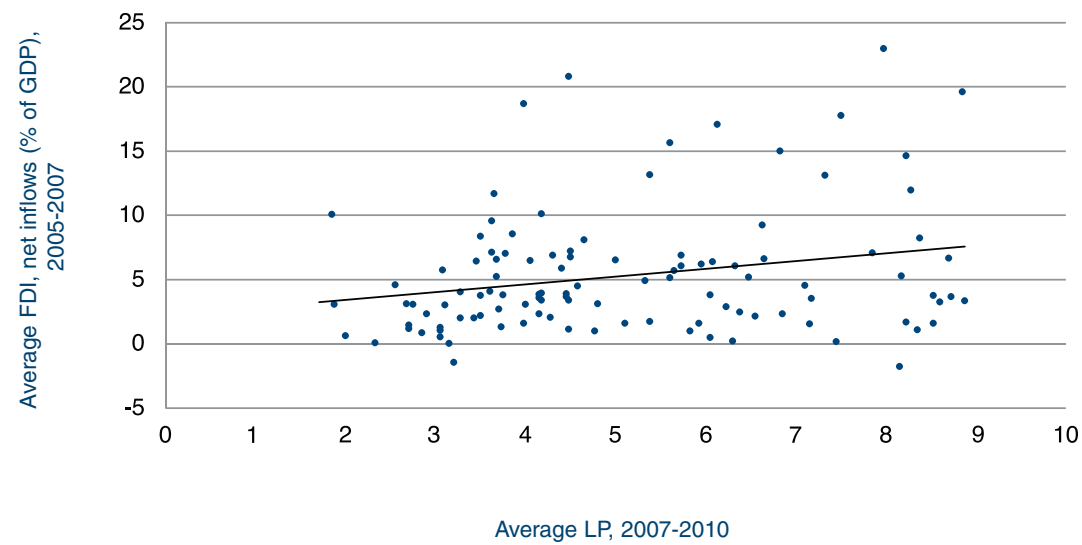
**Figure 13: Relationship between IPRI and FDI Inflows as a Percent of GDP**



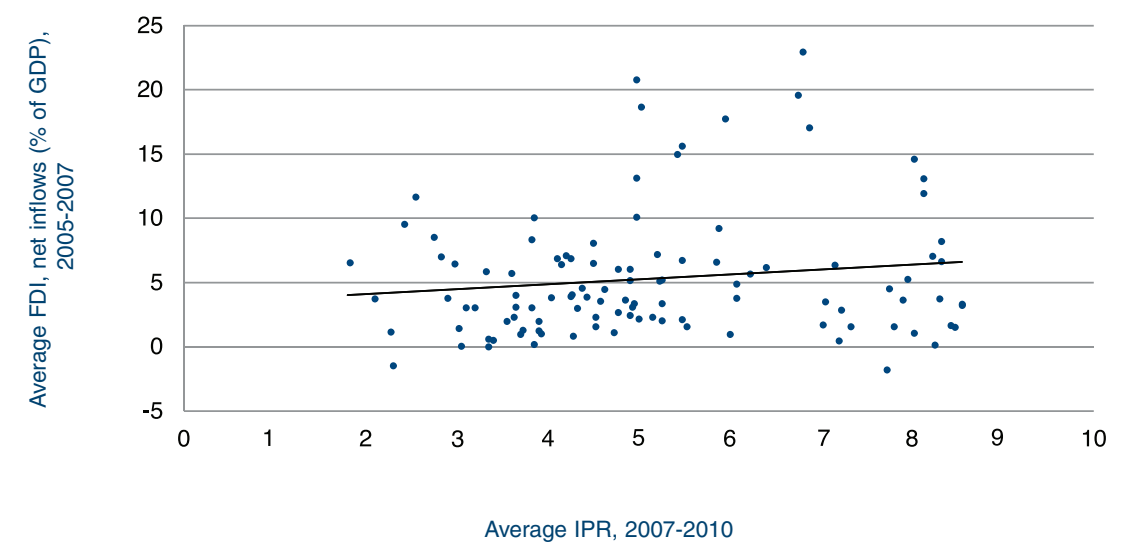
**Figure 15: Relationship between PPR and FDI Inflows as a Percent of GDP**



**Figure 14: Relationship between LP and FDI Inflows as a Percent of GDP**

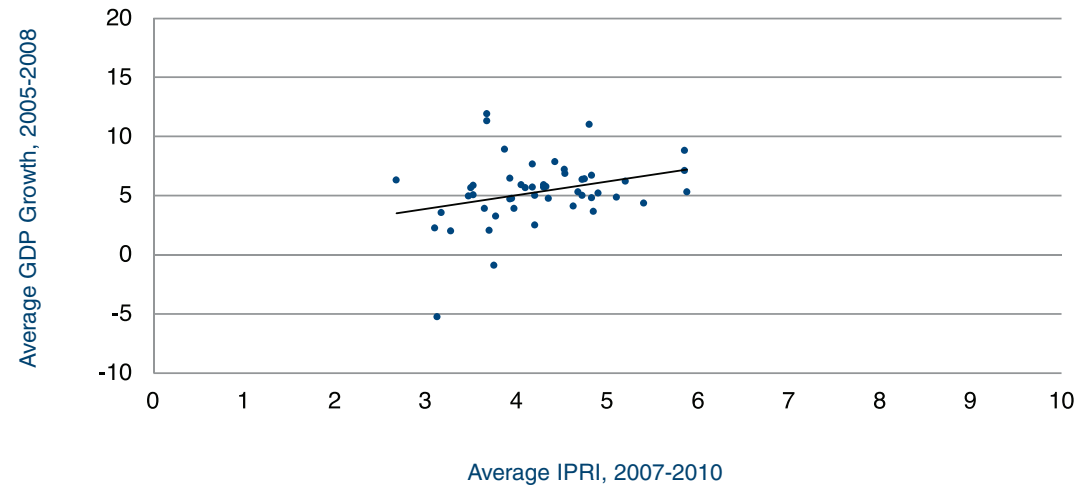


**Figure 16: Relationship between IPR and FDI Inflows as a Percent of GDP**

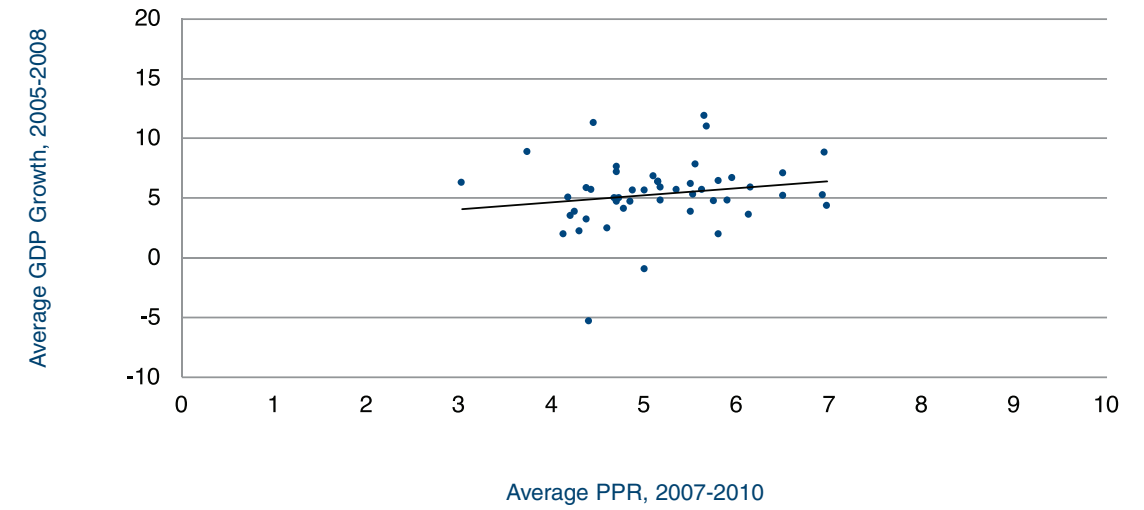


To further investigate the role that protection of property rights plays in economic development, the authors have considered the relationship between the IPRI and its components and FDI. [Figure 13](#) demonstrates that there is a positive relationship between the average IPRI score and average FDI inflows measured as a percent of GDP.<sup>9</sup> Similarly, [Figures 14-16](#) demonstrate that countries with better legal and political environments and stronger protection of physical property rights attract more FDI. This relationship appears to be weaker for the IPR component, but it is important to keep in mind that the data on IPR is less complete than for other components. Therefore, our results might be more prone to inconsistencies because of the lack of more comprehensive data. Additionally, the relationship appears to be somewhat hindered by the presence of outliers, such as Ireland, which is in the top quintile of the IPRI rank but experienced a significant reversal in the direction of FDI in 2005.<sup>10</sup> Again, averages are used to be able to establish long-term trends.

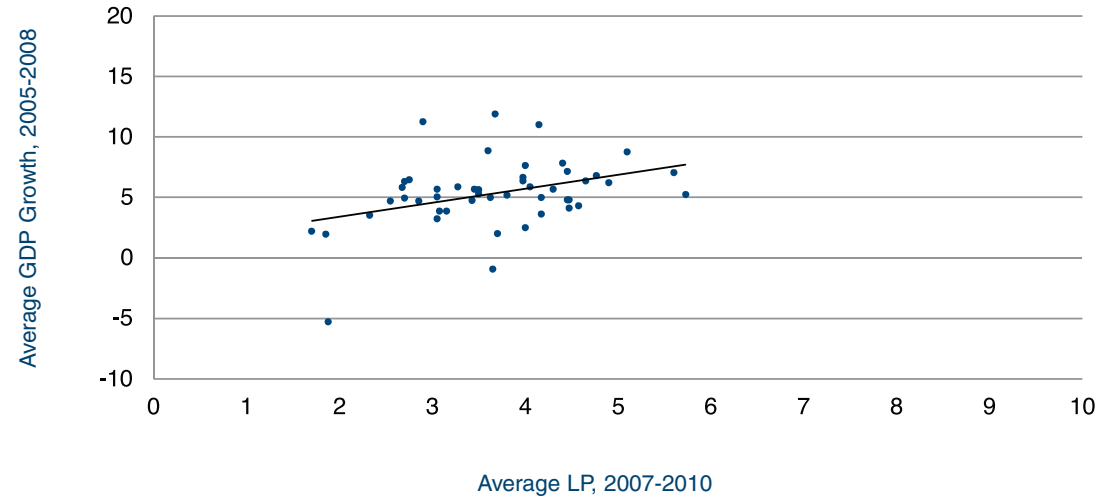
**Figure 17: Relationship between IPRI and GDP Growth in Developing Countries**



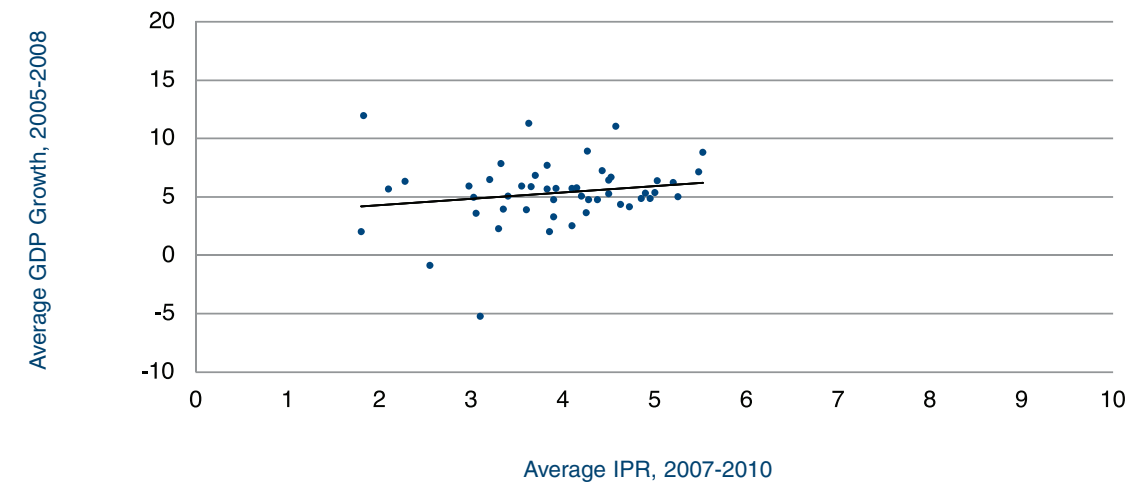
**Figure 19: Relationship between PPR and GDP Growth in Developing Countries**



**Figure 18: Relationship between LP and GDP Growth in Developing Countries**



**Figure 20: Relationship between IPR and GDP Growth in Developing Countries**



Countries in the top quintile of the IPRI ranking tend to be developed nations with lower GDP growth. The question then becomes whether stronger property rights are associated with higher economic growth in the developing countries.<sup>11</sup> Figures 17-20 demonstrate that those developing countries that respect property rights grow on average faster than those that fail to provide sound legal and political environment and protection of physical property rights. As with FDI inflows, the relationship is less clear with IPR but similar caveats apply about the nature of the IPR data.

## Regression Analysis

Because GDP per capita is one of the primary measures used to assess economic well-being, we additionally look at how it relates to IPRI via a regression analysis.

By estimating the relationship between IPRI and GDP per capita via this analysis, we find a statistically significant positive relationship. Specifically, a one point increase in the IPRI score predicts a \$7,694 increase in GDP per capita (R-squared=0.67). In other words, the IPRI score is highly correlated with the level of economic development measured as GDP per capita. In fact, the correlation coefficient between these two variables is 0.82, which suggests a very strong association. Similarly, the IPRI components are highly correlated with GDP per capita. Results show that for LP, the correlation coefficient is also 0.82, while the correlation coefficient for both PPR and IPR components is 0.75.

It is important to note that these estimates show a correlation and do not necessarily prove causality. One way to address the problem of simultaneity to some extent is to lag a property rights measure when estimating its impact on the economic outcome variable. However, with only four years of data available at the moment, this strategy is not as effective. This is especially the case considering that changes in institutions usually do not produce large changes in outcomes in such a short term.

Additionally, the nature of the data collected allows us to control for unobserved time-invariant country characteristics (i.e., systematic differences that do not change or change very slowly). The positive relationship between IPRI scores and GDP per capita holds, controlling for such country-specific differences.

## Conclusion

The global financial crisis and the recession that ensued provide us with an invaluable lesson. Clearly delineated property rights are a *sine qua non* for a flourishing economy. They are also likely to hold the key to a quick recovery. At a time when the financial markets are still in disarray and economies are struggling to recover, the world economy needs an infusion of economically viable assets that currently lack legal representation or are poorly enforced.

The 2010 IPRI finds that among the 125 countries included in the 2010 IPRI those countries in the top of the IPRI ranking continue to enjoy an overwhelmingly higher GDP per capita than those at the bottom. This relationship holds for components of the IPRI as well, thus reaffirming that countries with robust legal and political systems are better positioned to reap the benefits of both physical and intellectual property rights.

The 2010 IPRI demonstrates that despite the troubled economic times, countries continue to improve their property rights regimes, thus setting themselves on a path to economic development. However, because a few countries experienced setbacks, their prospects for recovery will most likely be inhibited.

While the evidence presented here is quite compelling, the authors invite readers to study further the relationship between property rights and economic outcomes using the IPRI data. Hopefully, further study will more fully unravel the link between secure property rights and economic well-being.

# CHAPTER V: CASE STUDIES

The 2010 IPRI presents six case studies exploring various aspects of physical and intellectual property rights. The case studies also highlight the efforts by IPRI's partner organizations to improve the situation with property rights in their respective countries. We thank the contributors for their invaluable insights that have greatly enhanced the IPRI report.

## PHYSICAL PROPERTY RIGHTS

### CASE STUDY: LAND TITLING IN SOUTH AFRICA

By Leon Louw, The Free Market Foundation (South Africa)

#### Introduction

South Africa's Land Acts are often regarded as the cornerstone of apartheid, which was the aspect of South Africa's 'crime against humanity' that made the biggest single contribution to psychological, political and material dispossession of black South Africans. The land question remains one of the most problematic and conflict-provoking aspects of post-apartheid South Africa. The land debate consists primarily of an acrimonious discourse about land redistribution from whites to blacks, which is so overpowering that scant attention is paid to other aspects that have greater potential for black economic empowerment.

#### The Land Situation in South Africa

Black South Africans constitute 80 percent of the population and live primarily on urban 'plots' that they hold under a range of limited forms of tenure. The balance (about 35 percent) live on plots or farms in rural 'tribal' areas (formerly 'homelands'), which are also under a range of forms of tribal tenure. A small but growing number of blacks live in historically 'white' areas.

Hard as it may be to believe, 15 years after the transition to predominantly black rule, most black South Africans still live under the legislative progeny of the Land Acts. In other words, most black South Africans still live under apartheid legislation and land tenure now imposed by a democratic government instead of a white racist regime. Additionally, the present regime inherited the massive loot of the apartheid government in the form of gigantic 'parastatals' created primarily for white regime patronage and extensive government-owned land. This land is unused or underused, and, therefore, is readily available for redistribution to landless blacks. Given the dire situation with respect to property rights, why has the post-apartheid government not converted black-held land to full ownership indistinguishable from historically white land? Why has it not used superfluous land and parastatals to empower its constituency?

The Free Market Foundation, Africa's oldest and most influential economic policy think tank, is the only organisation that has worked for conversion of all black-held land to full ownership ('freehold') and for the redistribution of superfluous government land to the victims of apartheid as a substantial once-off compensation for the crime of apartheid. Virtually everyone to whom these ideas are put endorses them regardless of ideology, yet, with few exceptions, neither has occurred. As Hernando de Soto has so eloquently explained, the poor are locked by tenacious land laws into a world of "dead capital." The theory is straightforward: unleash dead capital into the hands of the poor and the economy by giving them full title that is freely tradable and mortgageable. The reality is there are always powerful vested interests in preserving whatever the status quo happens to be – what Milton Friedman aptly called the "tyranny of the status quo" – compounded by prohibitively costly and complex laws governing fundamental change.

## The South African Experience

This matter can be understood in the context of three South African experiences.

### **Mathanjana tribal area**

Mathanjana is a remote tribal area northeast of Pretoria. After protracted interaction with the chiefs and communities, the government and all stakeholders agreed that Mathanjana should become the first tribal area in South Africa where village plots would be converted to freehold. That was eight years ago. Despite the fact that most plots had existed for generations, laws governing town planning, land survey, property registration, tribalism, local government tax, and the like have meant that the cost to the government to process reforms has exceeded the value of the raw land. Communities promised land title long ago have become frustrated and pessimistic. The conclusion to be drawn is that the introduction of full property rights in traditional communities in South Africa and probably throughout the developing world requires a fundamental and radical revision of law and procedure. Existing forms of tenure registration can be converted to full ownership without any expenses or formalities for all preexisting plots. Newly established plots on superfluous government land can be the subject of streamlined town planning and related formalities.

### **Ngwathe urban area**

Ngwathe is a municipal area covering various towns in the north of the Free State Province of South Africa. It prides itself on the extent to which it has implemented land 'transformation' for black South Africans. Virtually all black-occupied land has been properly surveyed, included in town planning schemes, and proclaimed and registered in the deeds registry. Thousands of title deeds were issued. Curiously, most were not given to the intended beneficiaries and some that were given were either not freely tradable or subject to endorsement. If titles of the latter type fail to obtain an endorsement, their validity would lapse.

In consultation with the Free Market Foundation, Ngwathe municipality has resolved to become the first urban area in South Africa where all land is held under full freehold on the basis of complete equality between whites and blacks. Because most formalities have already been complied with, conversion to ownership is relatively easy, at least conceptually. Even so, there are substantial obstacles of the kind that bedevil land ownership in the Third World. First, substantial sums in arrear rents, rates and taxes are owed to the municipality, sometimes far in excess of the value of the land. Although these sums are unlikely ever to be paid, they are reflected in the municipal accounts as assets. If they are written off to allow for a tenure upgrade, the municipality will be technically insolvent and in breach of local government management legislation. Second, there are a host of professions wanting a slice of the cake including town planners, property lawyers, land surveyors, and development consultants.

Armed with its Mathanjana experience, the Free Market Foundation confronted these challenges with Ngwathe and said that normalization could be achieved only if the council broke with convention in fundamental ways. It would have to be willing to grant full title without the prohibitively costly intervention of the professions. To solve its accounting problem it was suggested that land-related debts be severed from the land and converted in the council's accounts to civil debts so that 'clearance certificates' could be issued on all land regardless of debt to the council. The government is considering exempting land converted from apartheid title from the deeds registry fees. Property lawyers in the area have agreed to a substantial reduction of their fees. South Africa's leading financial company is considering covering the costs of essential consultants as a marketing rather than philanthropic expense with a view to offering mortgage finance to Ngwathe's new land owners.

As a result, over 25,000 plots will be converted. At an average value of, say, \$13,500 and five or more people per plot, Ngwathe residents will be empowered directly to the tune of \$338 million converted from dead capital to market value, i.e., \$2,700 per person. With an estimated five to 10 million plots to follow countrywide, blacks and the economy will get a direct injection of tradable land worth at least \$68 billion.

### **Langa urban area**

The standard objection to giving the poor full, unambiguously tradable ownership of their land is that 'they' cannot be trusted with it – that is, they will sell the land and spend the money frivolously, leaving them again landless. Apart from this being offensively patronising, it is contradicted by experience. The problem in South Africa and probably worldwide in comparable circumstances is the opposite; namely, the poor have been conditioned into not regarding land as tradable. They hold on to it tenaciously, passing it from one generation to another, fearful of losing it and mindful of their inability to acquire land in the free

market. The predominantly black area of South Africa where most of the plots are held under relatively free title is the Langa 'township' falling under the Cape Town municipality. Although these titles are freely tradable and mortgageable, no property market to speak of has emerged. Local newspapers do not have properties for sale classified advertisements of the kind that characterize mature property markets, and there are no estate agents (realtors). For sale signs are uncommon. A small but growing number of mortgages have been registered.

The problem turns out not to be purely technical. Difficult though it is to get full title, this further challenge is cultural and psychological. Dead capital does not become living capital as a matter of law. The solution proposed for Ngwathe is for a tenure upgrade to be accompanied by public information on the implications by way of pamphlets and workshops, preferably run by banks marketing their services.

## Conclusion

Hernando de Soto is certainly right about the tragedy of dead capital inflicted on the poor in most countries by virtue of them being denied unambiguous and fully tradable title to their most substantial physical asset: their land. South Africa's experience, like that of many other countries, is that conversion of restricted tenure to full title is, in the real world, extremely difficult and costly. The Free Market Foundation's experience in South Africa has exposed many of the practical challenges and resulted in creative solutions that could convert dead capital into living capital expeditiously and affordably.

What Hernando de Soto's vision seems to need is a basic set of implementation strategies tailored to context-specific circumstances. It is hard to imagine anything more effective than the world's 'development' agencies such as the UN, World Bank and IMF could do in the pursuit of their mandates than a global program along the lines of South Africa's experience.

## CASE STUDY: EXPROPRIATION FOR ECONOMIC DEVELOPMENT IN CANADA

By Joseph Quesnel, *Frontier Centre for Public Policy (Canada)*

### Introduction

This case study involves a family that owned a large piece of land for generations in rural Canada, a section of which was almost expropriated by a local government for its own vague business purposes that have yet to be defined to the original owners. After years of court battles and offers and counter-offers, the municipality involved abandoned the expropriation in early October 2009.

Traditionally, expropriation is thought of as a last resort where land is taken for clear public interests and purposes, such as the construction of a publicly-accessible road, highway, or a bridge. In Canada, some provinces allow local powers the ability to expropriate private land on the grounds of economic development. Unfortunately, the precise definition of 'economic development' is never fully specified and this power often allows local governments, who possess massive legal and financial resources compared to individual landowners, to deny individuals their rights.

The process of expropriation for economic development allows local governments to take over property because they feel they can do a 'better job' on development than that which would occur between private, consenting parties – especially if, of course, some parties do not wish to develop their land. This is an improper role for governments. They should encourage business growth, not become directly involved in it.

### History of the Issue

The Fouillard family owns a large piece of land near Fort Ellice in the province of Manitoba. On a portion of it, there is a historic Hudson's Bay trading post. Although the structure of the post has since been lost, there are cairns and a historic cemetery. Despite a history of generosity from the Fouillards where they allowed the public to explore the historic site free of charge for decades, the provincial government of Manitoba, the Rural Municipality of Ellice, and the nearby Town of St-Lazare tried to expropriate a large portion of their property. Their intention was to develop it as a more high-profile tourist site as part of their tourism strategy for the region.

In 2005, the Fouillards were given a notice of expropriation. Since that time, the family has sought to prevent the expropriation through legal channels. However, they exhausted their appeals to Manitoba courts, and recently the Supreme Court of Canada declined to hear their case. The problem, before the recent government reversal, was that Manitoba's Municipal Act provides a clear power to municipal governments to expropriate this land. The law was changed in 1997 to allow local governments the power to expropriate land to aid community job creation and economic development. Little did legislators realize at the time what sort of abuse this legal change could unleash on individual landowners.

### Property Rights Abuses in the Case of the Fouillards

#### Size of Land

Originally, the Rural Municipality of Ellice sought 288 acres of the Fouillard's property. Under Manitoba's legislation, however, the Fouillards were entitled to an independent inquiry into the expropriation. Although this seems like a safeguard, in fact it was not because the municipality was only required to consider the report issued by the independent inquiry officer. Indeed, the independent inquiry found the municipality did not require the amount of land they were seeking. The officer determined they only needed 90 acres. However, because the recommendations are not binding in whole or even in part, the municipality ignored the report and proceeded with the full expropriation.

#### Business Plans

Although the municipality involved indicated it wanted to develop the land into a more high-profile tourist-oriented historic site and the reeve ('mayor') of the community made vague references to "walking trails," the Fouillard family never received any concrete business plan from the municipality. The family would like to view the plans to determine their viability, but municipal officials have been very reticent about providing such details. There was no evidence the plan was even viable.

#### Third Party Involvement

The Fouillards were informed in court by municipal officials that the plan was to develop the land locally and that they were not to involve any third parties. However, provincial Freedom of Information requests later indicated Ellice officials sought audiences with various third parties and invited organizations such as the Manitoba Metis Federation to consider development of the land. In securing records of town council meetings, the Fouillards discovered the town sought business partners to help them develop the proposal.

#### Implications

The Fouillard's case serves as a warning to citizens and legislators who should realize that the expropriation process is prone to abuse. Governments should not be in the business of starting and engaging in business; they should create the environment where business can grow. They should also not act as a third party for land developers. To allow expropriation for economic development provides too much temptation for local governments to confiscate the property of private citizens merely for tax revenue purposes.

This process is also prone to abuse because individual landowners are not privy to backroom discussions between politically-connected business firms and organizations and municipal officials. Allowing this broad power to municipalities invites secret relationships and the possibility of corrupt arrangements. In this environment, local governments can expropriate solely for the benefit of another party, and they do not have to reveal their true intentions to the landowners who face expropriation. In the case of the Fouillards, they never received straight answers about the parameters of the project envisioned or which third parties the municipality had intended to work with.

Individual landowners also do not possess the deep pockets and organizational muscle to continue these battles indefinitely, whereas governments can obtain teams of lawyers and can draw upon taxpayer-based resources to fight expropriation efforts until they succeed.

#### Recommendations

The ultimate aim should be not to allow any governments to expropriate for economic development. This power should not be provided to them in the first place, and Canadian provinces need to amend their laws. If expropriation for economic development is allowed, it should include tight restrictions. For example, clauses in relevant legislation should clearly spell out what may and what may not be expropriated for economic development. This broad category should not be left up to governments to define because they will seek to maximize their gains at the expense of individual landowners.

Legislation should provide clear procedural safeguards for landowners caught in this situation. They should have clear rights to all relevant information pertaining to their case and they should have the possibility of third party panel review to the expropriation. Legislators should explore the idea of an individual landowner's bill of rights, which spells out rights for the landowner and binding obligations on the expropriating government.

In other countries, policy makers should avoid allowing regional or local level governments to enter into expropriation for economic development purposes. This practice should be restricted to public interest expropriation, most notably infrastructure such as roads, bridges, and canals, which will benefit all citizens and advance common interests.

Even the United States, which has an enviable level of property protection, has discovered the abuses present in allowing expropriation for economic development purposes. After the *Kelo v. City of New London* (2005) Supreme Court judgment, legislators at all levels have taken note of how corrosive this practice is on individual property rights. As of 2007, 42 states have enacted legislation that either limits or bans this practice altogether. Many have adopted measures to prevent expropriation that aims to benefit specific third parties.

## Conclusion

The Fouillard case study demonstrates how easy our private property rights can be taken away when those rights are not given due protection or when governments decide that their economic development needs should supersede the rights of individuals.

Rather than give up 288 acres of their pasture land to a local government for its plans to develop a historic site, the Fouillards chose to fight the expropriation. Although their judicial attempts were unsuccessful given that the law is clearly written to provide local governments with broad powers of expropriation, the municipality eventually abandoned their expropriation efforts. However, not all landowners may be as lucky as the Fouillards. Presently, the Canadian provinces of Manitoba, Alberta, Saskatchewan, Ontario, and New Brunswick allow expropriation for economic development purposes. Most of these laws are vaguely worded and broadly defined and give governments powers to enter into the competitive marketplace when their proper role is only to encourage business.

Although some provinces, such as Manitoba, have attempted reforms, these have not been met with success. In Manitoba, a private members' bill (legislation with little chance of success under Canadian parliamentary procedure) was introduced that sought to limit expropriation powers. Some organizations such as the Alberta Property Rights Initiative and some agricultural associations have begun to take notice of the abuses inherent in the process, but the groundswell of opposition has not yet emerged. Perhaps Canadians need to be better informed about events south of their own border or have their own dramatic *Kelo* case to awaken them to the dangers of expropriation for 'economic development' reasons.

## CASE STUDY: PRIVATE PROPERTY ABOLITION IN VENEZUELA

By *Andrea Rondón García, Luis Alfonso Herrera Orellana, and Tomás A. Arias Castillo, CEDICE (Venezuela)*

### Introduction

Commencing in 2001 with a set of decree-laws (i.e., executive orders with value and rank of laws) such as the one on Agrarian Reform (*Decreto-Ley de Tierras Urbanas y Desarrollo Agrario*), a new trend began in Venezuela to ignore private property rights protected by article 115 of the 1999 Constitution. Moreover, with the takeover of a significant number of private agrarian lands starting in 2005, such a trend has become a State policy. The government's strategy of systematically denying the existence of private property in different areas reached its highest manifestation with the enactment of new decree-laws in 2008 and recent legislation passed in 2009 by the National Assembly.

This policy has been developed by the Venezuelan state powers through laws, decree-laws, regulations, decrees, orders, and administrative acts, and it has been executed through procedures and decisions of the Public Administration and the Courts. These actions violating property rights have been intensifying as of 2008 after a majority of Venezuela's voters rejected the constitutional reform proposed by President Hugo Chávez. Chávez acknowledged private property rights only over "goods intended for use and consumption and over production means, legitimately acquired."

### Assault on Property Rights by All Branches of Government

The most emblematic cases in which this policy has been applied and executed jointly by the Executive, Legislative, and Judicial branches are the following:

- Open disregard of the existence of private property rights over agrarian lands.
- Application of regulations violating the essential contents of property rights and economic freedom over real estate, construction activities, and production means.
- Enactment of laws that violate the constitutional guarantees concerning property takings and expropriation.
- Administrative measures that deprive owners from using and exercising their power to dispose of their assets.
- Court rulings affirming that private property and economic freedom are not limited to State action because the content of such rights is determined by the National Assembly in law, not by the Constitution.

Moreover, the Executive and Judicial branches have censured and criminalized information campaigns to promote private property rights.

### Violations of Property Rights in Major Sectors of the Economy

In the case of agrarian lands, between 2006 and 2008 alone, private property rights over 590 farms were disregarded according to *FEDENAGA – Federación Nacional de Ganaderos de Venezuela* (the Venezuelan organization representing cattle dealers and breeders for over 60 years). By mid-2009, the Executive had already exercised its dominion over more than 2,500,000 hectares that were previously privately owned. This was done through the so-called *procedimiento de rescate de tierras agrarias* (an administrative procedure intended to recover agrarian lands supposedly idle), which does not involve the courts and takes place only when no one claims ownership over the land to be recovered. To accomplish the application of this procedure, the Executive ignores the current ownership documents unless accompanied by an "ownership chain documentation" as far back as 1848 (Rosito, 2007).

In the case of private companies and production means in general, the violation of private property rights has occurred by executing so-called "administrative expropriations." In reality, they fail to observe the guarantees given to private property under these legal instruments; therefore, they are arbitrary executive actions (*voie de fait/ vías de hecho*) similar to battery and assault. Additionally, such administrative expropriations have taken place by applying regulations and measures that deny the existence of basic features of free enterprise. For example, missing are the right to manage a company, to obtain a reasonable profit, and, in connection with private property, the ability to make use of produced goods (Canova, Anzola, & Herrera Orellana, 2009).

In the case of iron, steel, and cement industries, as well as activities related to primary hydrocarbons and the transportation and sale of liquid fuels, "special expropriations" have been created for the following purposes. First, to allow the takeover of goods to be expropriated before a payment of fair market value is made. Second, to enable the arbitrary setting of prices to be paid by the State. Third, to impede or to deny intervention of the courts.

In the case of foods and a large number of goods and services that the Government has declared essential, the Organic Decree-Law on Agro-Food Safety and Sovereignty (*Decreto-Ley Orgánica de Seguridad y Soberanía Alimentaria*) and the Consumer Protection Law (*Ley de Defensa de las Personas en el Acceso a los Bienes y Servicios*) impose limitations on producers and service providers to manage their companies and to make use of their goods freely. Moreover, they enable the Executive to set additional limitations and to adopt administrative measures for controlling the nationwide production and distribution of food, as well as for intervening, closing, managing, and disposing of plants, factories, goods, and machinery without any indemnification or time limitations. Although unusual, these measures led to a formal expropriation procedure of coffee-growing and processing companies (Ecarri, 2009).

In the case of urban lands and housing, whether already built or under construction, the situation has only worsened after the Caracas Metropolitan District ordered the expropriation and took over by force a significant number of homes in the city of Caracas in 2006 and 2007. Several regulations have been issued recently that set the criteria for calculating the value of the land. But the regulations do not reflect market prices and prohibit, in the case of construction in progress, collection of the real value of the property once completely built, accounting for inflation occurring during the construction period.

In September 2009, more than 2,000 properties in Caracas were declared of "cultural interest"; most of these properties are privately owned. From now on, such property may not be modified, sold, or lien by the owners thereof, according to the Law for the Protection and Defense of Cultural Estate (*Ley de Protección y Defensa del Patrimonio Cultural*) without the prior consent of the Executive. Additionally, in October 2009 the Law of Urban Lands (*Ley de Tierras Urbanas*) was enacted, thereby creating a procedure for the forced acquisition of urban lands in favor of the Executive without the guarantees against expropriation. Because of its ambiguity, this law effectively created a preferential right for the acquisition of such land and diminished the market value of urban lands in general and that of the buildings constructed on them.<sup>12</sup>

### Complicity of the Judiciary

Instead of putting a halt to the actions violating private property rights and economic security conducted by the Legislative and Executive branches, the Judicial branch has been tolerating and supporting them. The Constitutional and Political-Administrative Chambers of the Supreme Court of Justice, the Contentious-Administrative Courts, and the Agrarian-Contentious Courts continue to uphold the following judicial criteria. First, they do not allow property owners to resort to the constitutional protection claim as a way to demand the protection of such rights. Second, they do not allow the issuance of precautionary measures intended to cause the suspension of these proceedings or regulations to avoid further damages. Third, they strongly affirm that because these rights are not absolute and Venezuela is not a *Bourgeois State* but a *Global State*, private property rights and economic security can actually be restricted and even eliminated in the manner already conducted by the Executive and Legislative branches (Arias, Herrera Orellana, & Rondón García, 2009).

Not surprisingly, the initiatives of NGOs such as CEDICE and ASOESFUERZO to conduct information campaigns in connection with this systematic policy of violation of private property rights as well as the consequences thereof in other countries have been rejected and penalized by the State through CONATEL (the Venezuelan Telecommunications Agency) and the criminal courts. The latter, in addition to banning such campaigns, has initiated criminal trials against some members or participants of these NGOs.<sup>13</sup>

### Conclusion

The above mentioned facts constitute clear evidence of the manner in which the Venezuelan government is systematically eliminating rights such as private property and economic freedom as acknowledged in the 1999 Constitution. These actions are intended to eliminate all economic independence of citizens from the State and to implement a centralized planning system. They are contrary to the Constitution but in agreement with the 2007 constitutional reform and the 2007-2013 Socialist Plan, which is currently under development by the Government.

Unfortunately, this scenario will result in a less favorable ranking than the one obtained by Venezuela in the IPRI 2009 Report. In 2009, the country ranked 109 out of 115 countries assessed.

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## INTELLECTUAL PROPERTY RIGHTS

### CASE STUDY: IPRS IN MEXICO: CHALLENGES AND OPPORTUNITIES

By Carlos Ignacio Gutiérrez and Alberto Saracho, Fundación IDEA (Mexico)

#### Introduction

In recent decades, knowledge has become the most valued commodity in the global economy. Today, to compete is to invent, to produce, and to offer the most innovative and knowledge-intensive products and services. In other words, countries have to innovate continuously to compete.

The process of innovation entails two important risks. On one hand, a successful innovation in a product or service might lead to it being copied and commercialized illegally by a third-party. On the other, failure to succeed generates sunk costs in the form of time, money, and effort.

Intellectual Property Rights (IPRs) can address these risks. These rights promote efforts to create and to offer knowledge-intensive goods and services. In the world of patents, they do this by protecting the ideas of those who wish to profit from them through an exclusivity agreement with society in which an inventor is the only entity authorized to exploit his or her idea. In exchange for this protection, society is able to use the knowledge in the future freely. The existence of IPRs creates incentives that increase the likelihood that society will invest accordingly in the activities and knowledge required to increase a country's wealth.

Within Mexico, there exist challenges that stifle innovation and opportunities that promote it. The following is an analysis of situations where IPRs have an impact on various aspects of the country.

#### Commerce and FDI

Mexico's IPRs are one of the strongest in Latin America. Legislation that is currently in place is the result of the country's need to expand its commercial horizons through free trade agreements.

In essence, the need to foster commercial ties is a complex process in which both parties have to appease the needs of their local industries. For developed nations, an important base of their economic activity depends on the export of innovative products and services that need the protection of IPRs to avoid illegal copying. Henceforth, beginning with the North American Free Trade Agreement (NAFTA), the country has moved towards providing greater protection of IPRs. Since NAFTA was signed, Mexico has continued on this path and has created permanent commercial ties by means of 12 free trade agreements that cover 44 nations.

As a consequence, foreign direct investment (FDI) has poured into the country. Three benefits arise from this activity. The first is related to an increase in the resources invested in Mexico. From 1999 to 2008, investments in FDI totaled US\$217 billion dollars (Secretaría de Economía, 2009a). In comparison, Latin American and the Caribbean received approximately US\$650 billion in FDI from 1999 to 2007 (World Bank, 2009). The majority of the FDI that Mexico receives comes from developed countries. In fact, 95.2 percent came from countries that are part of the Organization for Economic Co-operation and Development (OECD) (55.2 percent from the United States and 33.7 percent from the EU) (Secretaría de Economía, 2009b).

The second benefit of FDI is that it provides a valuable opportunity for technology transfers. Through these investments, local workers and enterprises may assimilate foreign skills and technology. In addition to being trained, locals may decide either to license or to purchase knowledge that would be unavailable without proper IPRs protection.

The third and last benefit is for consumers. New investments in the country increase the number of firms competing for revenue. This, in turn, forces local corporations to raise their standards to maintain or to increase their market share against new entrants. Hence, consumers will more often than not be able to obtain higher quality products that are either produced locally or imported.

#### National Competitiveness Strategy

Specialized literature on the subject has identified four reasons why Mexico's ability to innovate may be hampered (Lederman & Maloney, 2003):

- The difficulties faced by innovators in avoiding the unauthorized use of their creation.
- The existence of free riders that use knowledge generated by a third party.
- The absence of public research institutions that distribute new knowledge to society through intellectual property rights.
- The lack of public and private sector partnerships devoted to research and development.

Besides these factors, Mexico has been slow to acknowledge the importance of innovation in its competitive strategy. Because of this, activities that promote innovation, such as Research and Development (R&D), have been relegated mostly to the public sector. Evidence of this is observable in the 81 percent of the R&D personnel of the country that is concentrated within the government and education sectors; hence, only 19 percent of R&D is performed by the private sector (Zubieta, 2003). Unlike Mexico, the majority of R&D personnel in the U.S. (81 percent), Korea (68 percent) and Canada (56 percent) is concentrated in the private sector (Ibid.).

In terms of investment on innovation, the OECD has estimated that Mexico currently devotes 0.5 percent of its GDP on R&D (OECD, 2008). This amount is less than that invested in similar emerging economies, such as Chile (0.67 percent), Brazil (1.02 percent), China (1.42 percent), and Korea (3.23 percent) (OECD, 2008).

#### Prevalence of the Informal Economy

Currently, the informal economy employs more than half of all Mexican workers and produces at least 30 percent of the nation's GDP (Perry, Maloney, Arias, Fajnzylber, & Mason, 2007). A number of these businesses infringe IPRs. In Mexico, it is possible to buy illegal copies of movies, music, software, medicines, and other products without consequences.

These activities are harmful to society in three ways. First, they indicate that the government is unwilling to devote resources into eliminating these illegal activities. Hence, the incentive to copy is greater than the one to innovate. Second, the health and safety of consumers is put at risk because substandard copies of some products, such as medicines, may, in some cases, cause life-threatening situations. Lastly, the proliferation of these markets ensures that the government loses a source of revenue. A recent study by the American Chamber of Commerce on the issue estimated that in 2008 the government did not receive approximately \$2.6 billion pesos (about US\$190 million) in lost revenue (American Chamber of Commerce–Mexico, 2008). This amount represents more than the \$2.2 billion pesos (about US\$160 million) 2009 budget for the Sistema Nacional de Investigadores (Presupuesto de Egresos de la Federación, 2009), a national system that provides funding for research in several fields.

#### Innovation within Mexico

Because of factors related to education level, public policies on innovation, and economic opportunities, Mexico's population is still learning to use IPRs as a tool for development. An indicator of this is the percentage of patents registered by Mexicans in Mexico, which in 2007 was 3.9 percent and in 2008 was 4.1 percent (Instituto Mexicano de la Propiedad Industrial, 2009). In fact, the nation that leads patents in the country is the United States with about 50 percent of all patents (Ibid.).

Though Mexicans remain a minority in the patenting of ideas in their country, they dominate the registration of utility model applications. The latest statistics show that out of the 434 applications in 2008, 387 were submitted by Mexicans (Ibid.). Efforts by locals to improve products or services are a positive sign that the population is willing to use official channels to register their innovations.

#### Conclusion

To become what the World Economic Forum calls an innovation-driven country, such as South Korea, Mexico requires significant cultural and governmental changes that will enhance its use of IPRs and incent innovative activities. One of the country's main

barriers towards reaching this point is its inability to change its dependence on business models that use unskilled and inexpensive labor as the foundation for economic and social development.

Though many solutions can be proposed to change the course of Mexico's future, developed economies have shown that to reach development goals it is fundamental for the country to realize that its most important assets are the ideas of its population.

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## CASE STUDY: COMPULSORY LICENSING AND MITIGATION TECHNOLOGIES

By Tim Wilson, Institute of Public Affairs (Australia)

### Introduction

In pursuit of securing an agreement to cut global greenhouse gas emissions, some countries want to replicate the undermining of intellectual property rights on pharmaceuticals onto mitigation and adaptation technologies.

With the Kyoto Protocol set to expire in 2012, governments are attempting to secure a successor agreement at the December 2009 Copenhagen meeting of the United Nations Framework Convention on Climate Change (UNFCCC). Proposals for a post-Kyoto pact are broad, but the central focus is to secure an agreement between developing and developed countries to cut, or at least to curb, the growth of emissions and to agree on the policy instruments they will need to do so.

Article 4.5 of the UNFCCC agreement requires developed countries to “take all practicable steps to promote, facilitate and finance, as appropriate, the transfer of, or access to, environmentally sound technologies and know-how to other Parties” (United Nations, 1992). The spirit of this provision is not unique, but as developing countries focus on how they will achieve proposed emissions targets, some are seeking to interpret this Article widely to undermine intellectual property on technologies. Their hope is watering down patents will make them cheaper.

In doing so, they are attempting to replicate the campaign against patents on innovative pharmaceuticals. This campaign saw amendments to the World Trade Organisation's Trade Related Aspects of Intellectual Property Rights Agreement allow developing countries to waive the patents on innovative pharmaceuticals through compulsory licensing.

### The Campaign to Undermine IP for Mitigation Technologies<sup>14</sup>

The current campaign originated around the 2007 G8 meeting with press reports calling for “an agreement on ... IPRS on technological efforts in developing countries paralleling the successful agreement on compulsory licensing of pharmaceuticals” (Government of India, Press Information Bureau, 2007).

So far their campaign has been successful with the September 2009 negotiating text including four different proposals for mitigation and adaptation technologies. The first proposal calls for the promotion of technology transfer by “operating the intellectual property regime in a balanced manner ... [by] deploy[ing] patent sharing and/or intellectual property[,] free renewable energy and energy efficiency technologies” with financial support.

The second proposal calls for governments not to interpret or to implement any international IP agreement in a way that “limits or prevents any Party from taking any measures to address adaptation or mitigation of climate change,” including the establishment of “a Global Technology Pool for Climate Change” and “the full flexibilities contained in the TRIPS agreement, including compulsory licensing” as well as many other measures.

The third option is for governments “to exclude patents and revoke existing patents...” The fourth proposal is for the establishment of a “committee, an advisory panel, or designate some other body, to proactively address patents and related intellectual property issues...”

But before governments agree to undermine patents on mitigation and adaptation technologies, they should assess whether patents actually have any impact on their final price and how to improve access.

### The Role of Patents in the Cost of Mitigation Technologies

There is little doubt that mitigation and adaptation technologies are expensive. But in replicating the campaign against pharmaceutical patents, developing countries are misunderstanding why these technologies are expensive and that the contribution of patents to their overall price is limited.

First, unlike many innovative pharmaceuticals, mitigation and adaptation technologies are not single patent technologies. Instead, they are built on multiple licensed patented technologies many of which are used for non-mitigation and adaptation purposes. Many of these technologies are off-patent or face competition in the marketplace and do not attract a significant patent premium.

Second, while patents afford a 20 year exclusive right to exploit a technology, the extent that a patent premium can be charged is relative to the amount of competition that product faces in the marketplace. Many pharmaceuticals face limited competition because they are the only product that can deliver a particular health outcome. But Patent Cooperation Treaty applications with the World Intellectual Property Organization show that hundreds of different mitigation and adaptation technologies are being patented, and hundreds of patent applications are being made within technology families, demonstrating significant inter- and intra-product competition (Dechezleprêtre, Glachant, Hascic, Johnstone, & Ménière, 2008; Love, 2008).

Third, the patent premium as a contribution of the final cost of a technology is small. For example, the wind turbines that make up a wind farm are made up of costs associated with the physical product (reinforced concrete stands, the turbine, and the propellers), land ownership or rental for its placement, and the technical know-how for its installation, connection to the electricity grid (engineers and labourers), and placement (location identification for maximum wind activity).

Fourth, even if patents were scrapped, many developing countries would still lack the technical skills to produce and to install these technologies. This was the experience of developing countries after they secured agreement from WTO members to allow near carte blanche compulsory licensing on pharmaceuticals. But they promptly discovered that they did not have the technical or physical production capacity to manufacture them.

### IP Promotes Technology Transfer

Instead of promoting technology transfer to developing countries, undermining patents is likely to have the reverse impact by harming innovation and removing the market-based incentives for technology innovators to license their technologies. A United Nations Development Program study found that "regulations governing ... [IPRs] help in some cases to build confidence amongst international firms and encourage them to engage in practices such as licensing and joint ventures" (Watson, MacKerron, Ockwell, & Wang, 2007, p. 51). Further, the Stern Review found that "there are a number of measures that governments can take to create a suitable investment climate for energy investment and the adoption of new technologies, such as ... strengthening intellectual property rights" (Stern, 2006, p. 6).

But the worst impact will be on innovation in the industry itself because it is an infant industry that requires long-term, significant, upfront investment (Israel, 2008, p. 1). These significant financial commitments will only come with a guarantee of property rights to assist in commercialisation, and their absence would send a worrying signal to investors and "may have implications in terms of the level of private investment already made in a technology and the level of returns that IPR owners need to derive before they are happy to release the IPR" (Watson et al., 2007, p. 8).

### Other Ways to Decrease Technology Costs

Irrespective of patents, countries can act to decrease the cost of mitigation and adaptation technologies by removing trade barriers. A study by the World Bank supports this conclusion, which found that the diffusion of "green technologies would increase by between 7 percent and 14 percent per year based on different models of liberalisation" (World Bank, 2007, p. 53).

Trade barrier data demonstrate the enormity of the problem. Table 1 identifies barriers imposed by the top 18 greenhouse gas (GHG) emitting developing countries on select mitigation technologies with the combined contribution of tariff and non-tariff barriers (NTBs) being as high as 165 percent.

The World Bank report also found that weak IP regimes were another form of NTB undermining the transfer of climate friendly technologies (World Bank, 2007, p. 59). Similar conclusions were developed by Professor Barton of Stanford Law School who argued that IP regimes are not "significant" barriers to technology transfer, but weak IP barriers were a disincentive for foreign investors (Barton, 2008). This point has not been missed by the European Parliament, which called for "the need to reduce barriers to 'green' trade by, for example, removing tariffs on 'green' goods at the WTO level" (European Parliament, 2007).

Instead of being a concrete proposal to promote technology transfer to mitigation and adaptation technologies, undermining patents will not assist developing country governments in meeting emissions targets. But it will harm the capacity of developed and developing countries alike to innovate the next generation of technologies, and with it any chance of using technology as part of a solution to cut global emissions.

**Table 1: Applied Average Tariff and NTBs for Climate Friendly Technologies in the 18 High GHG-emitting Developing Countries**

Countries	Clean coal		Wind		Solar		Fluorescent lamps	
	Tariff	NTBs	Tariff	NTBs	Tariff	NTBs	Tariff	NTBs
China	15	25	8	0	10	0	8	0
Colombia	15	0	10	32	15	0	20	0
India	15	0	15	0	15	0	15	102
Venezuela	15	0	10	0	15	0	20	0
Brazil	14	145	14	87	18	53	18	96
Mexico	12	0	15	0	13	62	15	0
Bangladesh	6	0	8	0	25	0	19	0
Chile	6	0	6	0	6	0	6	0
Zambia	5	0	15	60	30	0	30	83
Egypt	5	149	6	70	32	0	18	87
Nigeria	5	160	0	89	20	70	20	91
Philippines	3	119	6	88	15	70	11	93
Thailand	1	0	10	0	10	0	20	0
Argentina	0	0	14	0	18	57	18	0
Indonesia	0	0	10	0	15	0	5	0
Kazakhstan	0	0	0	0	0	0	0	0
Malaysia	0	93	5	59	18	0	30	85
South Africa	0	125	0	0	12	0	17	0
High Income OECD	1	0	3	0	3	0	4	0

Source: WITS Database, Adapted from World Bank (2007).

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## CASE STUDY: THE PIRATE CODE ON TRIAL IN SWEDEN – WHAT FUTURE FOR INTELLECTUAL PROPERTY?<sup>15</sup>

By Waldemar Ingdahl, Eudoxa (Sweden)

### Introduction

The conditions for creating and consuming music, film, literature, journalism, computer software, and other intellectual products have changed dramatically in less than a decade. It is within the creative industries that the impact of technology to copy and to share content on the Internet has been most keenly felt. Facilitated by the simplicity of copying and sharing content on the Internet, the public is consuming ever more culture.

