INTERNATIONAL PROPERTY RIGHTS INDEX

# 2011 REPORT

Study conducted by Kyle A. Jackson, 2010 Hernando de Soto Fellow
with contributions by:
Marius Doksheim, Joseph Quesnel, Krishna Neupane
Marcos Hidding Ohlson, Martin Krause and Nicole Alpert

PROPERTY RIGHTS ALLIANCE

A Project of the Property Rights Alliance

# 2010 IPRI PARTNER ORGANIZATIONS

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Americans for Tax Reform Foundation (ATRF) performs research and analysis in order to educate taxpayers on the true causes and effects of legislation and regulatory affairs. ATRF's efforts inform debate, initiate conversation, and emphasize the importance of fundamental tax reform and spending restraint. In turn, Americans for Tax Reform (ATR), a 501(c)4 non-profit lobbying organization, uses this research and analysis to track initiatives beyond the traditional tax increase model. In addition to the *International Property Rights Index*, ATRF also produces and publishes the *Cost of Government Day® Report* and the *Index of Worker Freedom*.

Property Rights Alliance (PRA), an affiliate of Americans for Tax Reform, stands as an advocacy organization dedicated to the protection of physical and intellectual property rights, both domestically and internationally.

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# Table of Contents

Letter from Hernando de Soto ....3
Letter from the Executive Director of the Property Rights Alliance ....4
Foreword by Richard E. Wagner....5
Acknowledgements....7
Premise of the Hernando de Soto Fellowship Program ....8
About the Author....8
About the Contributors....8
About the 2011 International Property Rights Index ....10
Partners....11

Chapter I: **INTRODUCTION**....19
Chapter II: **PROPERTY RIGHTS AND ECONOMIC DEVELOPMENT**....20
Chapter III: **INDEX COMPOSITION AND COVERAGE** ....21
Chapter IV: **RESULTS**....27
**IPRI Ranking**....27
**Ranking by Index Core Components**....32
**Changes in Scores (2009–2010)** ....32
**Regional Distribution of IPRI** ....40
**IPRI and Economic Outcomes**....41
**Regression Analysis**....48
**Conclusion** ....48

Chapter V: **CASE STUDIES** ....49

**Immigration and Property**....49
*By Marius Doksheim*

**Creating Indigenous Property Rights: The Nisga'a Landholding Transition Act** ....52
*By Joseph Quesnel*

**A Half Century of Land Reform: Nepal's Experience** ....55
*By Krishna Neupane*

**The Coase Theorem and Informal Property Rights**....58
*By Marcos Hidding Ohlson and Martin Krause*

**Preservation vs. Property Rights in Hong Kong** ....61
*By Nicole Alpert*

Chapter VI: **IPRI AND GENDER EQUALITY**....64
Chapter VII: **DATA SOURCES** ....69

Appendix I: **COUNTRY PROFILES** ....72

Appendix II: **DETAILED METHODOLOGY AND DATA SOURCE INFORMATION** ....138

Appendix III: **REGIONAL DIVISION OF COUNTRIES** ....41

Reference List ....143

Endnotes ....143

**LIST OF FIGURES AND TABLES**

Figure 1: Structure of the IPRI ....22
Figure 2: Ranking by IPRI Score
Figure 3: IPRI Ranking by Quintile ....28
Figure 4: Ranking by LP Score ....32
Figure 5: Ranking by PPR Score ....34
Figure 6: Ranking by IPR Score ....35
Figure 7: Average Scores by Region and Component ....40
Figure 8: Average Per Capita Income by IPRI Quintile ....41
Figure 9: Relationship between IPRI and GDP Per Capita ....42
Figure 10: Relationship between LP and GDP Per Capita ....42
Figure 11: Relationship between PPR and GDP Per Capita ....43
Figure 12: Relationship between IPR and GDP Per Capita ....43
Figure 13: Relationship between IPRI and FDI Inflows as a Percent of GDP ....44
Figure 14: Relationship between LP and FDI Inflows as a Percent of GDP ....44
Figure 15: Relationship between PPR and FDI Inflows as a Percent of GDP ....45
Figure 16: Relationship between IPR and FDI Inflows as a Percent of GDP ....45
Figure 17: Relationship between IPRI and GDP Growth ....46
Figure 18: Relationship between LP and GDP Growth ....46
Figure 19: Relationship between PPR and GDP Growth ....47
Figure 20: Relationship between IPR and GDP Growth ....47
Figure 21: Structure of the Gender Equality Component (GE) ....64

Table 1: Scores by Country ....29
Table 2: Top 10 by Component (Number Indicates Rank) ....30
Table 3: Bottom 10 by Component (Number Indicates Rank) ....30
Table 4: Summary Statistics ....33
Table 5: Changes in the IPRI Score (2009–2010) ....36
Table 6: Changes in the LP Score (2009–2010) ....37
Table 7: Changes in the PPR Score (2009–2010) ....38
Table 8: Changes in the IPR Score (2009–2010) ....39
Table 9: Ranking by IPRI(GE) Score ....66
Table 10: Ranking by GE Score ....67

# LETTER FROM HERNANDO DE SOTO

In 2007, the Property Rights Alliance (PRA) established the Hernando de Soto fellowship as a means of producing the International Property Rights Index (IPRI). Now in its fifth edition, the IPRI remains the most comprehensive international measurement of property rights around the world. The first edition compared the efforts of physical and intellectual property rights protection in 70 countries. The 2011 Index has grown to examine 129 countries.

With each new year, the link between economic prosperity and property rights protection becomes increasingly clearer. The 2011 IPRI once again emphasizes the evident connection between countries with the greatest economic strength and countries with the strongest protections of property rights. Looking at the trends found in the past four editions of the IPRI, the latest Index continues to show advancements in property rights protection around the world, while drawing attention to the improvements that must be made, especially the extension of more universal property rights.

Now that the correlation between economic well-being and property rights has been established, it is imperative to continue improving property rights on a global level. Weak property rights are most commonly seen in the developing world. As the citizens of these countries are in the greatest need of economic growth, it is crucial that their physical and intellectual property be granted protection. This Index, and similar efforts, seek to educate politicians, economists, academics, and entrepreneurs about the necessity to protect property rights around the world.

Due the vast quantities of data necessary to compile the IPRI, the task of doing so is far from easy. I congratulate Kyle Jackson, for his efforts in developing, researching, and producing the 2011 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

Property Rights Alliance (PRA), in collaboration with our international partners, is proud to present the fifth edition of the International Property Rights Index (IPRI).

With regard to private property rights, PRA has and continues to subscribe to the notion that the protection of both physical and intellectual property is equally important in nature. Individual freedom, economic expansion and job creation depend on securing property rights. Patents, trademarks and copyrights provide inventors and great thinkers with the ability to be rightly rewarded for their innovations. Likewise, land rights provide empowerment through ownership, allowing citizens to utilize and prosper from their investment. Economic growth only occurs when property, in all forms, is respected and protected.

As property rights continue to face challenges around the world, we hope this study will be a useful tool for policymakers, think tanks, academics, and investors by highlighting the importance of property rights as a key building block for economic growth.

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 2011 IPRI. Additionally, I would like to thank the author of this year's index, Kyle Jackson, for his 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 2011 IPRI possible.

Best regards,

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

# FOREWORD

**Private Property and Collective Action: Managing a Faustian Bargain**
***By Richard E. Wagner, George Mason University***

If you go to Google Images and type in "Korean Peninsula at night," you will see a variety of satellite photos that show South Korea brightly illuminated, while North Korea is dark. Some of those photos will also take in surrounding territory from China and Japan. Those territories, too, are brightly illuminated, though China not so much as Japan. It is said that a picture is worth a thousand words. In this respect, those pictures from space tell a tale of how private property promotes human flourishing, while collective property impairs it.

This tale is not new. It is ancient, going back at least to the classical Greeks and the debate between Plato and Aristotle over the raising of children. Plato proposed that children be raised collectively to prevent some children from gaining advantage because their parents reared them in particularly good fashion. The trouble with Plato's scheme, Aristotle pointed out, was that all children would be treated with equal indifference, leading to the degradation of all children.

This ancient debate is alive in the comparison of North and South Korea. North Korea is based on communal property; South Korea on private property. People have generally weak incentive to develop common property, while having strong incentive to abuse it. Suppose a lake is held in common by a thousand adjoining residents. Someone who catches immature fish will have strong incentive to keep the fish rather than return for someone else to catch. It is better to have a small fish than no fish. Thus, communal property undergoes degradation unless it is managed in voluntary fashion, as Elinor Ostrom's *Governing the Commons* explains.

While the world presents us with numerous particular arrangements of human governance, the apparent surface complexity rests upon two simple principles. One principle is private property, which entails individual responsibility for the value consequences of one's actions. The other principle is communal property, where value consequences are diffused throughout society. Grounding in private property gives us the illumination of South Korea; grounding in communal property gives us the darkness of North Korea.

Late in the 18th century, Adam Smith concluded that "little else is requisite to carry a state to the highest degree of opulence from the lowest barbarism, but peace, easy taxes, and a tolerable administration of justice; all the rest being brought about by the natural course of things." Smith's conclusion presents us with a puzzle. There would surely exist universal agreement that liberty and opulence are superior to servility and destitution. Yet liberty and opulence have not dominated human history and are far from universal today. Human interaction is only incompletely governed by principles of private property. In the presence of a universal desire for liberty and opulence, how can we account for the limited place of private property in the organization of human governance throughout the world? Both technical and moral issues are involved in limiting the range of private property.

As a technical matter, private property requires a suitable administrative apparatus. Objects of ownership must be established and recorded. Transfers of ownership must likewise be recorded. Such recordation is necessary to help resolve disputes over ownership that will inevitably arise. Dispute resolution, in turn, will require the development of institutional arrangements and their associated processes and procedures. There are different paths this development can follow, and these can operate with varying quality. This administrative apparatus, moreover, will be operated by people who may undertake their activities with varying degrees of skillfulness and rectitude. The talents and capacities required to accommodate governance through private property are many and varied.

While the significance of these technical matters should not be underestimated, the most severe impediments to private property are surely moral. Human governance through private property requires both that people embrace responsibility for the value consequences of their actions and that they forbear from interfering with the similar actions of other people. You may open a

business, but you must also forbear from interfering in the equal right of other people to open businesses, even if their businesses compete with yours for customers. If your business does not do well, it is you who will bear the loss. Forbearance entails a morality of individual responsibility for both losses and gains.

This morality is invariably undermined by governmental action, more fully in some countries than in others. Governmental power inescapably involves a form of a Faustian bargain: a government can use force to accomplish good, but it will also accomplish harm. Good is secured to the extent a government uses its powers to secure rights of private property, as illustrated by the efficient keeping of records and the impartial administration of justice. But power is never used just for good; this is the Faustian bargain at work. Governments will require modest amounts of taxation to support their universally beneficial activities. But governments are never modest in their appetites for revenue, or for power.

An impartial administration of justice requires but modest revenue and leaves government as a background participant in the life of a society. Government officials are like stagehands. But governments can use their taxing and regulating powers to propel their officials onto center stage. This happens all too easily, always with harmful consequences, as illustrated by the recent credit crisis.

At base, credit is a simple contract regarding the use of private property. A lender gives temporary custody of property to a borrower. If the borrower does not return the property according to the terms of the contract, the government should assist the lender by enforcing compliance with the terms of the contract. That the object that is rented is intangible, in contrast to the tangible character of a contract to rent a house or a car, does nothing to change the simple nature of a credit transaction.

All complications that arise over credit contracts are manifestations of governmental stagehands forcing their way onto center stage. Credit contracts are no longer simple relationships between borrowers and lenders. Governments have become active participants in those relationships and in many particular ways, all of which move away from the impartial administration of justice. Some governmental actions protect borrowers who do not repay their loans. Other governmental actions force lenders to make loans they would not have made under an impartial administration of justice. Yet other governmental actions offer rewards to lenders who support the movement onto center stage of government officials.

In her masterful *Systems of Survival*, Jane Jacobs described a well working society as involving carriers of two distinct moral syndromes: the commercial and the guardian. Within this societal architecture, carriers of the commercial syndrome occupy center stage and carriers of the guardian syndrome support the commercial carriers through the impartial administration of justice. Power might be reasonably contained in such a well working society but it can never be tamed. To the extent power breaks its containment, hybridization results between commercial and guardian syndromes, which Jacobs described as "monstrous moral hybrids." Rather than seeking to compete by developing better products, businesses come to compete by supporting governmental efforts to restrict the ability of others to compete. Rather than being content with enforcing commercial contracts, governmental officials move onto center stage by becoming participants in commercial activity.

Despite the immense complexity we see in systems for governing human relationships throughout the world, there are really only two contrasting principles by which that governance can be secured. One operates through private property and individual responsibility. The other operates through common property and collective responsibility. With private property, we are the director of our actions, and our relationships with other people follow the principle of equality under law. With collective property, by contrast, our actions are to a significant degree directed by those who possess power over us, and with relationships among people thereby mired in positions and attitudes of deference and supplication.

Neither principle operates in its pure form, of course, and nor could it. There is good reason to think, however, that the work of the Property Rights Alliance in promoting awareness that property rights are the true foundation for genuine human rights will help to spread the blessings of liberty and human flourishing throughout the world.

# ACKNOWLEDGEMENTS

We would like to express our appreciation for Hernando de Soto's exemplary work in the area of securing property rights for the world's poor. His ideas and efforts continue to be a source of encouragement and inspiration for us. We are honored to have the fellowship bear his name and grateful for his support. We look forward to working with him and the Institute for Liberty and Democracy (ILD) in the future.

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.

Special thanks are due to Alexandra C. Horst (2006 Hernando de Soto Fellow), Satya Thallam (2007 Hernando de Soto Fellow), Anne C. Dedigama (2008 Hernando de Soto Fellow), and Victoria Strokova (2009 Hernando de Soto Fellow). Their hard work and effort on previous editions made this year's index possible. We also thank Scott LaGanga whose conceptualization of the program and continual encouragement were instrumental.

We extend our special appreciation to Katerina Bricker for her excellent research assistance. Her efforts made it feasible to again include individual country profiles in the 2011 IPRI. Many thanks are due to Ryan Balis for his thorough editing of this publication.

The 2010 International Property Rights Index benefited from outstanding papers by the following contributors: Marius Doksheim (Civita); Joseph Quesnel (Frontier Centre for Public Policy); Krishna Neupane (Limited Government); Marcos Hidding Ohlson and Martin Krause (ESEADE); Nicole Alpert (The Lion Rock Institute); and Richard E. Wagner (George Mason University). We thank our contributors for their valuable time and insights, which greatly enriched this report.

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.

**Kyle A. Jackson**, 2010 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.[i]

## ABOUT THE AUTHOR

Kyle Jackson is pursuing a doctoral degree in economics at George Mason University. He received his Bachelor of Arts in economics from Hillsdale College in Hillsdale, MI and a Master of Arts in economics from San Jose State University. Most recently he was a summer fellow at the American Institute for Economic Research where he was a recipient of the Roy A. Foulke, Jr. Award, given to the student fellow who demonstrates the highest potential for development as an economic scientist.

Mr. Jackson's previous research has been in the area of economic development, specifically the origin and nature of institutions that facilitate economic growth. Through this work he has come to appreciate the vital role property rights play in promoting prosperity and freedom and hopes to further our understanding of this role through the International Property Rights Index.

## ABOUT THE CONTRIBUTORS

**Nicole Alpert**
Ms. Nicole Idanna Alpert is The Lion Rock Institute's Editor of *Best Practice*, Lion Rock's first journal. Before joining Lion Rock in 2008, Ms. Alpert managed a boutique wine company and worked in cross-cultural literature for Lingnan University's Dept. of English and Dept. of General Education. She received her BA in Economics and International Relations from Washington College of Maryland.

**Marius Doksheim**
Mr. Marius Doksheim is a Political Economy Adviser at Civita. He holds a BS in Economics from the University of Oslo and a MS in Political Economy from the Norwegian School of Management, BI. Mr. Doksheim has co-authored several books and papers, among them *Svikt!*, on public choice, and *Migrasjon og frihet*, on immigration.

**Martin Krause**
Dr. Martin Krause is a professor of Economics at the Law School, University of Buenos Aires, and Director of the Center for Research on Institutions and Markets (CIIM-ESADE). The author of several books and academic articles, Dr. Krause is also a member of the Mont Pelerin Society. He earned his PhD in Management from the University of La Plata, Argentina.

**Krishna Neupane**
Mr. Krishna Neupane is the founder and president of Limited Government, Nepal's first free market think tank. After working at free market think tanks in India and the United States, Mr. Neupane served as the Technical Specialist for Ministry of Health and Population (Nepal) to reform its budgetary management in 2008 and 2009. He earned an MS in Development Planning and Management from Purbanchal University with distinction and also holds an MA in Economics from Wichita State University.

**Marcos Hidding Ohlson**
Mr. Marcos Hidding Ohlson is a Professor of International Economics at the School of Economics and Business Administration (ESEADE) in Buenos Aires, Argentina where he teaches microeconomics. Between 2002 and 2006 he worked as an economic analyst at Delphos Investment and IB & CP, after which he spent 6 months in South Africa as a missionary, living in a Township, where he gained firsthand experience of life in an informal settlement. The editor of the daily Republican Forum, he also serves as a City Councilor in San Isidro, a suburb of Buenos Aires. He holds a BA in Economics from the Universidad Católica Argentina (UCA) and a Masters in International Economics, JIBS (Jönköping International Business School), Sweden.

**Joseph Quesnel**
Mr. Joseph Quesnel is a policy analyst at the Frontier Centre for Public Policy. Mr. Quesnel is the lead researcher on the Centre's Aboriginal Frontiers Project, which examines governance issues on First Nations communities and researches many other aboriginal related issues. He is from the Sudbury region of Northern Ontario, and has Metis ancestry from Quebec. He holds a BA in Political Science and History from McGill University in Montreal, Quebec and is completing a Master of Journalism degree at Carleton University in Ottawa, Ontario.

**Dr. Richard E. Wagner**
Richard Wagner is Holbart Harris Professor of Economics at George Mason University. He has published numerous books and articles in economic theory and political economy. The uniting thread running through that body of work is the continuing contest between liberty and servility, with a focus on seeking to understand better how liberty might expand and servility contract. His most recent books are *Fiscal Sociology and the Theory of Public Finance* (2007) and *Mind, Society, and Human Action: Time and Knowledge in a Theory of Social Economy* (2010). He received his PhD in Economics from the University of Virginia.

# ABOUT THE 2011 INTERNATIONAL PROPERTY RIGHTS INDEX

This report presents the fifth 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 2011 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 129 economies using these three variables as core components and ranks them accordingly.

Because of the expansion of some of the underlying data sources this year's index welcomes the addition of Angola, Iran, Lebanon, Rwanda, and Swaziland. Being both geographically and economically diverse, these countries significantly contribute to the comprehensiveness of the index. Unfortunately, a lack of data on intellectual property rights prevented the Kyrgyz Republic from being ranked and included in this year's index. The net change of four countries 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 2011 index uses the same components and data sources as the 2010 index and maintains consistency with the previous editions by 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.

To better compare countries' IPRI scores across time country profiles have been included to 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.

Following last year's shift, the gender equality component of the 2011 IPRI focuses solely on non-OECD countries. The total number of countries scored for this component is 83 this year, which represents a small increase 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. Once again, 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 2011 report contains five case studies on various property rights issues contributed by the IPRI partner organizations.

The 2011 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**
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**
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**
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**
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.

**Association for Liberal Thinking – Turkey**
**http://www.liberal.org.tr**
Association for Liberal Thinking, ALT, was established in December 1992. The objectives of ALT as a non-profit, non-governmental organization are to introduce to Turkish public the richness of the intellectual tradition that lay at heart of the liberal democratic civilization to engage in activities that promote understanding and acceptance of values and concepts like liberty, justice, tolerance, peace, human rights, the rule of law, to encourage academic researches on liberal themes; and to contribute to finding effective solutions to Turkey's political and economic problems within liberal thought.

**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**
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**
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**
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**
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**
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**
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**
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**
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.

**Central Asian Free Market Institute — Kyrgyz Republic**
**http://www.freemarket.kg/**
The Central Asian Free Market Institute (CAFMI) is an independent, non-profit, think-tank founded on April 6, 2009, with offices in Bishkek and Dushanbe and activities spanning Kyrgyzstan, Tajikistan and Kazakhstan. CAFMI experts to develop into Central Asia's major advocacy and research hub for public policy issues.

**Centre for Civil Society – India**
**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**
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**
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**
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**
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**
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**
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**
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**
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**
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**
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**
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**
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**
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**
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**
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**
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**
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**
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**
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 of Political Economy – Ecuador**
**http://www.ieep.org.ec/en/**
The Ecuadorian Institute of Political Economy, IEEP, is an organization devoted to public policy analysis and the dissemination of ideas of freedom in Ecuador. It was founded in 1991 by Dora of Ampuero as a private, independent, nonprofit. IEEP finances its activities through voluntary donations from individuals, corporations and foundations. IEEP conducts research related to socio-economic problems that affect Ecuador within a framework of respect for individual liberties, private property, free markets and limited government and responsible.

**Institute for Democracy and Economic Affairs (IDEAS) – Malaysia**
**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**
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**
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 Liberty and Democracy – Peru**
**http://www.ild.org.pe/**
The Institute for Liberty and Democracy (or ILD) is a Lima-based think tank devoted to the promotion of property rights in developing countries. To provide governments with the expertise and information to implement institutional reforms in property and business rights that allow citizens to be included in the market economy and thus pull themselves out of poverty and prosper.

**Institute for Market Economics (IME) – Bulgaria**
**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**
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**
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**
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 Research Foundation (IRF) – Oman**
**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**
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**
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**
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**
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**
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**
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**
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**
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**
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**
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**
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**
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**
The OHRID Institute is an independent, non-profit think tank. It is commited 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**
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**

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.

**Samriddhi Foundation –Nepal**
**http://www.samriddhi.org/**

Emulating the principles of democratic practices recognized in the 21st century, Samriddhi, The Prosperity Foundation is registered under the Company Act of Nepal as a not for profit organization. It believes in people's power and recognizes individuals as the top notch of the power center

**Timbro – Sweden**
**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 Unirule Institute of Economics – China**
**http://english.unirule.org.cn/**

The Unirule Institute of Economics (Unirule) is an independent, nonprofit, non governmental (NGO) think tank, which was jointly initiated in July of 1993 by five prominent economists, Prof. Mao Yushi, Prof. Zhang Shuguang, Prof. Sheng Hong, Prof. Fan Gang, and Prof. Tang Shouning. Unirule is dedicated to the open exchange of ideas in economics in general, with a particular focus on institutional economics, and maintains a highly prestigious status within academic circles.

**The Ukrainian Reform Support Foundation – Ukraine**
**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

**"Nobody is at liberty to attack several property and to say at the same time that he values civilization. The history of the two cannot be disentangled." — *Sir Henry Maine***

Economic development is both fairly simple and impossibly difficult. We know it's fairly simple because 235 years ago Adam Smith was able to boil it down to three words: division of labor. While visiting a pin factory Smith observed that instead of making each pin from start to finish the workers would instead specialize in one or a few steps of the process and then pass their product on to another laborer. This focus allowed the employees to hone their skills and increase their productivity, albeit in only a few steps of pin making. But Smith found when the slightly more productive employees work together the result is a fantastic increase in output. The same basic principle is in play for people who specialize in one industry and trade their surplus output with people who specialize in other industries. More output means more consumption which is essentially economic development. Simple as that.

And yet something is missing. The wealthy industrialized countries are certainly characterized by specialization and division of labor. But large portions of the world's population still engage in economic activity best described as self-sufficient. In fact, wealthy industrialized countries are a relatively new phenomenon. For most of human history life could be best described as poor, nasty, brutish, and short. So while the mechanism for achieving economic development is fairly simple, the process of getting that mechanism going in the first place appears to be quite difficult. Otherwise all these poor and stagnant societies would (presumably) just specialize and trade and become wealthy. What do the wealthy industrialized countries have that other societies lack?

The answer is a system of secure property rights. Property rights internalize costs and benefits and provide the proper incentives for good stewardship of resources. A farmer will treat a parcel of land or a tractor or a hat differently if she is the one reaping the benefits. A baker is more likely to bake breads and pastries for sale if he knows that someone else will not confiscate the profits of his activity. Property rights give the baker the incentive to bake.

Property rights also play a vital role in directing resources to those uses most valued by society. This was first pointed out by the economist Ludwig von Mises in the academic debates about the efficiency of socialism in the 1920s. When privately owned goods are sold they are transferred between owners at some price. These market prices contain in them important information about the resources' relative scarcity. As a good becomes more scarce either through a decrease in supply or an increase in demand, its price will rise indicating to society that it is more valuable and should only be used for higher valued purposes. Mises pointed out that without private property there are no exchange markets, and with no markets there are no prices. This makes it impossible to allocate resources efficiently. Should cars be built with steel or some alloy? Should a restaurant use plastic silverware and plates or more durable ones? Without prices to act as a guide people can only guess at the answers to questions like these. The result is resources being used less efficiently than would otherwise be the case and society is poorer as a result.

The International Property Rights Index helps illustrate the vital role property rights play in generating material well being. By ranking countries' respect for property rights we are able to make comparisons and see the consequences of having a weak or strong property rights regime. As with any study, there are limitations to our approach. Data limitations prevent us from ranking every country for example. But we remain confident that this study clearly demonstrates the positive relationship between property rights and economic development.

# 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 integrate these economies into the 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. 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 can 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 can 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 included as 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 2011 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 2010-2011 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 2010 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 2010 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 2010 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 2010-2011 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 2010 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 2010-2011 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 2010-2011 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 2010 Special 301 Report, Seventh Annual BSA and IDC Global Software Piracy Study (2009)*

## 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:

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

$X_i$ rrepresents the individual country's value (either number of steps or number of days to register property) from the raw data. $X_{\max}$ and $X_{\min}$ are the highest and lowest values from the original sample of countries in 2007. 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 2011 *International Property Rights Index* ranks a total of 129 countries from around the world. Five new countries were ranked while one country (The Kyrgyz Republic) dropped out due to a lack of data. 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 varied 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 129 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).

As in the past, this study remains constrained by the availability of intellectual property rights data, especially by the lack of data on trademarks. In 2009, trademarks were dropped as one of the sub-components because of the lack of updated data, a situation that persists. 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, as the index enters its fifth 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 using more robust methods.

# CHAPTER IV: RESULTS

This chapter presents the results of the 2011 *International Property Rights Index* (IPRI). The complete scores and rankings, presented according to various criteria, follow a brief overview of the data and outcomes. Notes on score adjustments can be found here. The chapter concludes with a presentation on the relationship between IPRI scores and countries' economic well-being.

## Data and Outcome Characteristics

The IPRI's 2011 rankings are 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 participate in these surveys, and the resulting ratings in the form of a numeric factor are based on their judgment. Based on these sources, a country that ranks the highest or lowest in the IPRI does not necessarily have the strongest or weakest property rights, respectively. Instead, rankings are based on the *perception* of the relative strength of a country's property rights regime. 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. Similarly, estimates of the level of piracy are based on actual economic data from trade groups like the International Intellectual Property Alliance and the Business Software Association.

A plan for future indices is to use additional hard data. 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.

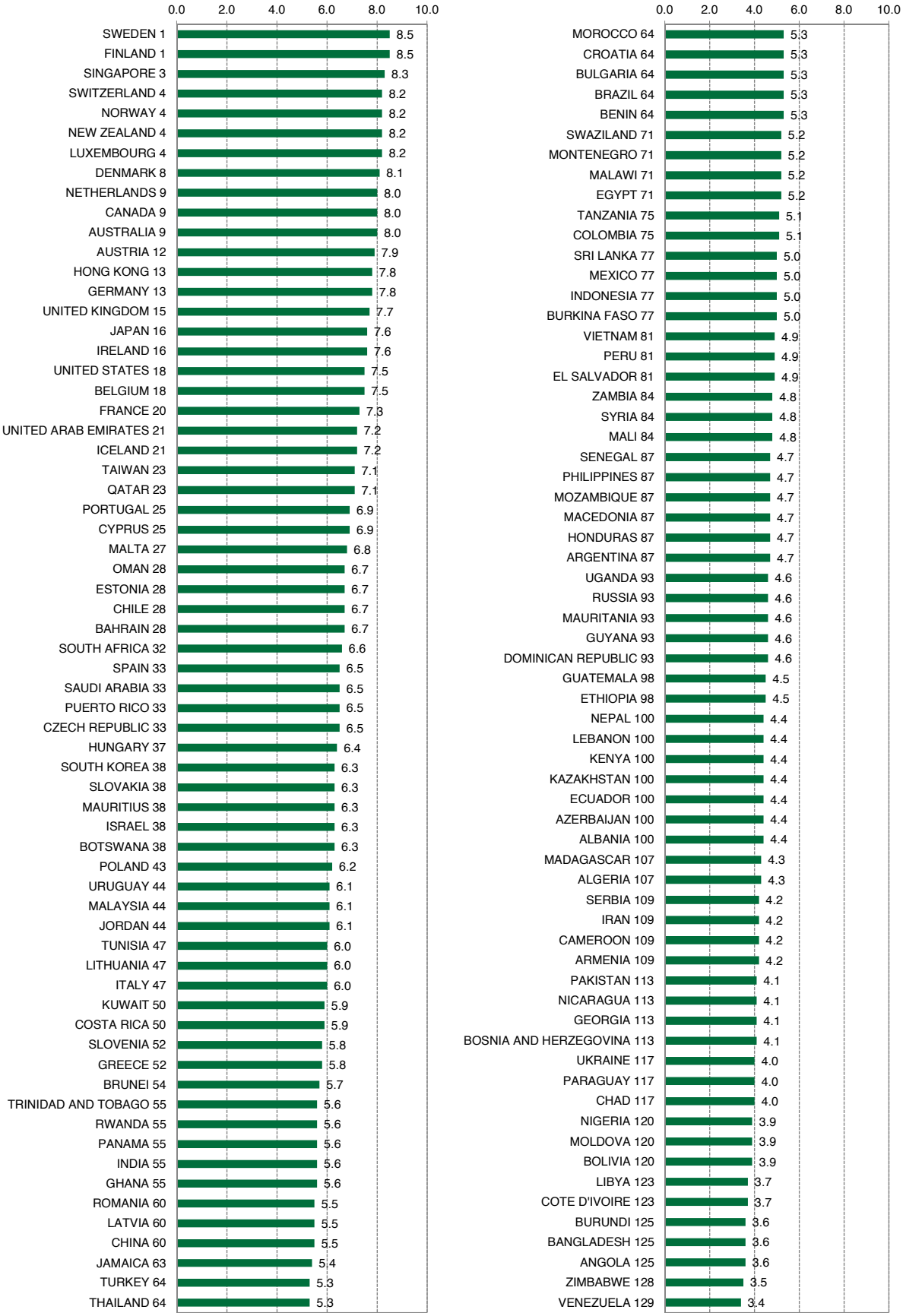
In analyzing the final outcome of the scoring process, the reader is presented with two related but ultimately different measures of property rights protections throughout the sample: ordinal and cardinal. The scores are presented in such a way that the reader can easily compare countries according to how they rank relative to each other, as well as how they score on a scale of 0 to 10. 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 and enforces property rights.

## IPRI Ranking

The 2011 IPRI contains rankings on the relative strength of a property rights regime in 129 economies. This sample includes 97 percent of the world's GDP. Figure 2 and Table 1 present the rankings by highest to lowest scores and scores by country, respectively.

Because of the larger country coverage this year, the rankings in the 2011 report are not directly comparable to the rankings in the 2010 report. Therefore, the authors will primarily focus on discussing the score changes instead of the ranking changes from 2010. A more detailed overview of the countries' score changes for the IPRI and their components can also be found in Appendix I.

## Figure 2: Ranking by IPRI Score



## Table 1: Scores by Country

| Country | IPRI | LP | PPR | IPR |
|---|---|---|---|---|
| ALBANIA | **4.4** | 4.5 | 5.5 | 3.3 |
| ALGERIA | **4.3** | 3.5 | 5.4 | 3.9 |
| ANGOLA | **3.6** | 3.1 | 4.5 | 3.1 |
| ARGENTINA | **4.7** | 4.1 | 5.1 | 5.0 |
| ARMENIA | **4.2** | 4.2 | 5.9 | 2.5 |
| AUSTRALIA | **8.0** | 8.3 | 7.7 | 7.9 |
| AUSTRIA | **7.9** | 8.1 | 7.5 | 8.1 |
| AZERBAIJAN | **4.4** | 3.8 | 6.2 | 3.2 |
| BAHRAIN | **6.7** | 5.9 | 8.1 | 6.0 |
| BANGLADESH | **3.6** | 3.4 | 4.5 | 2.8 |
| BELGIUM | **7.5** | 7.4 | 7.0 | 8.0 |
| BENIN | **5.3** | 4.5 | 6.2 | 5.2 |
| BOLIVIA | **3.9** | 3.2 | 4.5 | 4.0 |
| BOSNIA AND HERZEGOVINA | **4.1** | 4.1 | 4.9 | 3.3 |
| BOTSWANA | **6.3** | 6.8 | 7.2 | 5.0 |
| BRAZIL | **5.3** | 5.0 | 5.5 | 5.5 |
| BRUNEI | **5.7** | 7.0 | 5.8 | 4.4 |
| BULGARIA | **5.3** | 5.0 | 5.6 | 5.4 |
| BURKINA FASO | **5.0** | 4.2 | 5.6 | 5.3 |
| BURUNDI | **3.6** | 2.6 | 4.8 | 3.5 |
| CAMEROON | **4.2** | 3.5 | 5.3 | 3.9 |
| CANADA | **8.0** | 8.4 | 7.5 | 8.1 |
| CHAD | **4.0** | 2.4 | 4.9 | 4.6 |
| CHILE | **6.7** | 7.3 | 7.0 | 5.8 |
| CHINA | **5.5** | 4.5 | 6.8 | 5.2 |
| COLOMBIA | **5.1** | 3.8 | 6.0 | 5.4 |
| COSTA RICA | **5.9** | 6.6 | 6.1 | 5.0 |
| COTE D'IVOIRE | **3.7** | 2.4 | 5.0 | 3.8 |
| CROATIA | **5.3** | 5.3 | 5.7 | 4.8 |
| CYPRUS | **6.9** | 7.0 | 7.5 | 6.3 |
| CZECH REPUBLIC | **6.5** | 6.3 | 6.3 | 6.9 |
| DENMARK | **8.1** | 8.7 | 7.3 | 8.3 |
| DOMINICAN REPUBLIC | **4.6** | 4.2 | 5.7 | 4.0 |
| ECUADOR | **4.4** | 3.0 | 5.3 | 4.8 |
| EGYPT | **5.2** | 4.6 | 6.2 | 4.9 |
| EL SALVADOR | **4.9** | 4.4 | 6.0 | 4.4 |
| ESTONIA | **6.7** | 7.1 | 7.1 | 5.8 |
| ETHIOPIA | **4.5** | 3.3 | 5.6 | 4.6 |
| FINLAND | **8.5** | 8.8 | 8.3 | 8.5 |
| FRANCE | **7.3** | 7.2 | 6.7 | 7.9 |
| GEORGIA | **4.1** | 4.1 | 6.0 | 2.3 |
| GERMANY | **7.8** | 8.1 | 7.1 | 8.1 |
| GHANA | **5.6** | 5.2 | 6.0 | 5.7 |
| GREECE | **5.8** | 5.4 | 6.0 | 6.1 |
| GUATEMALA | **4.5** | 3.5 | 6.1 | 4.0 |
| GUYANA | **4.6** | 4.1 | 5.7 | 4.0 |
| HONDURAS | **4.7** | 3.9 | 5.7 | 4.4 |
| HONG KONG | **7.8** | 8.1 | 7.9 | 7.5 |
| HUNGARY | **6.4** | 6.1 | 6.3 | 6.9 |
| ICELAND | **7.2** | 8.3 | 6.8 | 6.5 |
| INDIA | **5.6** | 4.7 | 6.6 | 5.5 |
| INDONESIA | **5.0** | 4.2 | 6.7 | 4.0 |
| IRAN | **4.2** | 3.5 | 5.4 | 3.8 |
| IRELAND | **7.6** | 8.2 | 6.7 | 7.9 |
| ISRAEL | **6.3** | 6.1 | 5.9 | 7.0 |
| ITALY | **6.0** | 5.5 | 5.7 | 6.9 |
| JAMAICA | **5.4** | 4.7 | 5.7 | 5.7 |
| JAPAN | **7.6** | 7.6 | 7.0 | 8.2 |
| JORDAN | **6.1** | 5.6 | 6.8 | 5.8 |
| KAZAKHSTAN | **4.4** | 4.4 | 5.6 | 3.2 |
| KENYA | **4.4** | 3.0 | 6.0 | 4.2 |
| KUWAIT | **5.9** | 6.2 | 6.6 | 5.0 |
| LATVIA | **5.5** | 5.9 | 5.8 | 4.8 |
| LEBANON | **4.4** | 3.3 | 6.5 | 3.3 |
| LIBYA | **3.7** | 4.3 | 4.3 | 2.6 |
| LITHUANIA | **6.0** | 5.8 | 6.3 | 5.9 |
| LUXEMBOURG | **8.2** | 8.5 | 7.9 | 8.3 |
| MACEDONIA | **4.7** | 4.6 | 5.5 | 3.9 |
| MADAGASCAR | **4.3** | 3.8 | 5.3 | 3.9 |
| MALAWI | **5.2** | 5.1 | 5.6 | 4.9 |
| MALAYSIA | **6.1** | 5.6 | 6.8 | 5.9 |
| MALI | **4.8** | 4.1 | 5.5 | 4.9 |
| MALTA | **6.8** | 7.3 | 6.8 | 6.4 |
| MAURITANIA | **4.6** | 3.3 | 5.5 | 5.1 |
| MAURITIUS | **6.3** | 6.6 | 7.2 | 5.0 |
| MEXICO | **5.0** | 4.2 | 5.7 | 5.0 |
| MOLDOVA | **3.9** | 3.7 | 5.6 | 2.3 |
| MONTENEGRO | **5.2** | 5.4 | 6.6 | 3.6 |
| MOROCCO | **5.3** | 4.6 | 6.2 | 5.1 |
| MOZAMBIQUE | **4.7** | 4.6 | 5.2 | 4.3 |
| NEPAL | **4.4** | 3.2 | 5.8 | 4.1 |
| NETHERLANDS | **8.0** | 8.4 | 7.5 | 8.2 |
| NEW ZEALAND | **8.2** | 8.8 | 7.7 | 8.0 |
| NICARAGUA | **4.1** | 3.5 | 4.9 | 3.9 |
| NIGERIA | **3.9** | 2.9 | 4.6 | 4.1 |
| NORWAY | **8.2** | 8.5 | 8.3 | 7.8 |
| OMAN | **6.7** | 6.6 | 7.8 | 5.6 |
| PAKISTAN | **4.1** | 2.8 | 6.0 | 3.6 |
| PANAMA | **5.6** | 4.6 | 6.8 | 5.3 |
| PARAGUAY | **4.0** | 2.9 | 5.4 | 3.6 |
| PERU | **4.9** | 3.7 | 6.5 | 4.4 |
| PHILIPPINES | **4.7** | 3.5 | 5.8 | 4.9 |
| POLAND | **6.2** | 6.4 | 5.6 | 6.6 |
| PORTUGAL | **6.9** | 6.8 | 6.8 | 7.0 |
| PUERTO RICO | **6.5** | 6.3 | 6.2 | 6.9 |
| QATAR | **7.1** | 7.9 | 7.5 | 5.9 |
| ROMANIA | **5.5** | 5.2 | 5.8 | 5.4 |
| RUSSIA | **4.6** | 3.5 | 5.2 | 5.0 |
| RWANDA | **5.6** | 5.2 | 6.3 | 5.4 |
| SAUDI ARABIA | **6.5** | 5.6 | 7.9 | 5.9 |
| SENEGAL | **4.7** | 4.4 | 5.4 | 4.2 |
| SERBIA | **4.2** | 4.1 | 5.2 | 3.2 |
| SINGAPORE | **8.3** | 8.3 | 8.3 | 8.3 |
| SLOVAKIA | **6.3** | 5.7 | 6.7 | 6.5 |
| SLOVENIA | **5.8** | 6.8 | 4.7 | 5.9 |
| SOUTH AFRICA | **6.6** | 5.5 | 6.9 | 7.3 |
| SOUTH KOREA | **6.3** | 6.0 | 6.1 | 6.8 |
| SPAIN | **6.5** | 6.1 | 6.6 | 6.9 |
| SRI LANKA | **5.0** | 4.5 | 6.1 | 4.4 |
| SWAZILAND | **5.2** | 4.6 | 6.2 | 4.8 |
| SWEDEN | **8.5** | 8.8 | 8.2 | 8.5 |
| SWITZERLAND | **8.2** | 8.5 | 7.8 | 8.3 |
| SYRIA | **4.8** | 3.7 | 6.2 | 4.6 |
| TAIWAN | **7.1** | 6.4 | 7.6 | 7.2 |
| TANZANIA | **5.1** | 4.6 | 5.5 | 5.1 |
| THAILAND | **5.3** | 4.6 | 6.8 | 4.5 |
| TRINIDAD AND TOBAGO | **5.6** | 5.3 | 5.3 | 6.2 |
| TUNISIA | **6.0** | 5.7 | 7.2 | 5.2 |
| TURKEY | **5.3** | 4.6 | 6.1 | 5.1 |
| UGANDA | **4.6** | 3.8 | 5.0 | 5.0 |
| UKRAINE | **4.0** | 3.5 | 4.4 | 4.2 |
| UNITED ARAB EMIRATES | **7.2** | 6.7 | 7.8 | 7.0 |
| UNITED KINGDOM | **7.7** | 7.8 | 7.2 | 8.1 |
| UNITED STATES | **7.5** | 7.1 | 7.1 | 8.4 |
| URUGUAY | **6.1** | 7.0 | 6.0 | 5.2 |
| VENEZUELA | **3.4** | 2.3 | 4.4 | 3.5 |
| VIETNAM | **4.9** | 4.8 | 6.1 | 3.8 |
| ZAMBIA | **4.8** | 4.9 | 5.8 | 3.6 |
| ZIMBABWE | **3.5** | 2.1 | 4.9 | 3.5 |

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

| IPRI | LP | PPR | IPR |
|---|---|---|---|
| Finland (1) | Finland (1) | Finland (1) | Finland (1) |
| Sweden (1) | New Zealand (1) | Norway (1) | Sweden (1) |
| Singapore (3) | Sweden (1) | Singapore (1) | United States (3) |
| Luxembourg (4) | Denmark (4) | Sweden (4) | Denmark (4) |
| New Zealand (4) | Luxembourg (5) | Bahrain (5) | Luxembourg (4) |
| Norway (4) | Norway (5) | Hong Kong (6) | Singapore (4) |
| Switzerland (4) | Switzerland (5) | Luxembourg (6) | Switzerland (4) |
| Denmark (8) | Canada (8) | Saudi Arabia (6) | Japan (8) |
| Netherlands (9) | Netherlands (8) | Oman (9) | Netherlands (8) |
| Canada (9) | Australia (10) | Switzerland (9) | Austria (10) |
| Australia (9) | Iceland (10) | United Arab Emirates (9) | Canada (10) |
| | Singapore (10) | | Germany (10) |
| | | | United Kingdom (10) |

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

| IPRI | LP | PPR | IPR |
|---|---|---|---|
| Bolivia (120) | Ecuador (120) | Bosnia And Herzegovina (117) | Albania (118) |
| Moldova (120) | Kenya (120) | Chad (117) | Bosnia and Herzegovina (118) |
| Nigeria (120) | Nigeria (122) | Nicaragua (117) | Lebanon (118) |
| Cote D'Ivoire (123) | Paraguay (122) | Zimbabwe (117) | Azerbaijan (121) |
| Libya (123) | Pakistan (124) | Burundi (121) | Kazakhstan (121) |
| Angola (125) | Burundi (125) | Slovenia (122) | Serbia (121) |
| Bangladesh (125) | Chad (126) | Nigeria (123) | Angola (124) |
| Burundi (125) | Cote D'Ivoire (126) | Angola (124) | Bangladesh (125) |
| Zimbabwe (128) | Venezuela (128) | Bangladesh (124) | Libya (126) |
| Venezuela (129) | Zimbabwe (129) | Bolivia (124) | Armenia (127) |
| | | Ukraine (127) | Georgia (128) |
| | | Venezuela (127) | Moldova (128) |
| | | Libya (129) | |

Finland and Sweden tie for the top spot in this year's index with a score of 8.5 out of a possible 10. This is the fifth year in a row that Finland earned the highest ranking despite a decrease from last year's score of 8.6. Other Scandinavian countries that also perform well are Norway (8.2), tying for fourth place, and Denmark (8.1), tying for eighth place. Singapore (8.3) is the top-scoring country in the combined Asia and Oceana region followed closely by New Zealand (8.2) and Australia (8.0). Western Europe is well represented in the top 10 (see Table 2) with Luxembourg (8.2), Switzerland (8.2), and The Netherlands (8.0). Canada rounds out the top-scoring group with a score of 8.0.

At the bottom of the rankings are Bolivia (3.9), Moldova (3.9), Nigeria (3.9), Cote D'Ivoire (3.7), Libya (3.7), Angola (3.6), Burundi (3.6), and Bangladesh (3.6). Bangladesh shows solid improvement over last year's score of 2.9, allowing it to pass Zimbabwe (3.5) and Venezuela (3.4) – the two countries at the bottom of the rankings this year.

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. In this year's index, each quintile has 26 countries except for the bottom, which has only 25. Additionally, the map on the IPRI's distribution, displayed in the inside cover of this report, indicates which country belongs to which quintile.

**Figure 3: IPRI Ranking by Quintile**

strongest ↓ weakest

| Top 20 percent | 2nd Quintile | 3rd Quintile | 4th Quintile | Bottom 20 percent |
|---|---|---|---|---|
| FINLAND | MALTA | SLOVENIA | MEXICO | LEBANON |
| SWEDEN | BAHRAIN | BRUNEI | SRI LANKA | NEPAL |
| SINGAPORE | CHILE | GHANA | EL SALVADOR | ALGERIA |
| LUXEMBOURG | ESTONIA | INDIA | PERU | MADAGASCAR |
| NEW ZEALAND | OMAN | PANAMA | VIETNAM | ARMENIA |
| NORWAY | SOUTH AFRICA | RWANDA | MALI | CAMEROON |
| SWITZERLAND | CZECH REPUBLIC | TRINIDAD AND TOBAGO | SYRIA | IRAN |
| DENMARK | PUERTO RICO | CHINA | ZAMBIA | SERBIA |
| AUSTRALIA | SAUDI ARABIA | LATVIA | ARGENTINA | BOSNIA AND HERZEGOVINA |
| CANADA | SPAIN | ROMANIA | HONDURAS | GEORGIA |
| NETHERLANDS | HUNGARY | JAMAICA | MACEDONIA | NICARAGUA |
| AUSTRIA | BOTSWANA | BENIN | MOZAMBIQUE | PAKISTAN |
| GERMANY | ISRAEL | BRAZIL | PHILIPPINES | CHAD |
| HONG KONG | MAURITIUS | BULGARIA | SENEGAL | PARAGUAY |
| UNITED KINGDOM | SLOVAKIA | CROATIA | DOMINICAN REPUBLIC | UKRAINE |
| IRELAND | SOUTH KOREA | MOROCCO | GUYANA | BOLIVIA |
| JAPAN | POLAND | THAILAND | MAURITANIA | MOLDOVA |
| BELGIUM | JORDAN | TURKEY | RUSSIA | NIGERIA |
| UNITED STATES | MALAYSIA | EGYPT | UGANDA | COTE D'IVOIRE |
| FRANCE | URUGUAY | MALAWI | ETHIOPIA | LIBYA |
| ICELAND | ITALY | MONTENEGRO | GUATEMALA | ANGOLA |
| UNITED ARAB EMIRATES | LITHUANIA | SWAZILAND | ALBANIA | BANGLADESH |
| QATAR | TUNISIA | COLOMBIA | AZERBAIJAN | BURUNDI |
| TAIWAN | COSTA RICA | TANZANIA | ECUADOR | ZIMBABWE |
| CYPRUS | KUWAIT | BURKINA FASO | KAZAKHSTAN | VENEZUELA |
| PORTUGAL | GREECE | INDONESIA | KENYA | |

## Table 4: Summary Statistics

| Indicator | Mean | Median | Deviation | Minimum | Maximum |
|---|---|---|---|---|---|
| **IPRI** | **5.6** | **5.3** | **1.4** | **3.4** | **8.5** |
| LP | 5.3 | 4.9 | 1.8 | 2.1 | 8.8 |
| PPR | 6.2 | 6.1 | 1.0 | 4.3 | 8.3 |
| IPR | 5.4 | 5.1 | 1.6 | 2.3 | 8.5 |

Table 4 presents summary statistics for the 2011 IPRI and its component scores. This year's index finds a one point increase in both the mean and median scores. While these are largely the result of improvement by low scoring countries (the lowest country score jumped from 2.9 to 3.4) the effect is somewhat offset by slightly deteriorating scores at the top. This converging of scores across the data set can be seen in the deviation, which shows a slight decrease from 1.5 to 1.4.

This year's highest score in any one of the core components is 8.8 in Legal and Political Environment (LP) achieved by Finland, New Zealand, and Sweden. The lowest score in any of the core components is Zimbabwe's LP score of 2.1, which is still a notable improvement over last year's lowest component score, a 1.6 LP for Chad. Physical Property Rights (PPR) again has the highest component mean at 6.2.

### 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.

Table 2 and Table 3 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. Luxembourg, Sweden, and Switzerland also place in the top 10 in all three components. Interestingly, two countries (the United States in Intellectual Property Rights (IPR) and Bahrain in PPR) make the top five list for a component score but do not make the top 10 IPRI.

The bottom 10 lists are much more heterogeneous with no country making it on all three. Zimbabwe ranks the lowest in the LP component, Libya in the PPR component, and Moldova in the IPR component.

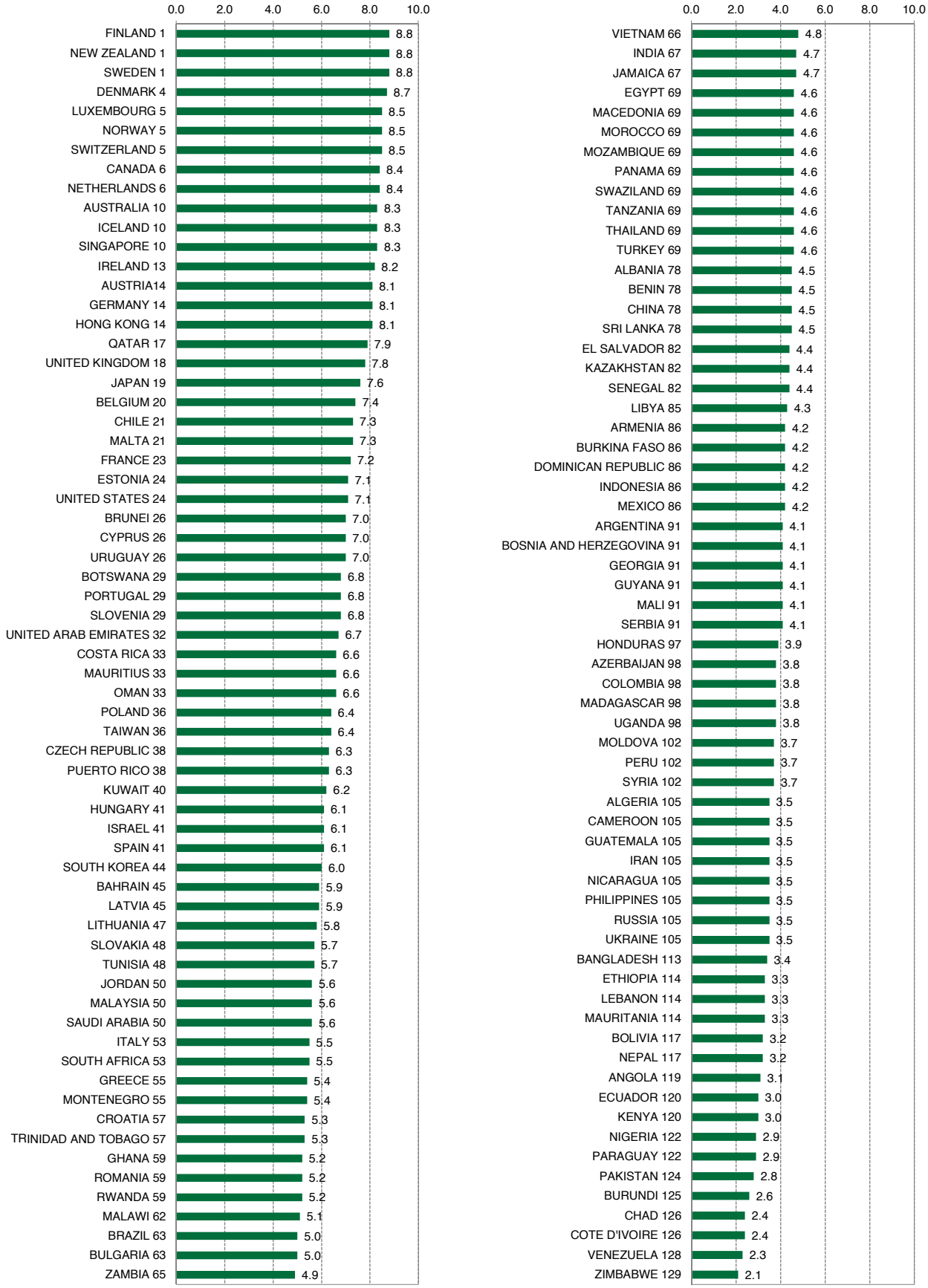
Figures 4–6 provide a complete rank ordering of the entire 125 country set, according to the three core components of the IPRI.

### Changes in Scores (2010–2011)

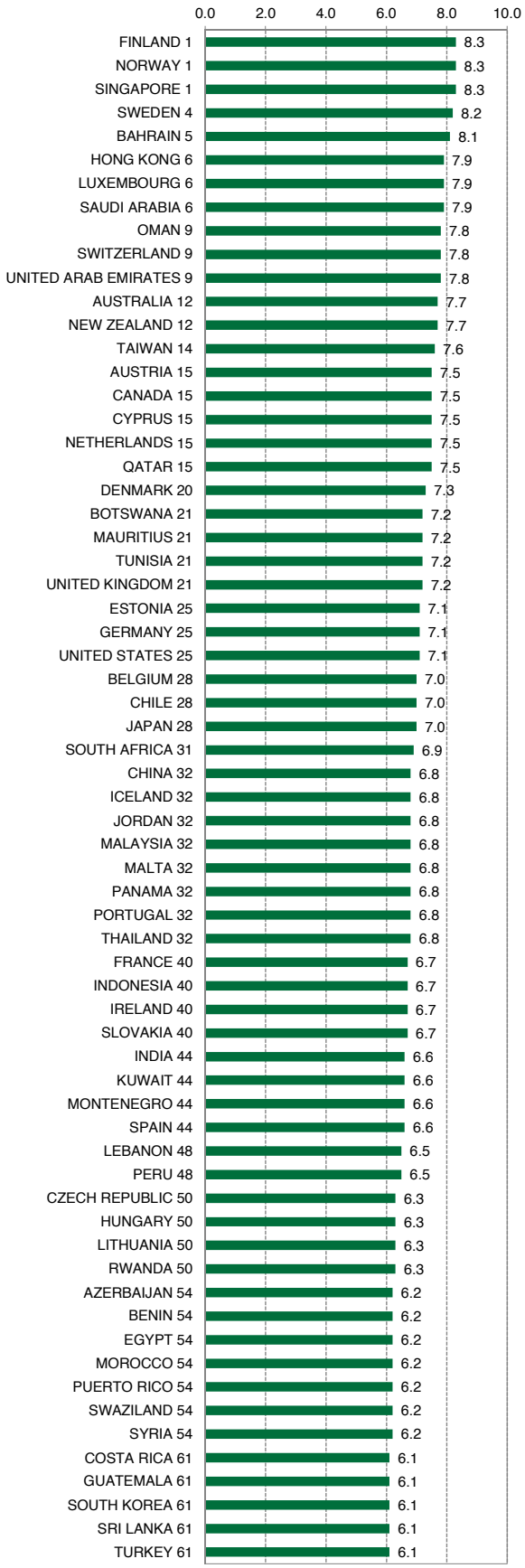
A direct comparison of the ordinal rankings between 2010 and 2011 is hindered by the fact that five additional countries (Angola, Iran, Lebanon, Rwanda, and Swaziland) are included in this year's rankings, while the Kyrgyz Republic is not included because of a lack of data. As a result, some changes in the rankings could reflect changes in the composition of countries indexed instead of the countries' performance compared with last year. A comparison of results between 2009 and 2010 is found in Tables 5–8, which present the changes in scores for the IPRI as well as their components.

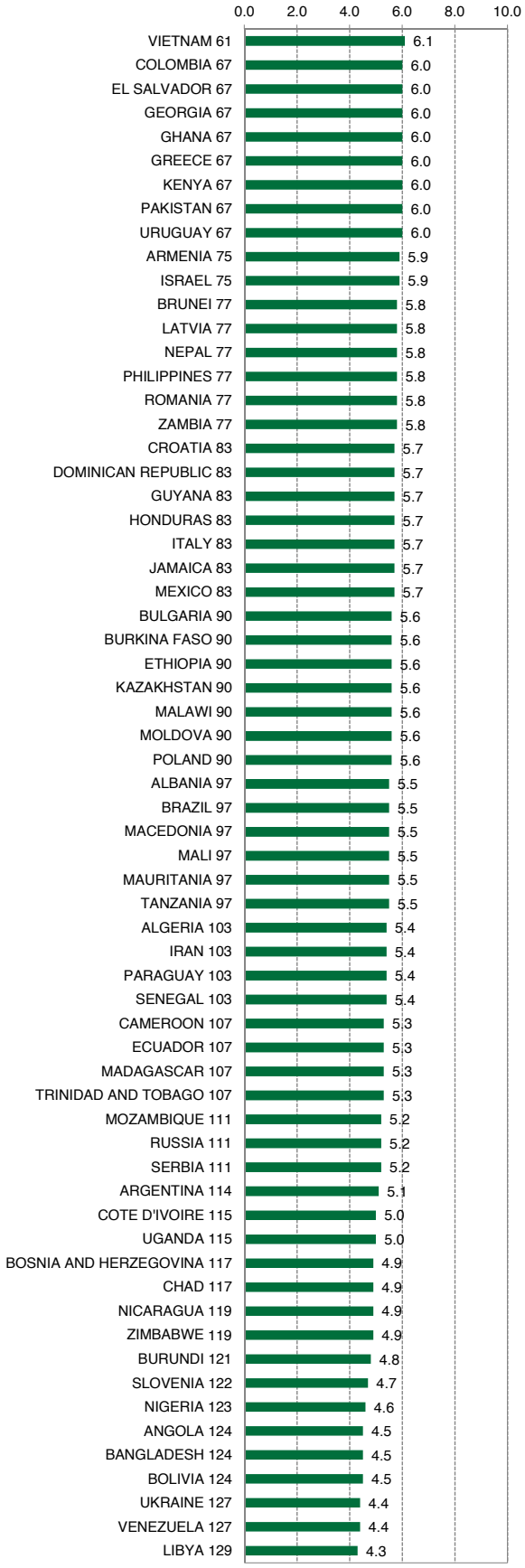
The countries that demonstrate the most improvement in their IPRI score over the last year are a diverse group. These include Brunei, Benin, Indonesia, Uganda, Algeria, Burkina Faso, Ethiopia, Senegal, Mauritius, and Ecuador. Unfortunately, the following countries show a decrease in their property rights performance: Iceland, Ireland, South Korea, Denmark, The Netherlands, United States, Lithuania, Latvia, United Kingdom, and New Zealand. Those countries that are experiencing the largest setbacks in property rights tend to be among the wealthiest.

## Figure 4: Ranking by LP Score

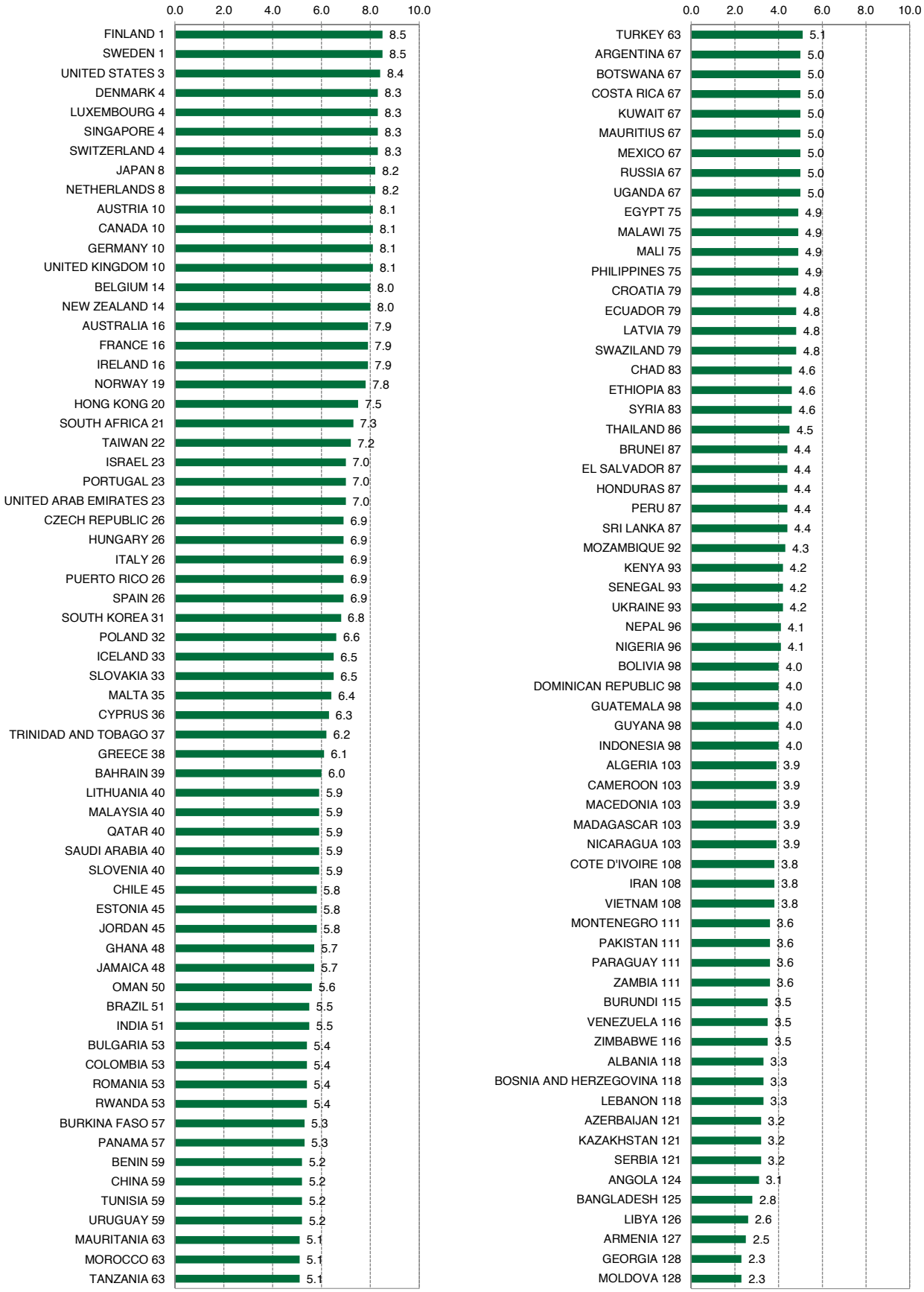


## Figure 5: Ranking by PPR Score



## Figure 6: Ranking by IPR Score



## Table 5: Changes in the IPRI score (2010–2011)

| County | Change | IPRI 2011 | IPRI 2010 |
|---|---|---|---|
| BRUNEI | 1.4 | 5.7 | 4.3 |
| INDONESIA | 0.9 | 5.0 | 4.1 |
| CHAD | 0.8 | 4.0 | 3.2 |
| GUYANA | 0.7 | 4.6 | 3.9 |
| MONTENEGRO | 0.7 | 5.2 | 4.5 |
| BANGLADESH | 0.7 | 3.6 | 2.9 |
| BENIN | 0.7 | 5.3 | 4.6 |
| UGANDA | 0.7 | 4.6 | 3.9 |
| POLAND | 0.7 | 6.2 | 5.5 |
| MACEDONIA | 0.6 | 4.7 | 4.1 |
| ALBANIA | 0.6 | 4.4 | 3.8 |
| COTE D'IVOIRE | 0.6 | 3.7 | 3.1 |
| PERU | 0.6 | 4.9 | 4.3 |
| ALGERIA | 0.6 | 4.3 | 3.7 |
| ETHIOPIA | 0.5 | 4.5 | 4.0 |
| TANZANIA | 0.5 | 5.1 | 4.6 |
| MOZAMBIQUE | 0.5 | 4.7 | 4.2 |
| ECUADOR | 0.5 | 4.4 | 3.9 |
| MALAWI | 0.5 | 5.2 | 4.7 |
| SENEGAL | 0.5 | 4.7 | 4.2 |
| PARAGUAY | 0.5 | 4.0 | 3.5 |
| BAHRAIN | 0.5 | 6.7 | 6.2 |
| NICARAGUA | 0.5 | 4.1 | 3.6 |
| BOSNIA AND HERZEGOVINA | 0.5 | 4.1 | 3.6 |
| BOLIVIA | 0.5 | 3.9 | 3.4 |
| URUGUAY | 0.4 | 6.1 | 5.7 |
| AZERBAIJAN | 0.4 | 4.4 | 4.0 |
| SAUDI ARABIA | 0.4 | 6.5 | 6.1 |
| CHINA | 0.4 | 5.5 | 5.1 |
| GHANA | 0.4 | 5.6 | 5.2 |
| CROATIA | 0.4 | 5.3 | 4.9 |
| TRINIDAD AND TOBAGO | 0.4 | 5.6 | 5.2 |
| CAMEROON | 0.4 | 4.2 | 3.8 |
| SRI LANKA | 0.4 | 5.0 | 4.6 |
| NEPAL | 0.4 | 4.4 | 4.0 |
| VIETNAM | 0.4 | 4.9 | 4.5 |
| MAURITIUS | 0.4 | 6.3 | 5.9 |
| ARMENIA | 0.4 | 4.2 | 3.8 |
| BURKINA FASO | 0.4 | 5.0 | 4.6 |
| GEORGIA | 0.4 | 4.1 | 3.7 |
| CYPRUS | 0.3 | 6.9 | 6.6 |
| ARGENTINA | 0.3 | 4.7 | 4.4 |
| TAIWAN | 0.3 | 7.1 | 6.8 |
| ZIMBABWE | 0.3 | 3.5 | 3.2 |
| CHILE | 0.3 | 6.7 | 6.4 |
| QATAR | 0.3 | 7.1 | 6.8 |
| RUSSIA | 0.3 | 4.6 | 4.3 |
| SERBIA | 0.3 | 4.2 | 3.9 |
| BURUNDI | 0.3 | 3.6 | 3.3 |
| BOTSWANA | 0.3 | 6.3 | 6.0 |
| ZAMBIA | 0.3 | 4.8 | 4.5 |
| MEXICO | 0.3 | 5.0 | 4.7 |
| CZECH REPUBLIC | 0.3 | 6.5 | 6.2 |
| HONG KONG | 0.3 | 7.8 | 7.5 |
| OMAN | 0.2 | 6.7 | 6.5 |
| COSTA RICA | 0.2 | 5.9 | 5.7 |
| VENEZUELA | 0.2 | 3.4 | 3.2 |
| DOMINICAN REPUBLIC | 0.2 | 4.6 | 4.4 |
| MOROCCO | 0.2 | 5.3 | 5.1 |
| MAURITANIA | 0.2 | 4.6 | 4.4 |
| SLOVENIA | 0.2 | 5.8 | 5.6 |
| PAKISTAN | 0.2 | 4.1 | 3.9 |
| GUATEMALA | 0.2 | 4.5 | 4.3 |
| PANAMA | 0.2 | 5.6 | 5.4 |
| EGYPT | 0.2 | 5.2 | 5.0 |
| BRAZIL | 0.2 | 5.3 | 5.1 |
| MALTA | 0.2 | 6.8 | 6.6 |
| PUERTO RICO | 0.2 | 6.5 | 6.3 |
| PHILIPPINES | 0.2 | 4.7 | 4.5 |
| EL SALVADOR | 0.1 | 4.9 | 4.8 |
| UNITED ARAB EMIRATES | 0.1 | 7.2 | 7.1 |
| KUWAIT | 0.1 | 5.9 | 5.8 |
| TUNISIA | 0.1 | 6.0 | 5.9 |
| THAILAND | 0.1 | 5.3 | 5.2 |
| ROMANIA | 0.1 | 5.5 | 5.4 |
| LUXEMBOURG | 0.1 | 8.2 | 8.1 |
| NIGERIA | 0.1 | 3.9 | 3.8 |
| FRANCE | 0.1 | 7.3 | 7.2 |
| HONDURAS | 0.1 | 4.7 | 4.6 |
| JAMAICA | 0.1 | 5.4 | 5.3 |
| COLOMBIA | 0.1 | 5.1 | 5.0 |
| KENYA | 0.1 | 4.4 | 4.3 |
| KAZAKHSTAN | 0.1 | 4.4 | 4.3 |
| SINGAPORE | 0.1 | 8.3 | 8.2 |
| TURKEY | 0.1 | 5.3 | 5.2 |
| INDIA | 0.1 | 5.6 | 5.5 |
| BULGARIA | 0.1 | 5.3 | 5.2 |
| MALI | 0.1 | 4.8 | 4.7 |
| LATVIA | 0.1 | 5.5 | 5.4 |
| MALAYSIA | 0.0 | 6.1 | 6.1 |
| BELGIUM | 0.0 | 7.5 | 7.5 |
| MADAGASCAR | 0.0 | 4.3 | 4.3 |
| ESTONIA | 0.0 | 6.7 | 6.7 |
| LIBYA | 0.0 | 3.7 | 3.7 |
| JORDAN | 0.0 | 6.1 | 6.1 |
| SWEDEN | 0.0 | 8.5 | 8.5 |
| JAPAN | 0.0 | 7.6 | 7.6 |
| CANADA | 0.0 | 8.0 | 8.0 |
| ITALY | 0.0 | 6.0 | 6.0 |
| ISRAEL | 0.0 | 6.3 | 6.3 |
| HUNGARY | -0.1 | 6.4 | 6.5 |
| SLOVAKIA | -0.1 | 6.3 | 6.4 |
| UNITED KINGDOM | -0.1 | 7.7 | 7.8 |
| NEW ZEALAND | -0.1 | 8.2 | 8.3 |
| SWITZERLAND | -0.1 | 8.2 | 8.3 |
| PORTUGAL | -0.1 | 6.9 | 7.0 |
| SYRIA | -0.1 | 4.8 | 4.9 |
| NORWAY | -0.1 | 8.2 | 8.3 |
| GREECE | -0.1 | 5.8 | 5.9 |
| FINLAND | -0.1 | 8.5 | 8.6 |
| UKRAINE | -0.1 | 4.0 | 4.1 |
| LITHUANIA | -0.2 | 6.0 | 6.2 |
| AUSTRALIA | -0.2 | 8.0 | 8.2 |
| GERMANY | -0.2 | 7.8 | 8.0 |
| SOUTH AFRICA | -0.2 | 6.6 | 6.8 |
| AUSTRIA | -0.3 | 7.9 | 8.2 |
| SPAIN | -0.3 | 6.5 | 6.8 |
| IRELAND | -0.4 | 7.6 | 8.0 |
| NETHERLANDS | -0.4 | 8.0 | 8.4 |
| DENMARK | -0.4 | 8.1 | 8.5 |
| UNITED STATES | -0.4 | 7.5 | 7.9 |
| MOLDOVA | -0.5 | 3.9 | 4.4 |
| SOUTH KOREA | -0.5 | 6.3 | 6.8 |
| ICELAND | -0.6 | 7.2 | 7.8 |
| ANGOLA | - | 3.6 | - |
| IRAN | - | 4.2 | - |
| LEBANON | - | 4.4 | - |
| RWANDA | - | 5.6 | - |
| SWAZILAND | - | 5.2 | - |

## Table 6: Changes in the LP score (2010–2011)

| County | Change | LP 2011 | LP 2010 |
|---|---|---|---|
| CHAD | 0.8 | 2.4 | 1.6 |
| BRUNEI | 0.7 | 7.0 | 6.3 |
| POLAND | 0.7 | 6.4 | 5.7 |
| ALBANIA | 0.7 | 4.5 | 3.8 |
| COTE D'IVOIRE | 0.7 | 2.4 | 1.7 |
| QATAR | 0.7 | 7.9 | 7.2 |
| TRINIDAD AND TOBAGO | 0.6 | 5.3 | 4.7 |
| CHILE | 0.5 | 7.3 | 6.8 |
| MONTENEGRO | 0.5 | 5.4 | 4.9 |
| INDONESIA | 0.5 | 4.2 | 3.7 |
| SRI LANKA | 0.5 | 4.5 | 4.0 |
| MACEDONIA | 0.5 | 4.6 | 4.1 |
| CAMEROON | 0.5 | 3.5 | 3.0 |
| NICARAGUA | 0.5 | 3.5 | 3.0 |
| ZAMBIA | 0.5 | 4.9 | 4.4 |
| MOZAMBIQUE | 0.4 | 4.6 | 4.2 |
| SENEGAL | 0.4 | 4.4 | 4.0 |
| BANGLADESH | 0.4 | 3.4 | 3.0 |
| BULGARIA | 0.4 | 5.0 | 4.6 |
| GUYANA | 0.4 | 4.1 | 3.7 |
| ROMANIA | 0.4 | 5.2 | 4.8 |
| ARGENTINA | 0.4 | 4.1 | 3.7 |
| GEORGIA | 0.4 | 4.1 | 3.7 |
| KAZAKHSTAN | 0.4 | 4.4 | 4.0 |
| VIETNAM | 0.4 | 4.8 | 4.4 |
| VENEZUELA | 0.4 | 2.3 | 1.9 |
| ARMENIA | 0.4 | 4.2 | 3.8 |
| COSTA RICA | 0.3 | 6.6 | 6.3 |
| GHANA | 0.3 | 5.2 | 4.9 |
| URUGUAY | 0.3 | 7.0 | 6.7 |
| BRAZIL | 0.3 | 5.0 | 4.7 |
| LATVIA | 0.3 | 5.9 | 5.6 |
| ZIMBABWE | 0.3 | 2.1 | 1.8 |
| BOSNIA AND HERZEGOVINA | 0.3 | 4.1 | 3.8 |
| PANAMA | 0.3 | 4.6 | 4.3 |
| PAKISTAN | 0.3 | 2.8 | 2.5 |
| ESTONIA | 0.3 | 7.1 | 6.8 |
| ECUADOR | 0.3 | 3.0 | 2.7 |
| SLOVENIA | 0.3 | 6.8 | 6.5 |
| HONDURAS | 0.3 | 3.9 | 3.6 |
| PARAGUAY | 0.3 | 2.9 | 2.6 |
| BOLIVIA | 0.2 | 3.2 | 3.0 |
| CROATIA | 0.2 | 5.3 | 5.1 |
| JAPAN | 0.2 | 7.6 | 7.4 |
| THAILAND | 0.2 | 4.6 | 4.4 |
| RUSSIA | 0.2 | 3.5 | 3.3 |
| MEXICO | 0.2 | 4.2 | 4.0 |
| ISRAEL | 0.2 | 6.1 | 5.9 |
| BAHRAIN | 0.2 | 5.9 | 5.7 |
| ITALY | 0.2 | 5.5 | 5.3 |
| ETHIOPIA | 0.2 | 3.3 | 3.1 |
| UGANDA | 0.2 | 3.8 | 3.6 |
| SAUDI ARABIA | 0.2 | 5.6 | 5.4 |
| DOMINICAN REPUBLIC | 0.2 | 4.2 | 4.0 |
| AZERBAIJAN | 0.2 | 3.8 | 3.6 |
| CZECH REPUBLIC | 0.2 | 6.3 | 6.1 |
| PERU | 0.1 | 3.7 | 3.6 |
| TAIWAN | 0.1 | 6.4 | 6.3 |
| JAMAICA | 0.1 | 4.7 | 4.6 |
| EL SALVADOR | 0.1 | 4.4 | 4.3 |
| LITHUANIA | 0.1 | 5.8 | 5.7 |
| BURUNDI | 0.1 | 2.6 | 2.5 |
| CHINA | 0.1 | 4.5 | 4.4 |
| CYPRUS | 0.1 | 7.0 | 6.9 |
| PUERTO RICO | 0.1 | 6.3 | 6.2 |
| SWEDEN | 0.1 | 8.8 | 8.7 |
| NEPAL | 0.1 | 3.2 | 3.1 |
| SERBIA | 0.1 | 4.1 | 4.0 |
| MOROCCO | 0.1 | 4.6 | 4.5 |
| MALAWI | 0.1 | 5.1 | 5.0 |
| UNITED KINGDOM | 0.0 | 7.8 | 7.8 |
| MAURITIUS | 0.0 | 6.6 | 6.6 |
| PHILIPPINES | 0.0 | 3.5 | 3.5 |
| NORWAY | 0.0 | 8.5 | 8.5 |
| LUXEMBOURG | 0.0 | 8.5 | 8.5 |
| TANZANIA | 0.0 | 4.6 | 4.6 |
| NEW ZEALAND | 0.0 | 8.8 | 8.8 |
| KENYA | 0.0 | 3.0 | 3.0 |
| MAURITANIA | 0.0 | 3.3 | 3.3 |
| TUNISIA | 0.0 | 5.7 | 5.7 |
| DENMARK | 0.0 | 8.7 | 8.7 |
| CANADA | 0.0 | 8.4 | 8.4 |
| ALGERIA | 0.0 | 3.5 | 3.5 |
| GUATEMALA | 0.0 | 3.5 | 3.5 |
| BELGIUM | 0.0 | 7.4 | 7.4 |
| HONG KONG | 0.0 | 8.1 | 8.1 |
| HUNGARY | 0.0 | 6.1 | 6.1 |
| COLOMBIA | 0.0 | 3.8 | 3.8 |
| FRANCE | 0.0 | 7.2 | 7.2 |
| UNITED ARAB EMIRATES | -0.1 | 6.7 | 6.8 |
| BENIN | -0.1 | 4.5 | 4.6 |
| SYRIA | -0.1 | 3.7 | 3.8 |
| IRELAND | -0.1 | 8.2 | 8.3 |
| BOTSWANA | -0.1 | 6.8 | 6.9 |
| INDIA | -0.1 | 4.7 | 4.8 |
| MALAYSIA | -0.1 | 5.6 | 5.7 |
| KUWAIT | -0.1 | 6.2 | 6.3 |
| OMAN | -0.1 | 6.6 | 6.7 |
| MOLDOVA | -0.1 | 3.7 | 3.8 |
| BURKINA FASO | -0.1 | 4.2 | 4.3 |
| EGYPT | -0.1 | 4.6 | 4.7 |
| FINLAND | -0.1 | 8.8 | 8.9 |
| JORDAN | -0.1 | 5.6 | 5.7 |
| SLOVAKIA | -0.1 | 5.7 | 5.8 |
| NETHERLANDS | -0.1 | 8.4 | 8.5 |
| TURKEY | -0.1 | 4.6 | 4.7 |
| SOUTH KOREA | -0.1 | 6.0 | 6.1 |
| AUSTRALIA | -0.2 | 8.3 | 8.5 |
| SPAIN | -0.2 | 6.1 | 6.3 |
| SWITZERLAND | -0.2 | 8.5 | 8.7 |
| NIGERIA | -0.2 | 2.9 | 3.1 |
| SINGAPORE | -0.2 | 8.3 | 8.5 |
| MALTA | -0.2 | 7.3 | 7.5 |
| SOUTH AFRICA | -0.2 | 5.5 | 5.7 |
| GREECE | -0.2 | 5.4 | 5.6 |
| UKRAINE | -0.2 | 3.5 | 3.7 |
| ICELAND | -0.2 | 8.3 | 8.5 |
| GERMANY | -0.2 | 8.1 | 8.3 |
| MADAGASCAR | -0.3 | 3.8 | 4.1 |
| MALI | -0.3 | 4.1 | 4.4 |
| PORTUGAL | -0.3 | 6.8 | 7.1 |
| LIBYA | -0.3 | 4.3 | 4.6 |
| AUSTRIA | -0.3 | 8.1 | 8.4 |
| UNITED STATES | -0.4 | 7.1 | 7.5 |
| ANGOLA | - | 3.1 | - |
| IRAN | - | 3.5 | - |
| LEBANON | - | 3.3 | - |
| RWANDA | - | 5.2 | - |
| SWAZILAND | - | 4.6 | - |

## Table 7: Changes in the PPR score (2010-2011)

| County | Change | IPRI 2011 | IPRI 2010 |
|---|---|---|---|
| BRUNEI | 2.4 | 5.8 | 3.4 |
| BENIN | 1.5 | 6.2 | 4.7 |
| INDONESIA | 1.2 | 6.7 | 5.5 |
| UGANDA | 1.2 | 5.0 | 3.8 |
| ALGERIA | 1.1 | 5.4 | 4.3 |
| BURKINA FASO | 1.0 | 5.6 | 4.6 |
| ETHIOPIA | 0.8 | 5.6 | 4.8 |
| SENEGAL | 0.8 | 5.4 | 4.6 |
| MAURITIUS | 0.8 | 7.2 | 6.4 |
| ECUADOR | 0.8 | 5.3 | 4.5 |
| BANGLADESH | 0.8 | 4.5 | 3.7 |
| POLAND | 0.8 | 5.6 | 4.8 |
| CHINA | 0.7 | 6.8 | 6.1 |
| CYPRUS | 0.7 | 7.5 | 6.8 |
| COTE D'IVOIRE | 0.7 | 5.0 | 4.3 |
| CHAD | 0.7 | 4.9 | 4.2 |
| BAHRAIN | 0.7 | 8.1 | 7.4 |
| PARAGUAY | 0.7 | 5.4 | 4.7 |
| PERU | 0.7 | 6.5 | 5.8 |
| CAMEROON | 0.7 | 5.3 | 4.6 |
| NICARAGUA | 0.6 | 4.9 | 4.3 |
| SAUDI ARABIA | 0.6 | 7.9 | 7.3 |
| URUGUAY | 0.6 | 6.0 | 5.4 |
| MOZAMBIQUE | 0.6 | 5.2 | 4.6 |
| CROATIA | 0.6 | 5.7 | 5.1 |
| TANZANIA | 0.6 | 5.5 | 4.9 |
| DOMINICAN REPUBLIC | 0.5 | 5.7 | 5.2 |
| MADAGASCAR | 0.5 | 5.3 | 4.8 |
| BOLIVIA | 0.5 | 4.5 | 4.0 |
| GUYANA | 0.5 | 5.7 | 5.2 |
| GHANA | 0.5 | 6.0 | 5.5 |
| EGYPT | 0.5 | 6.2 | 5.7 |
| BURUNDI | 0.5 | 4.8 | 4.3 |
| MACEDONIA | 0.5 | 5.5 | 5.0 |
| BOSNIA AND HERZEGOVINA | 0.5 | 4.9 | 4.4 |
| MALAWI | 0.5 | 5.6 | 5.1 |
| AZERBAIJAN | 0.5 | 6.2 | 5.7 |
| ARGENTINA | 0.4 | 5.1 | 4.7 |
| MALI | 0.4 | 5.5 | 5.1 |
| MONTENEGRO | 0.4 | 6.6 | 6.2 |
| VIETNAM | 0.4 | 6.1 | 5.7 |
| MOLDOVA | 0.4 | 5.6 | 5.2 |
| MALTA | 0.4 | 6.8 | 6.4 |
| MEXICO | 0.4 | 5.7 | 5.3 |
| PHILIPPINES | 0.4 | 5.8 | 5.4 |
| GUATEMALA | 0.4 | 6.1 | 5.7 |
| SERBIA | 0.4 | 5.2 | 4.8 |
| BOTSWANA | 0.3 | 7.2 | 6.9 |
| CZECH REPUBLIC | 0.3 | 6.3 | 6.0 |
| LIBYA | 0.3 | 4.3 | 4.0 |
| NEPAL | 0.3 | 5.8 | 5.5 |
| MAURITANIA | 0.3 | 5.5 | 5.2 |
| MOROCCO | 0.3 | 6.2 | 5.9 |
| ALBANIA | 0.3 | 5.5 | 5.2 |
| TAIWAN | 0.3 | 7.6 | 7.3 |
| FRANCE | 0.2 | 6.7 | 6.5 |
| ZIMBABWE | 0.2 | 4.9 | 4.7 |
| GEORGIA | 0.2 | 6.0 | 5.8 |
| QATAR | 0.2 | 7.5 | 7.3 |
| OMAN | 0.2 | 7.8 | 7.6 |
| ROMANIA | 0.2 | 5.8 | 5.6 |
| TUNISIA | 0.2 | 7.2 | 7.0 |
| RUSSIA | 0.2 | 5.2 | 5.0 |
| PAKISTAN | 0.2 | 6.0 | 5.8 |
| TURKEY | 0.1 | 6.1 | 6.0 |
| BELGIUM | 0.1 | 7.0 | 6.9 |
| SRI LANKA | 0.1 | 6.1 | 6.0 |
| NIGERIA | 0.1 | 4.6 | 4.5 |
| LUXEMBOURG | 0.1 | 7.9 | 7.8 |
| HONG KONG | 0.1 | 7.9 | 7.8 |
| COLOMBIA | 0.1 | 6.0 | 5.9 |
| UNITED ARAB EMIRATES | 0.1 | 7.8 | 7.7 |
| ARMENIA | 0.1 | 5.9 | 5.8 |
| MALAYSIA | 0.1 | 6.8 | 6.7 |
| BRAZIL | 0.1 | 5.5 | 5.4 |
| ITALY | 0.0 | 5.7 | 5.7 |
| VENEZUELA | 0.0 | 4.4 | 4.4 |
| INDIA | 0.0 | 6.6 | 6.6 |
| EL SALVADOR | 0.0 | 6.0 | 6.0 |
| PUERTO RICO | 0.0 | 6.2 | 6.2 |
| SINGAPORE | 0.0 | 8.3 | 8.3 |
| KENYA | 0.0 | 6.0 | 6.0 |
| COSTA RICA | 0.0 | 6.1 | 6.1 |
| CHILE | 0.0 | 7.0 | 7.0 |
| ZAMBIA | 0.0 | 5.8 | 5.8 |
| SLOVENIA | 0.0 | 4.7 | 4.7 |
| JORDAN | -0.1 | 6.8 | 6.9 |
| THAILAND | -0.1 | 6.8 | 6.9 |
| SWITZERLAND | -0.1 | 7.8 | 7.9 |
| PANAMA | -0.1 | 6.8 | 6.9 |
| TRINIDAD AND TOBAGO | -0.1 | 5.3 | 5.4 |
| PORTUGAL | -0.1 | 6.8 | 6.9 |
| JAPAN | -0.1 | 7.0 | 7.1 |
| JAMAICA | -0.2 | 5.7 | 5.9 |
| HONDURAS | -0.2 | 5.7 | 5.9 |
| GREECE | -0.2 | 6.0 | 6.2 |
| KAZAKHSTAN | -0.2 | 5.6 | 5.8 |
| SYRIA | -0.3 | 6.2 | 6.5 |
| CANADA | -0.3 | 7.5 | 7.8 |
| ISRAEL | -0.3 | 5.9 | 6.2 |
| FINLAND | -0.3 | 8.3 | 8.6 |
| AUSTRIA | -0.3 | 7.5 | 7.8 |
| SWEDEN | -0.3 | 8.2 | 8.5 |
| HUNGARY | -0.3 | 6.3 | 6.6 |
| SPAIN | -0.3 | 6.6 | 6.9 |
| NORWAY | -0.3 | 8.3 | 8.6 |
| KUWAIT | -0.4 | 6.6 | 7.0 |
| BULGARIA | -0.4 | 5.6 | 6.0 |
| UKRAINE | -0.4 | 4.4 | 4.8 |
| GERMANY | -0.4 | 7.1 | 7.5 |
| ESTONIA | -0.4 | 7.1 | 7.5 |
| AUSTRALIA | -0.4 | 7.7 | 8.1 |
| SLOVAKIA | -0.4 | 6.7 | 7.1 |
| SOUTH AFRICA | -0.5 | 6.9 | 7.4 |
| NEW ZEALAND | -0.5 | 7.7 | 8.2 |
| UNITED KINGDOM | -0.5 | 7.2 | 7.7 |
| LATVIA | -0.5 | 5.8 | 6.3 |
| LITHUANIA | -0.6 | 6.3 | 6.9 |
| UNITED STATES | -0.7 | 7.1 | 7.8 |
| NETHERLANDS | -1.0 | 7.5 | 8.5 |
| DENMARK | -1.0 | 7.3 | 8.3 |
| SOUTH KOREA | -1.1 | 6.1 | 7.2 |
| IRELAND | -1.1 | 6.7 | 7.8 |
| ICELAND | -1.3 | 6.8 | 8.1 |
| ANGOLA | - | 4.5 | - |
| IRAN | - | 5.4 | - |
| LEBANON | - | 6.5 | - |
| RWANDA | - | 6.3 | - |
| SWAZILAND | - | 6.2 | - |

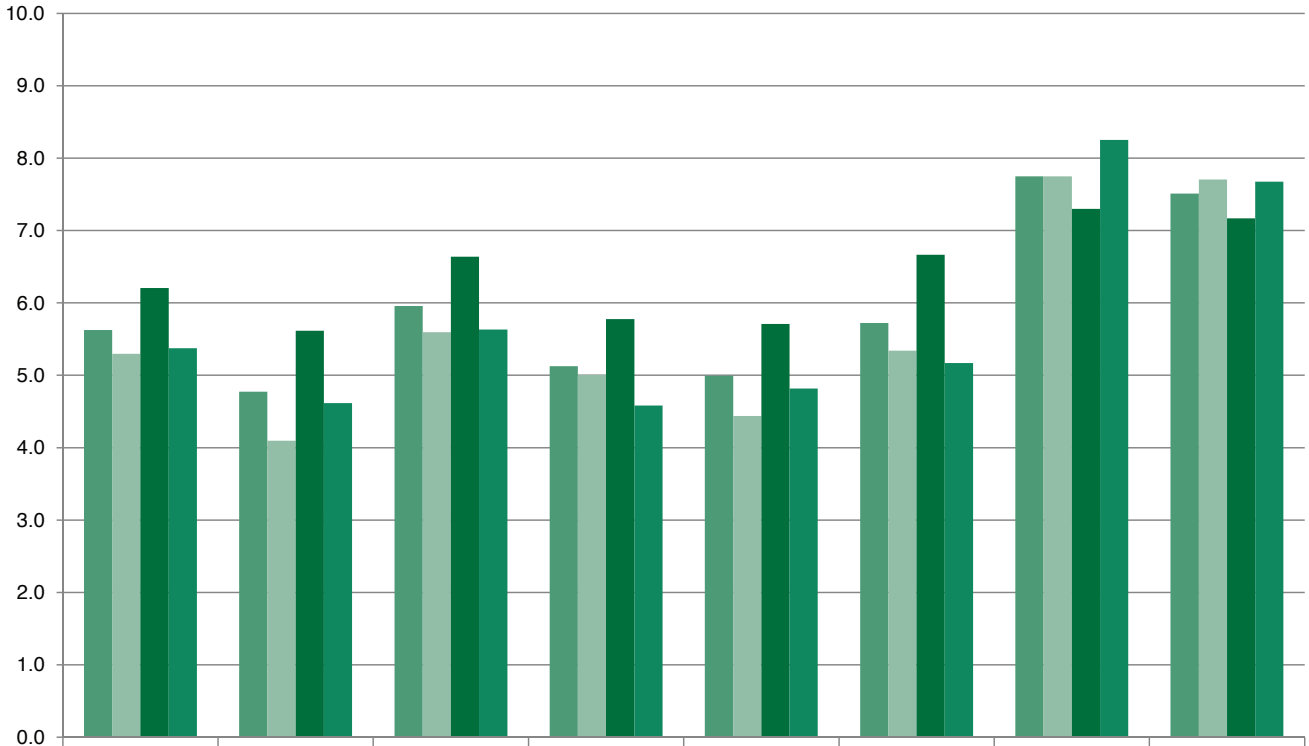
## Table 8: Changes in the IPR score (2010–2011)

| County | Change | IPRI 2011 | IPRI 2010 |
|---|---|---|---|
| GUYANA | 1.3 | 4.0 | 2.7 |
| BRUNEI | 1.2 | 4.4 | 3.2 |
| MONTENEGRO | 1.2 | 3.6 | 2.4 |
| MALAWI | 1.0 | 4.9 | 3.9 |
| ALBANIA | 1.0 | 3.3 | 2.3 |
| KUWAIT | 0.9 | 5.0 | 4.1 |
| TANZANIA | 0.9 | 5.1 | 4.2 |
| PERU | 0.8 | 4.4 | 3.6 |
| MACEDONIA | 0.8 | 3.9 | 3.1 |
| HONG KONG | 0.8 | 7.5 | 6.7 |
| INDONESIA | 0.8 | 4.0 | 3.2 |
| CHAD | 0.8 | 4.6 | 3.9 |
| BANGLADESH | 0.7 | 2.8 | 2.1 |
| BOTSWANA | 0.7 | 5.0 | 4.3 |
| ARMENIA | 0.7 | 2.5 | 1.9 |
| AZERBAIJAN | 0.6 | 3.2 | 2.6 |
| TRINIDAD AND TOBAGO | 0.6 | 6.2 | 5.6 |
| NEPAL | 0.6 | 4.1 | 3.5 |
| BOSNIA AND HERZEGOVINA | 0.6 | 3.3 | 2.7 |
| UGANDA | 0.6 | 5.0 | 4.4 |
| ETHIOPIA | 0.6 | 4.6 | 4.0 |
| BOLIVIA | 0.6 | 4.0 | 3.4 |
| POLAND | 0.5 | 6.6 | 6.1 |
| GEORGIA | 0.5 | 2.3 | 1.8 |
| MOZAMBIQUE | 0.5 | 4.3 | 3.8 |
| BENIN | 0.5 | 5.2 | 4.7 |
| TAIWAN | 0.5 | 7.2 | 6.7 |
| COTE D'IVOIRE | 0.5 | 3.8 | 3.3 |
| SRI LANKA | 0.5 | 4.4 | 3.9 |
| ALGERIA | 0.5 | 3.9 | 3.4 |
| BAHRAIN | 0.5 | 6.0 | 5.5 |
| GHANA | 0.5 | 5.7 | 5.2 |
| PARAGUAY | 0.5 | 3.6 | 3.1 |
| OMAN | 0.4 | 5.6 | 5.2 |
| SLOVENIA | 0.4 | 5.9 | 5.5 |
| ZIMBABWE | 0.4 | 3.5 | 3.1 |
| MAURITANIA | 0.4 | 5.1 | 4.7 |
| SINGAPORE | 0.4 | 8.3 | 7.9 |
| CHILE | 0.4 | 5.8 | 5.4 |
| RUSSIA | 0.4 | 5.0 | 4.6 |
| LATVIA | 0.4 | 4.8 | 4.4 |
| MALTA | 0.4 | 6.4 | 6.0 |
| EL SALVADOR | 0.4 | 4.4 | 4.0 |
| CHINA | 0.4 | 5.2 | 4.8 |
| ECUADOR | 0.4 | 4.8 | 4.4 |
| SERBIA | 0.4 | 3.2 | 2.8 |
| BURUNDI | 0.4 | 3.5 | 3.1 |
| SAUDI ARABIA | 0.4 | 5.9 | 5.5 |
| COSTA RICA | 0.3 | 5.0 | 4.7 |
| ZAMBIA | 0.3 | 3.6 | 3.3 |
| NIGERIA | 0.3 | 4.1 | 3.8 |
| MOROCCO | 0.3 | 5.1 | 4.8 |
| LUXEMBOURG | 0.3 | 8.3 | 8.0 |
| CZECH REPUBLIC | 0.3 | 6.9 | 6.6 |
| VIETNAM | 0.3 | 3.8 | 3.5 |
| SLOVAKIA | 0.3 | 6.5 | 6.2 |
| UNITED ARAB EMIRATES | 0.3 | 7.0 | 6.7 |
| PAKISTAN | 0.3 | 3.6 | 3.3 |
| ARGENTINA | 0.3 | 5.0 | 4.7 |
| GUATEMALA | 0.3 | 4.0 | 3.7 |
| VENEZUELA | 0.3 | 3.5 | 3.2 |
| PANAMA | 0.3 | 5.3 | 5.0 |
| BURKINA FASO | 0.3 | 5.3 | 5.0 |
| BRAZIL | 0.3 | 5.5 | 5.2 |
| CROATIA | 0.3 | 4.8 | 4.5 |
| BULGARIA | 0.3 | 5.4 | 5.1 |
| UKRAINE | 0.3 | 4.2 | 3.9 |
| NICARAGUA | 0.3 | 3.9 | 3.6 |
| URUGUAY | 0.3 | 5.2 | 4.9 |
| CYPRUS | 0.3 | 6.3 | 6.0 |
| TUNISIA | 0.3 | 5.2 | 4.9 |
| HUNGARY | 0.3 | 6.9 | 6.7 |
| JAMAICA | 0.3 | 5.7 | 5.5 |
| PUERTO RICO | 0.3 | 6.9 | 6.7 |
| KENYA | 0.2 | 4.2 | 4.0 |
| SWEDEN | 0.2 | 8.5 | 8.3 |
| EGYPT | 0.2 | 4.9 | 4.7 |
| UNITED KINGDOM | 0.2 | 8.1 | 7.9 |
| INDIA | 0.2 | 5.5 | 5.3 |
| THAILAND | 0.2 | 4.5 | 4.3 |
| CANADA | 0.2 | 8.1 | 7.9 |
| HONDURAS | 0.2 | 4.4 | 4.2 |
| LIBYA | 0.2 | 2.6 | 2.4 |
| ESTONIA | 0.2 | 5.8 | 5.6 |
| MEXICO | 0.2 | 5.0 | 4.9 |
| MALAYSIA | 0.1 | 5.9 | 5.8 |
| MAURITIUS | 0.1 | 5.0 | 4.9 |
| PHILIPPINES | 0.1 | 4.9 | 4.8 |
| SENEGAL | 0.1 | 4.2 | 4.1 |
| COLOMBIA | 0.1 | 5.4 | 5.3 |
| KAZAKHSTAN | 0.1 | 3.2 | 3.1 |
| MALI | 0.1 | 4.9 | 4.8 |
| GREECE | 0.1 | 6.1 | 6.0 |
| CAMEROON | 0.1 | 3.9 | 3.8 |
| TURKEY | 0.1 | 5.1 | 5.0 |
| JORDAN | 0.1 | 5.8 | 5.7 |
| NEW ZEALAND | 0.1 | 8.0 | 7.9 |
| DOMINICAN REPUBLIC | 0.1 | 4.0 | 3.9 |
| SYRIA | 0.1 | 4.6 | 4.5 |
| ISRAEL | 0.1 | 7.0 | 6.9 |
| FRANCE | 0.0 | 7.9 | 7.9 |
| FINLAND | 0.0 | 8.5 | 8.5 |
| IRELAND | 0.0 | 7.9 | 7.9 |
| QATAR | 0.0 | 5.9 | 5.9 |
| LITHUANIA | 0.0 | 5.9 | 5.9 |
| PORTUGAL | 0.0 | 7.0 | 7.0 |
| SWITZERLAND | 0.0 | 8.3 | 8.3 |
| NETHERLANDS | 0.0 | 8.2 | 8.2 |
| MADAGASCAR | 0.0 | 3.9 | 3.9 |
| NORWAY | 0.0 | 7.8 | 7.9 |
| UNITED STATES | -0.1 | 8.4 | 8.5 |
| AUSTRALIA | -0.1 | 7.9 | 8.0 |
| SOUTH AFRICA | -0.1 | 7.3 | 7.4 |
| BELGIUM | -0.1 | 8.0 | 8.1 |
| JAPAN | -0.1 | 8.2 | 8.3 |
| GERMANY | -0.1 | 8.1 | 8.2 |
| ITALY | -0.2 | 6.9 | 7.1 |
| SOUTH KOREA | -0.2 | 6.8 | 7.0 |
| AUSTRIA | -0.2 | 8.1 | 8.3 |
| DENMARK | -0.2 | 8.3 | 8.5 |
| SPAIN | -0.3 | 6.9 | 7.2 |
| ROMANIA | -0.4 | 5.4 | 5.8 |
| ICELAND | -0.4 | 6.5 | 6.9 |
| MOLDOVA | -1.8 | 2.3 | 4.1 |
| ANGOLA | - | 3.1 | - |
| IRAN | - | 3.8 | - |
| LEBANON | - | 3.3 | - |
| RWANDA | - | 5.4 | - |
| SWAZILAND | - | 4.8 | - |

### Regional Distribution of IPRI

Figure 7 presents the average scores by region and component in the 2011 IPRI. Keeping with last year's report, Mexico and Malta are assigned to the combined Latin America and Caribbean region and Western Europe, respectively. Angola, Rwanda, and Swaziland, newly added countries to the IPRI, are assigned to Africa. Iran and Lebanon are grouped into the combined Middle East and North Africa region. Appendix III presents the complete regional assignments.

**Figure 7: Average Scores by Region and Component**




| | All Countries | Africa | Asia and Oceania | CEE and Central Asia | Latin America and Caribbean | Middle East and North Africa | North America | Western Europe |
|---|---|---|---|---|---|---|---|---|
| IPRI | 5.6 | 4.8 | 6.0 | 5.1 | 5.0 | 5.7 | 7.8 | 7.5 |
| LP | 5.3 | 4.1 | 5.6 | 5.0 | 4.4 | 5.3 | 7.8 | 7.7 |
| PPR | 6.2 | 5.6 | 6.6 | 5.8 | 5.7 | 6.7 | 7.3 | 7.2 |
| IPR | 5.4 | 4.6 | 5.6 | 4.6 | 4.8 | 5.2 | 8.3 | 7.7 |

## IPRI and Economic Outcomes

The underlying assumption of this study is the strong correlation between an effective property rights regime and its significant impact on the economic performance of a country. According to the distribution of average income among countries in the IPRI quintiles, countries with high property rights scores tend to be the nations with higher per capita incomes. Countries with low property rights scores tend to have lower per capita incomes. Additionally, countries with strong property rights regimes attract more foreign direct investment (FDI). Finally, developing countries with strong property rights show stronger 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**

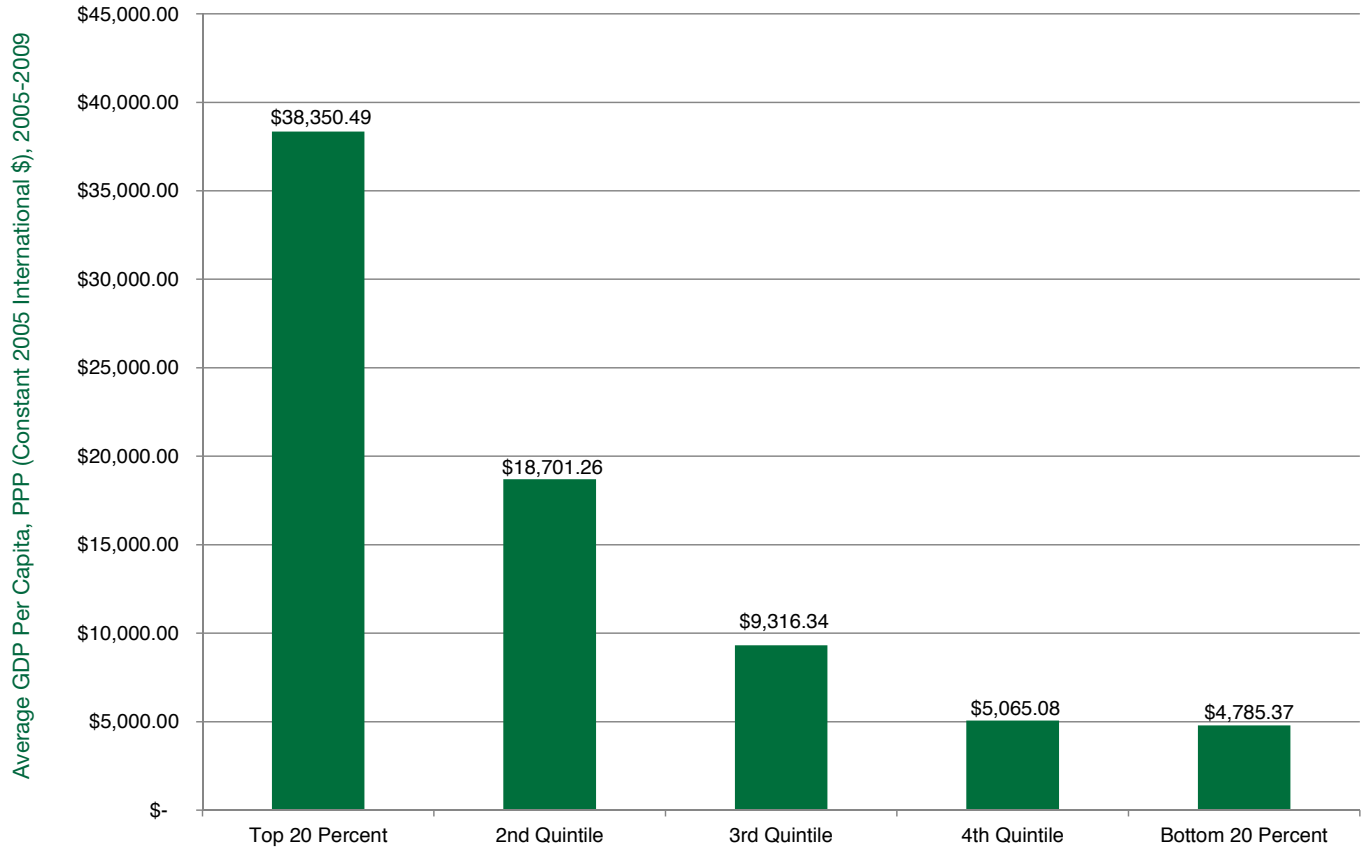
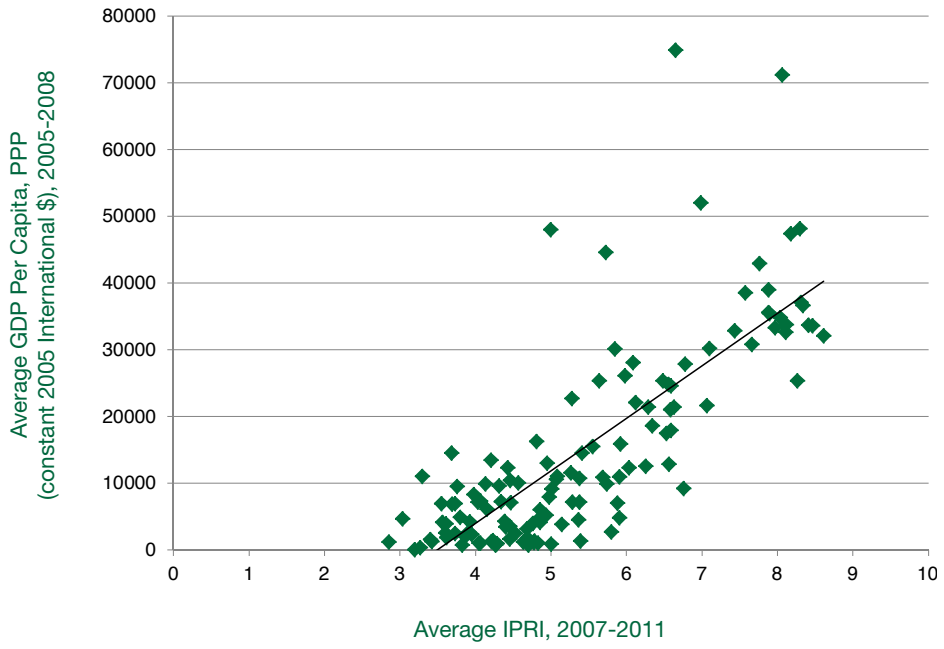



Figure 8 illustrates that, on average, countries in the top quintile of IPRI scores enjoy a per capita income eight times that of their counterparts in the bottom quintile.[ii] Calculations for Figure 8 are based on the averages of the IPRI scores for years 2007–2011 and corresponding data on average GDP per capita in PPP terms for years 2005–2009. Use of averages allows us to establish a more robust relationship between property rights and income, which may 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: Relationship between IPRI and GDP Per Capita




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

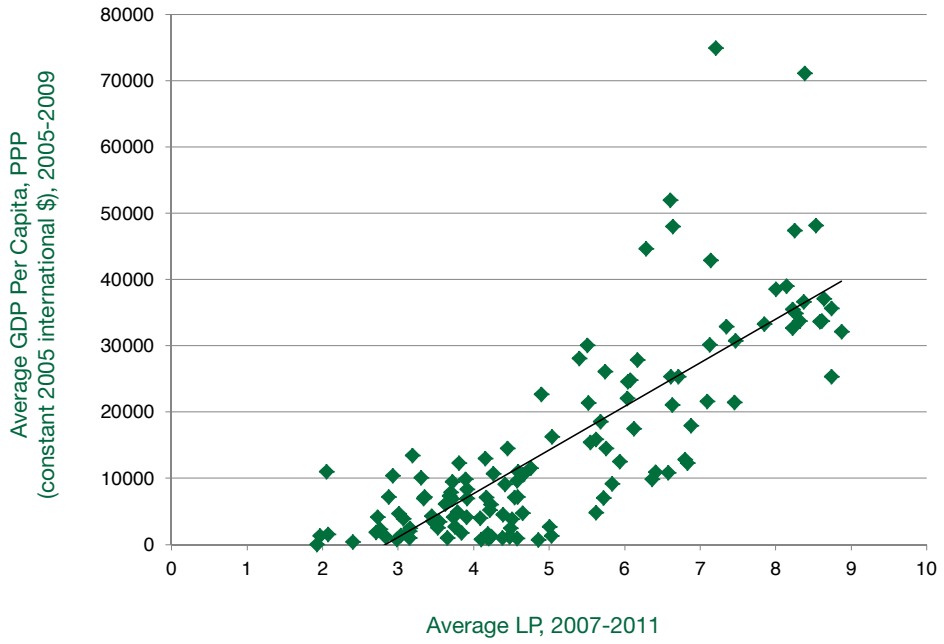
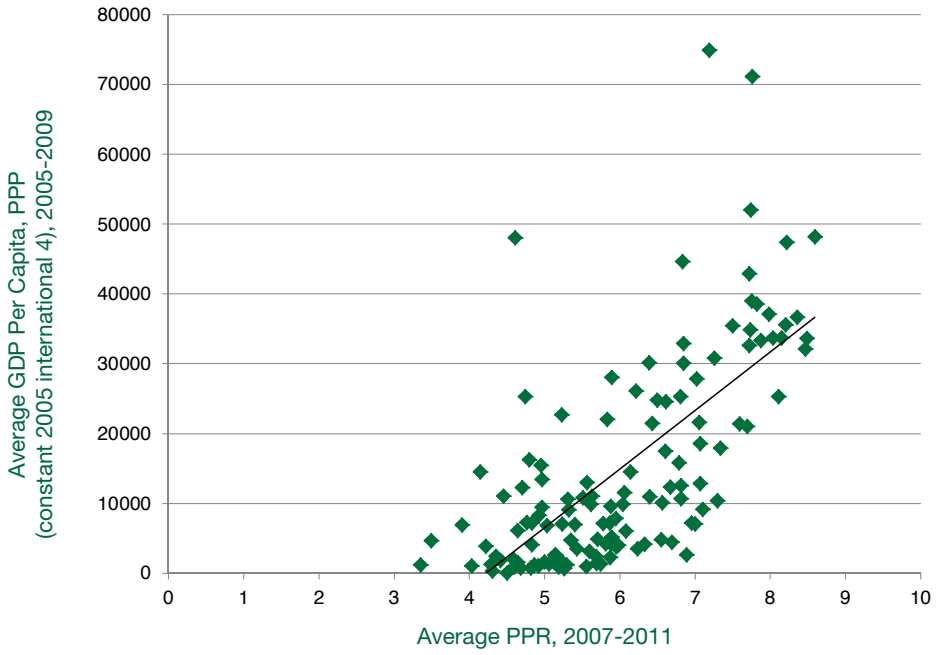
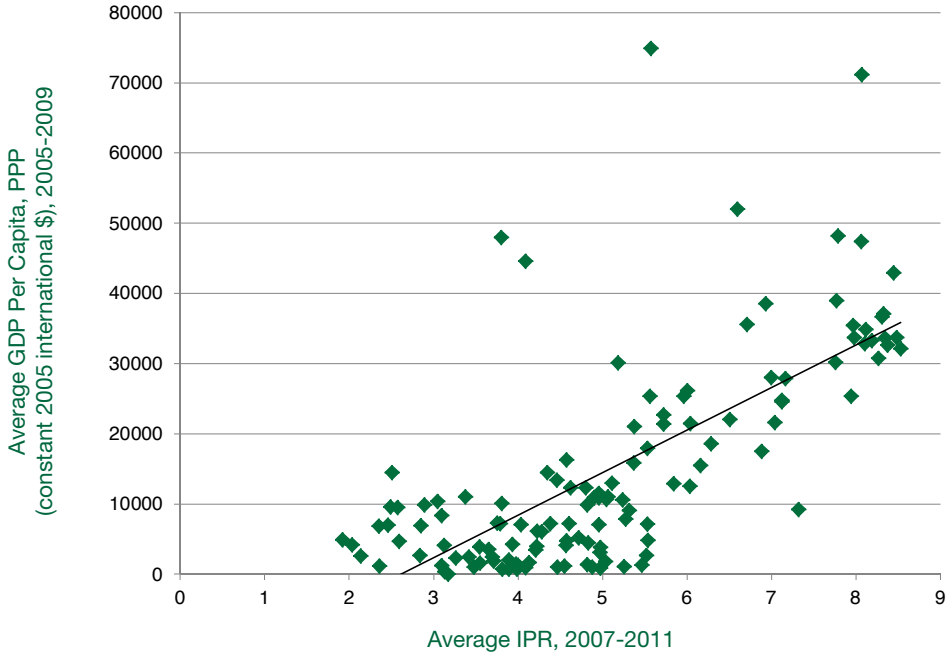



Figure 9 presents the relationship between the IPRI scores and GDP per capita. The IPRI score is overwhelmingly positively related to GDP per capita. We find that countries with strong property rights protections have higher GDP per capita income compared to countries at the bottom of the IPRI ranking. A similar relationship is observed for the IPRI's core components (Figures 10–12).