The paradox is that the willingness to pay for this consumption is decreasing. This paradox has ultimately resulted in the Swedish trial against the owners of the file sharing hub, The Pirate Bay. The purpose of the trial is to determine if The Pirate Bay promoted copyright infringement with its actions as a torrent tracking website. In the first instance, The Pirate Bay was found guilty.

The attention of the Swedish public to intellectual property is demonstrated by the election of two representatives of The Pirate Party to the European Parliament. Hence, the conflict surrounding Internet piracy has entered a political dimension regarding the status of intellectual property and the survival of content producing industries.

### File Sharing in Sweden

File sharing refers to the providing and receiving of digital files over a computer network where the files are stored on and served by the personal computers of users. Much of the debate before the trial has been about the legal grounds for prosecuting the operators of The Pirate Bay. They argue on their web site that "only torrent files are saved at the server. That means no copyrighted and/or illegal materials are stored by us."

Are the people behind The Pirate Bay not responsible for the material that is being spread using the tracker? Prosecutor Håkan Roswall disputed this. In an interview with *Reuters* in January 2008, he said: "It's not merely a search engine. It's an active part of an action that aims at, and also leads to, making copyright protected material available."

The file sharing conflict is becoming important in the lives of regular people. File sharing is a central function of the Internet. In itself it is not illegal, and is used for the sale of digital content. File sharing becomes illegal when sharing materials protected by copyright without the permission of the proprietor occurs. A survey, recently carried out by the International Federation of the Phonographic Industry (IFPI), reveals that 40 percent of Swedes between 15 and 74 years old actively share music files illegally over the Internet on a daily basis, or with less frequency. The figure is equivalent to 2.8 million people, or nearly one third of Sweden's population of 9 million people – a figure much higher than suggested by previous studies.

### Illegal Downloading and The Pirate Bay Trial

In 1960, the social democratic government instituted a private copying levy, which was an extra charge on the purchases of recordable media allocated to content developers. This created a culture of home recording and home taped music. In the 1990s, Sweden excelled as an early adopter of information technology and developed an infrastructure with powerful broadband connections. The dot-com crash significantly impacted the innovative Swedish IT industry. What was left were not companies and institutions but an extended, powerful broadband waiting to be filled with content. That content happened to be uploaded music, films, and books shared through programs like Napster and Kazaa.

On 31 May 2006, a third of Europe's Internet traffic suddenly halted. Swedish police had raided the server hall of the company PRQ and confiscated the server running the notorious Bit Torrent tracker, The Pirate Bay. With more than 20 million users and more than one million torrent files, it was seen by the U.S. State Department as the most prominent source of pirated films, music, computer games, software, and media.

On 16 February 2009, the main hearing started in the Stockholm District Court against the four young men behind The Pirate Bay. On 17 April 2009, Peter Sunde, Fredrik Neij, Gottfrid Svartholm, and Carl Lundström were found guilty of assistance to copyright infringement and sentenced to one year in prison and payment of a fine of \$3,620,000, after a trial of nine days. The defendants have appealed the verdict and the judge has been accused of bias. The case may take up to five years to be resolved through the Swedish legal system.

The Pirate Bay is actually becoming obsolete as the trial progresses. It requires special software; the distribution is centralized on the torrent site instead of using search engines like Google, as file-hosting sites do. Globally, The Pirate Bay ranks below many file-hosting sites. According to Alexa Internet, RapidShare is currently the 17th most visited site in the world, while The Pirate Bay is the 108th.

Previously, the closure of Napster, Kazaa, DC++, and many other torrent sites has only lead to an accelerated development of new sites and new technologies. The recent and controversial EU directive IPRED (International Property Rights Enforcement Directive) does not seem to have particularly influenced the average file-sharer.

### Political Significance of The Pirate Bay Trial

The trial's importance is linked to its political significance. In his book *Code and Other Laws of Cyberspace*, Lawrence Lessig made the comparison between East Coast Code (law in Washington) and West Coast Code (programming in Silicon Valley), suggesting they are fundamentally the same, i.e., "the code is law." In other words, if you have the power to write code, you can shape the world.

In the legal arena, there have been relatively few problems instituting new laws to protect copyright. On the technical level, the easy dissemination of content and the complexity of the Internet made it very difficult to uphold and to enforce the law. The result of these two parallel debates was the forming of a huge rift and an unfortunate imbalance between the law and actual practice.

In reality, legal and technical issues are intimately connected. The key to successful policies is to use the expertise of both sides, considering that it is relatively easy to have technically inexperienced lawyers and legally inexperienced technicians agree on issues they would never have considered if they had not collaborated.

### From Anti-IP Sentiments to a Political Party

The problem for the content industry was that the general population in Sweden held anti-IP sentiments. The file-sharers started to argue against intellectual property, disputing that copying is theft, and sparking the creation of a network of a file-sharing supporter NGO named the Pirate Bureau. The Pirate Bureau functions as a think tank providing ideas for a more intellectual criticism of copyright. The Pirate Bay was in its early stages connected to the Pirate Bureau. Finally a formal political party, the Pirate Party, was formed in 2006 and aimed for the Swedish and European parliament.

The party promises to strengthen privacy protection, to weaken copyright laws, to abolish the EU Data Retention Directive, and to roll back government surveillance legislation. The party was vitalized by the demonstrations following the police raid on The Pirate Bay and the government passing of an unpopular anti-terrorist eavesdropping legislative package in 2008. Its membership has risen to almost 10,000 (outnumbering some of the traditional parties). In the Swedish election to the European Parliament, the party received 7.13 percent of the total vote. The Pirate movement has reached out internationally, establishing branches in Europe. The party closest mimicking the Swedish success has been the German Pirate Party that gained 2 percent of the vote in the latest parliamentary election.

The Pirate Party is increasingly becoming aware of how extensive the ramifications of intellectual property are in our present society, putting political pressure on the issues of pharmaceutical patents, patent protection limits, and international organizations like the WTO and WIPO. As intellectual property is further becoming ever more important in the regular production of devices in which computers and their programs play a key role, The Pirate Party's influence on the debate is significantly increasing.

### Conclusion

The organized pirate movement is making use of the sympathy gained from many illegal downloaders and developing an argument against property that is perceived to resonate with the workings of the Internet. The core of the pirate ideology is to elaborate how a future culture would appear by making use of the Internet's collaborative qualities and pointing out conflicts

between individual creators and copyright holders. In this aspect, the pirate movement is similar to socialism's challenge to private physical property.

In the long run, the Swedish example shows that trials and crackdowns will become less effective in protecting copyright from technical and political pirates. The debate is turning from legislation into a discussion of the ethical value of property in the digital age and the provision of legal alternatives, such as the services Spotify and Voddler.

The trial of the Pirate Bay has become the symbol of one of the most powerful challenges against the concept of the ownership of ideas.

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## CHAPTER VI: IPRI AND GENDER EQUALITY

Gender equality is often taken for granted in developed countries, while in many developing countries there are striking disparities in property rights between men and women. Women play a crucial role in economic development of a country, but they often are denied rights to property either by biased laws or by custom. These practices not only deny women a secure income, but they also further exacerbate poverty for future generations.

This chapter highlights the importance of gender equality with respect to economic development. It presents a separate component that is aimed at accounting for varying degrees of gender equality in developing countries.

#### The Concept

It has been pointed out by academics and policy makers that women's rights to property rights add an additional layer of complexity to the understanding of property rights in many countries. Developed countries overwhelmingly have espoused in law and practice gender equality with respect to property rights. By contrast, developing countries vary significantly in how much protection is afforded to women's property rights. To account for gender equality, this report extends the standard IPRI measure to include a measure of gender equality (GE) concerning property rights. The IPRI formula was modified to incorporate gender equality, as is shown below:

$$\text{IPRI(GE)} = \text{IPRI} + 0.2 * \text{GE}$$

The weight of 0.2 for the gender equality measure was chosen somewhat arbitrarily by the authors. The authors have varied the weight from 0.1 to 0.5 but found scores and resulting rankings to be highly correlated under different weighting schemes. However, the reader is invited to change this weight according to his or her preferences. The construction of the GE measure is based on the five indicators displayed in [Figure 21](#).

**Figure 21: Structure of the Gender Equality Component (GE)**

- Women's Access to Land
- Women's Access to Credit
- Women's Access to Property Other than Land
- Inheritance Practices
- Women's Social Rights\*

\* This indicator is a composite of 4 other variables combined to represent the social rights of women.

#### The Variables

##### **Women's Access to Land, Women's Access to Property Other than Land, and Women's Access to Credit**

These three variables are integrated in the GE component because they indicate the quality of women's ownership rights with respect to three aspects: women's access to bank loans, their right to acquire and own land, and the right to own property other than land. The rating of these factors indicates the extent of restrictions or the size of the female population for which restrictions are relevant. However, some restrictions may only be relevant for a woman in a specific stage of her life (e.g., married women).

Source: OECD Gender, Institutions and Development Database 2009 (GID-DB)

**Inheritance Practices**

This factor covers inheritance practices, ranking countries on the degree to which regulations show preference to male heirs. In other words, this variable indicates the extent to which bequests are equally shared between male and female offspring.

Source: OECD Gender, Institutions and Development Database 2009 (GID-DB)

**Women's Social Rights**

This variable covers broader aspects of women's equality. It is composed of several aspects of women's social rights that are crucial to their equal standing in a society. These include parental authority, female genital mutilation, freedom of movement, and the ratio of female-to-male adult literacy. Please note that previously this component also included a measure of repudiation. However, this aspect is no longer available in the updated source. This omission is not expected to have a significant impact on the overall score because the women's social rights measure, which includes repudiation, and the one excluding it are essentially identical in last year's data.

Source: OECD Gender, Institutions and Development Database 2009 (GID-DB)

**Methodology**

The methodology of the GE component is identical to the one used to construct the IPRI. The final GE score is also an index based on the average of equally weighted variables, which range on a scale of 0 to 10. On this measurement, a score of 0 signifies complete discrimination against women, while a 10 is given to countries with fully developed equal rights of ownership between women and men. Given that all variables in the original data source were constructed as indicators, we simply normalized the data to the 0-10 scale.<sup>16</sup> Consequently, for the final IPRI(GE) ranking, a 0-12 scale results because of the 0.2 weighting for GE.

**Results**

Table 9 presents the results of the IPRI, integrating the gender equality (GE) variables. This year, 80 countries were scored and ranked for gender equality. This is primarily because updated data from the primary source of gender equality data are only available for non-OECD countries. However, OECD countries are overwhelmingly industrialized countries with full respect for gender equality. These countries are not expected to exhibit any change in the gender equality component over the years. Therefore, non-OECD countries present a much better sample, representing a wide range of the low-income to middle-income countries with a much larger proportion of developing countries. It is these countries that we primarily focus on because in many of these countries much progress needs to be made before full gender equality with respect to property rights is attained.

Singapore tops the ranking for the IPRI(GE) with a score of 10.2. It is followed by Hong Kong with a score of 9.5 and Taiwan with a score of 8.6. The rest of the countries in the top 10 are more geographically dispersed with countries from the Middle East, Africa, and Latin America. Chad is at the bottom of the IPRI(GE) ranking with a score of 3.6. Bangladesh's IPRI(GE) score of 4.0 is slightly higher than Chad's. Because of its higher GE score, Bangladesh ranks second lowest on the IPRI(GE) even though it scored the lowest on the IPRI index.

Table 10 presents a ranking by the GE score. Despite including only non-OECD countries, a similar pattern occurs as in previous reports with a heavy grouping of countries at the top with a score of 10.0 in the GE component. This is the result of a somewhat general measure employed in the underlying data source, which does not allow for much variation in the scores. However, the final IPRI(GE) scores and rankings accurately reflect the relative strength of each country's protection of women's rights to prosperity.

The IPRI(GE) presents a useful tool to understand the repercussions of gender inequality in property rights for economic development. The authors hope that in the future more data become available to allow a more nuanced understanding of women's rights. Nevertheless, the current IPRI(GE) is a good approximation of the situation with property rights in the developing world.

To provide more context to this issue, the case study that follows looks at Uganda, a country in the bottom 10 of both the IPRI(GE) and GE rankings. The case study underscores the challenges that women continue to face in exercising their legal rights to property and outlines the ways in which these challenges can be overcome. The authors extend sincere thanks to the contributors of the case study who have shared their expertise on this issue.

**Table 9: Ranking by IPRI (GE) Score**

Rank	Country	IPRI(GE)	GE	Rank	Country	IPRI(GE)	GE
1	Singapore	10.2	10.0				
2	Hong Kong	9.5	10.0				
3	Taiwan	8.6	9.0				
4	United Arab Emirates	8.2	5.8				
5	Chile	8.1	8.7				
6	Mauritius	7.9	10.0				
	South Africa	7.9	5.5				
8	Malaysia	7.7	8.3				
	Uruguay	7.7	10.0				
	Costa Rica	7.7	10.0				
	Tunisia	7.7	8.9				
12	Oman	7.6	5.9				
13	Bahrain	7.5	6.2				
14	Kuwait	7.4	8.2				
	Panama	7.4	10.0				
16	Thailand	7.2	10.0				
	Botswana	7.2	5.8				
18	Brazil	7.1	10.0				
	China	7.1	10.0				
20	Trinidad and Tobago	7.0	9.0				
	Saudi Arabia	7.0	4.6				
22	Jamaica	6.9	8.0				
	Croatia	6.9	10.0				
24	Colombia	6.8	9.0				
25	Egypt	6.6	8.1				
	India	6.6	5.1				
27	Honduras	6.5	9.7				
	El Salvador	6.5	9.0				
	Vietnam	6.5	10.0				
30	Morocco	6.4	6.8				
	Moldova	6.4	10.0				
	Argentina	6.4	10.0				
33	Philippines	6.3	9.0				
	Kazakhstan	6.3	10.0				
	Peru	6.3	9.9				
	Ghana	6.3	5.6				
	Russia	6.3	10.0				
38	Syria	6.2	6.7				
39	Ukraine	6.1	10.0				
	Guatemala	6.1	8.9				
41	Sri Lanka	6.0	6.7				
	Dominican Republic	6.0	8.0				
43	Azerbaijan	5.9	9.7				
	Madagascar	5.9	8.3				
	Burkina Faso	5.9	6.2				
	Macedonia	5.9	9.0				
47	Armenia	5.8	10.0				
	Malawi	5.8	5.6				
	Indonesia	5.8	8.3				
50	Georgia	5.7	10.0				
	Kyrgyz Republic	5.7	8.0				
	Mali	5.7	4.7				
	Tanzania	5.7	5.6				
	Ecuador	5.7	9.0				
	Mauritania	5.7	6.5				
56	Bosnia and Herzegovina	5.6	10.0				
57	Paraguay	5.5	10.0				
	Serbia	5.5	8.0				
	Benin	5.5	4.2				
60	Nicaragua	5.4	9.0				
	Bolivia	5.4	9.9				
	Senegal	5.4	6.1				
63	Albania	5.3	7.7				
64	Kenya	5.2	4.4				
	Zambia	5.2	3.4				
	Venezuela	5.2	10.0				
	Algeria	5.2	7.1				
68	Nepal	5.1	5.3				
69	Mozambique	5.0	4.3				
70	Nigeria	4.9	5.6				
	Pakistan	4.9	5.0				
72	Uganda	4.8	4.4				
	Ethiopia	4.8	4.1				
74	Libya	4.7	5.2				
	Cameroon	4.7	4.2				
76	Burundi	4.5	6.0				
77	Côte d'Ivoire	4.1	5.0				
	Zimbabwe	4.1	4.4				
79	Bangladesh	4.0	5.2				
80	Chad	3.6	2.1				

Table 10: Ranking by GE Score

Rank	Country	IPRI(GE)	GE	Rank	Country	IPRI(GE)	GE
1	Uruguay	7.7	10.0	41	Egypt	6.6	8.1
	Brazil	7.1	10.0	42	Dominican Republic	6.0	8.0
	Costa Rica	7.7	10.0		Jamaica	6.9	8.0
	Argentina	6.4	10.0		Serbia	5.5	8.0
	Hong Kong	9.5	10.0		Kyrgyz Republic	5.7	8.0
	Vietnam	6.5	10.0	46	Albania	5.3	7.7
	Georgia	5.7	10.0	47	Algeria	5.2	7.1
	Bosnia and Herzegovina	5.6	10.0	48	Morocco	6.4	6.8
	Ukraine	6.1	10.0	49	Syria	6.2	6.7
	Kazakhstan	6.3	10.0		Sri Lanka	6.0	6.7
	Russia	6.3	10.0	51	Mauritania	5.7	6.5
	Armenia	5.8	10.0	52	Bahrain	7.5	6.2
	Venezuela	5.2	10.0		Burkina Faso	5.9	6.2
	Moldova	6.4	10.0	54	Senegal	5.4	6.1
	Croatia	6.9	10.0	55	Burundi	4.5	6.0
	Paraguay	5.5	10.0	56	Oman	7.6	5.9
	Thailand	7.2	10.0	57	United Arab Emirates	8.2	5.8
	Singapore	10.2	10.0		Botswana	7.2	5.8
	Mauritius	7.9	10.0	59	Tanzania	5.7	5.6
	China	7.1	10.0		Malawi	5.8	5.6
	Panama	7.4	10.0		Ghana	6.3	5.6
22	Bolivia	5.4	9.9		Nigeria	4.9	5.6
	Peru	6.3	9.9	63	South Africa	7.9	5.5
24	Honduras	6.5	9.7	64	Nepal	5.1	5.3
	Azerbaijan	5.9	9.7	65	Libya	4.7	5.2
26	Philippines	6.3	9.0		Bangladesh	4.0	5.2
	Colombia	6.8	9.0	67	India	6.6	5.1
	Taiwan	8.6	9.0	68	Côte d'Ivoire	4.1	5.0
	Nicaragua	5.4	9.0		Pakistan	4.9	5.0
	Trinidad and Tobago	7.0	9.0	70	Mali	5.7	4.7
	Macedonia	5.9	9.0	71	Saudi Arabia	7.0	4.6
	El Salvador	6.5	9.0	72	Zimbabwe	4.1	4.4
	Ecuador	5.7	9.0		Kenya	5.2	4.4
34	Guatemala	6.1	8.9		Uganda	4.8	4.4
	Tunisia	7.7	8.9	75	Mozambique	5.0	4.3
36	Chile	8.1	8.7	76	Cameroon	4.7	4.2
37	Madagascar	5.9	8.3		Benin	5.5	4.2
	Malaysia	7.7	8.3	78	Ethiopia	4.8	4.1
	Indonesia	5.8	8.3	79	Zambia	5.2	3.4
40	Kuwait	7.4	8.2	80	Chad	3.6	2.1

## CASE STUDY: WOMEN'S RIGHTS TO LAND IN UGANDA

By Deborah Espinosa and Renée Giovarelli, Rural Development Institute (United States)

### Introduction

In Uganda, like in many African countries, having secure rights to land is a determining factor in overall living conditions. Rights to land are essential to everyday survival, food security, economic security, and physical safety – particularly for women who must be a central focus of efforts to reduce poverty. In Uganda, women head 26 percent of rural households and grow between 70 percent and 80 percent of the food crops, yet they own less than 8 percent of the land.

Despite the importance of land to women, the overriding feature of their relationship to land is insecure tenure. This insecurity is largely a result of economic and social discrimination against women, and more particularly, gender-biased laws, policies, and traditional practices that prevent women from renting, owning, and inheriting land independent of their relationships with men. Women who are divorced, deserted, separated, or widowed have little fallback position without secure rights to the land they farm. Women's weak tenure may also set in motion a series of events that can lead to the spread of HIV infection.

### Formal Legal Framework Governing Women's Land Rights

The formal legal framework for women's property rights in Uganda is based on the 1995 Constitution, the 1998 Land Act, the 2004 Amendment to the Land Act, and the succession laws. The Constitution of Uganda (1995) provides for the right of every person to own property, guarantees women equal rights with men, and nullifies any customary laws, traditions, or customs that discriminate against women.

The Land Act of 1998 and its amendments contain some protections for the land rights of women. The Act safeguards the rights of women in relation to customary land and requires the consent of spouses and children before certain land transfers occur.

Uganda's succession laws are progressive because they do not distinguish between daughters and sons among lineal descendants and dependent relatives. However, the inheritance rights of wives depend on whether the marriage was formalized. The problem is that many of the rural poor do not formally register their marriage because of cost, willingness of the husband, or a lack of understanding about the need to register.

### Customary Law

Under the customary land tenure system, both men and women have use rights to land. Families cultivate land and produce crops for their livelihood. However, the right to dispose of land is subject to the decision of the clan or community. Men determine which land women and children may use, and a woman (often from a different clan) does not automatically acquire use rights upon marriage.

Under customary law, land is generally inherited by a male heir. Men pay a bride price upon marriage, and women are regarded as part of the man's acquired property. If women do inherit land, they hold it subject to control exercised by the family or clan and usually do not have the right to transfer the land to someone else. Land is often allocated to other male relatives in the clan or household, and the widow is left with a small parcel for growing food crops only.

In some cases, girls may inherit a use right to her family's land but not the right to sell or to make sole decisions on long-term investments without seeking permission from male relatives. Women lose the right to such land when they marry.

Some land can be purchased. Although legally women can acquire this land and express a strong desire to do so, lack of money, fear of social pressure, and male opposition to women owning land limit women's ability to purchase land.

### Options for Meaningful Change

The challenge of dealing with gender and family issues is that relationships within the family are embedded in customary law. Legislation alone cannot change custom, but it can create a space for change. Equally important is the need for people to be able

to know about their legal rights and how to enforce them, and some ability to discuss and to understand the impact of long-held attitudes and beliefs. Interventions must take into account the priorities of the women in the country for change and which changes are most likely to be accepted in the current environment. The process of changing cultural values takes a long time because cultural values are interconnected and changes affect many different aspects of life. Programs aimed at making change may require some trial and error.

Legal reform efforts should parallel community education. Many women are adamant that men as well as women must be informed of women's rights and educated about the value of women having access and control over land.

Some intervention options include:

**Educate men regarding the need for women to hold secure land rights**

To help men understand that sharing power with women increases productivity and economic benefits for the whole family, women in Uganda suggested that a male worker from outside the community, who is older and trained to work with men and male leaders, "sensitize" men in the village. They would provide training to men to help them understand the value of including women in agricultural extensions services, the value of women starting and participating in women's self-help groups, and the value of including women in the decision-making process and control over income and land within the family. The trainer would also discuss the treatment of widows in the village and the implications of that treatment.

**Empower women within their family relationships and their community**

To empower women, women must have training on several different levels. First, they must understand their formal rights and how to exercise those rights. Second, they must be trained in skills that will help them in their agricultural work, in marketing their produce, and in increasing the livelihood of the family. Women must be taught to use new technology and tools that will reduce their workload, while at the same time increase production. Finally, women must be encouraged to gain some economic independence. Women interviewed saw economic independence as the only way to gain permanent access to land.

**Provide women with tools to realize the benefits of legal rights**

In addition to knowing their rights, women must be able to realize their rights to land. There are few legal aid services available, and those that are available are not always accessible to remote locations. The elders who most often hear land conflicts do not necessarily know and understand the law and do not understand the need for women to have independent access to and control over land.

**Legislative Change**

Under the succession laws, widows should be afforded the right to use and to control the land they had been using during their husband's life. If possible, widows should also be able to inherit use rights to their husband's land and to use it in the same manner as the male head of household.

Land and property laws need to be revised to allow for and to encourage joint ownership of land for married couples and those living in consensual unions.

Separated and abandoned women must be considered in land or family legislation. These women currently have no rights to land or property and no rights to compensation for its value. There must be options for assisting women who are abandoned or separated because of abuse. They should receive a portion (half) of the land of the family or the value of that land must be pursued.

**Conclusion**

Even though formal law requires that customary rules no longer discriminate against women, customary rules that discriminate against women are the primary rules governing society throughout Uganda. Generally, neither women nor men have the knowledge or understanding of the means to effectuate change.

However, legal change is not sufficient. Women have very little power within families or communities. Women must be able to understand and to explain their rights, to stand up for their rights, and to have some power to insist on the exercise of their rights. Further, women are more likely to be included in family decisions and to challenge men's ideas if they are themselves trained agriculturists and are able to increase productivity and to add to the decision-making process.

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## CHAPTER VII: DATA SOURCES

This chapter presents detailed information on the data sources that were used in the compilation of the IPRI and the IPRI(GE) measures. This year, the authors have mainly carried an update of the previous data, thus using the same data sources. Below is a brief review of the data included in the indices, each data source, and its data collection methodology.

### Subjective versus Objective Data

The majority of data included in the IPRI stems from survey responses by experts. However, some factors are based on hard data based on the countries' regulations, laws, and actual estimates of magnitudes (e.g., copyright piracy). The combination of subjective and objective data presents several advantages over an index that relies on only one or the other.

First, objective data that reflect a country's strength in property rights protection is almost impossible to obtain beyond a narrow scope of parameters. As a result, there are few alternatives to relying on subjective data collections. Second, instead of merely summarizing a country's *de jure* facts regarding property rights protection, the IPRI aims to capture *de facto* outcomes and the prevailing effectiveness of the property rights system. Perceptions-based measures often contain information that is not reflected by objective measures, particularly in developing countries. In fact, the research for the initial IPRI in 2007 focused mainly on the latter intention, and it, therefore, integrated a large amount of data stemming from the experience and perceptions of experts in the field. In the future, the authors will continue to consider alternative compositions of subjective and objective data.

### Data Sources

#### World Economic Forum (WEF) – Global Competitiveness Index

The World Economic Forum's *Global Competitiveness Report* provides information regarding an economy's competitiveness for a large set of countries (134 for 2008-2009). The rankings are drawn from a combination of publicly available hard data and the results of the Executive Opinion Survey. The latter is a comprehensive survey conducted on an annual basis by the WEF together with its network of partner institutes – leading research institutes and business organizations – in the countries covered in the report.

There are four variables in the IPRI for which data have been obtained from the 2008-2009 WEF's *Global Competitiveness Report*. These variables are *Judicial Independence*, *Protection of Physical Property Rights*, *Access to Loans*, and *Protection of Intellectual Property Rights*. The specific questions that were used to elicit a response can be found in Appendix II. For more detailed information, visit: <http://www.weforum.org/en/initiatives/gcp/Global%20Competitiveness%20Report/index.htm>.

#### World Bank Institute (WBI) – Worldwide Governance Indicators

The *Worldwide Governance Indicators* are produced jointly by experts from the Brookings Institution, World Bank Development Economics Research Group, and the World Bank Institute. They draw on the most recent data available on an annual basis so the most recent report (2009) contains data gathered from multiple years within the last decade. The *World Governance Indicators* reflect the perceptions on governance of a very diverse group of respondents. Hundreds of variables are drawn from more than 50 sources and organizations. Several of the data sources are surveys of individuals or domestic firms with first-hand knowledge of the governance situation in their country. But the report also captures the perception of country analysts at the major multilateral development agencies, reflecting these individuals' in-depth experience working on the countries they assess. Other data sources from NGOs, as well as commercial risk rating agencies, base their assessments on a global network of correspondents typically living in the country they are rating. The variables *Rule of Law*, *Political Stability* and *Control of Corruption* are drawn from this source. For more information, see: <http://info.worldbank.org/governance/wgi/index.asp>.

#### World Bank Group (WB) – Doing Business

The source of the *Registering Property* variable is the 2009 edition of the World Bank Group's *Doing Business* report. The *Doing Business* data are collected in a standardized way on an annual basis. To start, the *Doing Business* team, along with academic advisors, designs a survey. The survey uses a simple business case to ensure comparability across countries and over time – with assumptions about

the legal form of the business, its size, its location, and the nature of its operations. Surveys are administered through more than 8,000 local experts, including lawyers, business consultants, accountants, freight forwarders, government officials, and other professionals routinely administering or advising on legal and regulatory requirements.

The *Doing Business* methodology has five limitations that should be considered when interpreting the data. First, the collected data refer to businesses in the economy's largest business city and may not be representative of regulation in other parts of the economy. Second, the data often focus on a specific business form – generally a limited liability company (or its legal equivalent) of a specified size – and may not be representative of the regulation on other businesses (e.g., sole proprietorships). Third, transactions described in a standardized case scenario refer to a specific set of issues and may not represent the full set of issues a business encounters. Fourth, the measures of time involve an element of judgment by the expert respondents. Finally, the methodology assumes that a business has full information on what is required and does not waste time when completing procedures. In practice, completing a procedure may take longer if the business lacks information or is unable to follow up promptly. Alternatively, the business may choose to disregard some burdensome procedures. For both reasons, the time delays reported in *Doing Business 2010* would differ from the recollection of entrepreneurs reported in the *World Bank Enterprise Surveys* or other perception surveys.

Because of these limitations, it is likely that the *Registering Property* variable underestimates the extent of procedures and time required to register property. The estimates presented in the report should be regarded as the low bound for this factor. For more information about the publication, please see: <http://www.doingbusiness.org/>.

#### Ginarte-Park (GP) – Index of Patent Rights

The *Patent Protection* variable in the IPRI comes from the *Ginarte-Park Index of Patent Rights* (2005). The *GP Index* quantifies the strength of national patent laws and is updated every five years. The information used to construct the index is obtained through review of national patent laws and contains the following five categories: the extent of coverage of patent protection, membership in international patent agreements, provisions for loss of protection, enforcement mechanisms, and the duration of protection. For more information on the index and its methodology, please refer to Ginarte & Park (1997). The dataset is available at <http://www1.american.edu/cas/econ/faculty/park.htm>.

The original index contains scores for 124 countries for 2005. Scores for two countries were added strictly following the methodology in Ginarte & Park (1997). Moldova's score was calculated based on survey results of five practicing patent attorneys as well as the author's review of the patent laws with the helpful assistance of Dr. Walter Park, American University. Similarly, the score for the Kyrgyz Republic was calculated based on a review of laws by the author and the helpful assistance of Dr. Park. The scores were constructed for 2005 to make them comparable to the patent protection scores for the rest of the countries.

#### International Intellectual Property Alliance (IIPA) – Special 301 Report

The data used for the construction of the copyright piracy factor stem from the IIPA's submission to the *Special 301 Report*, prepared by the U.S. Trade Representative in the context of its annual review of countries' intellectual property practices. The data used in the IPRI reflects the estimated level of piracy in the business software and record industries. The previous editions of the IIPA's *Special 301 Report* occasionally included data on other industries such as motion pictures, entertainment software, and books. But this data become unavailable in recent years. Individual industries estimate their data in different ways. It is reasonable to assume that the piracy levels reported are underestimated because they only capture piracy experienced by U.S. copyright-based industries. For more information, see: [http://www.iipa.com/2009\\_SPEC301\\_TOC.htm](http://www.iipa.com/2009_SPEC301_TOC.htm).

The 2009 *Special 301 Report* data on business software piracy is complemented with the data from the *Sixth Annual BSA and IDC Global Software Piracy Study* (2008) available at <http://global.bsa.org/globalpiracy2008/index.html>.

#### Organization for Economic Co-operation and Development (OECD) – Gender, Institutions and Development Database (GID-DB)

The OECD GID-DB is the sole source of data used for construction of the IPRI(GE) rankings, which incorporate aspects of gender equality. The GID is a tool for researchers and policy makers to determine and to analyze obstacles to women's economic development. It covers a total of 124 countries – excluding OECD member-countries – and comprises an array of 60 indicators on gender discrimination. The eight GID-DB variables, which are incorporated in the GE component, are related to women's access to loans, access to land, access to non-land property, inheritance practices, and social rights. These data have been compiled from various sources such as BRIDGE, the Asian Development Bank, the Canadian International Development Agency, and AFROL. For more information, see: <http://www.oecd.org/dev/gender/gid>.

## APPENDIX I: COUNTRY PROFILES

The authors are pleased to present an addition of country profiles to the IPRI report this year. This appendix includes a country profile for each country ranked in the index.

Country profiles feature the IPRI and its components' scores for the period 2007–2010. They include commentary that identifies trends or changes in the overall component scores and the IPRI. Importantly, they also discuss any major advances or regressions in the sub-component scores. This allows readers not only to see larger trends but also to understand the driving factors behind these changes. Additionally, any particularly strong or weak features of the countries' property rights regimes, as measured in the index, are pointed out.

The country profiles are a complimentary tool to the IPRI rankings. They provide a snapshot of a country's performance in the IPRI over the last four years. As such, they should not be construed as a comprehensive overview of a country's property rights regime. However, the authors are hopeful that they will be used in combination with the rankings to bring attention to specific issues in property rights that need improvement. Alternatively, they can be used to commend any government policies contributing to positive developments in the protection and enforcement of property rights.

Where possible, the country profiles refer to policy developments in countries that the authors believe could be associated with particular score changes. These are certainly not the only factors that could affect a property rights environment. They are provided here for informational purposes, and further review of such factors is encouraged.

Finally, the country profiles address any data inconsistencies that hinder the comparison of the IPRI and its sub-components' scores across years. Unfortunately, such inconsistencies persist because of the lack of some sub-component data. The authors hope that any gaps currently present in the data will be filled in the future as updated sources become available.

The country profiles enhance the IPRI report and provide an additional tool to be used by policy makers, business leaders, think tanks, and other interested parties to better understand the situation with respect to property rights in their respective countries.

When referring to score changes, the names of the IPRI sub-components are capitalized and italicized. Please see [Figure 1](#) for the structure of the IPRI. The reader is reminded that all IPRI scores are on a 0–10 scale.

### ALBANIA

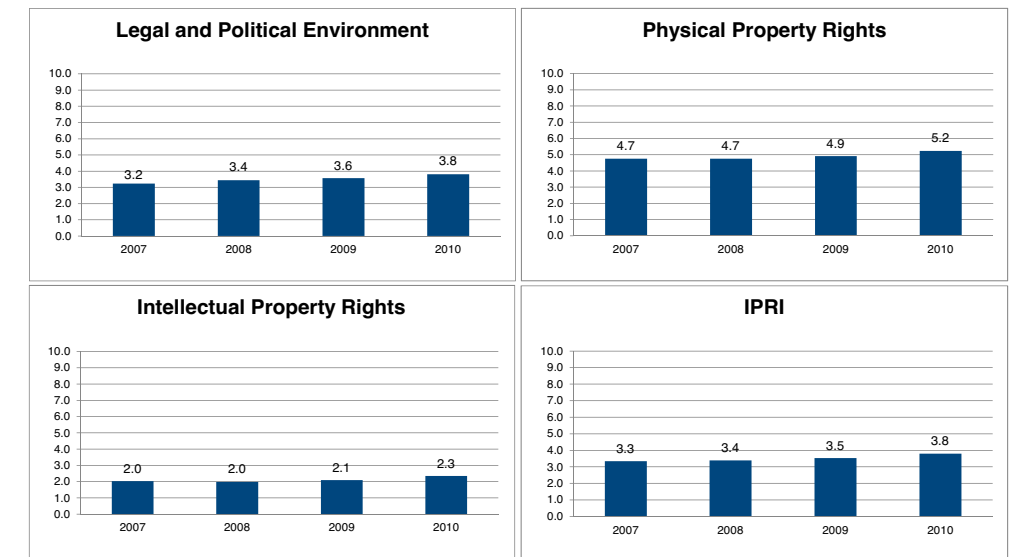
World Rank: 109 Regional Rank: 22

Albania saw a steadily increasing IPRI over the course of the past four years, especially in 2009. Despite the fact that its *Judicial Independence* continued to hover around 2.4, its LP benefited from a 0.5 point increase in *Political Stability* this past year.

Albania's PPR underwent the most progress, improving its score in all sub-components. The *Access to Loans* score jumped a striking 0.6 this last year alone, factoring the most heavily in the rise of PPR.

Interestingly, while the survey results for the *Protection of Intellectual Property Rights* experienced sizeable jump in ratings, the other sub-components of IPR experienced a negligible change.

This situation led Albania to earn the worst IPR rating among all of its neighbors in Southeast Europe.<sup>17</sup>



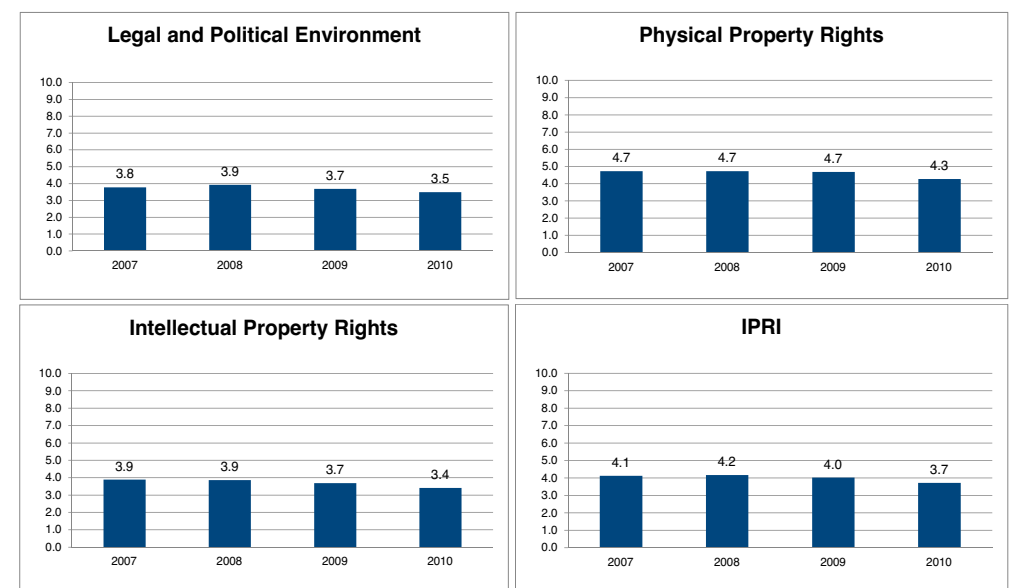
### ALGERIA

World Rank: 113 Regional Rank: 14

Property rights suffered in all aspects in Algeria in 2009. The LP score in the country dropped 0.2 this past year overall. While scores for *Control of Corruption* and *Political Stability* did not change significantly, expert opinion on judicial independence plunged significantly and resulted in this sub-component's score dropping a full point.

The country's PPR experienced a similar trend. While the overall PPR score fell 0.4, this drop was a result of one sub-component. Expert opinion on the protection of physical property has deteriorated, and this sub-component's score collapsed 1.2 points. *Access to Loans* in Algeria remains at a low 2.0. The IPR scores have also undergone a similar regression.

It should be noted that all aspects of Algerian property rights were hampered by sub-components based on survey results of local business leaders. Such polling numbers should not be shocking in a country whose political legitimacy has been under severe scrutiny in light of the recent presidential election.<sup>18</sup>



## ARGENTINA

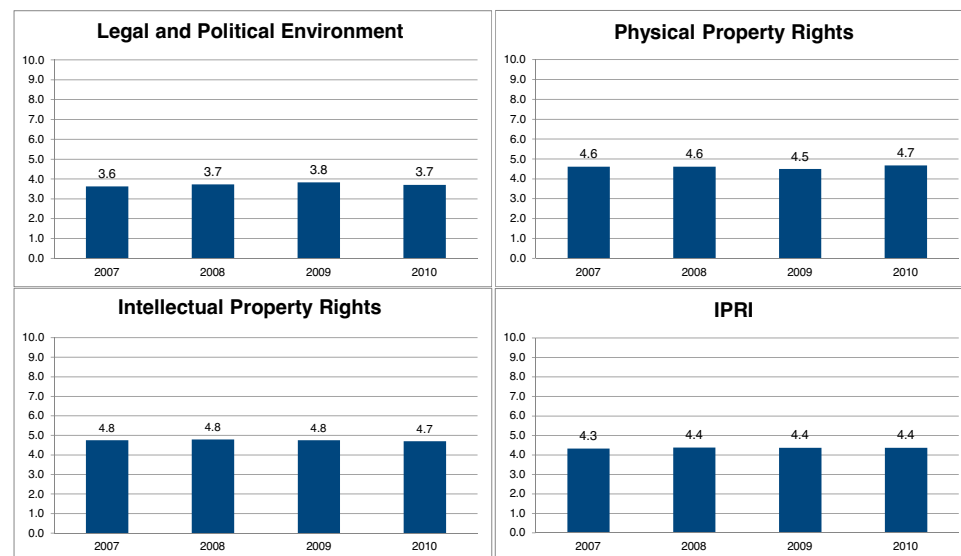
World Rank: 84 Regional Rank: 13

Argentina experienced a very consistent IPRI rating of 4.4 over the past three years. Similarly, its overall ratings for the three components remained fairly stable. Despite what was immediately apparent from these scores, there were dramatic changes in the individual components.

Argentina's LP again scored a rating of 3.7, marking a reversion from what had appeared to be steady growth in the component. This decrease was largely because of a sharp drop in the rating for *Political Stability*. The *Political Stability* score in Argentina rose 0.8 points from 2007 to 2009, only to revert back 0.4 points in 2010. The other three sub-components of LP were stable. Neither *Judicial Independence* nor *Control of Corruption* experienced any significant change the past three years.

The PPR score rose 0.2 points in 2010. *Access to Loans* remained a dismal 2.2. Over the past two years, Argentina's PPR rose in large part because of growth in the opinion-based *Protection of Physical Property Rights* score.

IPR in Argentina did not experience much change. It should be noted, however, that *Protection of Intellectual Property Rights* has declined slightly two years in a row since 2008.



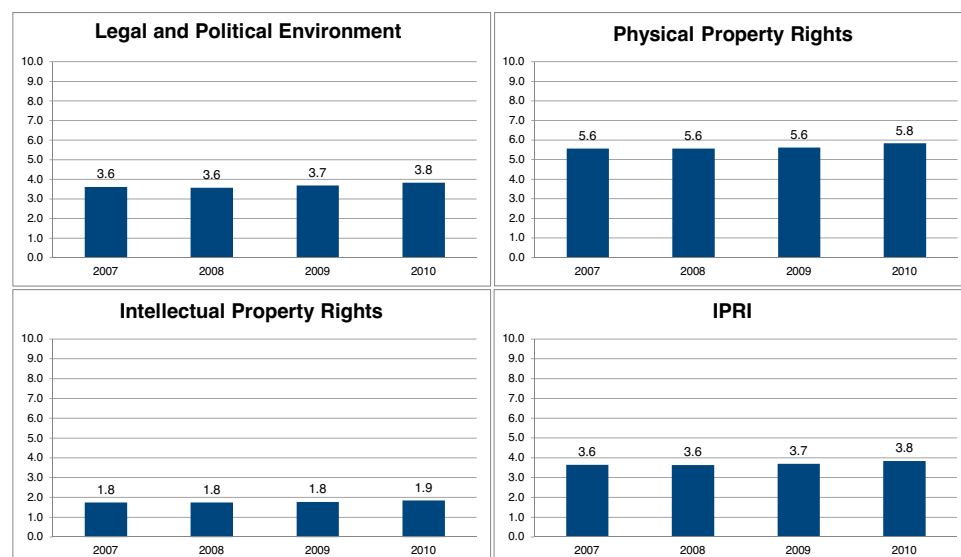
## ARMENIA

World Rank: 109 Regional Rank: 22

While IPRI for Armenia only reflects an increase of 0.1, the country raised its IPRI scores in all components. *Rule of Law* and *Control of Corruption* substantially increased this past year. Both *Political Stability* and *Judicial Independence* failed markedly to increase or to decrease, combining for a modest increase in LP as a whole.

The situation with PPR in Armenia is complex. Its *Registering Property* score continues to be superb, at 9.4, as registration only takes 4 days to complete. Despite an increase in *Access to Loans* of 0.4 since 2009, Armenia only rates a dismal 2.1 for this sub-component.

Armenia suffers from the second lowest IPR in the region, ahead of only Georgia. Piracy of business software pervades the country with as much as 95 percent of operated software being illegally acquired. As a result, the *Copyright Piracy* score in Armenia has never reached above 1.0.



## AUSTRALIA

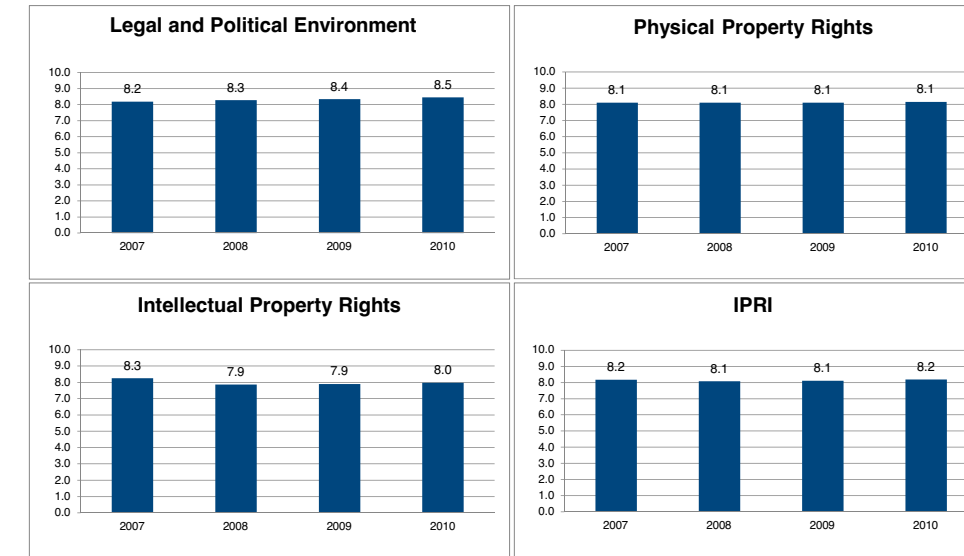
World Rank: 8 Regional Rank: 2

Overall, the situation with property rights in Australia improved slightly over the past three years. The LP component in the country steadily increased 0.1 points every year that data were collected for the IPRI. *Judicial Independence* and *Control of Corruption* both increased 0.3 points over the past four years. *Political Stability* was the weakest sub-component of LP by a vast margin. Fortunately, Australia's *Political Stability* score increased half a point in 2010, raising the sub-component to 7.2.

PPR in Australia has remained relatively unchanged the past four years. Its score was buoyed by the *Registering Property* sub-component. Registering property takes only 5 procedures and 5 days, garnering Australia a score of 9.0 in that sub-component.

IPR in Australia experienced only a limited change. *Protection of Intellectual Property Rights* has remained unchanged since 2007. *Copyright Piracy* improved slightly in 2010, as the market share of pirated business software fell to 26 percent.

Australia enjoys one of the highest IPRI in the region and the world. It is tied with Singapore and second only to New Zealand among its neighbors.



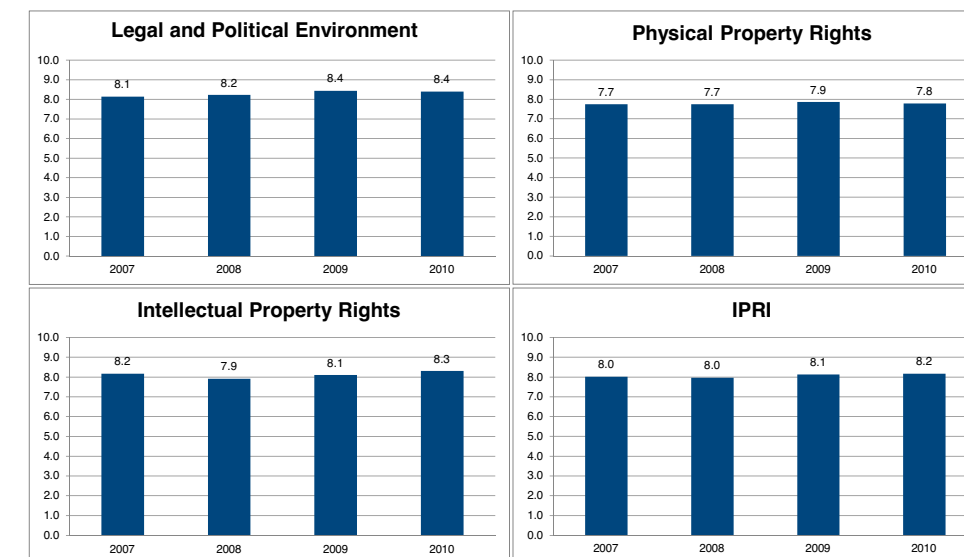
## AUSTRIA

World Rank: 8 Regional Rank: 7

IPRI in Austria increased for the second consecutive year. Its LP score did not shift overall, but the individual sub-components of the score revealed much greater change. Curiously, the score for *Political Stability* increased slightly, yet *Control of Corruption* dropped a startling 0.4 points.

PPR decreased slightly in 2010. *Protection of Physical Property Rights* increased slightly, and *Registering Property* maintained its high score. *Access to Loans* remains the weakest sub-component of Austrian PPR. In 2010, the *Access to Loans* sub-component score fell 0.4 points.

However, IPR in Austria has increased 0.4 points since 2008. The increase in 2010 is attributable in large part to the *Protection of Intellectual Property Rights* sub-component, which increased half a point. Austria continues to enjoy property rights protection that ranks among the world's best. Its IPRI score of 8.2 reflects this positive environment.



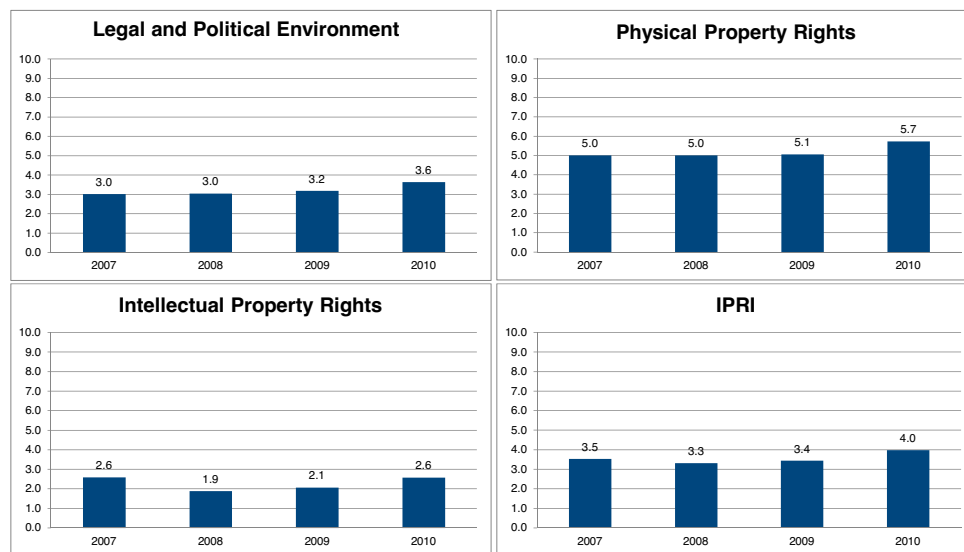
## AZERBAIJAN

World Rank: 101 Regional Rank: 20

IPRI in Azerbaijan experienced a considerable increase of 0.6 in 2010. LP increased 0.4 points this year. This increase was because of large increases in both *Political Stability* and *Judicial Independence*. The score for *Judicial Independence* alone has risen 1.3 points since last year.

Similarly, Azerbaijan's PPR score experienced an impressive increase. Registering property has become considerably easier this past year, as the number of days required to register property has decreased from 61 to 11. *Protection of Physical Property Rights* experienced a substantial increase as well, from 4.5 to 5.4.

IPR increased in a similar fashion as other components. *Protection of Intellectual Property Rights* increased 0.9 points. The rating remains low, however, because of a poor rating for *Copyright Piracy*. An estimated 90 percent of the business software in the country is pirated. Despite low scores for IPR, the situation with property rights in Azerbaijan has improved dramatically since 2007.