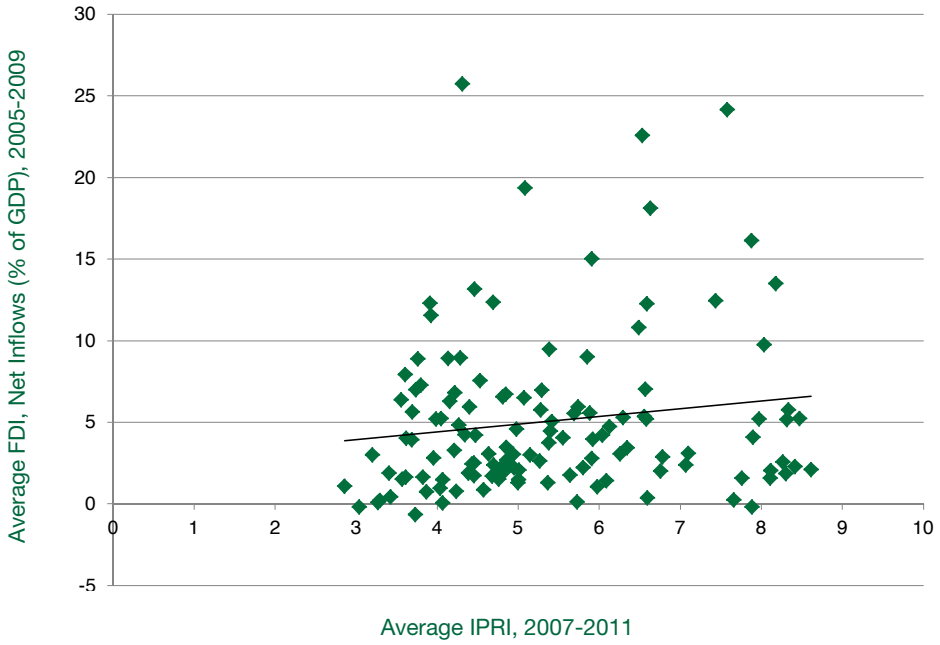
## Figure 11: Relationship between PPR and GDP Per Capita



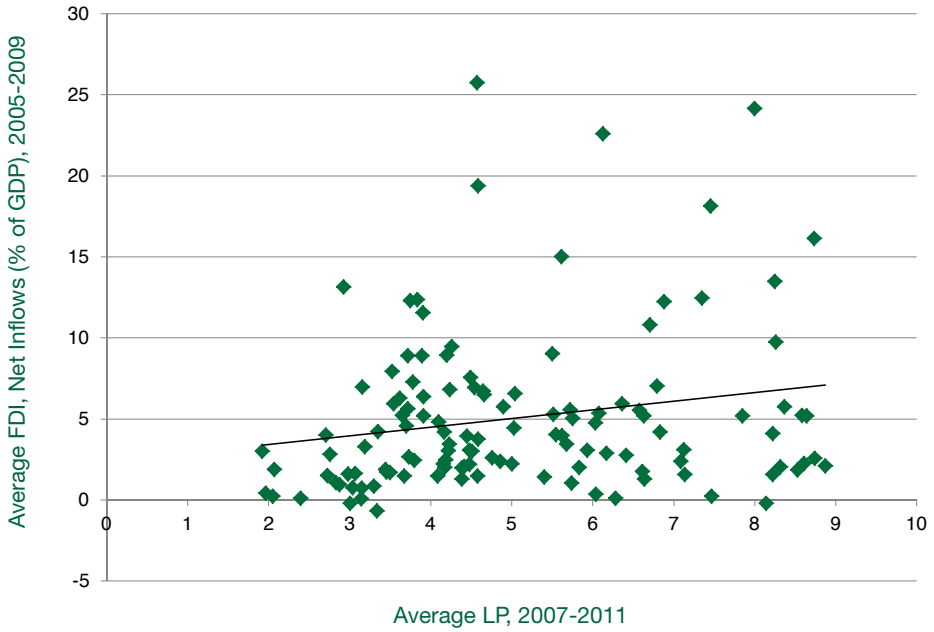

## Figure 12: Relationship between IPR and GDP Per Capita



## Figure 13: Relationship between IPRI and FDI Inflows as a Percentage of GDP




## Figure 14: Relationship between LP and FDI Inflows as a Percentage of GDP




To further investigate the role that protection of property rights plays in economic development, we consider 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 percentage of GDP.[iii] Similarly, Figures 14–16 demonstrate that countries with a well-established legal system, a stable political environment and strong protection of physical property rights attract more FDI. This relationship appears to be weaker for the IPR component, but data on IPR is less complete than for other components. Therefore, our results may be prone to inconsistencies in certain cases because of the lack of comprehensive data.

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

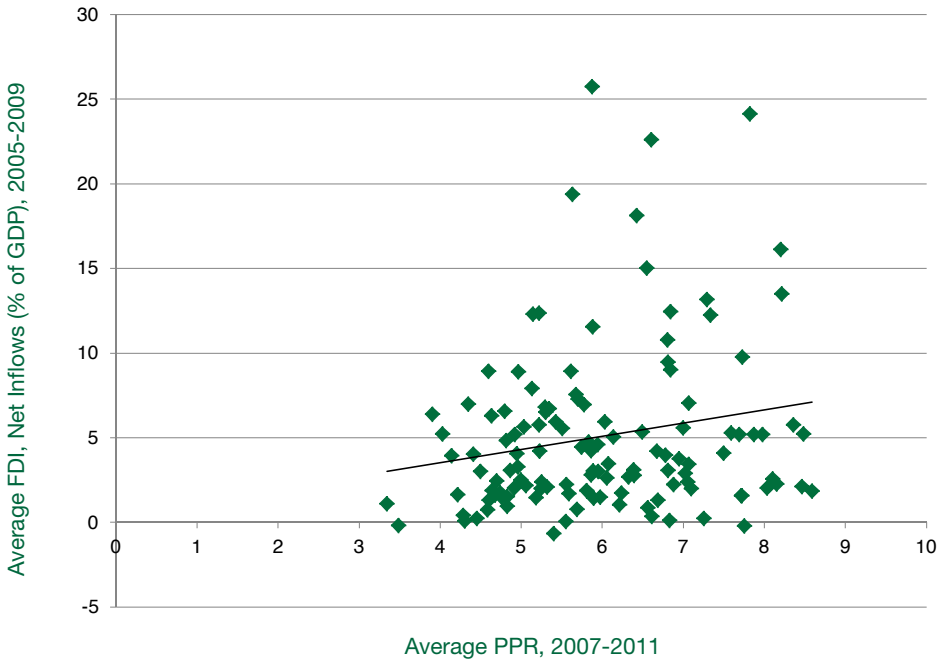
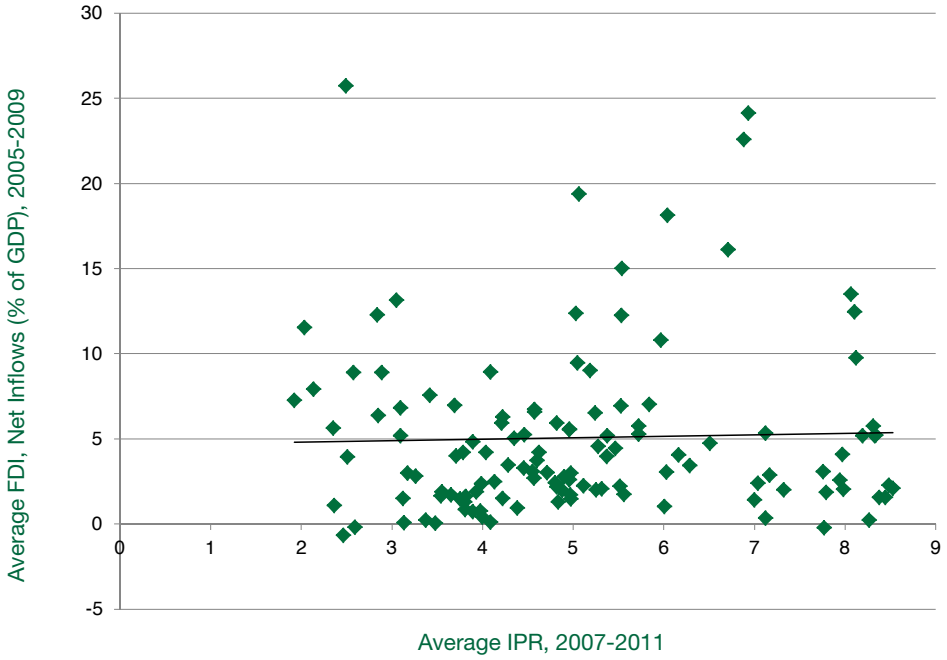
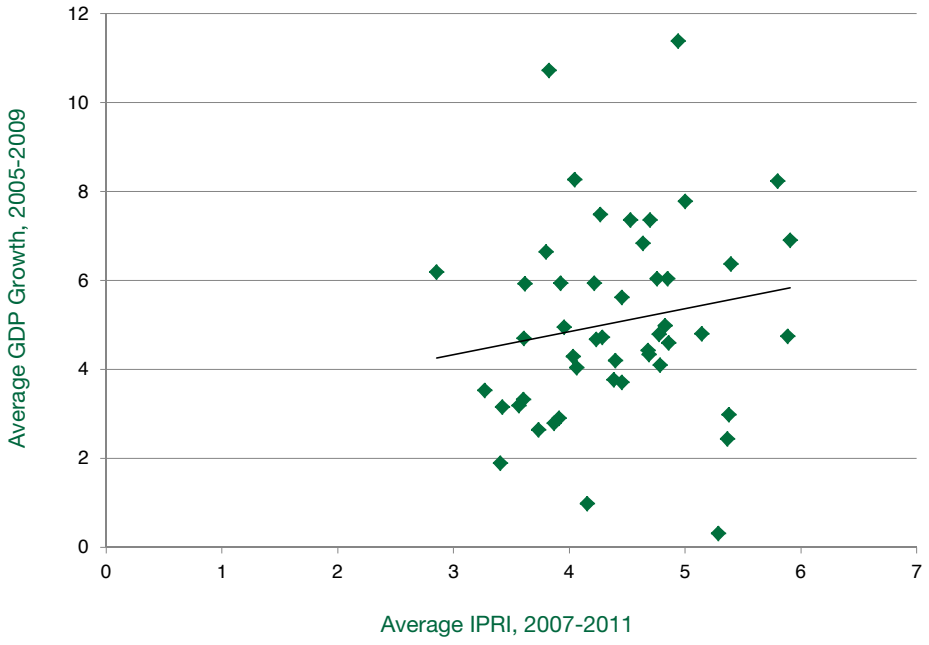



**Figure 16: Relationship between IPR and FDI Inflows as a Percentage of GDP**

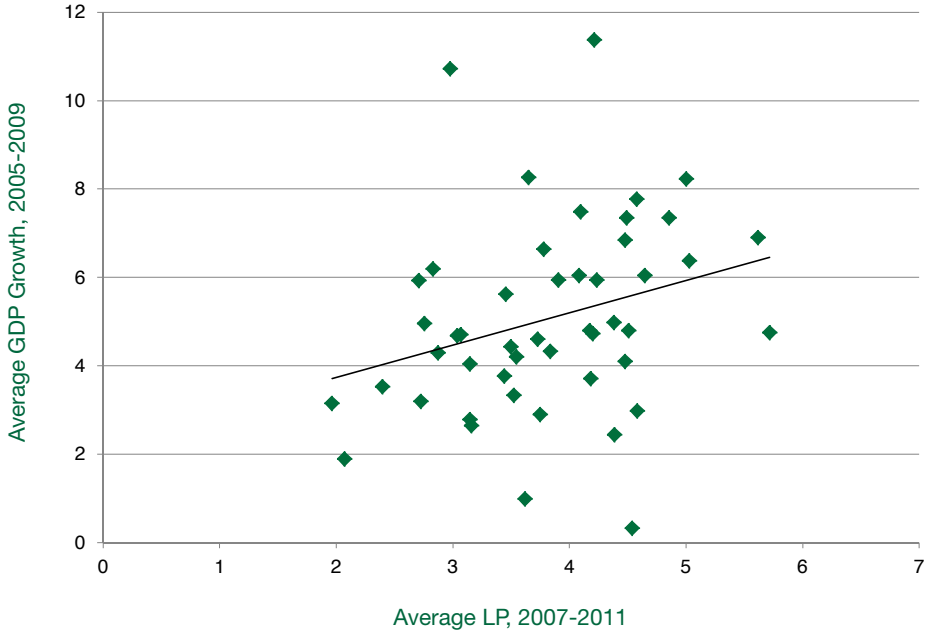



The amount of economic activity that involves IPR is smaller than that which involves physical property rights. This means that changes in IPR would have less effect on total economic output than a similar change in PPR. Additionally, the relationship appears to be somewhat hindered by the presence of outliers, such as Ireland, which ranks in the top quintile of the IPRI but has attracted significantly less FDI since 2005.[iv] Again, we use averages to establish long-term trends.

## Figure 17: Relationship between IPRI and GDP Growth

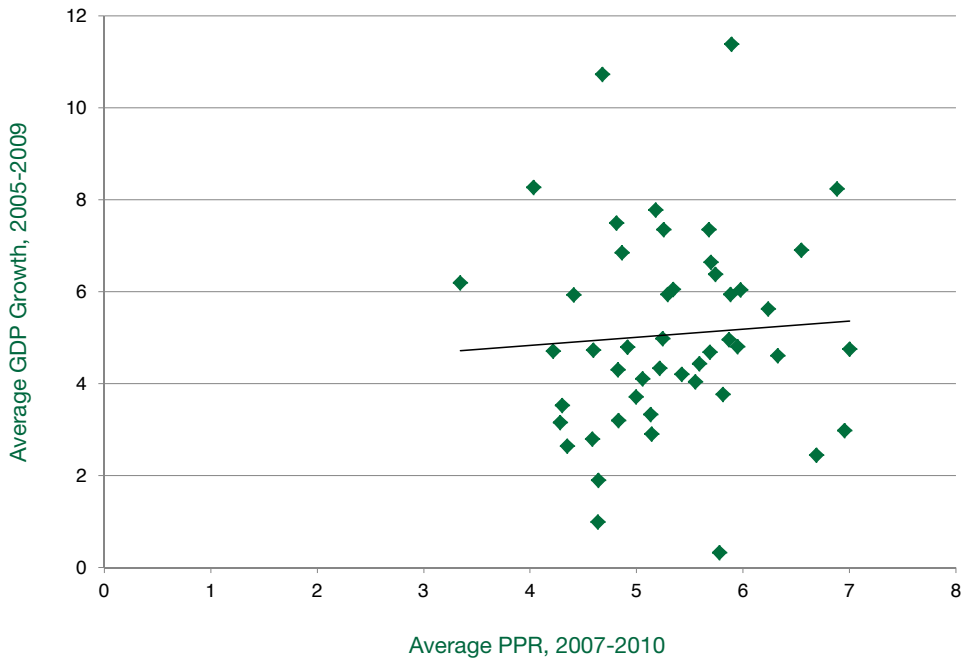



## Figure 18: Relationship between LP and GDP Growth

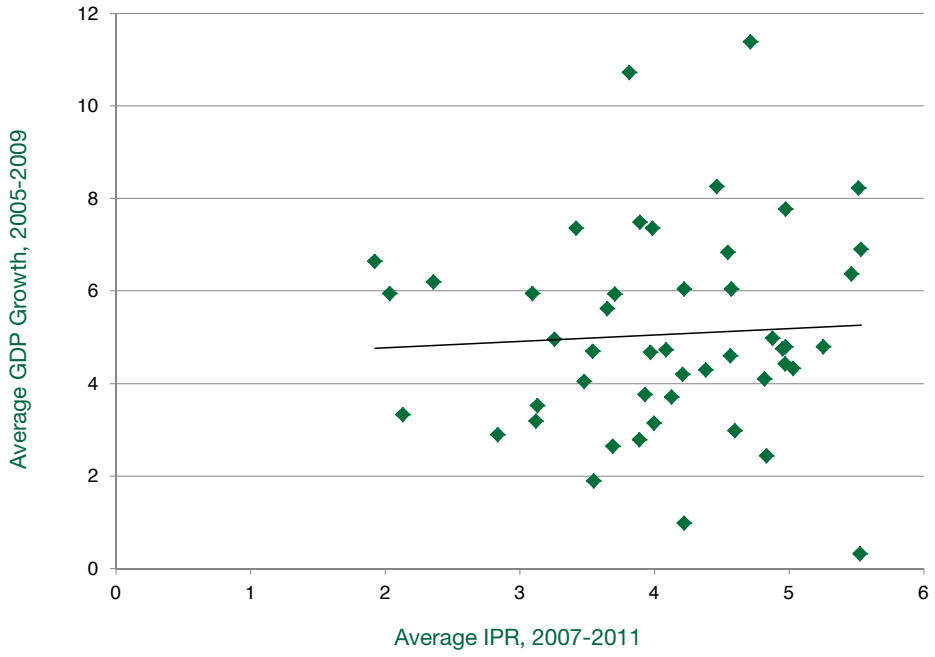



Countries in the top quintile of the IPRI rankings tend to be developed nations with mature markets that generally expand at a slower rate than those in many developing economies. We compare countries with high GDP growth to those with low GDP growth and test whether a strong property rights regime is associated with high economic growth.[v]

## Figure 19: Relationship between PPR and GDP Growth




## Figure 20: Relationship between IPR and GDP Growth




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 environments and protection for 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. We find that a high IPRI score is strongly correlated to economic development, which we measure in GDP per capita. A one point increase in the IPRI score predicts a $8,960 increase in GDP per capita (R-squared=0.63). Similarly, the results show that the IPRI components – LP, PPR, and IPR – are highly correlated with GDP per capita."

The regression analysis shows a correlation and does 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 five years of data available at the moment, this strategy is not as effective. This is especially true 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 2011 *International Property Rights Index* (IPRI) provides important insight as the global economy attempts to climb out of a serious economic downturn. Clearly delineated property rights are a *sine qua non* for a flourishing economy. They can also encourage a quicker recovery by providing a sense of security to entrepreneurs and investors. At a time when economies are struggling to recover, the world economy could use an infusion of economically viable assets that currently lack legal representation or are poorly enforced.

The 2011 IPRI finds that among the 129 countries included in the index those countries at 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, reaffirming that countries with robust legal and political systems are better positioned to reap the benefits of both physical and intellectual property rights.

The 2011 IPRI demonstrates that despite challenging economic times, most countries continue to improve their property rights regimes, setting themselves on a path to economic development. However, prospects for recovery will most likely be slower and weaker than need be among the few countries that did not improve property rights.

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 VI: CASE STUDIES

The 2011 IPRI presents five case studies exploring various aspects of 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.

## Case Study: Immigration and property

*By Marius Doksheim, Civita (Norway)*

Immigrants to Norway, who now make up about 10 percent of the population, are quite successful. Even though they were, until recently, almost exclusively asylum seekers and refugees and tended to come from less developed countries, the immigrant population in Norway has a rate of labor-market participation almost as high as that of natives. Their youth also have higher rates of participation in higher education than among native Norwegian youth. Immigrant pupils and students achieve good results and a very high social mobility. Norwegians are generally more welcoming to immigrants than most others. *Why is this?*

One reason could be the Norwegian policies for property rights and ownership. As immigrants adapt and begin to own their dwellings, these policies help them take on homes that are more dispersed and diverse compared to other European countries. Just looking at neighbouring Sweden and Denmark, the differences are significant. We know that private ownership and diversified housing have beneficial effects. Moreover, we believe these traits have an impact on the integration of immigrants.

Obviously, there is much standing in the way of home ownership for immigrants. One out of every three immigrants has lived in Norway for less than five years. With a shorter resident history, immigrants often have less education, capital, or security. They also have poorer language skills and smaller social networks. These difficulties do not make it easy to compete in a high-priced housing market like in Norway. In addition, immigrants could face plain discrimination in this market.

It is, however, evident that a growing number of immigrants is becoming homeowners. The tendency is for immigrants to engage in the housing market just like any other Norwegian citizen. They increasingly avoid bad flats in impersonal and rundown apartment blocks and move on to freestanding houses with gardens and verandas.

Norway has very strong property rights, and a large proportion of Norwegians own their own home. Even in the cities, a large percentage lives in one-family homes or other small buildings. This has had positive effects for Norway and Norwegians. In the same way, the structure and ownership of immigrant homes can have beneficial effects for immigrants and their integration into Norwegian society.

If one compares neighbourhoods in Oslo with other cities in Europe, one can see several important differences. In Oslo (and other cities in Norway), immigrants are more evenly spread. While in Stockholm (Sweden) we find that residents from minority groups make up more than 90 percent of the local population in certain boroughs, no part of Oslo is made up of more than 50 percent first- and second-generation immigrants.

Additionally, one can see that most countries have focused their housing policies on municipal housing in large apartment compounds. In Norway, the emphasis has been on private ownership. This is seen in a variety of forms, from regular freeholders to joint ownership in private housing associations. Oslo certainly does have its share of rental-based housing complexes, but these large compounds still remain within much more diverse residential areas compared to other Scandinavian and European cities.

When low- and high-priced homes share neighborhoods, and newly arrived immigrants are domiciled within these diverse environments, the odds of successful integration are much more favorable. If this is coupled with strong incentives to become homeowners, immigrants will also tend to copy the housing trends of the majority of Norwegians. The places where immigrants most often live become special in their "extreme diversity, not only in religion and ethnicity, but also by class, living conditions, education." This diversity makes Oslo rather unique.

In Norway as a whole, 45 percent of the immigrant population live in apartment buildings. While this is higher in comparison with native Norwegians, it is low considering that immigrants more often live in larger cities and have lower incomes. More importantly, this trend is quickly changing. Ten years ago 60 percent lived in rentals. The number of people living in freestanding privately owned estates has doubled from 13 percent in 1996 to more than 25 percent today.

Areas with big apartment blocks and impersonal surroundings can lead to social problems. These areas lack employment opportunities and separate those living there from the rest of society. Those immigrants who succeed move away.

The Norwegian pattern makes people with higher and lower incomes, at a higher degree than in most other countries, live side by side. Living side by side, a stronger sense of a diverse but well-integrated community is stimulated. A setting of natives living alongside immigrants allows for children to attend the same school. Just as important, it encourages successful immigrants to remain in the area longer, moving only from smaller to larger apartments or on to a villa. This again serves as a strong example for newly arrived immigrants and their children.

Together with other Nordic countries, Norway consistently performs among the top countries in the *International Property Rights Index.* Ownership is upheld and enforced by an efficient and trustworthy judicial system. Property can safely be used as investment objects, as collateral for other investments, or most commonly as a safe and lasting home for families. This, along with other policies supportive of private ownership, can explain why such a high percentage – 80 percent – of Norwegians owns their dwelling.

The immigrant population of Norway has higher ownership rates than immigrants in most other countries. Private ownership is increasing among immigrants as they receive higher income and better education. Today immigrants in Norway own their homes to the same degree as *all* of the population in the United Kingdom and Italy, as well as much more often than the populations of Sweden, France, and Germany.

In 2005/2006, 63 percent of immigrants owned their own homes. That is an increase of nine percentage points in only 10 years. This is beneficial for their integration. Private home ownership is beneficial for a plethora of reasons. Being private owners allows immigrants, like all other property owners, to get both the reward of increasing value and the penalty of decreasing worth. Ownership increases savings and financial security.

There are also wider effects to private possession of property. Home ownership has extended benefits. The reason is simple, really: the purchase of a home is the most important and most costly investment a family makes. Ownership gives increased stability and security in so many ways; it is a strong sign that you are staying. If the bank agrees to finance, it sure tells someone else they believe you will succeed as well. Greater stability and stronger ties to the surroundings will lead to a different attachment to the society in which one owns property. The success of that society becomes much more relevant to your own future.

Many social scientists and economists have shown the beneficial effects of ownership. Coulson (2002) argues that ownership works through three channels: owners are taking better care of their property, better care of their children, and become better citizens than renters. DiPasquale and Glaeser (1999) finds that ownership leads to increased investment in local well-being and increased social capital because ownership attaches the owner to the local area. Haurin, Parcel, and Haurin (2002) shows how owners give their

children a better environment for development, better results in schools, and fewer behavioral problems. Boehm and Schlottmann (1999) argues that children of people owning their home more often take higher education and earn more than the children of renters. Rossi and Weber (1996) maintains that owners participate more in their local society and politics. It also looks like high ownership rates makes for high social mobility, according to Rohe, Van Zandt, and McCarthy (2002).

Of course, it is not just that high ownership rates and strong property rights secure the successful integration of immigrants. Several other factors play in. But the ownership structure could perhaps explain some aspects of why integration into Norwegian society has been quite successful. Immigrants, and especially their children, are quickly adapting into the middle class.

*Author's Note: This essay is strongly based on Civitanotat 5/2010: Innvandring og eiendom by Marius Doksheim, Civita.*

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## Case Study: Creating Indigenous Property Rights: The Nisga'a Landholding Transition Act

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

### Introduction

A significant factor that explains indigenous poverty is the lack of enforceable property rights on Indian reserves.

Canada's Indian Act of 1876 recognizes the unique land ownership systems of its indigenous peoples. While the act preserved a scarce land base for native inhabitants, it locked these communities out of the modern economy by denying them access to commercial credit. The Indian Act states that the Crown (federal and provincial governments) holds title in trust and benefit to reserve lands, which are under federal jurisdiction under Canada's Constitution for Indians. Reserve lands could only be alienated to the federal government and are not subject to seizure, attachment, lien, or collateralization.

Leasing arrangements on reserve lands exist, but these do not generate as much value as fully transferable property rights. Observers long recognized that the Indian Act land system reduced land values and promoted low value land use. Peruvian economist Hernando de Soto said Canada's indigenous people face a problem common to many developing countries: the indigenous people possess land, but it is dead capital, meaning it cannot be leveraged in the wider economy.

### Who are the Nisga'a?

The Nisga'a Nation is an indigenous community in rural northwest British Columbia (BC), Canada's westernmost province. There are reportedly 6,400 Nisga'a citizens, although a small proportion of that number lives on Nisga'a territory. Sources say the word Nisga'a comes from a combination of two Nisga'a words: *Nisk̲'* meaning "top lip" and *Tl'ak̲'* meaning "bottom lip." The term derives from the Nass River Valley, where the Nisga'a live. Nisga'a Nation consists of four villages, which are regional governments, and a central government named Nisga'a Lisims Government (NLG) that is based in the community of New Aiyansh.

Unlike much of Canada, most of British Columbia did not sign historic treaties. As a result, the Nisga'a sought a negotiated settlement over land and governance for over 100 years. The Nisga'a, the federal government, and British Columbia signed the Nisga'a Final Agreement in 1999. The Nisga'a are signatories to a modern treaty, Nisga'a Treaty, that came into effect in 2000.

The Nisga'a Treaty grants limited self-government in enumerated areas to the Nisga'a government, although many governmental powers and responsibilities are concurrently held with the federal and BC provincial governments. The treaty was controversial during its negotiation and adoption because Nisga'a law had supremacy in several legislative areas.

### What's Happening?

Nisga'a Nation made history when, in a voluntary move, it passed a law granting fee simple property rights to its members. Nisga'a citizens who obtain fee simple title to their residential property under the law will be able to mortgage their property as security for a loan. They also may transfer, bequeath, lease, or sell their property to any person, whether they be Nisga'a or not, or even indigenous or not.

In October 2009, the Wilp Si'ayuukhl Nisga'a (WSN), the legislative body of NLG, passed the Nisga'a Landholding Transition Act. The Nisga'a Nation is developing a Torrens-style land title system to register fee simple interests. At present, registration will occur in a Nisga'a land title office.

Nisga'a sources claim, "It is believed to be the first Torrens-type, fee simple land title system established by an indigenous government anywhere in the world." It is uncertain if this claim is true, but it is true for Canada.

The NLG dealt with concerns about the potential erosion of the Nisga'a land base by including an important caveat. Although Nisga'a citizens who obtain fee simple title to their property under the act will be able to transfer their property to any person, the property will always remain part of the Nisga'a Lands and be subject to Nisga'a laws under the Nisga'a Final Agreement. This means fee simple holders will be subject to zoning and land-use regulations adopted by Nisga'a governments. Although the Nisga'a government shows interest in future expansion into commercial property, at the moment the legislation only applies to residential properties.

The move is not as radical as some claim and is in fact quite limited. Fee simple ownership only applies to residential properties. The lands affected are lots within Nisga'a villages zoned for residential use and are less than 0.2 hectare (approximately half an acre) in size. The total amount of land affected is approximately 100 hectares, or .05 percent of Nisga'a Lands.

The legislation recognizes two means of obtaining fee simple. The first is a Nisga'a village entitlement to a lot for a citizen at no charge. This meant if the lot qualified – did not have a mortgage, met size requirements, and was residential – the entitlement holder could accept or decline the offer. The second method is for an entitlement holder to request a lot. The village is required reasonably to consider the request, and appeals are available if the request is denied.

### History of the Legislation

The decision to move toward individual fee simple rights was not one the Nisga'a government entered lightly or without deliberation, although the issue remains controversial today.

At a roundtable discussion in 2006, the WSN considered ways Nisga'a citizens could hold their residential properties. Nisga'a sources say the meetings identified the current restrictive system of Nisga'a Village Entitlements and Nisga'a Nation Entitlements as barriers to economic development. Over the next three years, Nisga'a living in the four Nisga'a villages and in Vancouver, Prince Rupert, and Terrace were consulted. The Nisga'a have what they call urban locals in these three communities, which provide representation for urban-based Nisga'a citizens. Numerous legislative options were considered by the Nisga'a Lisims Government, culminating in the introduction of the Landholding Transition Act.

In 2007, a report was prepared by the Nisga'a government for the executive regarding these community discussions. While there was support for unrestricted ownership of land, concerns were raised by community members over the potential loss of the land base. After community discussions, the executive brought forward legislation to create the possibility of unrestricted fee simple on residential lots in Nisga'a villages, which led to the passage of the aforementioned law in 2009.

At present, the Nisga'a government is developing and passing consequential amendments associated with the move, including appropriate zoning laws and revisions of land title systems.

### Undemocratic Change?

Some Nisga'a opponents of the move criticized the democratic nature of the change. Nisga'a officials, however, point out that the Nisga'a Constitution requires a referendum be held if a disposition of more than 40 square kilometers is made by the Nisga'a Nation or a disposition of more than 10 square kilometers is made by a Nisga'a Village. Officials argue the Constitution does not require a referendum because the total amount of land that the proposed legislation affects is approximately one square kilometer.

### Implications

As a result of the Nisga'a move, other Canadian First Nation communities are engaging in a substantive discussion about property rights for their own reserves. Manny Jules, an indigenous leader from British Columbia, has engaged other native communities in a discussion about a First Nations Property Ownership Act, which the Nisga'a move inspired. This proposed voluntary legislation

would allow participating Indian bands to opt-into a legislative regime in which land title could be transferred from the Crown to a willing First Nation government, which could then choose to transfer that land to individuals.

While some indigenous scholars and activists have directed intense criticism toward the Nisga'a move, other Indian bands are monitoring the change. The Assembly of First Nations (AFN), the body purporting to represent on-reserve Indians, has been cool towards the idea, not expressing a clear opinion on the matter. At a conference on the topic of Aboriginal property rights held in Vancouver, British Columbia in October 2010, several Indian bands expressed an interest in opting into the First Nations Property Ownership Act.

The eyes of the indigenous community and many other interested observers are fixed on the Nisga'a Nation as it embarks on this historic experiment. If the Nisga'a are successful in leveraging fee simple to improve their business climate and standard of living, the case for indigenous property rights in Canada may be bolstered and alleviate some of the apprehensions some communities have over such a system.

## Recommendations

Observers should adopt a 'wait-and-see' approach to the Nisga'a fee simple plan. The limited and voluntary nature of the plan suggests Nisga'a governments are adopting a conservative and incremental approach. The Nisga'a are wise to include education and support for Nisga'a citizens who wish to assume fee simple ownership. An understanding on the risks of ownership and foreclosure would be crucial. Native communities would benefit by seeing the advantages, challenges, and potential pitfalls of full property ownership before embracing it.

Native communities under the Indian Act should consider the benefits of adopting the First Nation Property Ownership if (or when) it becomes a legislative option. The First Nations Tax Commission, which is spearheading the initiative, should proceed in galvanizing support for the bill and helping to make it a reality.

As currently conceived, the legislation is flexible and can be tailored to specific native realities. Some communities may not be ready for full property rights or may deem certain parts of the reserve inalienable or only available for sale to First Nation members. Lessons from the Nisga'a case study may help these communities in developing their own property regimes.

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## Case Study: A Half Century of Land Reform: Nepal's Experience

*By Krishna Neupane, Limited Government (Nepal)*

### Introduction

Nepal still has a primarily subsistence-based agrarian economy. Agriculture contributes to 40 percent of gross domestic product (GDP). In the 1960s, with the vast majority (over 90 percent) of Nepal's population dependent on agriculture for their livelihood, land reforms were heralded for being a top priority under the system of planned development borrowed largely from then-socialist India. It was natural for Nepal to replicate policies after its century of isolation from the external world under a family rule.

Nepal pursued one of the largest programs of land reforms on record since the 1960s. The reforms were planned with an objective of redistributing land to rural peasants. The strategy behind this plan was to slowly acquire land through strict enforcement of a 'land ceiling' over so-called aristocratic families that possessed larger estates. The evidence on these reforms' outcomes on poverty is mixed. In contrast to its stated goals, land reforms led to a significant rise in poverty and food insecurity because of fragmentation. However, one achievement was its ability to properly title the available land to almost 99 percent of households.

### History of Land Reforms

Ownership of land in Nepal is traditionally vested in the state. The most prominent forms of tenure were state-owned land rented to tenant (*raikar*), state-offered lands to private individuals (*birta*), current government employees (*jagir*), royal vassals and former rulers (*rajya*), religious and charitable institutions (*guthi*), and communal land ownership (*kipat*). A series of Land Acts were subsequently enacted in the 1950s retaining only the *raikar* and *birta* as the main forms of tenure. Table 1 demonstrates that the majority of the pre-1950s land in Nepal was possessed by the state.

**Table 1: Land Tenure Before 1950**

| Form of Tenure | Area (hectares) | Percentage of Total Area |
|---|---|---|
| Raikar | 963,500 | 50 |
| Birta | 700,080 | 36.3 |
| Guthi | 40,000 | 2 |
| Kipat | 77,090 | 4 |
| Rajya, Jagir, Rakam, etc. | 146, 330 | 7.7 |
| **Total** | **1,927,000** | **100** |

*Note:* Because a part of land under *birta* was used by individuals as *guthi*, the total area under *guthi* tenure may have been much more.

*Source:* HLRC, 1995

### Features and Outcomes of Land Reform in Nepal

The Land Reform Act of 1964 (LRA) fixes ceilings on the land an individual can own, protects the right of tenants by registering his or her name in the owner's deed itself, fixes rent on agricultural land, and does away with the traditionally very high interest rates for rural loans.

### Population: Total and Farm Size

Nepal's population in the past half-century has increased by 2.5 times, while the farm population grew by 2.3 times from its 1961/62 level (Table 2). The proportion of people engaged in agriculture has declined by seven percentage points between 1961/62 and 2001/02. This does not indicate that the population involved in agriculture has declined significantly, which was a major aim of the LRA.

**Table 2: Characteristics of Population in Nepal (1961/62-2001/02)**

| Classification | 1961/62 | 1971/72 | 1981/82 | 1991/92 | 2001/02 |
|---|---|---|---|---|---|
| Total Population (thousands) | 9,413 | 11,556 | 15,022 | 18,491 | 3,151 |
| Farm Population (thousands) | 8,410 | NA | 12,877 | 16,258 | 19,032 |
| Proportion of Farm Population | 89.34 | NA | 85.72 | 87.92 | 82.21 |

*Source: CBS (2001)*

### Redistribution of Land

Another primary objective of the LRA was to redistribute land to the landless and small holders to create an agrarian egalitarian society. The government, however, distributed only 1.5 percent of the total agriculture land among the landless. This raises a question: was the land reform truly necessary? The size of land holdings had already been small. The imposition of land ceilings has been one of the primary features of the reform for the government since 1964 and, in turn, has directly affected productivity on the land.

### Land Holdings

There are two types of holdings: agricultural holdings that use land in farming operations and agricultural holdings that do not require land. Most holdings that do not require land are used for raising livestock and poultry. The number of agricultural holdings that use land has been proportionally increasing since 1961/62 but decreased slightly in 1981/82 and 1991/92. However, there was a slight increase in the proportion of holdings using land in 2001/02. The slight increase in the proportion of holdings using land resulted in a decrease in the actual number of holdings without land between 1991/92 and 2001/02 from 32,100 to 26,700. This drop indicates that fragmentation of land has significantly promulgated poverty.

### Further Issues

Since the adoption of the Land Reform Act of 1964, the government has achieved land egalitarianism. On the other hand, a half-century with such reforms has led to land fragmentation and vulnerable property rights security, among other drawbacks highlighted below.

### Disguised Unemployment

Land fragmentation has helped to keep people employed in the agrarian sector rather than seeking employment elsewhere.

### Increased Land Fragmentation

At the national level, the average number of parcels per household has been steadily declining. Since 1961/62, the average number has decreased from 6.8 in 1961/62 to 4.4 in 1981/82, 4.0 in 1991/92, and 3.3 in 2001/02. The main reason for the decline is the decreasing size of an agricultural holding from 1.11 hectares in 1961/62 to 0.80 hectare in 2001/02.

### Incomplete Registration

It is doubtful that government data over five decades old are accurate. The Badal High Commission for Land Reform stated in 1995 that even after four decades of promulgation of the LRA, more than 450,000 tenant households were not registered (HLRC, 1995). Even the registered households have not been able to avail themselves of their rights as tenants. It is estimated that around one million poor households have been deprived of their legitimate rights over land resources. Tenants have been cultivating land for generations but never had any evidence to support their claim. Hard-working tenants had no information about land registration and could not register within the stipulated time.

### Conflict between Owners and Tillers

One of the main sources of conflict in the country is related to land with a great number of land cases flooding the Supreme Court. The majority of these cases involve proof of documents or tiller eviction. This gives an indication of the deep-sown seeds of strife between landowners and tillers.

### Food Insecurity

By the end of the 1970s, Nepal's strong ability to export agricultural products was weakening as it turned itself into a net importer. As time passed after the land reforms, the food deficit became more prominent in some parts of the country. Officially, over 45 of 75 districts in Nepal today import food except for those in districts that share a border with India. The primary source of imported food is India.

### Land Fragmentation and Productivity

According to the Central Bureau of Statistics, land productivity claims by reformers and subsequent implementers have been cast into serious doubt. Though measurable statistics are not yet available, there is widespread belief that the LRA has not brought the desired productivity goals.

### Conclusion

A structured, secure, and properly defined private property rights system lubricates a modern economy. Tiny land-locked Nepal's political elites have succeeded in portraying land reforms with ultimately undesirable consequences as desirable. The presence of awkward limitations of property rights have regretfully insulated Nepal from the north-south economic warmth that we see in much of the rest of Asia. Even citizens whose livelihoods are thoroughly agrarian based are baffled by a situation marked by legal plunder. Mere access to land would not, of course, ensure that land productivity would increase and poverty would be reduced. Instead, a dynamic, commercially-oriented agriculture sector is the best hope to significantly increase farm incomes and reduce poverty.

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## Case Study: The Coase Theorem and Informal Property Rights

*By Marcos Hidding Ohlson & Martín Krause, CIIMA/ESEADE (Argentina)*

In his seminal paper, Ronald Coase (1960) presented what was later called a "theorem" bearing his name:

> **"It is always possible to modify by transactions on the market the initial legal delimitation of rights. And, of course, if such market transactions are costless, such a rearrangement of rights will always take place if it would lead to an increase in the value of production."**

One of the most quoted papers in economic history, it opened a flood of research and discussion. Some of it centered on transaction costs and whether these would be sufficiently high or low to inhibit or to allow such market transactions. Among these costs, the very definition of property rights takes an important role. If it is not clear to whom they belong or what use can be made of an asset, a good deal of effort may be needed first to clarify the issue and then to proceed with the transaction.

Nevertheless, if we stick to the subjective nature of value, costs are subjective as well and inimical to the acting individual. Valuation becomes evident only as "revealed preference" in action. Therefore, there is not much that an independent observer can say except that if the transaction was made it must be assumed that the involved parties thought "it would lead to an increase in the value of production" and if not, that the subjective costs were higher than the subjective benefits.

To test this proposition, we conducted a field research experiment in a shanty town in the suburbs of Buenos Aires where there is no formal definition of property rights in housing. Would there be transactions in this case? (Hidding Ohlson & Krause, 2010).

### The Neighborhoods of San Isidro

San Isidro is located some 20 miles north of the place where Buenos Aires was founded in 1580, in a border zone between the areas occupied, or rather transited, by the Guaraní and Querandí tribes. Juan de Garay, the founder, distributed parcels on the northern coast of the River Plate among his men somewhere beyond San Isidro. Only two centuries later, a small town to be named San Isidro, Madrid's patron saint, started to grow. It completed its development thanks to the migration of people resulting from the economic boom of Argentina in the second half of the 20$^{th}$ century.

Large estates were parceled and created the urban downtown with a residential neighborhood of large parcels and houses named Lomas de San Isidro. La Cava is an informal settlement created mainly on government land. In 1946, the state water company, Obras Sanitarias, asked the federal government for this plot of land to use the red soil to filter water and to manufacture bricks, generating a sink or "cava" – from the Spanish word to dig or to excavate – and giving its name to the estate. The digging soon reached groundwater and the project was set aside. The sink was partially refilled and started to be settled by squatters on the 50 acres of its present area. According to different census estimates, there were between 1,700 to 2,100 houses and between 8,000 to 11,000 people, though the area housed a larger population in the past.

In San Isidro, as in most of the other city neighborhoods, the right to property is guaranteed by a title recognized by law, granting its validity to any legal claim, allowing sale and purchase, mortgaging it, and protecting possession against usurpation. Of course, such guarantee is relative considering Argentina's low institutional quality and the lack of trust in its political and judicial systems. The 2009 *International Property Rights Index*, for example, shows Argentina in position 80 with a total score of 4.3 (on a scale of 1 to 10).

In La Cava, only 16 percent of those polled said they have a property title for their houses. Some even asked what that was. Among the rest, 17 percent said they have an informal document, usually consisting of an informal sale/purchase invoice. Altogether, 84 percent said they do not have formal documentation. On average, they lived 15 years at the same house, which shows low turnover rates. Those who said they have a property title also have lived at the same house 15 years on average. When asked how they acquired their home, 37 percent bought it, while 26 percent built it. In many cases, people added homes as annexes of a family house. Six percent say they got their house from the government.

There are not many problems in the sale/purchase of housing because deals are made with people they trust and payment is in cash at the moment of possession (90 percent of respondents). Only 27 percent said there could be installments but much trust or familiar ties were needed.

We asked La Cava dwellers how they solve problems with neighbors when there is conflict related to continued coexistence, such as negative externalities. As an example, what happens if a neighbor whose home is at a close distance away plays music at a high volume or emits smoke or nasty odors? What if there are problems with the dividing walls or unclear borders between one property and the next, or someone builds a second floor blocking sunlight or damaging the other? Houses are quite precarious, and these are real possibilities.

Confirming conclusions from a subjective cost interpretation of the Coase Theorem, 76 percent said they solve these problems by talking with the other side. They prefer not having intermediaries, either from the same neighborhood or outside, and they avoid violence at all cost. Only in extreme cases do they resort to it. They know they cannot go to the authorities, and starting violence is a dangerous game. Besides, in a place where people live very close to each other, having a good relationship with neighbors is an important asset. Those unresolved cases have to do with the nature of the neighbor; they must evaluate his/her reaction, and sometimes it is better to bear the cost of the externality than the cost of attempting a solution.

As mentioned, one source of high transaction costs is a disagreement over property rights. It makes bargaining costly and prevents a negotiated internalization of the externality. Nevertheless, what really matters to the application of the Coase Theorem does not seem to be just the formal definition of the right to property, but that neighbors know and respect the informal right. This includes not just the definition of the land plot and its borders but also its accepted use and effects on third parties.

The high proportion of answers related to negotiated solutions shows there are common codes of conduct regarding alternative uses of properties, which facilitate negotiations. They are not legal "ordinances," but they fulfill similar functions. They demand consensus and generalized acceptance to become "social norms."

The lack of formal property rights does not prevent the transfer of the possession, although it does not allow for the existence of mortgage credit and disincentivizes investment. Acceptance of "informal" rights allows for a solution of negative externalities in most cases. Many "public goods" are supplied voluntarily, others not.

Personal relationships and goodwill are critical when there are no written rules or cases in which different rules apply to different people. It is important who happens to be your neighbor because there are no clear mechanisms to resolve disputes. Regarding security, they are at the mercy of criminals and must rely on their capacity to defend themselves. Houses are bought and sold among known parties, groceries lent to those who they trust, and people are afraid of moving if they do not know who will be their new neighbors.

A lack of formal property rights prevents dwellers of La Cava from accessing credit, some public services, even jobs, and having a sense of security provided by ownership. They cannot appeal to formal authorities to solve problems of negative externalities. The absence of authorities increases subjective transactions costs because residents must evaluate personal reactions among other residents.

In conclusion, the Coase Theorem is verified in such informal settings though it should probably be rewritten to take into account the subjective nature of transaction costs. We offer the following suggested rewrite: "It is always possible to modify by transactions on the market the initial legal or informal delimitation of rights. And, of course, if such market transactions are worth the subjective costs for the parties, such a rearrangement of rights will always take place if it would lead to an increase in the value of production."

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## Case Study: Preservation Versus Property Rights: The Case of Hong Kong

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The Antiquities and Monuments Office (AMO), under the Leisure and Cultural Services Department, is the professional adviser to the Hong Kong government and the official board on heritage issues. At present, the Secretary for Development, in the capacity as the Antiquities Authority under the AMO, has the power to declare a site a monument whether or not it is perceived to have heritage value. When declaring a site a monument or a proposed monument, the building is legally protected under government statutory powers from construction in any form.

Sites that are protected under monument status may not have been assessed previously or may have been graded. Grade One on a heritage scale represents great heritage value. Grades Two and Three signify relatively less significant heritage value (no graded building is legally protected from demolition or redevelopment). A "proposed" monument designation allows for legal protection against any demolition or development. The designation can last up to 12 months, at which point a "formal" monument may be declared or the proposed monument declined.

The grading system has had its fair share of problems, despite having been employed for over a decade. The administrative agency seems to lack a coherent strategy, as seen from incidences that involve wavering conclusions. An incident in which two grading assessments of a particular site within 10 months of each other (April 2007 to February 2008) reported opposing conclusions on the site's heritage value represents a U-turn in heritage policy. Additionally, the secretary has many times declared sites a "proposed" monument, signifying great heritage value, only to revert the site's status to a low heritage value of Grade Three.

Problems in the grading system because of wavering definitions and a lack of transparency undermine the credibility of the AMO and, therefore, the power to declare statutory powers to protect any piece of land. In the examples to follow, a declaration of a proposed monument on privately owned property has been carried out without lawful legitimacy.

A small minority of the public, especially conservation groups, interested in heritage pressures the government to employ ad hoc means to "saving" buildings from demolishment, although a building may not be defined as a valued heritage site. The ex post method often arrives out of crisis management, and a site's heritage status, or lack of one, is revisited once demolition is underway. As such, private sector participation is forced on surprised owners who plan demolition works or redevelopment. Because of an ex post, ad hoc mechanism, the power of the secretary to declare a site a proposed or formal monument is a bargaining tool used to force landowners' hand in preservation, although the area's conservation value is questionable. There are many such initiatives to block development and force preservation using this ex post method. Each time, the property rights of private landowners are denied.

The government has mentioned both that the current policy is inadequate and that some form of standard guidelines would facilitate owners. But such a paradigm is yet to be seen, as the administration refuses to provide "one-size-fits-all" guidelines and is comfortable relying on a case-by-case basis. The current strategy is described as "taking no action if our enemy does not make any move," and the AMO has instructed the Buildings Department to inform it "once it receives applications for demolition, so that we can see what actions we can take."

There are numerous issues with the piecemeal approach, most of which arrive from a blatant disrespect of property rights. Both the opportunity and real costs are endured by owners, as well as destruction of heritage that may have been preserved had sufficient consultation and proper mechanisms been employed. With 70 percent of identified heritage buildings privately owned, the need for overhaul is pressing.

## Case Studies

The following case studies represent the ex post, ad hoc development – an inequitable way to conserve heritage properties and an unfair burden for property owners. Most instances of ad hoc, ex post intervention take place at graded heritage sites in which the government enters a dialogue with the owners of sites before or while redevelopment procedures are taking place. The secretary only declares proposed or formal monuments to be protected if deemed necessary – that is, to stop demolition or redevelopment projects that are not in line with the government's interests in preservation.

Normally, the monument status has been declined. Owners grant a promise to conserve and maintain the private heritage property and to bear preservation costs. Should talks fail, the sites often become "formal" monuments with legal protection against any type of development, including demolition. In essence, a proposed monument allows the government to hold private heritage property hostage, while it attempts negotiations with owners.

The Ho Tung Garden and Mansion at 75 Peak Road is one such site that follows this procedure in 2011. The government entered a dialogue with the owner concerning preservation of the Grade One, 83-year-old site, but talks ceased abruptly months ago. The owner, therefore, secured plans to demolish the structure, at which point the secretary held up the multibillion dollar development, declaring the site a proposed historic monument.

The secretary says that she has months to negotiate an agreement by using the monument status as a looming threat should a consensus not be met. In that case, the owner may claim a financial loss, a matter for courts to resolve. The secretary admits that she needs to play the proposed monument card because she was unable to reach a preservation deal with the owners previously.

Once Jessville Mansion at 128 Pokfulam Road was to undergo redevelopment, the secretary declared the site a proposed monument. However, in February 2008, the site was downgraded to a Grade Three historical building after the owners agreed to use it as a clubhouse for an adjacent residential development. The U-turn in the government's assessment and abuse of the secretary's power to declare monument status created confusion for the owners as to the value of their property, the economic opportunity, and the legal right for redevelopment.

The King Yin Lei Mansion at 45 Stubbs Road is another case of ex post intervention. The mansion was in the process of being demolished once the secretary declared the site a monument. The government used a preservation option of a non-in-situ land exchange in which the owner is held responsible for restoring the site to AMO's satisfaction at his own expense. The owner then surrenders the property for preservation and is granted an adjacent lot for private residential development.

The government says that purchasing sites such as those outlined above would be a "last resort" because of cost concerns and the controversial way in which to spend taxpayer money. However, the government has had no difficulty ignoring the property rights of owners by holding up development prospects and surprising owners with new or revised heritage claims.

It is possible to balance private property rights and conservation, but the current heritage protocol is only acting from one side of the scale. The huge lapse in the opposing assessments from April 2007 to February 2008 remains unanswered, furthering suspicions that the AMO is not assessing heritage sites comprehensively or honestly.

The government boasts that it has maintained privately owned heritage at no expense to taxpayers, except for those who privately own heritage buildings. Involving the private sector in heritage is possible, but the government has not respected property rights. By involving landowners, the government could employ economic incentives such as site buyback, land exchange, change or transfers in plot ratios (a process in which the owner may transfer the unrealized development potential to another site), or a relaxation of building restrictions (e.g., height limits). Such incentives can sway a property developer to include preservation in redevelopment.

However, imposing these economic incentives may anger owners who operate under the assumption that their development rights are fully protected.

## Conclusion

Heritage is an important part of any society, but the current policy sacrifices the rights of owners for the sake of a minority interest with little credibility. There is no legitimate reason after a decade of heritage research and assessment why sites that are not identified as heritage monuments or zoned with development concessions should suddenly be rendered protected. A lack of planning has led to a lack of credibility in heritage protocols and departments. There is clearly a lack of a long-term, broad-based heritage conservation policy, as evidenced by the many U-turns the government's heritage policies take.

The case studies here exhibit the cost of heritage in Hong Kong. Owners lose much in revenue as development is halted wrongfully. A standard mechanism to protect property owners should be initiated. We recommend:

1. Improving current administrative and legal frameworks by applying consistent principles
2. Addressing a lack of understanding of heritage and conservation; without a proper definition, it is impossible to create a legal system that defends property rights
3. Increasing private sector participation motives by clarifying interests and zoning of conservation areas
4. Compensating property owners justly and employing market forces for preservation, such as transfer of development rights, land swap mechanisms, resumption, easements, or greater plot ratios
5. Removing constraints on heritage preservation so that private owners are incentivized to preserve historic buildings and employ objective guidelines to reference restoration and reuse of heritage properties (e.g., building codes)
6. Revising the existing grading system and Heritage Impact Assessment, which have lost credibility, to enhance transparency and eliminate the possibility of misuse with respect to declaration powers on proposed monuments
7. Computerizing inventory grading lists and assuming regular reviews and rights of "new" ungraded heritage buildings

The number of monuments under the AMO that use the ad hoc, ex post method is rising. Government regulations and interventions create suboptimal market distortions and uncertainty in property ownership and development rights. The more the government regulates privately owned heritage property, the less freedom the property owners may exercise, thus increasing inefficient land use.

# 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 the economic development of a country, but they are often denied rights to property either by law or by custom. These practices not only deny women a secure income, but they also ensure future generations will have to deal with a similar level of poverty.

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.

## Concept of Study

Academics and policymakers point out that women's unequal access to property rights adds an additional layer of complexity to the understanding of property rights in many countries. Developed countries overwhelmingly have embraced gender equality in both law and practice with respect to property rights. By contrast, developing countries vary significantly in how much protection is afforded to women when it comes to issues of property. To account for gender equality, this chapter 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:

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

A weight of 0.2 for the gender equality measure is arbitrary. 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 preference. 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 four other variables combined to represent the social rights of women.

## Variables

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

These three variables are included 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 their 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 women at a specific stage in life (e.g., marriage).

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. This variable measures the extent to which bequests are equally shared between male and female children.

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 society. These include parental authority, female genital mutilation, freedom of movement, and the ratio of female-to-male adult literacy. In past IPRI studies, this component also included a measure of repudiation. However, this aspect is no longer available in the updated data source. This omission is not expected to have a significant impact on the overall score because the women's social rights scores are essentially identical in previous years' data when one excludes repudiation.

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 from 0 to 10. Zero signifies complete discrimination against women, while a top score is given to countries with fully developed and equal rights for women. Given that all variables in the original data source are constructed as indicators, we normalize the data to a 0–10 scale.[vi] Consequently, the result for the final IPRI(GE) ranking is on a 0–12 scale because of the 0.2 weighting for GE. For example, assume a country received perfect scores in both IPRI and GE measures. This means their IPRI(GE) score would be 10 + .2(10) = 12.

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

| Rank | Country | IPRI(GE) | GE |
|---|---|---|---|
| 1 | SINGAPORE | **10.3** | 10.0 |
| 2 | HONG KONG | **9.8** | 10.0 |
| 3 | TAIWAN | **8.9** | 9.0 |
| 4 | CHILE | **8.4** | 8.7 |
| | UNITED ARAB EMIRATES | **8.4** | 5.8 |
| 6 | MAURITIUS | **8.3** | 10.0 |
| 7 | URUGUAY | **8.1** | 10.0 |
| 8 | BAHRAIN | **7.9** | 6.2 |
| | COSTA RICA | **7.9** | 10.0 |
| | OMAN | **7.9** | 5.9 |
| 11 | TUNISIA | **7.8** | 8.9 |
| | MALAYSIA | **7.8** | 8.3 |
| 13 | SOUTH AFRICA | **7.7** | 5.5 |
| 14 | PANAMA | **7.6** | 10.0 |
| 15 | KUWAIT | **7.5** | 8.2 |
| | CHINA | **7.5** | 10.0 |
| | BOTSWANA | **7.5** | 5.8 |
| 18 | SAUDI ARABIA | **7.4** | 4.6 |
| | TRINIDAD AND TOBAGO | **7.4** | 9.0 |
| 20 | BRAZIL | **7.3** | 10.0 |
| | CROATIA | **7.3** | 10.0 |
| | THAILAND | **7.3** | 10.0 |
| 23 | JAMAICA | **7.0** | 8.0 |
| 24 | COLOMBIA | **6.9** | 9.0 |
| | VIETNAM | **6.9** | 10.0 |
| | PERU | **6.9** | 9.9 |
| 27 | EGYPT | **6.8** | 8.1 |
| 28 | GHANA | **6.7** | 5.6 |
| | ARGENTINA | **6.7** | 10.0 |
| | EL SALVADOR | **6.7** | 9.0 |
| | MOROCCO | **6.7** | 6.8 |
| | INDONESIA | **6.7** | 8.3 |
| 33 | HONDURAS | **6.6** | 9.7 |
| | INDIA | **6.6** | 5.1 |
| | RUSSIA | **6.6** | 10.0 |
| 36 | RWANDA | **6.5** | 4.7 |
| | PHILIPPINES | **6.5** | 9.0 |
| | MACEDONIA | **6.5** | 9.0 |
| 39 | KAZAKHSTAN | **6.4** | 10.0 |
| 40 | AZERBAIJAN | **6.3** | 9.7 |
| | SRI LANKA | **6.3** | 6.7 |
| | MALAWI | **6.3** | 5.6 |
| | GUATEMALA | **6.3** | 8.9 |
| 44 | BURKINA FASO | **6.2** | 6.2 |
| | TANZANIA | **6.2** | 5.6 |
| | DOMINICAN REPUBLIC | **6.2** | 8.0 |
| | SWAZILAND | **6.2** | 5.0 |
| | ARMENIA | **6.2** | 10.0 |
| | ECUADOR | **6.2** | 9.0 |
| 50 | BENIN | **6.1** | 4.2 |
| | SYRIA | **6.1** | 6.7 |
| | BOSNIA AND HERZEGOVINA | **6.1** | 10.0 |
| | GEORGIA | **6.1** | 10.0 |
| 54 | UKRAINE | **6.0** | 10.0 |
| | PARAGUAY | **6.0** | 10.0 |
| | MADAGASCAR | **6.0** | 8.3 |
| 57 | ALBANIA | **5.9** | 7.7 |
| | SENEGAL | **5.9** | 6.1 |
| | MAURITANIA | **5.9** | 6.5 |
| | NICARAGUA | **5.9** | 9.0 |
| | MOLDOVA | **5.9** | 10.0 |
| | LEBANON | **5.9** | 7.5 |
| | BOLIVIA | **5.9** | 9.9 |
| 64 | SERBIA | **5.8** | 8.0 |
| 65 | MALI | **5.7** | 4.7 |
| | ALGERIA | **5.7** | 7.1 |
| 67 | MOZAMBIQUE | **5.6** | 4.3 |
| 68 | ZAMBIA | **5.5** | 3.4 |
| | UGANDA | **5.5** | 4.4 |
| | NEPAL | **5.5** | 5.3 |
| 71 | VENEZUELA | **5.4** | 10.0 |
| 72 | KENYA | **5.3** | 4.4 |
| 73 | IRAN | **5.2** | 5.0 |
| 74 | PAKISTAN | **5.1** | 5.0 |
| 75 | CAMEROON | **5.0** | 4.2 |
| | NIGERIA | **5.0** | 5.6 |
| 77 | BURUNDI | **4.8** | 6.0 |
| 78 | LIBYA | **4.7** | 5.2 |
| | COTE D'IVOIRE | **4.7** | 5.0 |
| | ANGOLA | **4.7** | 5.5 |
| 81 | BANGLADESH | **4.6** | 5.2 |
| 82 | CHAD | **4.4** | 2.1 |
| | ZIMBABWE | **4.4** | 4.4 |

## Table 10: Ranking by GE Score

| Rank | Country | IPRI(GE) | GE |
|---|---|---|---|
| 1 | URUGUAY | 8.1 | 10.0 |
| | BRAZIL | 7.3 | 10.0 |
| | COSTA RICA | 7.9 | 10.0 |
| | ARGENTINA | 6.7 | 10.0 |
| | BOSNIA AND HERZEGOVINA | 6.1 | 10.0 |
| | GEORGIA | 6.1 | 10.0 |
| | HONG KONG | 9.8 | 10.0 |
| | VIETNAM | 6.9 | 10.0 |
| | UKRAINE | 6.0 | 10.0 |
| | KAZAKHSTAN | 6.4 | 10.0 |
| | RUSSIA | 6.6 | 10.0 |
| | ARMENIA | 6.2 | 10.0 |
| | VENEZUELA | 5.4 | 10.0 |
| | MOLDOVA | 5.9 | 10.0 |
| | CROATIA | 7.3 | 10.0 |
| | PARAGUAY | 6.0 | 10.0 |
| | THAILAND | 7.3 | 10.0 |
| | SINGAPORE | 10.3 | 10.0 |
| | MAURITIUS | 8.3 | 10.0 |
| | CHINA | 7.5 | 10.0 |
| | PANAMA | 7.6 | 10.0 |
| 22 | BOLIVIA | 5.9 | 9.9 |
| | PERU | 6.9 | 9.9 |
| 24 | HONDURAS | 6.6 | 9.7 |
| | AZERBAIJAN | 6.3 | 9.7 |
| 26 | PHILIPPINES | 6.5 | 9.0 |
| | COLOMBIA | 6.9 | 9.0 |
| | NICARAGUA | 5.9 | 9.0 |
| | TAIWAN | 8.9 | 9.0 |
| | TRINIDAD AND TOBAGO | 7.4 | 9.0 |
| | MACEDONIA | 6.5 | 9.0 |
| | EL SALVADOR | 6.7 | 9.0 |
| | ECUADOR | 6.2 | 9.0 |
| 34 | GUATEMALA | 6.3 | 8.9 |
| | TUNISIA | 7.8 | 8.9 |
| 36 | CHILE | 8.4 | 8.7 |
| 37 | MADAGASCAR | 6.0 | 8.3 |
| | MALAYSIA | 7.8 | 8.3 |
| | INDONESIA | 6.7 | 8.3 |
| 40 | KUWAIT | 7.5 | 8.2 |
| 41 | EGYPT | 6.8 | 8.1 |
| 42 | DOMINICAN REPUBLIC | 6.2 | 8.0 |
| | JAMAICA | 7.0 | 8.0 |
| | SERBIA | 5.8 | 8.0 |
| 45 | ALBANIA | 5.9 | 7.7 |
| 46 | LEBANON | 5.9 | 7.5 |
| 47 | ALGERIA | 5.7 | 7.1 |
| 48 | MOROCCO | 6.7 | 6.8 |
| 49 | SYRIA | 6.1 | 6.7 |
| | SRI LANKA | 6.3 | 6.7 |
| 51 | MAURITANIA | 5.9 | 6.5 |
| 52 | BAHRAIN | 7.9 | 6.2 |
| | BURKINA FASO | 6.2 | 6.2 |
| 54 | SENEGAL | 5.9 | 6.1 |
| 55 | BURUNDI | 4.8 | 6.0 |
| 56 | OMAN | 7.9 | 5.9 |
| 57 | UNITED ARAB EMIRATES | 8.4 | 5.8 |
| | BOTSWANA | 7.5 | 5.8 |
| 59 | TANZANIA | 6.2 | 5.6 |
| | MALAWI | 6.3 | 5.6 |
| | GHANA | 6.7 | 5.6 |
| | NIGERIA | 5.0 | 5.6 |
| 63 | ANGOLA | 4.7 | 5.5 |
| | SOUTH AFRICA | 7.7 | 5.5 |
| 65 | NEPAL | 5.5 | 5.3 |
| 66 | LIBYA | 4.7 | 5.2 |
| | BANGLADESH | 4.6 | 5.2 |
| 68 | INDIA | 6.6 | 5.1 |
| 69 | COTE D'IVOIRE | 4.7 | 5.0 |
| | IRAN | 5.2 | 5.0 |
| | SWAZILAND | 6.2 | 5.0 |
| | PAKISTAN | 5.1 | 5.0 |
| 73 | MALI | 5.7 | 4.7 |
| | RWANDA | 6.5 | 4.7 |
| 75 | SAUDI ARABIA | 7.4 | 4.6 |
| 76 | ZIMBABWE | 4.4 | 4.4 |
| | KENYA | 5.3 | 4.4 |
| | UGANDA | 5.5 | 4.4 |
| 79 | MOZAMBIQUE | 5.6 | 4.3 |
| 80 | CAMEROON | 5.0 | 4.2 |
| | BENIN | 6.1 | 4.2 |
| 82 | ZAMBIA | 5.5 | 3.4 |
| 83 | CHAD | 4.4 | 2.1 |

## Results

Table 9 presents the results of the IPRI, integrating the gender equality (GE) variables. This year, 83 countries are 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 low-income to middle-income countries with a much larger proportion of developing countries. We primarily focus on these countries because gender equality tends to be weaker.

Singapore tops the ranking for the IPRI(GE) with a score of 10.3. It is followed by Hong Kong with a score of 9.8 and Taiwan with a score of 8.9. The remaining countries in the top 10 are more geographically dispersed with countries from the Middle East, Africa, and Latin America. Zimbabwe and Chad tie for the lowest IPRI(GE) score at 4.4, though Zimbabwe has a lower GE score (3.5 versus Chad's GE score of 4.0). Bangladesh was third from the bottom, registering an IPRI(GE) score of 4.6.

Table 10 presents the rankings by 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 the measuring method that the underlying data source employs, 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 property.

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.

# 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 2010-2011). 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 2010-2011 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://gcr.weforum.org/gcr2010/

***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 (2010) contains data gathered from multiple years within the last decade through 2009. 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 2010 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). Last year 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. 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/2010_SPEC301_TOC.htm.

The *2010 Special 301 Report* data on business software piracy is complemented with the data from the *Seventh Annual BSA and IDC Global Software Piracy Study* (2009) available at http://global.bsa.org/globalpiracy2009/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 again present country profiles for 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 2007–2011. 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 five 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.

One notable change from last year is the omission of references to specific policy developments. Data for the IPRI is collected by a number of different organizations over slightly varying periods of time. Combining these characteristics with the implementation lags and varying enforcement levels inherent in public policy, the authors preferred to err on the side of caution and avoid potentially claiming false causality. Readers are encouraged to use the IPRI as a tool for understanding the impacts of certain policies they find interesting.

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. Where possible, any gaps previously present in the data have been filled in 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.

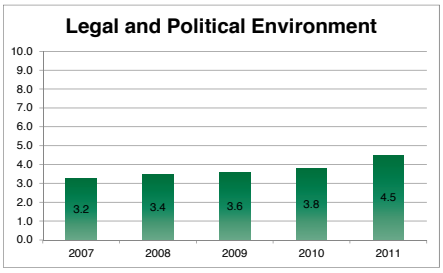
## ALBANIA

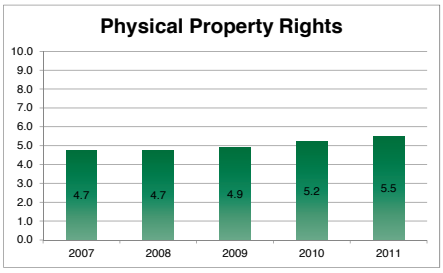
World Rank: 100 Regional Rank: 16

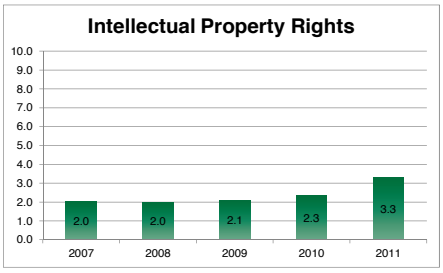
Albania increased its IPRI score for the fifth year in a row to 4.4. While *Political Stability* and *Control of Corruption* remained fairly constant, Albania saw its LP jump 0.7 points thanks largely to an increase in survey-based *Judicial Independence* from 2.4 to 4.7.

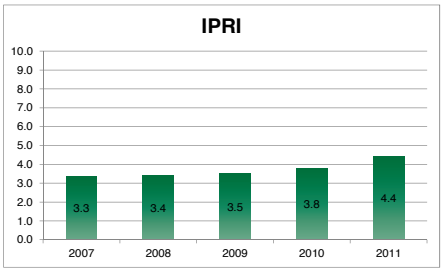
Albania's PPR also showed solid improvement, largely driven by a 0.9 increase in *Protection of Physical Property*. The PPR jump would have been larger were it not for a 0.4 fall in *Access to Loans*, which nearly wiped out last year's gains in this sub-component.

IPR rose a whole point thanks to higher scores for *Copyright Piracy* and *Protection of Intellectual Property*, which increased from 2.4 to 4.0.



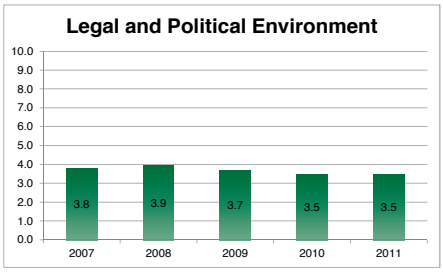

## ALGERIA

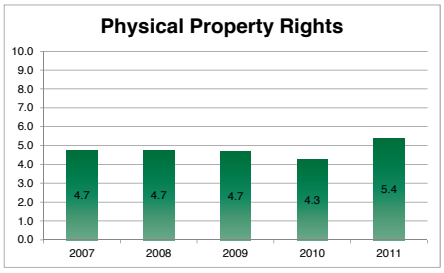
World Rank: 107 Regional Rank: 15

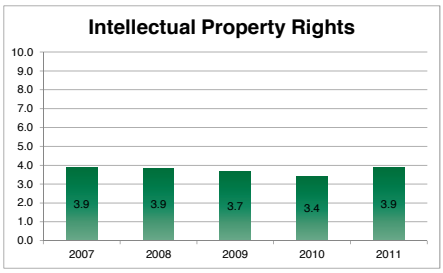
Algeria was able to reverse last year's slide, improving its IPRI score by 0.6 points to 4.3. The driving force behind this growth was a 1.1 point improvement in PPR, where all sub-components were better this year. *Protection of Physical Property* and *Registering Property* grew by 0.8 and 0.6 respectively but the largest increase was in *Access to Loans*, which improved 2 points by itself.

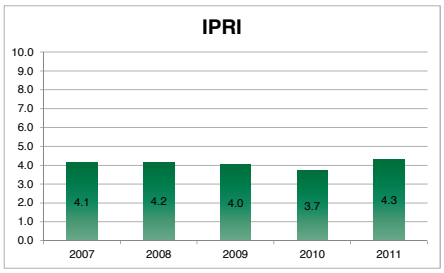
LP did not experience a change. *Judicial Independence* improved half a point, but this was offset by slight decreases in the three other sub-components.

The 0.5 point rise in Algeria's IPR was driven by a 1.4 point improvement in *Protection of Intellectual Property*. *Patent Protection* and *Copyright Piracy* remained the same.



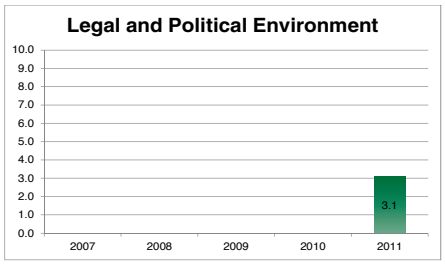
## ANGOLA

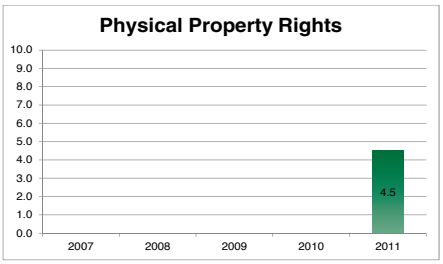
World Rank: 125 Regional Rank: 23

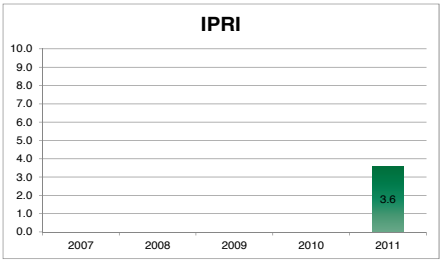
Angola returns to the IPRI after a two-year absence due to a lack of data, though it reenters in the bottom 4 of all countries. Angola ranks in the bottom ten for LP. Having one of the worst *Rule of Law* scores and the third worst *Control of Corruption* score pulls down their LP score. Data for *Judicial Independence* was not available.

Angola's PPR score places them in the bottom five for that category, just ahead of Libya, also from the African region. All sub-component scores place Angola in the bottom ten.

Angola's IPR is also in the bottom five. Both sub-components are in the bottom 15 for the world.





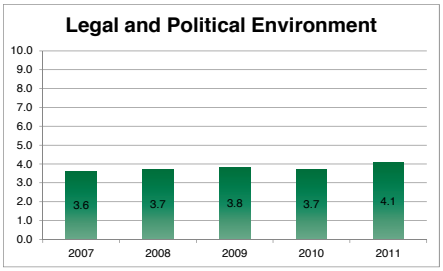

## ARGENTINA

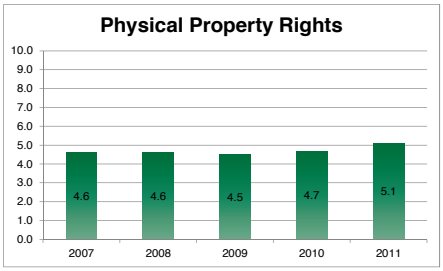
World Rank: 87 Regional Rank: 13

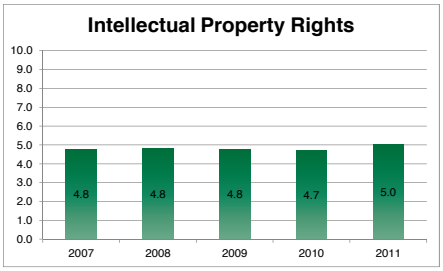
After three years of consistent scores, Argentina experienced improvement in all components and almost every sub-component. Its 4.7 IPRI is a 0.3 point improvement over last year. Argentina's LP rose 0.4 this year due to a 1.7 point improvement in *Judicial Independence*. The other sub-components were relatively stable.

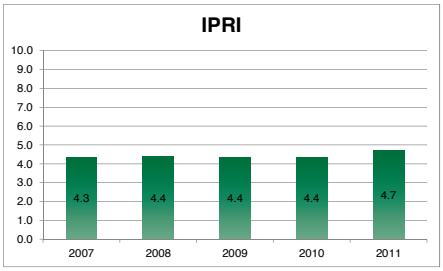
Argentina's PPR increased 0.4 thanks to a 1 point improvement in *Access to Loans*. *Protection of Physical Property* also improved slightly while *Registering Property* remained the same.

Argentina's IPR rose to its highest level in five years on the back of a 0.6 increase in *Protection of Intellectual Property*. *Copyright Piracy* was also slightly improved.



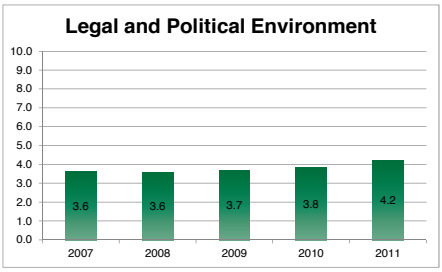
## ARMENIA

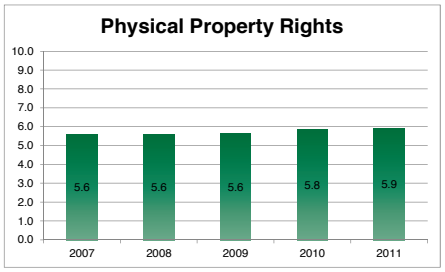
World Rank: 109 Regional Rank:19

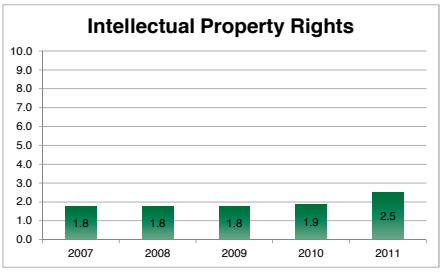
Armenia once again saw improvement in all three components this year, pushing its IPRI up almost half a point. LP improved by 0.4 points thanks mostly to 1.6 point jump in *Judicial Independence*. *Political Stability* also improved but this was offset by slight declines in *Rule of Law* and *Control of Corruption*.

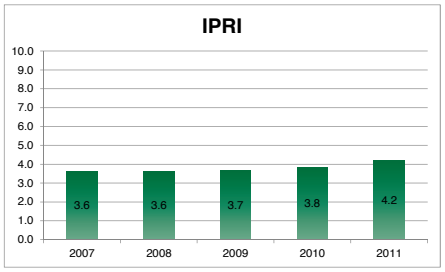
PPR is up slightly with a 0.8 increase in *Access to Loans* directly offsetting a 0.8 decrease in *Protection of Physical Property*. Armenia's excellent *Registering Property* increased by 0.1 points as the number of days needed to register fell from 4 to 3.

IPR grew 0.6 points thanks to 0.2 and one point gains in *Copyright Piracy* and *Protection of Intellectual Property* respectively.



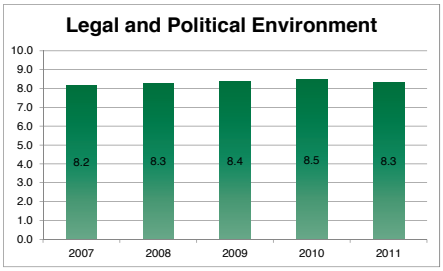

## AUSTRALIA

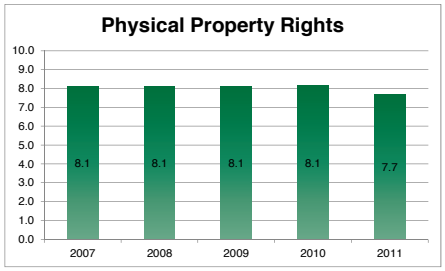
World Rank: 9 Regional Rank: 3

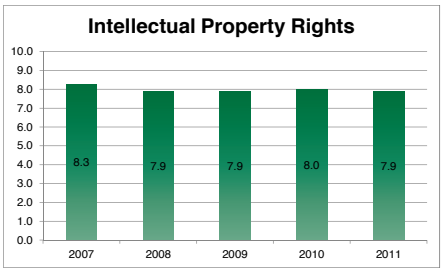
Like most industrialized countries, Australia saw a slight decline in all three components, though it does remain one of the world's best countries when it comes to property rights. LP declined 0.2 points on the back of a 0.5 loss for the weakest sub-component, *Political Stability*. *Judicial Independence* also experienced slightly negative movement.

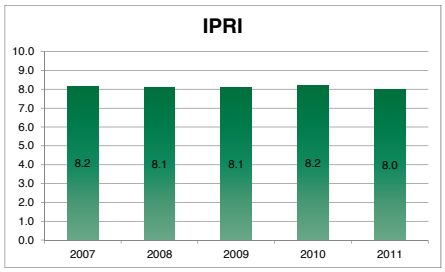
PPR changed for the first time in five years, falling by 0.4 points. The decline was led by a one point loss in *Access to Loans* while a 0.5 deterioration in *Protection of Physical Property* also hurt. *Registering Property* remained unchanged.

IPR fell by 0.1 points due to slight decreases in *Protection of Intellectual Property* and *Copyright Piracy*.



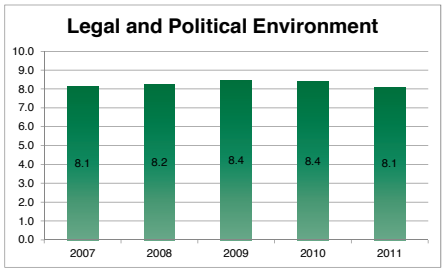
## AUSTRIA

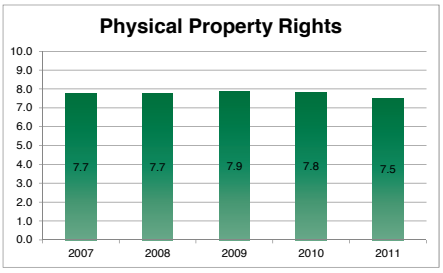
World Rank: 12 Regional Rank: 8

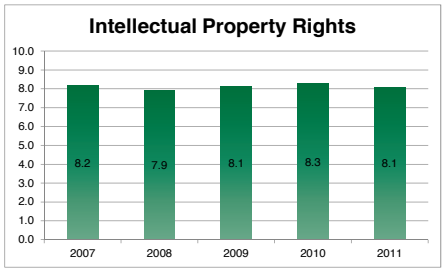
For the first time in the Index Austria's IPRI score fell, specifically by 0.3 points. LP fell by 0.3 points, a decline experience by all its sub-components. The lone exception is *Control of Corruption*, which fell only 0.1 points.

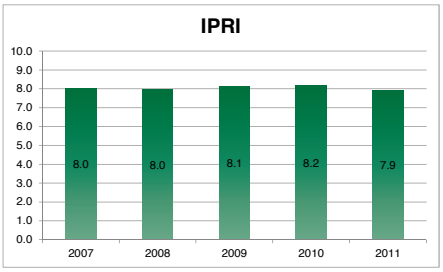
PPR decreased for the second year in a row, with all three components in decline. Once again *Access to Loans* is the weakest sub-component; this year it fell 0.5 points to 4.6.

IPR reversed its gains from last year, falling back to 8.1. The deterioration was largely due to a 0.6 drop in *Protection of Intellectual Property* though *Copyright Piracy* also declined slightly.



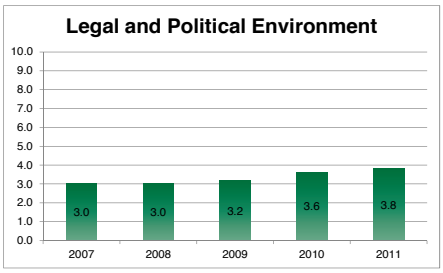

## AZERBAIJAN

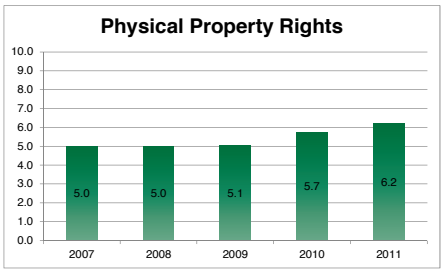
World Rank: 100 Regional Rank: 16

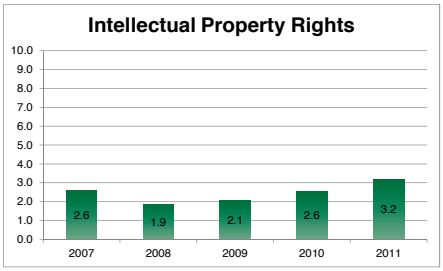
Azerbaijan continued to improve its IPRI score, raising it 0.4 points this year. LP improved by 0.2 points, led by a 0.6 point improvement in *Judicial Independence* and a slight improvement in *Political Stability*. *Control of Corruption* did fall by 0.2 points however.

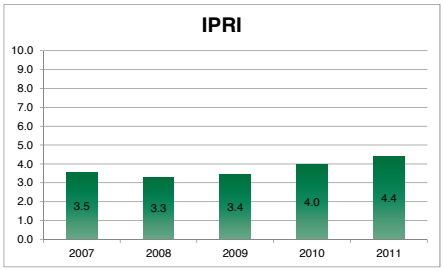
PPR increased by half a point, largely because *Access to Loans* grew 1.3 points to 4.0. Azerbaijan improved its already excellent *Registering Property* by cutting the number of days required to 4, down from 11. *Protection of Physical Property* also rose slightly.

A 0.9 increase in *Protection of Intellectual Property* pushed up more than half a point. *Copyright Piracy* also improved slightly.



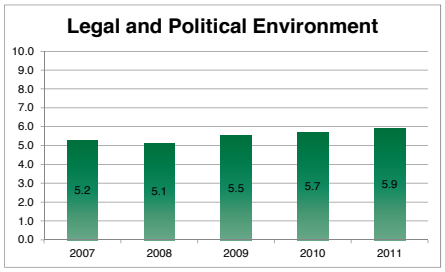
## BAHRAIN

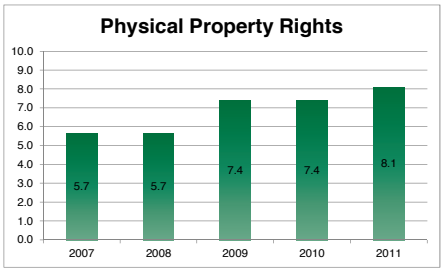
World Rank: 28 Regional Rank: 4

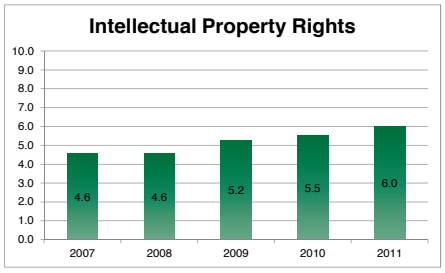
For the second year in a row IPRI improved in Bahrain along with each component. *Judicial Independence* grew 1.2 points, pushing LP up to 5.9. This would have been a larger gain had *Rule of Law* and *Control of Corruption* not fallen by 0.3 points each.

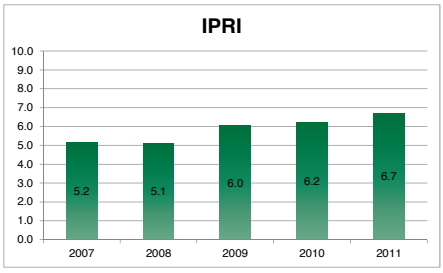
PPR in Bahrain improved by 0.7 points. This was largely driven by a 1.2 point increase in the *Access to Loans* score.

Bahrain saw its *Protection of Intellectual Property* score rise by 0.8 points. This combined with a modest improvement in *Copyright Piracy* to push IPR up half a point.



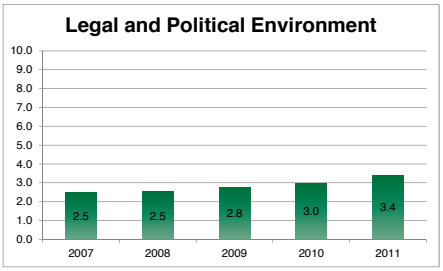

## BANGLADESH

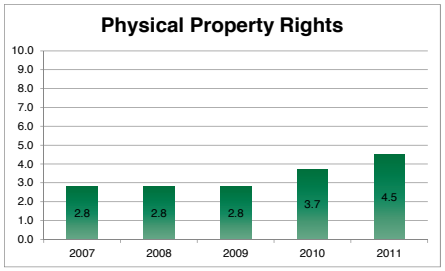
World Rank: 125 Regional Rank: 18

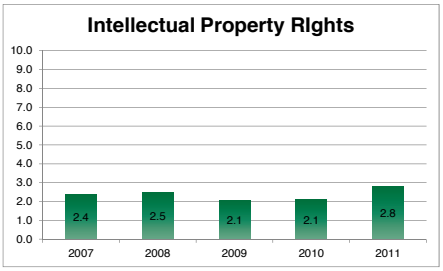
IPRI increased for the second year in a row in Bangladesh. LP improved 0.4 points largely because of a 1.2 point increase for *Judicial Independence*. *Control of Corruption* also increased 0.3 points while *Rule of Law* and *Political Stability* remained constant.

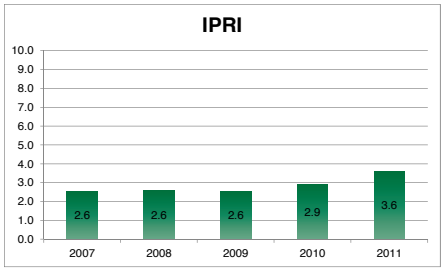
A 1.2 point gain in *Access to Loans* drove a 0.8 point increase in PPR. *Protection of Physical Property* and *Registering Property* also improved by 0.6 points each.

*Protection of Intellectual Property* increased by 0.9 points, generating the progress made in IPR. While Bangladesh still has a long way to go, two years of improvement have helped push it out of last year's last place ranking.



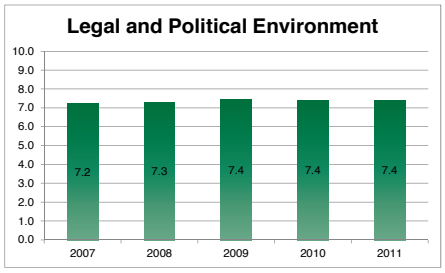
## BELGIUM

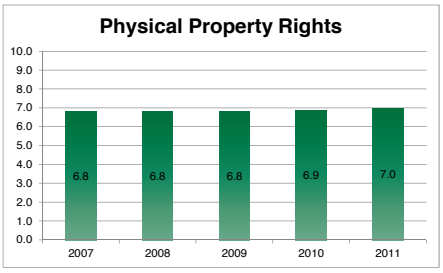
World Rank: 17 Regional Rank: 12

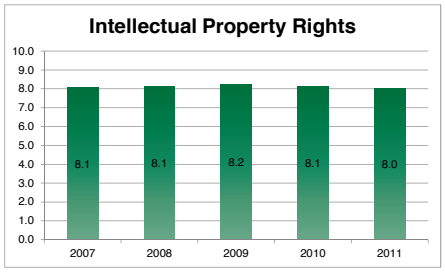
IPRI in Belgium continues to remain stable, with components exhibiting only minor changes. A 0.5 point drop in *Judicial Independence* was offset by modest gains in *Political Stability* and *Control of Corruption*. The net result is no change in LP.

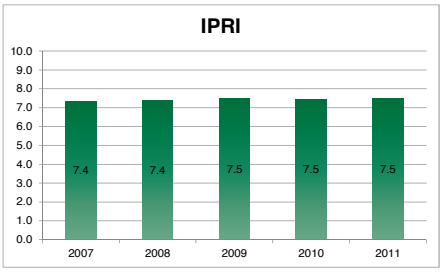
While there are still 7 procedures that need to be completed to register property in Belgium, the number of days it takes fell from 132 to 79. Unfortunately this great improvement was almost entirely offset by decreases in *Protection of Property Rights* and *Access to Loans*, resulting in a modest gain for PPR.

IPR fell slightly due to a small decline in *Protction of Intellectual Property*.



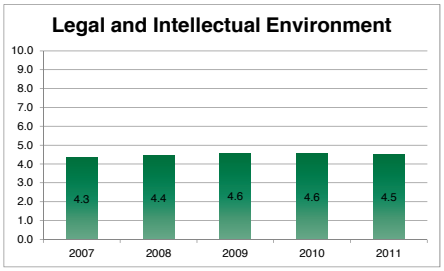

## BENIN

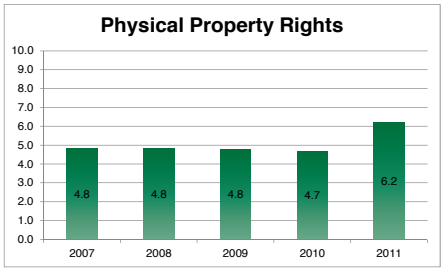
World Rank:64 Regional Rank: 6

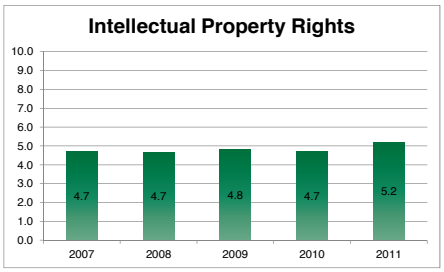
After showing little movement over the last 4 years Benin's IPRI jumped 0.7 points in 2011. PPR improved the most, gaining a full 1.5 points. *Protection of Physical Property* jumped an impressive 2.3 points while *Registering Property* and *Access to Loans* rose by 0.4 and 1.7 respectively.

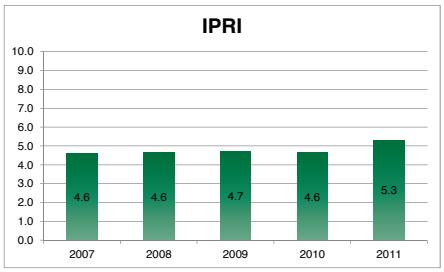
*Protection of Intellectual Property* improved by almost a whole point. This pushed Benin's IPR up to 5.2

LP did experience a slight decline. Slight gains in *Judicial Independence* and *Political Stability* were offset by deterioration in *Rule of Law* and *Control of Corruption*.



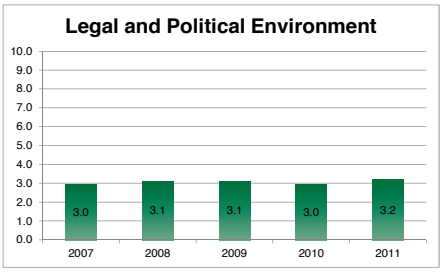
## BOLIVIA

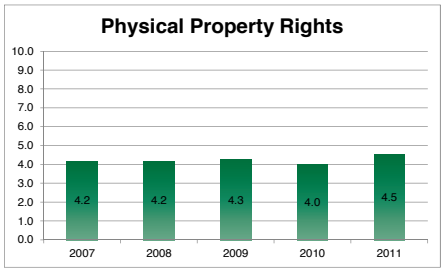
World Rank: 120 Regional Rank: 21

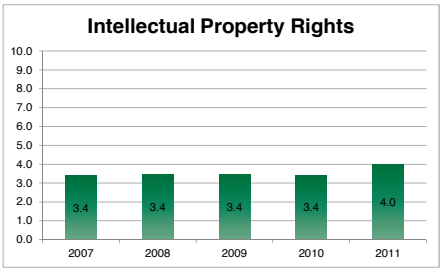
It would seem Bolivia has recovered from (or adapted to) the constitutional issues that hurt last year's ranking as this year's score of 3.9 is Bolivia's highest IPRI yet. A 1.3 point increase in *Judicial Independence* combined with a 0.4 point increase in *Political Stability* to push LP up to 3.2. This effect was somewhat dampened by losses in *Rule of Law* and especially *Control of Corruption.*

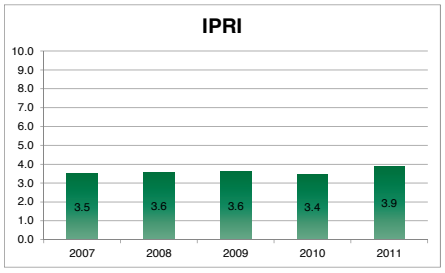
*Access to Loans* improved by more than a while point. Combined with smaller gains in *Protection of Physical Property* and *Registering Property*, PPR for 2011 improved by 0.5 points.

IPR increased by over half a point, largely as the result of a 1.5 point improvement in *Protection of Intellectual Property*. Despite these positive gains, however, Bolivia remains towards the bottom of both the world and regional rankings.



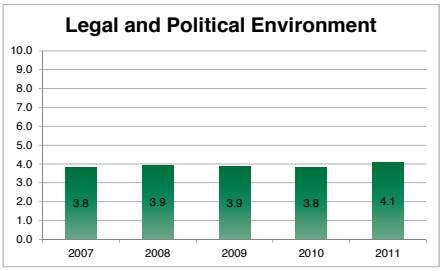

## BOSNIA AND HERZEGOVINA

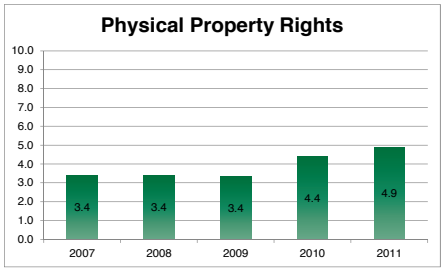
World Rank: 113 Regional Rank: 21

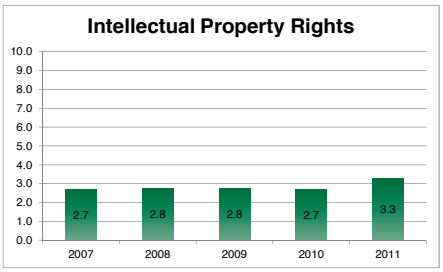
IPRI in Bosnia and Herzegovina continued last year's improvement, increasing by 0.5 points. While other sub-components remained the same, *Judicial Independence* rose by an entire point, resulting in a 0.3 point increase for LP.

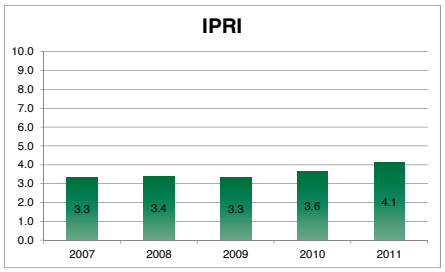
*Protection of Physical Property* decreased slightly, but solid improvement in both *Registering Property* and *Access to Loans* was able to raise PPR by half a point.

IPR experienced increases in each available sub-component. A 1.1 point increase in *Protection of Intellectual Property* helped push Bosnia and Herzegovina's IPR score over 3 for the first time.



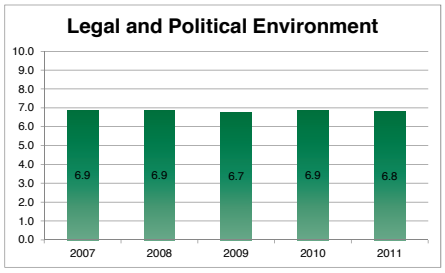
## BOTSWANA

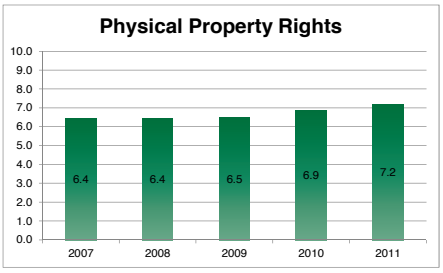
World Rank: 38 Regional Rank: 2

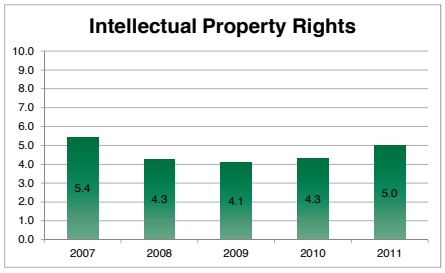
IPRI in Botswana continued to rise this year, achieving Botswana's highest score since 2007. *Control of Corruption* and *Political Stability* did both marginally decrease but these changes were somewhat hidden by a 0.2 point increase in *Judicial Independence*. The result is a modest decline for LP.

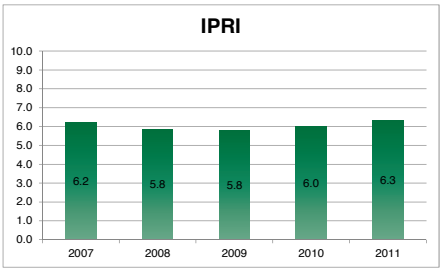
PPR experienced solid gains in both *Protection of Physical Property* and *Access to Loans* of at least 0.5 points. A slight decrease in *Registering Property* did not prevent PPR from improving in 2011.

*Protection of Intellectual Property* grew by 2 points for Botswana. This translated into a 0.7 point increase in Botswana's IPR.



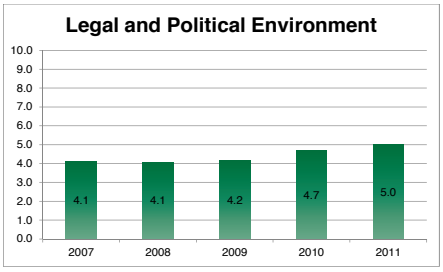

## BRAZIL

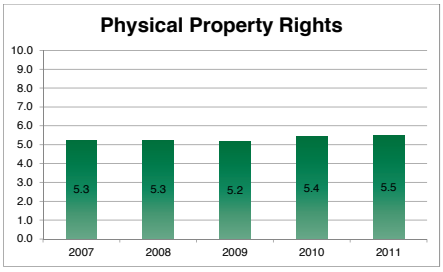
World Rank: 64 Regional Rank: 8

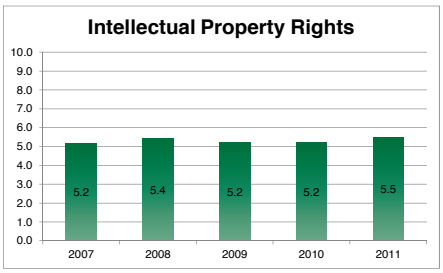
Brazil continues to improve its IPRI in 2011, raising it another 0.2 points. Every sub-component of PPR grew by at least 0.2 points, except for *Control of Corruption* which remained the same. This resulted in Brazil's LP being 0.3 points higher this year.

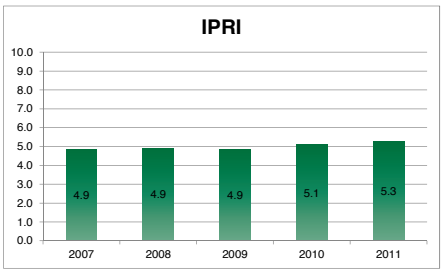
PPR increased slightly in 2011. This was driven by modest gains in *Protection of Physical Property* and *Access to Loans*.

A 0.3 point rise in IPR was driven by improvement in most sub-components this year. IPR's increase was driven by a gain of over half a point in *Protection of Intellectual Property*.



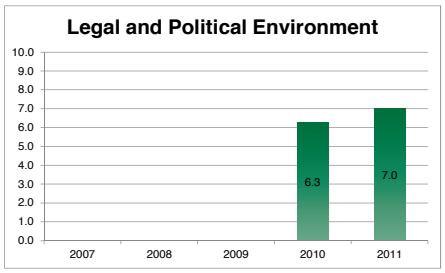
## BRUNEI

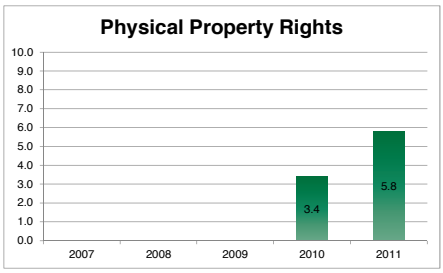
World Rank: 54 Regional Rank:9

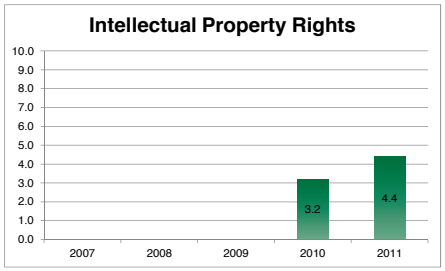
2011 is Brunei's second year in the IPRI and it saw substantial improvement in all three components. LP improved by 0.7 points due to increases of at least 0.3 in all sub-components. *Judicial Independence* improved the most, rising by 1.1 points.

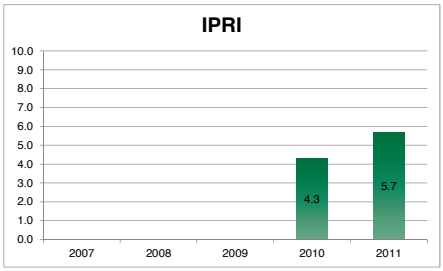
Brunei experienced improvement in both *Protection of Physical Property* and *Ease of Access to Loans* which enhanced the PPR score. However, companies' inability to hold land in their own name continues to hurt this score.

Intellectual property rights in Brunei improved with both a decrease in software piracy and a 0.7 point increase in *Protection of Intellectual Property*. This resulted in a 1.2 point increase for IPR.



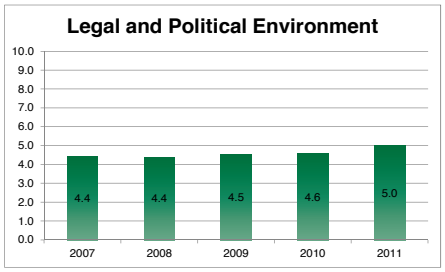

## BULGARIA

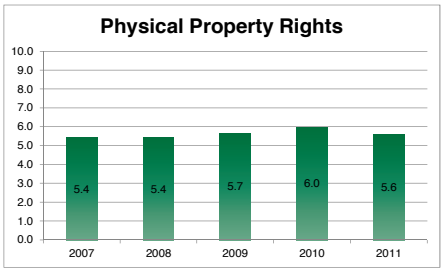
World Rank: 64 Regional Rank: 10

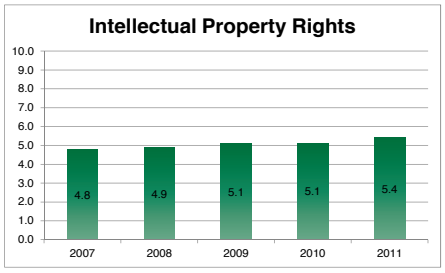
The property rights situation in Bulgaria continues to improve. For the third year in a row LP has risen with gains across sub-components, the largest of which being a whole point in *Judicial Independence*.

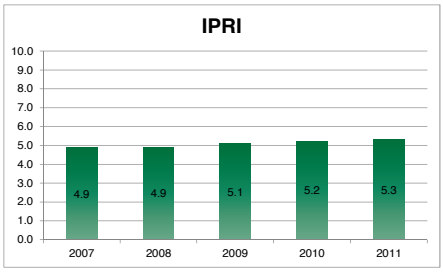
PPR did decrease this year, falling below 2009 levels. This decline was driven by weakening *Protection of Physical Property* and *Access to Loans* scores, especially the latter.

*Protection of Intellectual Property* improved 0.7 points this year. A slight improvement in *Copyright Piracy* also helped raise IPR 0.3 points.



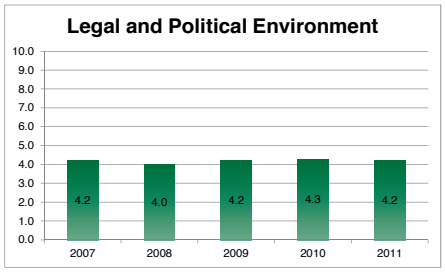
## BURKINA FASO

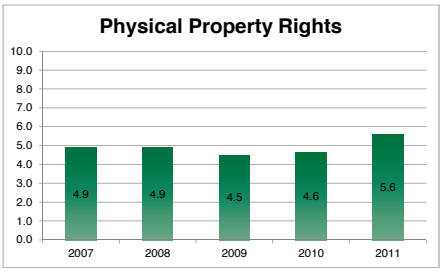
World Rank: 77 Regional Rank: 10

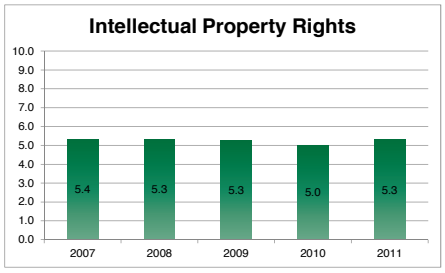
Burkina Faso reversed the negative trend IPRI had been experiencing for two years and improved to its highest rating yet. LP once again moved in the opposite direction of Burkina Faso's IPRI, falling by 0.1 points. While *Rule of Law* improved marginally the effect was swamped by small declines in *Judicial Independence* and *Control of Corruption*.

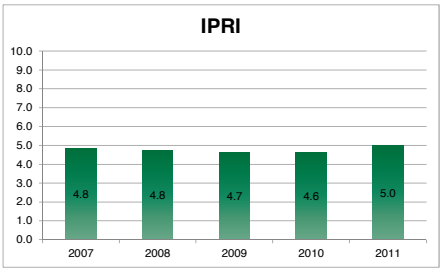
PPR increased by an entire point for 2011. *Registering Property* led the way by improving almost 2 points with improvements also seen in the other sub-components.

IPR returned to the same level it was at two years ago. A lack of copyright data meant this swing was once again the result of a change in *Protection of Intellectual Property*.



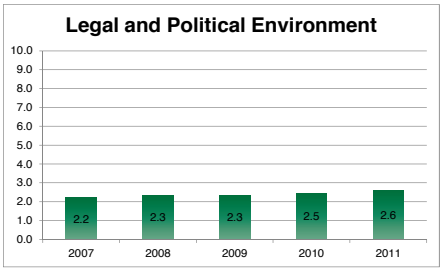

## BURUNDI

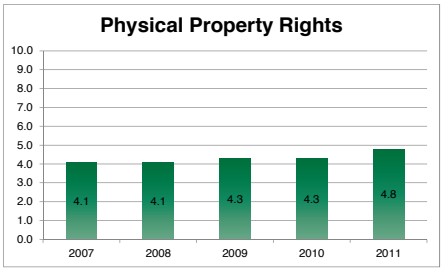
World Rank: 125 Regional Rank: 23

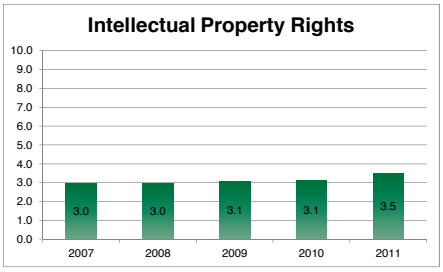
Burundi again improved its property rights in 2011, though the country remains ranked in the bottom five. Gains in all three components helped increase IPRI by 0.3 points, a rate of improvement faster than the privious three years. *Judicial Independence* rose a whole point and this would have meant a larger increase for LP had it not been for small declines in *Rule of Law* and *Control of Corruption*.

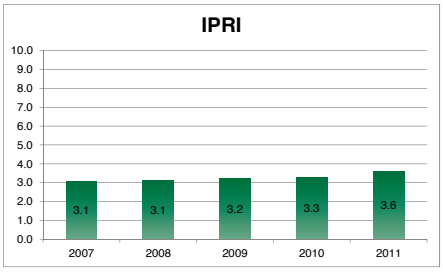
PPR increased rode improvements in all three sub-components to increase half a point. *Protection of Physical Property* saw the largest gains at 0.6 points.

IPR improved by almost half a point thanks to a better *Protection of Intellectual Property* score. Copyright data remains unavailable for Burundi.



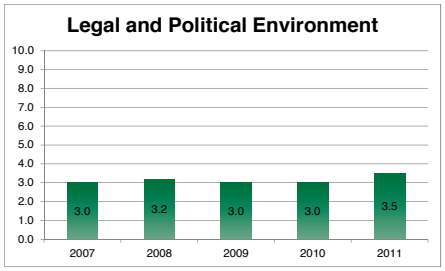
## CAMEROON

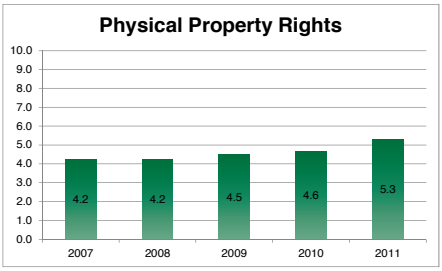
World Rank: 109 Regional Rank: 19

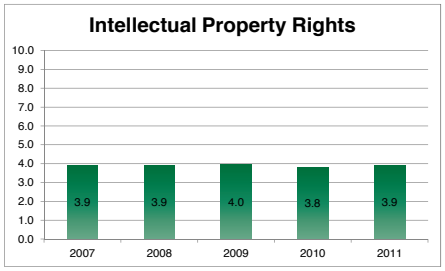
Cameroon's IPRI changed for the first time in three years, moving up to 4.2. All three components improved. LP rose half a point thanks largely to a 1.8 jump in *Judicial Independence*. The other sub-components were relatively stable, though *Political Stability* did see some modest gains.

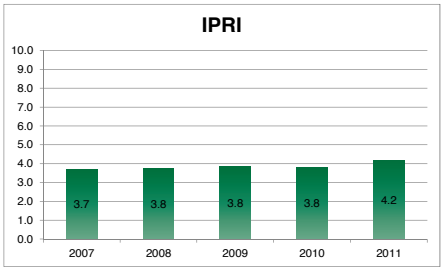
PPR saw the biggest improvement, rising 0.7 points. All three sub-components increased, led by a 0.8 point rise in *Access to Loans*.

IPR slightly increased because of a 0.3 point improvement in *Protection of Intellectual Property*. Other sub-components remained the same.



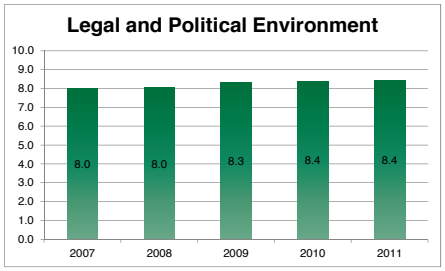

## CANADA

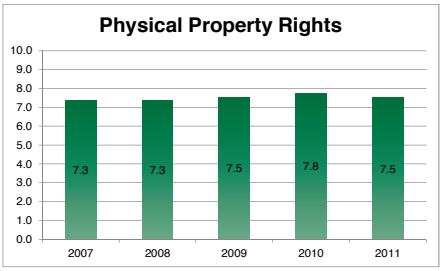
World Rank: 9 Regional Rank: 1

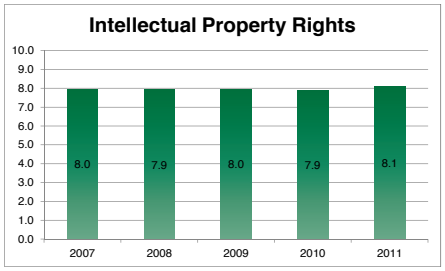
Canada's IPRI remained the same after two previous years of slight increases. There is little to complain about however, as Canada remains the highest ranked country in both its region and the western hemisphere. LP was the model of stability, with only offsetting 0.1 point changes in half of the sub-components.

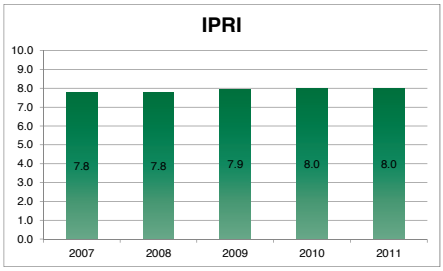
PPR did decrease thanks to 0.4 point declines in both *Protection of Physical Property* and *Access to Loans*. *Registering Property* was unchanged.

IPR masked the fall in PPR by rising 0.3 points. Canada has one of the best *Copyright Piracy* scores in the world despite failing to bring its laws in line with the WIPO Internet Treaties. This lack of compliance is why the IIPA recommends Canada remain on the Special 301 Priority Watch List.



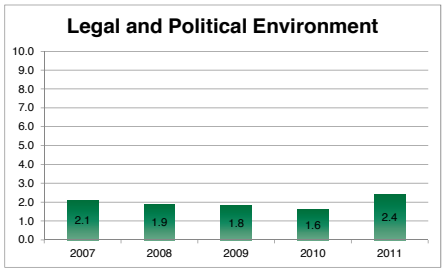



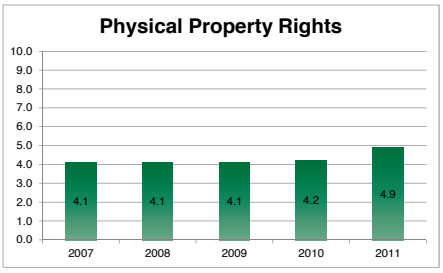
## CHAD

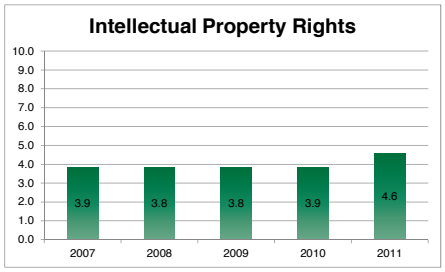
World Rank: 117 Regional Rank: 20

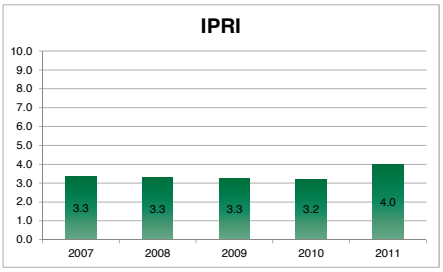
For the first time in the index's history Chad saw some positive growth in its IPRI score, and quite a bit of it relatively speaking. Chad's LP score had been the lowest in the world and on a three year decline until 2011. Improvement in all sub-components raised Chad's LP by 0.8 points. The largest increase was in *Judicial Independence* which rose 2.5 points to a merely weak score of 3.8. *Rule of Law* and *Political Stability* both improved but remain below 2.0.