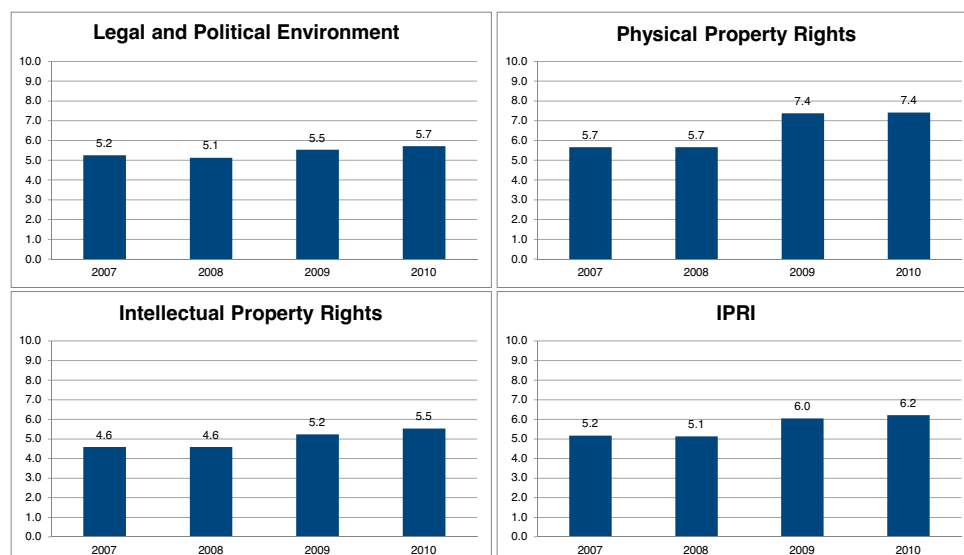
## BAHRAIN

World Rank: 38 Regional Rank: 6

IPRI increased in 2010 for Bahrain, and each individual component experienced an increase as well. The major change in the country's LP score occurred as a result of the *Judicial Independence* sub-component. While other LP sub-components remained stagnant, *Judicial Independence* rose 0.8 points.

PPR experienced an increase over the years, but the increase is slightly misleading because there were no data for *Registering Property* before 2009. The addition of this sub-component's score of 9.1 aided an increase in the overall PPR score from 2008 to 2009. However, other PPR sub-components experienced increases in that time period as well.

IPR in Bahrain increased 0.3 points in 2010 largely because of a change in the *Protection of Intellectual Property Rights* sub-component, which has increased 0.4 points since 2008. Bahrain's *Copyright Piracy* score also rose. Pirated business software's share of the market was estimated at 55 percent, dropping from 60 percent in 2007.



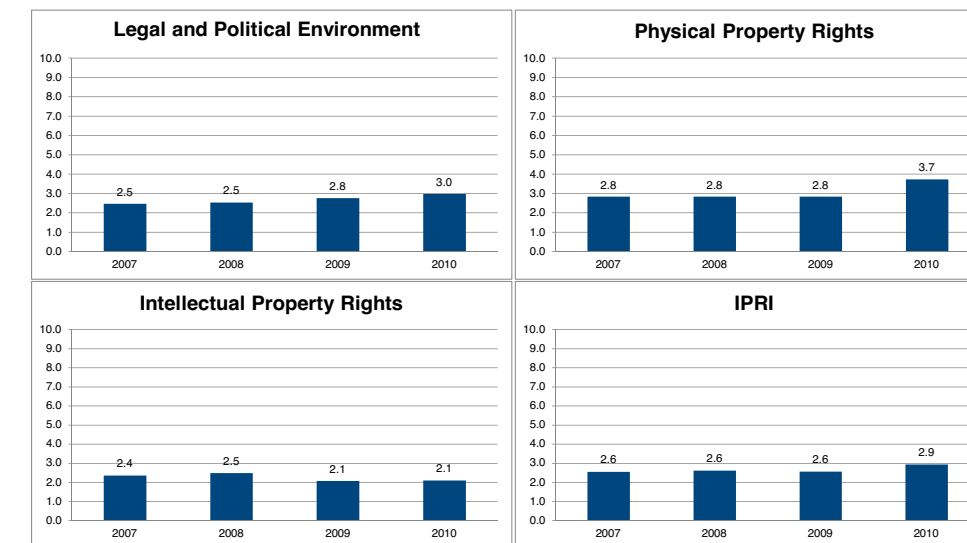
## BANGLADESH

World Rank: 125 Regional Rank: 19

In 2010, IPRI in Bangladesh rose for the first time since this report began publishing in 2007.<sup>19</sup> The property rights regime of Bangladesh presents a picture of conflict. While some components experienced dramatic increases, others sharply decreased. But the LP component did undergo a real increase. Despite slight decreases in *Political Stability* and *Control of Corruption*, the LP score increased because *Judicial Independence* rose 0.9 points.

PPR increased by a large margin in 2010 and contributed heavily to the change in overall IPRI. While *Protection of Physical Property Rights* fell 0.4 points, according to expert opinion, registering property has become much easier. From 2007 to 2009, it took 425 days to register property, while in 2010 that number fell to 245. This change increased the sub-component score three points.

While other components of IPRI experienced growth in 2010, Bangladesh's IPR remained largely unchanged. Despite what appears to be some progress in property rights protection, the country still has the worst IPRI in the region and the world.



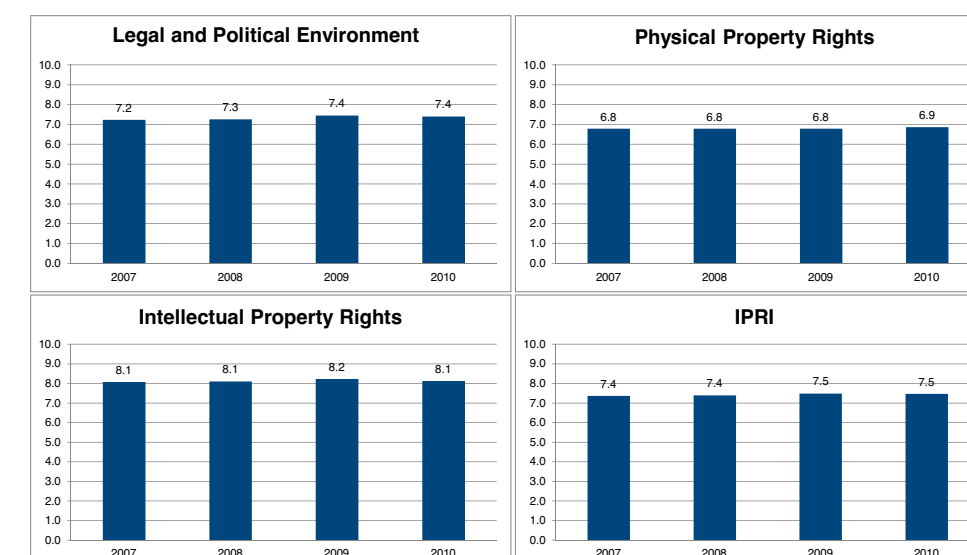
## BELGIUM

World Rank: 19 Regional Rank: 13

IPRI in Belgium remained unchanged from 2009, despite some interesting developments in property rights. The LP component did not change overall, but individual sub-components of this component demonstrate very divergent trends that happen to offset each other. *Rule of Law*, *Political Stability*, and *Control of Corruption* all decreased at least 0.2 since 2009, reverting to levels similar to 2007. Meanwhile, *Judicial Independence* increased 0.6 in 2010 and nearly an entire point since 2008.

PPR in Belgium was hampered by a difficult process to register property. The sub-component ranks among the lowest among countries in Western Europe and has not shown any improvement since 2007. It still takes a staggering 132 days to register property in Belgium.

According to expert opinion, protection of intellectual property in Belgium has weakened since 2007. The sub-component score decreased 0.3 points in 2010. The *Copyright Piracy* score, however, increased. In 2010, legal business software accounts for three percent more of the market than it did in 2007. Pirated business software dropped to 25 percent of the market share in 2010.



**BENIN**

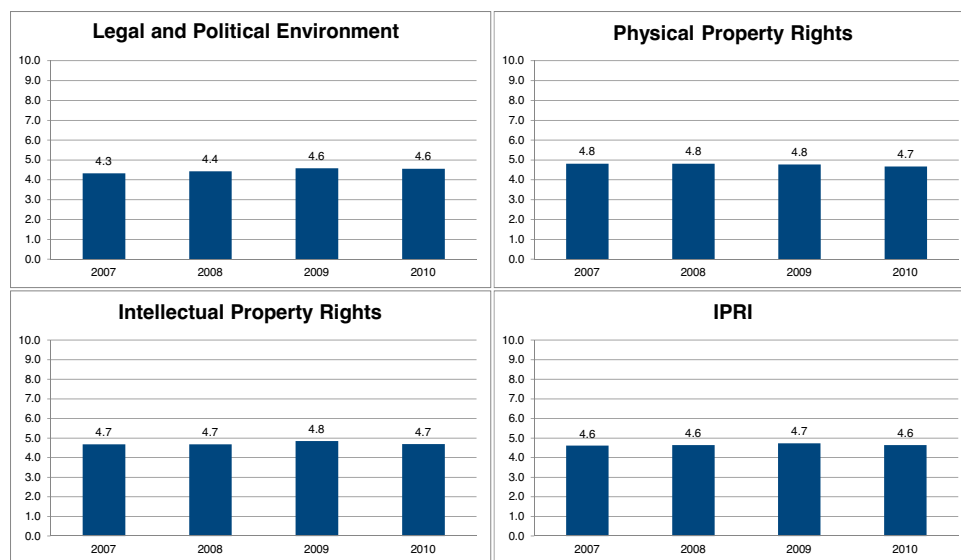
World Rank: 75 Regional Rank: 7

IPRI in Benin decreased slightly because of a drop in all components in 2010. LP in Benin changed only slightly, but that does not indicate that there was no change in the legal and political environment in the country in 2010. *Control of Corruption* increased 0.2 points, while *Rule of Law* decreased 0.2, disguising any overall change for the component.

While the PPR score has remained static since 2007, there have been drastic changes to the country's physical property rights regime the past four years. According to expert opinion, *Access to Loans* increased dramatically, from 1.5 in 2008 to 2.4 in 2010. Unfortunately, data for the *Registering Property* sub-component suffered from inconsistencies that inhibit direct comparisons across years for this country.

Hopefully, these inconsistencies can be addressed in the future.

IPR in Benin experienced a slight improvement in 2009 only to retract back to its original score in 2010. These changes are because of fluctuations in expert opinion on the protection of intellectual property rights.



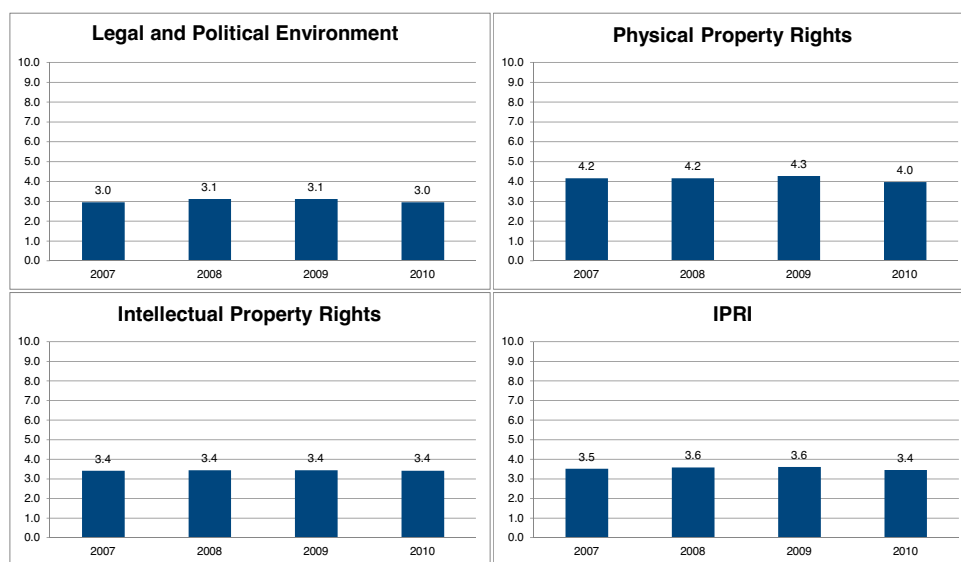
**BOLIVIA**

World Rank: 119 Regional Rank: 21

IPRI in Bolivia decreased in 2010. The country's LP score fell because of a 0.3 decrease in both *Judicial Independence* and *Rule of Law*. This score should come as no great surprise after the passage of a new constitution in January 2009. Many in the business and intellectual communities raised concern over the new document because it offers both new protection for state owned property and collectivization. The constitution is also seen to consolidate executive power in the office of the president.<sup>19</sup>

The PPR score in Bolivia experienced a similar shift in 2010. Most markedly, expert opinion of the *Protection of Physical Property Rights* decreased significantly. This sub-component fell 0.8 points in 2010.

IPR in Bolivia also experienced a negative shift, with *Protection of Intellectual Property Rights* decreasing 0.2 points after three consecutive years without any major change. Because of a lack of any improvement, Bolivia continues to be at the bottom of both the world and regional rankings.



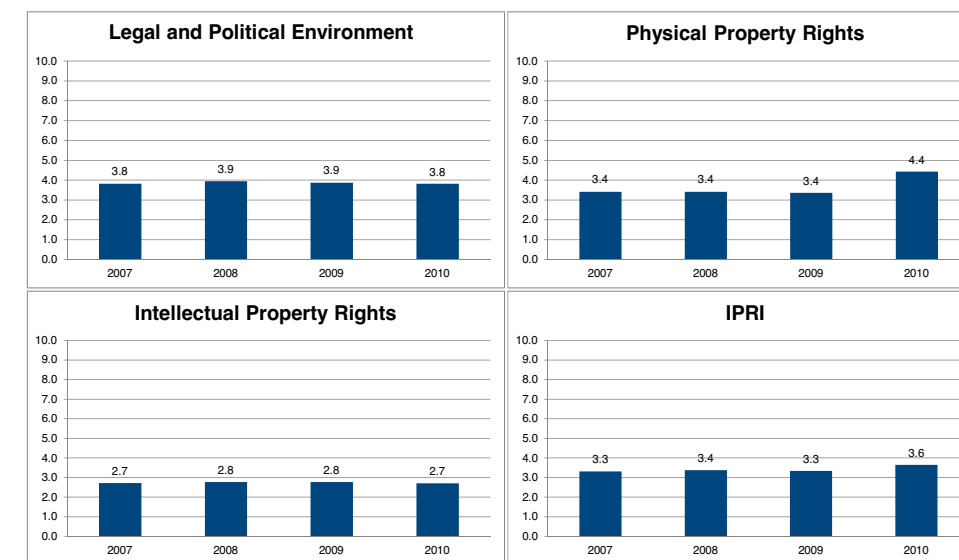
**BOSNIA AND HERZEGOVINA**

World Rank: 116 Regional Rank: 25

IPRI in Bosnia and Herzegovina increased 0.3 points in 2010, which presents a substantial improvement. The LP score decreased slightly, but further review of the sub-component scores shows some areas of improvement. *Rule of Law* and *Control of Corruption* both increased 0.3 points. Unfortunately, the score does not reflect those signs of progress, as *Judicial Independence* decreased 0.8.

The PPR score for Bosnia and Herzegovina was affected in large part by changes in the ease of registering property. For the past three years, it took an average of 331 days to register private property. But policy developments in 2009 led to this number dropping to 128 days this year. As a result, this sub-component of the PPR score increased an unparalleled 3.4 points.

Meanwhile, IPR in Bosnia and Herzegovina remained unchanged by any concrete measure. Despite these improvements, Bosnia and Herzegovina places among the bottom 10 countries for IPRI and scores the worst in its region.



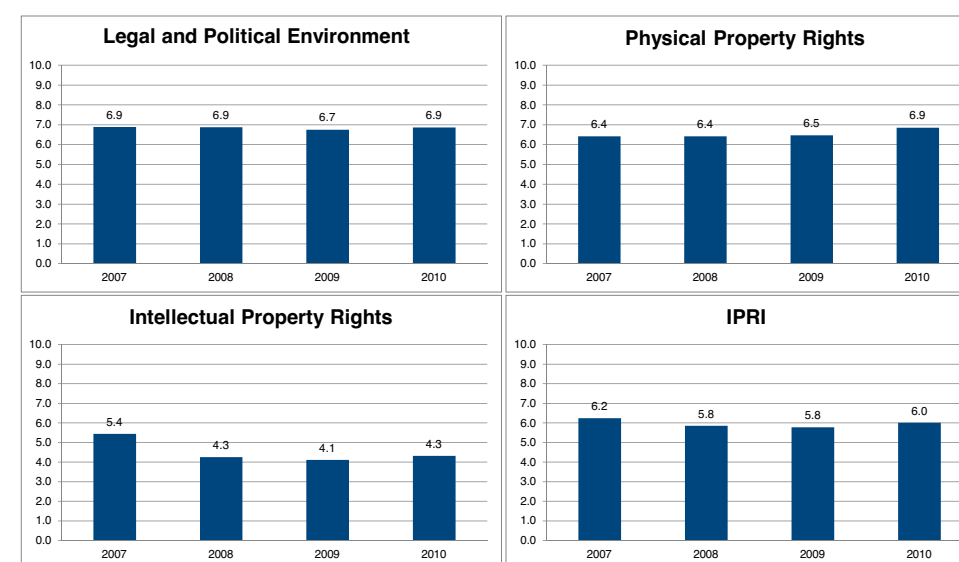
**BOTSWANA**

World Rank: 44 Regional Rank: 2

IPRI in Botswana rose for the first time in three years. Botswana demonstrated some improvement in all components. The country's LP score returned to the level it had reached in 2008, at 6.9. While *Judicial Independence* and *Rule of Law* remained unchanged, *Control of Corruption* and *Political Stability* both increased.

The PPR score experienced increases in each sub-component. Both *Protection of Physical Property Rights* and *Access to Loans* increased at least 0.3 points. Unfortunately, data for the *Registering Property* sub-component suffered from inconsistencies that inhibit direct comparisons across years for this country. Hopefully, these inconsistencies can be addressed in the future.

Similarly, the score for *Protection of Intellectual Property Rights* demonstrated a slight increase. Expert opinion on Botswana clearly shows the perception of progress in the country's property rights regime. Confidence among business leaders has helped Botswana enjoy the highest LP and second highest IPRI in Africa.



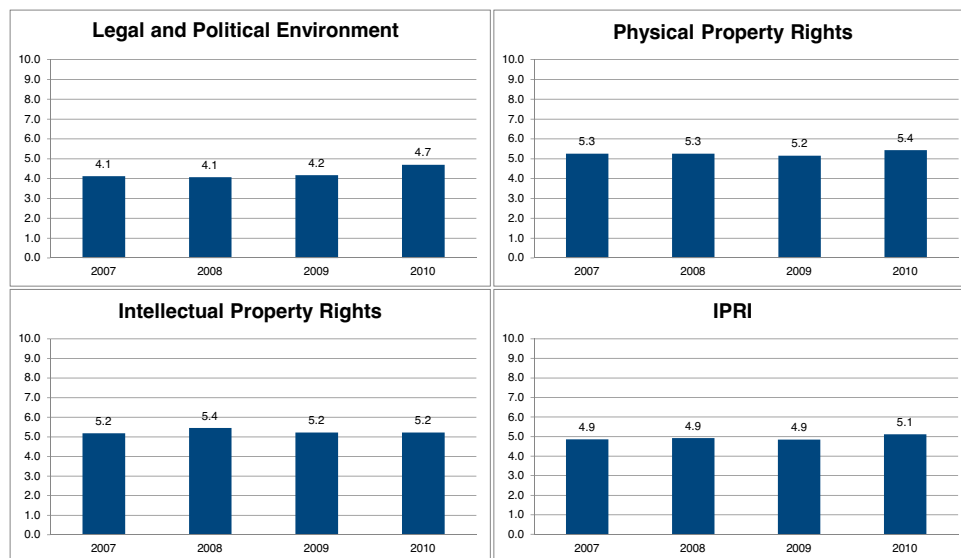
**BRAZIL**

World Rank: 64 Regional Rank: 8

Brazil's IPRI increased overall for the first time in four years. In particular, the LP score increased 0.2 points in 2010. *Control of Corruption* rose 0.4 points. Most strikingly, *Judicial Independence* increased 1.2 points.

The PPR score also increased in 2010. This increase was spurred by a 0.7 point increase in *Access to Loans*. Additionally, registering property is now easier thanks to some improvements. Specifically, it takes 3 fewer days for an average entrepreneur to purchase land and a building in the largest business city.

IPR in Brazil was the only component not to improve. Brazil still managed to maintain an IPR score above the average score of Latin American and Caribbean nations.



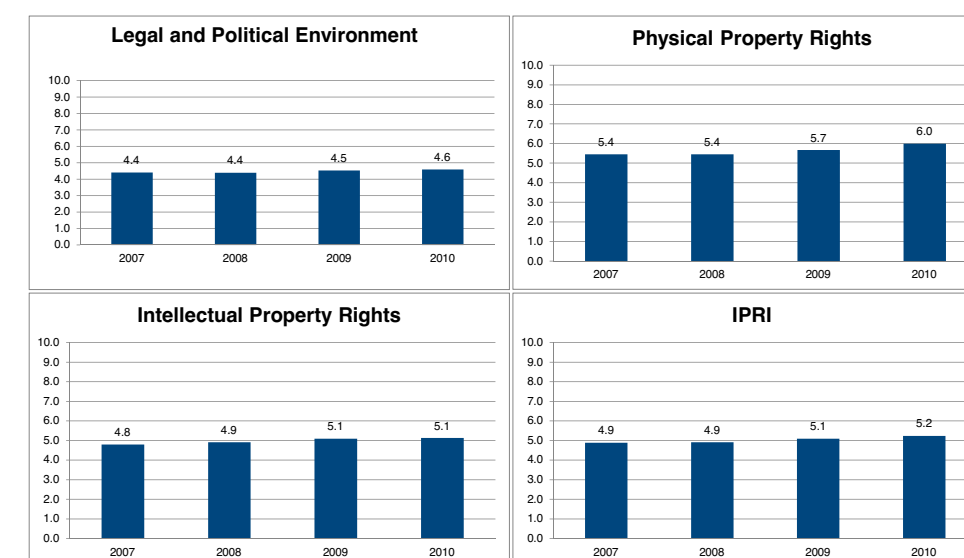
**BULGARIA**

World Rank: 59 Regional Rank: 10

Property rights in Bulgaria have continued to improve steadily since 2007. LP in the country has risen consistently over the last four years across the measured components.

PPR in Bulgaria underwent a sharp increase in 2010. Registering property has become less difficult since 2007, as one of the processes required was eliminated. The most dramatic score change for Bulgaria was the *Access to Loans* sub-component, which rose 0.6 points to 4.9.

Bulgaria's IPR was largely unchanged in 2010. While copyright piracy levels fell dramatically from 2007 to 2009, it did not continue to improve in 2010. Some of the improvement in the IPR scores in 2009-2010 relative to 2007-2008 can be attributed to the fact that data on copyright piracy for records and music industry were only available for the former period.



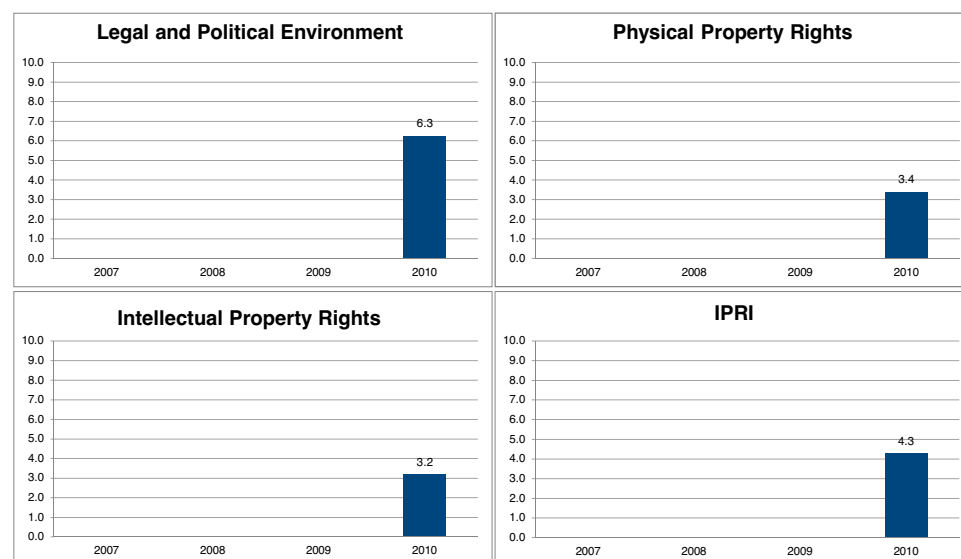
**BRUNEI**

World Rank: 88 Regional Rank: 15

2010 marked the first year Brunei was included in the IPRI. The property rights regime in this country is unique. Brunei enjoys a relatively high LP score because of a strong score for *Political Stability*. Brunei ranks sixth in the region for LP.

Brunei has the lowest PPR score in the world. This should not be surprising considering that companies cannot legally hold land in their own name. As such, Brunei's *Registering Property* score was zero.

Similarly, Brunei's IPR score was one of the lowest in the world. A low *Copyright Piracy* score reflects the fact that pirated material is estimated to account for 100 percent of the music market.



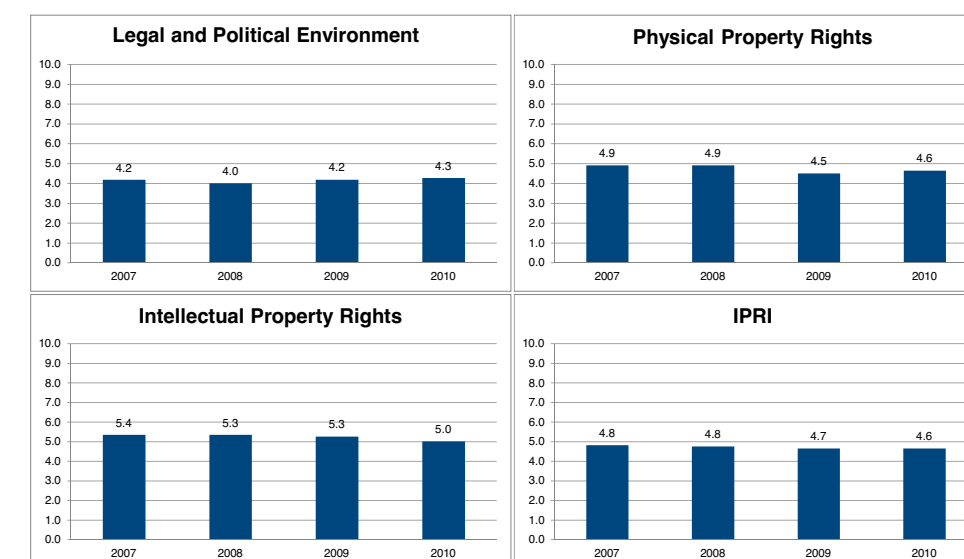
**BURKINA FASO**

World Rank: 75 Regional Rank: 7

Burkina Faso's IPRI score decreased for the second consecutive year. The country's LP score, however, continued to increase. *Rule of Law* and *Judicial Independence* both experienced substantial increases. *Political Stability*, however, decreased 0.4 points, hampering the LP score overall.

The PPR score is somewhat confounding. Registering property became considerably easier in 2010, and the sub-component score rose 1.1 points, accordingly. The score for *Access to Loans*, however, decreased 0.7 points.

The IPR score for Burkina Faso dropped dramatically in 2010. However, this decrease was less severe than it would immediately appear. There were no data for copyright piracy in Burkina Faso, so the decrease in IPR was solely because of the *Protection of Intellectual Property Rights* sub-component.



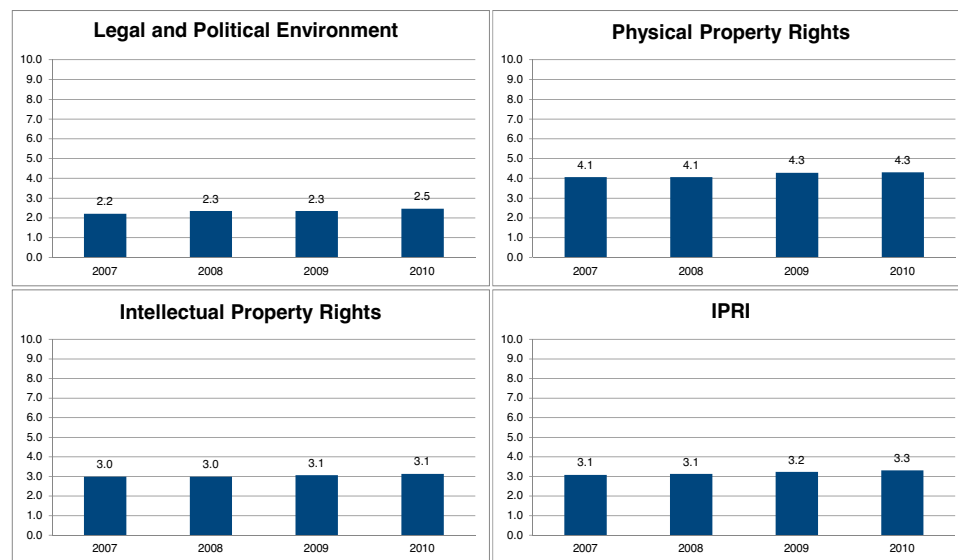
## BURUNDI

World Rank: 120 Regional Rank: 20

Burundi saw modest gains in property rights in 2010. The only component that showed substantial increases, however, was LP. Despite the fact that *Political Stability* decreased slightly, all other sub-component scores in LP rose.

PPR in Burundi did not experience an overall change in 2010, but its sub-components were not stagnant. *Protection of Physical Property Rights* fell 0.2 points, but *Access to Loans* increased by the same amount. *Registering Property* demonstrated no change. While it would appear that there was no significant improvement of property rights in Burundi, the reality is clearly not the case.

IPR increased slightly in 2010, but this change was reflective of only one sub-component. There were no reliable data for the extent of piracy of business software or records and music, and patent protection data have not been updated since 2007. As a result, the change in score relies solely on expert opinion regarding the protection of intellectual property.



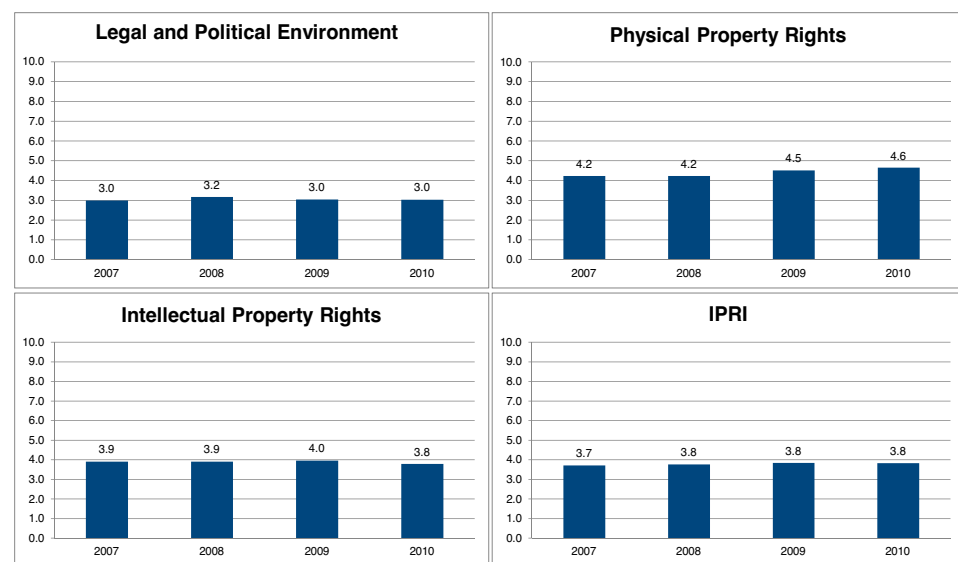
## CAMEROON

World Rank: 109 Regional Rank: 18

While IPRI in Cameroon has not changed since 2008, the country's property rights regime has certainly not remained static. Similarly, the LP score did not change, yet the individual sub-component scores varied. *Rule of Law* and *Control of Corruption* both made progress, yet *Political Stability* in Cameroon eroded.

The PPR score of Cameroon increased modestly. The *Access to Loans* sub-component progressed dramatically, improving 0.6 points in 2010 and 0.9 points since 2007. While it is obvious that a rating of 1.9 leaves significant room for improvement, a nearly full point increase in three years represents a significant gain.

Cameroon's IPR score in 2010 suffered from a combination of factors. The business software market continued to be dominated by piracy (estimated at 83 percent). It should come as no surprise that the *Protection of Intellectual Property Rights* sub-component fell 0.6 points in 2010.



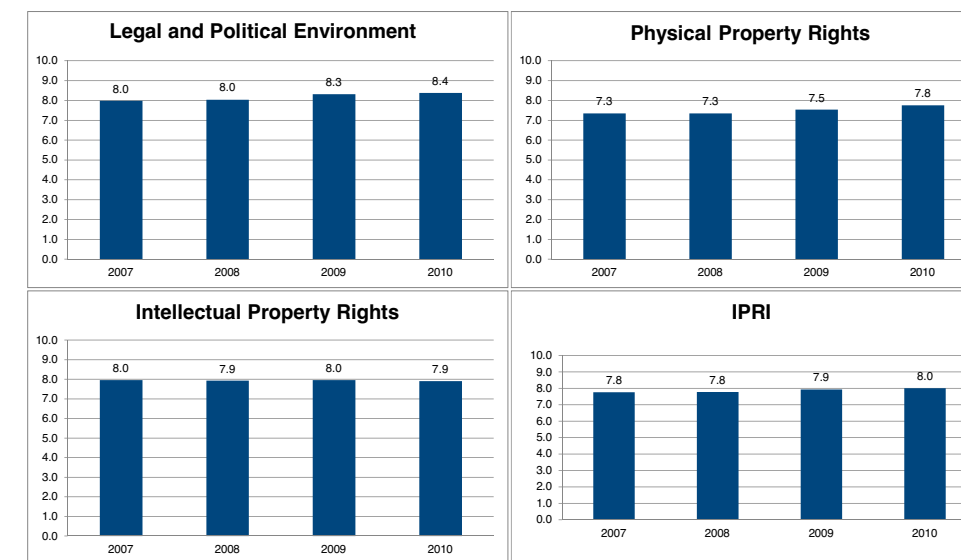
## CANADA

World Rank: 12 Regional Rank: 1

IPRI increased in Canada for the second consecutive year. Canada maintained its position as the highest ranking country in the Western Hemisphere. LP increased a modest 0.1 points. *Judicial Independence* demonstrated a substantial increase of 0.5, bringing the component score to 8.8. Canada enjoys the highest LP in the region as well as the Western Hemisphere as a whole.

PPR in Canada also increased sizably in 2010. The most dramatic change came in the *Protection of Physical Property Rights* sub-component, which increased 0.6 points.

The IPR scores have remained relatively unchanged for the last four years. Copyright piracy levels continued to be somewhat high for a well developed country – estimated at an average of 33 percent. As a result, the country was added to the “priority watch list” by the U.S. Trade Representative.<sup>21</sup> Moreover, reflective of the lack of progress with respect to IPR protection is the fact that expert opinion on protection of intellectual property rights has deteriorated since 2009.



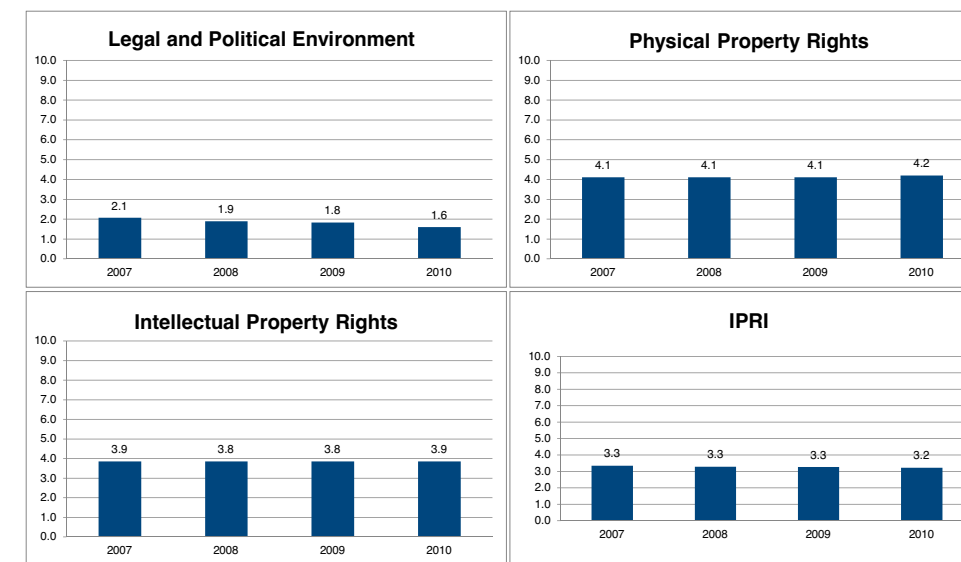
## CHAD

World Rank: 121 Regional Rank: 21

While IPRI in Chad only decreased slightly in 2010, the component scores display some particularly disconcerting information about certain aspects of the country's property rights environment. The LP component in Chad decreased in 2010. The sub-component scores suggest that *Political Stability*, *Control of Corruption*, and *Rule of Law* were all the weakest they have been since 2007. LP for Chad was the lowest of any of the countries in the IPRI that are included in these rankings.

PPR may offer some signs of progress for property rights. While registering property has not become easier, expert opinion on both protection of physical property and access to loans slightly increased.

IPR failed to make any substantive increases for the second consecutive year. Overall, the situation with property rights is dire in Chad. The country ranks among the bottom 10 in nearly every component.

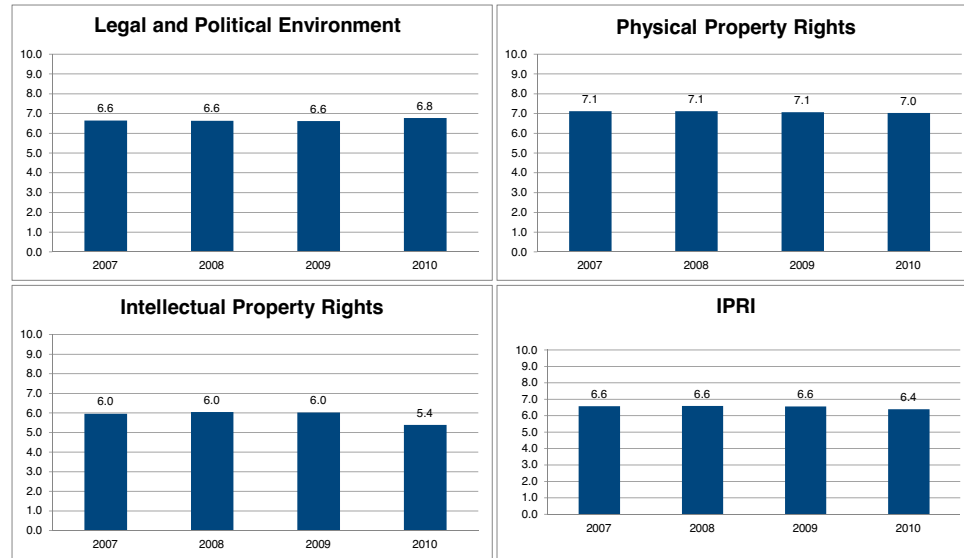


**CHILE**

World Rank: 34 Regional Rank: 1

Chile enjoys the highest IPRI in all of Latin America and the Caribbean. Despite this position, there is some cause for concern because the score fell for the first time in 2010. The LP score remained strong in 2010. *Judicial Independence*, in particular, underwent a substantial increase. The 0.5 point increase brings that sub-component score to 5.8

PPR in Chile showed limited change, while IPR decreased dramatically. The sub-component score for *Protection of Intellectual Property Rights* fell 0.7 points. This weakening expert opinion correlates to the explosion of piracy in Chile. Pirated music increased its share of the market by 22 percent the last year alone. As a result, the *Copyright Piracy* score decreased 1.1 points to 3.4. Because of the rise of these new problems, Chile's IPR rank fell from first to fourth in the region.



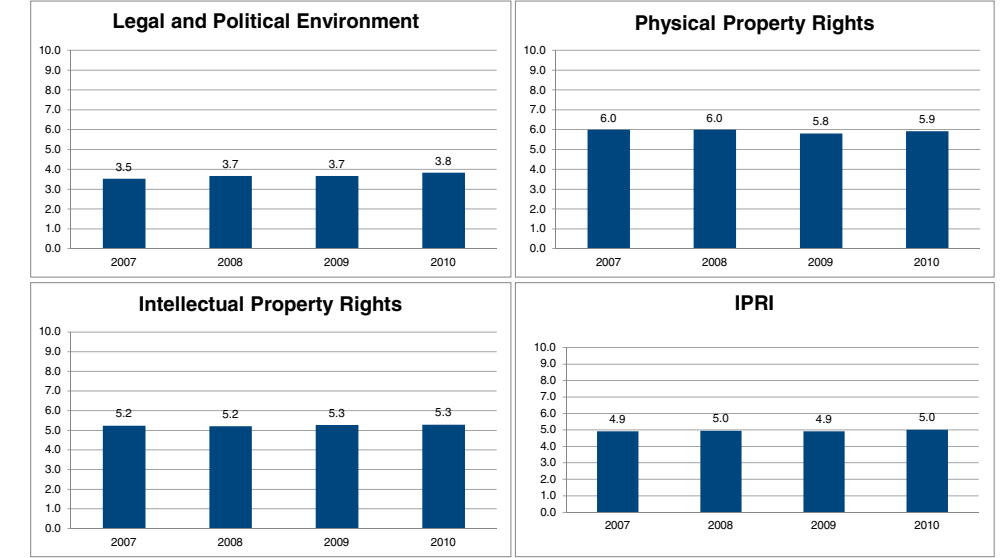
**COLOMBIA**

World Rank: 67 Regional Rank: 9

IPRI in Colombia increased in 2010, after a slight score diminution in 2009. Although LP in Colombia only showed a minimal change, the *Judicial Independence* score increased 0.4 points. The PPR score in 2010 showed a slight positive change. While expert opinion on the protection of private property worsened, the overall PPR score was helped by a 0.4 point increase in *Access to Loans*.

Despite the fact that the *Copyright Piracy* score increased in 2010, *Protection of Intellectual Property Rights* decreased equally in magnitude, and the IPR score failed to demonstrate any change. Some of the improvement in IPR scores in 2009-2010 relative to 2007-2008 can be attributed to the fact that data on copyright piracy for the records and music industry were only available for the former period.

There is hope that the IPR regime in Colombia would benefit from the adoption of the United States-Colombia Free Trade Agreement, which includes stipulations for protecting copyrights and intellectual property as a whole. Efforts toward the adoption of the treaty, however, have stalled for the foreseeable future.<sup>23</sup>



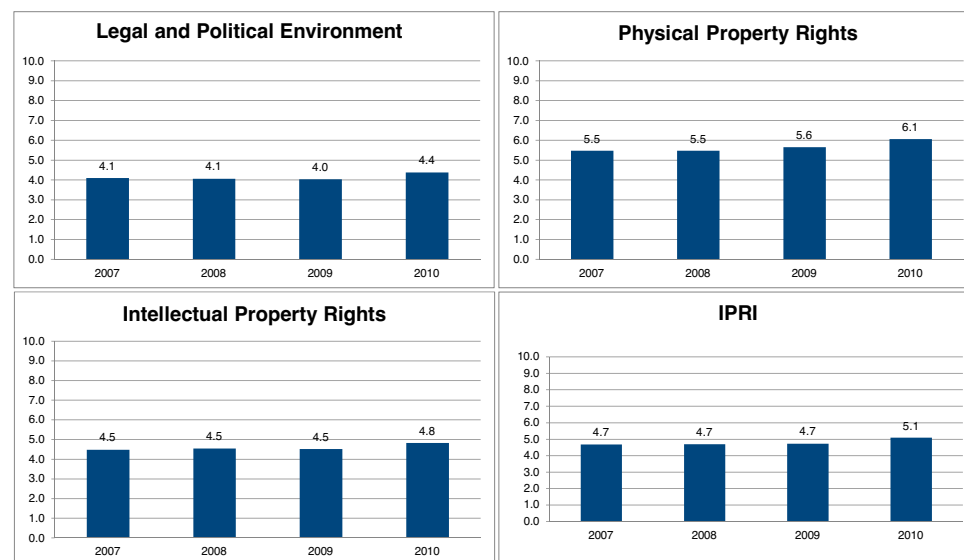
**CHINA**

World Rank: 64 Regional Rank: 11

IPRI in China increased for the first time since data became available in 2007. All components experienced a positive change of at least 0.3 in 2010. While every sub-component score of LP increased, *Judicial Independence* increased the most, jumping 0.7 points.

PPR increased as well because of an 1.1 increase in the *Protection of Physical Property Rights* sub-component score. *Registering Property* maintained a strong score of 8.8, which was the highest of any sub-component for the country. *Access to Loans* increased modestly in 2010, but it remains one of the weakest aspects of China's property rights regime.

The IPR score in 2010 presents a complicated situation. The situation with copyright piracy in China has improved slightly, but pirated business software and music still account for 80 percent and 90 percent of their markets, respectively. There are signs of progress, however, as the Chinese government launched nationwide campaigns against piracy and publicly committed to protecting copyrights.<sup>22</sup>

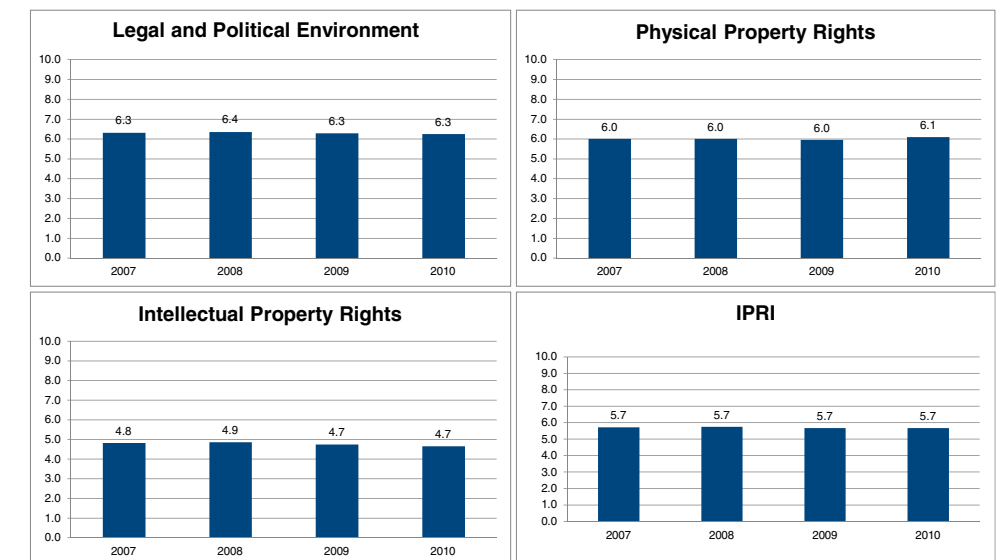


**COSTA RICA**

World Rank: 50 Regional Rank: 3

IPRI in Costa Rica failed to demonstrate any change for the fourth consecutive year. Despite what would appear to be stagnation in the country's property rights regime, there were some considerable changes in its property rights environment. In terms of LP, both *Judicial Independence* and *Control of Corruption* increased, yet *Political Stability* underwent a 0.6 point decrease, resulting in no net change to the overall score.

The PPR score experienced an increase because of a substantial 0.5 point increase in *Access to Loans*. IPR in Costa Rica have been hurt by a 0.8 point drop in *Protection of Intellectual Property Rights* since 2007, despite the fact that the government passed legislation providing for stronger IPR protection. Weak enforcement, or even a lack of enforcement, has plagued Costa Rica's intellectual property regime.





## CÔTE D'IVOIRE

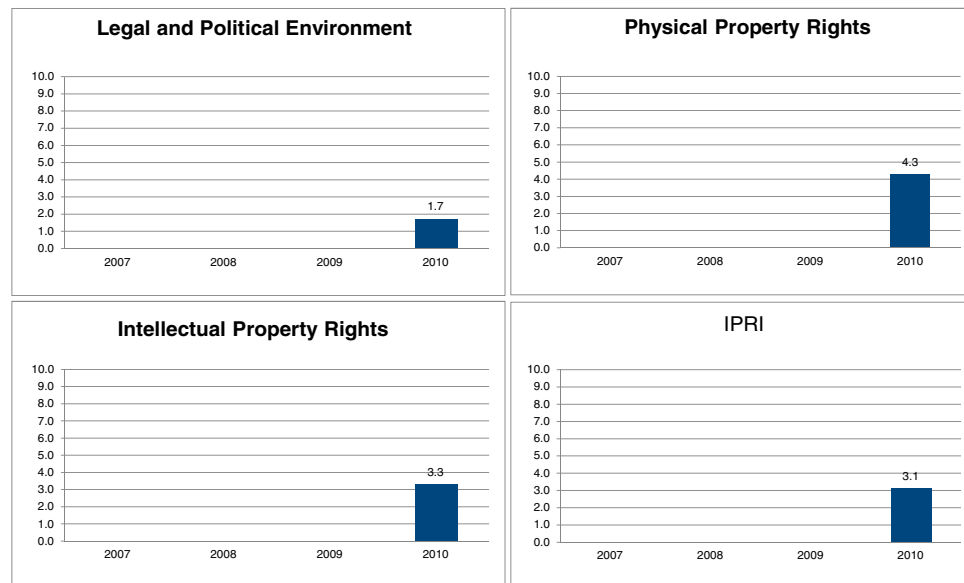
World Rank: 124 Regional Rank: 23

Côte d'Ivoire was included in the IPRI for the first time in 2010. The country suffers under the lowest IPRI score in the world. The strikingly low LP score contributed to this low rating. *Judicial Independence* and *Political Stability* both scored under 2.0 in 2010.

Côte d'Ivoire's strongest component was PPR. The comparatively high *Registering Property* score of 7.9 contributed to this situation. However, Côte d'Ivoire had the lowest *Access to Loans* score in the world (0.7).

*Protection of Intellectual Property Rights* in Côte d'Ivoire as weak (scored at 1.8). Combined with pervasive piracy in the country's business software market (estimated at 80 percent), this assessment contributed to a low IPR score of 3.3 for Côte d'Ivoire.

A weak legal and political environment, along with poorly protected and enforced intellectual property rights, contributed to Côte d'Ivoire's placement at the bottom of the IPRI ranking. The country also had the worst IPRI score among other African nations covered in the IPRI.



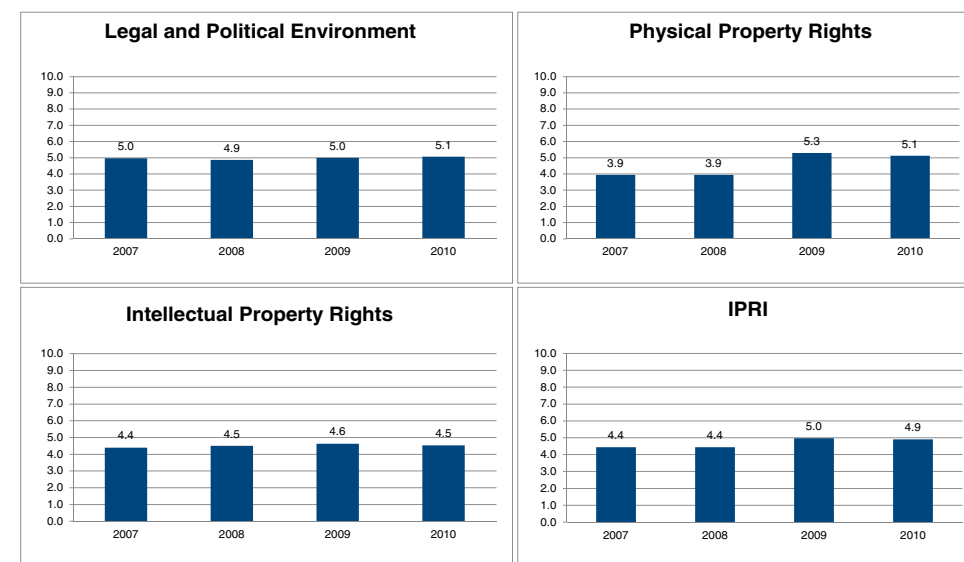
## CROATIA

World Rank: 69 Regional Rank: 12

IPRI in Croatia decreased in 2010. This negative change was the first that Croatia has experienced since data became available. Despite an overall score change in the country, Croatia's LP score increased. A slight decrease in *Judicial Independence* was offset by modest positive change in all other sub-component scores.

A decrease in PPR was the result of a sharp drop in one sub-component. Until 2010, *Access to Loans* in the country had not changed. But in 2010, *Access to Loans* decreased 0.5 points. This negative change reflects the monetary turmoil in which Croatia finds itself. As a result of the economic crisis, Croatia's currency is severely devalued and has repeatedly been described as a credit risk, making it very difficult to secure loans.<sup>25</sup>

IPR in Croatia experienced a slight decline, reverting back to its 2008 level. This was primarily because of fluctuating expert opinion on Croatia's protection of intellectual property rights. In fact, copyright piracy levels remained largely unchanged the last three years.



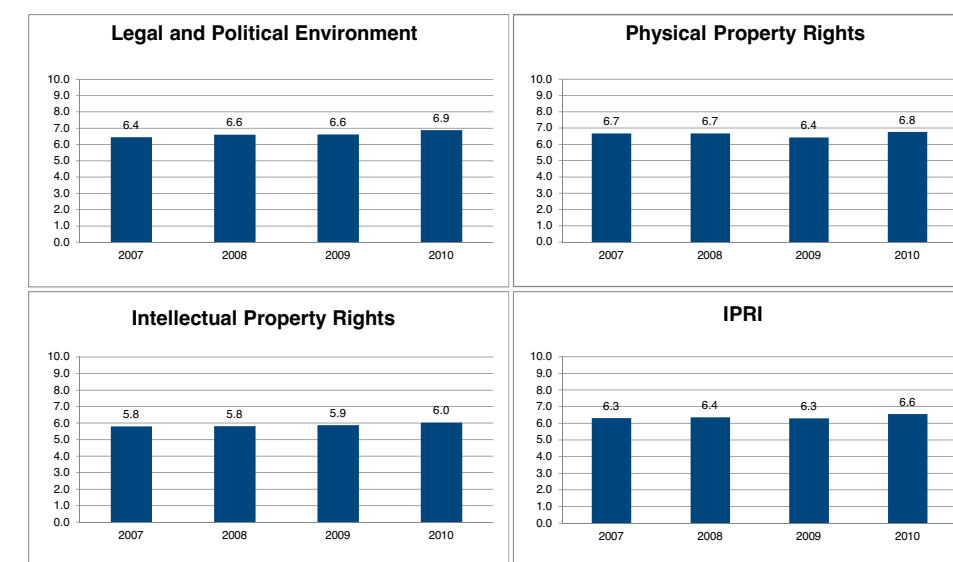
## CYPRUS

World Rank: 30 Regional Rank: 3

IPRI in Cyprus increased dramatically in 2010. All three components experienced positive change. The LP score rose 0.3 points because of major developments in multiple sub-component areas. *Judicial Independence* and the *Rule of Law* both increased, but *Control of Corruption* underwent a startling 0.5 point increase.

The PPR score for Cyprus also increased in 2010. Expert opinion regarding the protection of physical property has improved significantly, accounting for the shift in the overall component score.

The same held true for the *Protection of Intellectual Property Rights* sub-component and IPR score. One area of some concern was the remaining high levels of market share of pirated business software. Pirated content still accounts for more than 50 percent of the business software market.



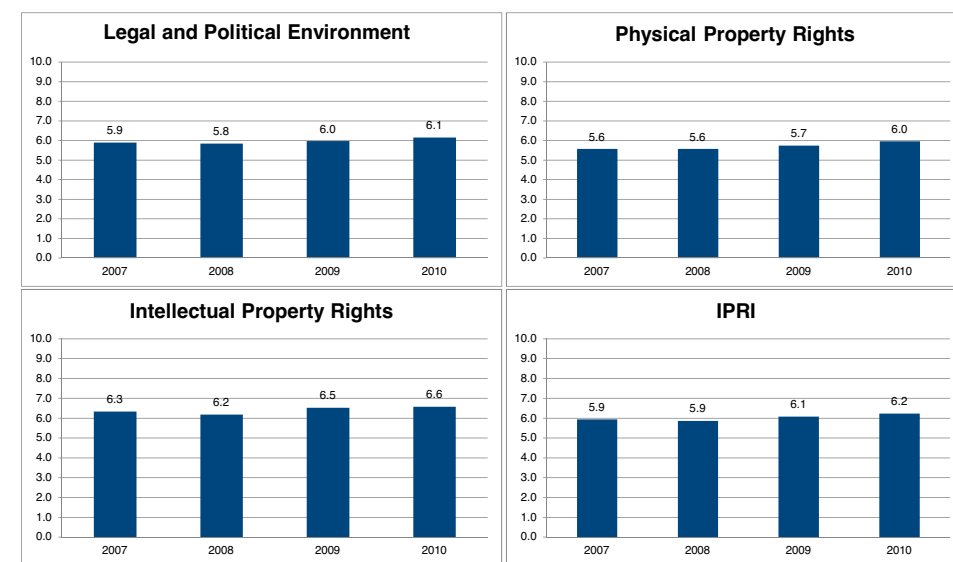
## CZECH REPUBLIC

World Rank: 38 Regional Rank: 4

IPRI in the Czech Republic increased for the second consecutive year. Each component underwent an increase in 2010. A 0.3 point increase in LP reflected nearly uniform improvements made in each scored sub-component.

The Czech PPR score also increased in 2010, rising 0.4 points since 2008. Despite the fact that registering property has not become demonstrably easier in four years, the *Protection of Physical Property Rights* score rose modestly in 2010. The most striking feature of the PPR score was an increase in *Access to Loans*. The sub-component score for *Access to Loans* has risen a full point since 2008.

While the IPR score for the Czech Republic increased, pirated and counterfeit goods held a large share of the retail market. The Czech government made efforts to curb the sale of these goods, but further improvement is still necessary.<sup>26</sup> Despite these problems, the Czech Republic still enjoyed the second highest IPR in the region.



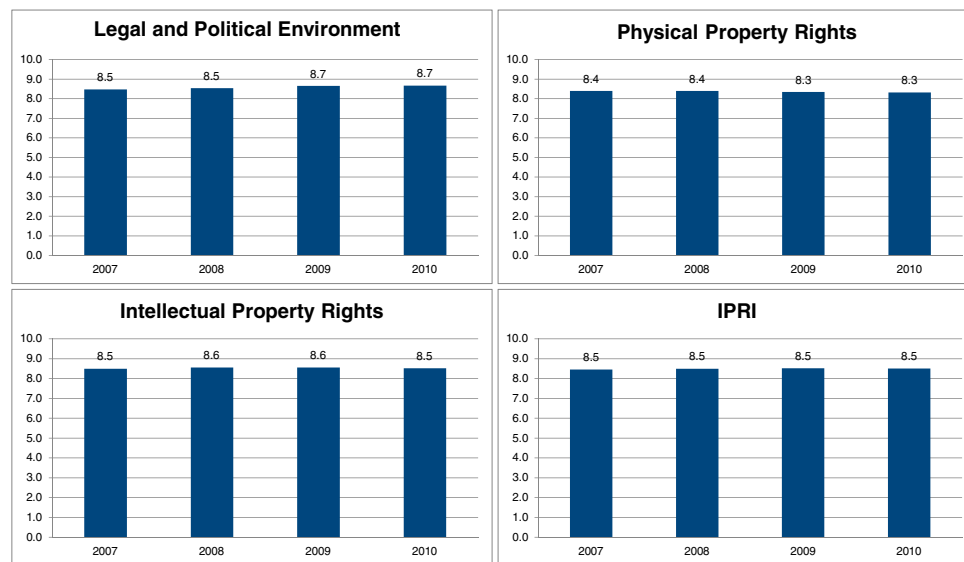
## DENMARK

World Rank: 2 Regional Rank: 2

While Denmark's IPRI did not increase in 2010, it maintained one of the top scores, tying Sweden for second highest of the ranked countries. Denmark's LP did not change overall in 2010. Although *Judicial Independence* and *Political Stability* improved, *Rule of Law* and *Control of Corruption* deteriorated. The changes offset each other.

The situation was similar with respect to the PPR score. Increases to the *Protection of Physical Property Rights* sub-component were offset by a decrease in the *Access to Loans* score, while there were no substantive changes to the process for registering property.

Although the change was slight, 2010 represents the first time that any aspect of the IPR score decreased since 2007. The score for the *Protection of Intellectual Property Rights* dropped modestly.



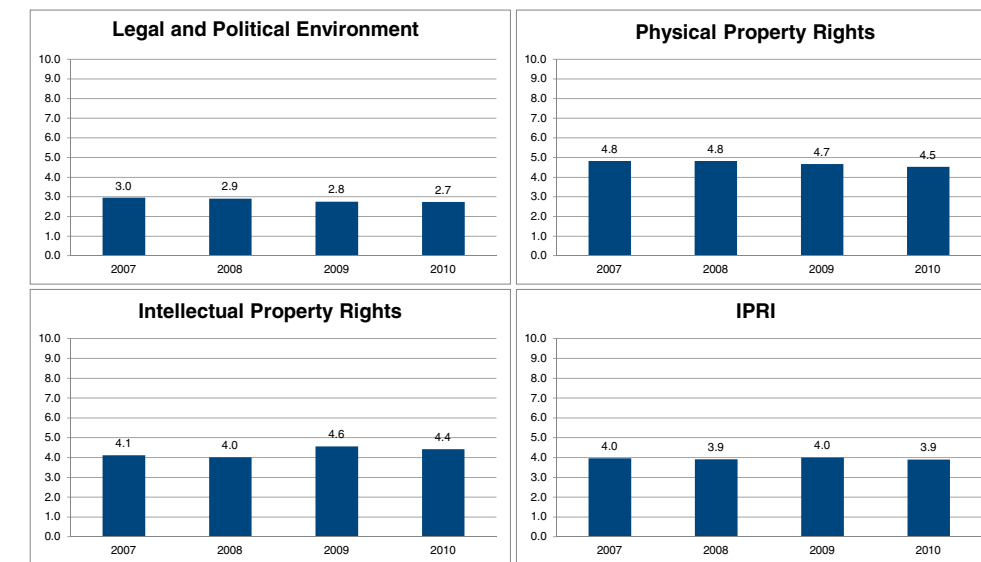
## ECUADOR

World Rank: 104 Regional Rank: 17

Ecuador's property rights suffered in 2010, as the score for every component decreased. A contributing factor to the decrease was the 0.4 point negative change to the *Rule of Law* sub-component score. However, *Political Stability* and *Control of Corruption* increased slightly.

The PPR score decreased because of the dramatic fall in the *Access to Loans* score. The sub-component rating has decreased 0.9 points since 2008. Unfortunately, data for the *Registering Property* sub-component suffered from inconsistencies that inhibit direct comparisons across years for this country. Hopefully, these inconsistencies can be addressed in the future.

The IPR score for the country fell because of expert opinion regarding the protection of intellectual property. Some of the improvement in the IPR scores in 2009-2010 relative to 2007-2008 can be attributed to the fact that data on copyright piracy for records and music industry were only available for the former period.



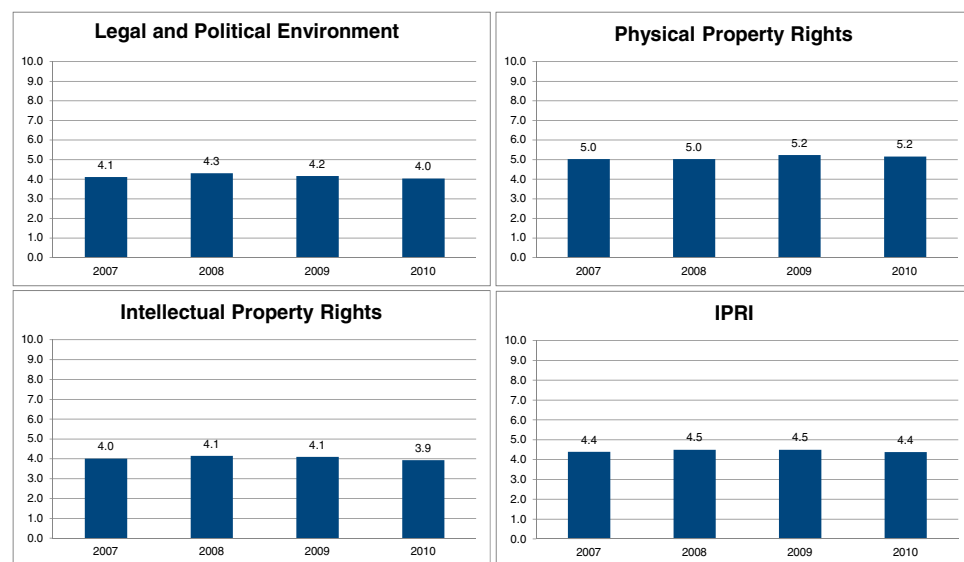
## DOMINICAN REPUBLIC

World Rank: 84 Regional Rank: 13

The IPRI score for the Dominican Republic decreased slightly in the 2010 index. The LP score fell to the lowest level recorded since the start of the IPRI. While *Control of Corruption* increased slightly, the score for *Judicial Independence* changed dramatically, dropping 0.4 points.

The PPR score remained the same for the Dominican Republic, while the sub-component *Protection of Physical Property Rights* fell 0.2 points. *Access to Loans* remained at a very low 2.7.

IPR in the Dominican Republic decreased slightly, although this score was somewhat skewed because of a lack of data for music piracy in 2010. Despite the adoption of intellectual property protection measures included in CAFTA-DR,<sup>27</sup> enforcement remained limited. While the *Protection of Intellectual Property Rights* sub-component score would suggest that some improvement was made to the IPR regime, the Dominican Republic remained a subject of scrutiny in the eyes of the United States.<sup>28</sup>



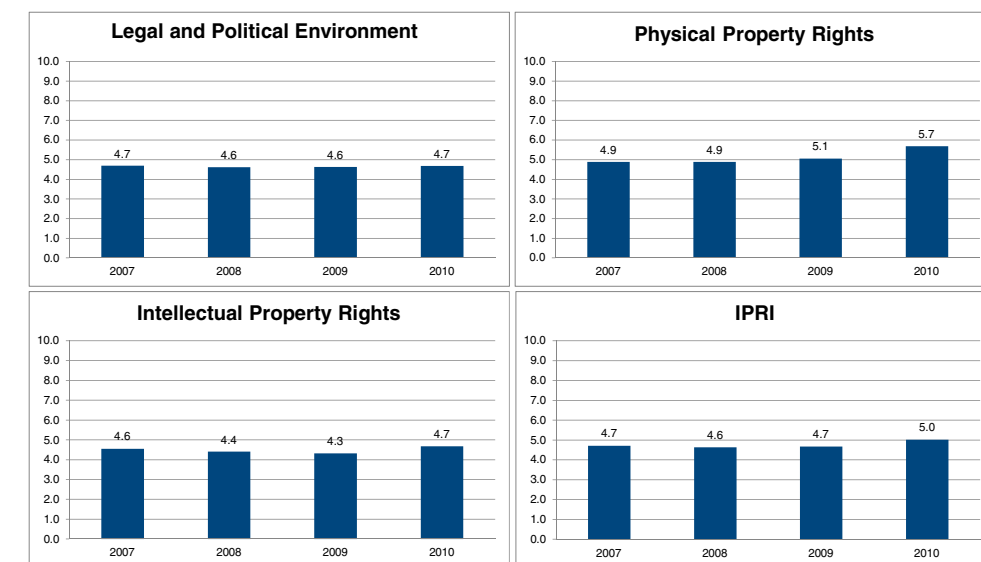
## EGYPT

World Rank: 67 Regional Rank: 12

The IPRI score rose considerably in 2010 because of large increases to both the PPR and IPR scores. However, the LP score experienced less of a change. While the other sub-components of the score increased, overall positive change was hampered by a diminution in the *Control of Corruption* sub-component.

PPR in Egypt experienced somewhat contradictory developments. *Access to Loans* increased 0.8 points in 2010. The waiting period for registering property decreased from 193 days to 72 days, leading to an increase of two points in this sub-component score. Despite these improvements, expert opinion regarding the protection of physical property regressed.

IPR in Egypt made significant progress this past year, but this figure is somewhat misleading. Because there were no data for piracy of records and music in 2010, the component score rose dramatically. Copyright piracy is a growing problem as use of the Internet becomes easier in the country. Reassuringly, the Egyptian government made judicial reforms to combat IPR problems.<sup>29</sup>



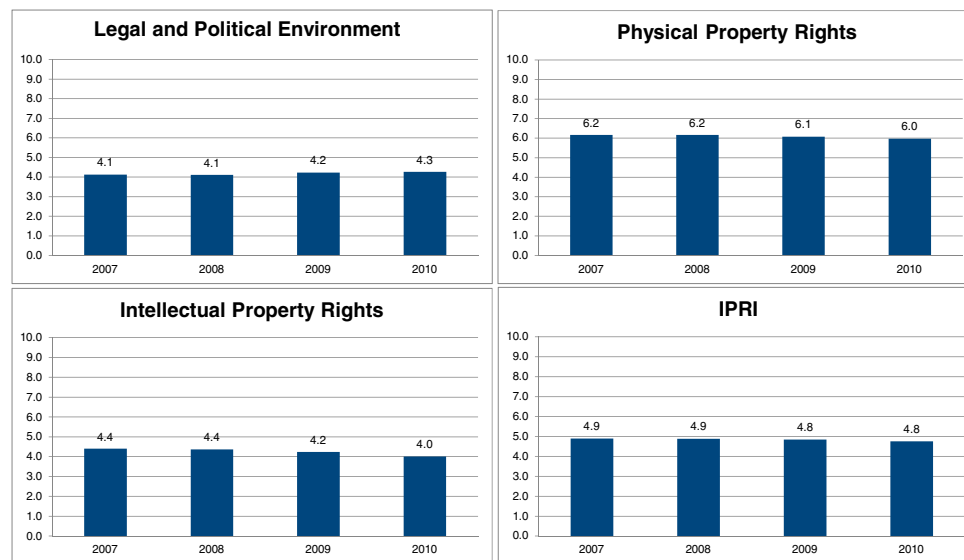
## EL SALVADOR

World Rank: 71 Regional Rank: 10

While IPRI did not change overall in El Salvador in 2010, there were some significant developments regarding property rights. The LP score was the only component that increased in 2010. While the score for *Control of Corruption* decreased slightly, every other aspect of this component underwent at least a slight positive change.

The PPR score decreased for the second consecutive year. However, *Registering Property* and *Access to Loans* remained at 2009 levels, so the change in the PPR component reflected only a decrease in the *Protection of Physical Property Rights* score.

IPR in El Salvador decreased 0.4 the past two years. This net negative change came as a result of a dramatic decrease in the sub-component score for *Protection of Intellectual Property Rights*. Having decreased nearly 1.3 points since 2008, expert opinion held that the IPR environment in El Salvador deteriorated.



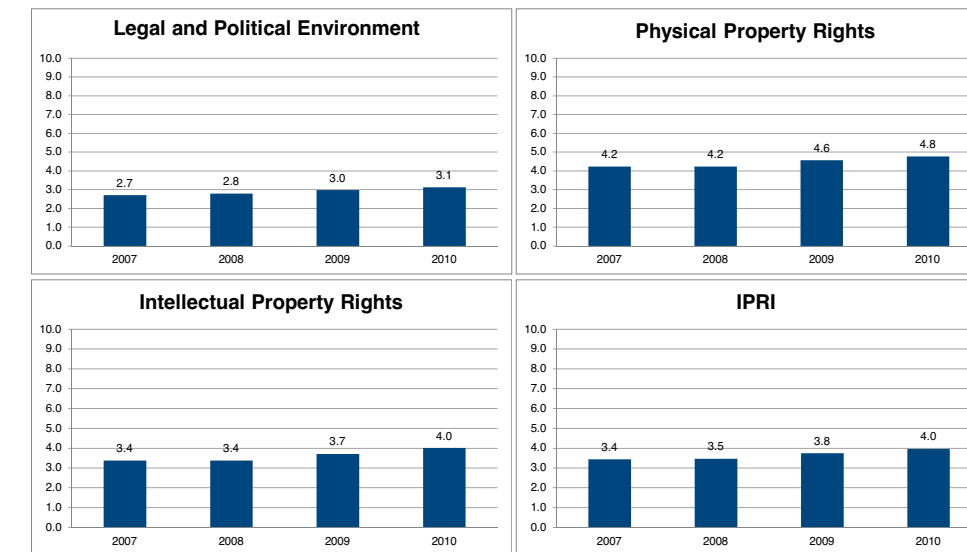
## ETHIOPIA

World Rank: 101 Regional Rank: 16

The IPRI score has undergone impressive growth since 2007, rising 0.6 points. The slight increase in LP in 2010 reflected a more sizeable change for one of the sub-component scores. The *Judicial Independence* sub-component increased 0.8 points in only one year.

PPR in Ethiopia presents a confusing set of issues. *Access to Loans* was very low, despite recent improvements. Registering property requires a burdensome 13 procedures, which can be completed in 43 days. Despite obvious problems, business leaders in the country hold a generally favorable view of physical property rights.

Because of a lack of any reliable data, there was not a sub-component score for *Copyright Piracy*. This placed a disproportionate value on the *Protection of Intellectual Property Rights* sub-component. As a result of an 1.3 increase in the sub-component since 2008, IPR also rose accordingly.

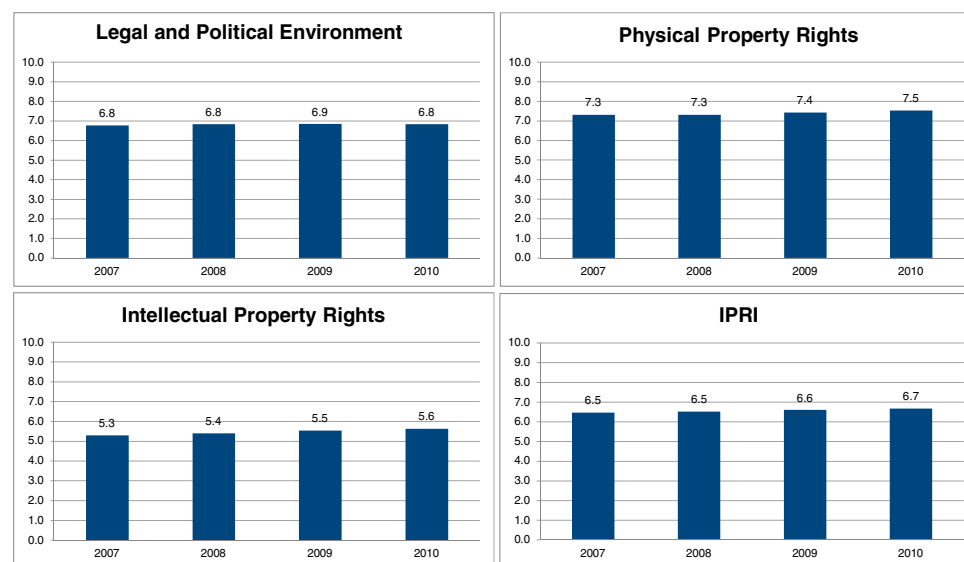


## ESTONIA

World Rank: 29 Regional Rank: 1

For the third consecutive year, IPRI in Estonia increased. Estonia continues to garner the highest score in Central and Eastern Europe. The only component not to improve in 2010 was LP. The *Political Stability* sub-component fell by a sizeable margin, although the other sub-components remained unchanged. Despite this problem, Estonia maintained the highest LP and PPR in the region. While PPR made progress in 2009, that change slowed. *Access to Loans* and *Registering Property* did not change.

IPR in Estonia made significant positive change since data became available in 2007. Progress made in decreasing piracy of business software was substantial and was the determining factor in changes to the IPR score, undergoing a total increase of 0.4 points. These improvements continued to ensure Estonia's leading position in its region.



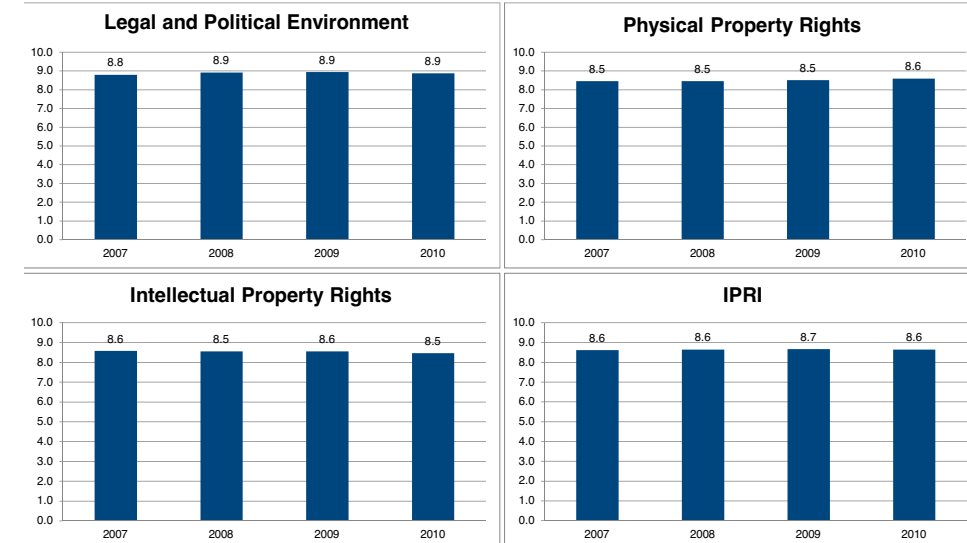
## FINLAND

World Rank: 1 Regional Rank: 1

Finland ranked highest among all countries in the IPRI. It had the strongest score in every component. LP has not changed since 2007, but there were some developments to the legal and political environment that affected property rights. *Judicial Independence* rose to 9.4, the highest in the world. This improvement was offset, however, by the decrease in *Control of Corruption*. Despite a 0.5 point negative change to the sub-component score, Finland still led the world in *Control of Corruption*.

While there was little room for improvement in the *Protection of Physical Property Rights*, Finland managed to raise *Access to Loans* for the second consecutive year. *Registering Property* score remained excellent.

The one area in which Finland needs to make progress is in IPR, specifically copyright protection. Pirated material in business software is estimated to account for over 25 percent of the business software on the market.



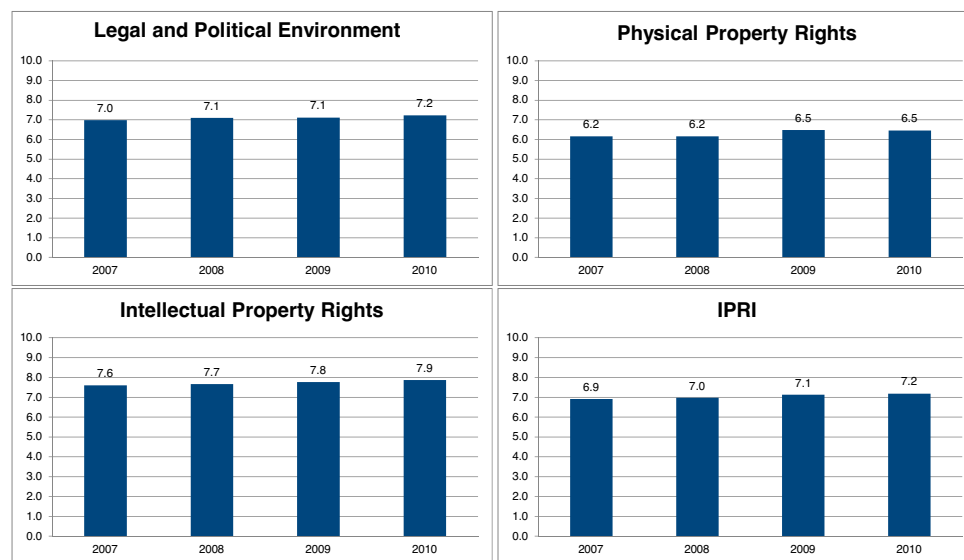
## FRANCE

World Rank: 21 Regional Rank: 14

IPRI in France increased for the third consecutive year. LP underwent a modest increase because of progress in *Rule of Law*, *Control of Corruption*, and *Political Stability*. This gain was somewhat hampered by a slight diminution to the *Judicial Independence* score.

The PPR score did not experience a net change from 2009. *Access to Loans* decreased moderately. Registering property has become much simpler, and the sub-component score has increased 1.2 points since 2008.

IPR in France improved substantially in 2010. A contributing factor was the continued decrease in piracy of business software. It can be reasonably expected that this trend will continue. The French Parliament passed aggressive legislation to combat online copyright infringement in 2009.<sup>30</sup>



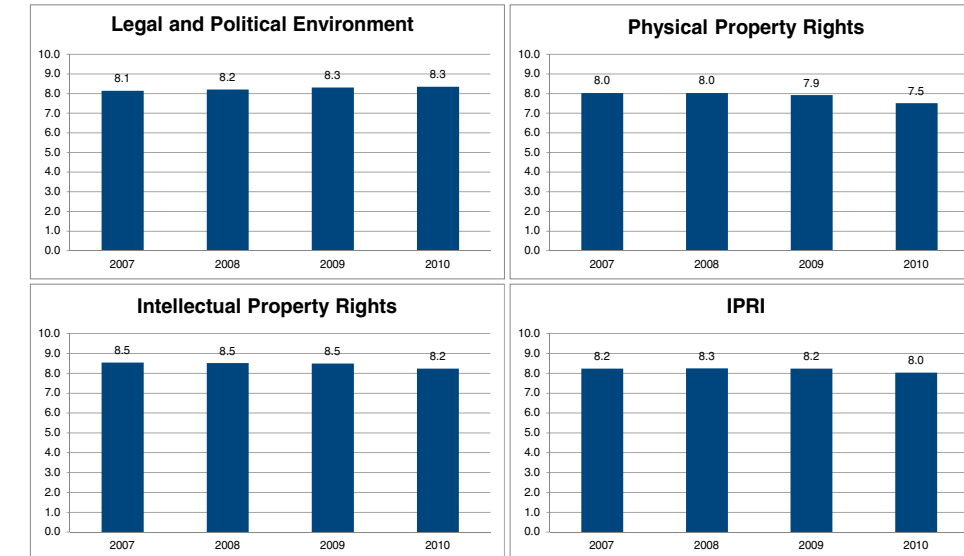
## GERMANY

World Rank: 12 Regional Rank: 9

IPRI in Germany decreased for the second consecutive year. The LP score, however, managed to avoid a negative change, despite modest decreases to the *Rule of Law* and *Control of Corruption* sub-components. A healthy increase to the *Political Stability* score offset other diminutions.

Sharp declines to both the *Access to Loans* and *Protection of Physical Property Rights* sub-components lowered the overall PPR score 0.4 points. Both of these sub-components decreased for two consecutive years.

The IPR score was affected by poor expert opinion of the protection of intellectual property. The component score has fallen nearly an entire point since 2008. Copyright piracy levels were relatively high in Germany (estimated at 27 percent) and did not improve for the second year in a row.



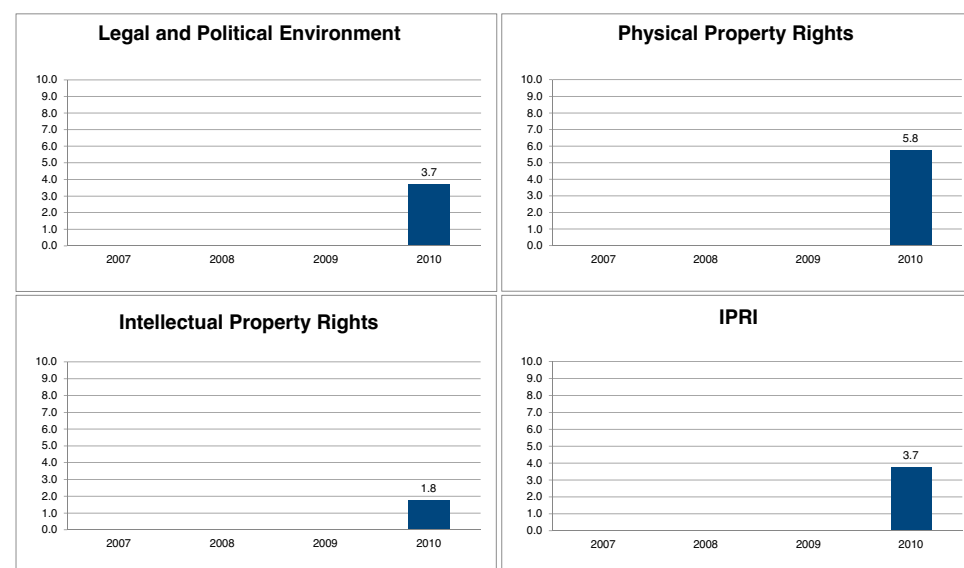
## GEORGIA

World Rank: 113 Regional Rank: 24

Newly available data allowed Georgia to be a new addition to the IPRI in 2010. Among the LP sub-components, *Rule of Law* and *Control of Corruption* had slightly higher scores than *Judicial Independence* and *Political Stability*.

*Protection of Physical Property Rights* was the strongest sub-component of the IPRI. Georgia's score for *Registering Property* was one of the highest in the world (9.6) because it takes only 2 procedures and 3 days to register property. Despite this ease of property registration, there remained significant challenges in property rights protection and enforcement. This was evidenced by relatively weak *Protection of Physical Property Rights* and *Access to Loans* (scored at 4.4 and 3.4, respectively).

IPR was the weakest among all the components of the IPRI. Copyright protection is very weak in Georgia, as pirated material is estimated to account for 95 percent of the business software market. Along with a poor assessment by business leaders of the intellectual property rights protection, this placed Georgia at the very bottom of the ranking for IPR.



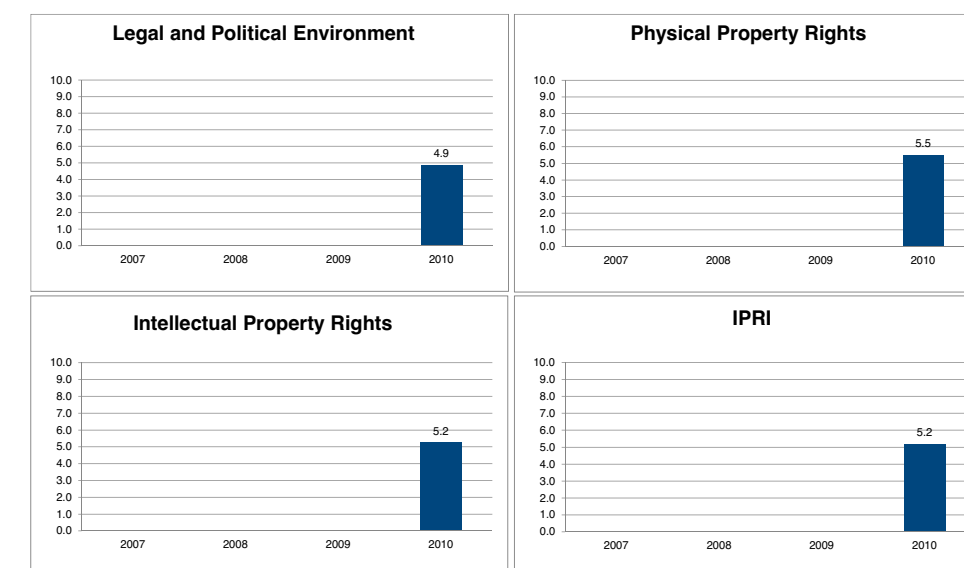
## GHANA

World Rank: 59 Regional Rank: 4

Ghana joined the index for the first time in 2010. Ghana enjoyed the fifth highest LP score in the region with *Political Stability* being slightly higher than the other sub-components.

The situation with physical property rights is more complex. It is relatively easy to register property in Ghana with only 5 procedures and 34 days required to register property transactions. On the other hand, *Access to Loans* was very low (scored at 2.3).

IPR was based upon new but somewhat limited data. Because there were no data for copyright piracy levels, the relatively high IPR score may be somewhat skewed. Despite these shortcomings, or perhaps because of them, Ghana ranked second in the region for IPR.

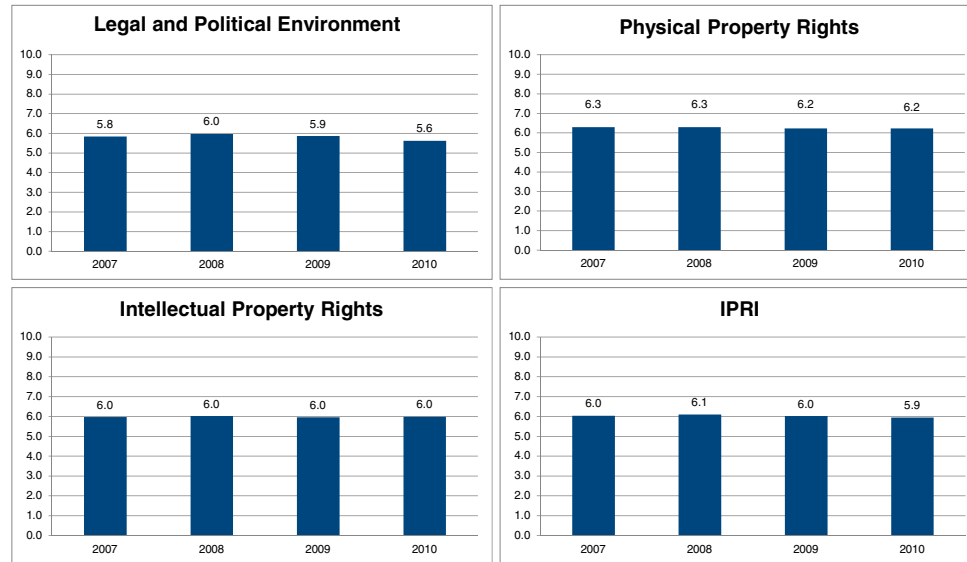


**GREECE**

World Rank: 46 Regional Rank: 19

In 2010, Greece's IPRI decreased for the second consecutive time. The negative change occurred as a result of significant decreases in LP. While *Rule of Law* and *Control of Corruption* both decreased, the 0.9 point decrease for the *Judicial Independence* sub-component score offset these improvements.

Neither the PPR score nor the IPR score underwent a net change in 2010. While IPR did not increase, there is reason to believe that progress will be made in the future. Greece wrote a National Action Plan on IPR in 2009. With strict enforcement and swift implementation, the National Action Plan should help create a much better intellectual property environment.<sup>31</sup> Hopefully, these changes will allow Greece to increase its rankings and to improve its current position at the bottom of Western Europe.

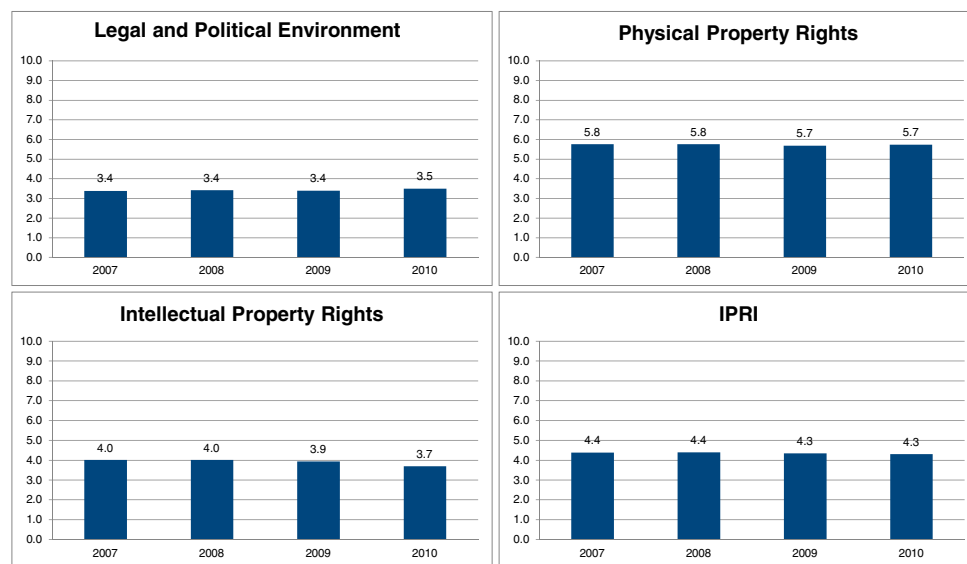


**GUATEMALA**

World Rank: 88 Regional Rank: 15

While IPRI in Guatemala did not change overall in 2010, there were some significant developments in the scored components. The LP score increased largely because of changes to two sub-components. *Political Stability* and *Control of Corruption* both improved. *Political Stability*, in particular, increased 0.3 since the last report and 0.6 since 2007.

PPR in Guatemala failed to increase for the third consecutive year. IPR decreased dramatically in 2010. The change was spurred by a 0.6 decrease in the *Protection of Intellectual Property Rights* sub-component this past year. Guatemala passed new legislation aimed at protecting intellectual property in accordance with CAFTA-DR.<sup>32</sup> Unfortunately, there was little substantive change to the IPR environment because of a lack of enforcement.<sup>33</sup>



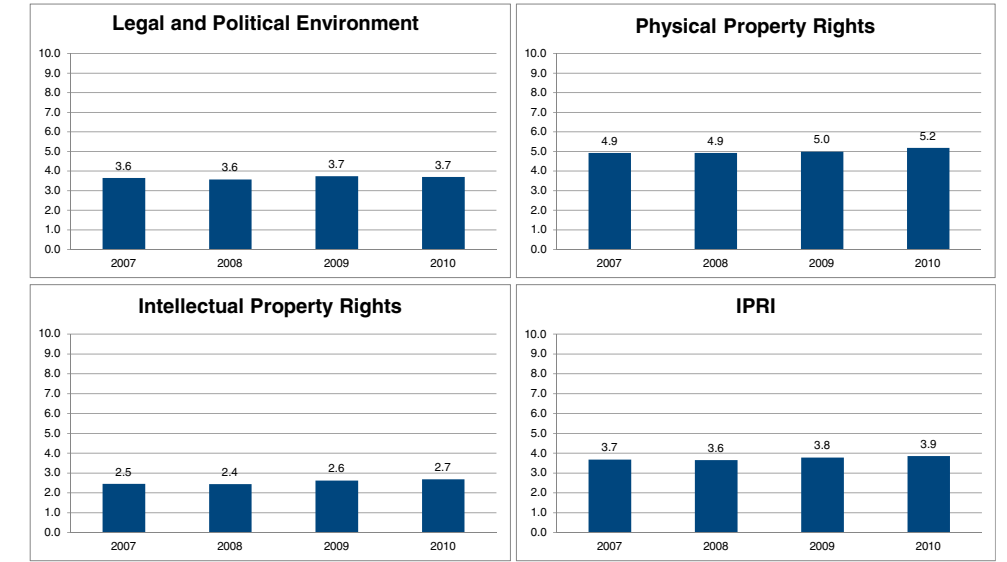
**GUYANA**

World Rank: 104 Regional Rank: 17

IPRI in Guyana made a slight change in 2010. While the LP score did not make a net change, there was shifting within the sub-components. The *Judicial Independence* and *Control of Corruption* scores both increased at least 0.3 points, while the *Rule of Law* and *Political Stability* scores both decreased at least the same amount.

The PPR score for Guyana improved 0.3 points because of improvement in business leaders' opinion of physical property rights and access to loans.

Similarly, IPR in Guyana slightly improved because of improved expert opinion of the protection of intellectual property rights. Unfortunately, data on copyright piracy were not available.



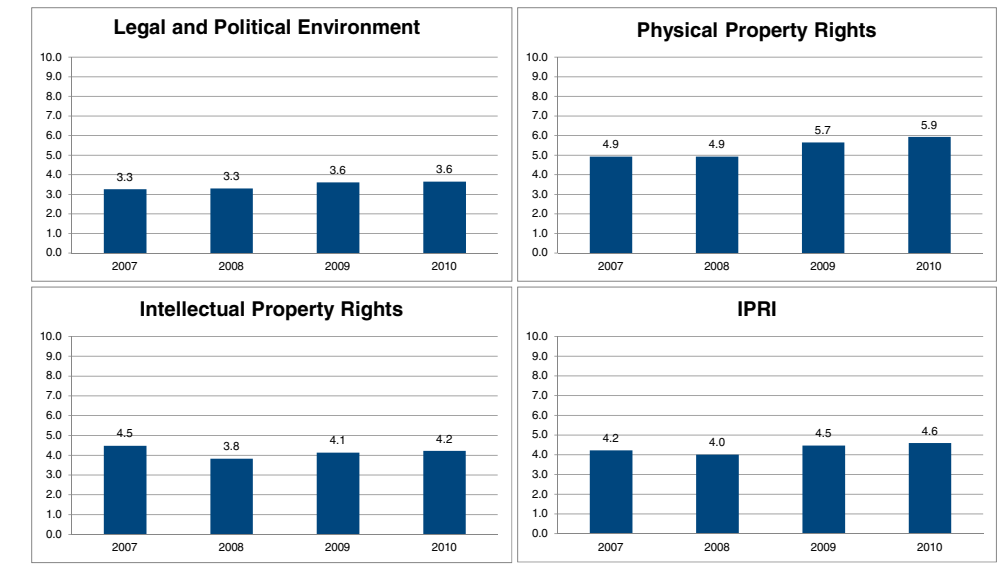
**HONDURAS**

World Rank: 75 Regional Rank: 12

IPRI in Honduras experienced a slight improvement for the second consecutive year. While the LP component has not changed since last year, most sub-components did change. While *Rule of Law* and *Control of Corruption* declined, increases in *Judicial Independence* and *Political Stability* offset those declines.

PPR continued to improve in 2010, as two sub-components increased since last year. Both *Protection of Physical Property Rights* and *Access to Loans* grew 0.4 points. Importantly, it has become significantly easier to register property over the last four years. The number of days required declined from 36 in 2007 to 23 in 2010.

IPR in Honduras continued to improve primarily because of improved opinion of business leaders about protection of intellectual property rights. The slightly elevated IPR score in 2007 was because of the fact that copyright piracy data were not available for that year. Piracy levels remained high, around 75 percent of the business software market.



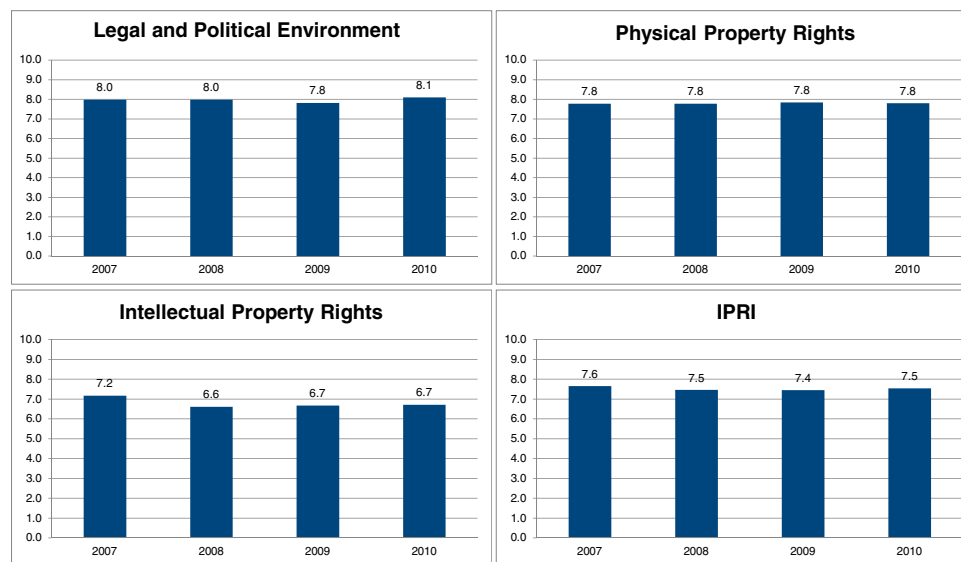
## HONG KONG

World Rank: 19 Regional Rank: 5

IPRI in Hong Kong increased once again in 2010, returning to 2008 levels. The country's LP score was the only component to change significantly. Every sub-component of LP increased. In particular, the *Control of Corruption* sub-component rose 0.6 points.

The PPR and IPR scores remained largely unchanged in 2010. However, it should be noted that *Access to Loans* has fallen slightly since 2009.

One sub-component that improved was *Copyright Piracy*. While pirated material accounted for 51 percent of the business software market in 2009, that figure fell to 48 percent in 2010. The IPR climate in Hong Kong would seem to be improving, as survey results showed increasing support for IPR protection.<sup>34</sup>



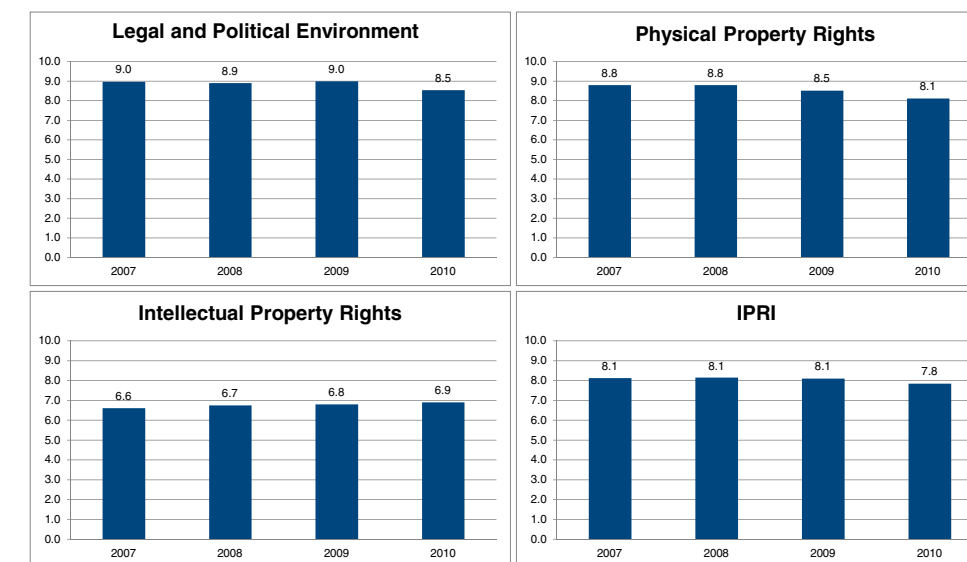
## ICELAND

World Rank: 16 Regional Rank: 11

For the first time, IPRI in Iceland decreased. Every sub-component of the LP score decreased in 2010. In particular, *Political Stability* and *Control of Corruption* both decreased significantly, by 0.9 and 0.6 points, respectively.

PPR also underwent a dramatic decrease. The *Access to Loans* score decreased 1.3 points. While this figure represents a very large negative change, it should not be very surprising considering the credit crisis that has shaken the country. International lines of credit to Iceland were severed in late 2008, and the nation's private banking industry collapsed as a result.<sup>36</sup> Despite these troubles, *Registering Property* scored an excellent 9.4. It takes only 3 procedures and 4 days to register property in Iceland.

On a positive side, IPR in Iceland continued to improve in 2010. This was primarily because of falling copyright piracy levels that declined more than 10 percent over the last four years.



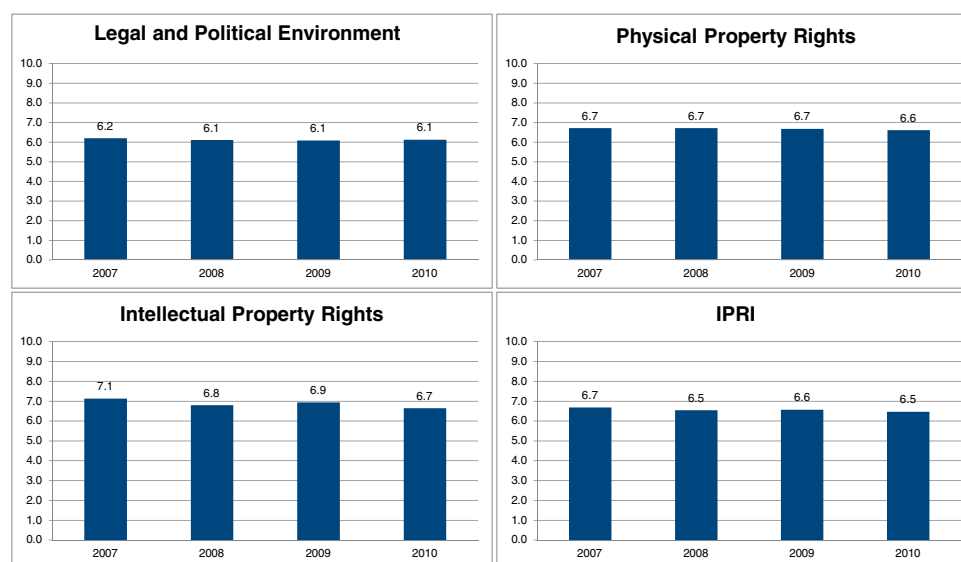
## HUNGARY

World Rank: 32 Regional Rank: 2

Hungary's IPRI score decreased in 2010. LP did not change in 2010, but there were some important developments. The *Control of Corruption* sub-component increased 0.2 points, rising for the first time since data became available.