All sub-components in PPR improved with the largest increase found in *Access to Loans*, which almost doubled. Chad's best sub-component is *Registering Property* with a respectable score of 8.3 because the process only takes 6 days.




IPR increased thanks to a half point improvement in *Protecting Intellectual Property*. While Chad's IPRI and component scores remain low, 2011 saw a lot of encouraging improvement.

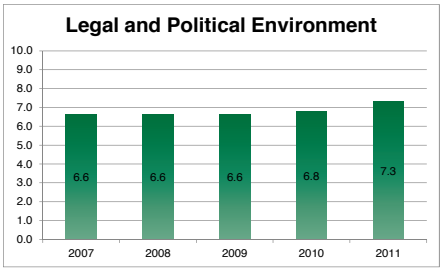
## CHILE

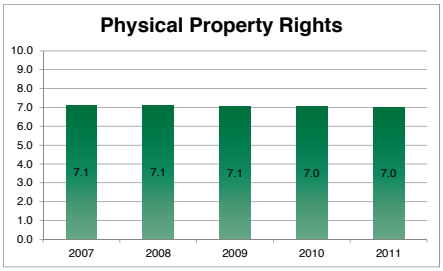
World Rank: 28 Regional Rank: 1

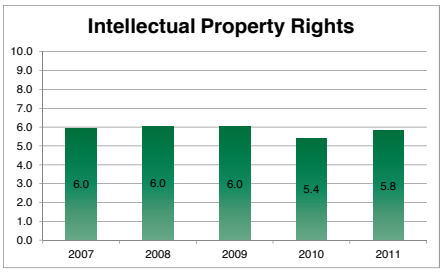
Chile's IPRI improved to 6.7 this year, making up for last years slight decline and keeping Chile at the top of the South America region. LP rose to 7.3 thanks to a second year of improvement in *Judicial Independence*. *Political Stability* and *Control of Corruption* also saw slight gains.

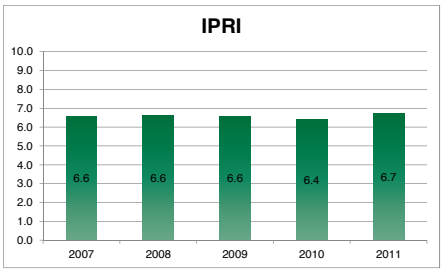
PPR is again 7.0 as most of the sub-components were unchanged. There was a slight decrease in *Access to Loans*, though, with the sub-component score falling from 5.4 to 5.2.

IPR rose to 5.8 for Chile, mostly driven by a 1 point increase in the *Protection of Intellectual Property* score. *Copyright Piracy* also saw a modest improvement.



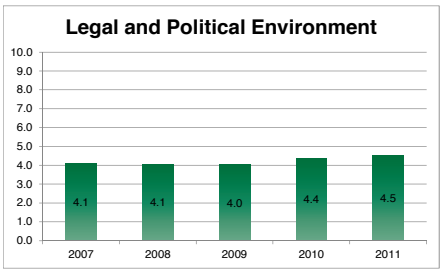
## CHINA

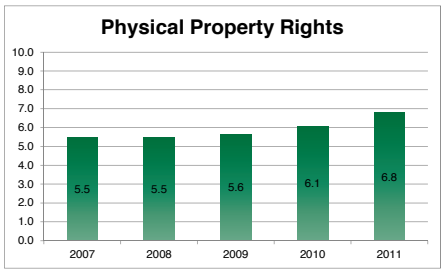
World Rank: 60 Regional Rank: 11

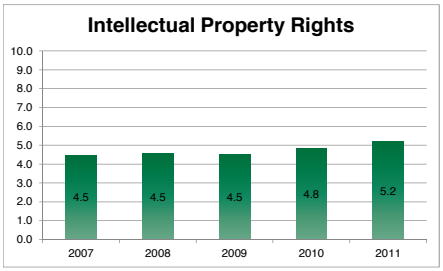
For the second year in a row IPRI in China increased thanks to improvements in all three components. *Judicial Independence* jumped a whole point but this progress was somewhat offset by deterioration in the *Political Stability* and *Control of Corruption* scores. The result is a modest 0.1 increase in China's LP score.

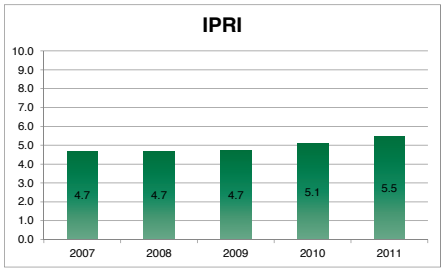
PPR improved again thanks to increases in all sub-component variables. *Registering Property* remains China's highest scoring sub-component at 8.9, but it was *Access to Loans* that improved the most, jumping by a point and a half.

The rise in the IPR score was due mostly to a 0.9 increase in *Protection of Intellectual Property*. While China did see a modest gain in *Copyright Piracy* the score is still only 1.6, reflecting the fact that China has some of the highest rates of piracy in the world.



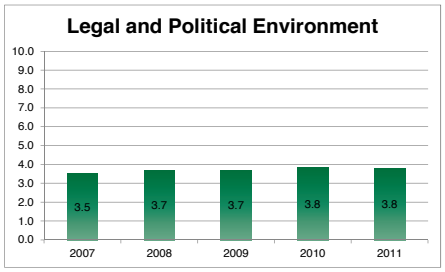

## COLUMBIA

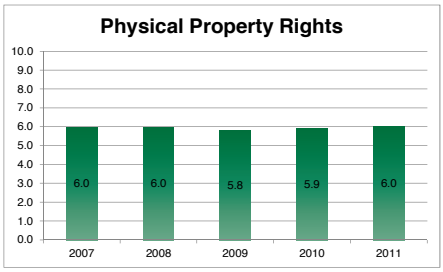
World Rank: 75 Regional Rank: 9

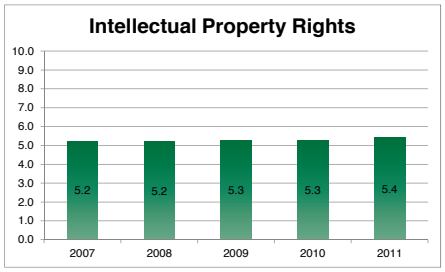
IPRI in Columbia increased modestly for the second year in a row. LP was again 3.8 due to only minimal increases (*Rule of Law*) and decreases (*Judicial Independence, Control of Corruption*).

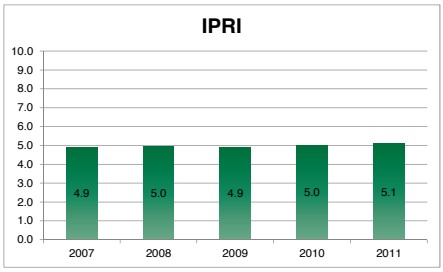
PPR experienced a modest 0.1 point increase for 2011. This is because the 0.5 point improvement in *Registering Property* was larger than the 0.2 point decrease in *Protection of Physical Property*. *Access to Loans* did not change.

IPR in Columbia rose 0.1 points. This improvement reflected similar increases in both *Protection of Intellectual Property* and *Copyright Piracy*.



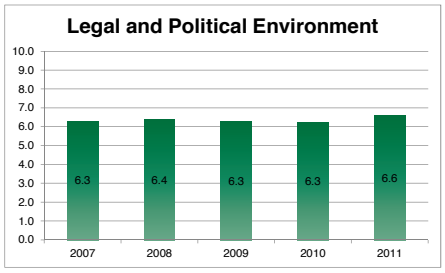
## COSTA RICA

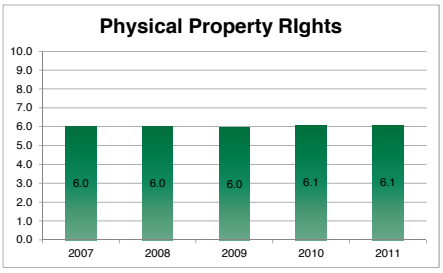
World Rank: 50 Regional Rank: 4

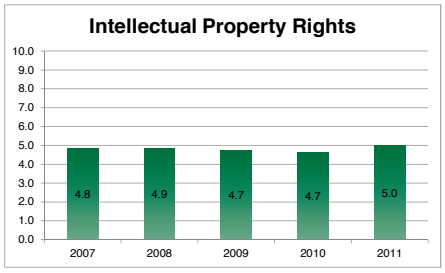
IPRI for Costa Rica changed for the first time in 4 years, improving to 5.9. LP rose 0.3 points due to improvement in all four sub-components. *Judicial Independence* saw the largest increase, jumping 0.5 points to 7.5.

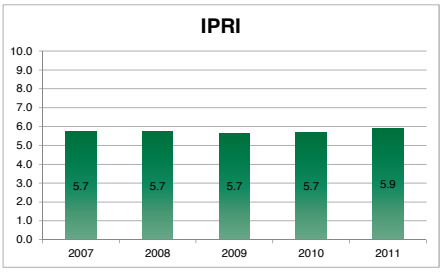
PPR held steady at 6.1. Modest gains in *Protection of Physical Property* and *Registering Property* were stifled by a 0.4 point decline in *Access to Loans*.

*Protection of Intellectual Property* jumped 0.9 points for 2011. This improvement combined with a slight gain in *Copyright Piracy* pushed IPR up to 5.0, the best IPR score for Costa Rica since 2007.



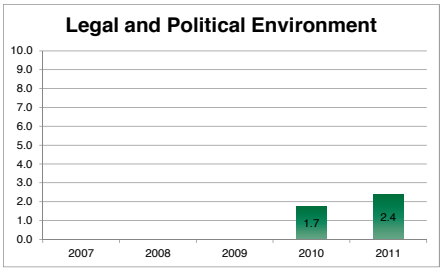

## COTE D'IVOIRE

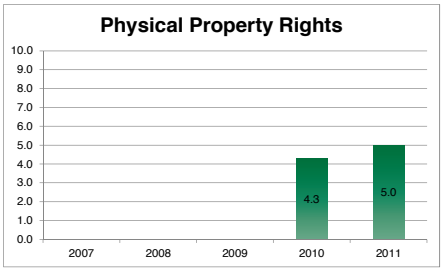
World Rank: 123 Regional Rank: 22

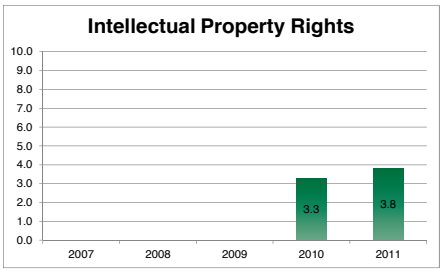
Cote D'Ivoire saw improvement in all three component scores this year and all sub-components, raising IPRI by over half a point. Most LP sub-components saw improvement, led by 1.6 point rise in *Judicial Independence*. Only *Control of Corruption* was unchanged.

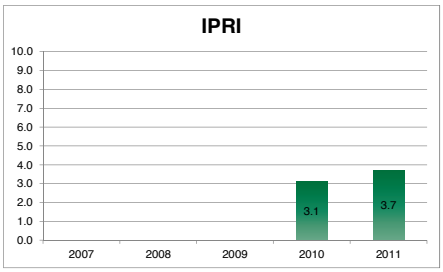
PPR rose 0.7 points thanks to a 1.5 point rise in *Access to Loans*. It should be noted though that *Access to Loans* is still only 2.2, up from an abysmal 0.7.

*Protection of Intellectual Property* grew 0.9 points and, along with marginal gains in *Copyright Piracy*, pushed IPR up half a point. While this across-the-board improvement is a welcome sight, more is still needed as Cote D'Ivoire remains among the lowested rated countries in the region and the world.



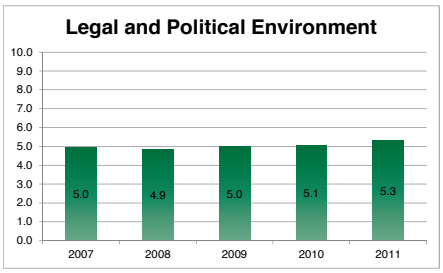
## CROATIA

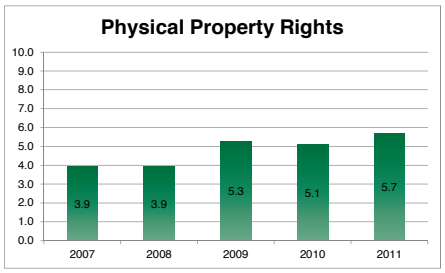
World Rank: 64 Regional Rank: 10

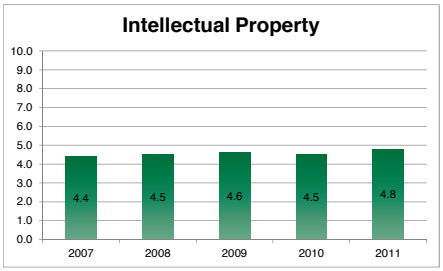
Croatia reversed last years decline and rose to its highest IPRI rating in the Index's five year history. LP improved for the second year in a row thanks to modest gains in all sub-components except *Control of Corruption*, which experienced a marginal decline.

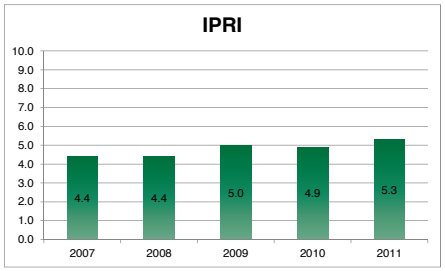
Improvements in both *Protection of Physical Property* and *Registering Property* drove the increase in PPR. *Access to Loans* decreased for the second year in a row, though only slightly.

IPR rose to its highest level because the expert opinions that form *Protection of Intellectual Property* improved. *Copyright Piracy* remained unchanged for the fourth year in a row.



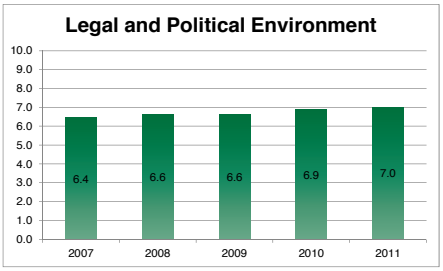

## CYPRUS

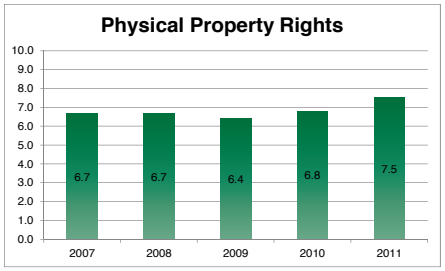
World Rank: 25 Regional Rank: 3

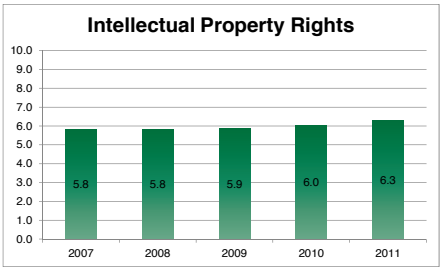
For the second year in a row Cyprus saw improvement in IPRI and three components. A rise in three sub-components increased LP. The lone exception was *Political Stability*, which fell 0.3 points.

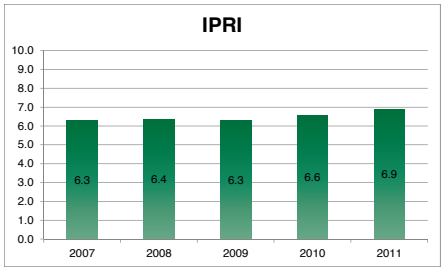
PPR increased despite a small decline in *Access to Loans*. This year data was available for *Registering Property*; the inclusion of Cyprus' 9.1 score in this sub-component pushed PPR up 0.7 points. *Protection of Physical Property* remained the same.

Expert opinion regarding the protection of intellectual property improved for 2011. This combined with a slight positive change for *Copyright Piracy* resulted in a 0.3 point increase for IPR.



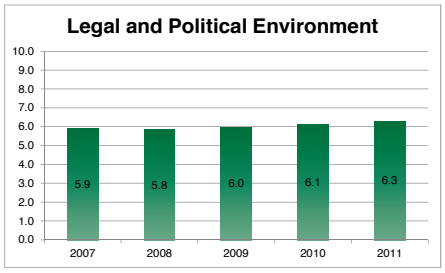
## CZECH REPUBLIC

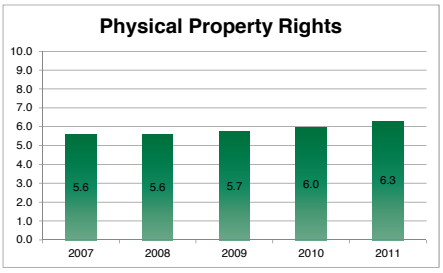
World Rank: 33 Regional Rank: 2

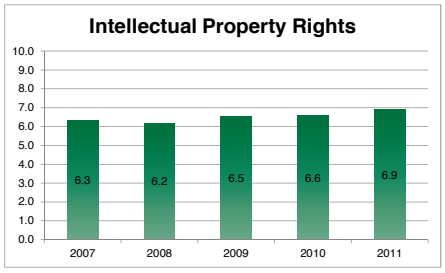
For the third year in a row the Czech Republic saw an increase in its IPRI. Like last year, all three components experienced a positive change. LP improved slightly as three of the four sub-components increased. *Political Stability* saw a minor decline.

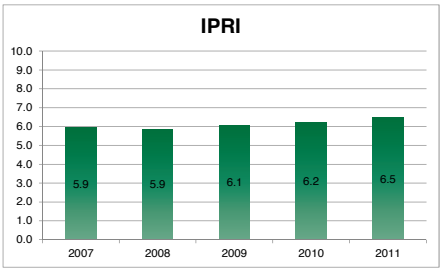
PPR rose 0.3 points thanks to improvements in two sub-components, including a 1.1 increase in *Registering Property*. *Access to Loans* was the exception to the trend, falling by 0.1 points.

Expert opinion regarding Czech defense of intellectual property rose this year. This, along with a slight improvement in *Copyright Policy*, pushed IPR up for the third year in a row.



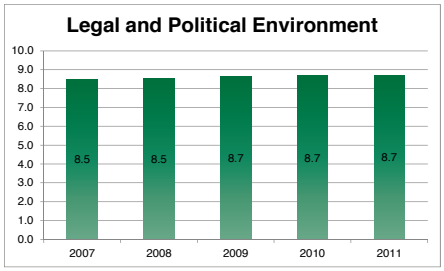

## DENMARK

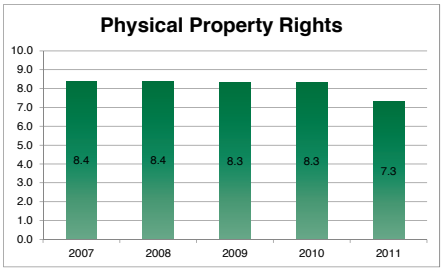
World Rank: 8 Regional Rank: 6

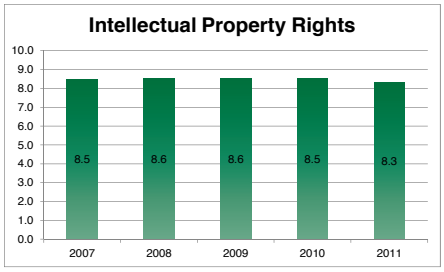
After 4 years of consistency Denmark saw a decline in its IPRI score. LP remained the same, with marginal declines in *Judicial Independence* and *Rule of Law* offsetting gains in *Political Stability* and *Control of Corruption*.

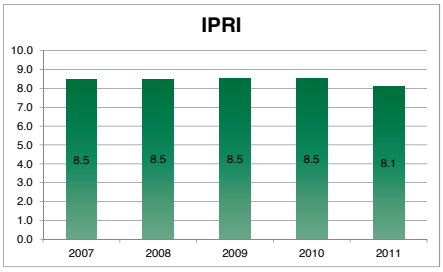
*Access to Loans* tumbled 2.3 points to a score of 5.1. This combined with a 0.8 point decrease in *Protection of Physical Property* to pull down Denmark's PPR to its lowest score in the history of the index.

Expert opinion of Denmark's protection of intellectual property fell slightly in 2010. Along with a slight rise in the rate of copyright piracy, this caused Denmark's IPR to fall for the second year in a row to a score of 8.3.



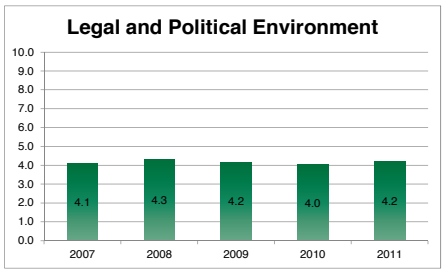
## DOMINICAN REPUBLIC

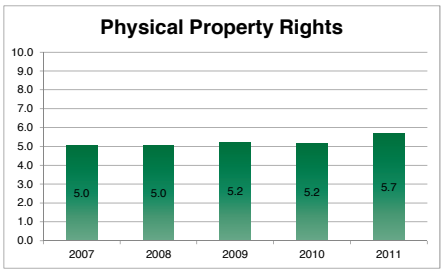
World Rank: 93 Regional Rank: 15

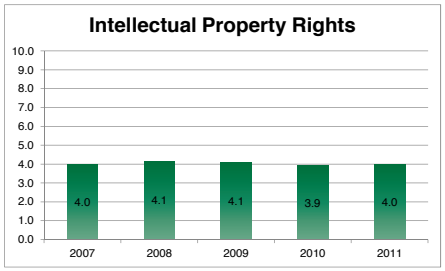
The IPRI score for the Dominican Republic reversed last year's decline and improved 0.2 points for the 2011 index. LP rose for the first time in two years thanks to a 1.0 point increase in *Judicial Independence*. This improvement was somewhat dampened by minor declines in *Rule of Law* and *Control of Corruption*.

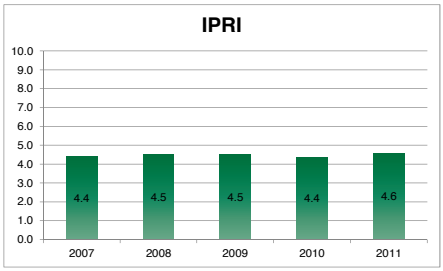
PPR improved thanks to increases in all three sub-components. *Access to Loans* remains the weakest sub-component but saw the biggest change, growing by 0.9 points.

IPRI increased slightly even though expert opinion on the Dominican Republic's *Protection of Intellectual Property* fell. This was because of a decline in the level of copyright piracy.



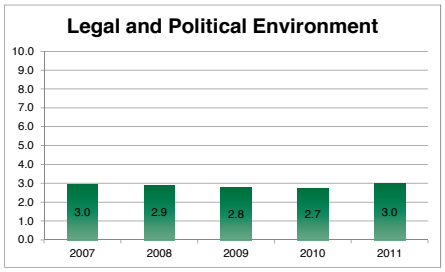

## ECUADOR

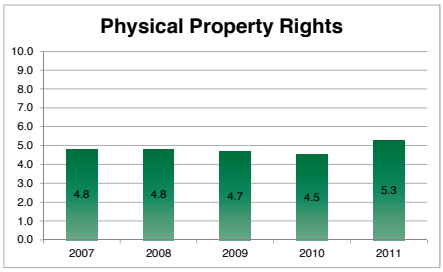
World Rank: 100 Regional Rank: 18

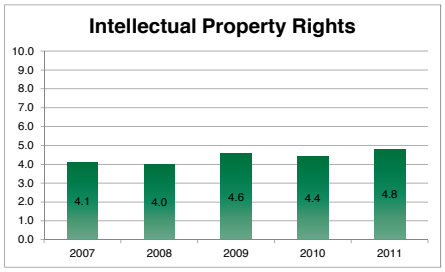
Unlike last year, it was all good news in Ecuador with increases in IPRI and every component. LP increased largely due to a 1.1 point rise in *Judicial Independence*, though the actual score remains low at 2.8. *Rule of Law* and *Control of Corruption* both fell by 0.2 points.

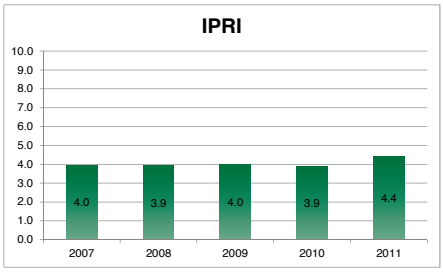
PPR rose thanks to increases of 0.8 and 0.5 for *Protection of Physical Property* and *Access to Loans* respectively. *Registering Property* was unchanged.

*Protection of Intellectual Property* jumped 1.1 points for 2011. This positive changed increased IPR despite a small decline in *Copyright Policy.*



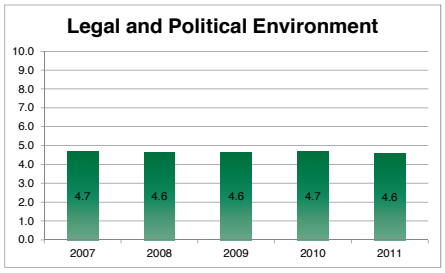
## EGYPT

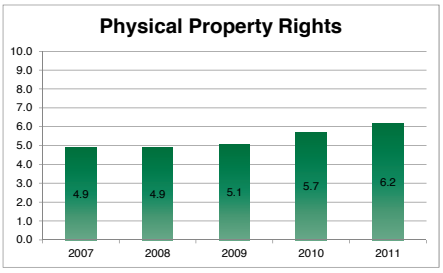
World Rank: 71 Regional Rank: 12

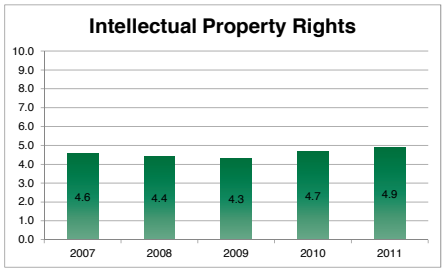
Egypt again saw an improvement in its IPRI due to increases in PPR and IPR. LP declined slightly because of a drop of a full point for *Judicial Independence*. This loss swamped the positive effects of a half point improvement in *Control of Corruption*.

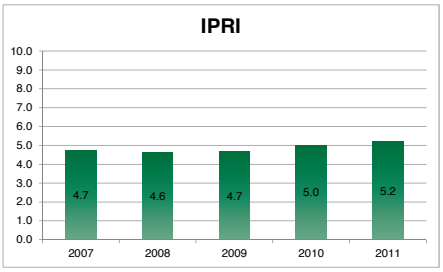
PPR saw improvements in all three sub-components and rose accordingly. The largest gain was a 0.8 point improvement in *Access to Loans*, though this score remains the lowest in the component at 4.3.

IPR rose for the second year in a row because of a 0.7 point increase in *Protection of Intellectual Property*. Copyright piracy levels were unchanged for 2011.



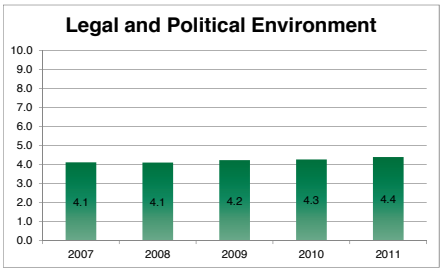

## EL SALVADOR

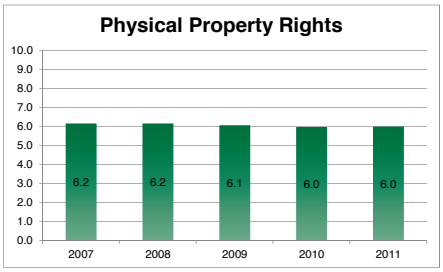
World Rank: 81 Regional Rank: 11

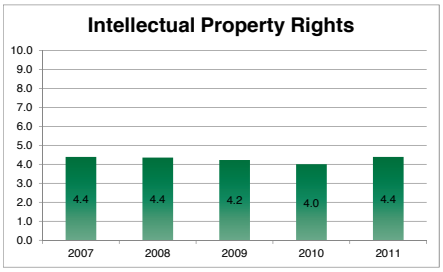
El Salvador saw modest gains in its IPRI and most of its components. Despite a 0.3 point decrease in *Rule of Law*, improvement in the three other sub-components was able to raise El Salvador's LP score slightly.

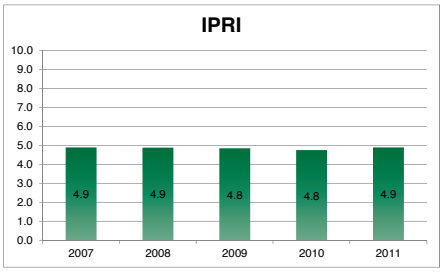
PPR was unchanged for 2011, though the same was not true for the sub-components. *Access to Loans* fell 0.6 points to 3.4, though gains in *Protection of Physical Property* made up for this decline. *Registering Property* was stable.

Improved expert opinion caused *Protection of Intellectual Property* to jump a whole point. *Copyright Piracy* did not change, however, so this only translated into a 0.4 point gain for IPR.



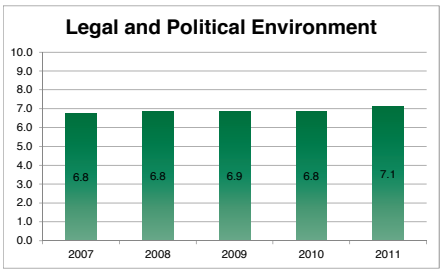
## ESTONIA

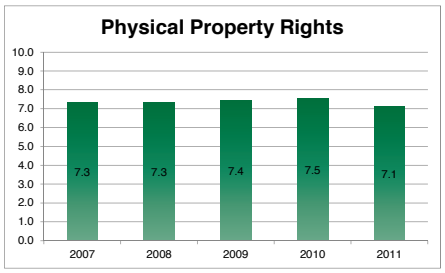
World Rank: 28 Regional Rank: 1

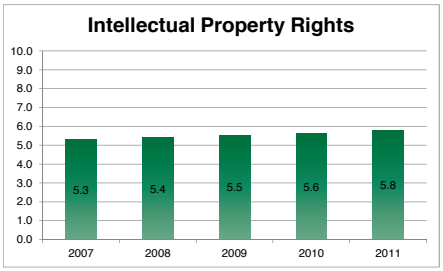
While its IPRI did not change in 2011 Estonia continues to hold the highest score for Central and Eastern Europe. LP improved rising 0.3 points because of improvement across all four sub-categories. *Judicial Independence* saw the largest change, jumping 0.6 points.

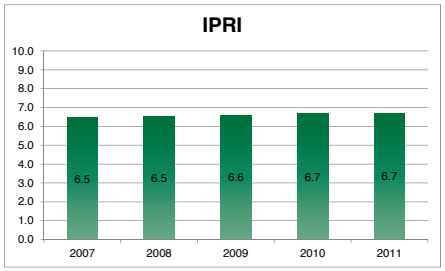
PPR declined this year after two years of improvement. Deterioration in *Protection of Physical Property* and *Access to Loans* were the main reason, especially a 1.7 point drop in the loans category.

IPR increased for the fourth year in a row as professional opinions of Estonia's intellectual property rights protection continued to improve. Levels of copyright piracy were the same for 2011.



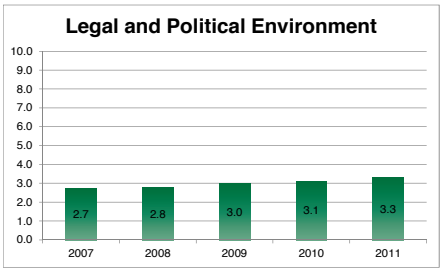

## ETHIOPIA

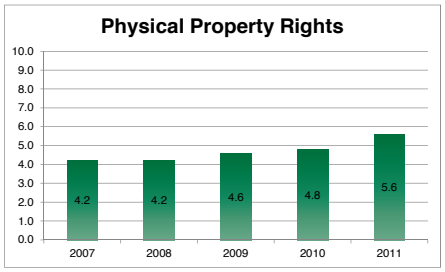
World Rank: 98 Regional Rank: 16

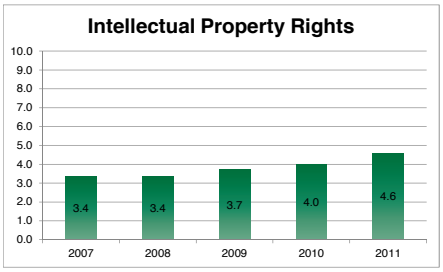
IPRI in Ethiopia jumped 0.5 points in 2011, almost matching its improvement for the previous three years combined. The 0.2 point gain for LP masked some turmoil within the sub-components: *Rule of Law* and *Control of Corruption* both declined while *Judicial Independence* jumped 1.1 points. While *Political Stability* did improve, its 1.5 score is among the lowest in the world.

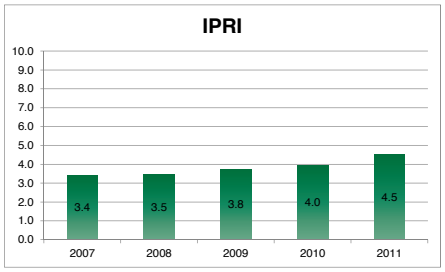
PPR improved for 2011 with increases in all three sub-components. *Protection of Physical Property* and *Access to Loans* both went up by a whole point.

IPR rose for the third year in a row. Copyright piracy data was unavailable, but *Protection of Intellectual Property* went up by over a point.



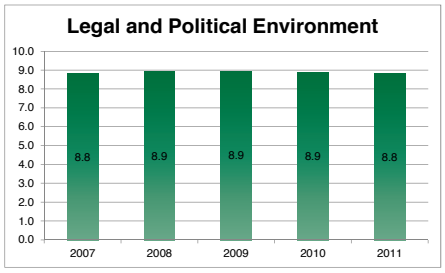
## FINLAND

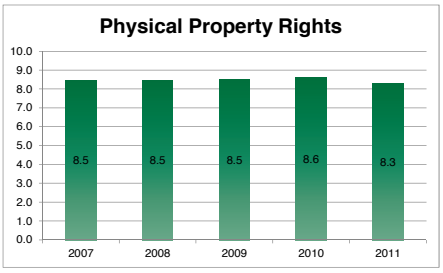
World Rank: 1 Regional Rank: 1

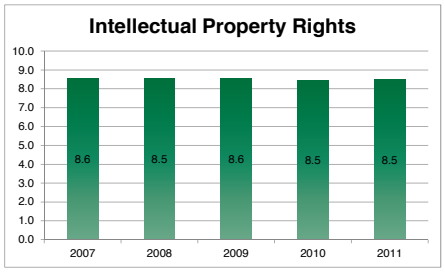
Despite a slight decline Finland enjoyed the highest IPRI in the world for the fifth year in a row, tied for first place with Sweden. It had the strongest score in every component. LP decreased by 0.1 points after three years of stability. Improvement in *Rule of Law* was swamped by small losses in *Judicial Independence* and *Control of Corruption*.

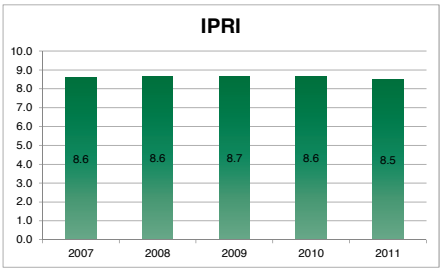
*Protection of Physical Property* and *Registering Property* remained stable but *Access to Loans* fell by a whole point. This pulled Finland's PPR score down by 0.3 points.

Finland saw small improvements in *Protection of Intellectual Property* and *Copyright Piracy*. These 0.1 point increases were not enough to change IPR for 2011 however.



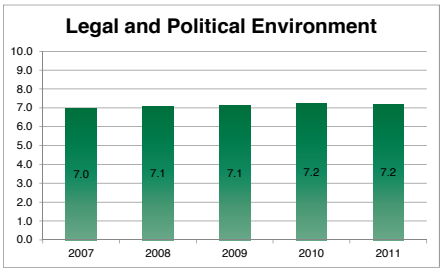



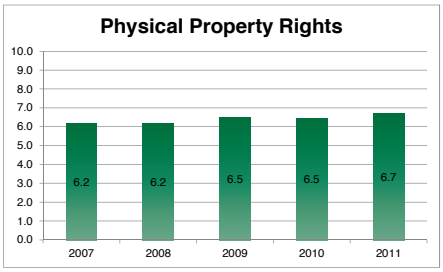

## FRANCE

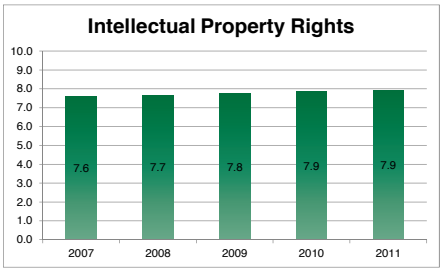
World Rank: 20 Regional Rank: 13

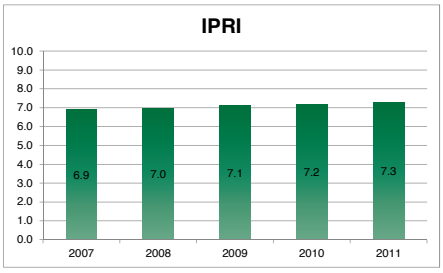
IPRI increased in France for the fourth consecutive year. *Judicial Independence*, *Political Stability*, and *Control of Corruption* all deteriorated slightly, but small progress in *Rule of Law* was enough to prevent LP from changing for 2011.

*Protection of Physical Property* lost 0.3 points but improvement in *Registering Property* and *Access to Loans* easily compensated for this change. This resulted in PPR increasing 0.2 points. Neither IPR nor any of its subcomponents experienced any change for this year's index.



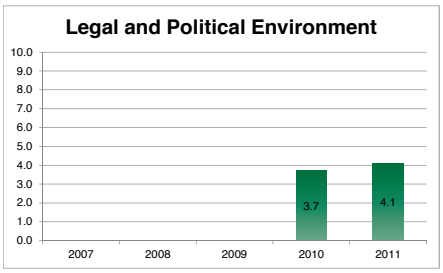
## GEORGIA

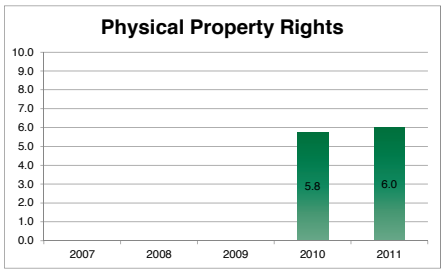
World Rank: 113 Regional Rank: 21

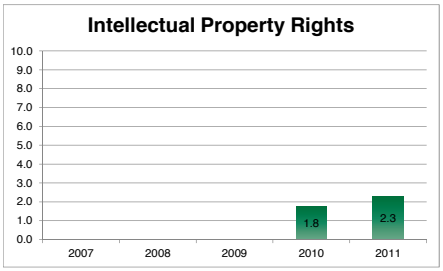
Georgia improved its scores for IPRI and all three components for its second year of inclusion in the index. A 1.2 point jump in *Judicial Independence* combined with a 0.4 point rise in *Rule of Law* to push LP up this year. *Political Stability* and *Control of Corruption* were unchanged.

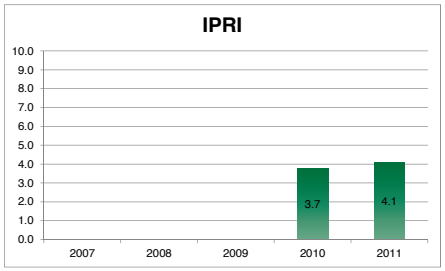
Progress in all three sub-components resulted in an improvement in PPR for 2011. All variables increased by 0.2 points.

IPR remains the weakest part of Georgia's otherwise strong property rights portfolio, but there was progress here as well. Professional opinion about Georgia's protection of intellectual property improved, raising that variable by a whole point. While *Copyright Piracy* remained the same, this was enough change for IPR to experience a 0.5 point improvement. Patent data remains unavailable.



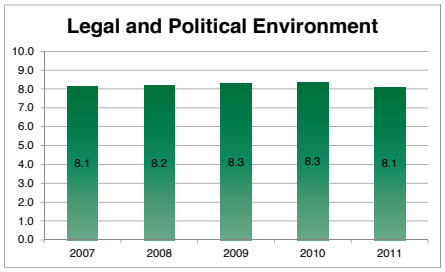

## GERMANY

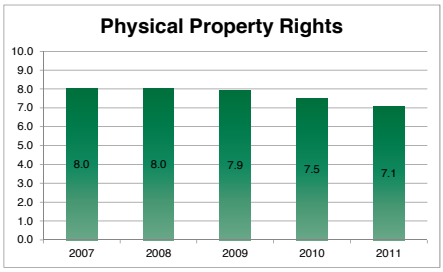
World Rank: 13 Regional Rank: 9

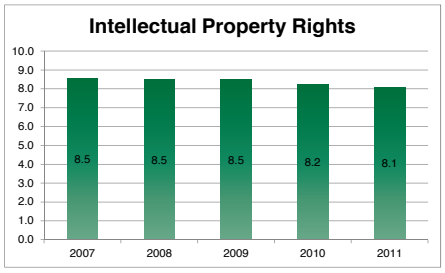
IPRI decreased in Germany for the third year in a row. LP also experienced a decline as all four sub-components deteriorated. *Political Stability* saw the largest change, falling by 0.5 points.

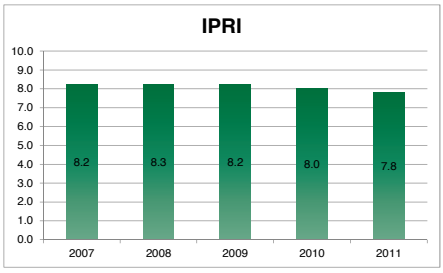
A 0.5 point drop in *Protection of Physical Property* and a 0.8 point drop in *Access to Loans* lowered PPR to a score of 7.1. Both of these sub-components decreased in the previous two years as well.

The IPR score was affected by a declining expert opinion of the protection of intellectual property. This decline combined with a slight rise in the level of copyright piracy hurt Germany's IPR score for 2011.



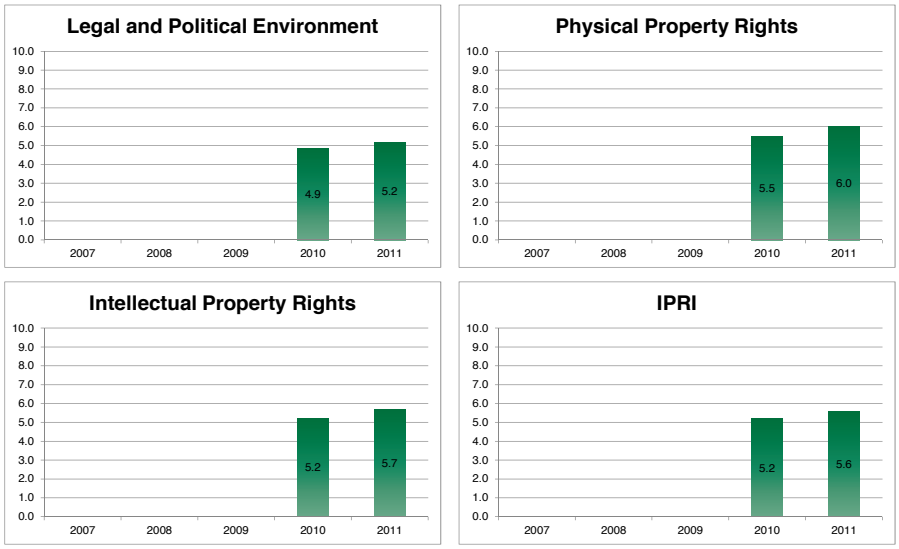
## GHANA

World Rank: 55 Regional Rank: 4

In its second year in the index, Ghana saw improvement in its IPRI and all three components. LP rose 0.3 points thanks to improvement in every sub-component except *Rule of Law*, which remained the same. *Judicial Independence* experienced the largest change, jumping 0.8 points.

*Access to Loans* remains weak but was able to increase an entire point for 2011. Minor improvements in *Protection of Physical Property* and *Rule of Law* also helped push PPR up by 0.5 points.

Data for copyright piracy in Ghana was not available, but expert opinion regarding protection of intellectual property has improved. This resulted in a 0.5 rise in IPR.



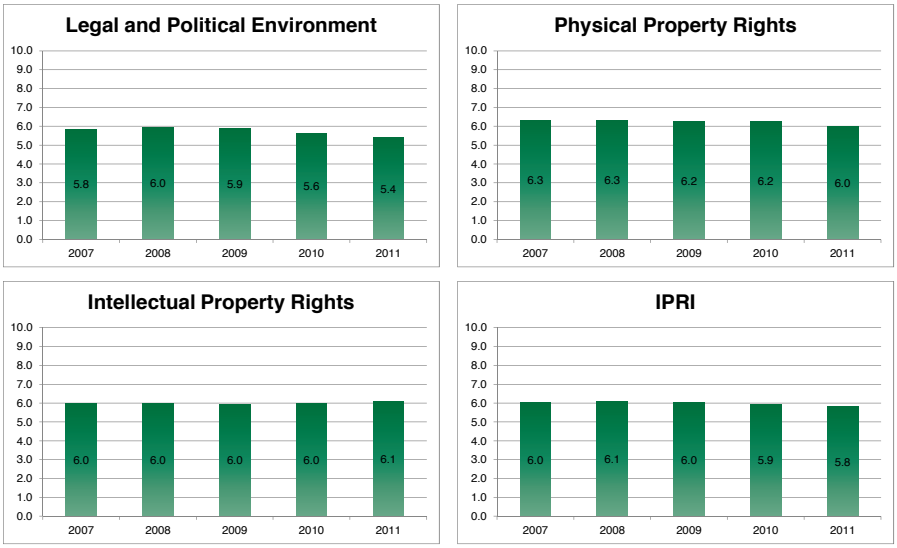

## GREECE

World Rank: 52 Regional Rank: 19

In 2011 Greece's IPRI fell for the third consecutive time. LP fell again this year, largely because of deteriorating scores in *Rule of Law* and *Political Stability*. *Judicial Independence* and *Control of Corruption* were relatively stable.

PPR also fell this year thanks to decreases in all three sub-component scores. *Access to Loans* saw the biggest change, declining by half a point.

IPR for Greece did increase this year thanks to improving professional opinion about protection of intellectual property rights. Other sub-component scores were unchanged.



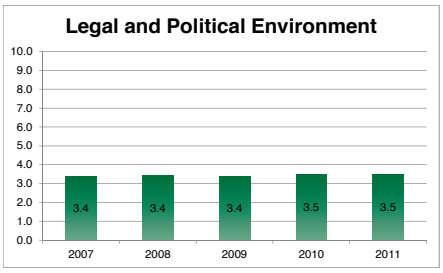
## GUATEMALA

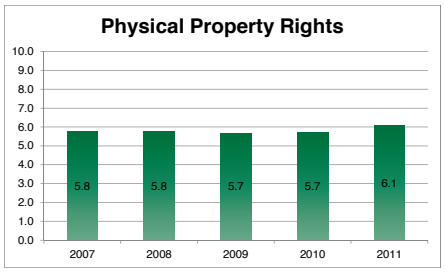
World Rank: 98 Regional Rank: 17

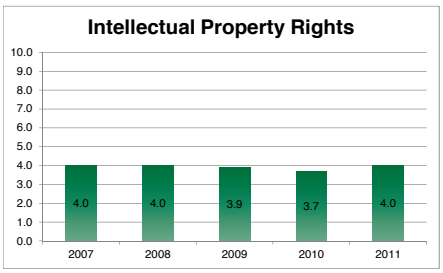
IPRI in Guatemala improved for 2011, rising 0.2 points. While Guatemala's LP score is the same, there were some changes in sub-components. *Political Stability* fell by 0.3 points but this was offset by marginal gains in *Judicial Independence* and *Control of Corruption*.

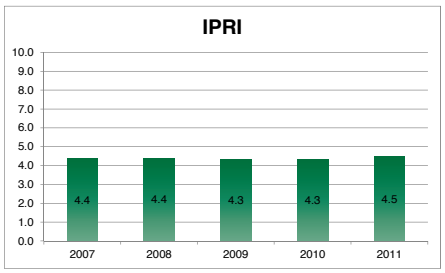
Despite a deterioration of *Protection of Physical Property*, PPR rose 0.4 points this year. This was largely the result of a 0.7 point increase in the *Access to Loans* score.

Improving expert opinion raised *Protection of Intellectual Property* by 0.8 points. A small increase in Guatemala's *Copyright Piracy* score also helped push IPR up to a score of 4.0.



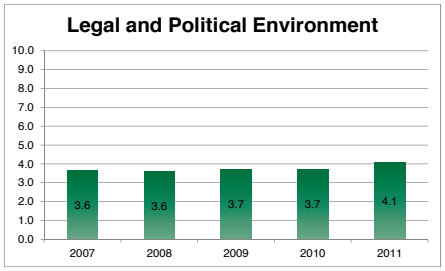

## GUYANA

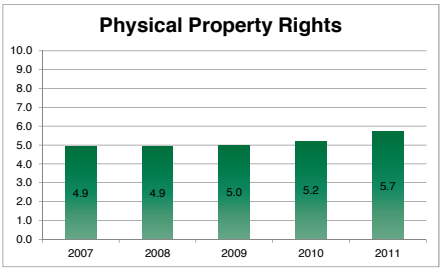
World Rank: 93 Regional Rank: 15

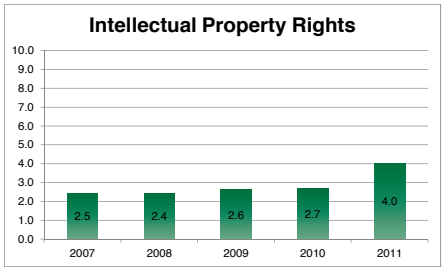
IPRI in Guyana made a dramatic increase in 2011. A 0.2 point rise in *Rule of Law* and a 1.5 point jump in *Judicial Independence* caused LP to improve by 0.4 points. This was despite a small deterioration in *Control of Corruption*.

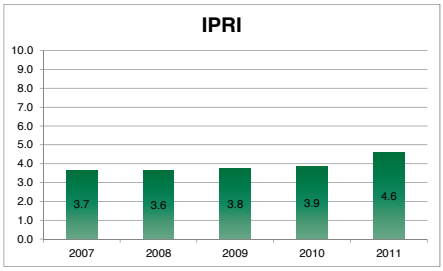
*Protection of Physical Property* and *Access to Loans* both improved by at least 0.6 points. This resulted in Guyana's PPR score increasing for the third year in a row.

Copyright Piracy data was unavailable, but improving professional opinion caused *Protection of Intellectual Property* to jump by 2.6 points. This led to a 1.3 point increase in IPR for 2011.



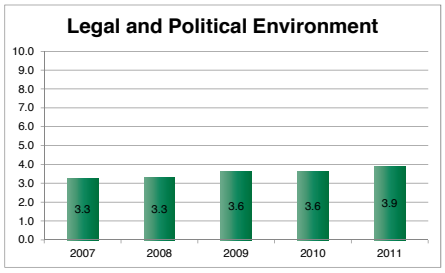
## HONDURAS

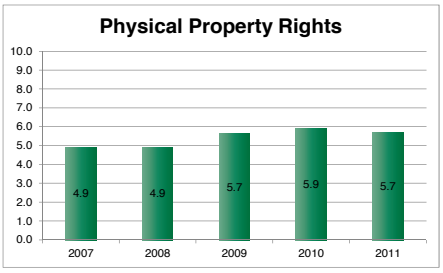
World Rank: 87 Regional Rank: 13

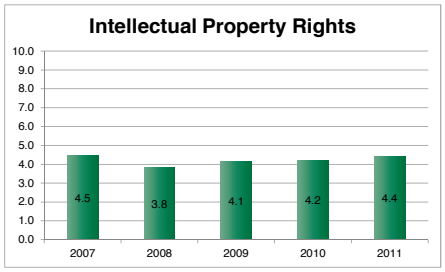
IPRI in Honduras experienced a slight increase for the third consecutive year. LP rose 0.3 points on the back of improvement in most sub-components, the largest change being a 0.8 jump in *Judicial Independence*. Only *Control of Corruption* declined, and that fall was slight.

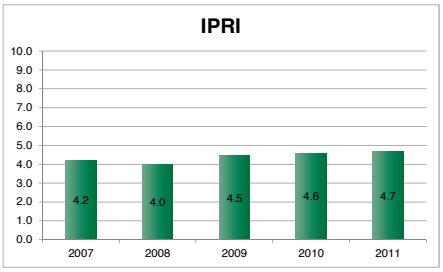
PPR deteriorated a little this year, falling 0.2 points. Both *Protection of Physical Property* and *Access to Loans* decreased while *Registering Property* remained unchanged.

IPR in Honduras rose 0.2 points thanks to improving professional opinions about intellectual property protection. Copyright piracy levels were the same as last year.



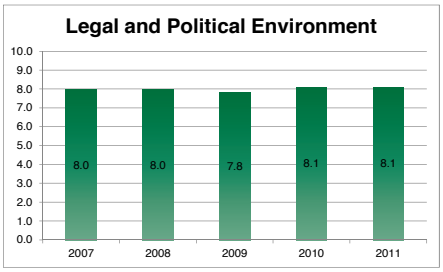

## HONG KONG

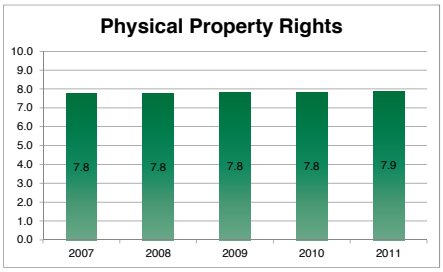
World Rank: 13 Regional Rank: 4

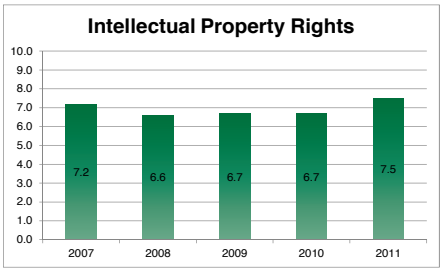
IPRI in Hong Kong rose to its highest level since the index began. A stable LP score masked movement in the sub-components. *Judicial Independence* rose 0.4 points, making up for declines in the three other variables.

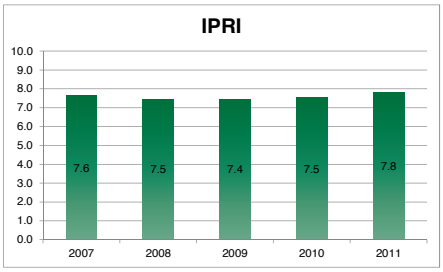
*Protection of Physical Property* and *Registering Property* both saw modest gains, but they were larger than the decline that happened in *Access to Loans*. This resulted in a small improvement in PPR.

*Copyright Piracy* jumped by 2 points in 2011. This increase was reflected in the improving professional opinions about Hong Kong's protection of intellectual property. The result is a 0.8 increase in IPR.



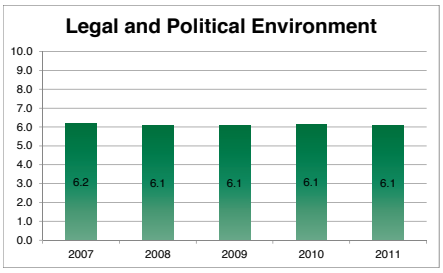
## HUNGARY

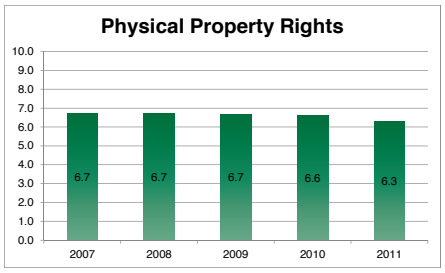
World Rank: 37 Regional Rank: 3

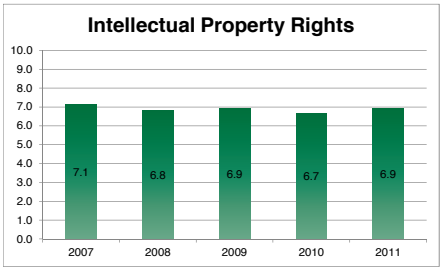
Hungary's IPRI score decreased for the second year in a row. LP did not change for 2011. This was because the small gains in *Judicial Independence* were offset by deterioration in *Control of Corruption*.

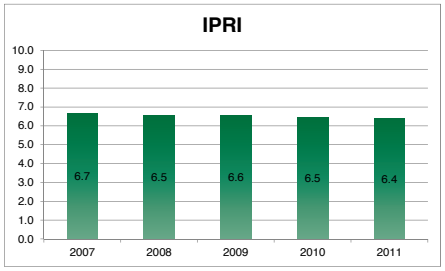
PPR fell slightly this year to 6.3. While *Registering Property* remains very strong the other sub-components declined, with *Protection of Physical Property* falling by 0.9 points.

IPR rose slightly in 2011, reflecting improved professional opinions about Hungary's protection of intellectual property. Copyright piracy levels were also down a small amount.



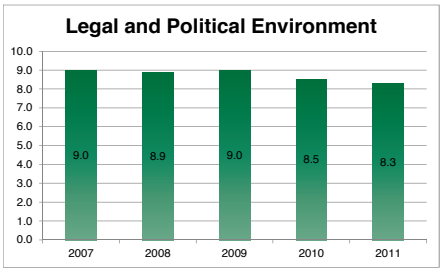

## ICELAND

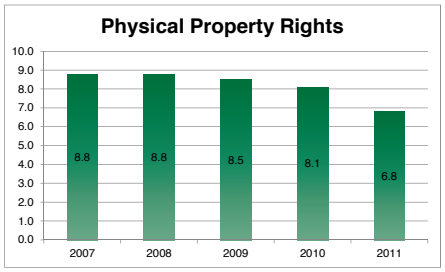
World Rank: 21 Regional Rank: 14

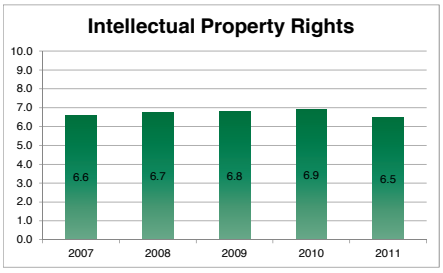
IPRI decreased in Iceland for the second year in a row. LP also fell for the second consecutive year. Both *Rule of Law* and *Control of Corruption* deteriorated, though *Judicial Independence* did improve slightly.

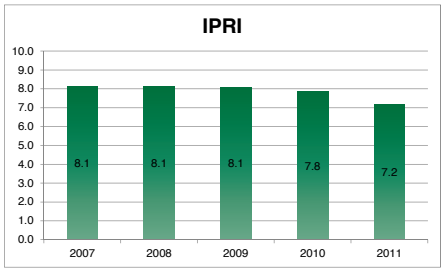
PPR took quite a hit, falling by 1.3 points. This was the result of large declines in both *Protection of Physical Property* (down 1.3 points) and *Access to Loans* (down an alarming 2.7 points).

IPR declined in 2011 after three consecutive years of improvement. *Protection of Intellectual Property* fell a whole point, though Iceland's *Copyright Piracy* score did improve.



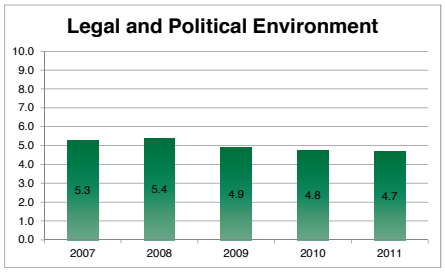
## INDIA

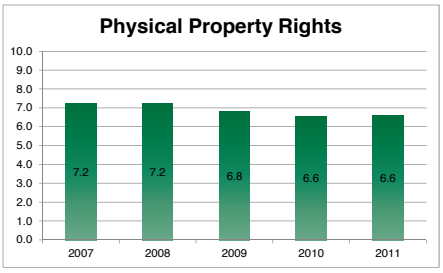
World Rank: 55 Regional Rank: 10

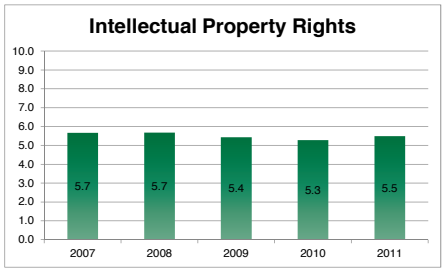
IPRI in India improved marginally in 2011. LP decreased for the third consecutive year because of deterioration in *Rule of Law* and *Political Stability*. *Judicial Independence* is slightly on the rise however.

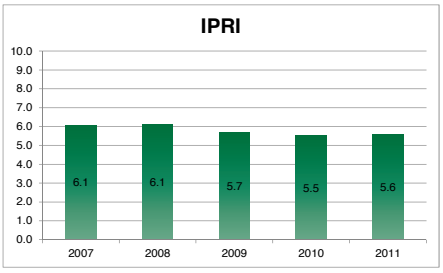
PPR was unchanged from last year. All three sub-components were relatively stable.

Improving professional opinions increased India's *Protection of Intellectual Property* score by 0.6 points. This resulted in a 0.2 rise in IPR despite a marginal fall in *Copyright Piracy*.



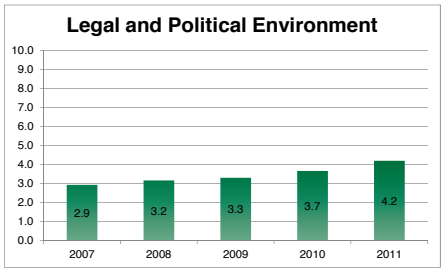

## INDONESIA

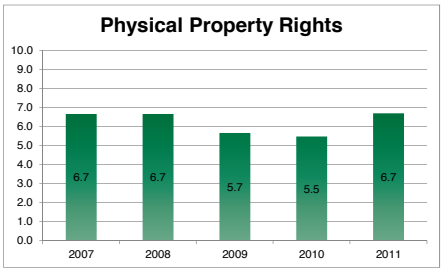
World Rank: 77 Regional Rank: 13

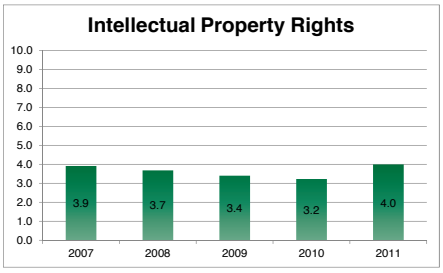
IPRI saw significant improvement in Indonesia in 2011. LP rose 0.5 points thanks to strong improvement in *Judicial Independence*, *Rule of Law*, and *Political Stability*. These gains more than made up for a marginal decline in *Control of Corruption*.

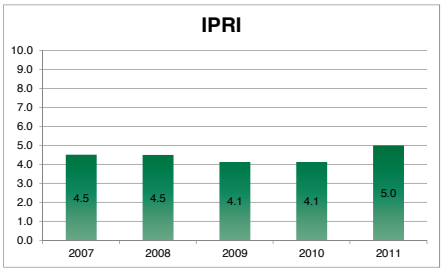
All three sub-components of PPR experienced improvement, with *Protection of Physical Property* and *Access to Loans* both increasing at least 1.6 points. The result was a 1.2 point rise in PPR.

Copyright piracy levels may have stayed the same, but professional opinion about intellectual property rights protection as a whole increased that variable by 1.2 points. This led to a 0.8 point rise in IPR.



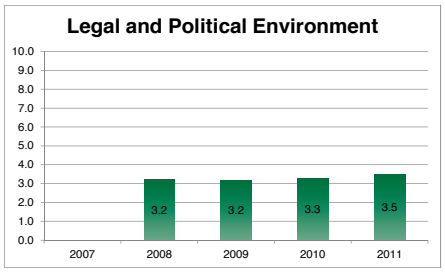
## IRAN

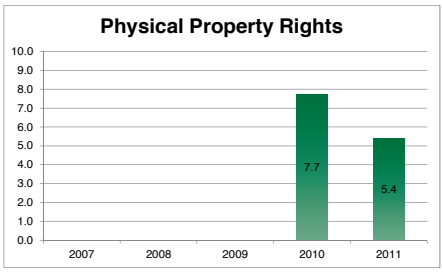
World Rank: 109 Regional Rank: 16

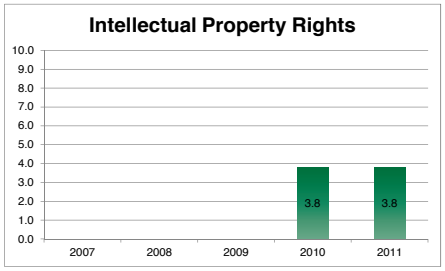
Iran joins the IPRI for the first time this year. LP is the weakest component, held down by a 2.0 score for *Political Stability*. *Rule of Law* and *Control of Corruption* also need improvement, scoring 3.2 and 3.3 respectively.

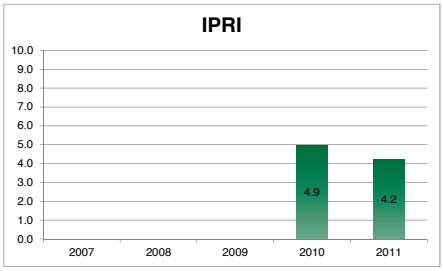
PPR is Iran's strongest component with a score of 5.4. It earns high marks for *Registering Property*: while the process does take 9 procedures the 36 days needed is fairly good for the region.

Professional opinion of Iran's intellectual property rights environment is not very high. It scored a 3.7 in *Protection of International Property*. Copyright data was unavailable.



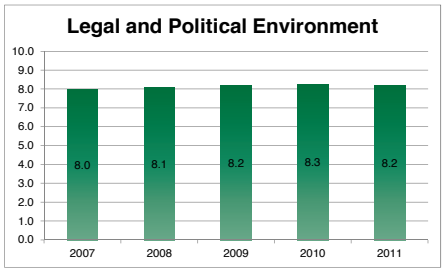

## IRELAND

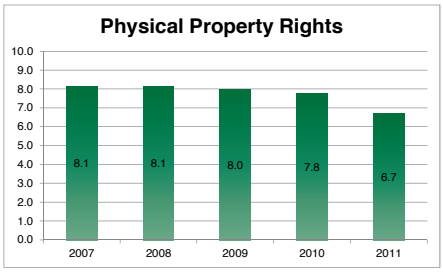
World Rank: 15 Regional Rank: 11

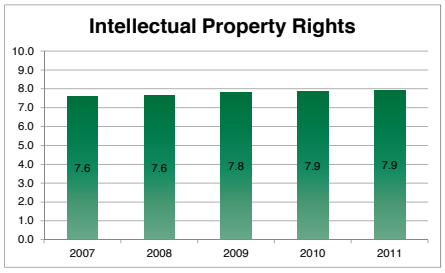
After three years of stability, IPRI in Ireland fell by 0.4 points. LP declined slightly to 8.2. This was the result of a deterioration of all sub-component scores. *Political Stability* experiencing the largest change, falling 0.3 points.

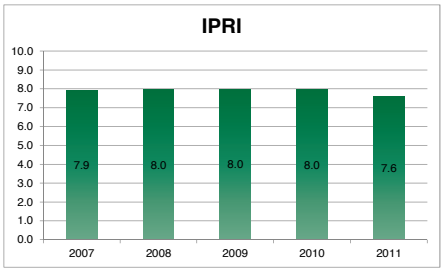
*Protection of Physical Property* decreased 0.6 points while *Access to Loans* was cut in half, falling to 3.0. This resulted in a 1.1 point decline in PPR.

IPR was unchanged in 2011. Copyright piracy levels rose slightly but professional opinion about the general level of intellectual property protection in Ireland rose to offset the resulting sub-component score change.



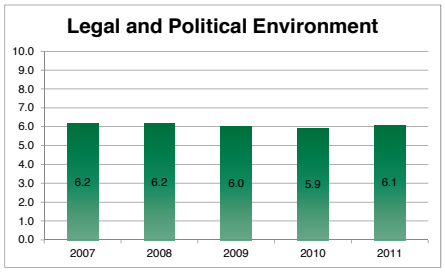
## ISRAEL

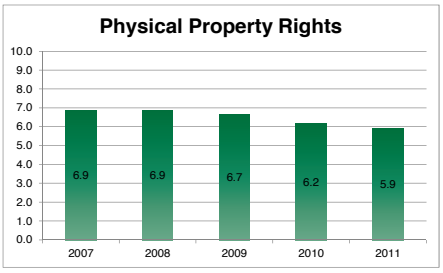
World Rank: 38 Regional Rank: 7

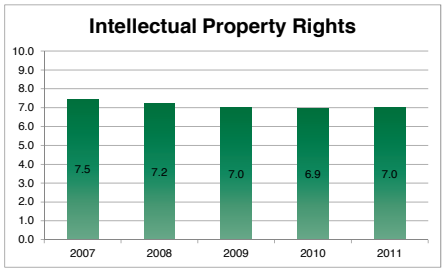
IPRI was unchanged for Israel in 2011. The LP score underwent a modest improvement, rising 0.2 points. A whole point increase for *Judicial Independence* was largely offset by marginal declines in the three other sub-components.

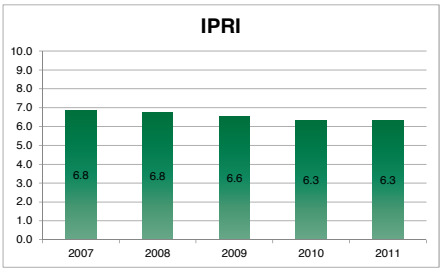
PPR continues its decline from 2008 as a result of deterioration in both *Protection of Physical Property* and *Access to Loans*. *Access to Loans* fell by a whole point.

IPR saw a marginal improvement this year. Copyright piracy levels are up slightly but professional opinion about intellectual property rights protection as a whole has improved.



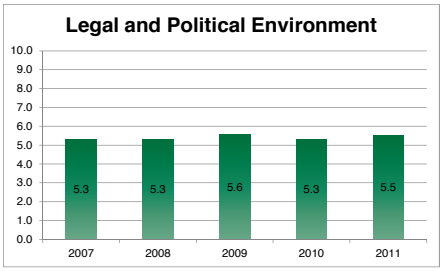

## ITALY

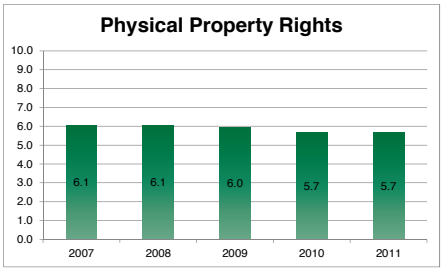
World Rank: 47 Regional Rank: 18

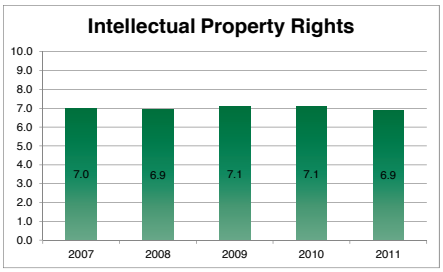
Italy's IPRI and component scores remained relatively stable for 2011. LP rose 0.2 points thanks largely to a 0.7 point increase in *Judicial Independence*. The impact of this change was weakened by small declines in *Rule of Law* and *Control of Corruption*.

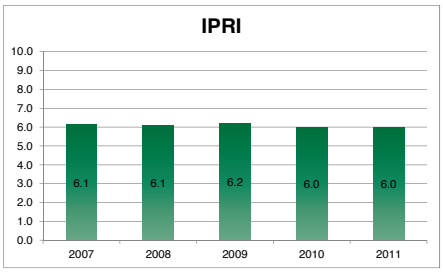
PPR was unchanged for 2011. The sub-components were fairly stable, though *Access to Loans* did see a notable improvement.

Copyright piracy levels were slightly up and professional opinions on Italy's protection of intellectual property deteriorated a bit. This lowered IPR by 0.2 points.



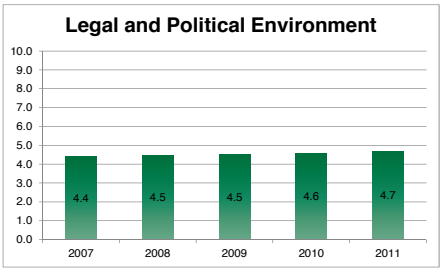
## JAMAICA

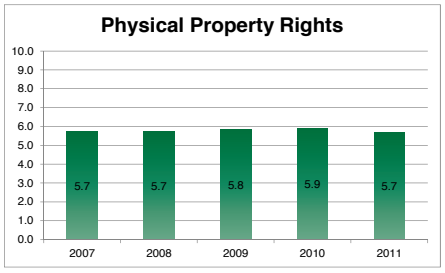
World Rank: 63 Regional Rank: 7

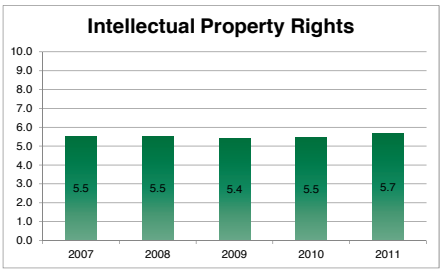
IPRI increased slightly for Jamaica in 2011, reflecting modest improvements to some components. *Judicial Independence* rose half a point though the impact of this change was somewhat offset by declines in *Political Stability*. The net result is a 0.1 point increase for LP.

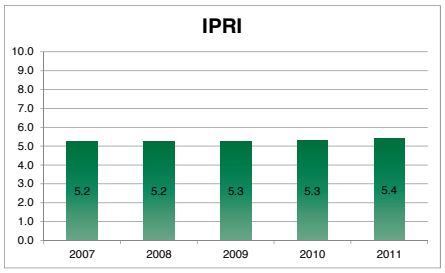
*Protection of Physical Property* fell 0.6 points, lowering PPR by 0.2 points. This was the only change in the situation with respect to physical property.

Copyright data was unavailable, but professional opinions about Jamaica's protection of intellectual property did improve. This raised Jamaica's IPR score by 0.2 points.



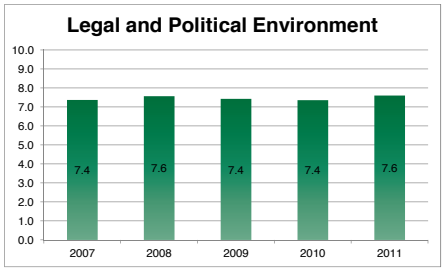

## JAPAN

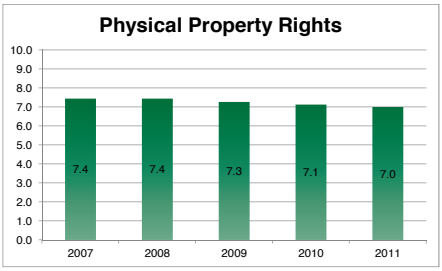
World Rank: 15 Regional Rank: 5

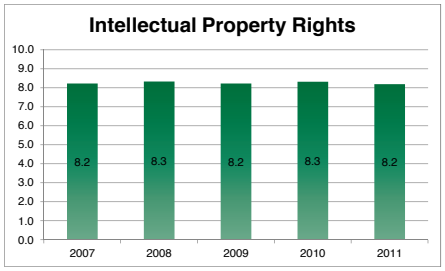
Property rights in Japan underwent significant change in 2011, despite what the unchanged IPRI score may suggest. *Judicial Independence* jumped 0.8 points while *Control of Corruption* saw a 0.2 point increase. These gains were somewhat offset by a small decline in *Rule of Law* but they still resulted in LP rising 0.2 points.

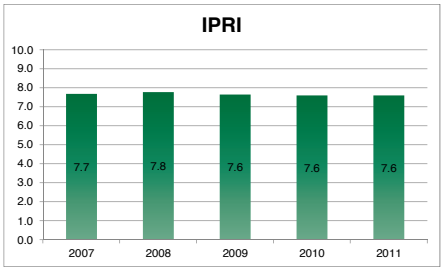
PPR was more stable than its sub-components. *Protection of Physical Property* fell almost a whole point to 8.0 while *Access to Loans* improved by a solid 0.4 points. *Registering Property* was basically unchanged.

Copyright piracy levels remained the same but professional opinions regarding the intellectual property environment in Japan fell slightly. The result is a 0.1 decrease in IPR.



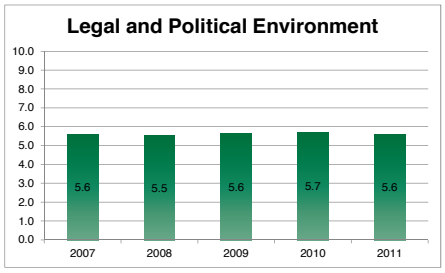
## JORDAN

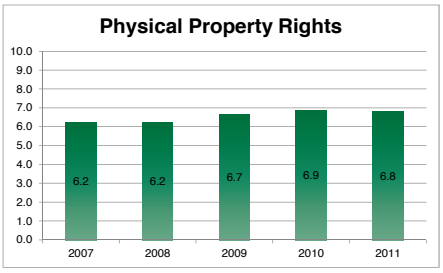
World Rank: 44 Regional Rank: 8

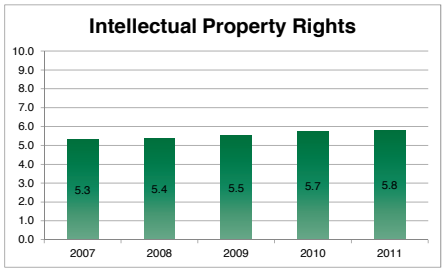
IPRI in Jordan was unchanged from last year. LP fell slightly on deteriorating scores for *Rule of Law* and *Control of Corruption*. *Political Stability* did see a minor improvement.

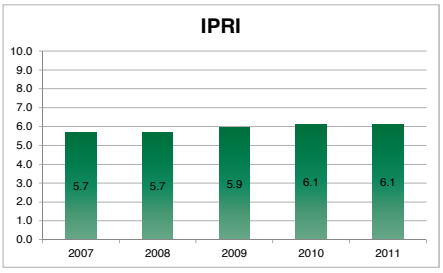
PPR declined slightly as *Protection of Physical Property* fell 0.4 points, wiping out most of its progress since 2008. *Access to Loans* also fell marginally.

Professional opinions about the protection of intellectual property in Jordan improved along with a small improvement in *Copyright Piracy*. This resulted in a 0.1 point gain in IPR.



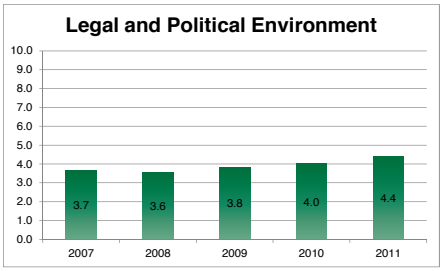

## KAZAKHSTAN

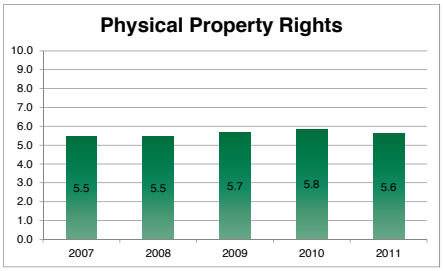
World Rank: 100 Regional Rank: 16

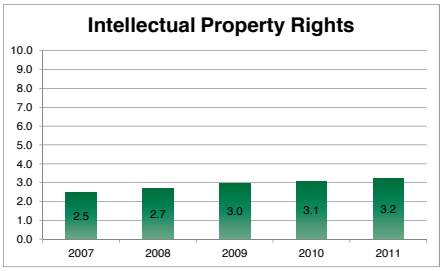
Kazakhstan saw a marginal improvement in IPRI for 2011. All four sub-components for LP rose, with *Judicial Independence* seeing the largest change of 0.5. Accordingly, LP rose 0.4 points.

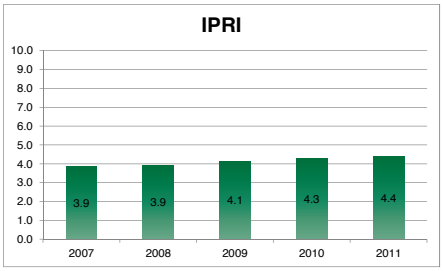
Kazakhstan's *Access to Loans* score plunged 1.2 points down to 3.0. Marginal improvements in *Protection of Physical Property* meant this pulled the PPR score down 0.2 points.

Copyright piracy levels were the same though professional opinions about the protection of intellectual property as a whole did improve slightly. The result is a 0.1 increase for IPR.



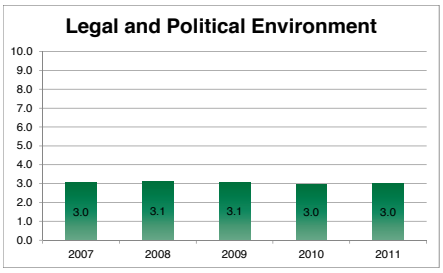
## KENYA

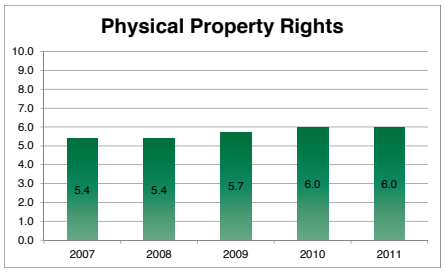
World Rank: 100 Regional Rank: 17

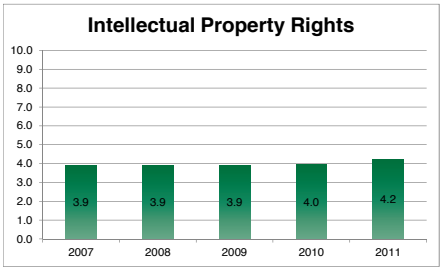
IPRI improved in Kenya for the third consecutive year. LP was unchanged. A 0.3 point gain in *Judicial Indpendence* was offset by marginal losses in the other sub-components.

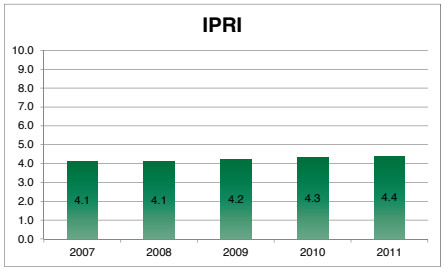
After two years of growth PPR stagnated in 2011. *Protection of Physical Property* did see a small improvement though.

Copyright piracy levels decreased while professional opinions regarding the intellectual property protection in Kenya improved. These factors combined to raise IPR by 0.2 points.



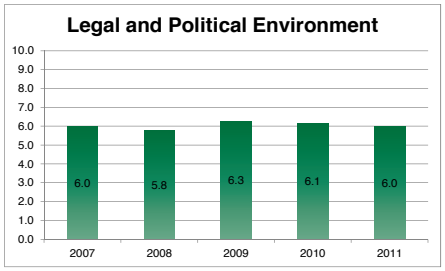

## KOREA, REPUBLIC OF (SOUTH KOREA)

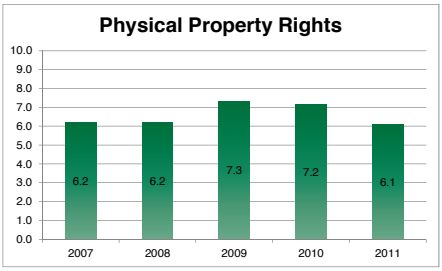
World Rank: 38 Regional Rank: 7

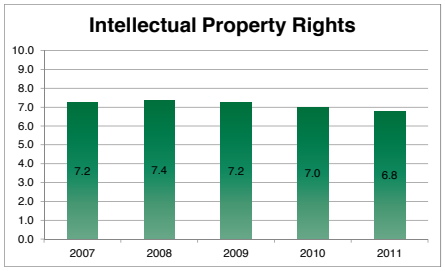
Korea's IPRI continued to decline, falling to its lowest score since the beginning of the index. *Judicial Independence* and *Political Stability* fell 0.6 and 0.4 points respectively. While *Rule of Law* and *Control of Corruption* did improve marginally, the net effect was a 0.1 point decrease in LP.

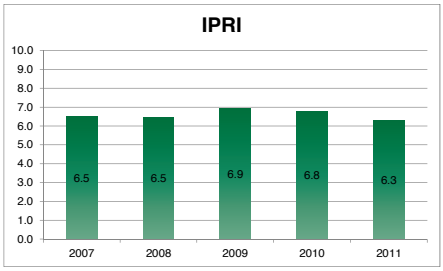
*Protection of Physical Property* declined but not as bad as *Access to Loans* which plummeted 2.6 points. A high *Registering Property* score helps keep PPR above 6.0.

The amount of copyright piracy fell but so did professional opinions about Korea's protection of intellectual property. This pulled IPR down 0.2 points.



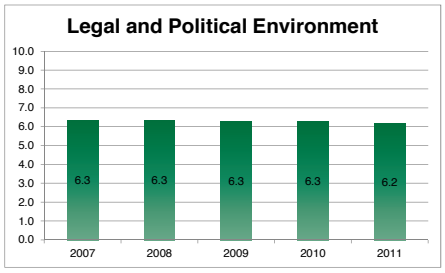
## KUWAIT

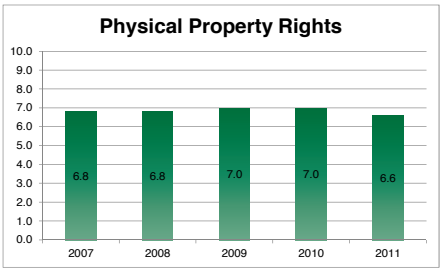
World Rank: 50 Regional Rank: 10

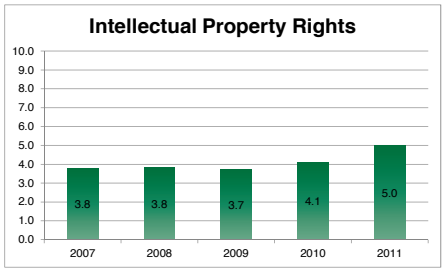
IPRI increased marginally for Kuwait in 2011. A 0.3 point gain in *Judicial Independence* was offset by declines in the rest of the sub-components. This pulled down LP by 0.1 points.

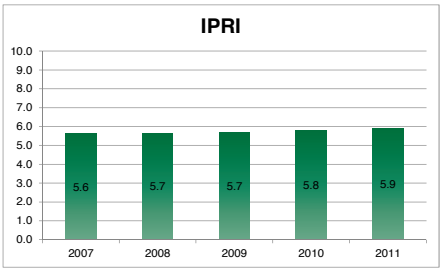
PPR decreased 0.4 points despite most sub-components being relatively stable. *Registering Property* and *Access to Loans* both declined marginally but *Protection of Physical Property* fell an entire point.

*Copyright Piracy* improved a bit and professional opinions about Kuwait's intellectual property environment improved substantially, raising *Protection of Intellectual Property* by 1.6 points. This resulted in IPR rising 0.9 points.



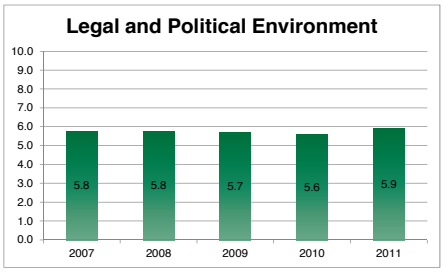

## LATVIA

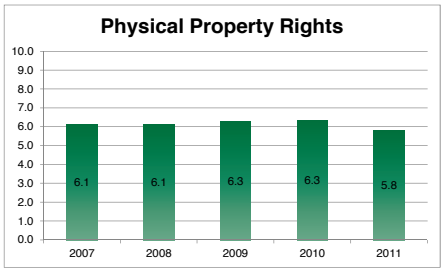
World Rank: 60 Regional Rank: 8

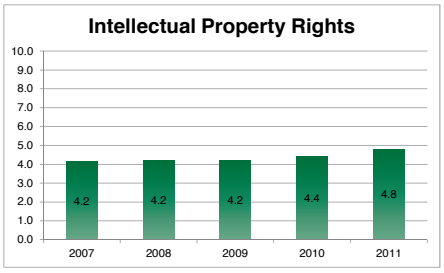
IPRI for Latvia changed for the first time since 2007, increasing by 0.1 points. *Judicial Independence, Rule of Law*, and *Political Stability* all improved in 2011. This caused LP to rise 0.3 points.

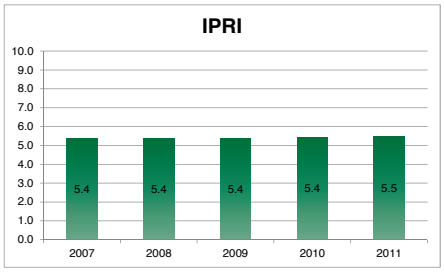
PPR fell to its lowest score since the index began. *Registering Property* did improve slightly, but this was more than offset by losses of a whole point for both *Protection of Physical Property* and *Access to Loans.*

Latvia's *Copyright Piracy* score improved marginally while *Protection of Intellectual Property* rose 0.7 points. This pushed IPR up for the second year in a row.



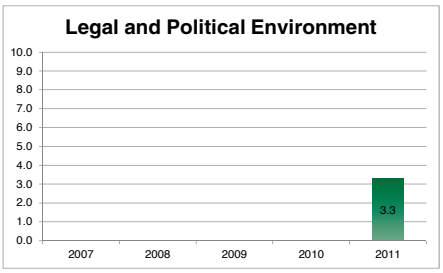
## LEBANON

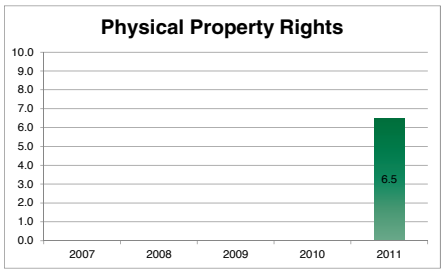
World Rank: 100 Regional Rank: 14

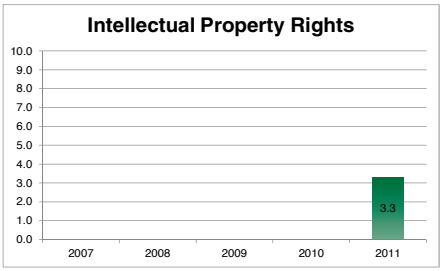
Lebanon joins the IPRI for the first time this year. Lebanon's LP score is 3.3. It is hampered by a weak *Access to Loans* score (2.0) while the other three sub-components range from 3.4 to 3.9.

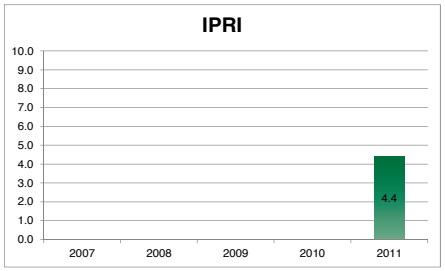
PPR is Lebanon's highest component score at 6.5. It's bolstered by a fairly strong 8.1 *Registering Property* score. The entire process takes about 8 steps and 25 days to complete.

IPR is Lebanon's weakest component score, coming in at 3.3. Professional opinion of the intellectual property environment is low while software piracy rates hover around 70%.



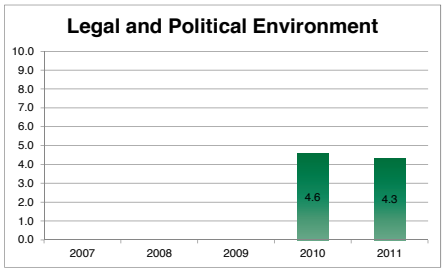

## LIBYA

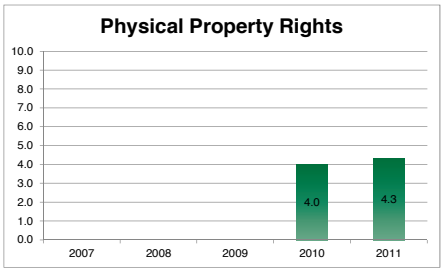
World Rank: 123 Regional Rank: 17

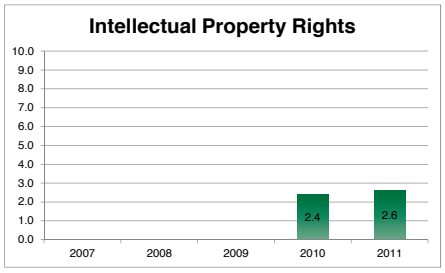
IPRI in Libya did not change for 2011. Deterioration in *Judicial Independence*, *Rule of Law,* and *Control of Corruption* pulled down LP. *Political Stability* did improve slightly.

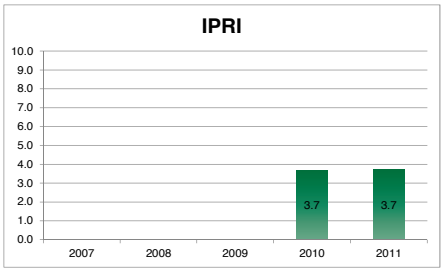
PPR rose on the backs of progress found in *Protection of Physical Property* and *Access to Loans*. Data was still not available for *Registering Property.*

Both *Copyright Piracy* and *Protection of Intellectual Property* improved. This led to a 0.2 point increase for IPR.



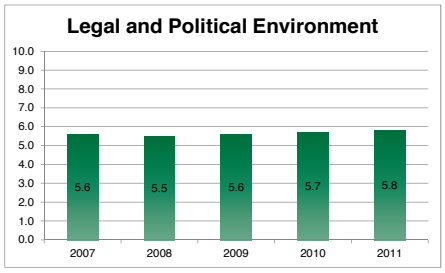
## LITHUANIA

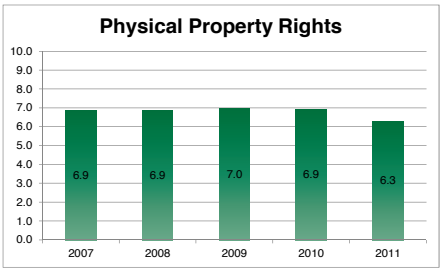
World Rank: 47 Regional Rank: 6

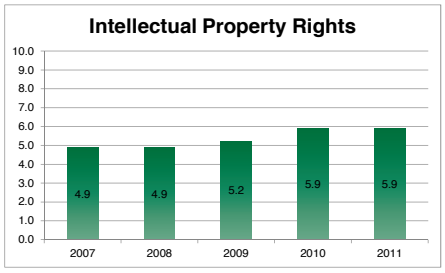
IPRI in Lithuania lost most of the gains it made last year. LP did increase for the third year in a row. *Judicial Independence* and *Rule of Law* saw moderate gains while only *Political Stability* saw negative change among LP sub-components

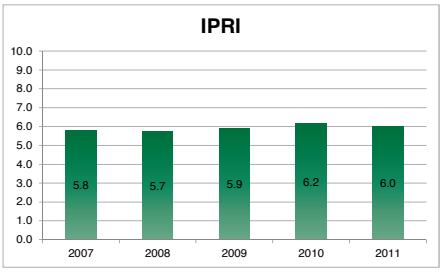
PPR underwent a large decrease in 2011. This was caused by declines in *Protection of Physical Property* and especially *Access to Loans* which fell 1.2 points. *Registering Property* remained strong.

Expert opinion regarding Lithuania's protection of intellectual property remained the same this year, as did *Copyright Piracy*. This meant there was no change for IPR.



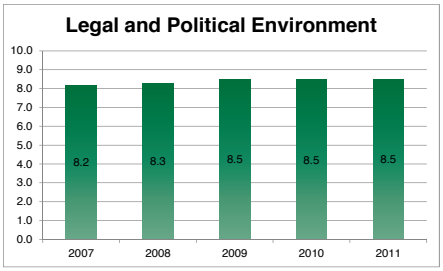

## LUXEMBOURG

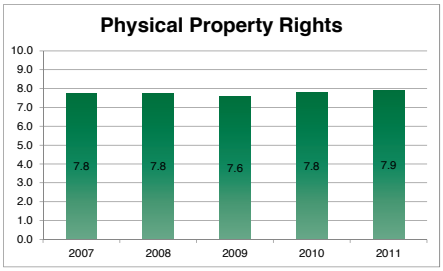
World Rank: 4 Regional Rank: 3

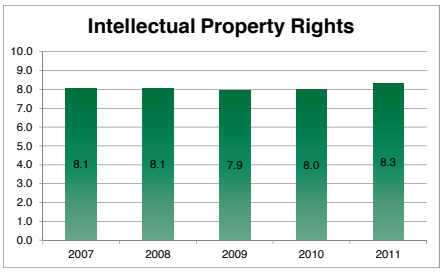
In addition to leading the world in per capita GDP, Luxembourg increased its consistently high IPRI score in 2011. *Judicial Independence* increased for the fourth consecutive year but marginal declines in *Political Stability* and *Control of Corruption* meant LP remained the same.

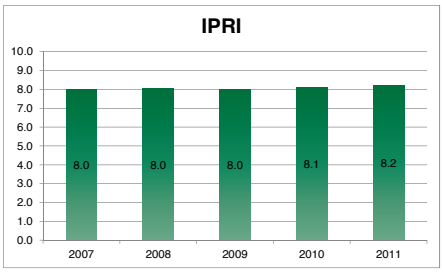
PPR increased thanks to a 0.4 rise in *Protection of Physical Property*. *Access to Loans* saw a slight decrease.

*Protection of Intellectual Property* improved 0.8 points this year. Copyright piracy levels were the same so IPR only rose 0.3 points.



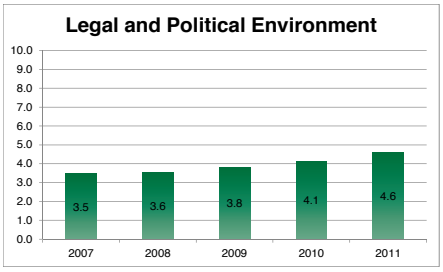
## MACEDONIA

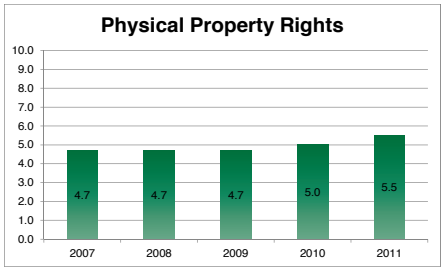
World Rank: 87 Regional Rank: 14

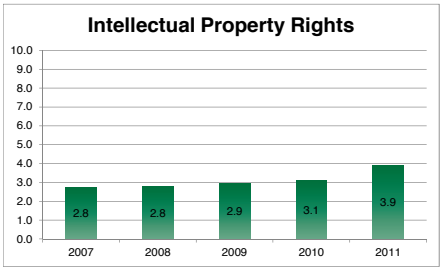
Macedonia made significant improvements to all three components in 2011. All sub-component scores of LP increased. Of particular note, *Judicial Independence* increased by 1.2 points.

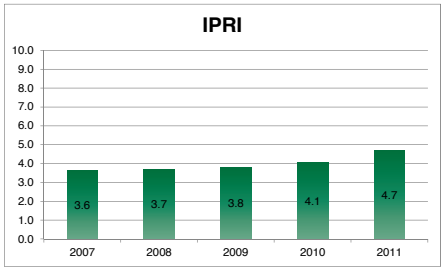
PPR also saw a rise in all sub-component scores. *Access to Loans* led the way, rising 0.5 points though it remains the weakest of all sub-components scoring just 2.9.

Improving expert opinion pushed *Protection of Intellectual Property* up 1.4 points. This combined with a small improvement in *Copyright Piracy* to raise IPR 0.8 points.



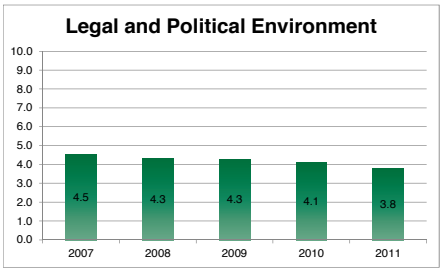

## MADAGASCAR

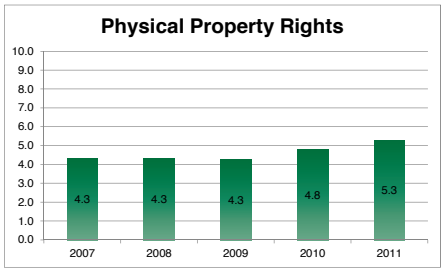
World Rank: 107 Regional Rank: 18

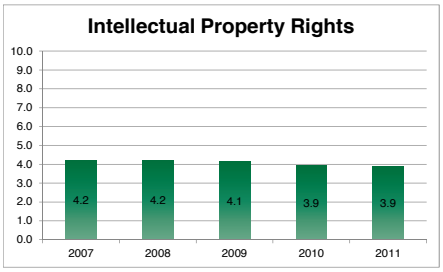
Madagascar's IPRI score has been relatively stable over the five years covered by the index. LP fell 0.3 points as every sub-component decreased except for *Judicial Independence*. The largest change was a 0.6 point decrease for *Rule of Law*.

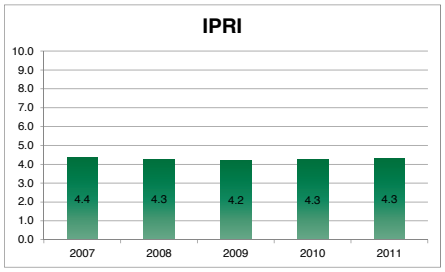
PPR improved remarkably for the second year in a row. This was largely driven by a 0.7 point increase for *Access to Loans*.

All sub-component scores for IPR were relatively stable this year. This meant no change in Madagascar's IPR score.



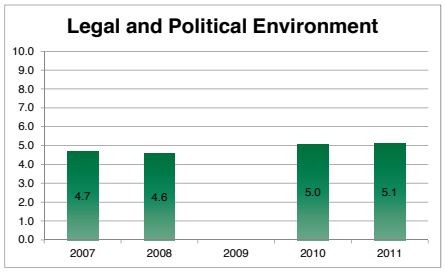
## MALAWI

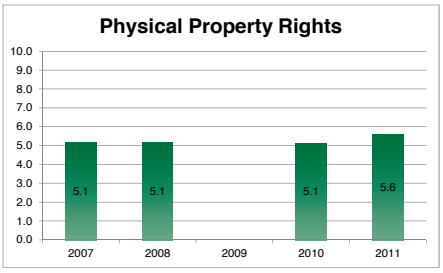
World Rank: 71 Regional Rank: 7

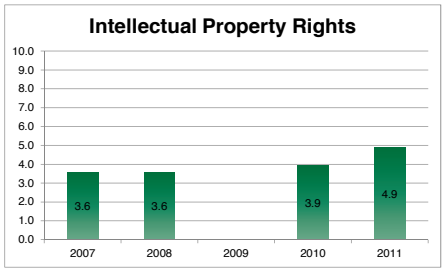
Malawi improved IPRI for its second year back in the index. Small gains in *Rule of Law* and *Control of Corruption* outweighed slight losses in *Judicial Independence* and *Political Stability* and pushed LP up 0.1 points.

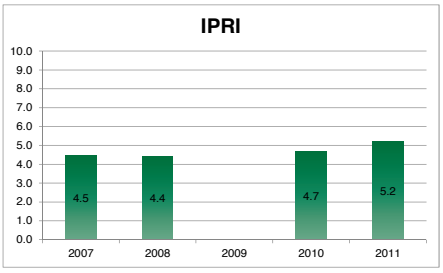
PPR Improved Remarkably in 2011. This was largely driven by 0.6 point improvements in both *Protection of Physical Property* and *Access to Loans*.

Improving expert opinion caused *Protection of Intellectual Property* to jump two points this year. This led to a one point increase for IPR.



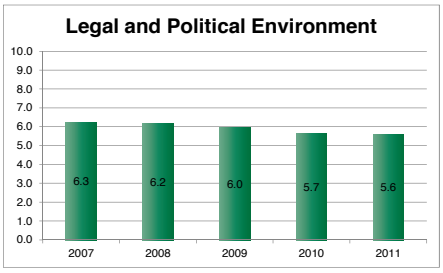

## MALAYSIA

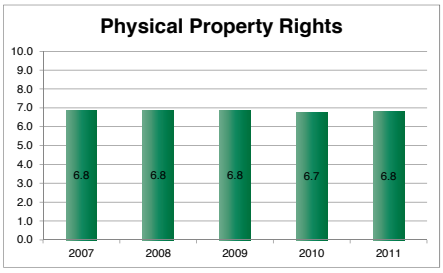
World Rank: 44 Regional Rank: 8

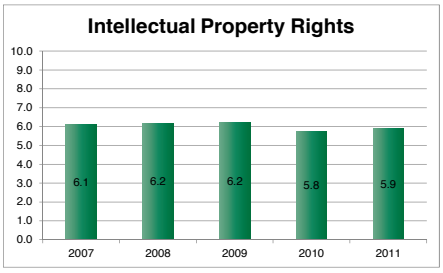
IPRI in Malaysia was unchanged for 2011. LP slipped 0.1 points thanks to small drops in *Political Stability* and *Control of Corruption*. *Judicial Independence* and *Rule of Law* both improved marginally.

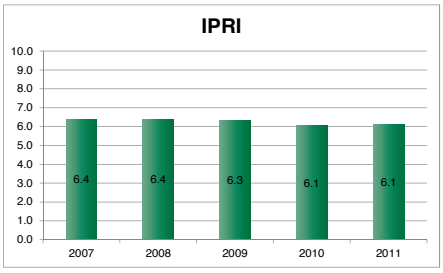
PPR slightly increased in 2011. This is due to the 0.4 point increase in *Registering Property* despite the decreases in the other two sub-categories.

*Copyright Piracy* was unchanged but improving professional opinions caused *Protection of Intellectual Property* to increase by 0.4 points. This translated into a 0.1 point gain for IPR.



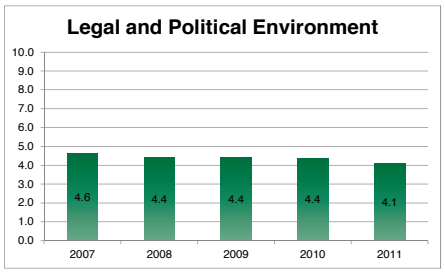
## MALI

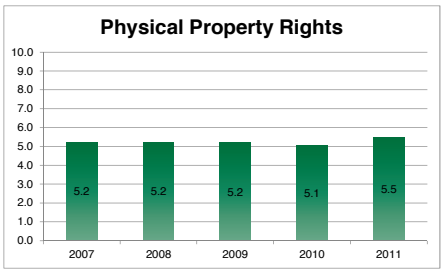
World Rank: 84 Regional Rank: 11

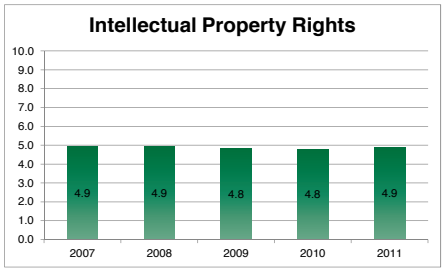
IPRI in Mali slipped back to 2009 levels this year. LP experienced a net change for the first time since 2008. All four sub-components were declined with both *Judicial Independence* and *Control of Corruption* falling half a point.

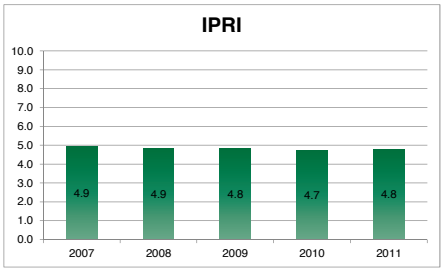
PPR grew 0.4 points in 2011. This was driven by a 1.1 point jump in *Access to Loans*, which remains a weak 2.7 despite this improvement.

Copyright data was unavailable, but professional opinion of Mali's intellectual property rights environment improved. This nudged IPR up to 4.9.



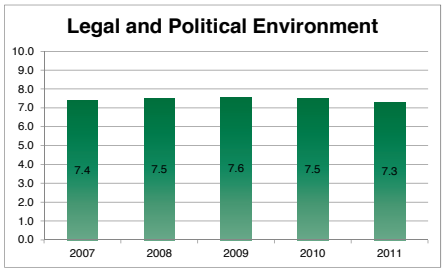

## MALTA

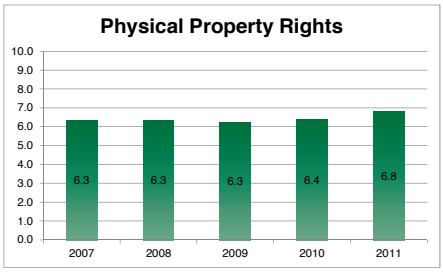
World Rank: 27 Regional Rank: 16

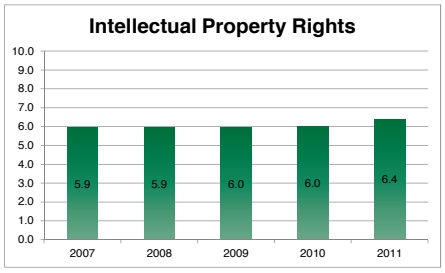
After three years of stagnation Malta's IPRI improved to 6.8. LP decreased for the second year in a row because of declines in *Rule of Law, Control of Corruption*, and especially a 0.5 point drop in *Political Stability*.

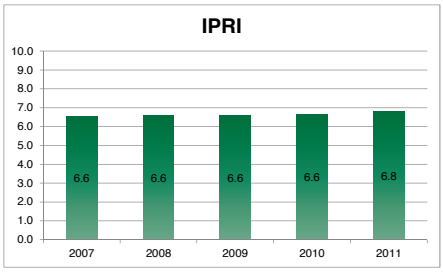
PPR saw solid improvement in 2011. This was driven by a 0.7 point increase in *Access to Loans*. Data for *Registering Property* remained unavailable.

Improving expert opinion raised *Protection of Intellectual Property* 1.1 points. This pushed IPR up 0.4 points as *Copyright Piracy* was unchanged from last year.



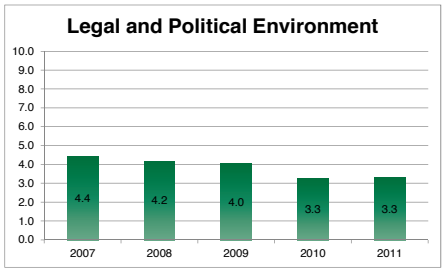
## MAURITANIA

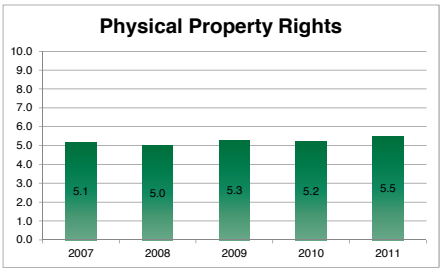
World Rank: 93 Regional Rank: 14

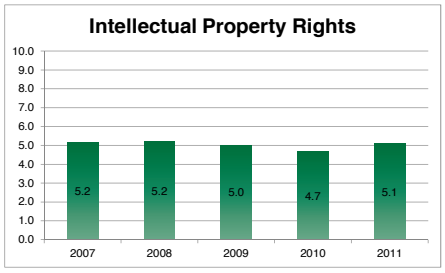
After last year's significant decline IPRI in Mauritania increased 0.2 points this year. LP was unchanged as losses in *Judicial Independence* and *Political Stability* were offset by gains in *Rule of Law* and *Control of Corruption*.

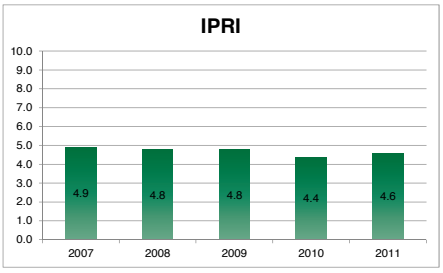
PPR improved in 2011. Marginal improvements in all sub-components raised PPR by 0.3 points.

Improving expert opinion pushed *Protection of Intellectual Property* up by 0.8 points. This led to a 0.4 point increase in IPR. Copyright Data remained unavailable.



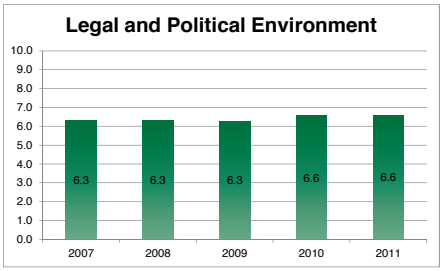

## MAURITIUS

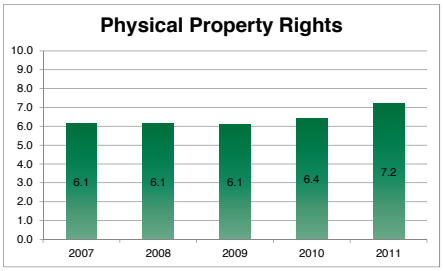
World Rank: 38 Regional Rank: 2

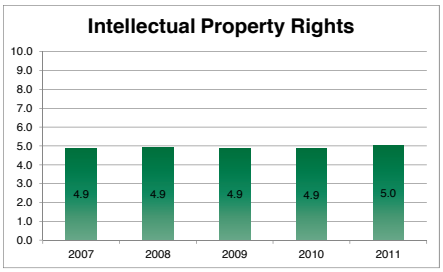
IPRI in Mauritius increased for the second year in a row. LP was unchanged despite small improvements in *Judicial Independence*, *Rule of Law*, and *Control of Corruption*. These gains were offset by a 0.5 decline in *Political Stability*.

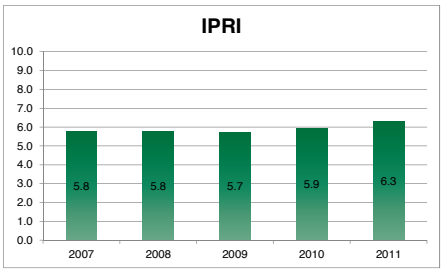
*Protection of Physical Property* and *Access to Loans* both declined this year, but the number of days needed to register property dropped from 210 to 26. This led to a 3.2 point increase in *Registering Property* which translated into a 0.8 point improvement in PPR.

Mauritius saw improvement in *Copyright Piracy* and expert opinion regarding the intellectual property environment in general. This led to a 0.1 increase in IPR for the year.