Although the overall PPR score showed only a slight decrease, the physical property protection environment saw drastic changes. The *Registering Property* score improved 0.8 points in 2010. While property registration took 78 days in 2008, it now only takes 17. *Access to Loans*, however, offset much of that increase. The sub-component score decreased 0.7 points.

IPR in Hungary decreased again, after what were encouraging improvements last year. The *Protection of Intellectual Property Rights* sub-component fell significantly. To some extent, this was because updated data on music and records piracy were not available. The National Board Against Counterfeiting and Piracy is making some significant improvements, but Internet piracy remains a problem.<sup>35</sup> Despite these problems, Hungary again ranked highest in IPR among countries in Central and Eastern Europe.



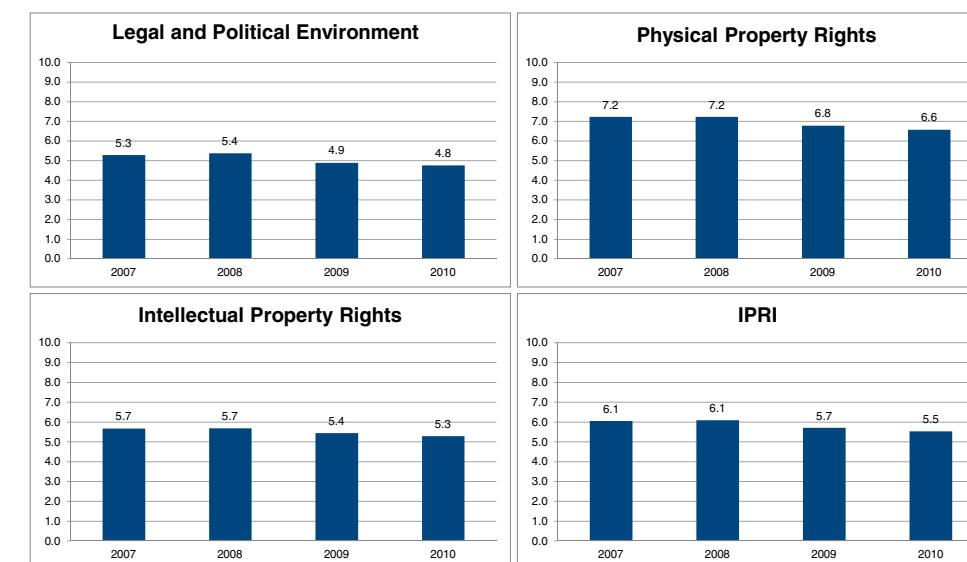
## INDIA

World Rank: 53 Regional Rank: 9

IPRI in India decreased for the second consecutive year. Each component underwent a negative change in 2010. While the other sub-components of LP remained unchanged, the *Judicial Independence* score decreased 0.7 points since 2009. This decrease solely was responsible for the overall LP score drop.

The PPR score also decreased in 2010 because business leaders' opinion of both protection of physical property rights and access to loans deteriorated. Both of the corresponding sub-components have decreased 0.5 points since 2009.

The IPR score also decreased because of failing expert opinion regarding the protection of intellectual property, while copyright piracy levels only marginally improved for business software and remained the same for records and music.



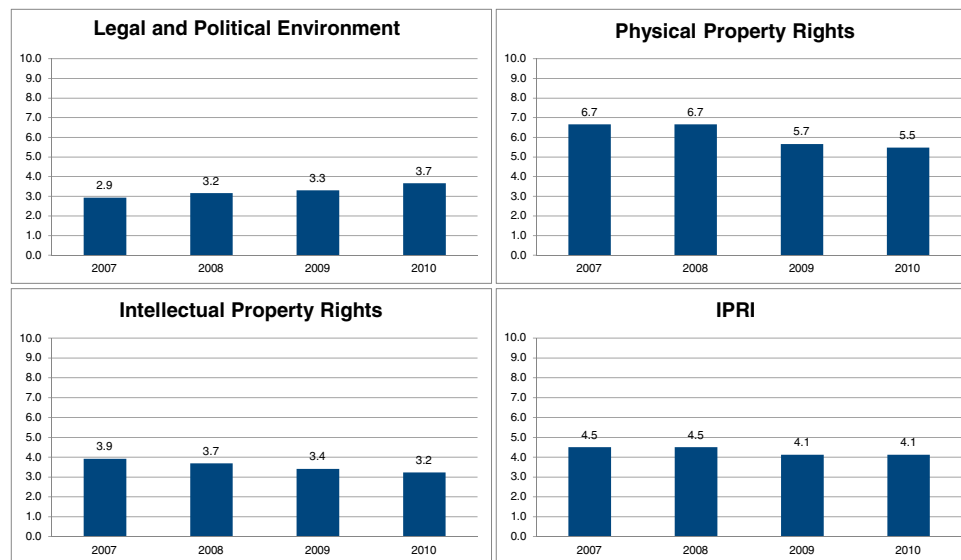
## INDONESIA

World Rank: 97 Regional Rank: 16

The IPRI score did not change in 2010, but the property rights environment in Indonesia underwent significant change. The LP component increased dramatically for the third consecutive year. Every sub-component score increased. *Judicial Independence* rose an entire point.

The PPR and IPR scores offset any improvements in LP. While *Protection of Physical Property Rights* slightly improved, *Access to Loans* decreased an entire point, resulting in a net decrease for PPR.

The IPR score decreased because of negative developments in the *Copyright Piracy* score. Pirated material now is estimated to account for 85 percent of the business software market and 95 percent of records and music.



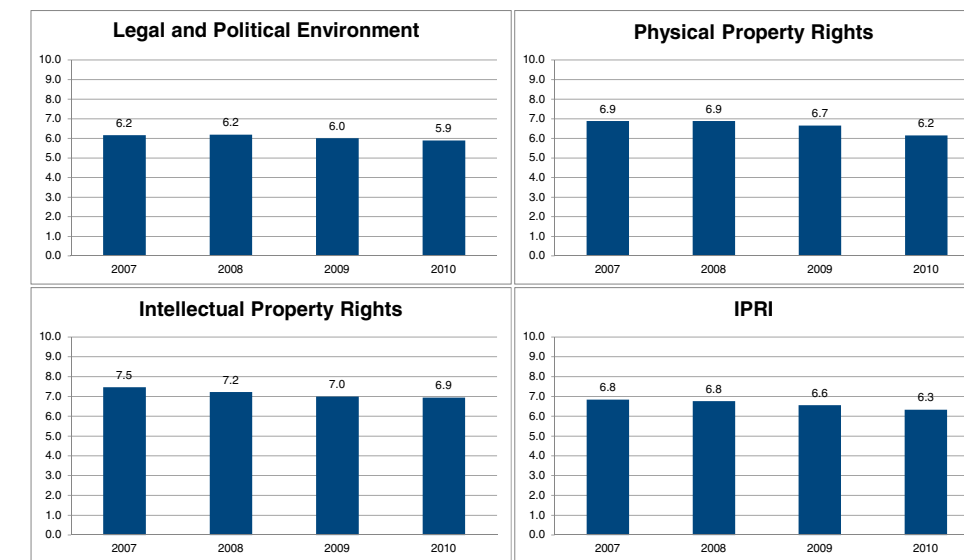
## ISRAEL

World Rank: 36 Regional Rank: 5

For the second consecutive year, IPRI decreased in Israel. The LP score only underwent a modest negative change. However, the sub-component score for *Judicial Independence* and *Political Stability* each decreased approximately 0.4 points. This change was offset to some degree by slight improvements to *Rule of Law* and *Control of Corruption*.

The PPR score has fallen dramatically since 2008. Both the *Protection of Physical Property Rights* and *Access to Loans* sub-components decreased 1.1 points the past two years.

The IPR score presents a complicated picture. *Protection of Intellectual Property Rights* has decreased about one point since 2009. Because of a lack of data for piracy of records and music in 2010, the copyright protection score increased. Thus, the overall IPR score decreased only 0.1 points. Despite problems with intellectual property protections, Israel's IPR score remains the highest in the Middle East and North Africa.

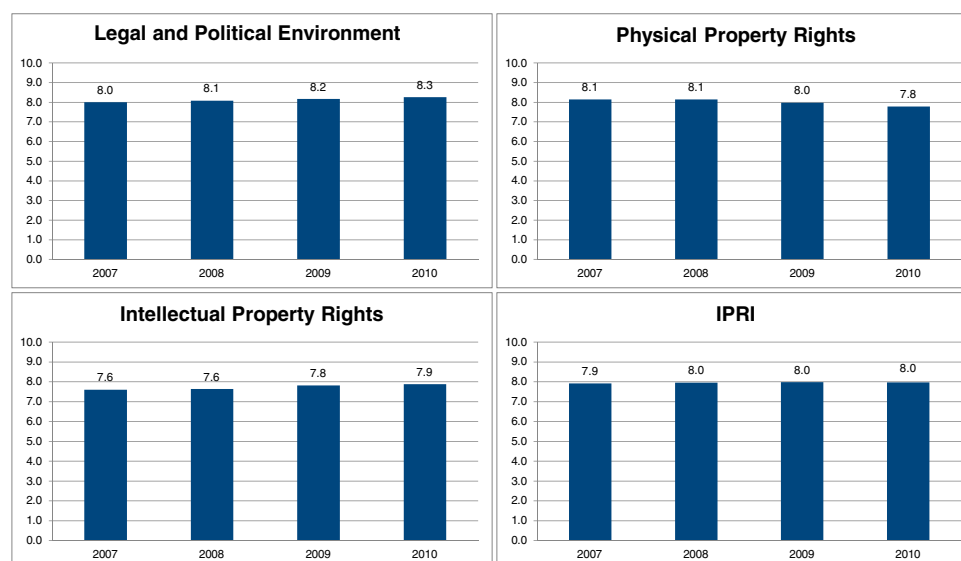


## IRELAND

World Rank: 12 Regional Rank: 9

IPRI in Ireland has not changed for the past three years. The LP score in 2010 increased slightly. This positive change was the direct result of a 0.4 point increase to the *Judicial Independence* score. The other sub-components failed to make any significant progress.

Only one sub-component of the PPR score changed in 2010. *Access to Loans* underwent a 0.7 point negative change. Ireland's banking system was hit particularly hard by the recent economic fallout and constrained lending, prompting government intervention in the financial sector.<sup>37</sup> IPR in Ireland rose slightly because of improved *Protection of Intellectual Property Rights*.



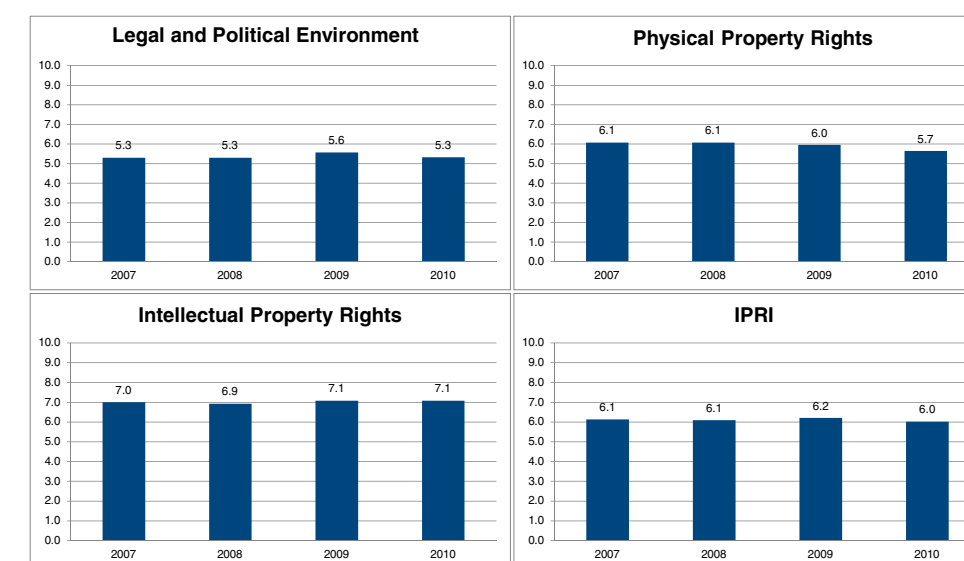
## ITALY

World Rank: 44 Regional Rank: 18

After having increased slightly in 2009, Italy's IPRI decreased in 2010. The LP score suffered because of negative changes in *Judicial Independence* and *Control of Corruption* sub-component scores. While the former sub-component fell 0.3 points, the latter fell 0.6 points in 2010.

PPR in Italy presents a situation similar to that of the country's LP. While the situation with property registration did not change, the *Protection of Physical Property Rights* and *Access to Loans* scores both decreased. As a result, Italy has the lowest ranked LP and PPR in Western Europe.

The IPR score did not increase in 2010, but there is potential for improvement. The Italian government established the General Directorate for Intellectual Property and an Internet piracy task force.<sup>38</sup> While the creation of these institutions is encouraging, proper enforcement of intellectual property protections is still necessary.



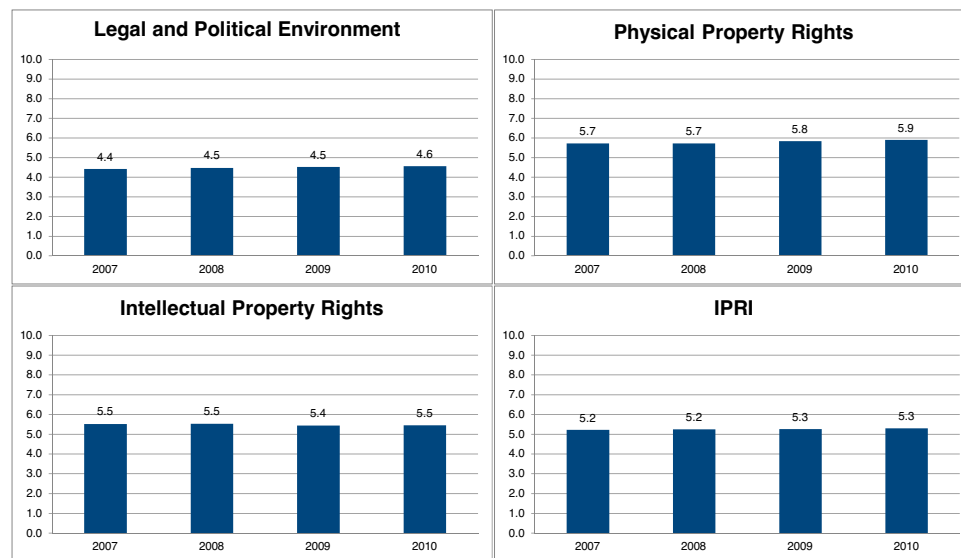
## JAMAICA

World Rank: 58 Regional Rank: 6

Though IPRI in Jamaica did not change in 2010, there were modest improvements to all three component scores. The LP score did not experience a dramatic positive change, although the *Rule of Law* and *Judicial Independence* scores increased 0.3 and 0.5, respectively. Any change to the overall LP score was offset by a considerable decrease to the *Political Stability* score.

The situation with respect to PPR did not experience any significant change, while *Access to Loans* slightly improved.

Similarly, IPR did not change. There is a reason to believe that the intellectual property environment in Jamaica will improve, contingent on enactment of the Patent and Designs Act, which is intended to implement Jamaica's obligations under the TRIPS Agreement and to comply with the United States-Jamaica Bilateral Intellectual Property Agreement.<sup>39</sup>



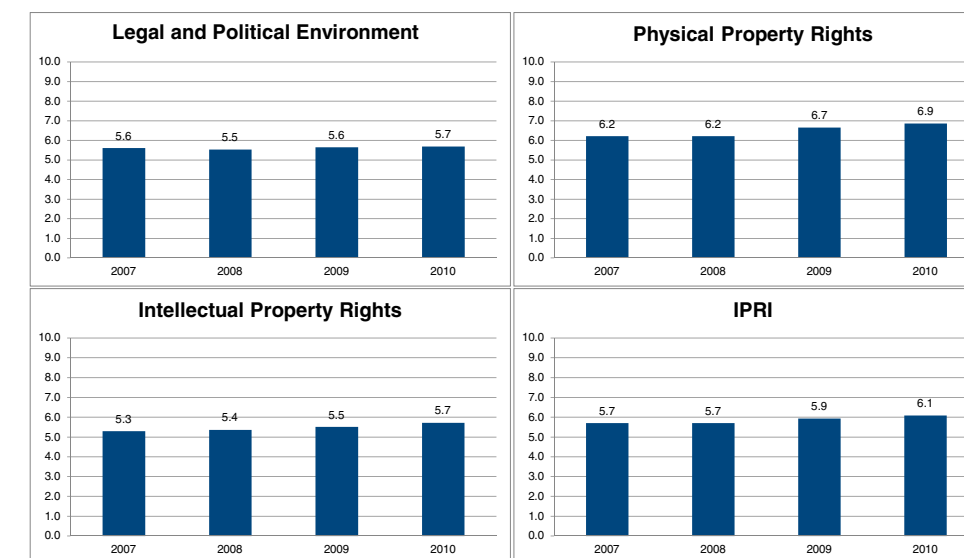
## JORDAN

World Rank: 41 Regional Rank: 7

IPRI in Jordan increased for the second consecutive year. All three components experienced a positive change as well. *Judicial Independence* and *Control of Corruption* both increased in 2010, contributing to the improvement in LP score.

PPR continued to improve. The *Protection of Physical Property Rights* score increased most dramatically, gaining nearly half a point in 2010 and about 1.5 points since 2008.

*Protection of Intellectual Property Rights* has improved 0.8 points since 2008, contributing to the rise in IPR. Copyright protection has also evidently improved. Pirated business software fell below 60 percent of the market for the first time in 2010.



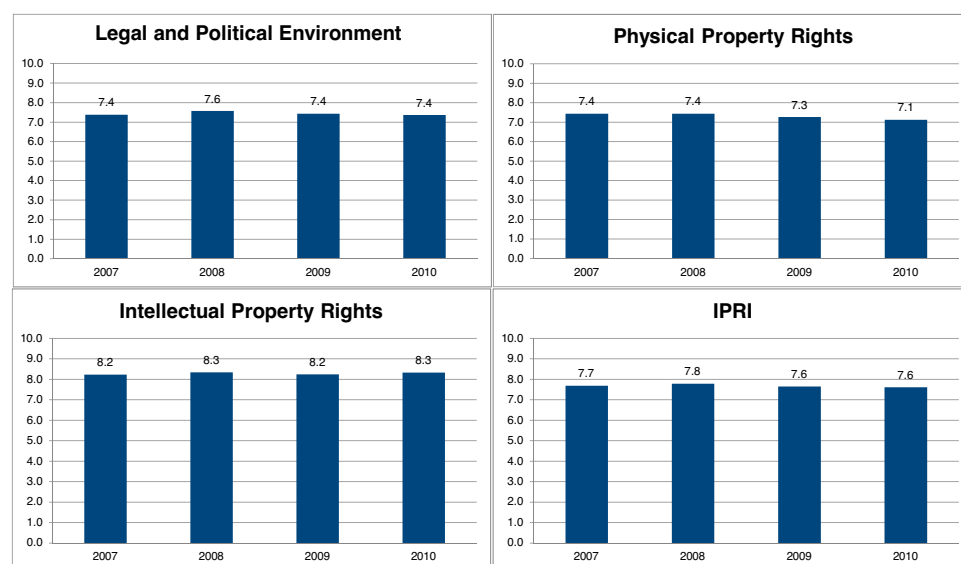
## JAPAN

World Rank: 18 Regional Rank: 4

Property rights in Japan underwent significant change in 2010, despite what the unchanged IPRI score may suggest. There were only mild fluctuations in the sub-component scores for LP. The most marked change came in the form of a 0.2 decrease to the *Judicial Independence* score.

PPR experienced more noticeable change, as the score decreased. While the *Protection of Physical Property Rights* sub-component score has improved slightly since 2008, the *Access to Loans* score fell an entire point within that time period.

However, the IPR score improved. This change comes as a result of progress in the country's fight against copyright piracy. Since 2007, the market share for pirated business software has fallen an estimated seven percent. Considering the country's comparatively successful copyright protection, it is not surprising that Japan enjoys the highest IPR in the region.



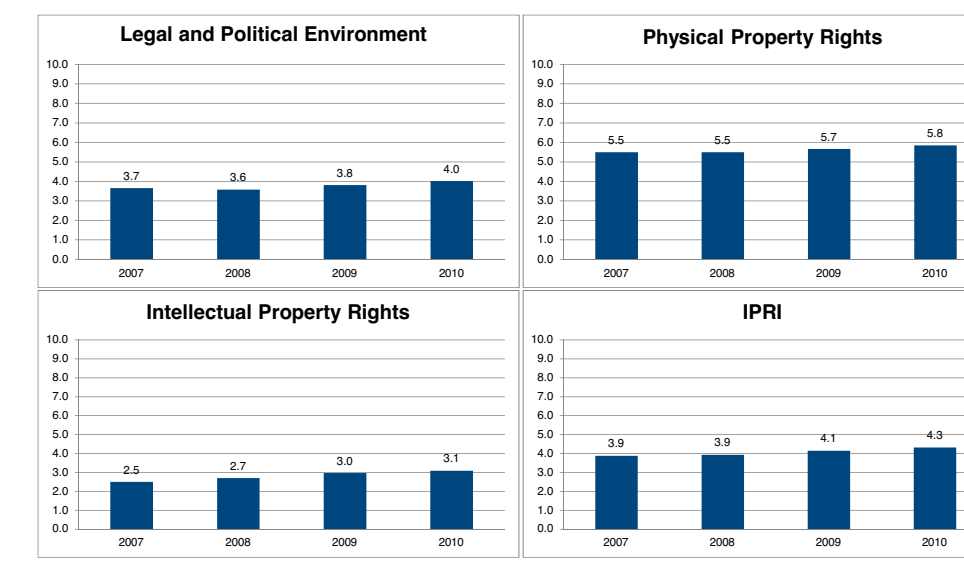
## KAZAKHSTAN

World Rank: 88 Regional Rank: 15

All three of the scored components of the IPRI improved for the second consecutive year. Accordingly, IPRI has increased 0.4 points since 2008. A modest increase to *Political Stability* and a substantial 0.5 point increase to the *Judicial Independence* score contributed to the rise in LP since 2009.

The PPR score was helped by considerable changes to the process for registering property. The number of procedures required to register property fell from 8 to 5, and the number of days to complete registration fell by 12 days.

Moreover, the IPR score consistently has increased because of improved expert opinion on the protection of intellectual property rights, as well as declining copyright piracy levels in business software.





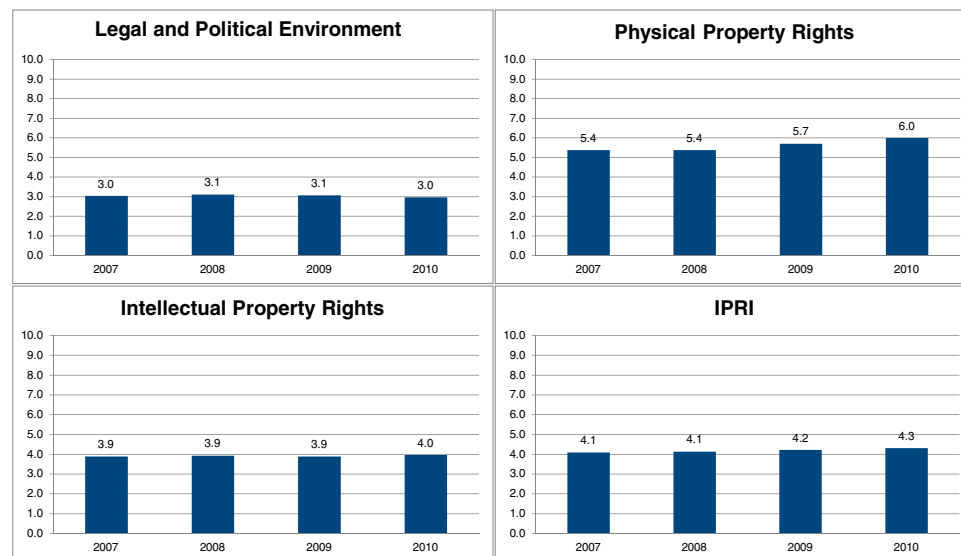
## KENYA

World Rank: 88 Regional Rank: 12

IPRI in Kenya improved for the second consecutive year. The increase for the overall score would have been greater in 2010, if not for a disappointing LP score. In particular, *Political Stability* decreased 0.3 points.

The PPR score represents significant progress for Kenya. *Access to Loans* increased 0.7 points in 2010 – a 1.2 point increase since 2008. Expert opinion regarding the protection of physical property rights also improved.

Kenya's IPR increased in 2010, but there remains room for much needed improvement. While the *Protection of Intellectual Property Rights* sub-component score increased, pirated material still is estimated to account for 80 percent of the business software used in the country.



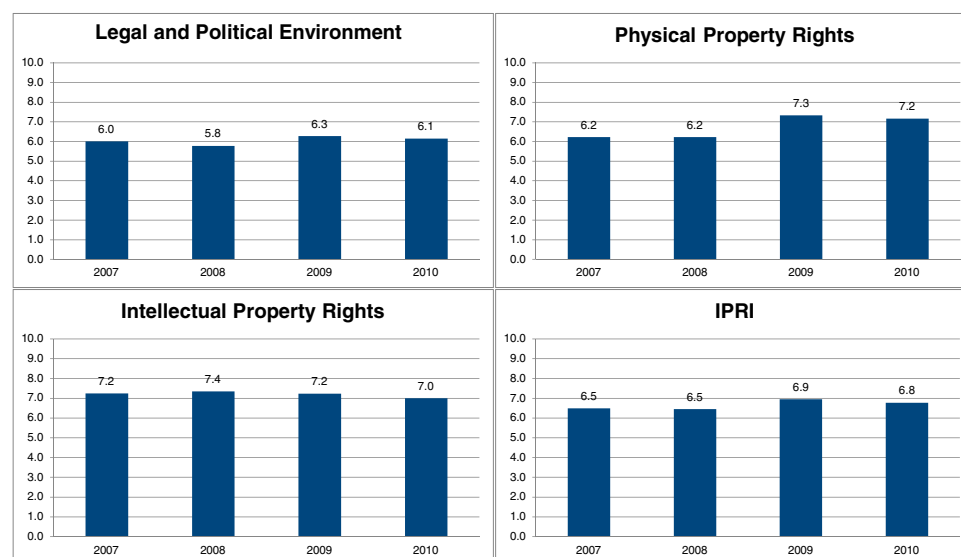
## KOREA, REPUBLIC OF (SOUTH KOREA)

World Rank: 24 Regional Rank: 6

After a dramatic increase to Korea's IPRI in 2009, the score regressed in 2010. All three component scores decreased. The LP score experienced a negative change because of decreases to the *Judicial Independence* and *Political Stability* scores, despite some improvement to *Control of Corruption*.

*Protection of Physical Property Rights* reverted back to 2008 levels and *Access to Loans* also decreased, hurting PPR. However, the waiting period of 11 days for registering property is very brief, which helped the overall PPR score.

The IPR score decreased for the second consecutive year. Some score changes between the 2007-2008 and 2009-2010 periods could be partly explained by an absence of reliable data for piracy of music and records for the latter period. The 0.7 point decrease in the *Protection of Intellectual Property Rights* sub-component in 2010, however, continued to lower the overall IPR score.

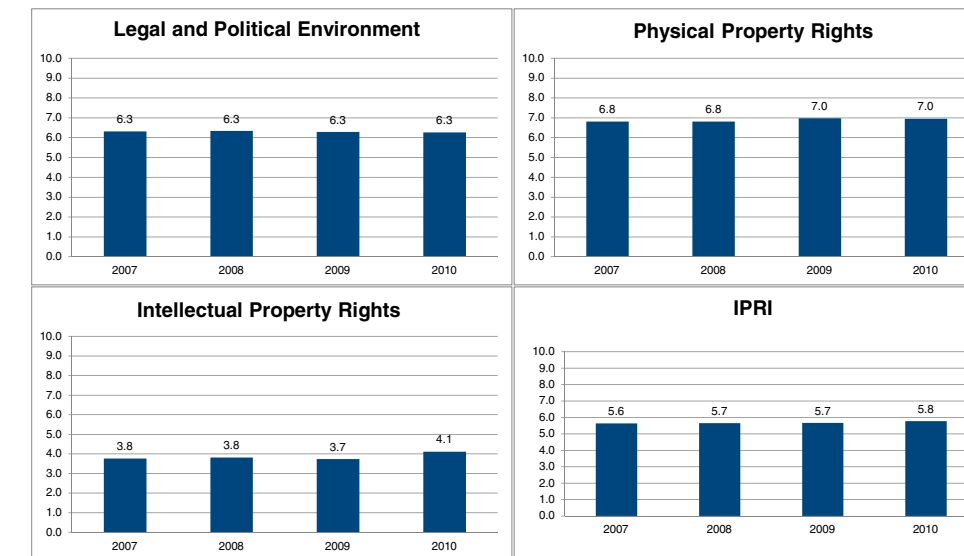


## KUWAIT

World Rank: 49 Regional Rank: 10

The change in IPRI for Kuwait in 2010 comes as a direct result of new developments in intellectual property protection. The LP score did not change for the third consecutive year. However, there were some developments to the sub-components. *Judicial Independence* decreased considerably. For the first time since 2007, the *Control of Corruption* score did not decrease, marking a departure from a disconcerting trend.

The lack of net change to the PPR score is very misleading. *Access to Loans* fell 0.7 points in 2010, but this dramatic decrease was offset by a 0.7 point increase to the *Protection of Physical Property Rights* score. The IPR score increased substantially in 2010, but this change was caused by a lack of data for piracy of records and music for this year.



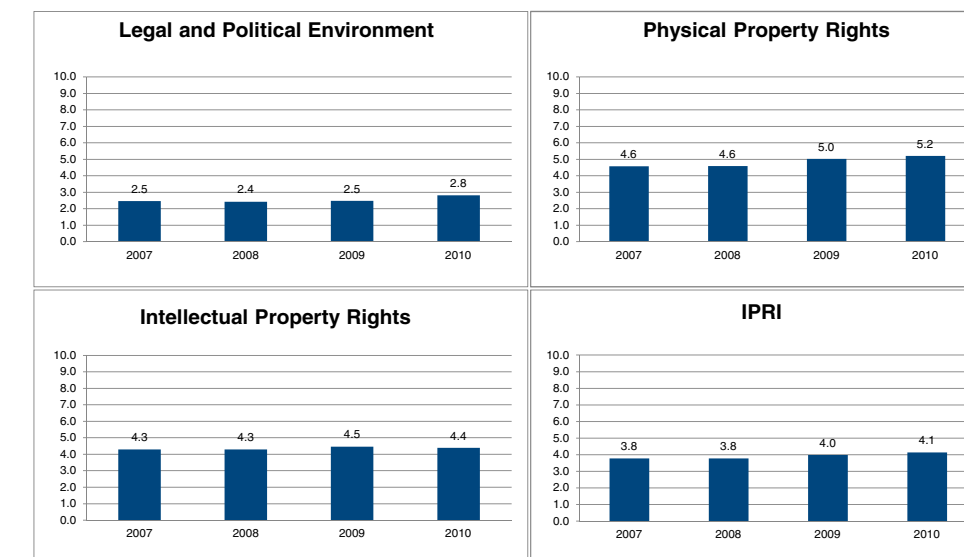
## KYRGYZ REPUBLIC

World Rank: 97 Regional Rank: 17

The Kyrgyz Republic is a new edition to the IPRI, but the newly available data also made it possible to calculate and present the country's scores for previous years. IPRI increased for the second consecutive year in Kyrgyzstan. While the *Rule of Law* score decreased slightly in 2010, all other LP sub-component scores increased. *Judicial Independence* increased 0.6 points, while *Political Stability* increased nearly an entire point.

PPR also improved for the second consecutive year. The *Access to Loans* score increased 0.5 in 2010 – a 1.5 point increase since 2008. Expert opinion on protection of private property also improved. The *Protection of Physical Property Rights* score increased 0.5 points since 2008.

IPR underwent a slight negative change in 2010. The *Protection of Intellectual Property Rights* score fell after a substantial increase in 2009 because of fluctuating opinions among business leaders.



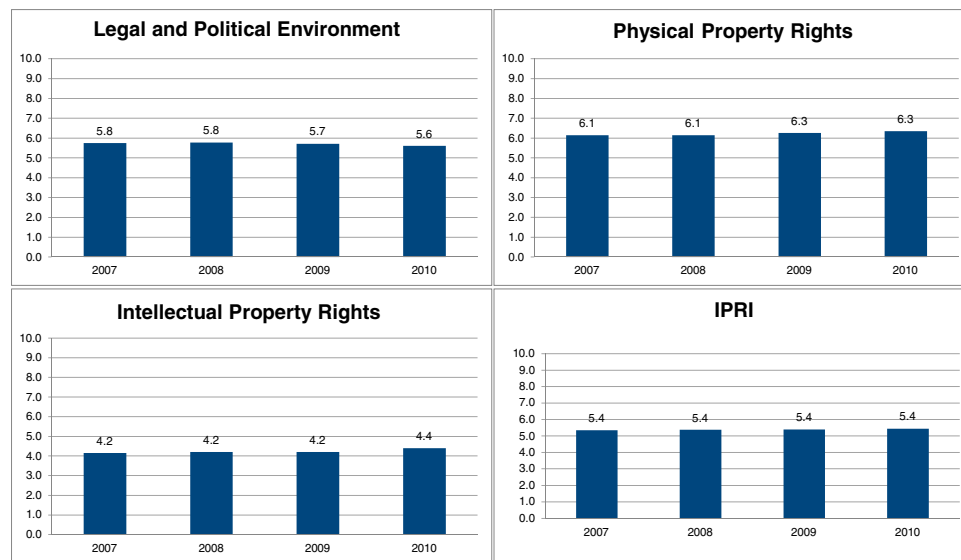
## LATVIA

World Rank: 55 Regional Rank: 8

IPRI in Latvia has not changed since 2007, but there have been some significant changes to the property rights environment. The *Rule of Law* score improved nearly 0.4 points in 2010, but the 0.6 point decrease in *Political Stability* offset any positive change in LP.

While the overall PPR score did not change in 2010, there were some significant developments in the sub-components. *Access to Loans* decreased 0.5 points. Both the *Protection of Physical Property Rights* and *Registering Property* scores increased substantially. Specifically, the number of procedures required to register property decreased by 1. Moreover, it took 4 fewer days to complete all the procedures in 2010 than in 2009.

The IPR score changed for the first time in 2010. The increase came as a result of a positive change in the opinion of business leaders regarding the protection of intellectual property rights.



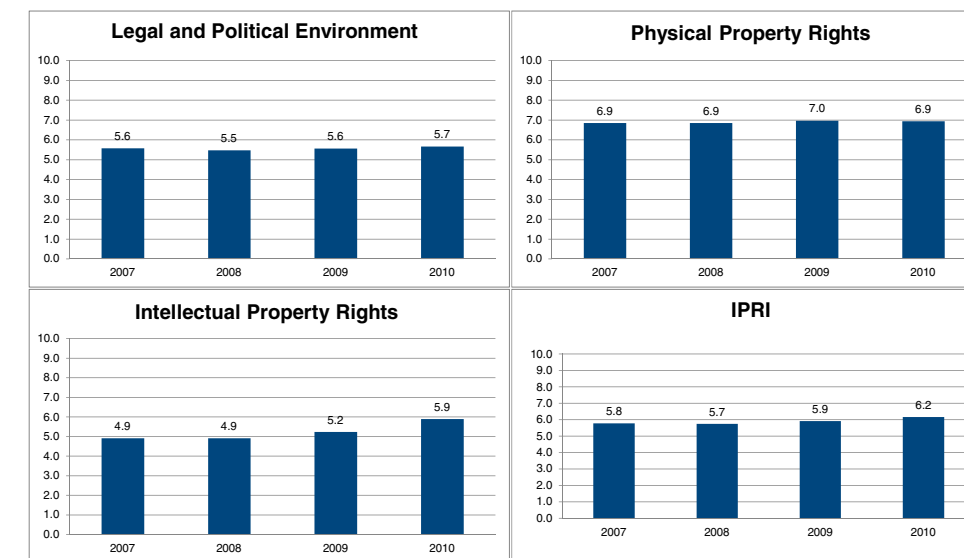
## LITHUANIA

World Rank: 38 Regional Rank: 4

IPRI in Lithuania made significant progress in 2010. The LP score increased for the second consecutive year. The *Judicial Independence* score increased 0.4 points. The *Control of Corruption* score was the only sub-component of LP not to change.

Lithuania enjoyed the third highest PPR score in Central and Eastern Europe. This ranking was largely a result of Lithuania's high *Registering Property* score, which stood at 9.6. It takes only 2 procedures and 3 days to register property. However, the *Access to Loans* score decreased substantially in 2010, leading to a net PPR decrease of 0.1.

The IPR score increased dramatically in 2010. Lithuania has made considerable progress in enforcing copyright protection since 2007. But there were no data for piracy of records and music in 2010, which somewhat overstates the real progress made in this field. However, business leaders tend to agree that there were positive developments.



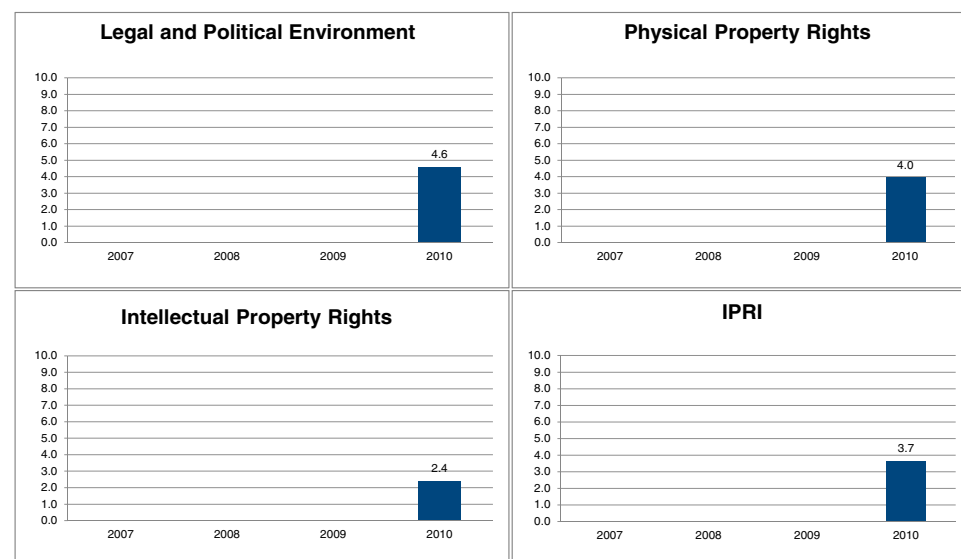
## LIBYA

World Rank: 113 Regional Rank: 14

Libya joined the IPRI for the first time in 2010. LP was Libya's strongest component. Among LP sub-components, *Judicial Independence* and *Political Stability* scored higher than *Rule of Law* and *Control of Corruption*.

Data for PPR in Libya were very limited. There were no reliable data for the *Registering Property* sub-component.

The situation was similar for the IPR score. Information for strength of patent rights was unavailable. However, copyright piracy is a serious problem in Libya. Pirate material accounts for 87 percent of the business software market. Libya currently places in the bottom 10 for both PPR and IPR components.



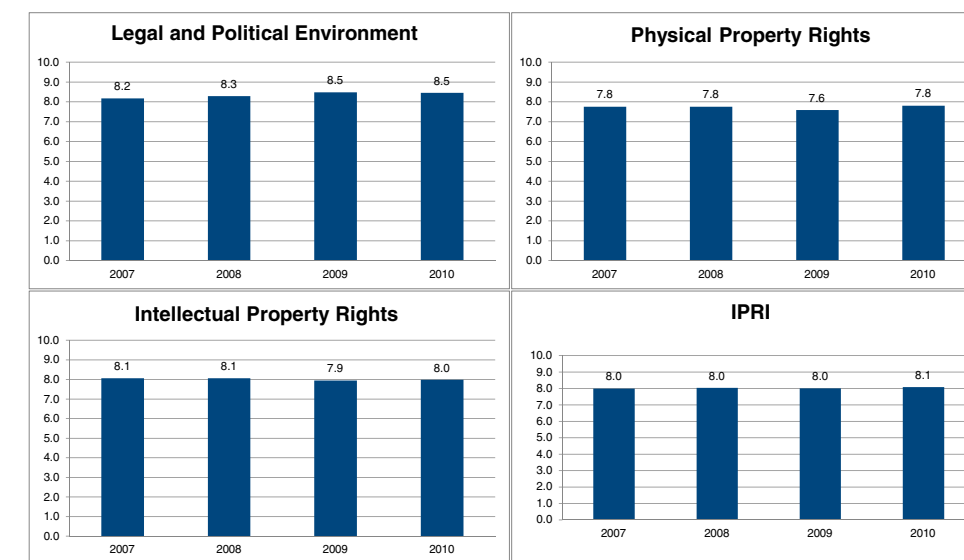
## LUXEMBOURG

World Rank: 11 Regional Rank: 8

In addition to leading the world in GDP per capita, Luxembourg enjoys a consistently high IPRI. There was substantial change in the LP sub-components in 2010, despite the fact that the overall score experienced no net increase or decrease. For the fourth consecutive year, the *Judicial Independence* score improved. After the *Control of Corruption* score increased 0.5 in 2009, the score reverted back to 2008 levels.

The PPR score increased in 2010 because of modest improvements made to two of the sub-components: *Protection of Physical Property Rights* and *Access to Loans*.

One area that failed to improve significantly for Luxembourg was IPR. None of the sub-component scores has experienced significant change since 2007.



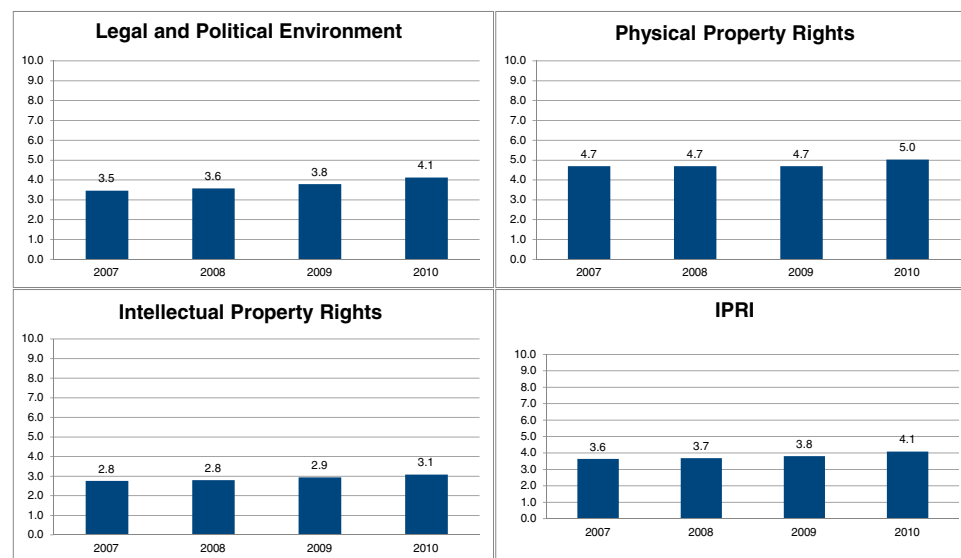
## MACEDONIA

World Rank: 97 Regional Rank: 17

Macedonia made significant improvements to all three components in 2010. All sub-component scores of LP increased. Of particular note, *Judicial Independence* increased half a point.

PPR was helped by changes to both the *Protection of Physical Property Rights* and *Registering Property* scores. The process for registering property became significantly easier in 2010. The number of days it takes to register property was reduced from 98 to 68.

The IPR score also made improvements. Expert opinion on the protection of intellectual property rights increased for the second consecutive year.



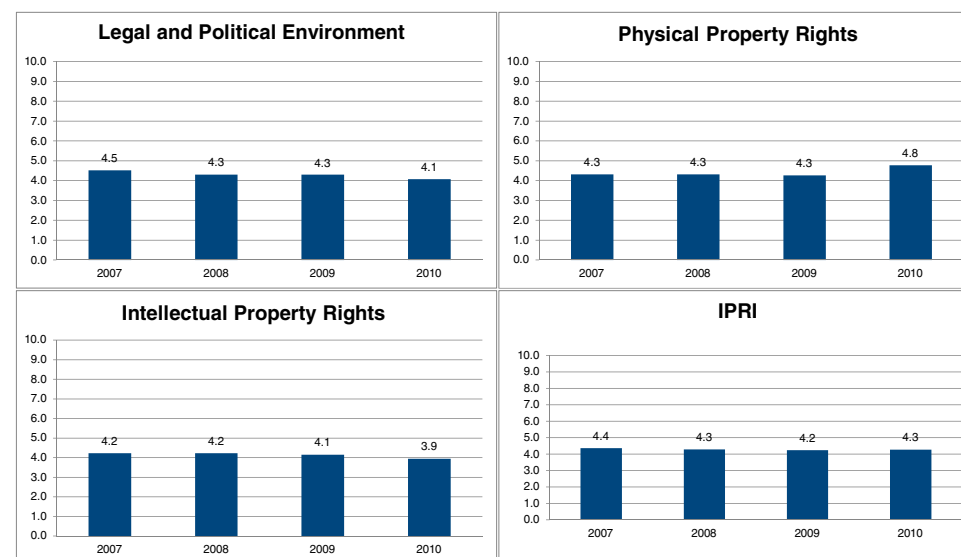
## MADAGASCAR

World Rank: 88 Regional Rank: 12

IPRI in Madagascar increased in 2010, despite significant negative changes to both LP and IPR. LP suffered in 2010 because of a decline in the *Political Stability* sub-component. The sub-component underwent a 0.7 point negative change, while the other sub-components of LP did not experience any significant changes.

The PPR score improved remarkably in 2010. This change came as a result of changes in the property registration regime. Registering property now requires 1 fewer procedure and 74 days instead of 134 to complete.

The IPR score decreased for the second consecutive year. This change came only as a result of the *Protection of Intellectual Property Rights* score, as there were no available data for copyright piracy.



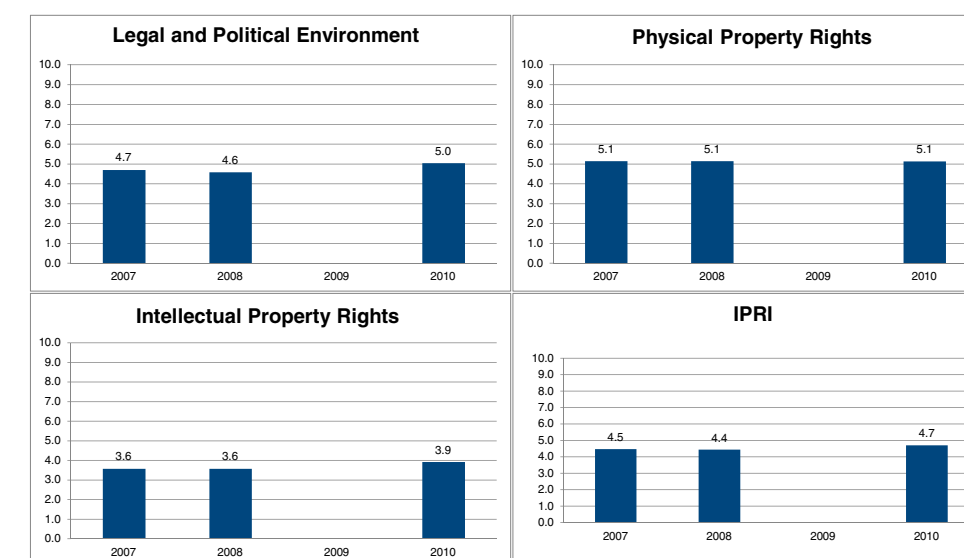
## MALAWI

World Rank: 72 Regional Rank: 5

Malawi returned to the IPRI in 2010 after a one year absence caused by a lack of some of the necessary data in 2009.<sup>40</sup> LP has changed significantly since 2008. The *Judicial Independence* sub-component, in particular, increased an entire point, and *Rule of Law* increased half a point. The other scored aspects of LP remained relatively unchanged.

The PPR score may not have undergone a net change, but the details reveal a more complicated situation. Unfortunately, data for the *Registering Property* sub-component suffered from inconsistencies that inhibit direct comparisons across years for this country. Hopefully, these inconsistencies can be addressed in the future. The *Access to Loans* score for Malawi has decreased 0.7 points since 2008.

The IPR score has increased by a significant margin since 2008. Expert opinion regarding the protection of intellectual property rights accounts for this change, as copyright piracy data in Malawi were unavailable. Despite these improvements, the country continued to rank very poorly in terms of IPR.



## MALAYSIA

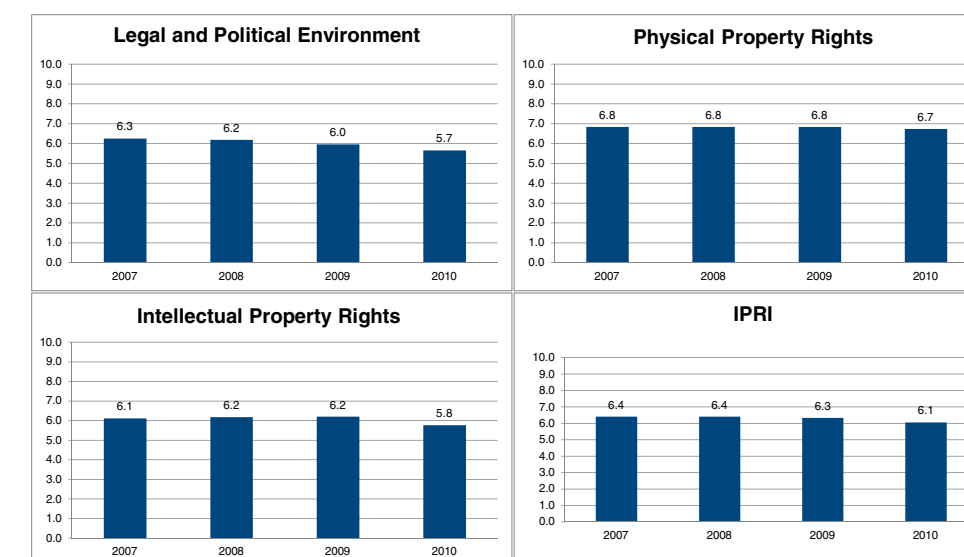
World Rank: 41 Regional Rank: 8

All three components decreased in 2010. Every sub-component of the LP score decreased as well. The only sub-component of LP to change dramatically was the *Judicial Independence* score, which fell nearly a full point. This change reflects widespread corruption and patronage in the Malaysian legal system, especially in light of the recent contentious elections.<sup>41</sup>

Despite the fact that *Access to Loans* improved for the second consecutive year, expert opinion on protection of physical property rights deteriorated. As a result, the PPR in Malaysia decreased for the first time.

IPR in Malaysia underwent a dramatic negative change. Pirated music now is estimated to account for 60 percent of the market – up from 45 percent in 2009.

Expert opinion on the protection of intellectual property rights worsened as well.