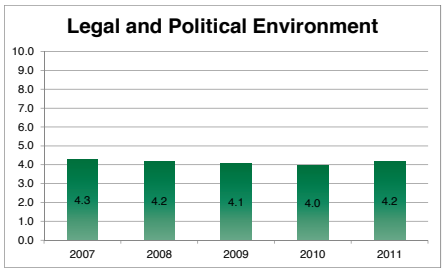
## MEXICO

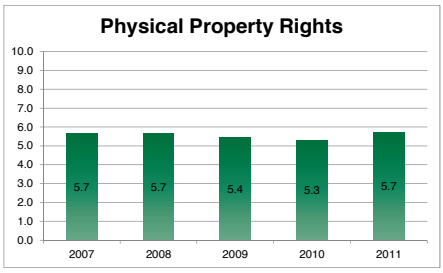
World Rank: 77 Regional Rank: 10

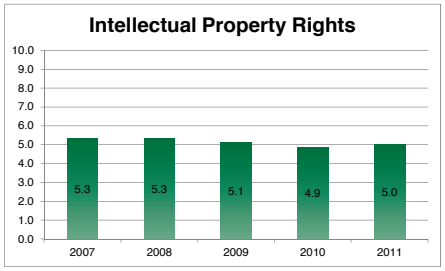
After two years of decline Mexico saw its IPRI improve in 2011. LP rose 0.2 points behind strong improvement in *Judicial Independence* and *Rule of Law*. *Political Stability* did experience a slight decline however.

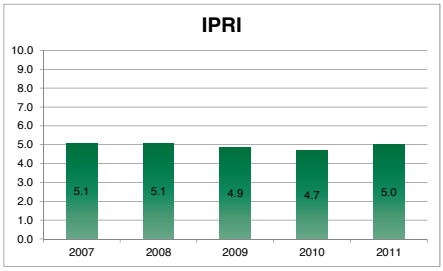
PPR improved this year thanks to increases in all three sub-components scores. *Access to Loans* saw the biggest change, rising by half a point.

*Protection of Intellectual Property* increased a solid 0.6 points in 2011. This was somewhat offset but a 0.2 point deterioration in *Copyright Piracy*. The net result is a 0.1 point increase for IPR.



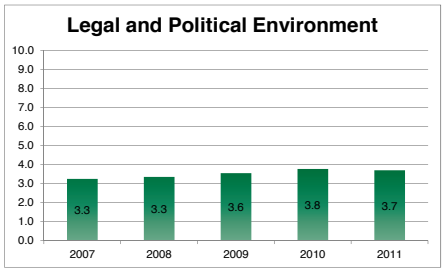

## MOLDOVA

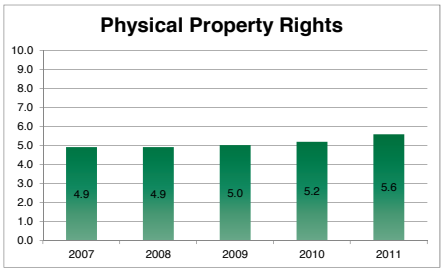
World Rank: 120 Regional Rank: 24

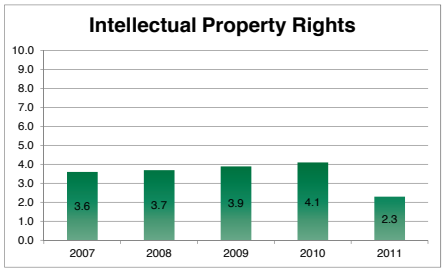
Moldova experienced a large fall in IPRI in 2011. Declines in *Political Stability* and *Control of Corruption* pulled LP down 0.2 points despite a small increase in *Judicial Independence*.

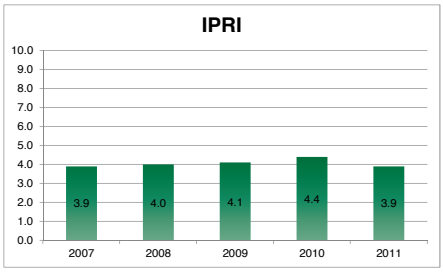
PPR improved 0.4 points thanks to increases in all three sub-component scores. The largest change was a 0.9 increase in *Registering Property*. This jump occured because the number of days needed to register property in Moldova fell from 48 to 5 this year.

Declining scores in *Protection of Intellectual Property* and *Copyright Piracy* resulted in a 1.8 point decline in IPR for 2011.



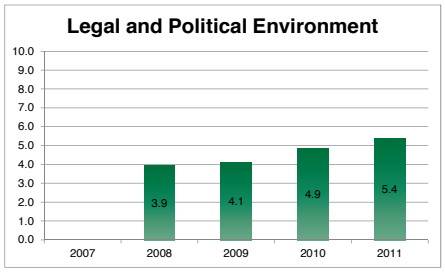
## MONTENEGRO

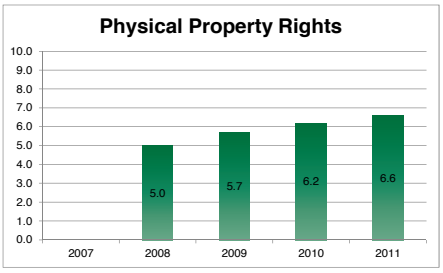
Rank: 71 Regional Rank: 13

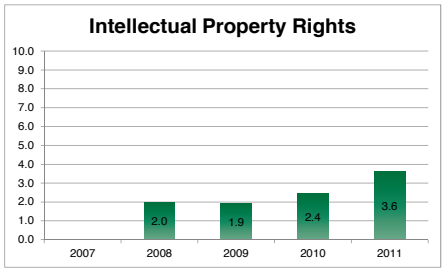
All three components increased in Montenegro in 2011 for the second consecutive year. *Protection of Property* increased 2 points in 2011. Montenegro increased in every component, but remained the same in the *Control of Corruption* category and decreased by 0.1 in *Access to Loans*.

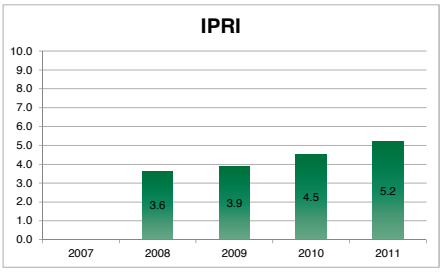
The PPR score increased by 0.4 points in 2011 because of the improvements in *Registering Property* and the *Protection of Physical Property Rights* despite the decrease in their *Access to Loans*.

The IPR score dramatically increased 1.2 points. This is a significant improvement from previous years. The *Intellectual Property Rights Score* sub-component increased 2 points. The IPR score has improved greatly, but still needs more work.



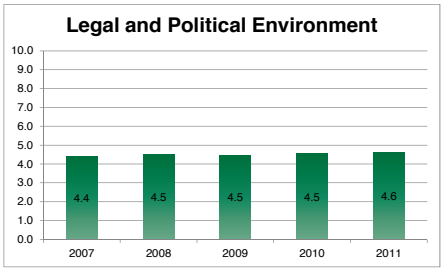

## MOROCCO

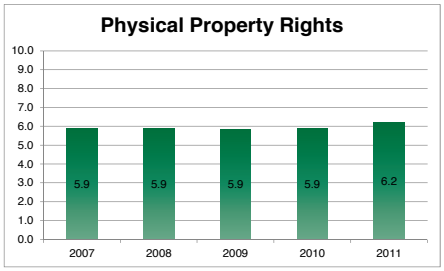
World Rank: 64 Regional Rank: 11

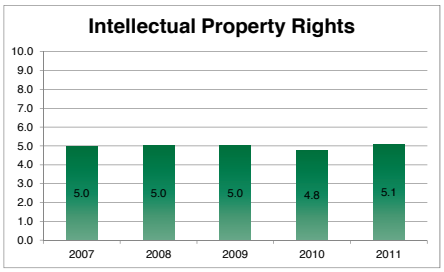
IPRI in Morocco continues to demonstrate its stability. All three components have shown slight increases in 2011, but no dramatic changes. The biggest change was in IPR in the sub-component of *Protection of Intellectual Property*, which increased approximately one point. Morocco's LP score scarcely increased by 0.1 point in 2011.

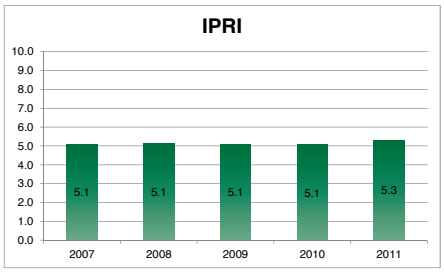
The PPR saw some slight improvement in 2011. The sub-component, *Access to Loans*, showed the most dramatic change, rising 0.6 points.

Morocco's IPR score has passed 5.0, which was the score of 2007 to 2009 before the decrease in 2010. The increase in *Protection of Intellectual Property* helped greatly.



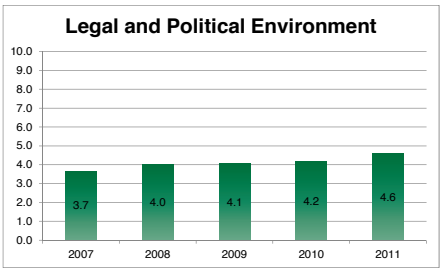
## MOZAMBIQUE

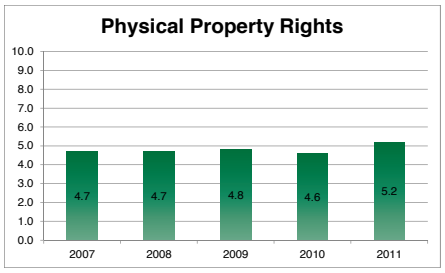
World Rank: 87 Regional Rank: 13

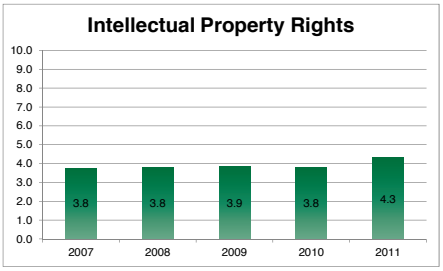
IPRI has undergone the most dramatic change since 2007. It is up by 0.5 points. The three components have also increased. Mozambique's LP has shown improvement over the past few years.

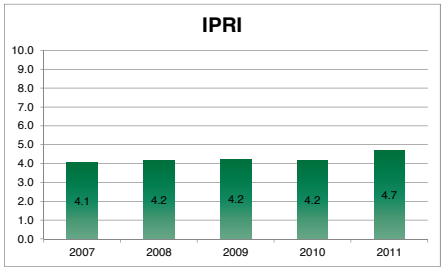
Mozambique hit its lowest level in 2010 of PPR and has since dramatically increased to 5.2 in 2011. This is the most significant change it has had since data has been available. *Registering Property* did not change in 2011.

IPR increased in 2011, but Mozambique still has limited data. Data on copyright piracy remains elusive.



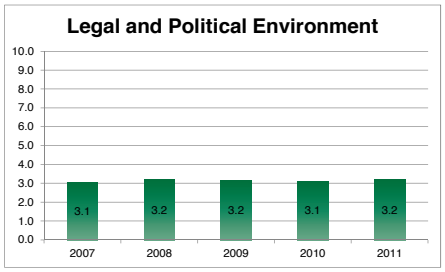

## NEPAL

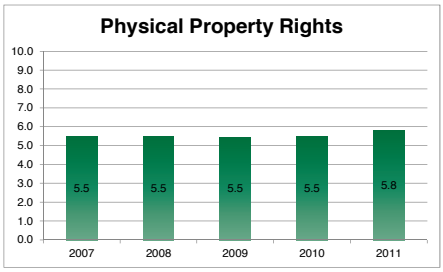
World Rank: 100 Regional Rank: 16

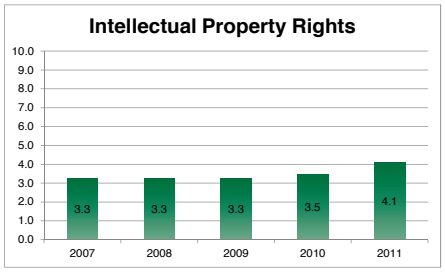
Since 2008, Nepal's IPRI has remained at a stagnant 4.0 until 2011. IPRI in Nepal has increased from 4.0 to 4.4. LP has had trouble increasing due to decreases in its subcategories of *Rule of Law*, *Political Stability*, and *Control of Corruption*. Despite these decreases *Judicial Independence* increased .9 points.

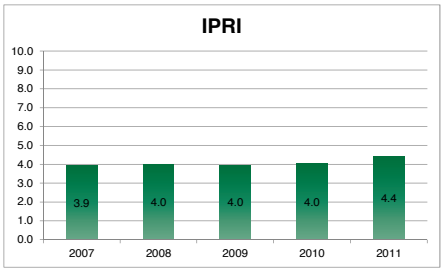
PPR in Nepal changed by 0.3 points due to all of its subcategories increasing in 2011. *Access to Loans* showed the most increase.

The IPR score increased substantially compared to 2010 and the previous years. It went up by 0.6 points.



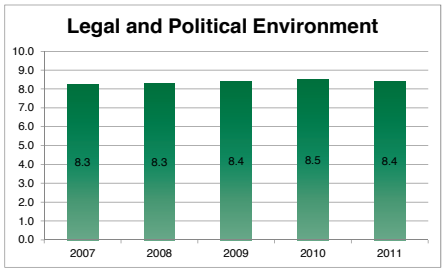
## NETHERLANDS

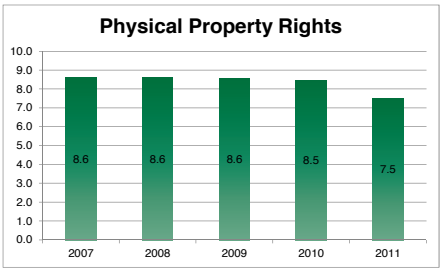
World Rank: 9 Regional Rank: 7

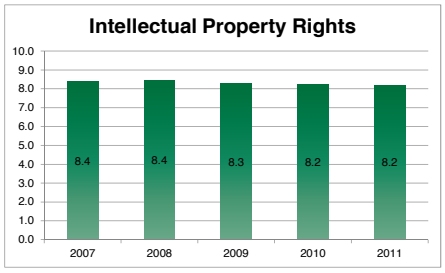
IPRI in the Netherlands experienced a negative change in 2011. Since 2007, IPRI has remained unchanged. IPRI has decreased by 0.4 points because LP and PPR decreased. *Judicial Independence* and *Control of Corruption* both decreased while *Political Stability* and *Rule of Law* remain virtually unchanged.

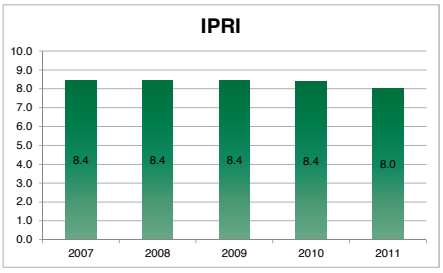
The PPR score again decreased in 2011 by a whole point. Every subcategory of PPR decreased. The greatest change was observed in *Access to Loans* by 1.7 points.

This year the IPR score remained unchanged.



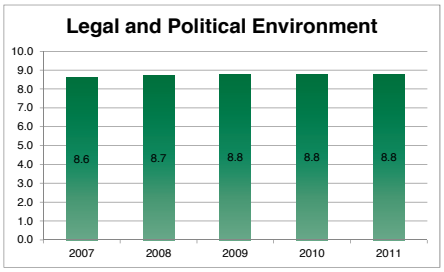

## NEW ZEALAND

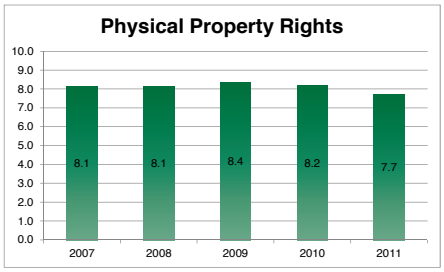
World Rank: 4 Regional Rank: 2

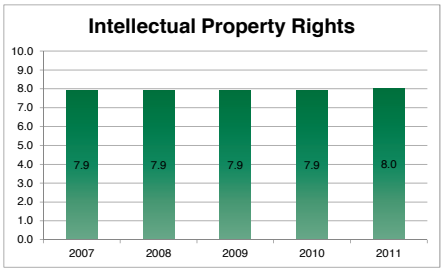
New Zealand's IPRI in 2011 decreased from 8.3 to 8.2. LP remained unchanged from 2010. LP's subcategories, *Judicial Independence*, *Rule of Law*, and *Control of Corruption* increased, while *Political Stability* decreased.

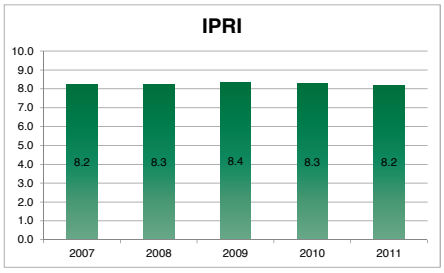
PPR saw a dramatic decrease this year, its largest decrease since the start of the index. It decreased .5 points. *Registering Property* was the only subcategory that increased and it only increased slightly by 0.2 points.

This year the IPR increased by 0.1 point.



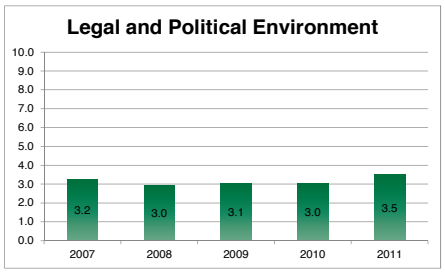
## NICARAGUA

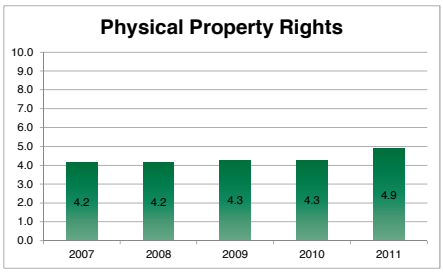
World Rank: 113 Regional Rank: 19

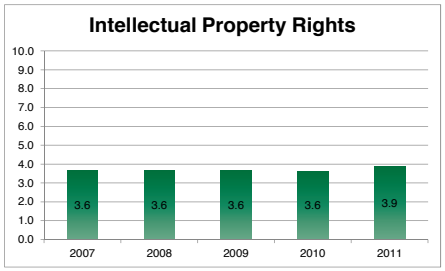
In 2011 Nicaragua made progress in all of its components of IPRI. IPRI increased by 0.5 points. LP also increased by 0.5 points and *Judicial Independence* made the most drastic increase of the subcategories from 1.3 to 3.0.

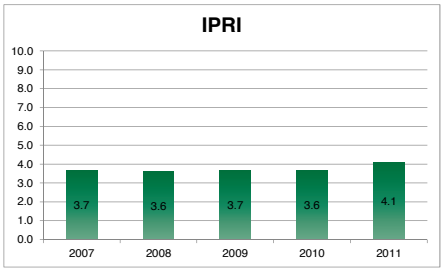
The PPR score increased by 0.6 points which is a significant improvement compared to the basically stagnant 0.1 change over the past four years. *Access to Loans* showed the greatest change out of the subcategories. It is worth noting that all of the subcategories of PPR increased.

Just as LP and PPR rose, IPR also increased. *Patent Protection* and *Copyright Piracy* stayed the same in 2011 but *Protection of Intellectual Property* drastically increased from 2.9 to 3.7.



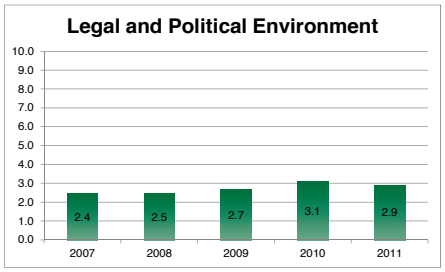

## NIGERIA

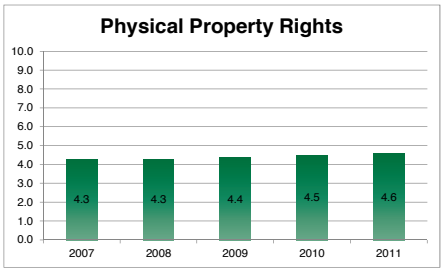
World Rank: 120 Regional Rank: 21

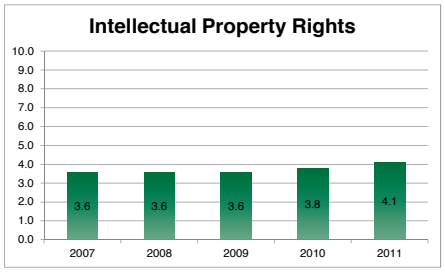
This year Nigeria saw improvement in some of its components. LP was the lone exception decreaseing by 0.2 points. All of the subcategories of LP decreased except for *Political Stability*.

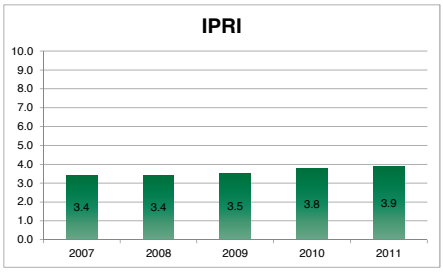
The PPR score increased by 0.1 points. *Access to Loans* showed the greatest change out of the subcategories, it is worthy to note that all of the subcategories of PPR increased.

IPR is still improving. There are slight increases in all of the subcategories, but a major increase in *Protection of Intellectual Property*.



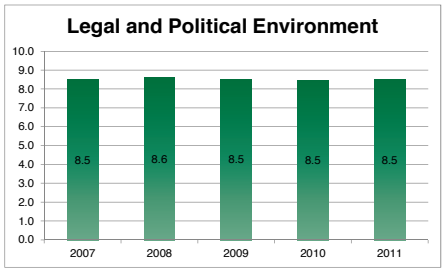
## NORWAY

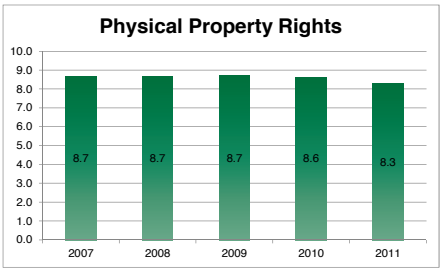
World Rank: 6 Regional Rank: 3

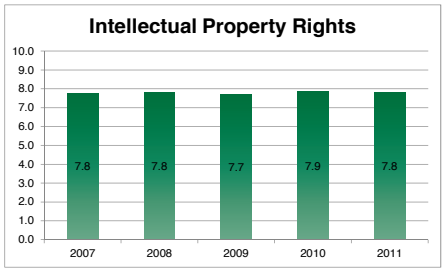
Norway has very strong property rights protections, but this year every component decreased, with the exception of LP staying the same. *Judicial Independence* and *Control of Corruption* are the only sub-categories of LP that increased.

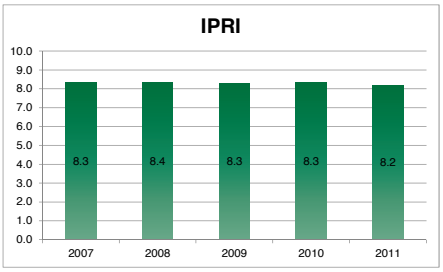
Norway's PPR decreased by 0.3 points and the *Registering Property* was the only sub-category that increased (by 0.2 points) in 2011.

*Copyright Piracy* still continues to deteriorate slightly in Norway. The other subcategories of IPR remained unchanged. Overall IPR decreased by 0.1 point.



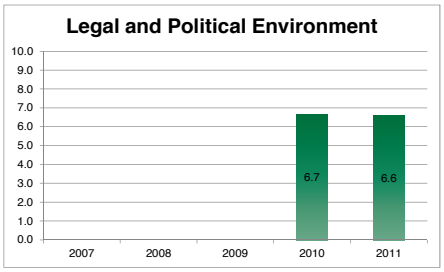

## OMAN

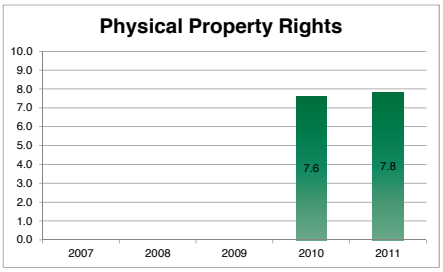
World Rank: 28 Regional Rank: 4

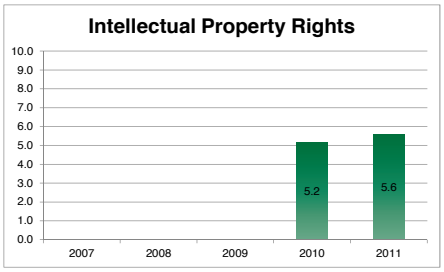
This is Oman's second year in IPRI. The total overall IPRI score increased by 0.2 points in 2011. The only component that did not show an increase is LP, which showed a slight decrease. *Judicial Independence* is the only subcategory that improved.

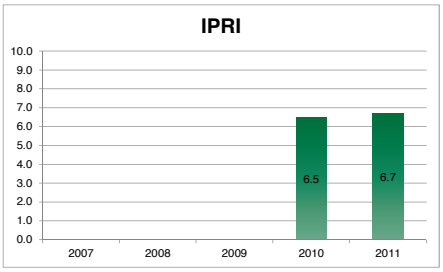
PPR seems to be very strong in Oman again. It increased by 0.2 points this year. Oman's *Access to Loans*, however, decreased by 0.2 points, but that did not stop PPR from increasing.

Again, IPR was the weakest component in Oman. *Patent Protection* did not have any data again this year. *Protection of Intellectual Property* increased by a whole point.



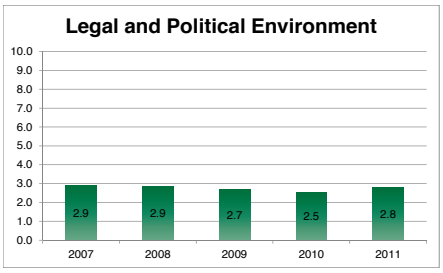
## PAKISTAN

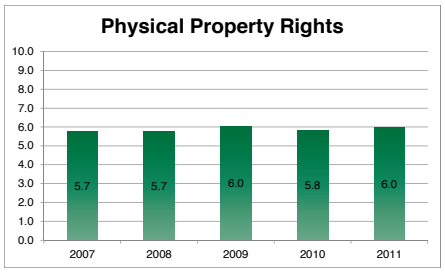
World Rank: 113 Regional Rank: 17

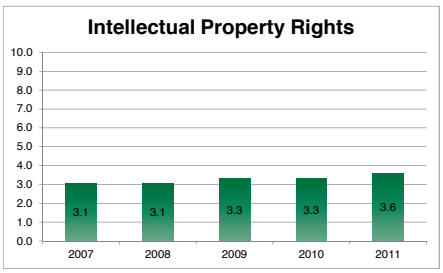
Pakistan reversed its decrease from last year in 2011. Pakistan can see improvements in all components. LP has increased by 0.3 points and *Judicial Independence* showed the most drastic increase. When raw data for *Political Stabiilty* is rescaled for the IPRI the score comes out as a -0.2. This number was changed to a flat 0.0 to fit within the IPRI's scale. This adjustment did not affect component or IPRI scores.

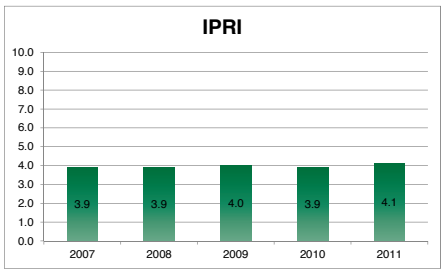
The PPR score increased by 0.2 points, which is back to its 2009 score. *Registering Property* and *Access to Loans* both showed slight increases in 2011.

IPR finally made a change from its past two years of remaining at a 3.3 to a 3.6. *Patent Protection* remained the same, while the other subcategories of IPR increased.



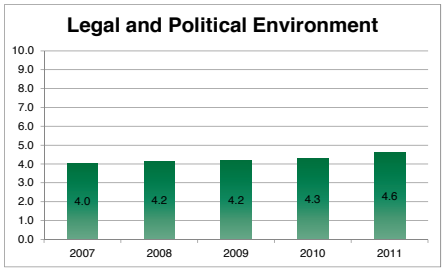

## PANAMA

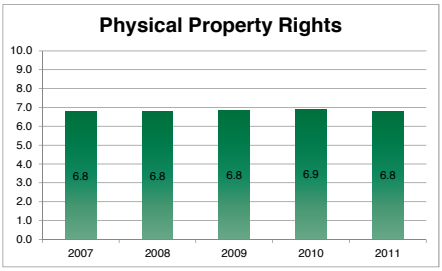
World Rank: 55 Regional Rank: 5

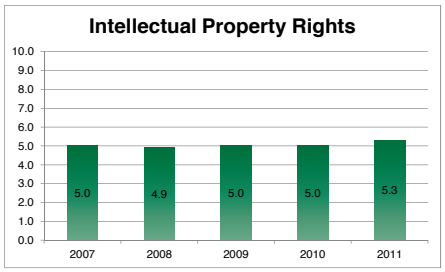
IPRI increased again for the second consecutive year. The LP score underwent a positive change of 0.3. Two subcategories of LP, *Judicial Independence* and *Rule of Law* both increased and aided in the overall increase of LP.

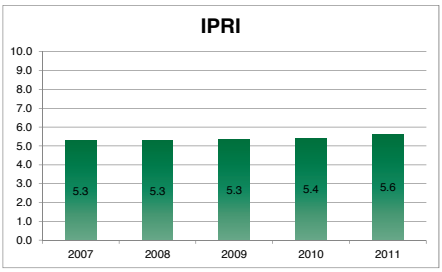
PPR, however, did not increase. It made an increase in 2010 to 6.9, but regressed back to 6.8, just like the previous years since 2007. *Rule of Law* and *Control of Corruption*, both made negative changes.

IPR increased 0.3 points. This is a significant increase from its previous years of remaining stagnant between 4.9 and a score of 5.0. *Protection of Intellectual Property* showed greatest increase by 0.3 points.



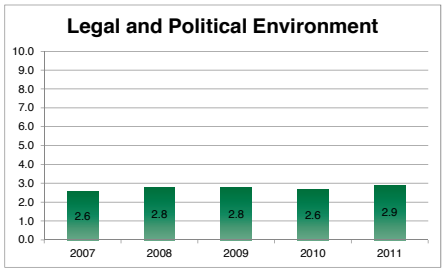
## PARAGUAY

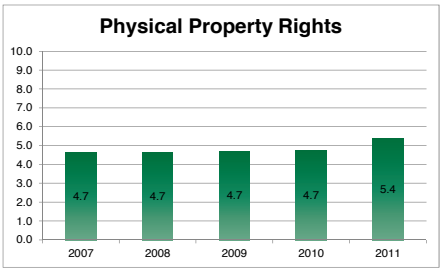
World Rank: 117 Regional Rank: 20

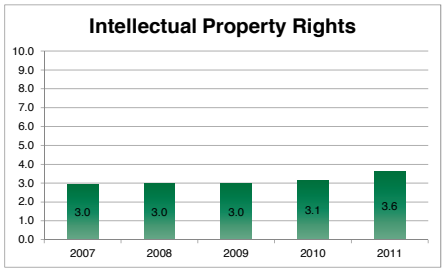
All components of IPRI increased by 0.3 points or more in 2011. IPRI's total score increased half a point, which is the largest increase it has seen since 2007. The past three years it has stayed at a score of 3.5. *Judicial Independence* made a significant increase, while *Politial Stability* made a significant decrease.

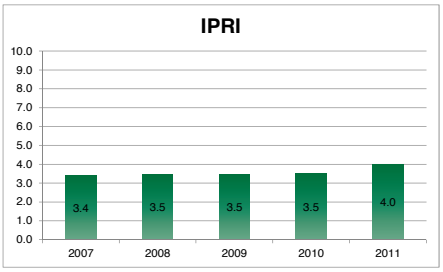
Paraguay's PPR has made the greatest change. Since 2007, PPR has stayed stagnant at 4.7, but now is at a 5.4. All subcategories of PPR have made significant increases; the most notable would be *Access to Loans*, which increased more than a point.

IPR increased by half of a point. *Protection of Intellectual Property* made the most significant increase in 2011.



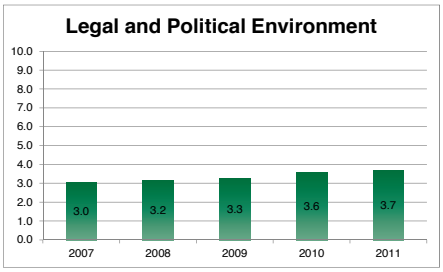

## PERU

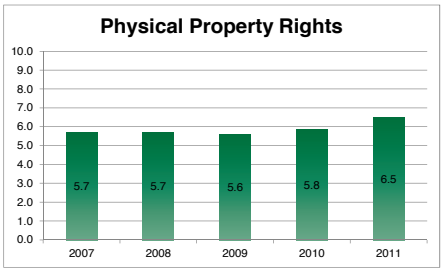
World Rank: 81 Regional Rank: 11

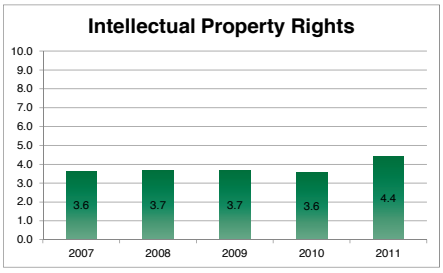
All components of IPRI in Peru increased in 2011. IPR showed the greatest increase from 3.6 to 4.4. IPR made the greatest changes. LP increased slightly in 2011, which was hindered by the decreases in *Political Stability* and *Control of Corruption*.

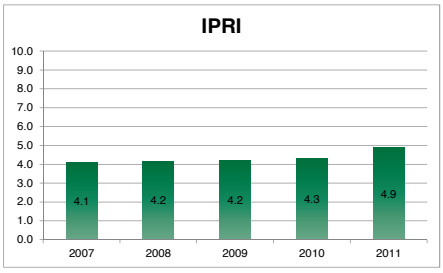
Peru's PPR increased by 0.7 points, which is major increase from the 5.7 to 5.8 scores it has stayed at the past few years. All the subcategories increased, which helped it make that significant change.

The greatest increase was Peru's IPR score. *Copyright Piracy* made the greatest change since 2010, of 1.5 points.



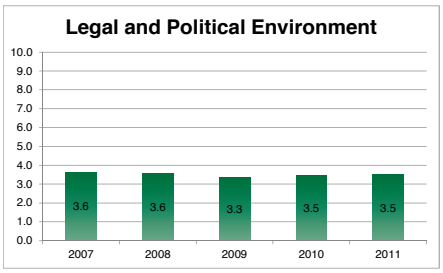
## PHILIPPINES

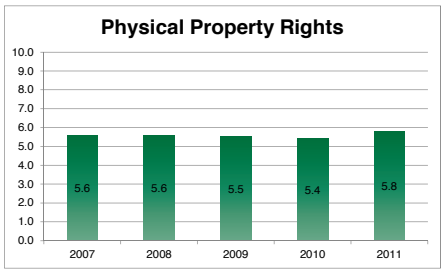
World Rank: 87 Regional Rank: 15

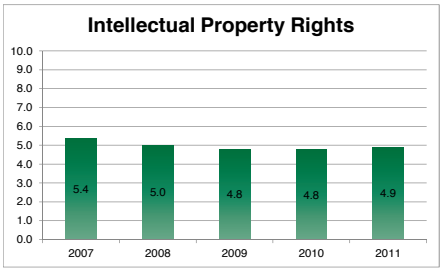
After three consecutive years of declining IPRI, it finally increased by 0.2 points in 2011. The LP score remains the same as 2010. *Rule of Law* decreased this year while *Judicial Independence* and *Political Stability* remained the same and *Control of Corruption increased*.

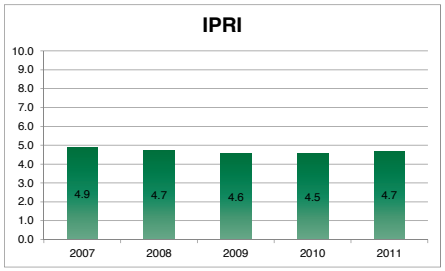
The PPR score made the greatest increase since data has been available. *Registering Property* remained the same while the other two subcategories improved.

IPR slightly increased this year. *Protection of Intellectual Property* made a solid increase of a whole point, while *Patent Protection* and *Copyright Piracy* remained unchanged.



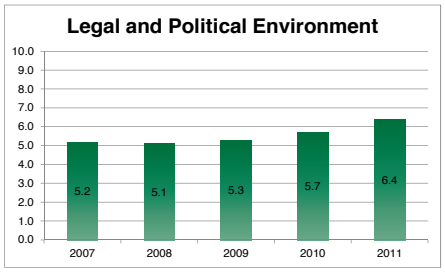

## POLAND

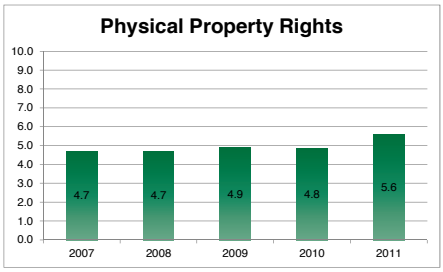
World Rank: 43 Regional Rank: 5

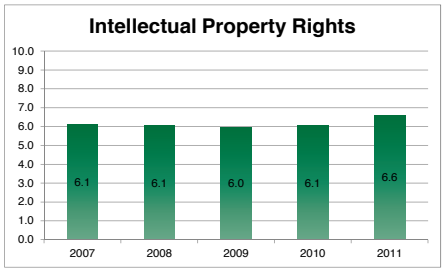
IPRI increased for the third consecutive year in Poland. This is due to the dramatic increases in all three components, all of which reached new highs. All subcategories of LP showed increases. *Judicial Independence* showed the greatest increase.

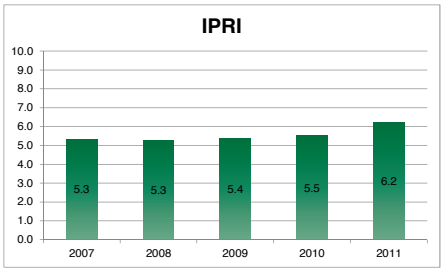
PPR has increased the greatest by 0.8 points in 2011. The past few years it has remained around 4.8. *Access to Loans* showed the slightest increase compared to *Registering Property* and *Protection of Physical Property*.

The IPR score has made a dramatic increase from its previous years as well. *Protection of Intellectual Property* has increased roughly by 1.3 points. Total IPRI has increased greatly and all components have increased by a significant margin.



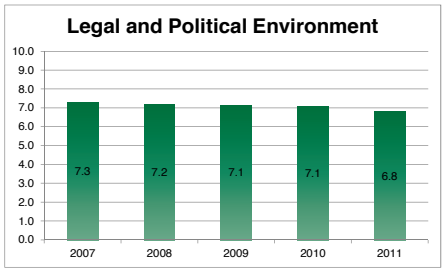
## PORTUGAL

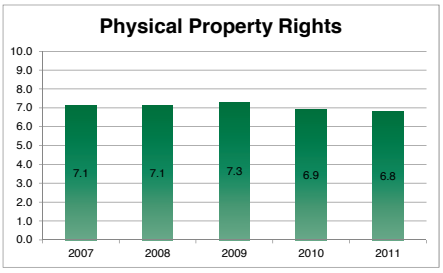
World Rank: 25 Regional Rank: 15

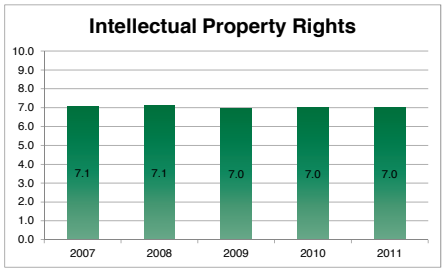
Portugal's IPRI decreased for the second consecutive year. All of the components of IPRI took a slight decrease with an exception of IPR remaining the same. LP fell 0.3 points. The changes in LP are due to the fact that the *Rule of Law* made a slight increase and *Control of Corruption* remained the same, while the other subcategories of LP decreased.

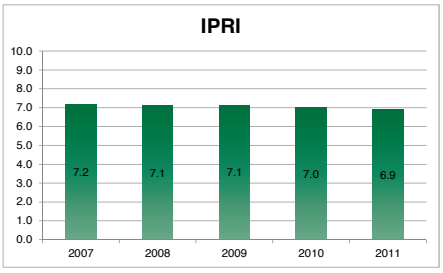
The PPR score was affected by the changes in *Protection of Physical Property* and *Access to Loans*, which decreased in 2011. *Registering Property*, however, made a significant increase by a half point.

The IPR score has remained the same for the third consecutive year. There were slight increases in *Copyright Piracy*, but these are leveled out due to the decrease in *Intellectual Property Rights*.



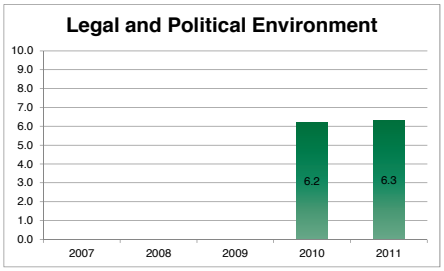

## PUERTO RICO

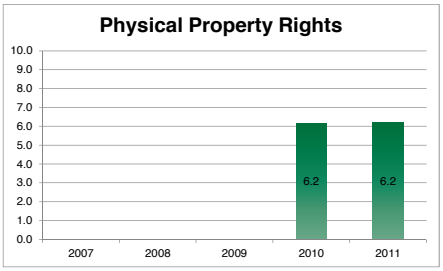
World Rank: 33 Regional Rank: 2

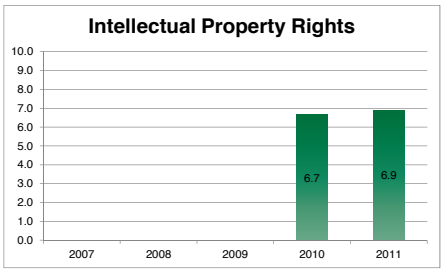
This is Puerto Rico's second year in the IPRI. Since last year the overall IPRI has increased and the components of IPRI have either increased or stayed the same. All of LP's subcategories increased, except for *Political Stability*.

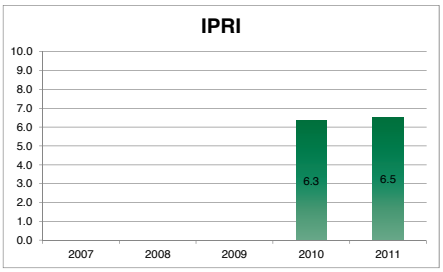
PPR remained unchanged in 2011. *Registering Property* made significant progress and increased by a half point.

Again, the IPR data had to depend upon the *Copyright Piracy* and *Protection of Intellectual Property* data due to the lack of patent rights information. However, IPR did increase 0.2 points.



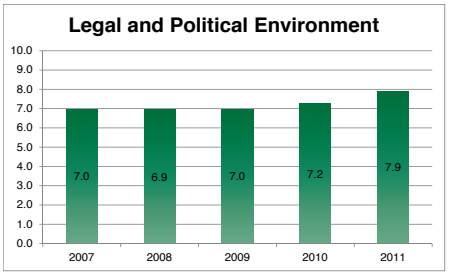
## QATAR

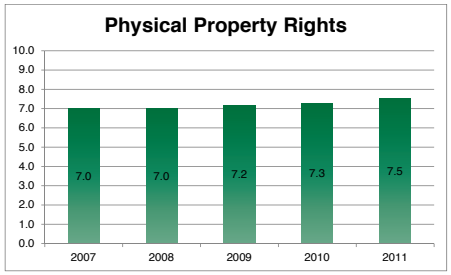
World Rank: 23 Regional Rank: 2

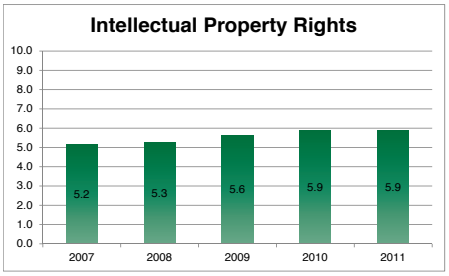
Qatar's IPRI score increased for the third consecutive year. The LP score made a significant increase by 0.7 points. All of LP's subcategories increased with a special notice to *Control of Corruption* which increased by 0.8 points.

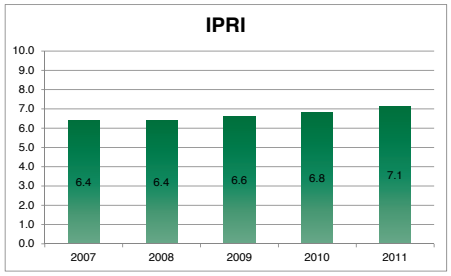
PPR is increasing for its third consecutive year. It is slight but positive nonetheless. *Registering Property* did not help PPR, it decreased slightly by .2 points.

Qatar's IPR score stayed the same despite increases the last few years. Patent protection data is still not available in for Qatar.



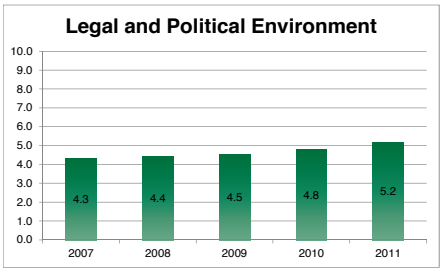

## ROMANIA

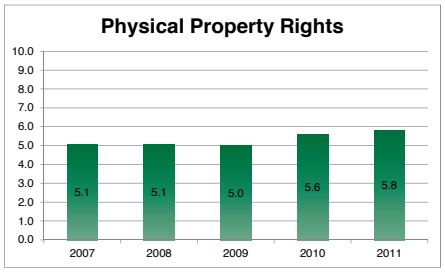
World Rank: 60 Regional Rank: 8

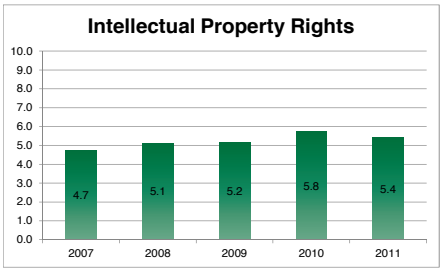
Romania's total IPRI score continues to increase. All categories of LP increased except *Control of Corruption*, which slightly decreased by 0.2 points

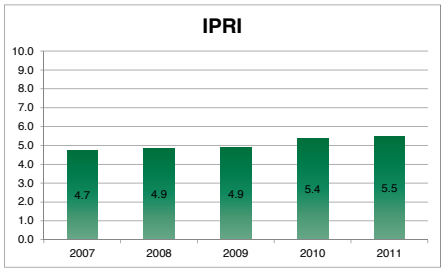
Romania's PPR score improved to some extent. Romania's *Access to Loans* category decreased, even though it made a slight increase in 2010. *Protection of Physical Property Rights* made the greatest increase with *Registering Property* following close behind it.

Despite IPR's significant increase in 2010, the IPR score decreased to 5.4 in 2011. *Patent Protection* remained relatively the same while the other two categories decreased in score.



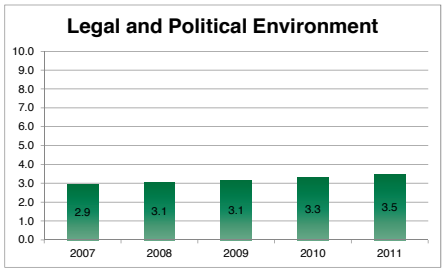
## RUSSIA

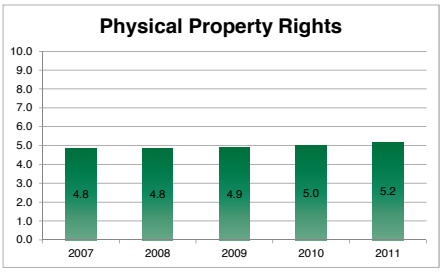
World Rank: 93 Regional Rank: 15

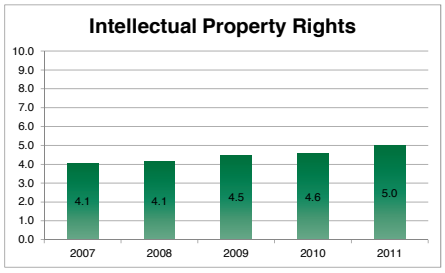
All components of Russia's IPRI in 2011 increased by at least 0.2 points. Overall IPRI increased 0.3 points and is following an increasing trend. *Political Stability* and *Control of Corruption* both decreased this year, but LP still increased this year.

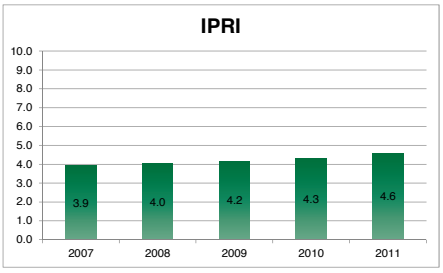
The PPR score increased for the third consecutive year. The *Access to Loans* was the only subcategory that remained unchanged.

IPR increased significantly compared to the subsequent years after 2007. *Protection of Intellectual Property* drastically increased by a whole point.



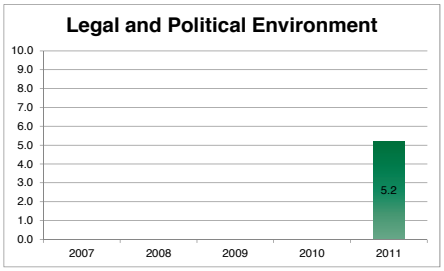

## RWANDA

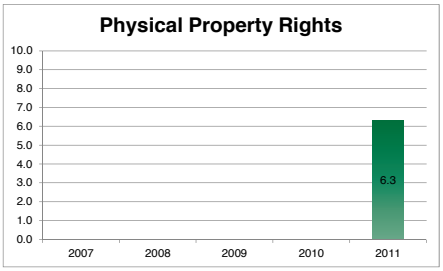
World Rank: 55 Regional Rank: 4

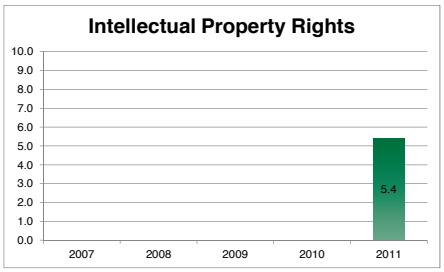
The year 2011 marks the first year Rwanda is featured in IPRI. Among the LP subcategories, the *Judicial Independence* score was drastically higher than the other subcategories. LP is not Rwanda's highest scored component of IPRI.

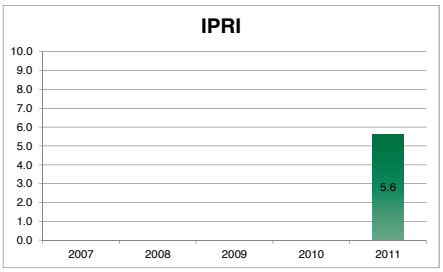
The PPR score is the highest marked component of IPRI in 2011. Among the PPR scores, the *Registering Property* score was outstandingly higher than any other score.

There is no available data on *Copyright Piracy* in Rwanda, but *Intellectual Property Rights* seem to have higher priority than *Patent Protections*.



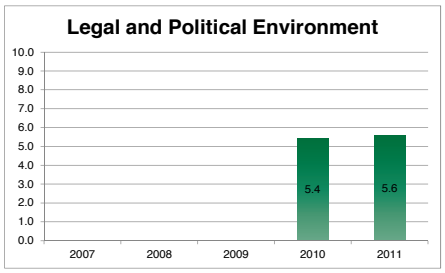
## SAUDI ARABIA

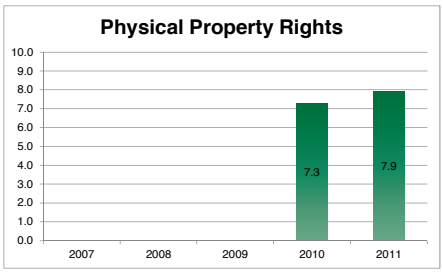
World Rank: 33 Regional Rank: 6

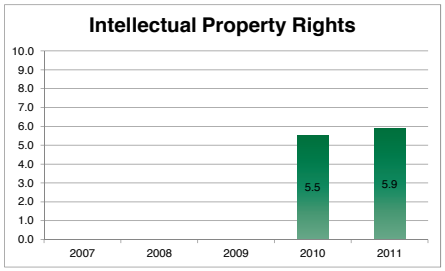
This is the second year in which Saudi Arabia appears in IPRI. Overall IPRI increased and all of its components increased in 2011. The *Judicial Independence* score is still remarkably higher than its other sub-components and increased greatly from last year.

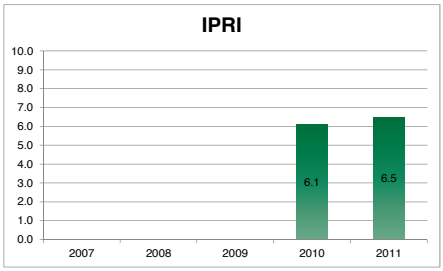
The PPR score is still the highest score out of the IPRI components. *Registering Property* increased 0.2 points and makes it a 9.8. Saudi Arabia is very strong in *Registering Property*.

IPR increased significantly due to all of its sub-components increasing.



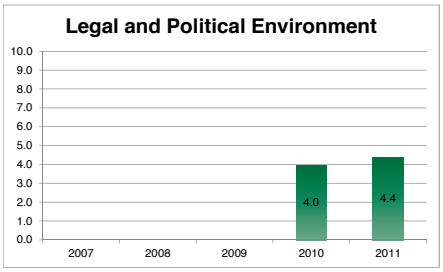

## SENEGAL

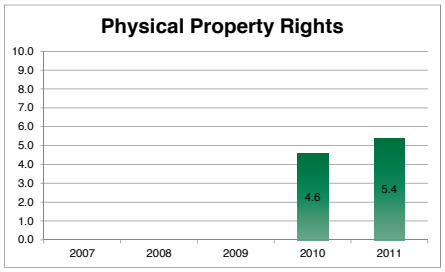
World Rank: 87 Regional Rank: 13

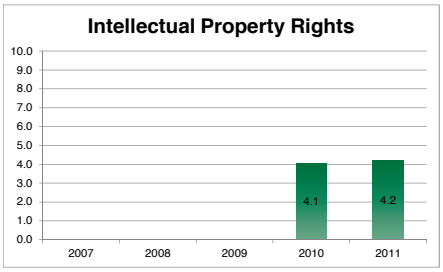
This is the second year Senegal is in the IPRI. All components increased this year. In 2010, *Judicial Independence* was significantly lower than its other LP subcategories and this year, *Judicial Independence* drastically increased by 1.7 points. *Rule of Law* and *Political Stability* remained the same and *Control of Corruption* decreased by 0.2 points.

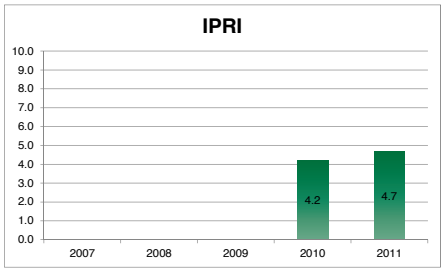
The PPR score increased significantly in 2011. *Access to Loans* increased the most by 2 whole points. All subcategories of PPR increased as well.

Senegal's IPR slightly increased in 2011. *Intellectual Property Rights* increased the most while *Patent Protection* and *Copyright Piracy* remained relatively the same.



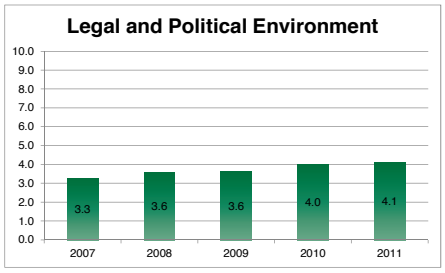
## SERBIA

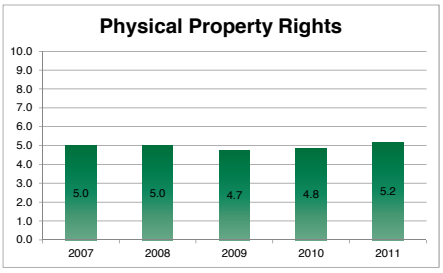
World Rank: 109 Regional Rank: 19

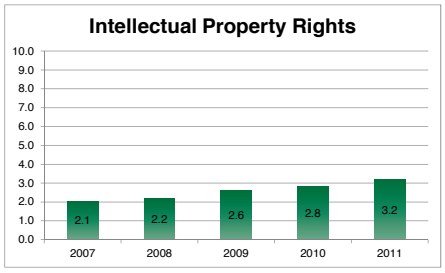
IPRI increased for the fifth consecutive year in Serbia. All of IPRI's components increased as well. LP slightly increased and *Judicial Independence* showed the greatest increase. However, *Control of Corruption* slightly decreased.

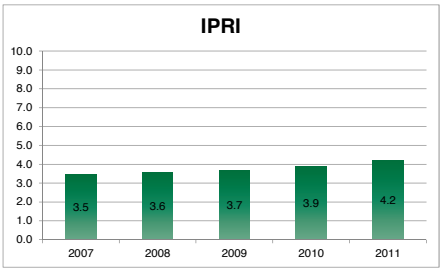
Serbia's PPR score increased 0.4 points in 2011. All subcategories of PPR increased, with *Registering Property* and *Access to Loans* increasing the greatest.

IPR increased fairly significantly. However, Patent Protection does not have data available.