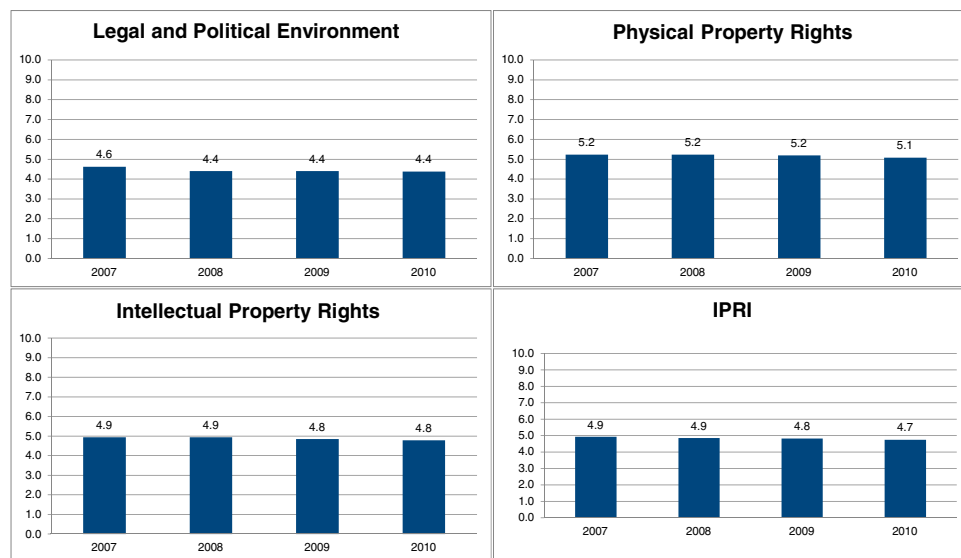
**MALI**

World Rank: 72 Regional Rank: 5

Mali's IPRI decreased for the second consecutive year, albeit only slightly. LP has not undergone a net change since 2008. However, both *Judicial Independence* and *Political Stability* underwent a slight decrease in 2010.

PPR decreased for the first time in 2010. The *Access to Loans* score decreased for the second consecutive year. The PPR score was buoyed slightly by a comparatively strong score for *Registering Property*.

The IPR score did not change in 2010. Despite this fact, expert opinion of the *Protection of Intellectual Property Rights* worsened for the second consecutive year. The IPR score was hampered by the lack of reliable data for copyright piracy.



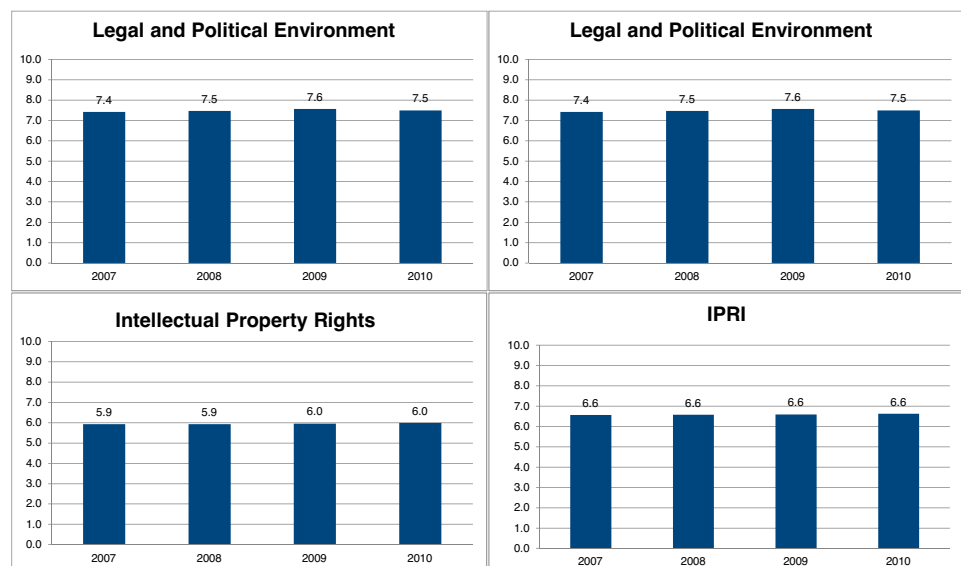
**MALTA**

World Rank: 30 Regional Rank: 17

For the third consecutive year, Malta's IPRI failed to improve. The LP score decreased after two years of positive change. The *Control of Corruption* score decreased 0.4 in 2010. A more dramatic change to the net LP score was offset, however, by a slight improvement to the *Rule of Law* score.

PPR in Malta increased in 2010. This change came as a result of a 0.4 point increase in *Protection of Physical Property Rights*. Unfortunately, this improvement was blunted by a small decrease in *Access to Loans*.

The IPR score did not change significantly in 2010. Copyright piracy in business software continued to fluctuate at an estimated 45 percent.



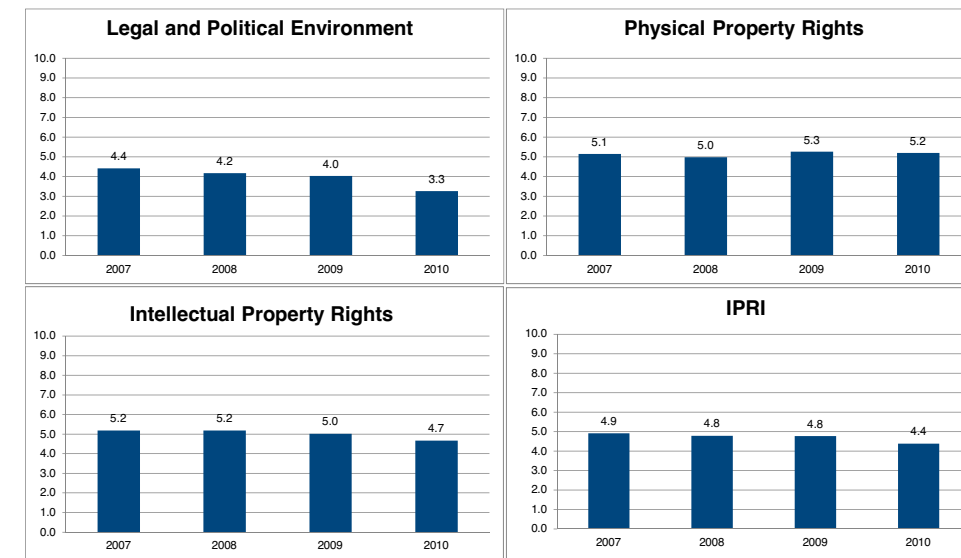
**MAURITANIA**

World Rank: 84 Regional Rank: 11

IPRI in Mauritania dropped significantly, as each component decreased in 2010. Each sub-component of the LP score decreased at least 0.5. Most dramatically, *Political Stability* and *Rule of Law* decreased 1.2 and .8 points, respectively.

The PPR score fell in 2010, but there are some encouraging signs. The *Access to Loans* score increased for the second consecutive year. This gain was offset, however, by a 0.4 point decrease in *Protection of Physical Property Rights*.

The IPR score underwent a serious negative change. Despite the fact that there were no reliable data for copyright piracy, expert opinion holds that the IPR climate in the country is badly regressing. The *Protection of Intellectual Property Rights* score decreased 0.7 points in 2010.



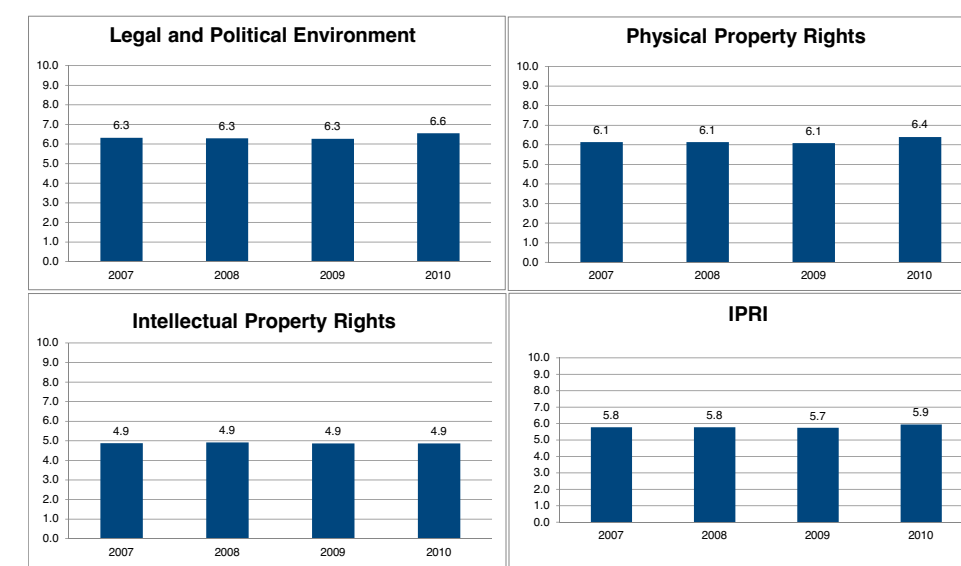
**MAURITIUS**

World Rank: 46 Regional Rank: 3

IPRI in Mauritius increased in 2010, as both LP and PPR increased 0.3 points. All sub-components of the LP score improved. Particularly, *Control of Corruption* increased markedly, while the *Judicial Independence* score underwent a dramatic increase, rising half a point. Mauritius enjoyed the second highest LP score in the region.

PPR also made improvements. Expert opinion of the protection of private property improved, as the score increased half a point in 2010. The *Registering Property* score also improved, because of removal of 2 procedures required to register property.

The IPR score presents less evidence of improvement than the other components. After two consecutive years of improvement to the *Copyright Piracy* score, it did not change in 2010. Despite a lack of progress in terms of IPR, Mauritius maintained the fourth highest IPRI in the region.



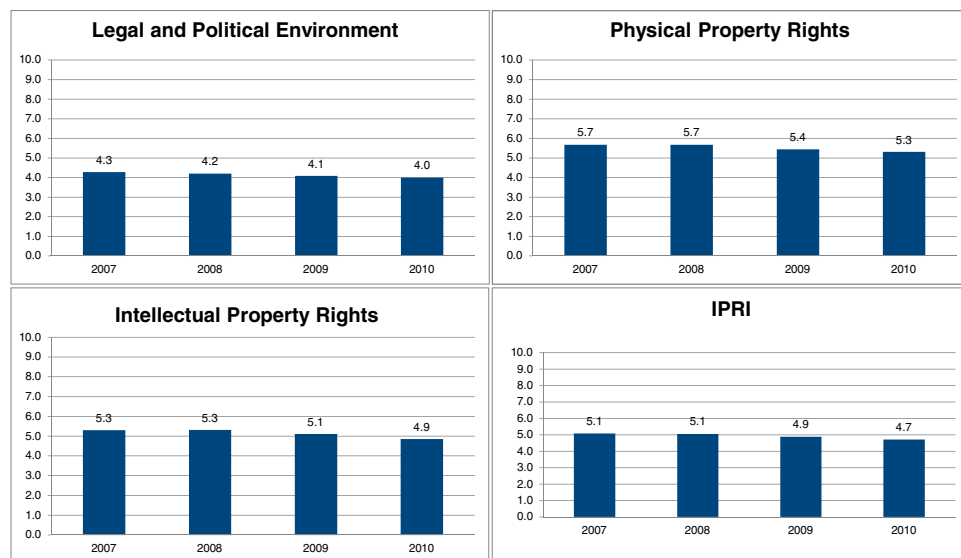
**MEXICO**

World Rank: 72 Regional Rank: 11

IPRI in Mexico continued to decline in 2010. All three component scores decreased for the second consecutive year. While the *Political Stability* and *Rule of Law* scores both decreased slightly, the *Judicial Independence* score fell 0.3 in 2010. More positively, the *Control of Corruption* score improved.

The PPR score for Mexico was affected negatively by two of its sub-components. Both the *Protection of Physical Property Rights* and *Access to Loans* scores decreased for the second consecutive year. In particular, the *Protection of Physical Property Rights* score has undergone a 0.8 point negative change since 2008.

The IPR environment in Mexico presents some evidence of improvement, but the IPR score decreased once again in 2010. Mexico managed to reduce the market share of pirated business software slightly. Unfortunately, music piracy proliferated further, and pirated music now accounts for 80 percent of the market.



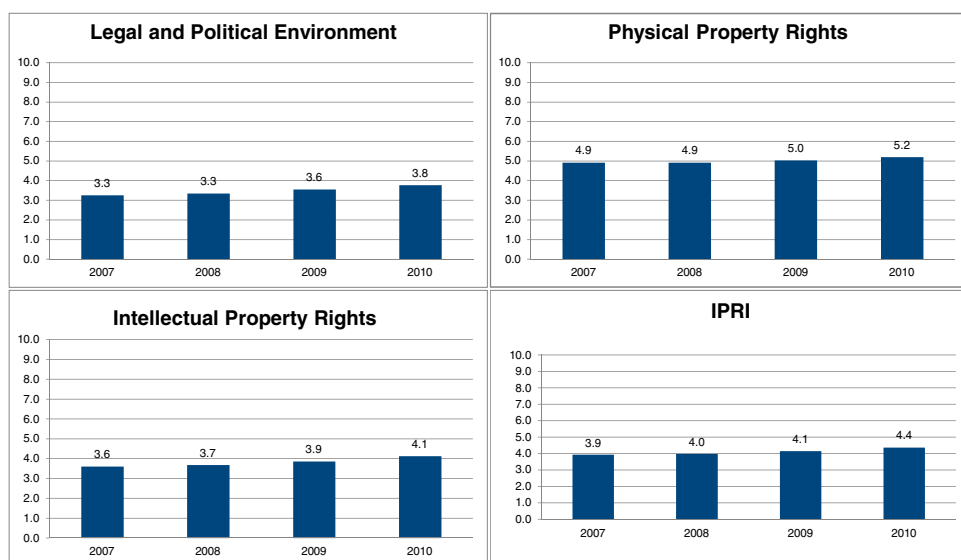
**MOLDOVA**

World Rank: 84 Regional Rank: 14

All three components increased in Moldova in 2010. The LP score increased for the second consecutive year despite a slight decrease in *Political Stability*. The *Rule of Law* score increased 0.4 points, while *Judicial Independence* experienced a 0.7 point increase.

The PPR score has seen two years of consecutive improvement. The change comes solely as a result of changing expert opinion regarding the protection of physical property rights. That sub-component score increased twice and by 0.6 points in 2010.

In 2010, the IPR score underwent considerable positive change. *Protection of Intellectual Property Score Rights* rose 0.6 points in 2010. The newly available data on *Patent Protection* was incorporated this year, boosting the overall IPR score. While *Copyright Piracy* score also has shown improvement each year since 2007, pirated material still accounts for an estimated 90 percent of business software used in the country.



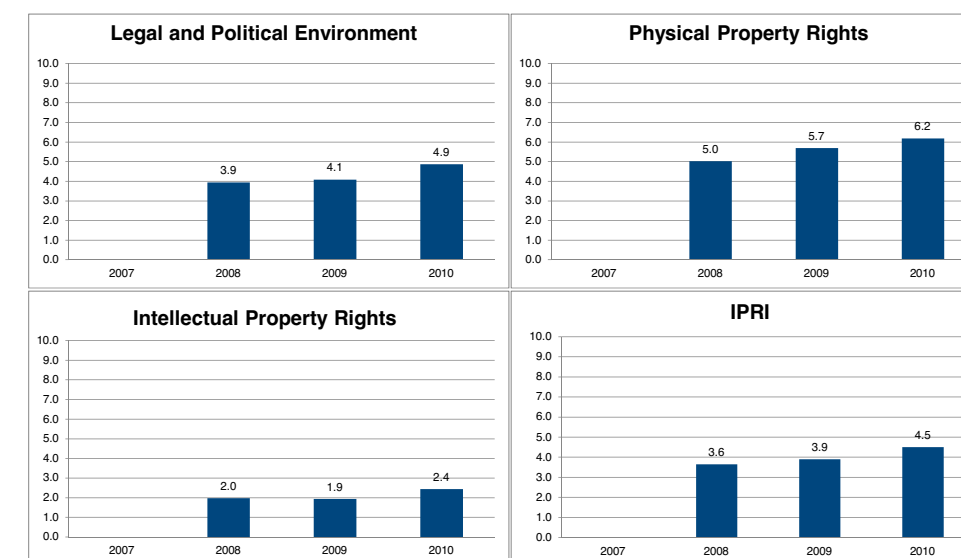
**MONTENEGRO**

World Rank: 80 Regional Rank: 13

Montenegro made considerable improvements in IPRI in 2010. Considering the low rating that the new country earned initially, there were impressive increases to the LP score. All sub-component scores increased at least 0.3 points. Most notably, *Judicial Independence* increased 0.7 points and *Political Stability* jumped a whopping 1.7 points.

The PPR score increased in 2010 because of developments in only one sub-component. The *Access to Loans* score increased dramatically, from 3.8 to 5.3. This score has risen two full points since 2008.

The IPR score for Montenegro represents an area in severe need of improvement. The *Protection of Intellectual Property Rights* score increased an entire point in 2010, but copyright piracy is still a major problem. Pirated business software accounts for 83 percent of the market. As a result, Montenegro had one of the lowest IPR scores in the world.



**MOROCCO**

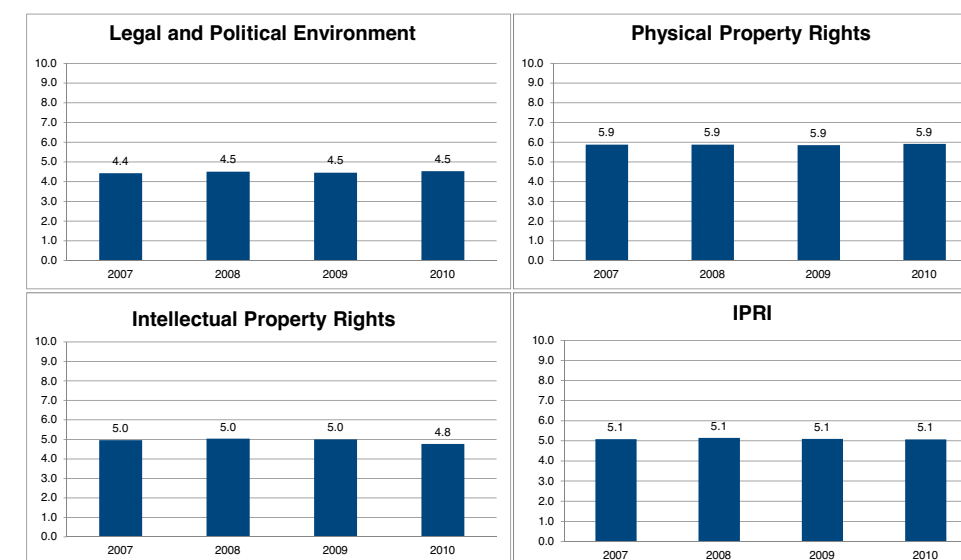
World Rank: 64 Regional Rank: 11

IPRI in Morocco has exhibited remarkable stability over the last few years. Despite small fluctuations in the components and sub-components scores, it appears that the situation with property rights did not change significantly.

A significant improvement in the *Judicial Independence* score since 2008 has been largely offset by declines in the other sub-components within the same period. As a result, LP failed to change significantly.

PPR saw a similar lack of progress because of the conflicting trends in its sub-components. *Access to Loans* has increased by more than a point since 2007. However, some deterioration in the ease of property registration and expert opinion on the physical property rights protection largely offset these improvements.

Similarly, IPR only experienced a slight decline in 2010, despite a significant drop in *Protection of Intellectual Property Rights*.



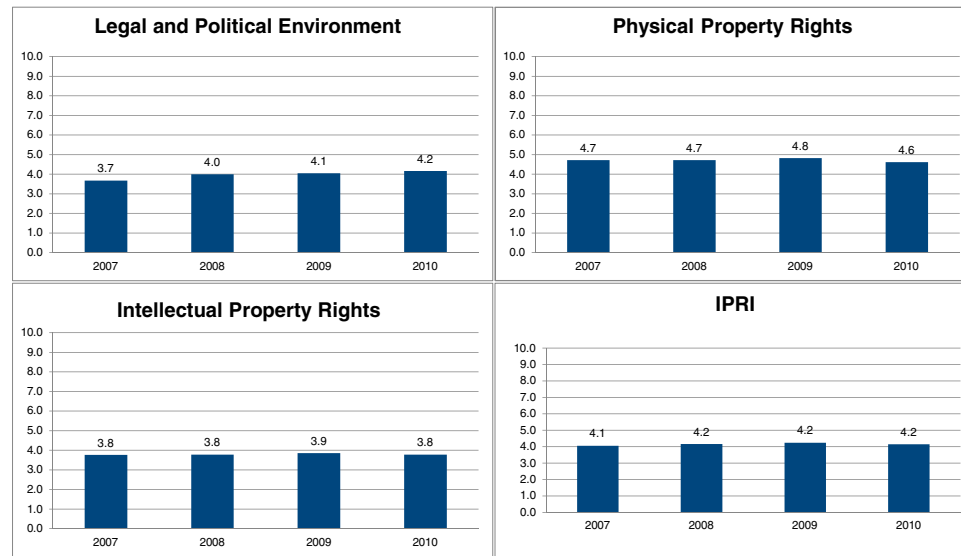
## MOZAMBIQUE

World Rank: 95 Regional Rank: 14

IPRI in Mozambique did not change in 2010, but the property rights environment underwent some significant changes. The LP score only increased slightly. However, *Rule of Law* improved modestly, while *Judicial Independence* experienced a 0.5 point positive change.

The PPR score reached its lowest level since data became available. The *Protection of Physical Property Rights* score decreased for the second consecutive year, falling nearly half a point. The *Access to Loans* score showed signs of progress in 2009 but failed to continue to improve.

IPR data for Mozambique were limited, as there was a dearth of hard data for copyright piracy. As a result, the score depended heavily upon expert opinion of the protection of intellectual property rights. After the score improved in 2009, IPR returned to 2008 levels in 2010.



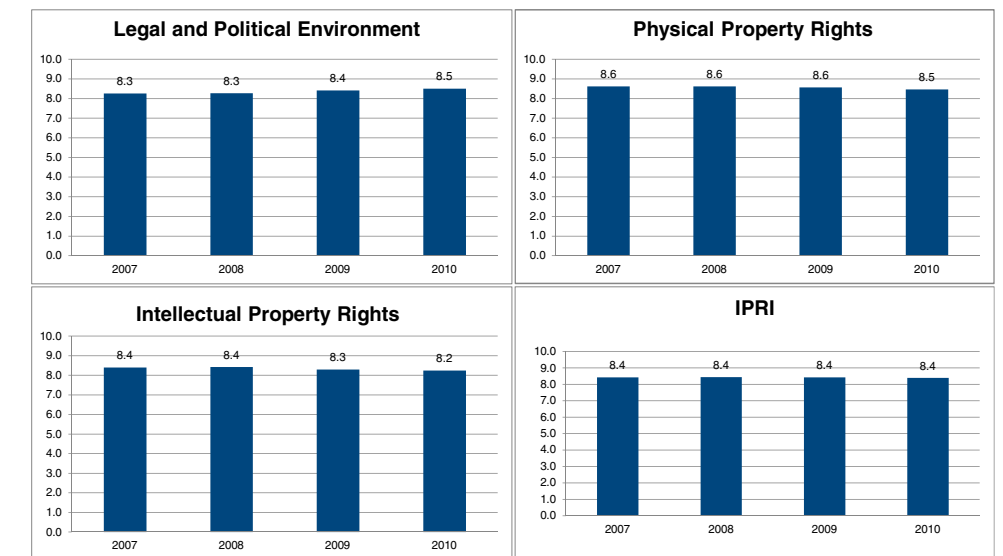
## NETHERLANDS

World Rank: 4 Regional Rank: 4

While IPRI in the Netherlands did not change in 2010, the country fell from second to fourth in the overall rankings. The LP score was the only component to increase. The *Judicial Independence* and *Political Stability* scores both improved.

The PPR score underwent a slight decrease in 2010. The *Protection of Physical Property Rights* score fell for the second consecutive year. The *Access to Loans* score also decreased, but for the first time.

For the second consecutive year, the IPR score decreased in 2010. *Copyright Piracy* has improved slightly since 2007. Any improvements were offset, however, by a 0.6 point decrease to the *Protection of Intellectual Property Rights* score from 2008 levels.



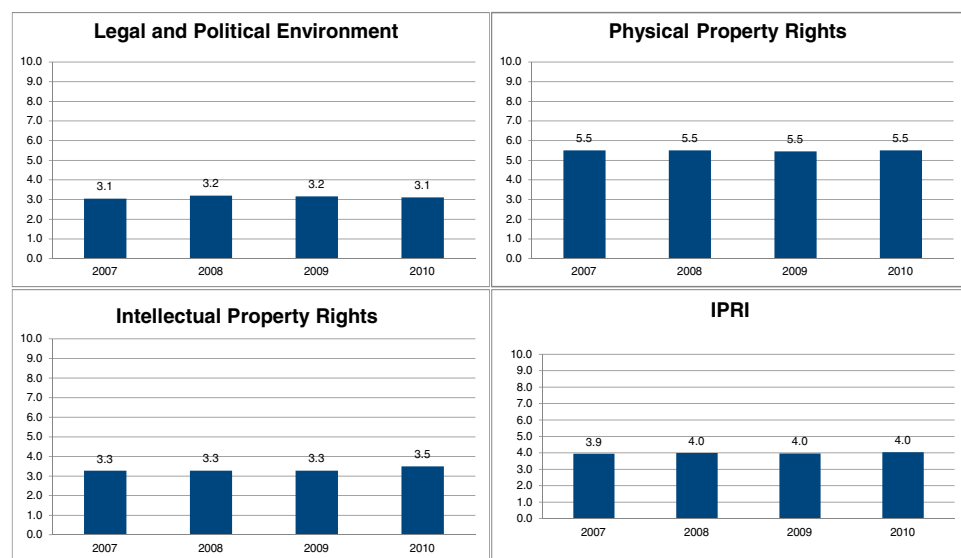
## NEPAL

World Rank: 101 Regional Rank: 17

Nepal's IPRI failed to change once again in 2010. The LP score only underwent a slight negative change in 2010, but the individual sub-component scores portray a more dynamic picture. *Rule of Law* decreased slightly, while the *Judicial Independence* score decreased more dramatically – 0.8 points. Despite these developments, *Political Stability* increased 0.9.

PPR in Nepal did not have a net change in 2010. Similarly to the LP score, there were considerable changes to the sub-component scores. A dramatic decrease to *Protection of Physical Property Rights* was offset by improvement to *Access to Loans*. Notably, *Registering Property* was the strongest aspect of PPR. It takes only three procedures and five days to register property in Nepal.

The IPR score increased for the first time in 2010. Since data were unavailable for the *Copyright Piracy* score, IPR relies heavily on the *Protection of Intellectual Property Rights* sub-component.



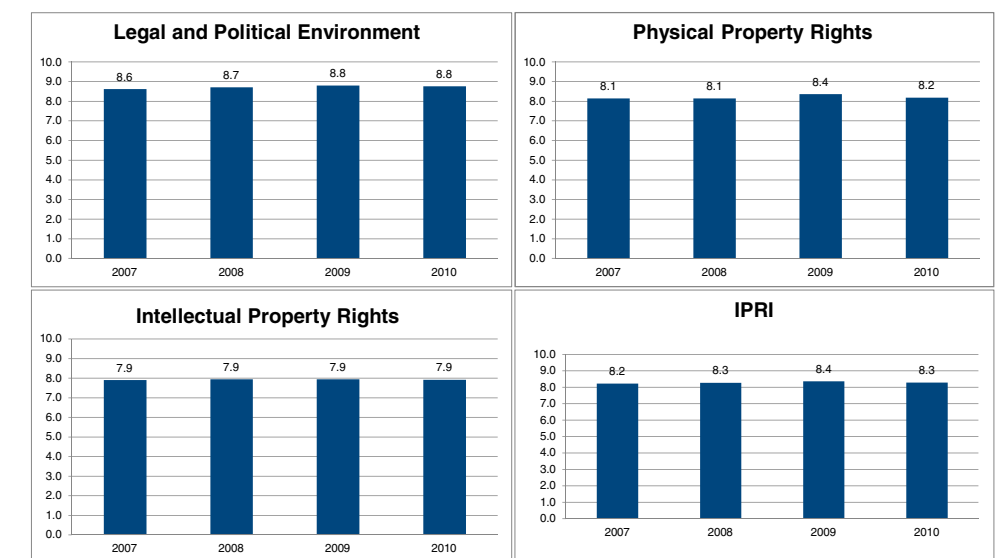
## NEW ZEALAND

World Rank: 5 Regional Rank: 1

While IPRI in New Zealand decreased in 2010, the country still managed to rank fifth in the world and first in the region. In terms of LP, there were some conflicting changes to the sub-component scores. While *Judicial Independence* made some progress, all three of the other sub-components decreased in 2010.

The PPR score decreased in light of falling expert opinion towards the protection of private property rights and a lower *Access to Loans* score. After impressive increases to the *Access to Loans* score in 2009, the sub-component decreased half a point in 2010. New Zealand also maintains one of the most efficient property registration regimes in the world. Only 2 procedures and 2 days are required to register property.

The IPR component has remained stable over the last four years in New Zealand.



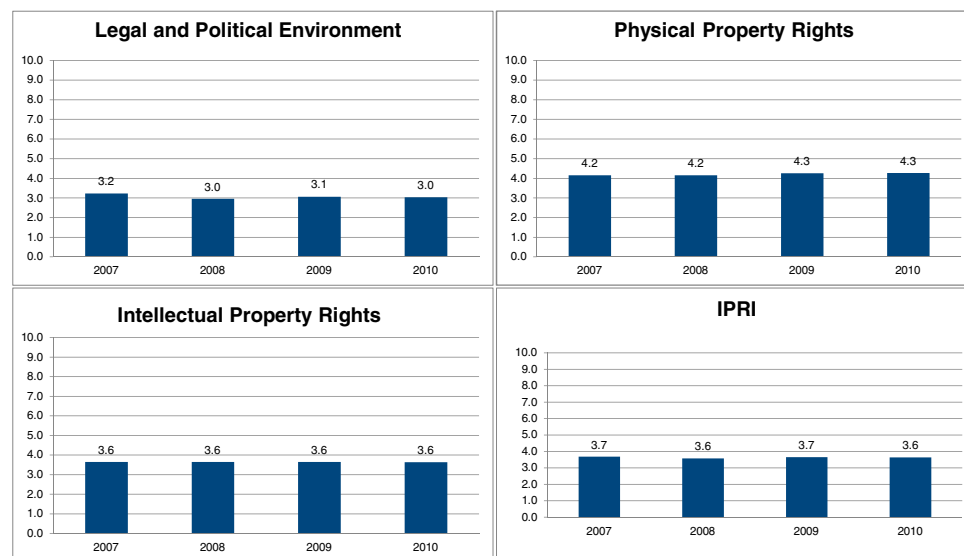
## NICARAGUA

World Rank: 116 Regional Rank: 19

IPRI in Nicaragua returned to 2008 levels after a slight increase last year. Nicaragua suffers under a very poor legal and political environment. Despite significant improvement in 2010, the *Judicial Independence* score remained fourth lowest in the world. The *Political Stability* score also underwent a substantial decrease.

After signs of improvement in 2009, the *Protection of Physical Property Rights* score decreased in 2010. The *Access to Loans* score increased substantially, marking the first change to that sub-component.

While the sub-components of the IPR score changed for the first time since data became available, the developments were so slight that they had no effect on the overall score.



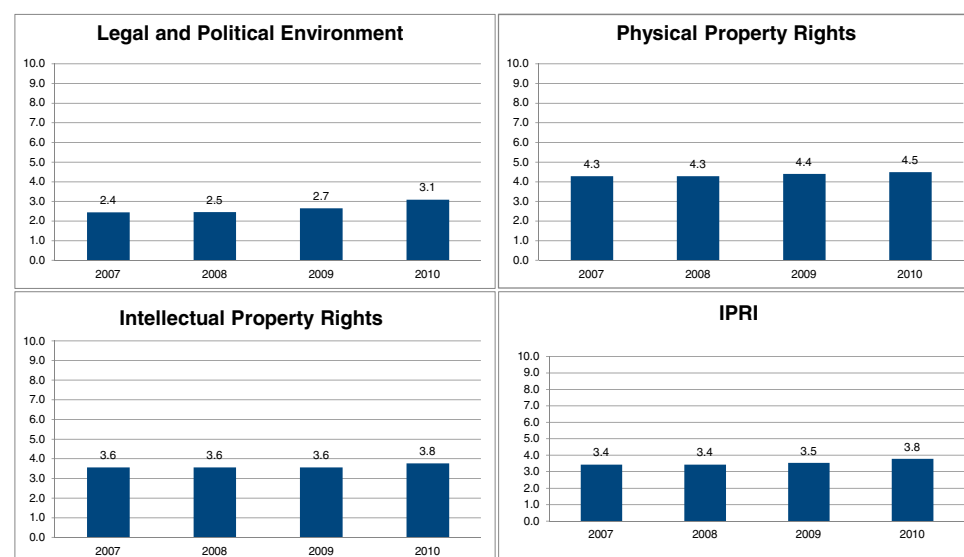
## NIGERIA

World Rank: 109 Regional Rank: 18

Nigeria showed increases in all three component scores in 2010. The *Rule of Law*, *Control of Corruption*, and *Judicial Independence* scores all increased, helping the LP score. In particular, the *Judicial Independence* score underwent a considerable positive change of more than an entire point.

The PPR score increased despite negative change in the *Access to Loans* score. Expert opinion of protection of physical property rights rose significantly. The PPR score was hampered by Nigeria's difficult process for registering property, requiring 14 different steps for completion.

While Nigeria's IPR score improved, this increase was because of the absence of data for piracy of records and music in 2010.



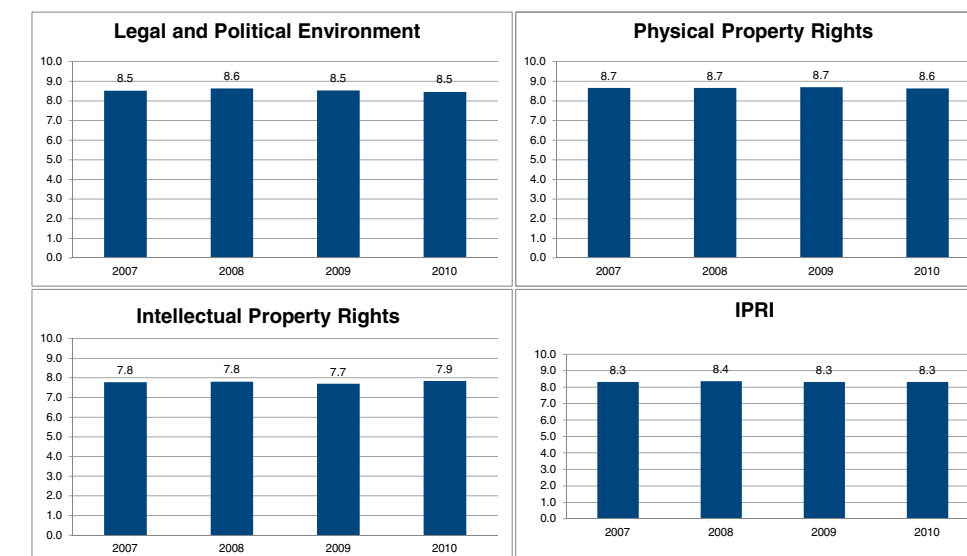
## NORWAY

World Rank: 5 Regional Rank: 5

Norway enjoys strong property rights protections by nearly every measure. Though the *Rule of Law* and *Control of Corruption* scores decreased in 2010, the LP score remained strong. The *Political Stability* score increased slightly.

Despite the fact PPR decreased slightly in 2010, Norway maintained the strongest PPR score in the world. The slight negative change to the score came as a result of a moderate decrease in the *Access to Loans* score. Expert opinion on the protection of physical property rights increased in 2010. Norway enjoys one of the best property registration regimes in the world. Registering property requires only 1 procedure and 3 days to complete.

Copyright piracy levels continued to decline moderately in 2010. Pirated material now accounts for an estimated 28 percent of the business software market. Expert opinion of the protection of intellectual property rights improved in 2010 after having waned in 2009.



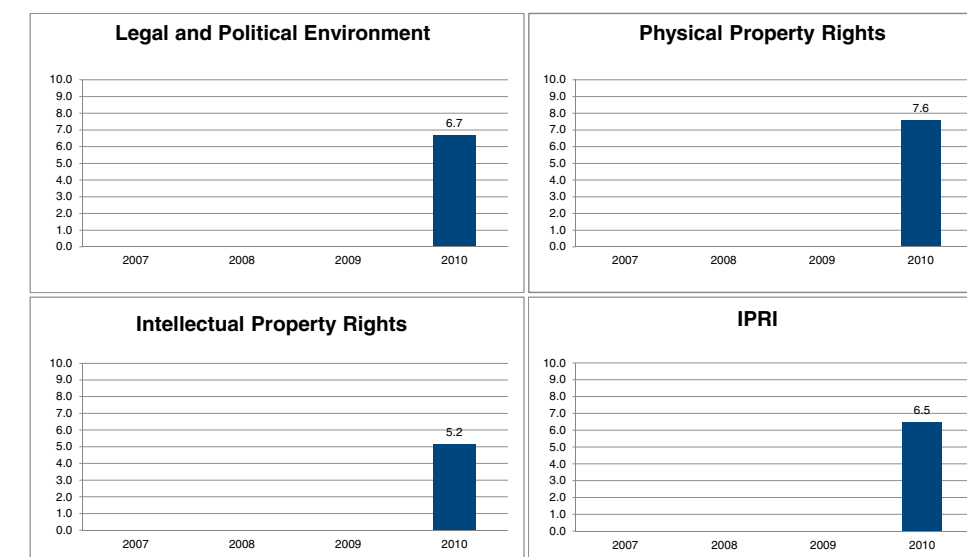
## OMAN

World Rank: 32 Regional Rank: 4

Oman is new to the IPRI in 2010. Oman enjoyed the second highest LP score in the Middle East and North Africa. *Judicial Independence* and *Political Stability* were particularly strong in this country.

PPR was the strongest aspect of the property rights regime in Oman. The newly available data for the *Protection of Physical Property Rights* and *Access to Loans* indicate that there is room for improvement. *Registering Property* was the exception. Oman earned a score of 9.4. This was because of the fact that registering property only requires two procedures and 16 days to complete.

IPR was the weakest component in Oman. While there were no available data for the strength of patent rights in Oman, a high level of piracy of business software (estimated at 62 percent) undermined the overall IPR score.



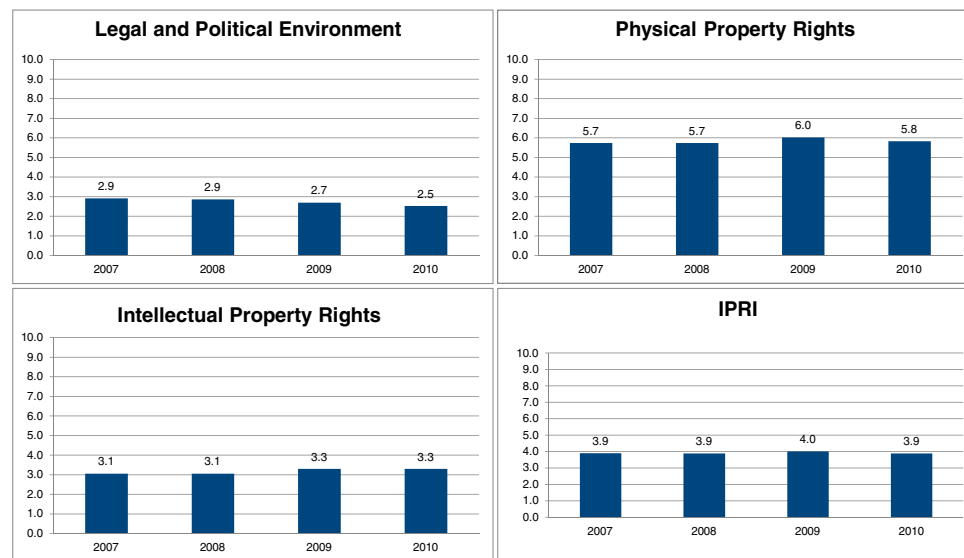
## PAKISTAN

World Rank: 104 Regional Rank: 18

After a slight improvement in 2009, the Pakistan's IPRI decreased in 2010. The LP score decreased for the second consecutive year. While the *Rule of Law* and *Control of Corruption* scores remained largely unchanged in 2010, the *Judicial Independence* and *Political Stability* scores decreased dramatically. *Political Stability* for Pakistan ranked the lowest of the scored countries in the index.

PPR increased in 2009, but the situation with respect to physical property rights regressed in 2010. *Access to Loans* fell 0.6 points, while expert opinion of the protection of physical property rights slightly improved.

The IPR score did not experience a net change in 2010, but this result is misleading. The *Protection of Intellectual Property Rights* score decreased 0.6 points. The *Copyright Piracy* score increased, but this change was only because there were no data for piracy of records and music in 2010. From 2007 to 2009, however, it is estimated that piracy accounted for the entire music market in Pakistan.



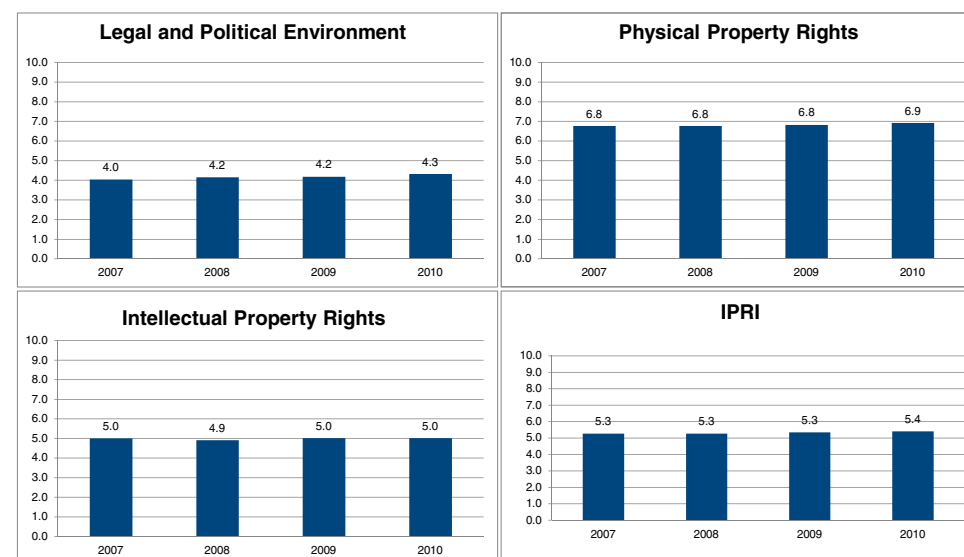
## PANAMA

World Rank: 55 Regional Rank: 5

For the first time, IPRI in Panama increased. The LP score increased for the first time since 2008. *Political Stability* decreased slightly in 2010. More favorably, *Judicial Independence* and *Control of Corruption* both underwent a positive change of at least 0.3.

The PPR score increased for the first time in 2010. This positive change came as a result of an increase to the *Protection of Physical Property Rights* sub-component for the second consecutive year. The *Registering Property* and *Access to Loans* scores both have failed to increase since 2007. Because of a comparatively high *Registering Property* score, Panama enjoyed the second highest PPR in the region.

While the IPR score for Panama remained the same in 2010, there were some significant developments in the intellectual property environment. While the *Protection of Intellectual Property Rights* score decreased, *Copyright Piracy* slightly improved. Though copyright piracy is still rampant, pirated material now is estimated to account for 73 percent of the business software market.



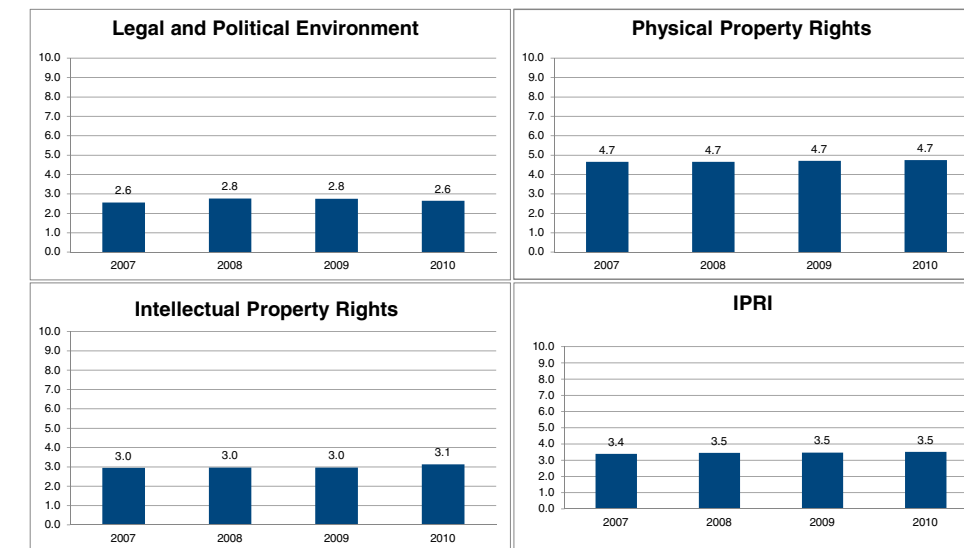
## PARAGUAY

World Rank: 118 Regional Rank: 20

The IPRI score did not undergo a net change in 2010. However, there were significant changes to the component scores. Paraguay's LP score suffered from the second lowest *Judicial Independence* in the world. *Political Stability* decreased substantially. Not surprisingly, Paraguay garnered the second lowest LP in the region and one of the lowest LP scores in the entire index.

The PPR score made little progress in 2010. The only sub-component to change was the *Access to Loans* score, which improved slightly.

IPR increased, but this score change is misleading. There were an absence of data for piracy of records and music in 2010. As a result, the *Copyright Piracy* score increased 0.7. The *Protection of Intellectual Property Rights* score, meanwhile, decreased 0.3.



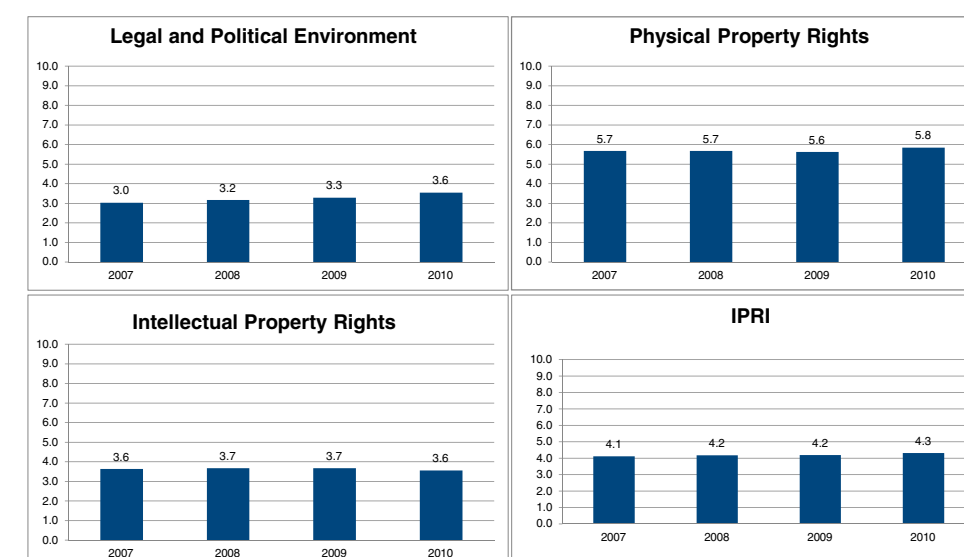
## PERU

World Rank: 88 Regional Rank: 15

IPRI in Peru increased in 2010, as two of the component scores made noticeable improvements. Significant positive change occurred in the LP score. Despite the fact that the *Rule of Law* score decreased slightly in 2010, *Control of Corruption* and *Judicial Independence* both increased substantially. In particular, *Judicial Independence* improved 0.9 in 2010.

The PPR score also improved in 2010. While the *Registering Property* score did not change, both the *Access to Loans* and the *Protection of Physical Property Rights* scores increased 0.4.

The IPR score decreased in Peru because of a decrease to the *Protection of Intellectual Property Rights* score. Despite new government institutions aimed at combating counterfeiting and piracy, enforcement is lacking.<sup>42</sup> Pirated material accounts for the vast majority of both the business software and music market.





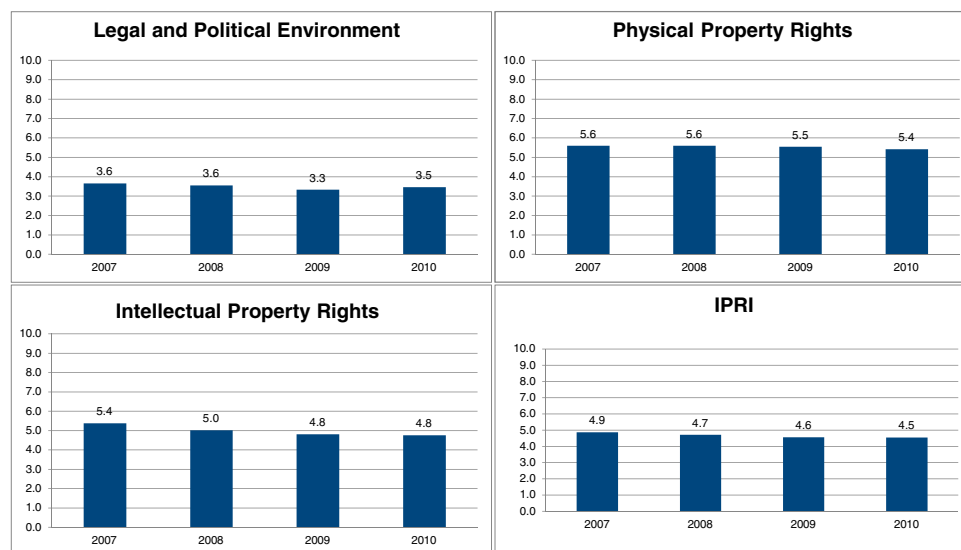
## PHILIPPINES

World Rank: 80 Regional Rank: 13

IPRI decreased for the third consecutive year in 2010. While the LP score remained low, there were significant improvements made this past year. *Judicial Independence*, *Rule of Law*, and *Control of Corruption* all increased. Despite this progress, the LP score remained among the lowest in the world.

The PPR score also did not change significantly. The *Registering Property* and *Access to Loans* scores did not change in 2010. The *Protection of Physical Property Rights* score decreased for the second consecutive year. This sub-component score has fallen 0.6 points since 2008.

The IPR score did not undergo a net change in 2010, after two consecutive declining years. The *Protection of Intellectual Property Rights* score did not change, but copyright protection seemed to be deteriorating because piracy in music and records continued to increase.



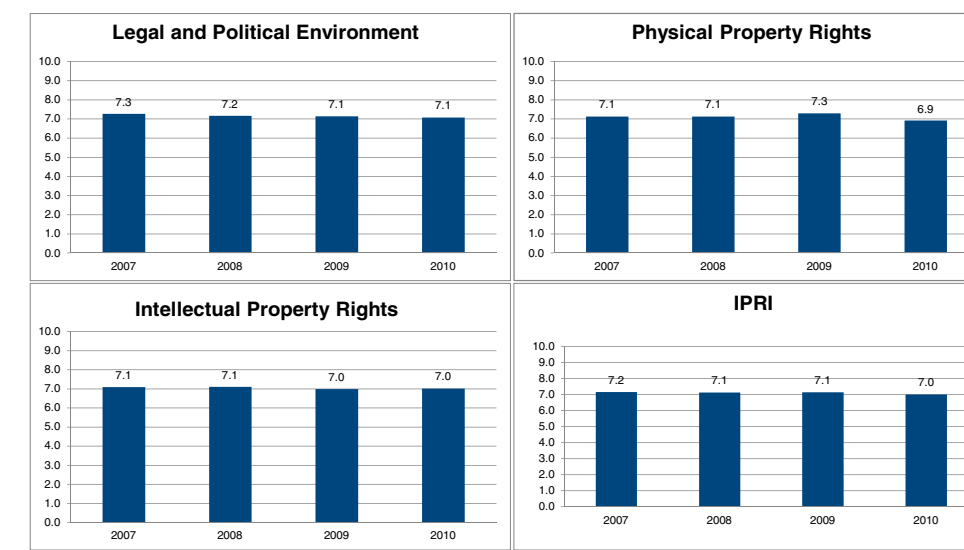
## PORTUGAL

World Rank: 23 Regional Rank: 15

Portugal's IPRI decreased slightly in 2010. The LP score, however, underwent no net change. The individual sub-components reveal a more complicated situation. The *Control of Corruption* score decreased slightly, while the *Judicial Independence* score underwent a significant decrease, plunging nearly a point. This change was offset by improvements to both *Rule of Law* and *Political Stability*.

The PPR score was affected by changes to only two of the sub-component scores. While the *Protection of Physical Property Rights* score experienced a modest decrease, the *Access to Loans* score fell an entire point in 2010 and 1.4 points since 2008.

The IPR score did not change overall. However, *Copyright Piracy* improved slightly. Pirated material now is estimated to compose 42 percent of the market for business software.



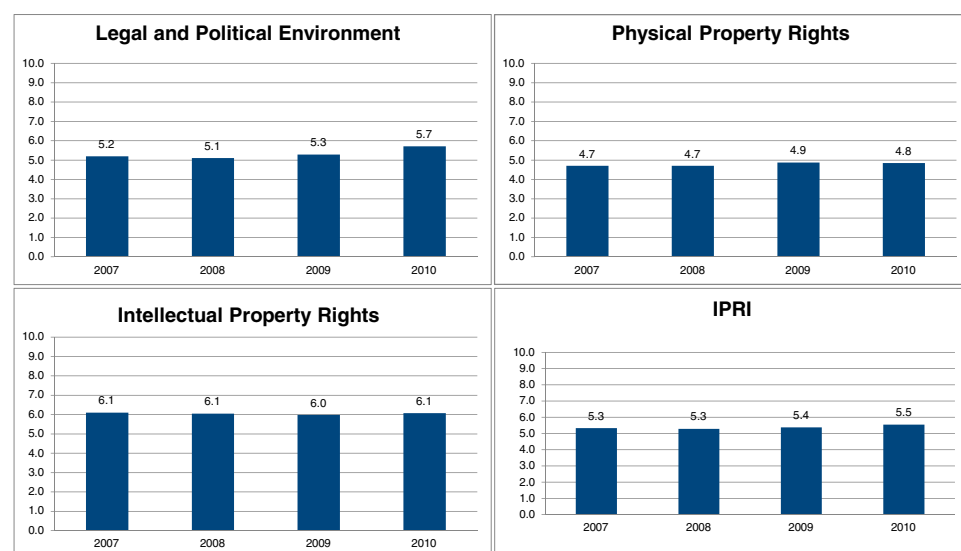
## POLAND

World Rank: 53 Regional Rank: 7

IPRI increased for the second consecutive year in Poland. This improvement is largely because of a change in the LP score. All LP sub-component scores increased in 2010. The *Judiciary Independence*, *Rule of Law* and *Political Stability* scores increased 0.4 points, while the *Control of Corruption* score increased half a point.

The PPR score underwent a slight negative change as a result of a decrease to the *Protection of Physical Property Rights* score. The *Registering Property* and *Access to Loans* scores did not change in 2010.

The IPR score returned to 2008 levels after a decrease in 2009. Despite a slight decrease to the *Protection of Intellectual Property Rights* sub-component, IPR made a net improvement. The *Copyright Piracy* score made marked increases in 2010. Estimated piracy of both business software and music decreased, contributing to an improved IPR score.



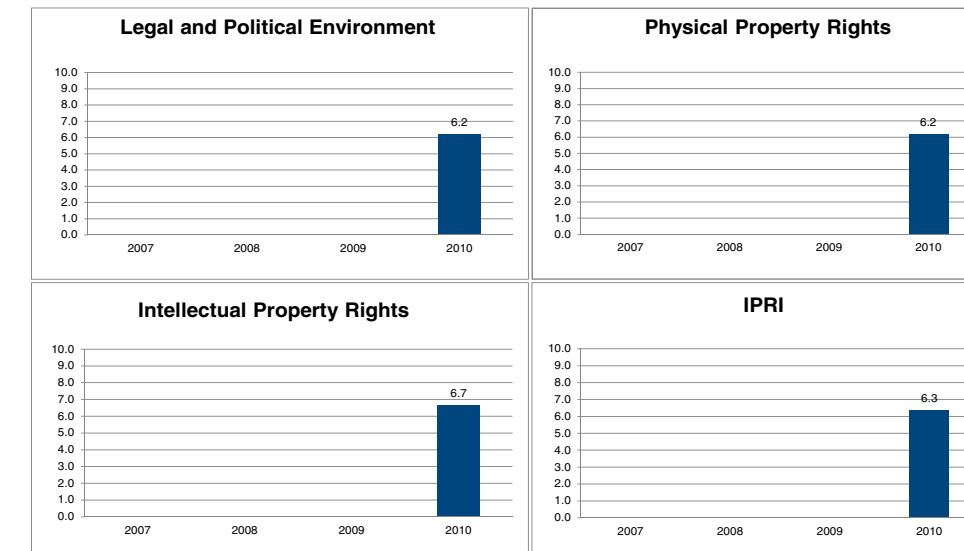
## PUERTO RICO

World Rank: 36 Regional Rank: 2

Puerto Rico joins the IPRI in 2010 for the first time. The country's LP score ranked the fourth highest in Latin America. *Judicial Independence* was slightly higher than the rest of the sub-components.

Puerto Rico enjoyed very high business leaders' opinion for the protection of physical property rights. Property registration, however, requires 194 days for completion, resulting in a lower score for this sub-component.

There were no data for the strength of patent rights in Puerto Rico, so the IPR score depended entirely upon data on *Copyright Piracy* and *Protection of Intellectual Property Rights*.



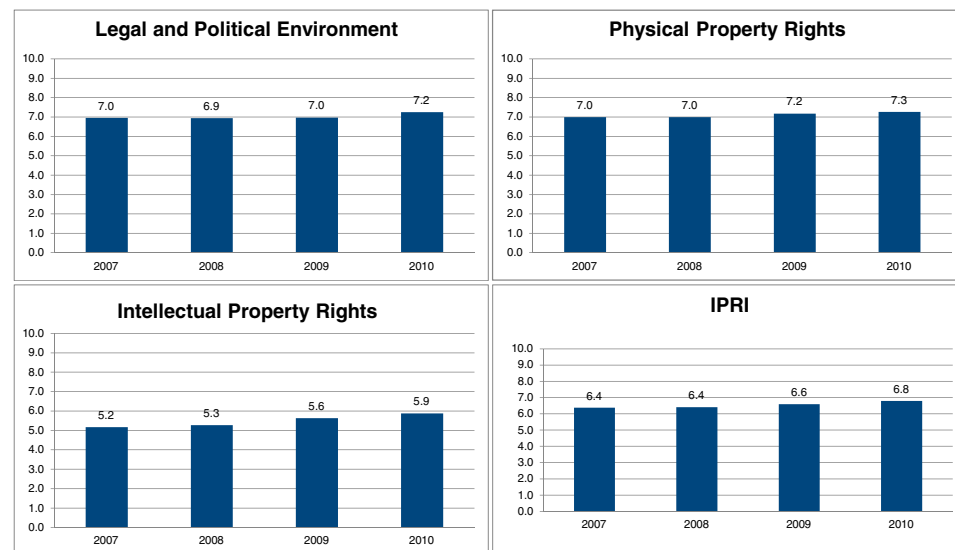
## QATAR

World Rank: 24 Regional Rank: 2

All three component scores increased in 2010. As a result, Qatar's IPRI made a sizeable increase. The LP score has improved 0.2 points since 2008. While the *Rule of Law* sub-component score experienced a slight decrease, all other LP scores increased. In particular, the *Control of Corruption* score increased half a point.

PPR made slight improvements for the second consecutive year. New data became available for the *Registering Property* score, which generally makes comparison of PPR scores across years difficult. However, expert opinion regarding the protection of private property has improved, which suggests that substantive improvement occurred.

The IPR score also increased in 2010. Both the scores for *Protection of Intellectual Property Rights Copyright Piracy* increased. Copyright piracy levels have declined in Qatar, and the score for this sub-component increased nearly an entire point since 2007.



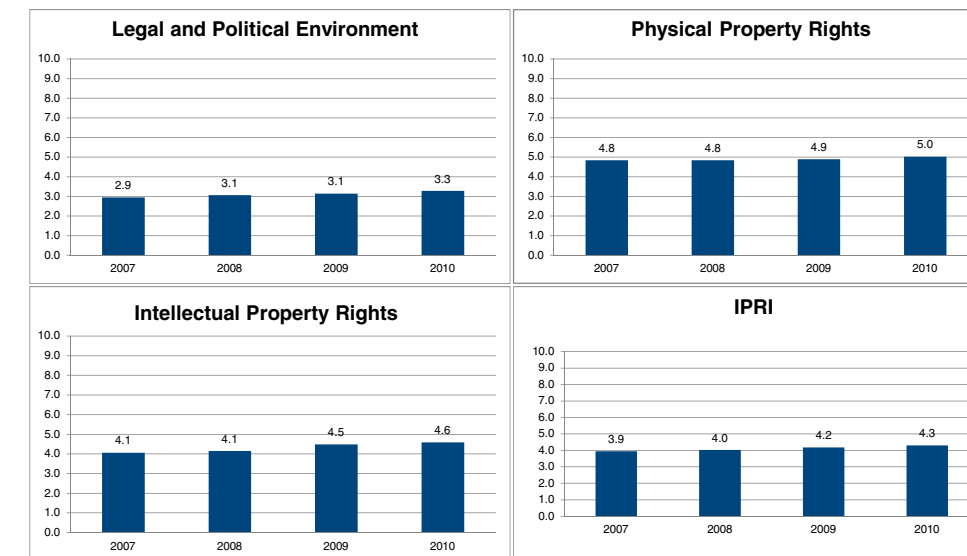
## RUSSIA

World Rank: 88 Regional Rank: 15

IPRI in Russia increased in 2010 because of consistent, if modest, increases to all component scores. The LP score underwent a net positive change, despite a slight decrease to the *Control of Corruption* score. The *Rule of Law*, *Political Stability*, and, most substantially, the *Judicial Independence* scores all improved in 2010.

PPR made small improvements in 2010. The *Protection of Physical Property Rights* and *Access to Loans* scores both underwent positive changes; the latter has increased 0.3 points since 2009.

The IPR score improved, despite an absence of data for copyright piracy for music and records in 2010 that had a negative effect on the score. The 0.5 point increase to the *Protection of Intellectual Property Rights* score offset this decrease.



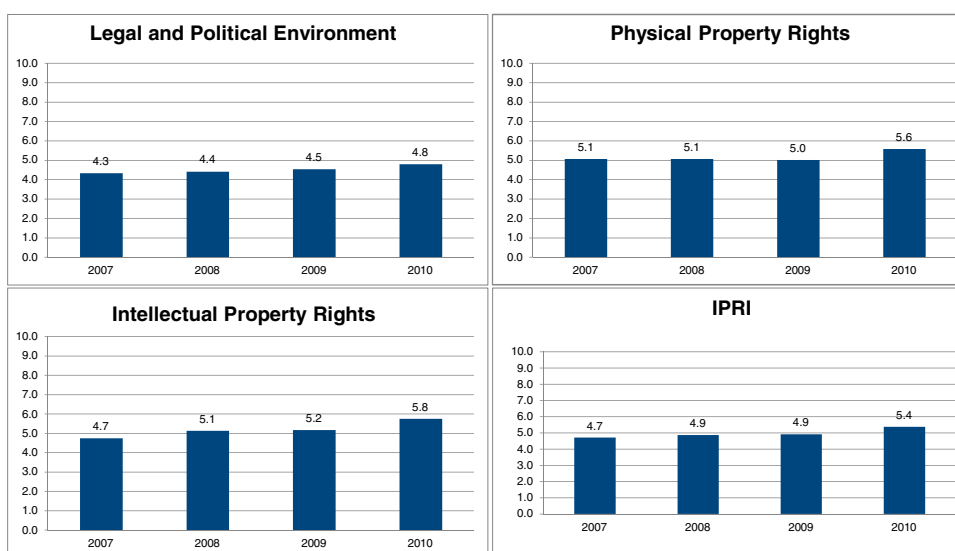
## ROMANIA

World Rank: 55 Regional Rank: 8

All of the component scores increased in Romania in 2010. As a result, the country's IPRI underwent substantial positive change. The LP score made improvements of at least 0.2 points in all sub-components. *Judicial Independence* and *Control of Corruption* experienced particularly strong increases.

The PPR score also made improvements in every sub-component. The *Access to Loans* score increased 0.5 points in 2010. Unfortunately, data for the *Registering Property* sub-component suffered from inconsistencies that inhibit direct comparisons across years for this country. Hopefully, these inconsistencies can be addressed in the future.

The IPR score underwent a significant increase in 2010. The *Protection of Intellectual Property Rights* score increased 0.4. Copyright protection has progressed markedly. Piracy of business software decreased slightly in 2010, while the market share for pirated music fell from an estimated 60 percent to 40 percent. As a result, the *Copyright Piracy* score increased 1.4.



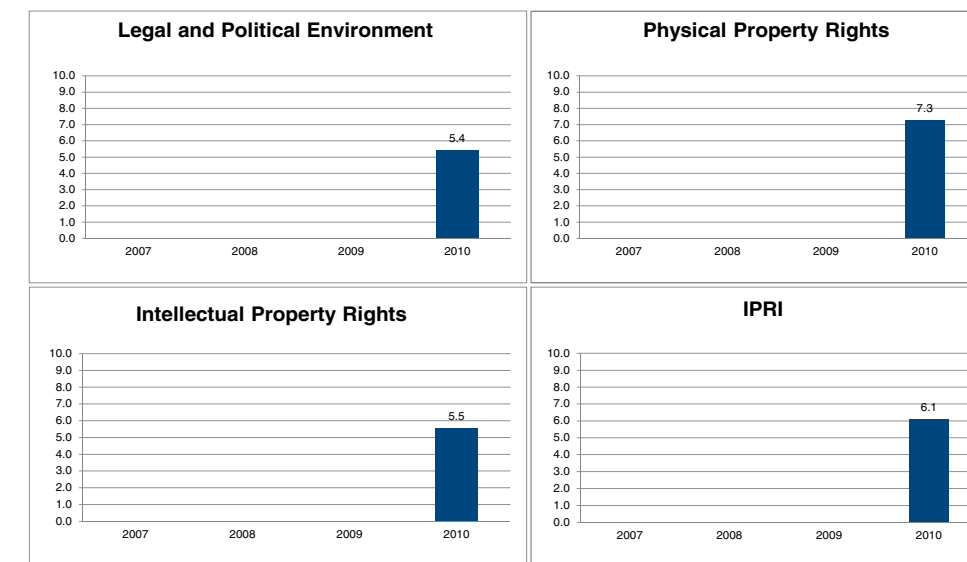
## SAUDI ARABIA

World Rank: 41 Regional Rank: 7

2010 marks the first year that Saudi Arabia is featured in the IPRI. Among the LP sub-components, the *Judicial Independence* score was markedly higher than the other sub-components.

Saudi Arabia enjoys one of the most efficient property registration regimes in the world, which helped the PPR score. Property registration requires only 2 procedures and 2 days to complete. PPR was the strongest component of Saudi Arabia's IPRI.

Intellectual property does not enjoy the same level of protection in Saudi Arabia as physical property does. Copyright piracy presents a serious problem with pirated material accounting for an estimated 52 percent of the business software market.



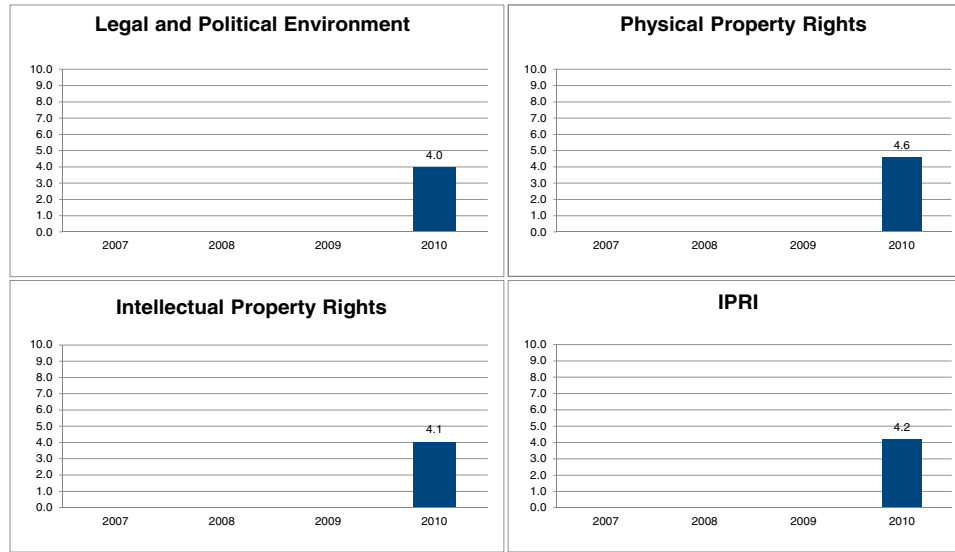
SENEGAL

World Rank: 95 Regional Rank: 14

Senegal appears for the first time in the IPRI. Among the LP sub-components the *Rule of Law*, *Political Stability*, and *Control of Corruption* scored significantly higher than *Judicial Independence*.

PPR scored slightly higher than the other components. *Access to Loans* scored very poorly, however, at 1.3. Registering property is not very easy because it takes 124 days to complete.

The IPR score suffered from poor copyright protection. Pirated material accounts for an estimated 79 percent of the business software market in Senegal.



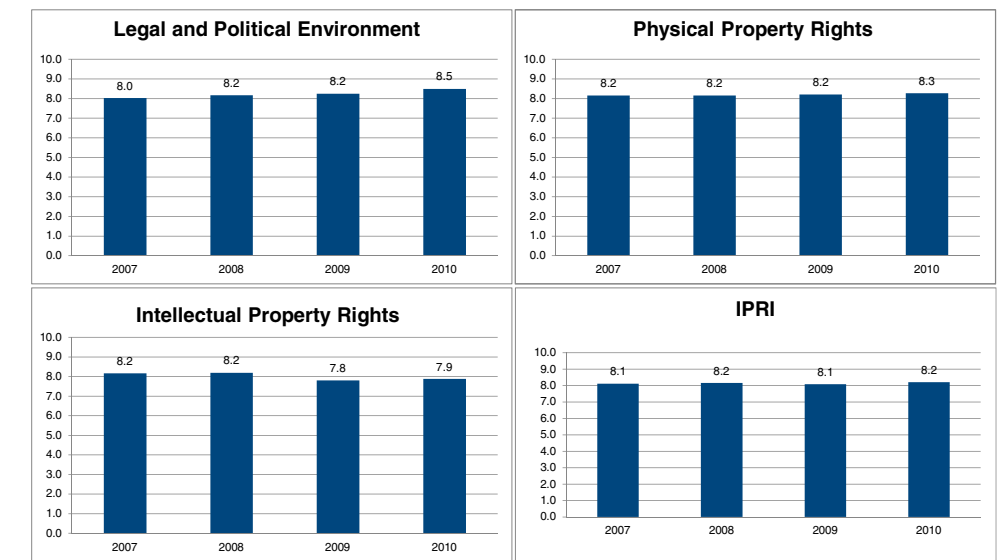
SINGAPORE

World Rank: 8 Regional Rank: 2

IPRI in Singapore increased slightly in 2010. All three components underwent a positive change. Most substantially, the LP score improved 0.3. Despite a slight decrease to the *Rule of Law* score, the other three sub-components of the LP score improved. In particular, the *Judicial Independence* score increased half a point.

PPR made a positive, if less dramatic, change. While neither the *Registering Property* nor the *Access to Loans* score has changed since 2007, the *Protection of Physical Property Rights* score improved for the second consecutive year. At 9.2, Singapore's *Protection of Physical Property Rights* score is one of the highest in the index.

The IPR score made progress as well in 2010. The *Protection of Intellectual Property Rights* score increased for the second consecutive year. Moreover, protection of business software copyright has improved every year since 2007. Pirated material lost market share for the third consecutive year.



SERBIA

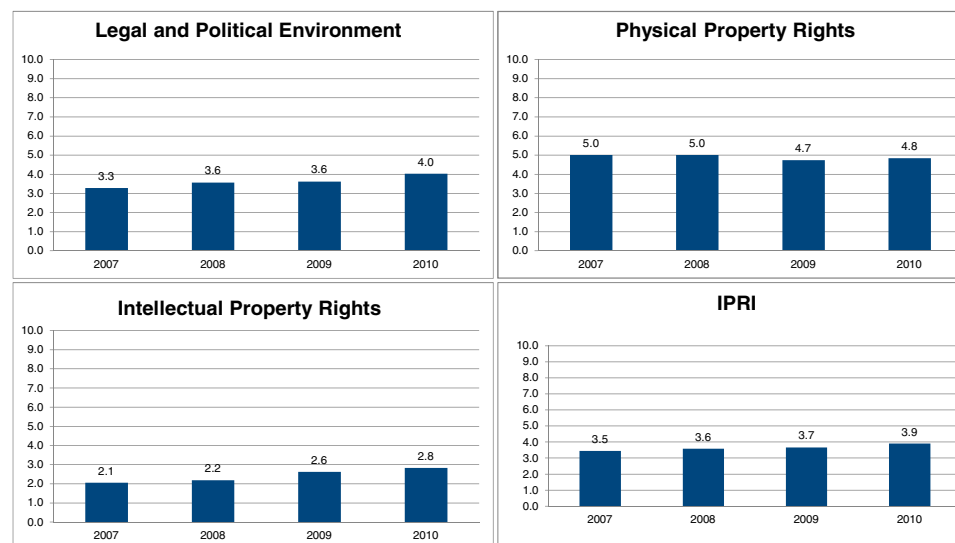
World Rank: 104 Regional Rank: 21

IPRI in Serbia increased for the fourth consecutive year. All sub-components of the LP score increased in 2010. Most notably, both the *Political Stability* and *Control of Corruption* scores increased half a point.

The PPR score increased as well. While the *Registering Property* score failed to change in 2010, the *Protection of Physical Property Rights* increased 0.4. The *Access to Loans* score, however, decreased slightly for the second consecutive year.

IPR underwent a positive change as a result of substantive changes in the intellectual property environment. The *Protection of Intellectual Property Rights* score increased for the second consecutive year. Copyright protection improved each year since data became available in 2007.

Evidence of this improvement are declining copyright piracy levels in business software.



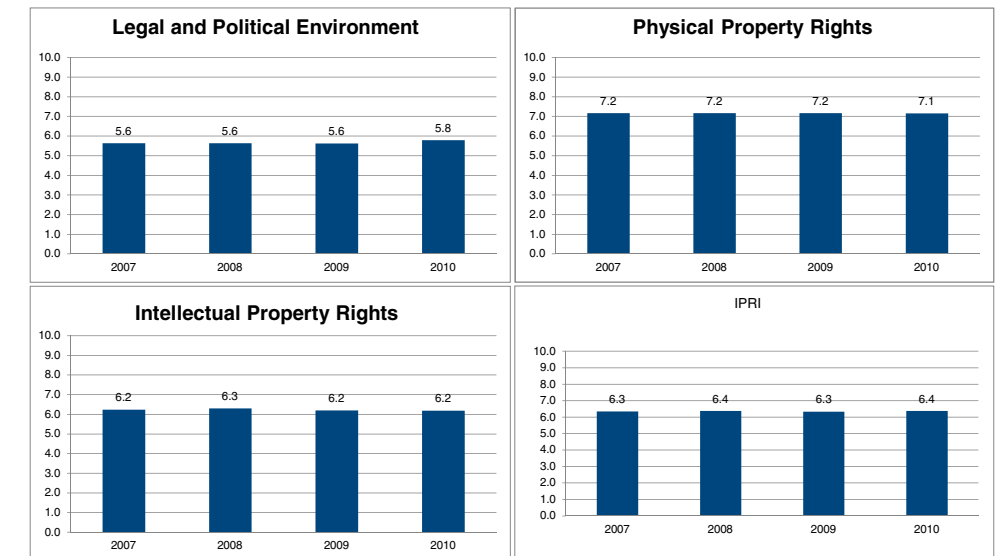
SLOVAKIA

World Rank: 34 Regional Rank: 3

IPRI increased slightly in Slovakia in 2010. The LP score increased for the first time in four years. Both the *Rule of Law* and the *Control of Corruption* scores increased 0.3 points in 2010, after two consecutive years of negative changes.

The PPR score decreased in 2010, after three years of stasis. The score for expert opinion in regard to the protection of physical property rights decreased for the first time. However, the *Access to Loans* score slightly increased.

While the IPR score did not change in 2010, there were significant developments. The *Protection of Intellectual Property Rights* score decreased for the second consecutive year. But this decline was offset by changes to the *Copyright Piracy* score. Piracy of business software was reduced to its lowest level since data became available.



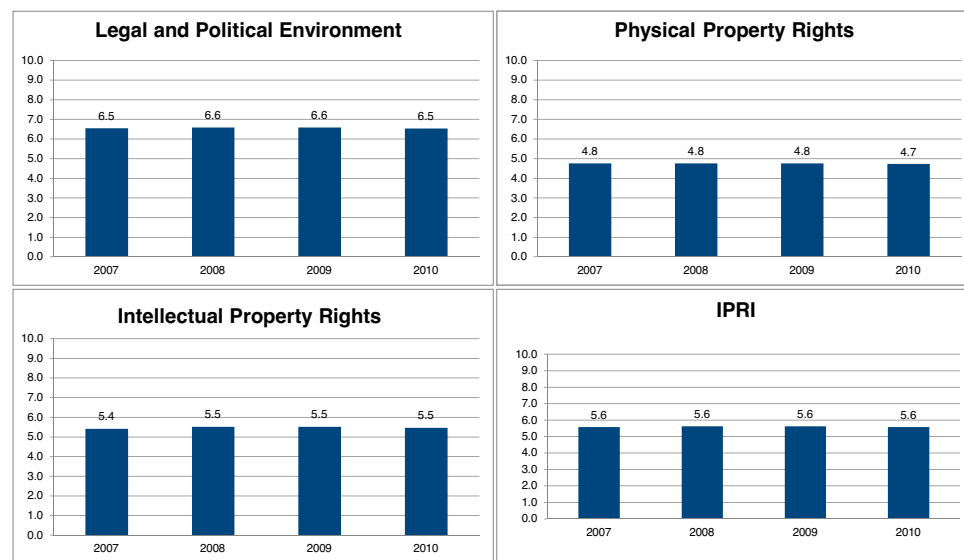
## SLOVENIA

World Rank: 52 Regional Rank: 6

While Slovenia's IPRI did not change in 2010, there were changes to the individual component scores. The LP score presents a complicated landscape. Three of the four sub-component scores increased in 2010. *Rule of Law*, *Political Stability*, and *Control of Corruption* all improved slightly. The *Judicial Independence* score, however, underwent a 0.5 point negative change.

PPR in Slovenia changed only slightly in 2010. The most striking aspect of the PPR score was the *Registering Property* sub-component. A 391-day waiting period for registering property was the worst in Europe.

The IPR score did not change in 2010 because of offsetting changes to the sub-component scores. The *Protection of Intellectual Property Rights* score decreased for the first time. Progress in terms of copyright protection compensated for this decline. Pirated material now accounts for an estimated 47 percent of the business software market, the lowest figure since 2007.



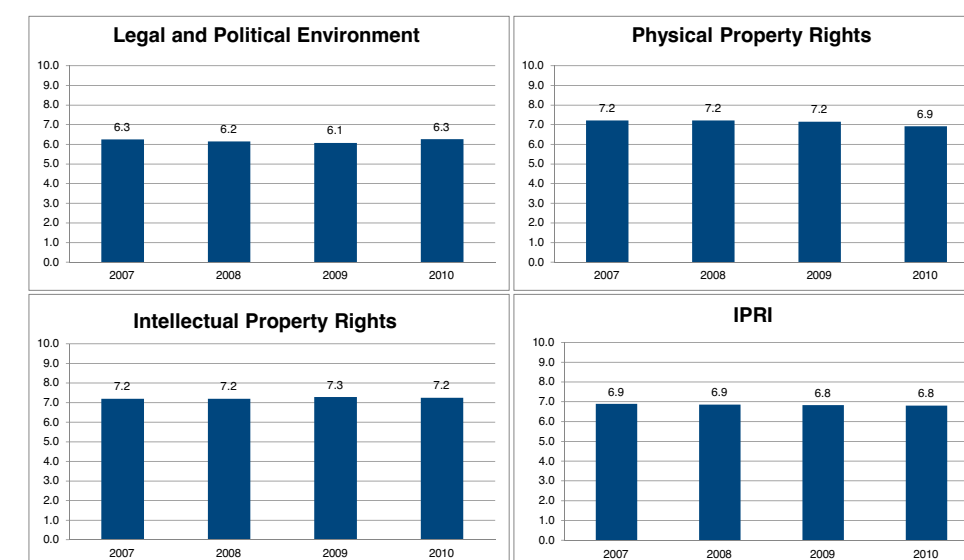
## SPAIN

World Rank: 24 Regional Rank: 16

Though Spain's IPRI scores have remained fairly stable since 2007, there were some noteworthy changes. LP improved in 2010 after decreasing in 2009. Most dramatically, the *Judicial Independence* score increased 0.8 points.

The PPR score changed for the first time, decreasing 0.3 points. The *Protection of Physical Property Rights* score decreased for the second consecutive year. A 0.5 point negative change to the *Access to Loans* score severely hurt overall PPR. Despite these problems, Spain maintained an excellent 9.0 *Registering Property* score.

The IPR score decreased in 2010. Though *Copyright Piracy* improved for the second consecutive year, the 0.3 point decrease to the *Protection of Intellectual Property Rights* score offset this progress.



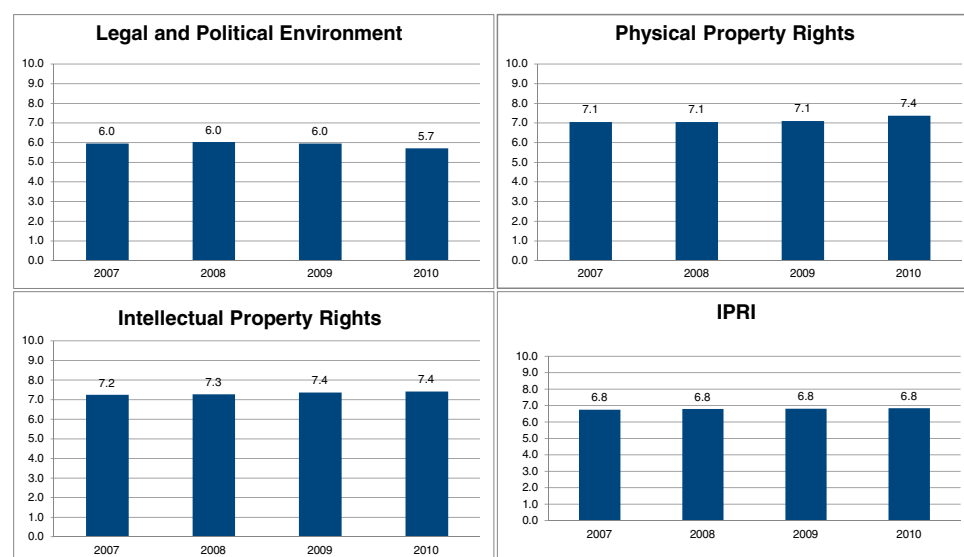
## SOUTH AFRICA

World Rank: 24 Regional Rank: 1

There were some dramatic changes to the property rights environment in South Africa, despite the lack of any net change to IPRI in South Africa. Three of the four scored aspects of the LP score decreased. Both the *Judicial Independence* and *Political Stability* scores underwent negative changes of at least 0.4.

The PPR score improved dramatically for the first time since data became available in 2007. The *Protection of Physical Property Rights* and *Access to Loans* scores both increased at least 0.4.

The IPR score in South Africa did not undergo significant changes in 2010. Despite this fact, South Africa maintained the highest PPR, IPR, and IPRI in the region.



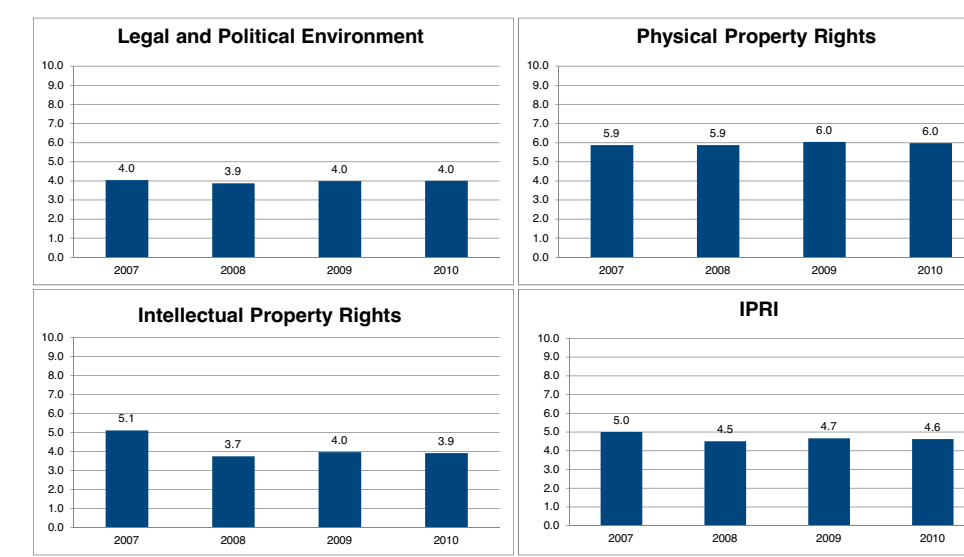
## SRI LANKA

World Rank: 75 Regional Rank: 12

In 2010, IPRI for Sri Lanka decreased for the second consecutive year. LP did not undergo a net change, but there were some significant changes to the property rights environment. For the second consecutive year, the *Judicial Independence* score decreased. Conversely, the *Political Stability* score has experienced a negative change every year since 2008.

The PPR score was affected by similar circumstances as LP. The *Protection of Physical Property Rights* score increased again, after improving in 2009 as well. The *Access to Loans* score, however, decreased 0.3 points in 2010. Despite divergent trends in the PPR sub-component scores, the overall score underwent no net change.

The IPR score decreased for the second time since 2007. In 2008, a significant drop in the score was a result of incorporating data on copyright piracy. The piracy level in business software continues to be rampant at an estimated 90 percent of the market. In 2010, the *Protection of Intellectual Property Right* score decreased.



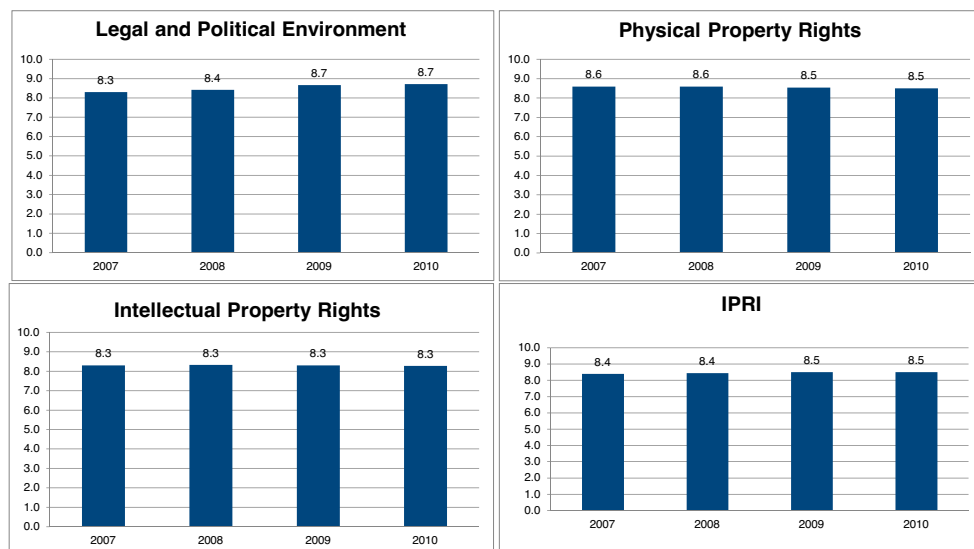
## SWEDEN

World Rank: 2 Regional Rank: 2

The IPRI score did not change in Sweden in 2010. In fact, none of the three component scores changed. Despite a lack of overall change, there were noticeable changes to the LP sub-components. *Political Stability* and *Control of Corruption* both decreased at least 0.2, but the *Judicial Independence* score experienced a 0.6 point increase. Sweden ranked third in the world in LP.

While the PPR score did not undergo a net change, there were some significant developments. The *Protection of Physical Property Rights* score increased for the second consecutive year. However, the *Access to Loans* score decreased in equal magnitude, cancelling any change to the score.

None of the IPR sub-component scores changed in 2010. In particular, copyright piracy remained at a relatively high level. The piracy in business software is estimated at 25 percent of the market.



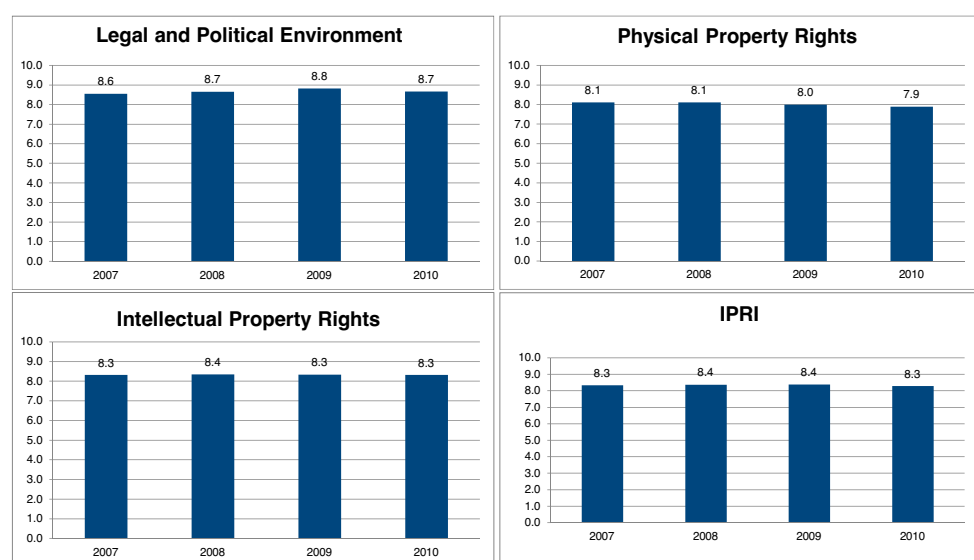
## SWITZERLAND

World Rank: 5 Regional Rank: 5

While Switzerland maintains high scores and rankings, the country's IPRI decreased slightly in 2010. Three of the four scored sub-components of LP experienced a negative change. Most notably, the *Judicial Independence* score decreased 0.3 points. Despite negative movement, Switzerland still managed to rank second in the region and third in the world for LP.

For the second consecutive year, the PPR score also decreased in 2010. The *Protection of Physical Property Rights* and *Registering Property* scores continued to rate highly. The negative trend was a result of two straight years of decreases to the *Access to Loans* score.

None of the sub-component scores for IPR changed in 2010. Switzerland shared the third highest IPR in the region and the fourth highest in the world. However, copyright piracy in business software remained at a relatively high level (estimated at 25 percent).



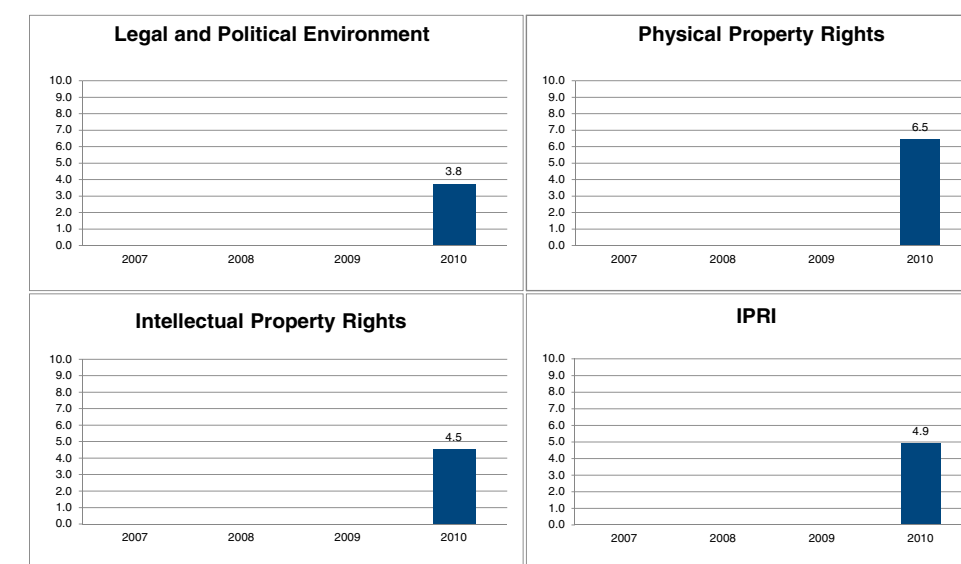
## SYRIA

World Rank: 69 Regional Rank: 13

Syria joins the IPRI for the first time. The country's LP was the weakest component with *Judicial Independence* scoring better than other sub-components.

PPR was the strongest aspect of Syria's IPRI, but the country's sub-component scores were diverse. *Access to Loans* was weak in Syria, scoring a low 2.7 points. The *Registering Property* score was comparatively high, however, at 8.9. It takes only 4 procedures and 19 days to register property in Syria.

The IPR score was based upon limited data because there were no available figures for copyright piracy. Scores from the other two sub-components suggest there is room for improvement with respect to intellectual property protection.



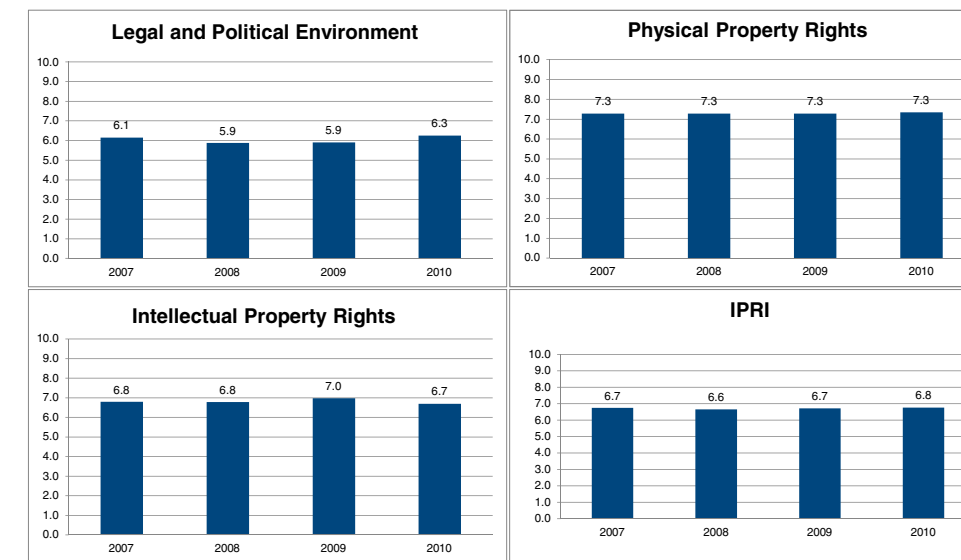
## TAIWAN

World Rank: 24 Regional Rank: 6

IPRI in Taiwan improved only slightly in 2010, but the component scores changed significantly. All LP sub-component scores increased. *Judicial Independence* and *Political Stability* both increased 0.5 points.

The PPR score has not changed since 2007. The *Access to Loans* score decreased slightly for the second consecutive year. However, the *Protection of Physical Property Rights* score improved. That sub-component's score increased for the second consecutive year.

In 2010, IPR underwent a significant decrease. However, the change is somewhat misleading. For the first time, there were no available data for piracy of music in 2010. The *Copyright Piracy* score improved in 2009, but the lack of data severely hampered the current score.



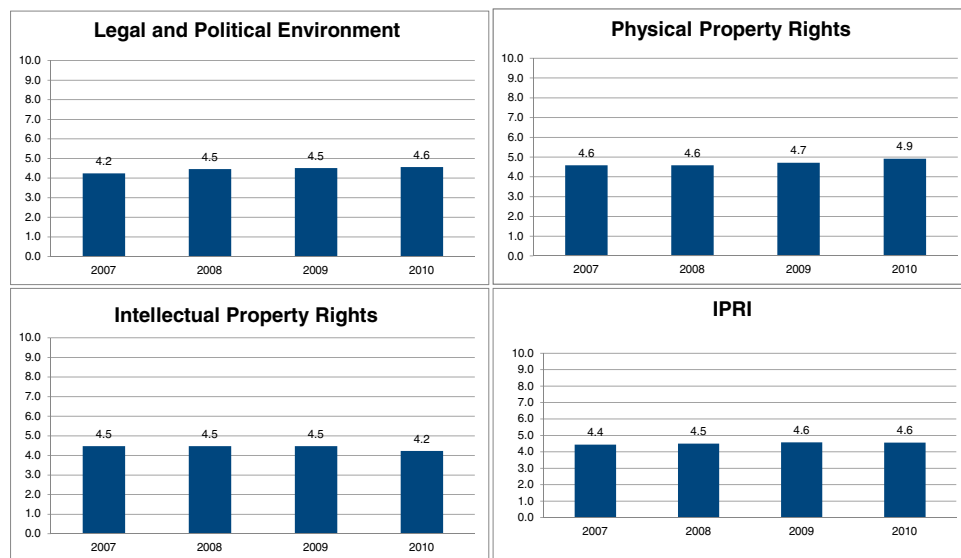
**TANZANIA**

World Rank: 75 Regional Rank: 7

After two previous years of positive development, IPRI in Tanzania remained unchanged in 2010. The LP score only increased slightly, but the sub-component scores experienced some change. The *Judicial Independence* and the *Control of Corruption* scores decreased in 2010. Conversely, the *Rule of Law* and the *Political Stability* scores increased.

The PPR score increased for the second consecutive year, despite the fact that the *Protection of Physical Property Rights* score underwent a 0.3 point decrease. Unfortunately, data for the *Registering Property* sub-component suffered from inconsistencies that inhibit direct comparisons across years for this country. Hopefully, these inconsistencies can be addressed in the future.

There were no available data for copyright piracy in Tanzania. As such, the IPR score was heavily dependent upon the *Protection of Intellectual Property Rights* score, which decreased half a point in 2010.



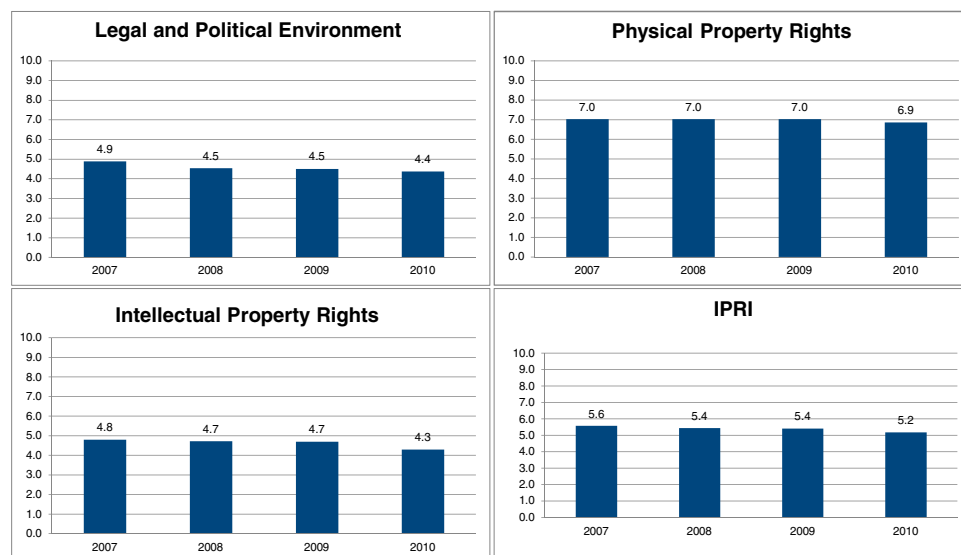
**THAILAND**

World Rank: 59 Regional Rank: 10

All three component scores in Thailand decreased in 2010. LP underwent only a modest negative change. While the *Rule of Law* and *Control of Corruption* scores increased slightly, both the *Judicial Independence* and *Political Stability* scores experienced significant decreases. Notably, the *Judicial Independence* score decreased half a point.

PPR also slightly declined in 2010. The *Protection of Physical Property Rights* score decreased for the second consecutive year. This sub-component score has fallen an entire point since 2008. In contrast, the *Access to Loans* score increased the past two years. However, registration of property is excellent and takes only 2 procedures and 2 days to complete.

The IPR score decreased 0.4 points in 2010. The *Protection of Intellectual Property Rights* score decreased for the second consecutive year, falling 0.6 in 2010. While copyright protection of business software is improving, music piracy is a growing problem. Pirated material now accounts for an estimated 65 percent of the music market.



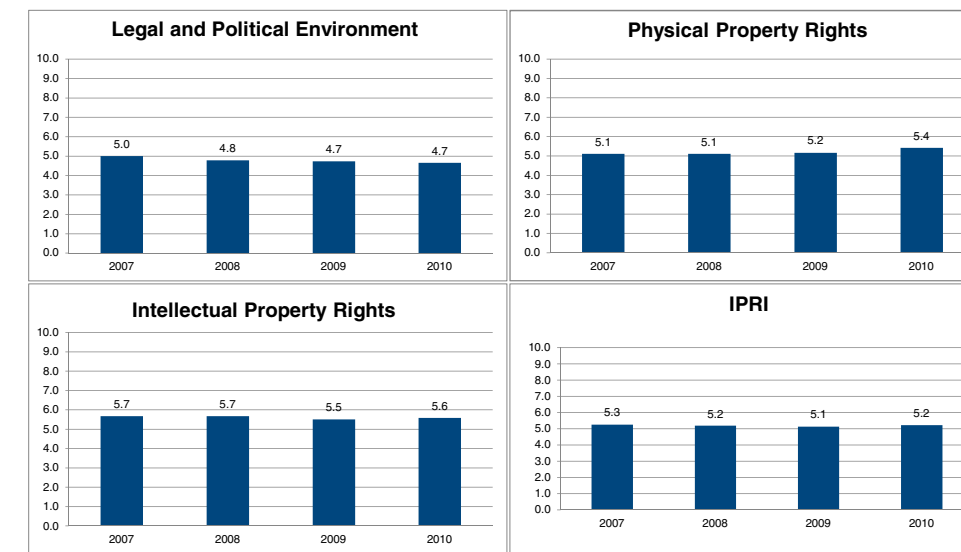
**TRINIDAD AND TOBAGO**

World Rank: 59 Regional Rank: 7

After two consecutive years of negative change, IPRI increased in 2010. The LP score did not change in 2010, but this was only a result of offsetting changes to the sub-component scores. While the *Political Stability* and *Control of Corruption* scores slightly increased, the *Judicial Independence* and the *Rule of Law* scores underwent a negative change.

The PPR score underwent a significant increase in Trinidad and Tobago. The *Registering Property* and *Protection of Physical Property Rights* scores failed to make substantial improvement. In 2010, the *Access to Loans* score changed for the first time, increasing 0.8 points.

The IPR score increased modestly in 2010. This change came as a result of improvements to expert opinion on the protection of intellectual property. The IPR score for Trinidad and Tobago ranked second in the region.



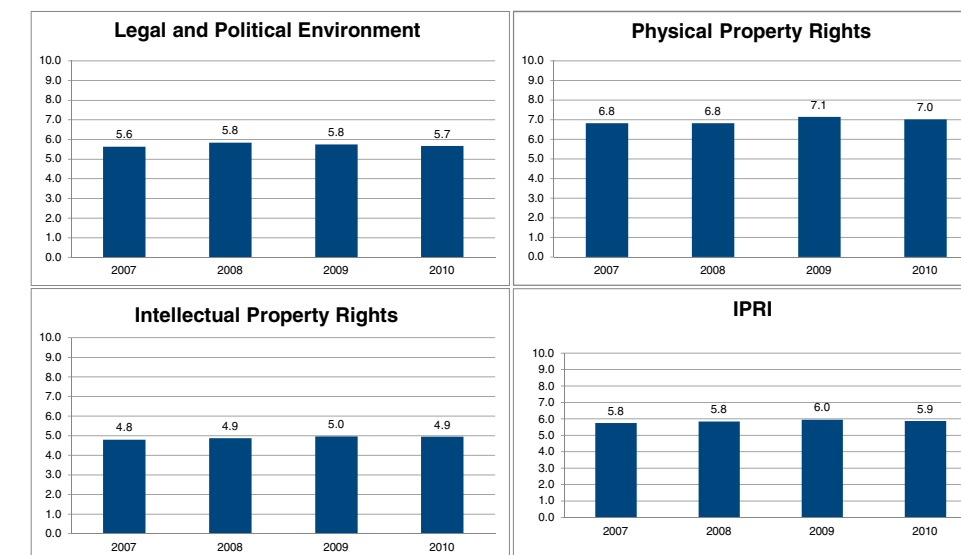
**TUNISIA**

World Rank: 46 Regional Rank: 9

IPRI decreased in 2010 in Tunisia after making some advances in 2009. All three of the component scores decreased in 2010. The *Political Stability* score increased, while the other LP sub-components decreased. Both the *Judicial Independence* and the *Control of Corruption* scores underwent a negative change of about 0.3 points.

The PPR score decreased because of significant negative changes to the *Access to Loans* score. The *Registering Property* and the *Protection of Physical Property Rights* scores both increased two consecutive years.

After two consecutive years of progress, the IPR score decreased in 2010. The *Protection of Intellectual Property Rights* sub-component decreased 0.4 points. However, the *Copyright Piracy* score has improved every year since 2007.



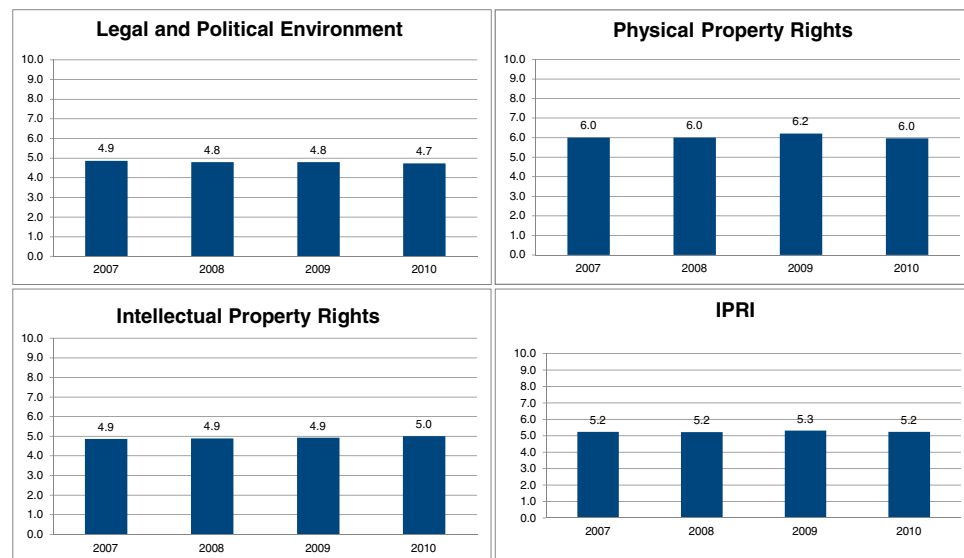
**TURKEY**

World Rank: 59 Regional Rank: 10

After showing improvement in 2009, this year IPRI in Tunisia regressed to 2008 levels. The LP score decreased because of a strong negative change to only one of the sub-components. While *Rule of Law*, *Political Stability*, and *Control of Corruption* all experienced positive change, the *Judicial Independence* score decreased dramatically. The sub-component fell 0.7 points.

The PPR score underwent similar change. The *Access to Loans* score increased for the second consecutive year. The *Protection of Physical Property Rights* score decreased an entire point.

The IPR score made only a small net change in 2010, but the individual sub-components reveal a much more complicated picture. The *Protection of Intellectual Property Rights* score decreased 0.6 points. The *Copyright Piracy* score improved 0.8 points, but this change is somewhat overstated because of a lack of reliable data for music piracy in 2010.



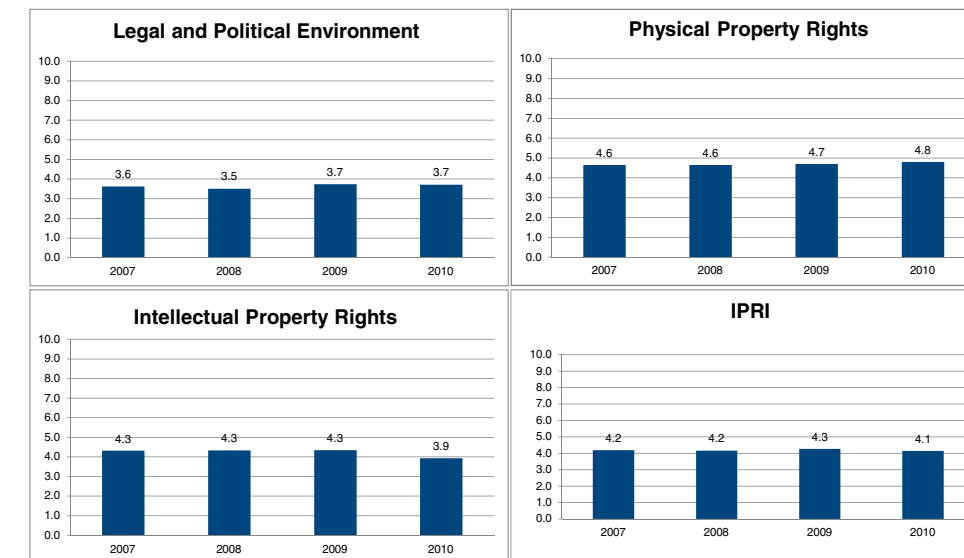
**UKRAINE**

World Rank: 97 Regional Rank: 17

IPRI decreased in the Ukraine in 2010. Two of the LP sub-components increased in 2010. *Judicial Independence* and *Rule of Law* all underwent positive changes. This progress was offset, however, by a 0.3 point decrease to the *Political Stability* score.

The PPR score was affected by changes to only one sub-component. While *Protection of Physical Property Rights* and *Registering Property* scores failed to change, the *Access to Loans* score increased for the second consecutive year.

The IPR score experienced a comparatively large decrease in 2010. The *Copyright Piracy* sub-component score decreased 1.3 points. This negative change, however, is overstated significantly because of a lack of data on copyright piracy in records and music in 2010. Copyright piracy in business software has increased only one percent since 2009.



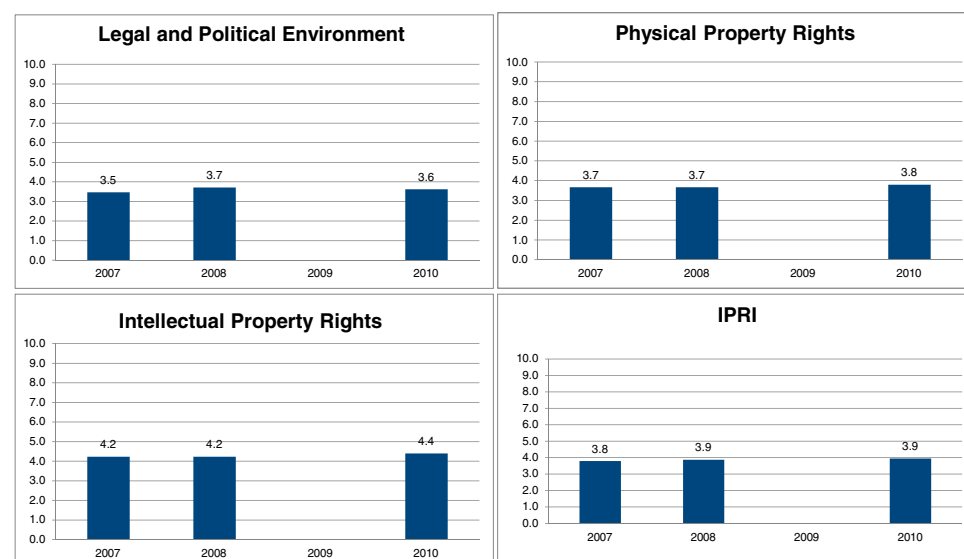
**UGANDA**

World Rank: 104 Regional Rank: 17

Uganda returned to the IPRI report after a year of absence because of a lack of necessary data.<sup>43</sup> LP has decreased slightly since 2008. *Control of Corruption* underwent a slight decrease, but *Judicial Independence* dropped 0.8 points. In the same time period, however, the *Political Stability* score increased 0.6 points.

The PPR score has remained largely unchanged since 2008, except for the *Access to Loans* score. This sub-component has increased 0.4 points since 2008. Unfortunately, Uganda's *Registering Property* score suffered because 13 procedures are required to complete property registration.

The IPR score increased since Uganda's last inclusion in the IPRI. There were no data available for copyright piracy of business software and music. The 0.4 point increase to the *Protection of Intellectual Property Rights* score accounted for the change to the overall IPR score.



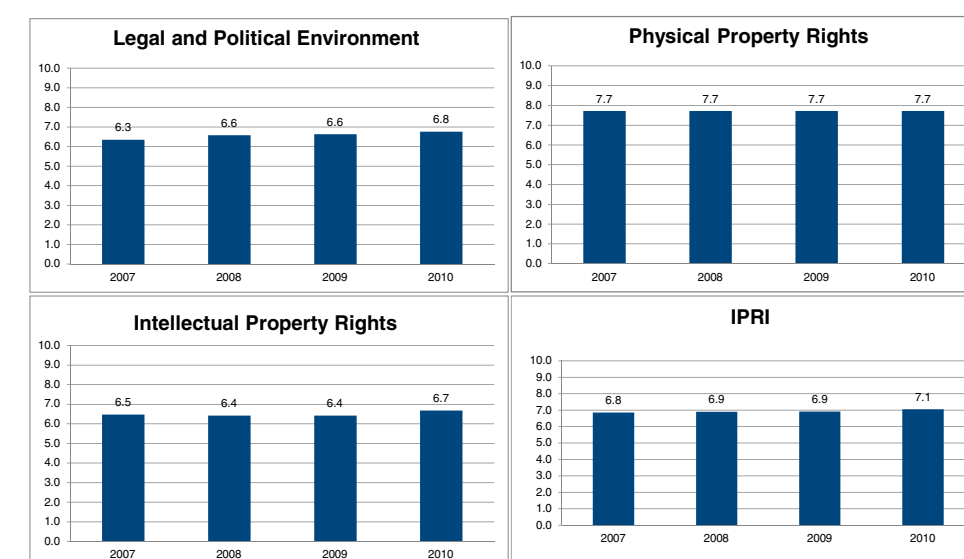
**UNITED ARAB EMIRATES**

World Rank: 22 Regional Rank: 1

IPRI increased in the United Arab Emirates in 2010. The country ranked first in IPRI in the Middle East and North Africa. The LP score increased to the highest score since 2007. Both the *Judicial Independence* and the *Rule of Law* scores increased in 2010. The United Arab Emirates enjoyed the third highest LP in the region.

Although the PPR score has not changed since the index began, there were noteworthy developments in terms of physical property rights. The *Protection of Physical Property Rights* score increased for the second consecutive year. But *Access to Loans* made an equivalent negative change in the same time frame. Because of a very strong *Registering Property* score, the United Arab Emirates rated first in the region for PPR.

IPR underwent a positive change in 2010 because the *Protection of Intellectual Property Rights* score increased 0.7 points.



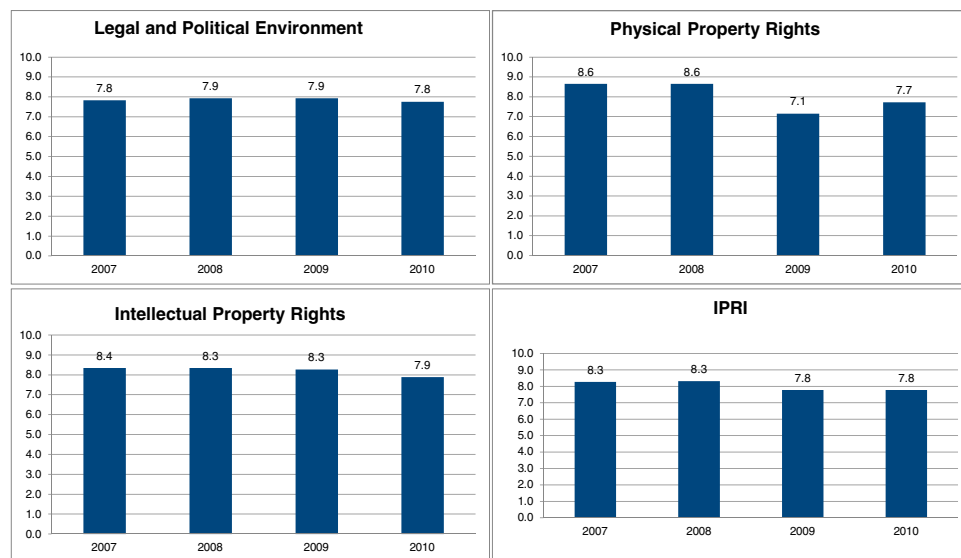
## UNITED KINGDOM

World Rank: 16 Regional Rank: 11

IPRI in 2010 did not make a net change in the United Kingdom, but its sub-components saw very large changes. The *Political Stability* score was the only sub-component of LP not to change. Other sub-components decreased. *Judicial Independence* fell 0.4 points.

The PPR score experienced considerable increases again after a sharp decrease in 2009. The *Protection of Physical Property Rights* score decreased for the second consecutive year, dropping an entire point since 2009. After a 3.8 point decrease in 2009, the *Access to Loans* score underwent another large change. It increased 2.7 points in 2010.

Negative change in the IPR score offset much of the progress made to the PPR score. The *Protection of Intellectual Property Rights* score decreased for the second consecutive year. This sub-component decreased an entire point in 2010.



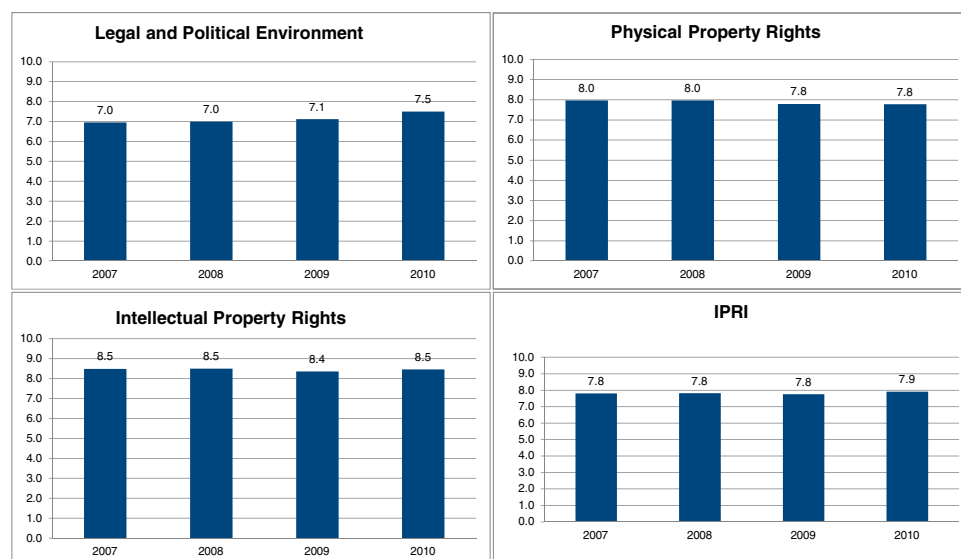
## UNITED STATES

World Rank: 15 Regional Rank: 2

For the first time, IPRI increased in the United States. This change is largely because of the LP score. All sub-components of LP increased in 2010. Both the *Judicial Independence* and *Political Stability* scores experienced a positive change of 0.6 points.

PPR was the only component score not to increase in 2010. The *Protection of Physical Property Rights* increased 0.5 points, returning to the level of 2008. The *Access to Loans* score, however, decreased for the first time. The 0.5 point decrease in this sub-component resulted in no net change to the PPR score.

Expert opinion on the protection of intellectual property rights suffered in 2009, and the IPR score decreased accordingly. The *Protection of Intellectual Property Rights* increased 0.3 in 2010, but it remained below 2008 levels. Copyright piracy levels remained the same in 2010. Pirated material of business software accounted for an estimated 20 percent of the market.



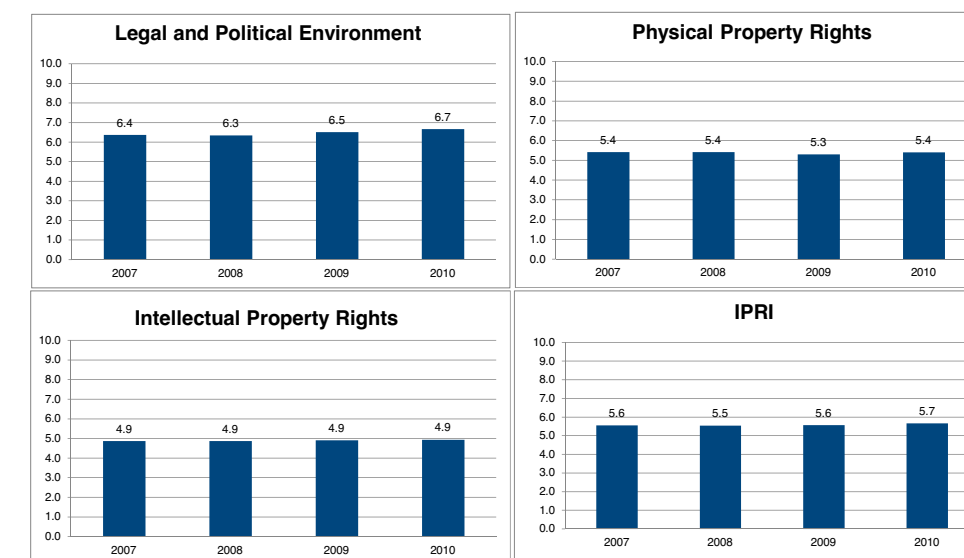
## URUGUAY

World Rank: 50 Regional Rank: 3

For the second consecutive year, IPRI increased in Uruguay. LP reached its highest score since the index began and rose for the second consecutive year. The *Judicial Independence* and the *Control of Corruption* scores both increased at least 0.3 points. The *Political Stability* score underwent a slight decrease in 2010. Uruguay enjoyed the second highest LP score in the region.

The PPR score returned to 2008 levels after negative changes in 2009. Both the *Access to Loans* and *Protection of Intellectual Property Rights* scores increased.

Although the IPR score did not undergo a net change in 2010, *Protection of Intellectual Property Rights* increased slightly for the first time.



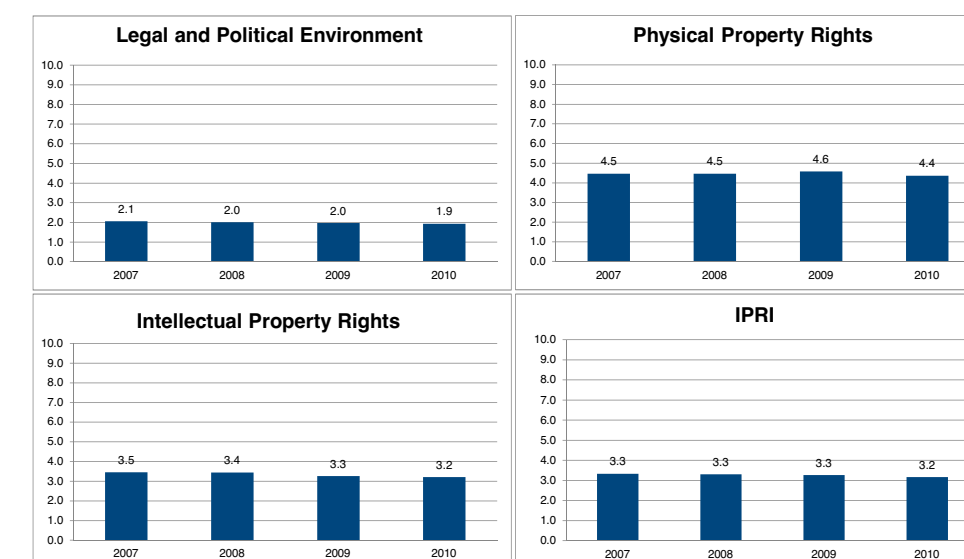
## VENEZUELA

World Rank: 121 Regional Rank: 22

Venezuela ranked among the worst in the world in terms of IPRI in 2010. All three components decreased. Venezuela suffered from the lowest LP score in Latin America and the world. The *Rule of Law* and the *Control of Corruption* score both decreased in 2010. Despite the fact that *Judicial Independence* increased 0.3 points, Venezuela continued to have the lowest *Judicial Independence* score in the world.

The PPR score remained the strongest of the three components in Venezuela. The *Access to Loans* score decreased 0.5 points in 2010. The *Protection of Physical Property Rights* score decreased for the second consecutive year. Venezuela was noteworthy, however, for enjoying a comparatively high *Registering Property* score of 7.7 points.

The IPR score has decreased every year since the index began. The *Protection of Intellectual Property Rights* score decreased for the second consecutive year.





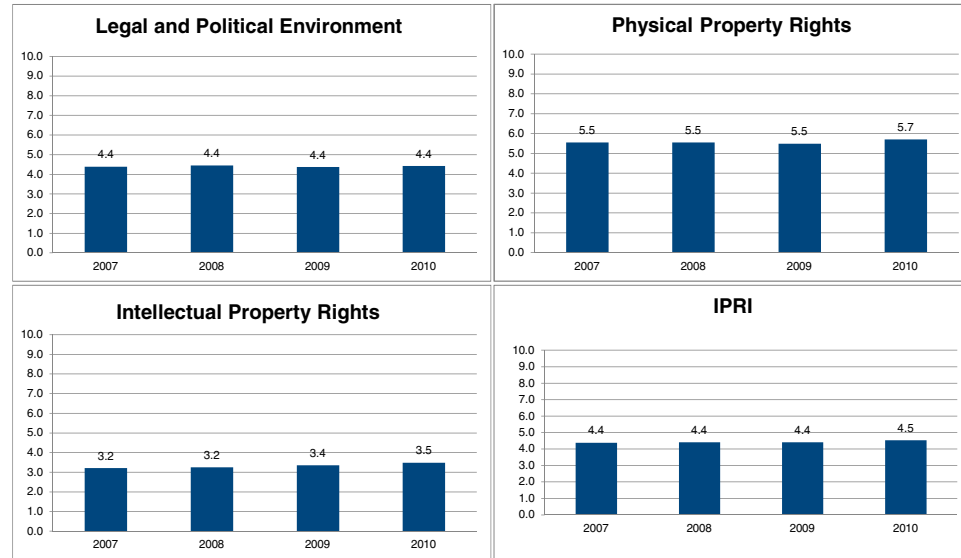
**VIETNAM**

World Rank: 80 Regional Rank: 13

In 2010, IPRI in Vietnam underwent a positive net change. The LP score, however, did not change. The *Judicial Independence* score has increased every year since 2007.

All three sub-components of the PPR score increased in 2010. The *Access to Loans* score increased for the second consecutive year. The waiting period for registering property also was reduced from 67 to 57 days. Importantly, the *Protection of Physical Property Rights* score experienced significant improvement.

IPR increased for the second consecutive year. The *Protection of Intellectual Property Rights* score increased 0.4 points in 2010. Copyright piracy remains to be a considerable problem in Vietnam, as pirated material is estimated to account for 85 percent of the business software and 95 percent of the music market.



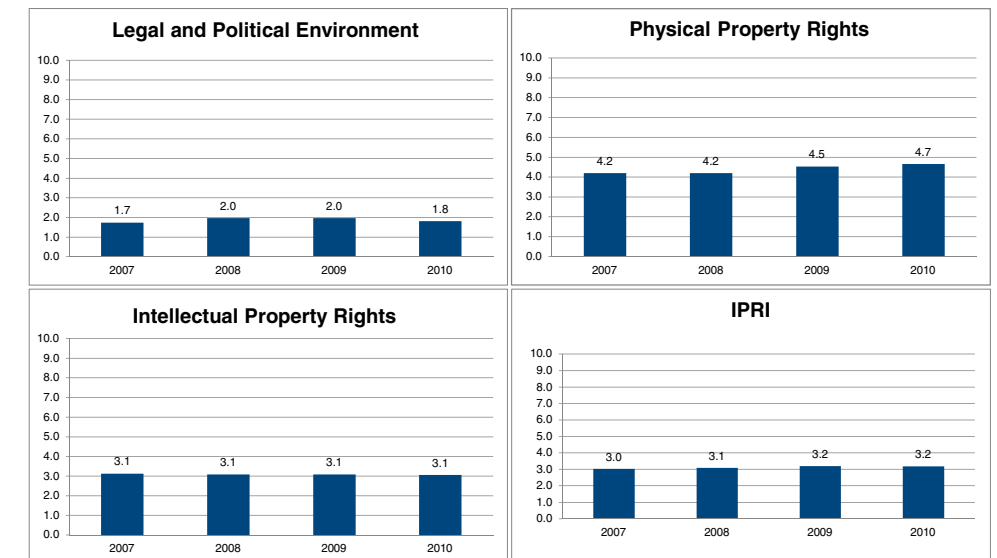
**ZIMBABWE**

World Rank: 121 Regional Rank: 21

Zimbabwe suffers from one of the lowest IPRI scores in the world. The LP score decreased in 2010. While the *Judicial Independence* score increased, the other sub-components of LP all underwent negative changes. Most notable was a 0.5 point decrease to the *Political Stability* score.

PPR increased for the second consecutive year. This change came as a result of consistent improvement to the *Access to Loans* scores. Zimbabwe's strongest sub-component was *Registering Property*, which has scored at 8.8 since 2007.

The IPR score for Zimbabwe was tied for worst in the region. Little has changed since data became available in 2007. Copyright protection is very weak, as an estimated 92 percent of the business software in Zimbabwe is pirated. The *Copyright Piracy* score ties for second worst in the index.



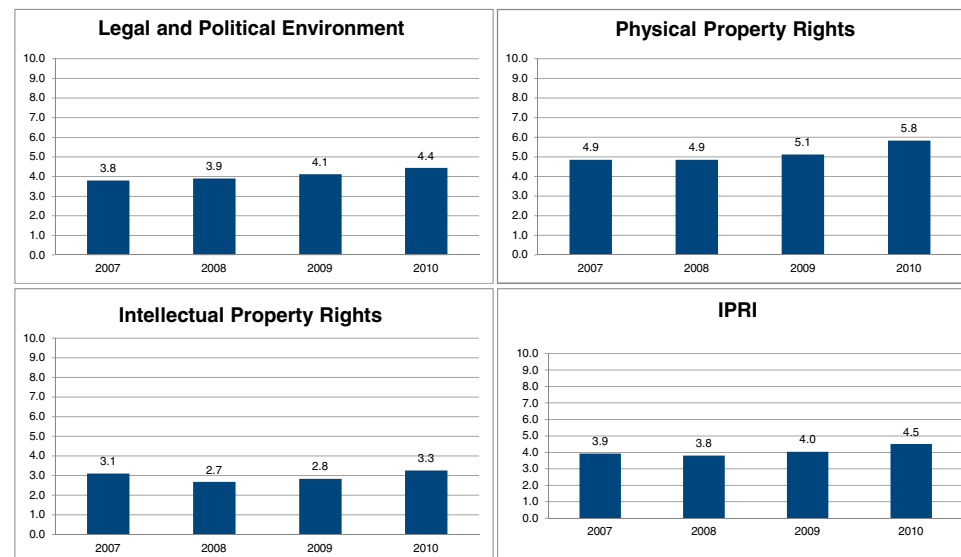
**ZAMBIA**

World Rank: 80 Regional Rank: 10

IPRI and all three component scores increased for the second consecutive year. LP also experienced improvement to each of its sub-components. Most notably, the *Judicial Independence* score increased 0.7 points in 2010. This score has risen 1.3 points since 2008.

The PPR score also increased dramatically. The *Registering Property* score increased 0.5 points. The waiting period to register property was reduced from 70 to 39 days in 2010. Zambia enjoyed the fifth highest PPR score in the region.

The IPR score changed again as a result of improving expert opinion on the protection of intellectual property. The *Protection of Intellectual Property Rights* increased 1.8 since 2008. Copyright piracy continued to be a problem, and this sub-component score has not changed since data became available in 2008.



## APPENDIX II: DETAILED METHODOLOGY AND DATA SOURCE INFORMATION

### LP Sources

Variable Name	Original Scale	Data Modifications	Year	Number of Countries	Source	Detailed Information about Data Source
Judicial Independence	1 = no, heavily influenced; 7 = yes, entirely independent	The original data was rescaled to a scale of 0 - 10.	2008-2009	134	World Economic Forum - Global Competitiveness Report <a href="http://gcr.weforum.org/">http://gcr.weforum.org/</a>	The ranking reflects experts' answers to the survey question: "Is the judiciary in your country independent from political influence of members of government, citizens or firms?"
Rule of Law	-2.5 (worst) - 2.5 (best)	The original data was rescaled to a scale of 0 - 10.	2008	212	World Bank Institute - Governance Matters 2009: Worldwide Governance Indicators, 1996-2008 <a href="http://info.worldbank.org/governance/wgi/index.asp">http://info.worldbank.org/governance/wgi/index.asp</a>	Combines several indicators including judicial independence, respect for law in relations between citizens and the administration, property rights, confidence in the police force, enforceability of contracts, direct financial fraud, law and order, which measure the existence of the rule of law.
Political Stability	-2.5 (worst) - 2.5 (best)	The original data was rescaled to a scale of 0 - 10.	2008	212	World Bank Institute - Governance Matters 2009: Worldwide Governance Indicators, 1996-2008 <a href="http://info.worldbank.org/governance/wgi/index.asp">http://info.worldbank.org/governance/wgi/index.asp</a>	Combines several indicators which measure perceptions of the likelihood that the government in power will be destabilized or overthrown by possibly unconstitutional and/or violent means, including domestic violence and terrorism.
Control of Corruption	-2.5 (worst) - 2.5 (best)	The original data was rescaled to a scale of 0 - 10.	2008	212	World Bank Institute - Governance Matters 2009: Worldwide Governance Indicators, 1996-2008 <a href="http://info.worldbank.org/governance/wgi/index.asp">http://info.worldbank.org/governance/wgi/index.asp</a>	Combines several indicators which measure the extent to which public power is exercised for private gain, including petty and grand forms of corruption, as well as "capture" of the state by elites and private interests.

### PPR Sources

Variable Name	Original Scale	Data Modifications	Year	Number of Countries	Source	Detailed Information about Data Source
Property Rights	1 (worst) - 7 (best)	The original data was rescaled to a scale of 0 - 10.	2008-2009	134	World Economic Forum - Global Competitiveness Report <a href="http://gcr.weforum.org">http://gcr.weforum.org</a>	Survey participants were asked to comment on: Property rights in your country, including over financial assets, are (1 = poorly defined and not protected by law, 7 = clearly defined and well protected by law).
Registering Property	Actual Number	The variable is a weighted average of the source's "Procedures to register property" and "Days to register property" data, with 30% of the weight given to the former and 70% to the latter. The actual numbers were standardized to a 0-10 scale.	2009	181	The World Bank Group - Doing Business 2009 <a href="http://www.doingbusiness.org">www.doingbusiness.org</a>	Number of procedures legally required to register property and time spent (in days) in completing the procedures. This indicator assumes a standard case of an entrepreneur who wants to purchase land and a building in the largest business city.
Ease of Access to Loans	1 (worst) - 7 (best)	The original data was rescaled to a scale of 0 - 10.	2008-2009	134	World Economic Forum - Global Competitiveness Report <a href="http://gcr.weforum.org">http://gcr.weforum.org</a>	Survey participants were asked: "How easy is it to obtain a bank loan in your country with only a good business plan and no collateral? (1 = impossible, 7 = easy)"

### IPR Sources

Variable Name	Original Scale	Data Modifications	Year	Number of Countries	Source	Detailed Information about Data Source
Intellectual Property Protection	1 (worst) - 7 (best)	The original data was rescaled to a scale of 0 - 10.	2008-2009	134	World Economic Forum - Global Competitiveness Report <a href="http://gcr.weforum.org">http://gcr.weforum.org</a>	Survey participants were asked to comment on: "Intellectual property protection and anti-counterfeiting measures in your country are (1 = weak and not enforced, 7 = strong and enforced)."
Patent Protection	0 (worst) - 5 (best)	The original data was rescaled to a scale of 0 - 10.	2005	122	Ginarte-Park Index of Patent Rights. <a href="http://www1.american.edu/cas/econ/faculty/park/Web%20Page%20Update%2010-08/IPP%20Data.xls">www1.american.edu/cas/econ/faculty/park/Web%20Page%20Update%2010-08/IPP%20Data.xls</a> For more information, see Ginarte & Park (1997).	A country's rank in patent strength is based on five extensive criteria: coverage, membership in international treaties, restrictions on patent rights, enforcement, and duration of protection.
Copyright Piracy Level	Percentage	Calculation per industry: $(100 - V_i)/10$ . The average of all industries' piracy level was taken to calculate final rescaled value.	2008	110	International Intellectual Property Alliance's Special 301 Report submitted to the U.S. Trade Representative <a href="http://www.iipa.com/2009_SPEC301_TOC.htm">www.iipa.com/2009_SPEC301_TOC.htm</a> . Additional data was obtained from Sixth Annual BSA and IDC Global Software Piracy Study <a href="http://global.bsa.org/global_piracy2008/index.html">http://global.bsa.org/global_piracy2008/index.html</a> .	Special 301 is an annual review process used in fighting international copyright piracy. It starts with the submission of public comments, of which IIPA's annual report is one of the most extensive and useful in terms of data.

## GE Sources

Variable Name	Original Scale	Data Modifications	Year	Number of Countries	Source	Detailed Information about Data Source
Women's Access to Land Ownership	0 (best) 0.5 (average) 1 (worst)	The original data was rescaled to a scale of 0 - 10.	2009	124	OECD Gender, Institutions and Development Database (GID-DB) <a href="http://www.oecd.org/dev/gender/gid">http://www.oecd.org/dev/gender/gid</a>	The GID-DB covers an array of 60 indicators on gender discrimination. The database has been compiled using a variety of sources.
Women's Access to Bank Loans	0 (best) 0.5 (average) 1 (worst)	The original data was rescaled to a scale of 0 - 10.	2009	124	OECD Gender, Institutions and Development Database (GID-DB) <a href="http://www.oecd.org/dev/gender/gid">http://www.oecd.org/dev/gender/gid</a>	The GID-DB covers an array of 60 indicators on gender discrimination. The database has been compiled using a variety of sources.
Women's Access to Property Other than land	0 (best) 0.5 (average) 1 (worst)	The original data was rescaled to a scale of 0 - 10.	2009	124	OECD Gender, Institutions and Development Database (GID-DB) <a href="http://www.oecd.org/dev/gender/gid">http://www.oecd.org/dev/gender/gid</a>	The GID-DB covers an array of 60 indicators on gender discrimination. The database has been compiled using a variety of sources.
Inheritance Practices	0 (best) 0.5 (average) 1 (worst)	The original data was rescaled to a scale of 0 - 10.	2009	124	OECD Gender, Institutions and Development Database (GID-DB) <a href="http://www.oecd.org/dev/gender/gid">http://www.oecd.org/dev/gender/gid</a>	The GID-DB covers an array of 60 indicators on gender discrimination. The database has been compiled using a variety of sources.
Women's Social Rights	0 (best) 0.5 (average) 1 (worst)	This component of the gender equality indicator is a simple composite of four variables in the GID-DB. The original data of each variable was rescaled to a scale of 0 - 10 and then averaged to determine this score.	2009	124	OECD Gender, Institutions and Development Database (GID-DB) <a href="http://www.oecd.org/dev/gender/gid">http://www.oecd.org/dev/gender/gid</a>	The four components comprising this variable are: Parental Authority, Female Genital Mutilation, Freedom of Movement, and Ratio of Female to Male Adult Literacy.

APPENDIX III:  
REGIONAL DIVISION OF COUNTRIES

Region	Country	Region	Country
Africa	Benin	Asia and Oceania	Malaysia
Africa	Botswana	Asia and Oceania	Nepal
Africa	Burkina Faso	Asia and Oceania	New Zealand
Africa	Burundi	Asia and Oceania	Pakistan
Africa	Cameroon	Asia and Oceania	Philippines
Africa	Chad	Asia and Oceania	Singapore
Africa	Ethiopia	Asia and Oceania	Sri Lanka
Africa	Ghana	Asia and Oceania	Taiwan
Africa	Côte d'Ivoire	Asia and Oceania	Thailand
Africa	Kenya	Asia and Oceania	Vietnam
Africa	Madagascar	Central/Eastern Europe and Central Asia	Albania
Africa	Malawi	Central/Eastern Europe and Central Asia	Armenia
Africa	Mali	Central/Eastern Europe and Central Asia	Azerbaijan
Africa	Mauritania	Central/Eastern Europe and Central Asia	Bosnia and Herzegovina
Africa	Mauritius	Central/Eastern Europe and Central Asia	Bulgaria
Africa	Mozambique	Central/Eastern Europe and Central Asia	Croatia
Africa	Nigeria	Central/Eastern Europe and Central Asia	Czech Republic
Africa	Senegal	Central/Eastern Europe and Central Asia	Estonia
Africa	South Africa	Central/Eastern Europe and Central Asia	Georgia
Africa	Tanzania	Central/Eastern Europe and Central Asia	Hungary
Africa	Uganda	Central/Eastern Europe and Central Asia	Kazakhstan
Africa	Zambia	Central/Eastern Europe and Central Asia	Kyrgyz Republic
Africa	Zimbabwe	Central/Eastern Europe and Central Asia	Latvia
Asia and Oceania	Australia	Central/Eastern Europe and Central Asia	Lithuania
Asia and Oceania	Bangladesh	Central/Eastern Europe and Central Asia	Macedonia
Asia and Oceania	Brunei	Central/Eastern Europe and Central Asia	Moldova
Asia and Oceania	China	Central/Eastern Europe and Central Asia	Montenegro
Asia and Oceania	Hong Kong	Central/Eastern Europe and Central Asia	Poland
Asia and Oceania	India	Central/Eastern Europe and Central Asia	Romania
Asia and Oceania	Indonesia	Central/Eastern Europe and Central Asia	Russia
Asia and Oceania	Japan	Central/Eastern Europe and Central Asia	Serbia
Asia and Oceania	South Korea	Central/Eastern Europe and Central Asia	Slovakia

Region	Country
Central/Eastern Europe and Central Asia	Slovenia
Central/Eastern Europe and Central Asia	Turkey
Central/Eastern Europe and Central Asia	Ukraine
Latin America and Caribbean	Argentina
Latin America and Caribbean	Bolivia
Latin America and Caribbean	Brazil
Latin America and Caribbean	Chile
Latin America and Caribbean	Colombia
Latin America and Caribbean	Costa Rica
Latin America and Caribbean	Dominican Republic
Latin America and Caribbean	Ecuador
Latin America and Caribbean	El Salvador
Latin America and Caribbean	Guatemala
Latin America and Caribbean	Guyana
Latin America and Caribbean	Honduras
Latin America and Caribbean	Jamaica
Latin America and Caribbean	Mexico
Latin America and Caribbean	Nicaragua
Latin America and Caribbean	Panama
Latin America and Caribbean	Paraguay
Latin America and Caribbean	Peru
Latin America and Caribbean	Puerto Rico
Latin America and Caribbean	Trinidad and Tobago
Latin America and Caribbean	Uruguay
Latin America and Caribbean	Venezuela
Middle East and North Africa	Algeria
Middle East and North Africa	Bahrain
Middle East and North Africa	Cyprus
Middle East and North Africa	Egypt
Middle East and North Africa	Israel

Region	Country
Middle East and North Africa	Jordan
Middle East and North Africa	Kuwait
Middle East and North Africa	Libya
Middle East and North Africa	Morocco
Middle East and North Africa	Oman
Middle East and North Africa	Qatar
Middle East and North Africa	Saudi Arabia
Middle East and North Africa	Syria
Middle East and North Africa	Tunisia
Middle East and North Africa	United Arab Emirates
North America	Canada
North America	United States
Western Europe	Austria
Western Europe	Belgium
Western Europe	Denmark
Western Europe	Finland
Western Europe	France
Western Europe	Germany
Western Europe	Greece
Western Europe	Iceland
Western Europe	Ireland
Western Europe	Italy
Western Europe	Luxembourg
Western Europe	Malta
Western Europe	Netherlands
Western Europe	Norway
Western Europe	Portugal
Western Europe	Spain
Western Europe	Sweden
Western Europe	Switzerland
Western Europe	United Kingdom

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### Endnotes

- <sup>1</sup> For more information on the fellowship, see <http://www.propertyrightsalliance.org/hernando-soto-fellowship-program-a2865>
- <sup>2</sup> A detailed description of all changes performed to the previous' years data is available from the authors by request.
- <sup>3</sup> As cited at <http://www.isil.org/resources/quotes-liberty.html>
- <sup>4</sup> Universal Declaration of Human Rights, Article 17. Available at <http://www.un.org/en/documents/udhr/>
- <sup>5</sup> Working Group on Property Rights. (2008). Empowering the poor through property rights. In *Making the law work for everyone*. Volume II, United Nations Development Programme, 25-42. New York: Commission on Legal Empowerment of the Poor.
- <sup>6</sup> As defined by the World Intellectual Rights Organization (WIPO) at <http://www.wipo.int/about-ip/en/>
- <sup>7</sup> The readers are also reminded that minor changes to the 2009 data resulting from efforts to ensure time-series consistency of the IPRI scores have also impacted some of the rankings that were initially reported in the 2009 IPRI report. Therefore, those interested in comparing the rankings changes from 2009 to 2010 are welcome to explore the IPRI data available upon request.
- <sup>8</sup> The GDP per capita income data is from the World Development Indicators Online (2009).
- <sup>9</sup> The FDI inflows data is from the World Development Indicators Online (2009). Please note that data on Luxembourg was removed from the dataset. Luxembourg's FDI inflows as a percent of GDP averaged 327 percent over 2005-2007 which is more than 8 times higher than the highest percentage among all other countries. Thus, Luxembourg presents a clear outlier removing which is necessary for this analysis.
- <sup>10</sup> In 2005, Ireland experienced a negative flow of FDI in the amount of 15.2 percent of GDP. The average GDP inflow in the country in the five years prior to that was 13.6 percent.
- <sup>11</sup> The GDP growth data is from the World Development Indicators Online (2009). Developing countries are defined as low-income and lower-middle income countries, according to the World Bank country classification available at <http://go.worldbank.org/K2CKM78CC0>. In total, 50 countries were classified as developing. Additionally, data on GDP growth for Azerbaijan were excluded from analysis. Azerbaijan experienced unusually high GDP growth rates in the period under study, averaging 24.2 percent, while the growth rate for five years prior to that was only 10.6 percent.

<sup>12</sup> See interviews with Mr. Noel Álvarez, Chairman of FEDECÁMARAS, and Alfredo Padilla, Director of Popular Economy at Instituto de Altos Estudios Sindicales INAESIN, *El Universal* newspaper, 08/18/09 and 08/29/09 editions.

<sup>13</sup> See <http://www.cedice.org.ve/detalle.asp?id=2993> for an update.

<sup>14</sup> The developments described here are current as of November 2009.

<sup>15</sup> The case study is an update and elaboration of an earlier article by the author published on Cafebabel.com in March 2009.

<sup>16</sup> In one case, the social rights score actually exceeded the 0-10 scale. Jamaica's score for social rights was 10.3 because the adult literacy rate for females is higher than for males (the ratio is 11.3). The authors have decided to top code this score to 10.0. Not modifying the score would have resulted in Jamaica being ranked higher than the rest of the countries with otherwise perfect gender equality scores. Top coding results in a very minor change in the overall gender equality score (from 8.1 to 8.0). Other countries with a literacy ratio slightly over 10 that did not cause their social rights score to be over 10.0 were not top coded.

<sup>17</sup> "Southeast Europe" is defined here as the former Yugoslav Republics, Bulgaria, Romania, and Greece.

<sup>18</sup> Lowe, C. (2009, April 27). Algerian president leaves government unchanged. *Reuters*. Retrieved from <http://uk.reuters.com/article/idUKLR75664520090427>

<sup>19</sup> Please note that changes in the IPRI score were reported previously in the 2008 and 2009 reports, but those changes were because of the changes in the methodology used to normalize the *Registering Property* data. When a consistent methodology is applied, the score remains unchanged across years until 2010.

<sup>20</sup> Bolivia votes for a new constitution. (2009, January 26). *Economist*. Retrieved from [http://www.economist.com/world/americas/displaystory.cfm?story\\_id=13007784&fsrc=rss&source=login\\_payBarrier](http://www.economist.com/world/americas/displaystory.cfm?story_id=13007784&fsrc=rss&source=login_payBarrier)

<sup>21</sup> Palmer, D. (2009, April 30). China, Russia, Canada top copyright pirates – USTR. *Reuters UK*. Retrieved from <http://uk.reuters.com/article/idUKWEQ00094320090430>

<sup>22</sup> More detailed information is available at the Intellectual Property Protection in China website at <http://int.ipr.gov.cn/en/index.shtml>

<sup>23</sup> Palmer, D. (2009, October 14). U.S. trade deals could languish for another year. *Reuters*. Retrieved from <http://www.reuters.com/article/politicsNews/idUSTRE59D58A20091014>

<sup>24</sup> 2009 Special 301 Report. (2009). *U.S. Trade Representative*. Retrieved from <http://www.ustr.gov/about-us/press-office/reports-and-publications/2009/2009-special-301-report>

<sup>25</sup> Barris, M. (2009, March 17). S&P cuts Croatia's long-term local currency rating. *Wall Street Journal*. Retrieved from <http://online.wsj.com/article/SB123722646233244721.html?mod=googlewsj>

<sup>26</sup> 2009 Special 301 Report. (2009). *U.S. Trade Representative*. Retrieved from <http://www.ustr.gov/about-us/press-office/reports-and-publications/2009/2009-special-301-report>

<sup>27</sup> Dominican Republic-Central America-United States Free Trade Agreement

<sup>28</sup> 2009 Special 301 Report. (2009). *U.S. Trade Representative*. Retrieved from <http://www.ustr.gov/about-us/press-office/reports-and-publications/2009/2009-special-301-report>

<sup>29</sup> Ibid.

<sup>30</sup> Sayer, P. (2009, September 22). French parliament approves 'three-strikes' anti-piracy law. *PC World*. Available at [http://www.pcworld.com/businesscenter/article/172389/french\\_parliament\\_approves\\_threestrikes\\_antipiracy\\_law.html](http://www.pcworld.com/businesscenter/article/172389/french_parliament_approves_threestrikes_antipiracy_law.html)

<sup>32</sup> 2009 Special 301 Report. (2009). *U.S. Trade Representative*. Retrieved from <http://www.ustr.gov/about-us/press-office/reports-and-publications/2009/2009-special-301-report>

<sup>32</sup> Dominican Republic-Central America-United States Free Trade Agreement

<sup>33</sup> 2009 Special 301 Report. (2009). *U.S. Trade Representative*. Retrieved from <http://www.ustr.gov/about-us/press-office/reports-and-publications/2009/2009-special-301-report>

<sup>34</sup> Intellectual property protection awareness up: 96 percent. (2009, February 19). *International Business Times*. Retrieved from [http://www.ibtimes.com.hk/articles/20090219/intellectual-property-protection-awareness-hongkong\\_all.htm](http://www.ibtimes.com.hk/articles/20090219/intellectual-property-protection-awareness-hongkong_all.htm)

<sup>35</sup> 2009 Special 301 Report. (2009). *U.S. Trade Representative*. Retrieved from <http://www.ustr.gov/about-us/press-office/reports-and-publications/2009/2009-special-301-report>

<sup>36</sup> Forelle, Charles. (2008, October). Iceland risks bankruptcy, leader says. *Wall Street Journal*. Retrieved from <http://online.wsj.com/article/SB122331879240408481.html?mod=googlewsj>

<sup>37</sup> Gergely, A, & Smith, K. (2008, September 30). Ireland guarantees all bank deposits. *Reuters*. Retrieved from <http://www.reuters.com/article/rbssFinancialServicesAndRealEstateNews/idUSLU10363120080930?pageNumber=1&virtualBrandChannel=0>

<sup>38</sup> 2009 Special 301 Report. (2009). *U.S. Trade Representative*. Retrieved from <http://www.ustr.gov/about-us/press-office/reports-and-publications/2009/2009-special-301-report>

<sup>39</sup> Ibid.

<sup>40</sup> Malawi's IPRI scores were mistakenly reported in the 2009 IPRI report. The country did not qualify to be included in the IPRI that year as it was missing more than half of the sub-components in the IPR component.

<sup>41</sup> Bowring, P. (2008, April 18). Malaysian hopes and fears. *New York Times*. Retrieved from <http://www.nytimes.com/2008/04/18/opinion/18iht-edbowring.1.12136831.html>

<sup>42</sup> 2009 Special 301 Report. (2009). *U.S. Trade Representative*. Retrieved from <http://www.ustr.gov/about-us/press-office/reports-and-publications/2009/2009-special-301-report>

<sup>43</sup> Uganda's IPRI scores were mistakenly reported in the 2009 IPRI report. The country did not qualify to be included in the IPRI that year as it was missing more than half of the sub-components in the IPR component.



The *International Property Rights Index* (IPRI) is the flagship publication of the Property Rights Alliance (PRA). The PRA is committed to promoting property rights around the world. The IPRI is an annual comparative study that aims to quantify the strength of property rights – both physical and intellectual – and to rank countries accordingly. The IPRI report demonstrates the link between property rights protection and economic development. The 2010 edition contains the ranking of 125 economies, which represents 97 percent of the world GDP.

The 2010 edition contains the IPRI rankings, rankings by IPRI core components, regional distribution of IPRI scores, and changes in IPRI scores since 2009. The 2010 edition for the first time features individual country profiles, which provide the historic progression of IPRI scores and their components, point to any advances or regressions, and show strong or weak aspects of countries' property rights. Additionally, to account for gender-based disparities existing in property rights in developing countries, a separate chapter is focused on gender equality. It is complemented by a case study on women's rights to land in Uganda.

The 2010 report features a variety of case studies on physical and intellectual property rights contributed by IPRI partner organizations. The case studies highlight developments in property rights in various regions of the world to provide clear and compelling evidence for the positive role that property rights play in economic development. The case studies in the 2010 IPRI include the following: Land Titling in South Africa, Expropriation for Economic Development in Canada, Private Property Abolition in Venezuela, Intellectual Property Rights in Mexico, Compulsory Licensing and Mitigation Technologies, and The Pirate Code on Trial in Sweden.

In its effort to produce the IPRI, PRA has secured the support of 62 think tanks and policy organizations in 51 countries involved in research, policy development, education, and promotion of property rights in their countries. The IPRI provides an international platform to highlight its partners' efforts to advance physical and intellectual property rights grounded in a strong legal framework and effective enforcement.

The 2010 IPRI serves as a tool for policy makers, think tanks, academics, business leaders, and other parties interested in promoting the protection of property rights and economic development.

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