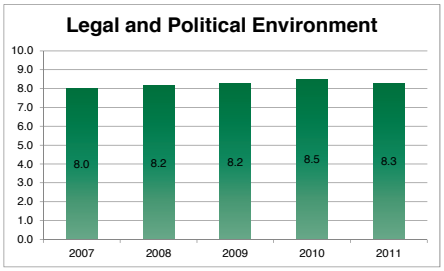

## SINGAPORE

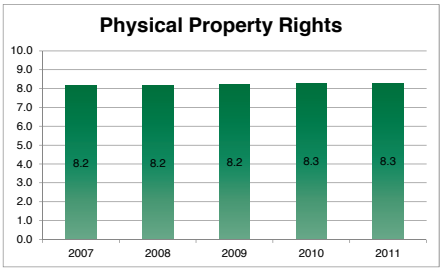
World Rank: 3 Regional Rank: 1

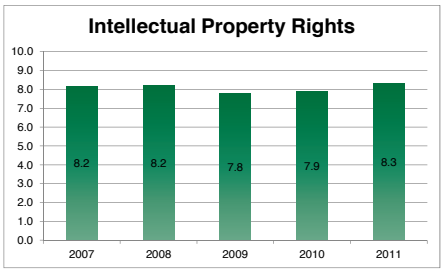
IPRI slightly increased this year. All of IPRI's components are all at scores of 8.3 in 2011. LP underwent a negative change of 0.2 points. All of its subcategories decreased as well. *Political Stability* underwent the most significant change of LP by 0.4 points.

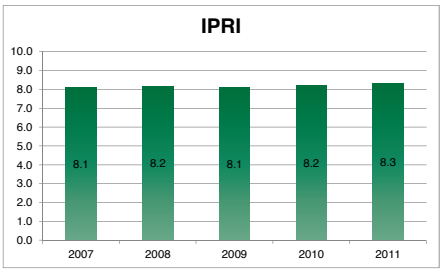
This year, PPR remained unchanged. *Protection of Physical Property* decreased while *Registering Property* and *Access to Loans* increased.

IPR increased for the second consecutive year. *Copyright Piracy* increased dramatically by 1.4 points.



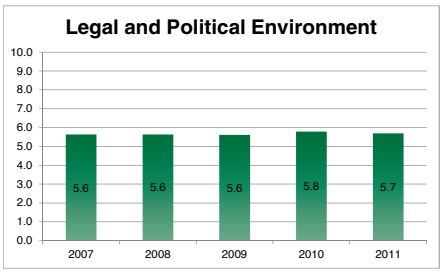
## SLOVAKIA

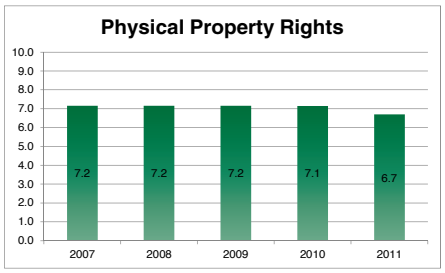
World Rank: 38 Regional Rank: 4

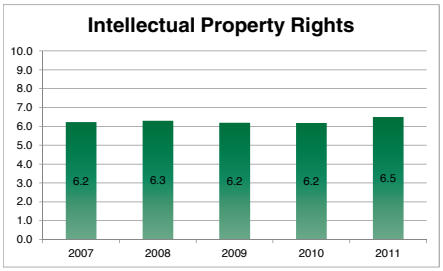
The IPRI score decreased slightly in 2011, by 0.1 points. IPRI in Slovakia has made a pattern of increasing by 0.1 points and decreasing by 0.1 points every other year. LP decreased as well this year. *Rule of Law* was the only subcategory that increased. This is the second consecutive year for LP decreasing.

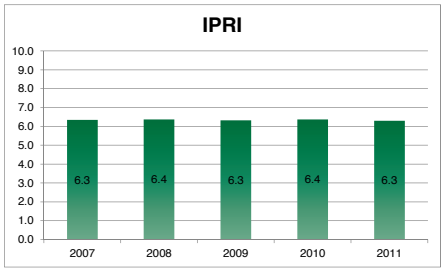
PPR has decreased for second year in a row. The only increase in PPR was *Registering Property*, which increased by 0.1 points.

IPR score increased this year despite its stagnant 6.2 score the past two years. *Patent Protection* and *Copyright Piracy* remained relatively the same, while *Intellectual Property Rights* drastically increased.



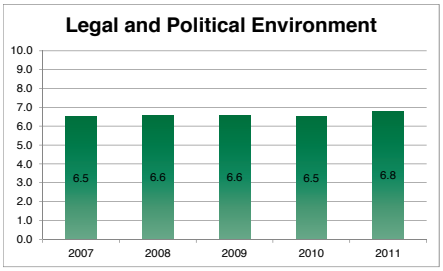

## SLOVENIA

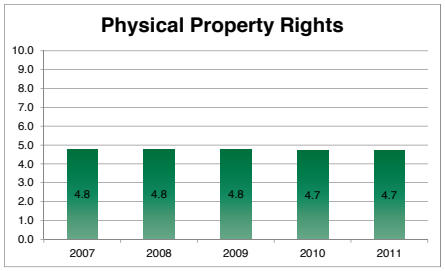
World Rank: 53 Regional Rank: 7

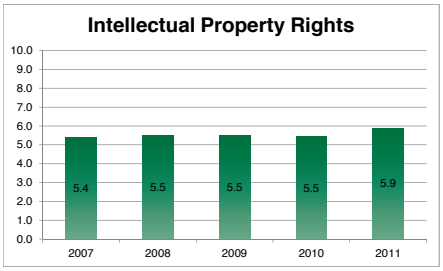
The past four years IPRI in Slovenia has remained unchanged until 2011. This year, IPRI has increased 0.2 points. LP has increased as well. All subcategories made positive changes except *Political Stability*.

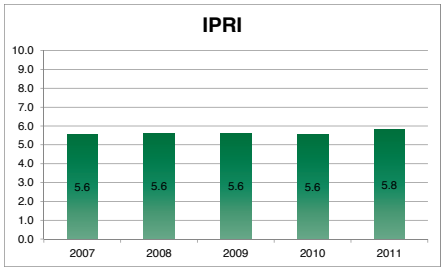
PPR remained the same even though *Registering Property* increased substantially by 1.1 points, but *Access to Loans* decreased by 1.3 points.

Slovenia's IPR increased by 0.4 points in 2011. *Intellectual Property Rights* and *Copyright Piracy* both showed increases, which aided in IPR increasing.



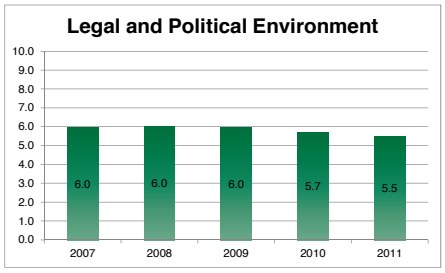
## SOUTH AFRICA

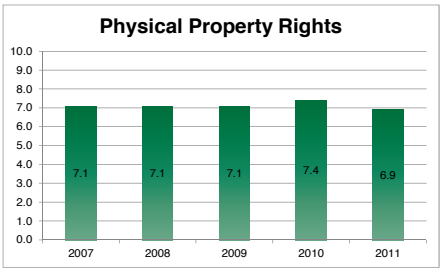
World Rank: 32 Regional Rank: 1

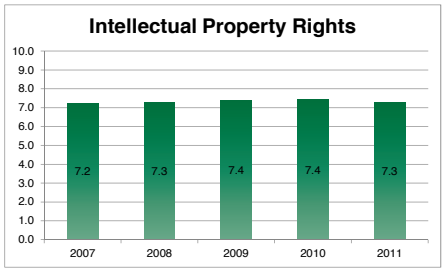
Overall IPRI in South Africa decreased in 2011. The past four years it has remained at 6.8. All components of IPRI decreased. LP decreased for the third consecutive year. Political Stability was the only sub-component that increased and it only increased by 0.1 point.

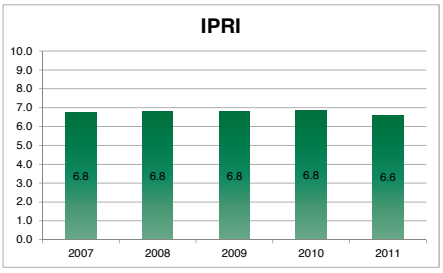
The PPR decreased significantly despite its major increase from 2009 to 2010. PPR is now the lowest it has been since data has been available. *Protection of Physical Property* and *Access to Loans* both significantly decreased while *Registering Property* remained unchanged.

South Africa's IPR score decreased slightly due to the *Intellectual Property Rights* decreasing by 0.2 points and *Patent Protection* and *Copyright Piracy Level* remaining the same.



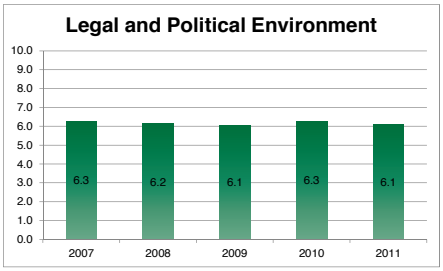

## SPAIN

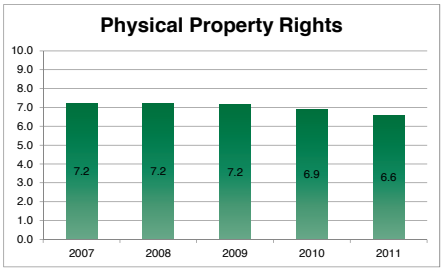
World Rank: 33 Regional Rank: 17

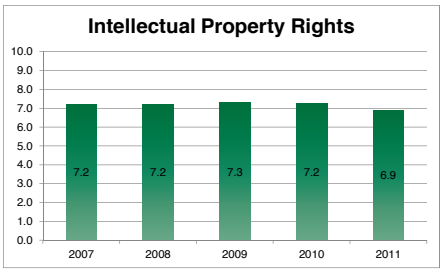
IPRI in Spain has decreased significantly this year by 0.3 points. All of the components of IPRI have made noteworthy decreases as well. LP decreased by 0.2 points. *Judicial Independence* was the only increase made in 2011 for LP.

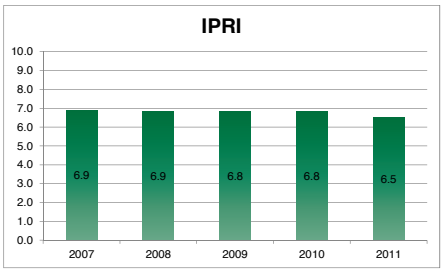
For the second consecutive year PPR decreased by 0.3 points. *Registering Property* was the only positive change that PPR underwent.

IPR decreased significantly by 0.3 points. *Patent Protection* was the only subcategory that remained fairly the same as 2010.



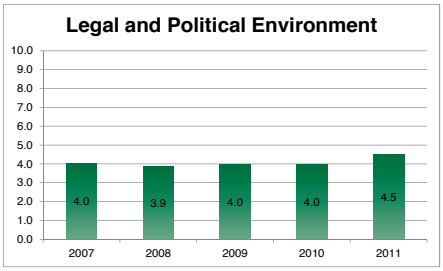
## SRI LANKA

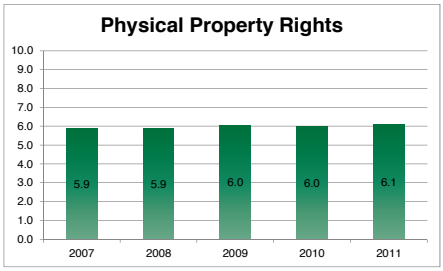
World Rank: 77 Regional Rank:13

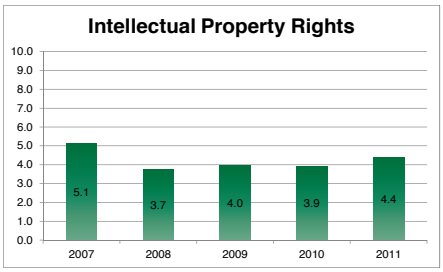
IPRI increased this year despite its slight decrease last year. IPRI has made a significant increase of 0.4 points. LP made a significant increase of half a point. *Political Stability* and *Judicial Independence* have made the greatest increases, with *Political Stability* increased by 1.4 points.

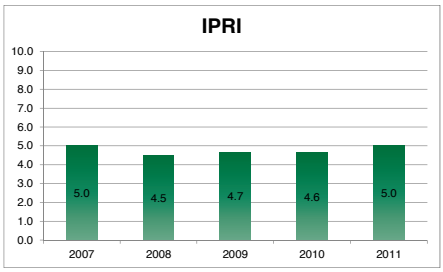
PPR slightly increased in 2011. *Registering Property* and *Access to Loans* both increased, but the decrease in *Protection of Physical Property* affected the score of PPR to make a slight increase.

IPR score increased to its highest level since 2007. *Intellectual Property Rights* showed the greatest positive change.



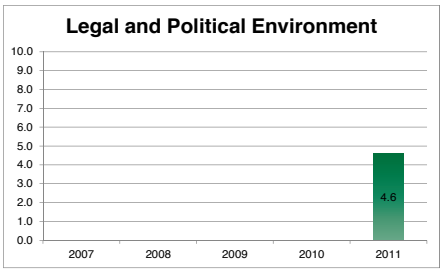

## SWAZILAND

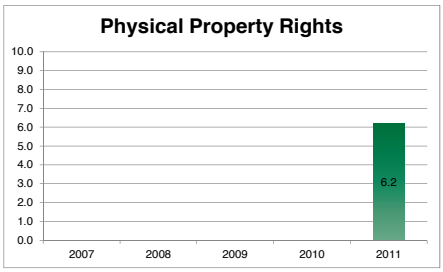
World Rank: 71 Regional Rank: 7

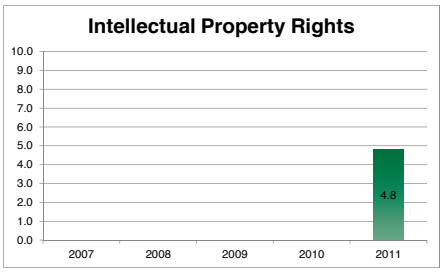
Swaziland joins IPRI for the first time. The country's LP was the weakest component with Judicial Independence showing the better score of the other sub-components.

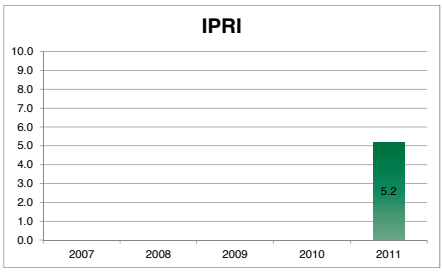
PPR was the strongest component of Swaziland's IPRI. Registering Property was very solid in Swaziland with a score of 7.6.

IPR in Swaziland was based on limited data because there were no figures on *Copyright Piracy*.



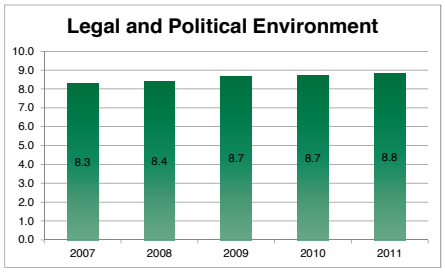
## SWEDEN

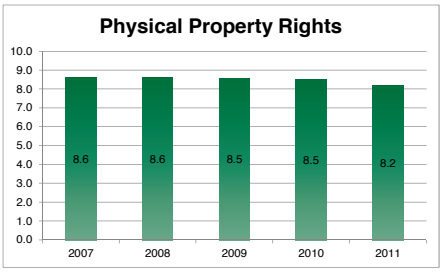
Rank: 1 Regional Rank: 1

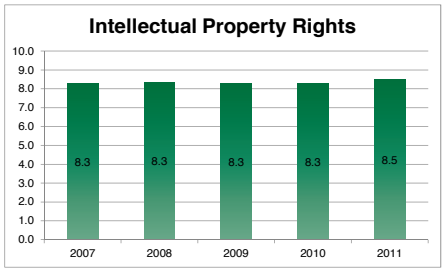
For the third consecutive year in a row the IPRI score did not change. Despite this lack of change Sweden tied with Finland for the highest IPRI score in the world. LP made a slight increase by 0.1 of a point. The LP sub-components did not make any significant changes either. There are no notable changes for LP; the sub-components either increased or decreased by 0.1 or stayed the same.

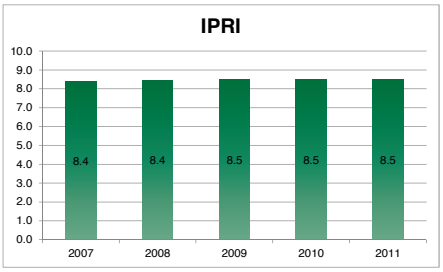
The PPR score decreased by 0.3 points and all its sub-components decreased as well. *Access to Loans* made the most drastic decrease by 0.6 points.

The sub-component of IPR that changed was *Protection of Intellectual Property* by 0.6 points.



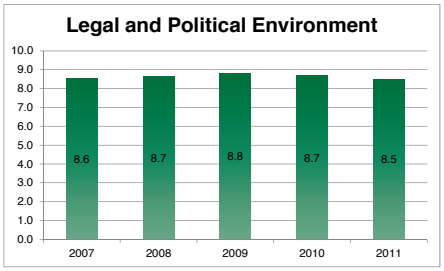

## SWITZERLAND

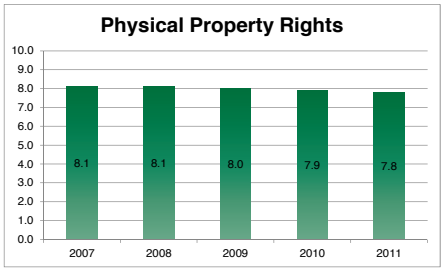
World Rank: 6 Regional Rank: 3

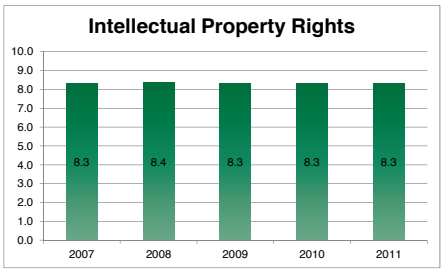
For the second consecutive year the IPRI in Switzerland has decreased. LP made the most significant decrease of 0.2 points with *Control of Corruption* decreasing the most out of the sub-components.

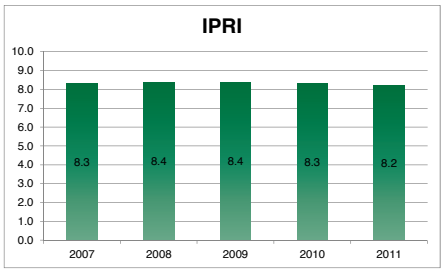
*Registering Property* is the only sub-component of PPR that increased in 2011. Since 2008, PPR has been decreasing slightly.

The IPR score remained the same as it has the past 2 years.



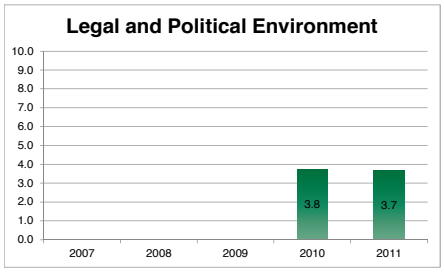
## SYRIA

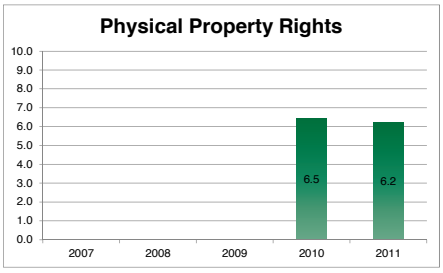
World Rank: 84 Regional Rank: 13

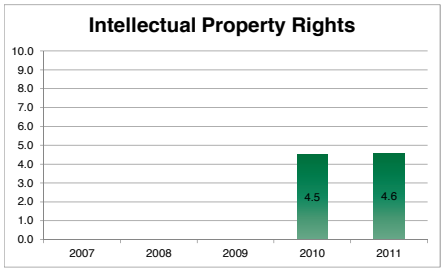
This is Syria's second year in the IPRI. Syria's total IPRI score decreased by 0.1 points in 2011 and all components, but IPR decreased in 2011. LP slightly decreased by 0.1 points. *Rule of Law* and *Control of Corruption* were the sub-components that increased.

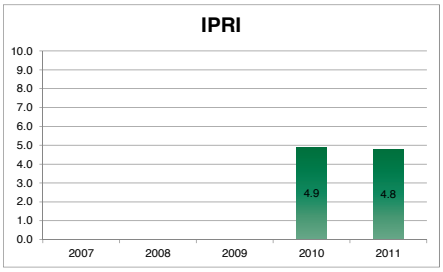
PPR score is still the strongest aspect of IPRI, but decreased significantly to 6.2. *Registering Property* and *Access to Loans* increased significantly, but the decrease in *Protection of Physical Property Rights* affected the PPR more drastically.

The IPR score increased slightly in 2011. This is due to the slight increases in *Patent Protection* and *Intellectual Property Rights*; however, there is no data available for *Copyright Piracy*.



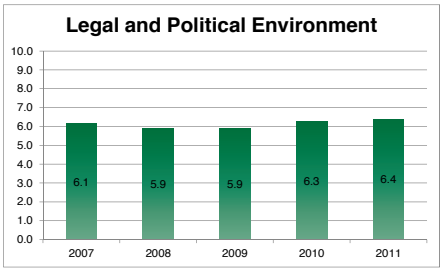

## TAIWAN

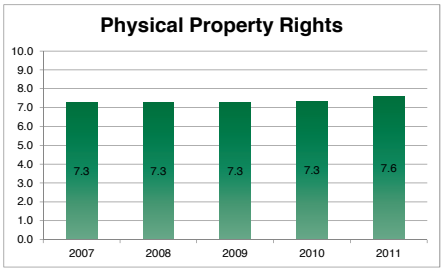
World Rank: 23 Regional Rank: 6

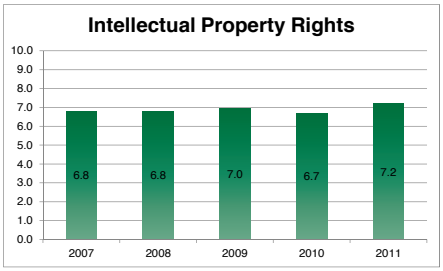
This year Taiwan has seen a significant increase in the total IPRI as well as in all of its components for the third consecutive year. LP increased slightly due to the decrease in *Political Stability* and the unchanging *Control of Corruption*. *Rule of Law* remains the strongest sub-component of LP.

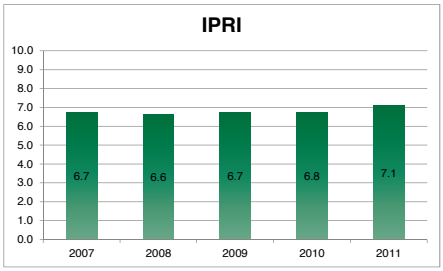
PPR score has increased significantly in 2011, compared to the subsequent years after 2007 in which it remained unchanged. *Registering Property* is the strongest sub-component of PPR and increased this year slightly.

Taiwan's IPR score made a significant increase following its decrease in 2010. It is now at its highest since data has been available. *Copyright Piracy* made the greatest increase by one whole point with *Protection of Intellectual Property* following behind it with half a point.



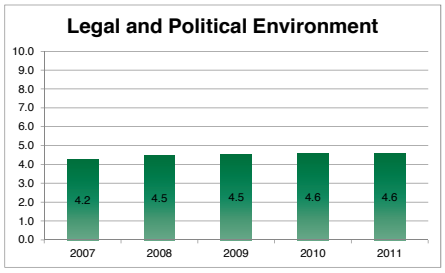
## TANZANIA

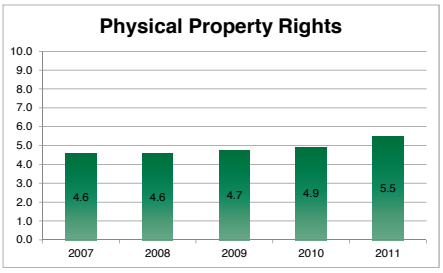
World Rank: 75 Regional Rank: 9

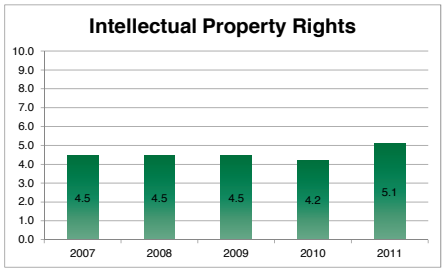
IPRI has drastically increased this year. This is the greatest increase and highest score for Tanzania since the start of the index. LP has remained unchanged for the second consecutive year.

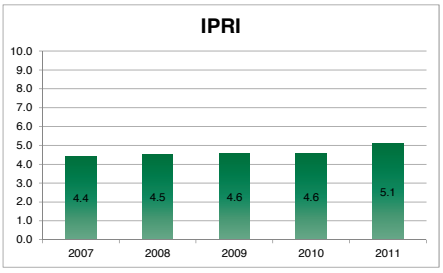
PPR increased for the third consecutive year. All of its sub-components increased. *Access to Loans* showed the greatest increase and remains the highest scoring sub-component of PPR.

IPR increased the most of all the components of IPRI even though there is no data available for *Copyright Piracy*. *Protection of Intellectual Property* increased the greatest, by 1.6 points, and remains the highest sub-component of IPR.



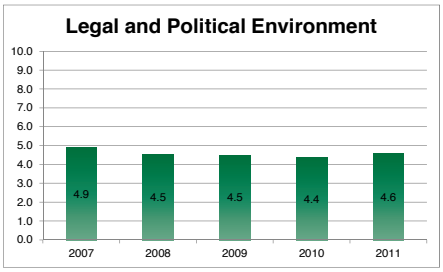

## THAILAND

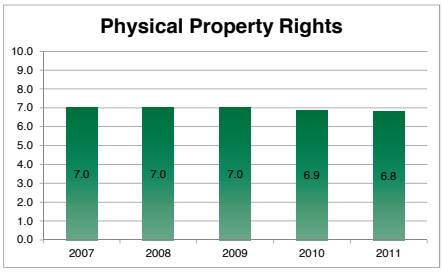
World Rank: 64 Regional Rank: 12

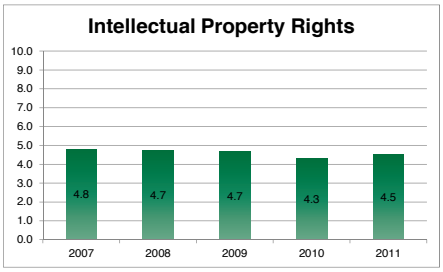
Despite the decreases last year, this year all components, but PPR increased. IPRI overall increased slightly by 0.1 points. LP took a positive change this year despite its negative trend the past few years. *Judicial Independence* is LPs strongest sub-component and increased the greatest in 2011.

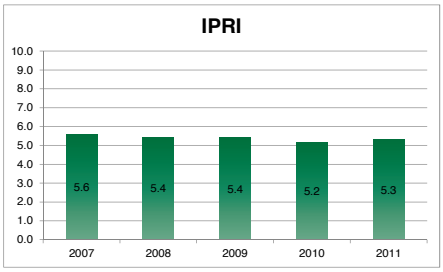
The PPR score decreased for the second consecutive year. The *Protection of Physical Property Rights* decreased again by 0.6 points, not as big as a decrease in 2010 when it dropped a whole point. *Registering Property* is PPR's strongest sub-component and increased 0.2 points.

The IPR score increased 0.2 points. *Copyright Piracy* increased the greatest by 0.8 points, but *Intellectual Property Rights* remains its highest scoring sub-component.



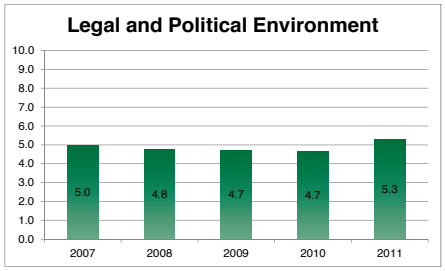
## TRINIDAD AND TOBAGO

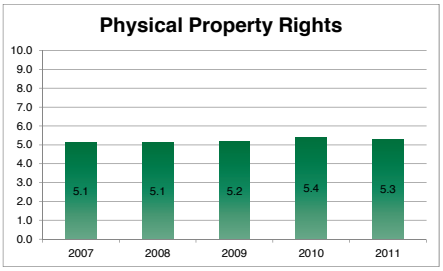
World Rank: 55 Regional Rank: 5

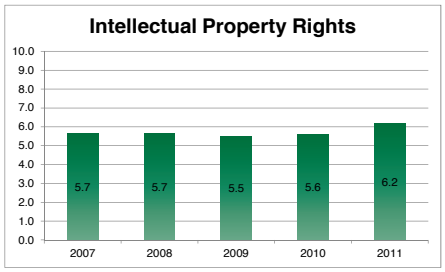
For the second consecutive year, IPRI has increased. LP has increased significantly by 0.6 points. *Judicial Independence* remains LP's highest scoring sub-component and showed the greatest increase among the other sub-components.

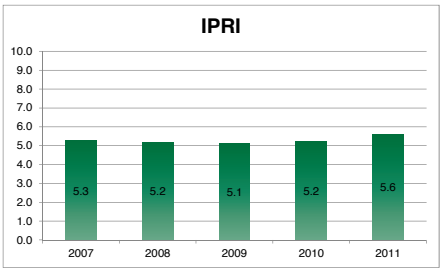
The PPR score underwent a slight negative change despite its significant increase in 2010. The *Ease of Access to Loans* decreased the most by 0.7 points.

From its modest increase in 2010, IPR has increased drastically in 2011. *Patent Protection* remained the same, but *Intellectual Property Rights* increased significantly by 1.1 points.



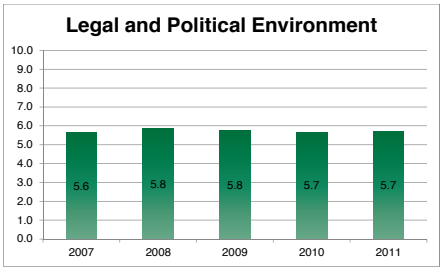

## TUNISIA

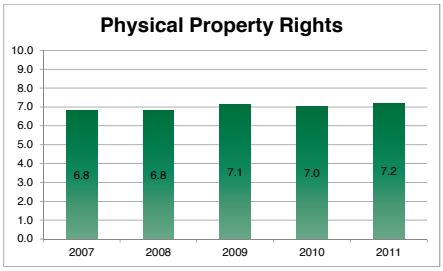
World Rank: 47 Regional Rank: 9

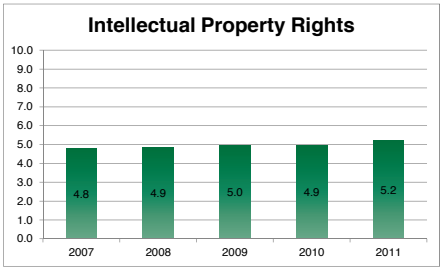
IPRI in 2011 increased modestly, back to its 2009 score. The LP score remained the unchanged component in 2011. All of the sub-components of LP remained relatively the same, which explains why it remained the same.No real change has been made in this component.

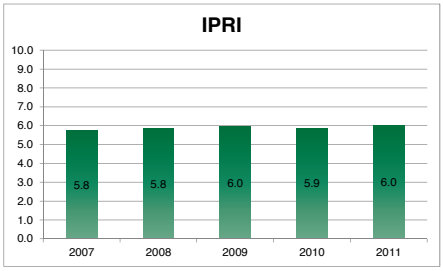
The PPR score has made a significant increase in 2011. *Registering Property* Remains the highest sub-component of PPR and has made a significant increase for the third consecutive year along with *Protection of Physical Property*. *Access to Loans* increased for the second consecutive year.

IPR scored increased significantly by 0.3 points despite its decrease in 2010. *Protection of Intellectual Property* showed the greatest increase.



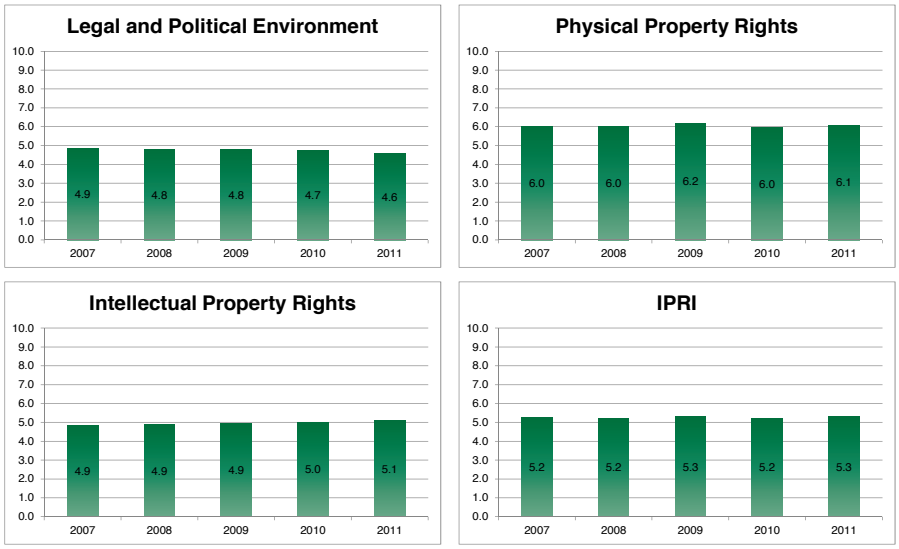
## TURKEY

World Rank: 64 Regional Rank: 10

IPRI increased slightly by 0.1 point in 2011. LP showed a slight decrease for the second consecutive year. *Political Stability* showed the greatest decrease and remains the lowest sub-component of LP.

Turkey's PPR score made a modest increase in 2011. *Registering Property* remained the same and still remains the highest sub-component of PPR. *Protection of Physical Property Rights* drastically increased by a half point.

IPR underwent a similar change as PPR. It increased for the third consecutive year. The *Protection of Intellectual Property* score increased by 0.3 points this year.

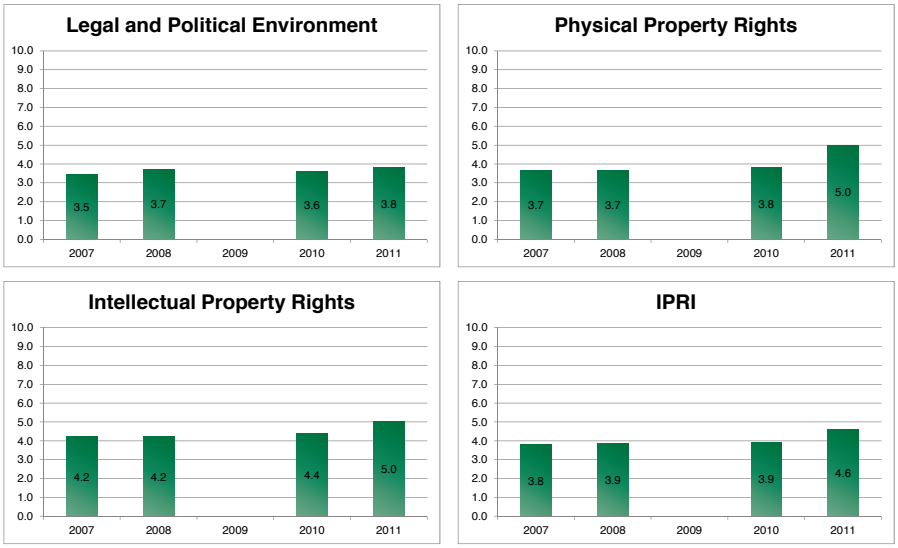



## UGANDA

World Rank: 93 Regional Rank: 14

Uganda has made great improvements in IPRI this year. It has made a drastic increase of 0.7 points. All components of IPRI increased this year. LP made the smallest increase of all the components. *Judicial Independence* made the greatest increase of a whole point, but the reason LP did not make a drastic increase compared to the other components is due to the decrease in *Political Stability* and *Control of Corruption*.

The PPR has made the most drastic increase and is tied with IPR for the strongest component for IPRI. Even though *Registering Property* score suffered in 2008, it has made a drastic increase by 2.4 points to become the strongest sub-component of PPR.




IPR increased by 0.6 points. It is one of the strongest components of IPRI. *Intellectual Property Rights* made the most significant increase of 1.1 points.

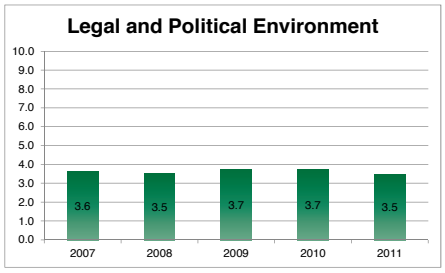
## UKRAINE

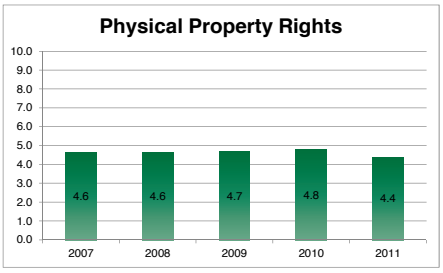
World Rank: 117 Regional Rank: 23

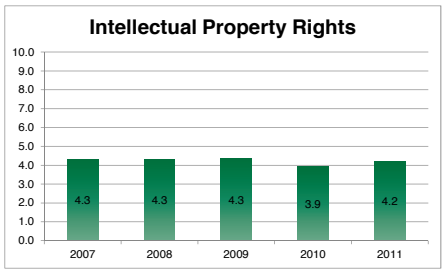
IPRI in Ukraine decreased for the second consecutive year. LP also increased for the first time since 2008. *Judicial Independence* was the only sub-component that changed positively.

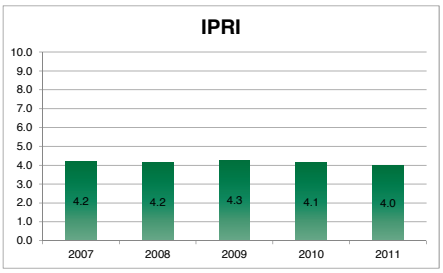
The PPR score was affected by the changes in *Protection of Property Rights* and *Access to Loans*.

IPR made a significant positive change in 2011. *Protection of Intellectual Property* is the most prevalent aspect to this significant change.



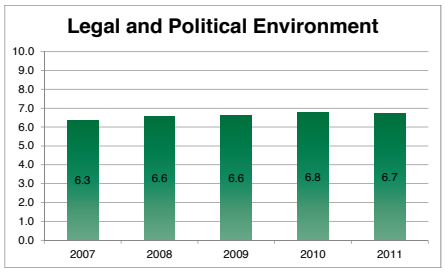

## UNITED ARAB EMIRATES

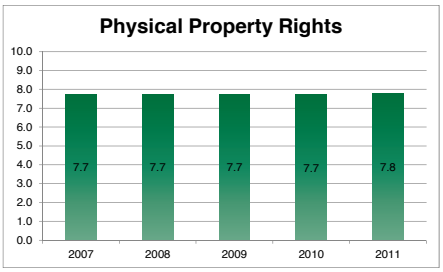
World Rank: 21 Regional Rank: 1

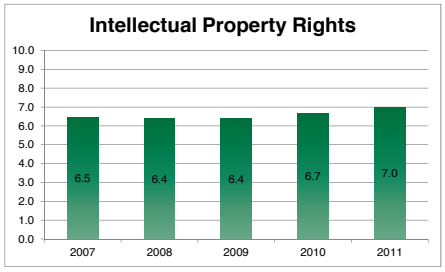
IPRI modestly increased for the third consecutive year. LP decreased slightly by 0.1 points due to the negative changes in *Rule of Law* and the unchanging *Judicial Independence*.

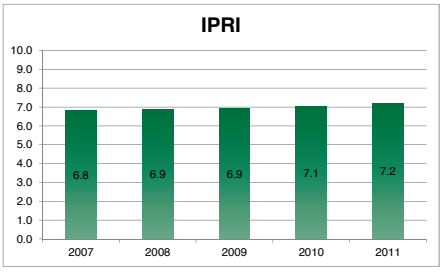
The PPR score has changed for the first time since data has been available. It made a modest increase in 2011. *Registering Property* has made the most significant increase from 9.3 to a 10 because it takes one day to register property.

IPR has made a significant increase because of the increase in *Protection of Intellectual Property*.



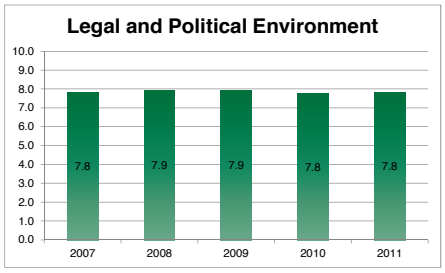
## UNITED KINGDOM

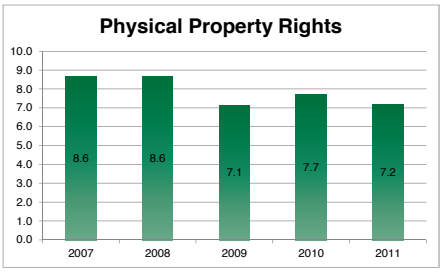
World Rank: 14 Regional Rank: 10

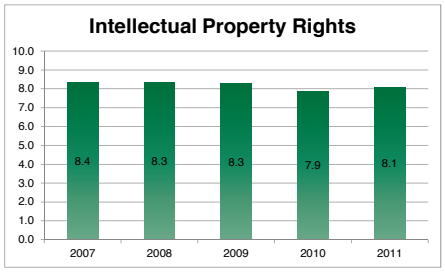
The United Kingdom saw a negative change in IPRI. This trend has been happening since data has been available when this country's IPRI started out at 8.3 and has now decreased to a 7.7 score. LP has remained unchanged for the second consecutive year. *Judicial Independence* has, however, made a significant increase by a whole point.

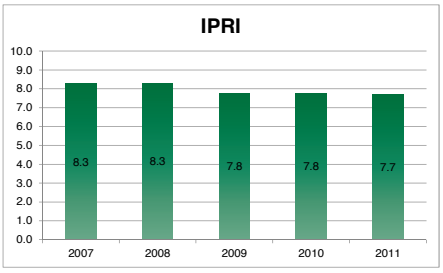
In 2011, the PPR score decreased significantly by half of a point. Despite the increases in *Protection of Physical Property Rights* and *Registering Property*, *Access to Loans* made a drastic drop of 2.6 points.

The IPR score increased significantly this year by 0.2 points. This is largely due to the increase in *Protection of Intellectual Property*.



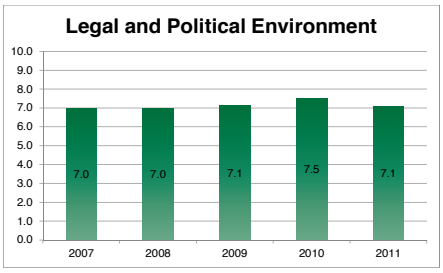

## UNITED STATES

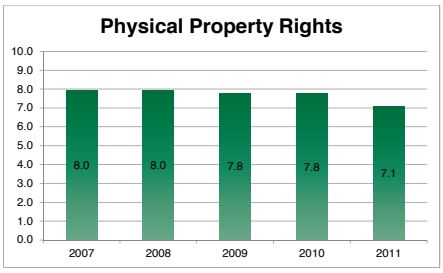
World Rank: 17 Regional Rank: 2

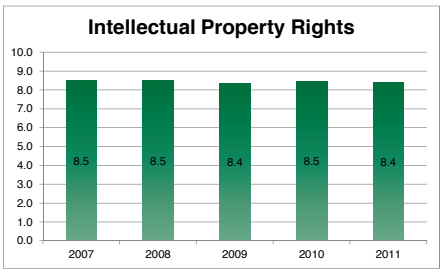
IPRI in the United States has taken a notable decline, by .4 points. All components of IPRI have decreased in 2011. All sub-components of LP have decreased. *Rule of Law* is, however, still the highest scoring component of LP.

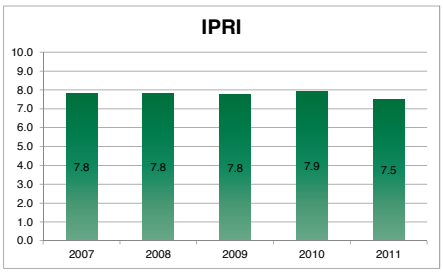
PPR has decreased the most significantly. All of its sub-components decreased except *Registering Property,* which only increased by 0.1 points.

IPR regressed back to its 2009 score of 8.4. IPR is still the highest scoring IPRI component though. *Protection of Intellectual Property* was the only sub-component that decreased, but that made the difference in the overall IPR score, despite the positive changes in the other sub-components.



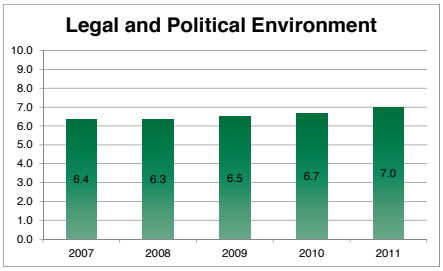
## URUGUAY

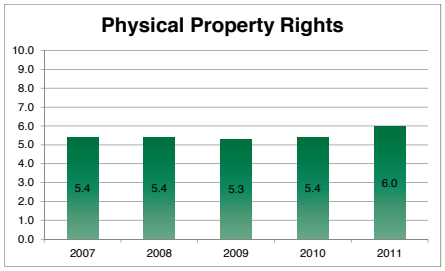
World Rank: 44 Regional Rank: 3

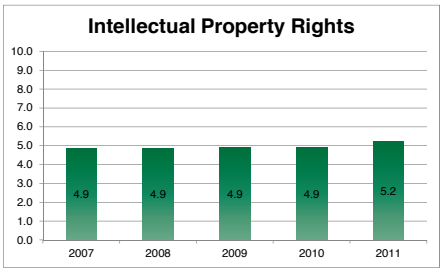
For the third consecutive year, IPRI in Uruguay increased. LP continued last year's progress thanks to improvement in all four sub-component scores. The most notable change was a 0.8 point improvement for *Judicial Independence*.

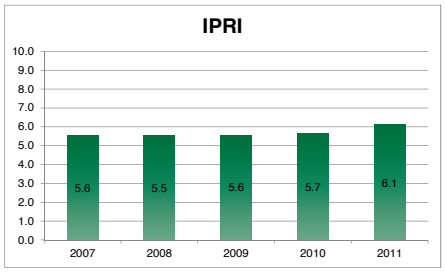
*Access to Loans* jumped a point and a half in 2011. This combined with an improvement in *Protection of Physical Property* to push PPR up 0.6 points.

Professional opinion regarding the intellectual property environment in Uruguay improved this year. Along with a slight improvement in *Copyright Piracy* this resulted in a 0.3 point increase for IPR.



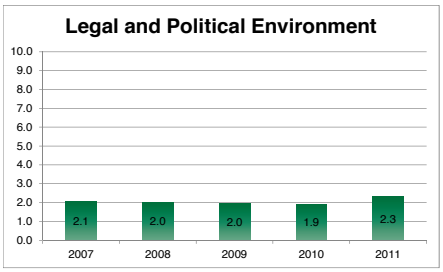

## VENEZUELA

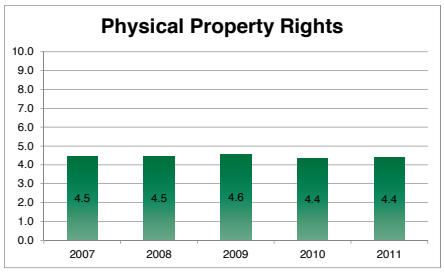
World Rank: 129 Regional Rank: 22

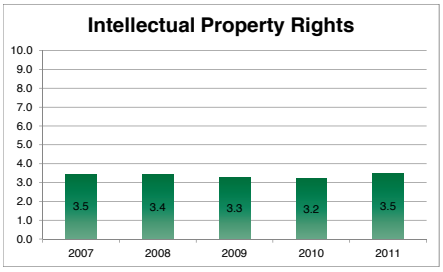
Despite improvement in all three components Venezuela had the lowest IPRI for 2011. LP improved 0.3 points but was still a dreadful 2.3. *Control of Corruption* and *Rule of Law* both declined, with the latter falling to the lowest score in the world at 1.2.

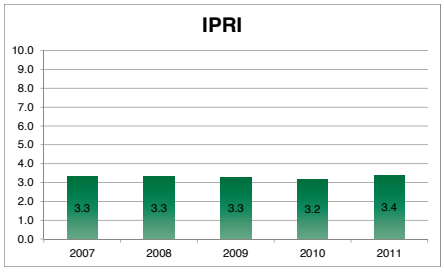
PPR remained the same as last year. A 0.4 increase in *Protection of Physical Property* was offset by a 0.3 decrease in *Access to Loans*.

IPR grew 0.3 points thanks to a notable improvement in the professional opinions regarding Venezuela's intellectual property environment. This was slightly dampened by a small rise in the amount of copyright piracy.



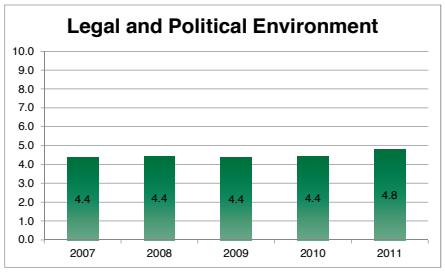
## VIETNAM

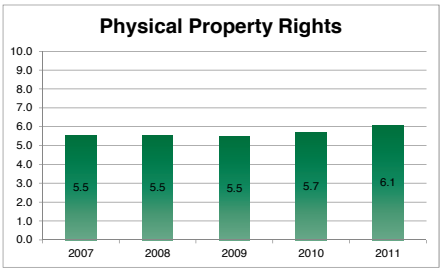
World Rank: 81 Regional Rank: 14

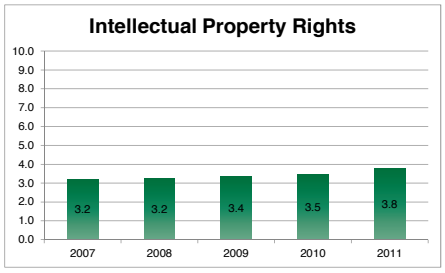
Vietnam continued its improvement in IPRI for 2011. *Control of Corruption* rose half a point while *Judicial Independence* increased a whole point. This improvement was somewhat tempered by a decline in *Political Stability*, resulting in a 0.4 gain for LP.

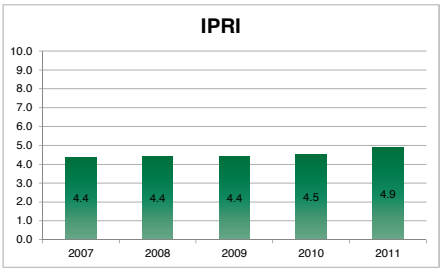
PPR saw improvement across all sub-components, with the largest change being a 0.8 increase for *Access to Loans*. This led to a 0.4 gain for PPR as well.

*Copyright Piracy* rose half a point, though it was still a low score at 1.5. Improving expert opinions reflected this change and *Protection of Intellectual Property* rose as well, pushing IPR up 0.3 points.



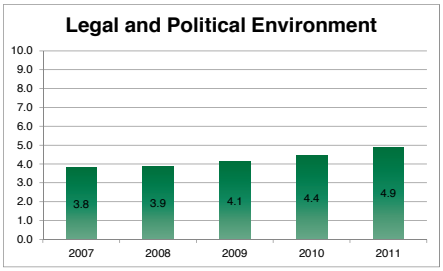

## ZAMBIA

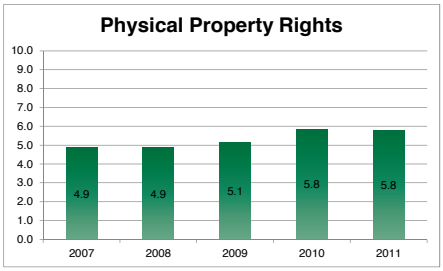
World Rank: 84 Regional Rank: 11

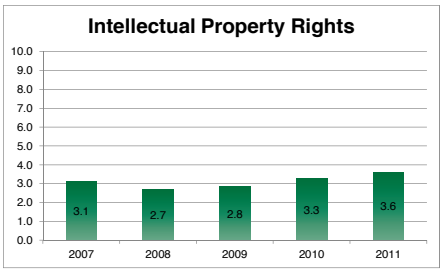
IPRI in Zambia improved for the third consecutive year. Zambia saw notable gains of 0.4 and 1.2 for *Control of Corruption* and *Judicial Independence* respectively. This resulted in a rise of 0.5 points for LP.

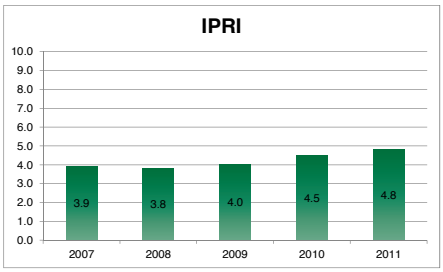
PPR remained stable at a score of 5.8 again this year. A 0.3 increase in *Access to Loans* was offset by a 0.3 decrease in *Protection of Physical Property.*

Expert opinion regarding Zambia's intellectual property environment improved this year, raising *Protection of Intellectual Property* a whole point. Copyright piracy levels were unchanged, resulting in a net increase of 0.3 for IPR.



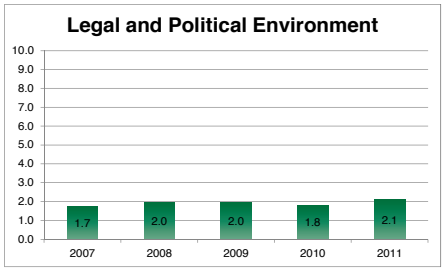
# ZIMBABWE

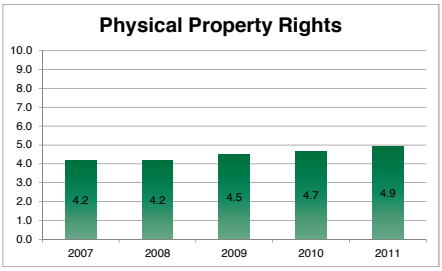
World Rank: 128 Regional Rank: 25

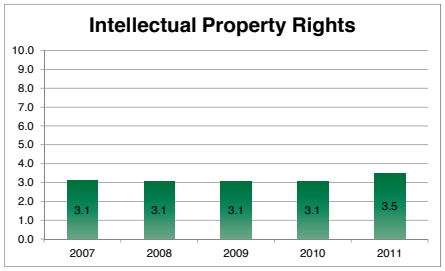
IPRI improved in 2011 but Zimbabwe remains one of the lowest scoring countries in the world. LP increased 0.3 points thanks to gains in *Judicial Independence* and *Political Stability*. The improvement would have been greater had it not been for deterioration in Rule of Law and Control of Corruption.

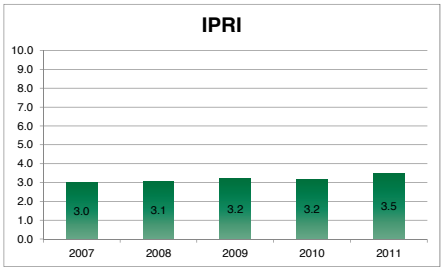
PPR increased for the third year in a row. *Protection of Physical Property* rose 1.3 points to 3.1. This improvement was somewhat offset by a 0.6 point deterioration in *Access to Loans*.

IPR improved after four years of stagnation. The 0.4 point increase was due to improved expert opinion regarding Zimbabwe's protection of intellectual property rights. *Copyright Piracy* was unchanged.



# 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. | 2010-2011 | 139 | World Economic Forum - Global Competitiveness Report http://gcr.weforum.org/ | 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. | 2009 | 213 | World Bank Institute - Governance Matters 2010: Worldwide Governance Indicators, 1996-2009 http://info.worldbank.org/governance/wgi/index.asp | 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. | 2009 | 213 | World Bank Institute - Governance Matters 2010: Worldwide Governance Indicators, 1996-2009 http://info.worldbank.org/governance/wgi/index.asp | 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 domenstic violence and terrorism. |
| Control of Corruption | -2.5 (worst) - 2.5 (best) | The original data was rescaled to a scale of 0 - 10. | 2009 | 213 | World Bank Institute - Governance Matters 2010: Worldwide Governance Indicators, 1996-2009 http://info.worldbank.org/governance/wgi/index.asp | 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. | 2010-2011 | 139 | World Economic Forum - Global Competitiveness Report http://gcr.weforum.org | 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 standartized to a 0-10 scale. | 2010 | 183 | The World Bank Group - Doing Business 2010 http://www.doingbusiness.org | 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. | 2010-2011 | 139 | World Economic Forum - Global Competitiveness Report http://gcr.weforum.org | 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. | 2010-2011 | 134 | World Economic Forum - Global Competitiveness Report http://gcr.weforum.org | 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. www1.american.edu/cas/econ/faculty/park/Web%20Page%20Update%2010-08/IPP%20Data.xls 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 - Vi)/10. The average of all industries' piracy level was taken to calculate final rescaled value. | 2009 | 110 | International Intellectual Property Alliance's Special 301 Report submitted to the U.S. Trade Representative http://www.iipa.com/2010_SPEC301_TOC.htm. Additional data was obtained from Seventh Annual BSA and IDC Global Software Piracy Study http://global.bsa.org/globalpiracy2009/index.html. | 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)<br>0.5 (average)<br>1 (worst) | The original data was rescaled to a scale of 0 - 10. | 2009 | 124 | OECD Gender, Institutions and Development Database (GID-DB) http://www.oecd.org/dev/gender/gid | 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)<br>0.5 (average)<br>1 (worst) | The original data was rescaled to a scale of 0 - 10. | 2009 | 124 | OECD Gender, Institutions and Development Database (GID-DB) http://www.oecd.org/dev/gender/gid | 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)<br>0.5 (average)<br>1 (worst) | The original data was rescaled to a scale of 0 - 10. | 2009 | 124 | OECD Gender, Institutions and Development Database (GID-DB) http://www.oecd.org/dev/gender/gid | 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)<br>0.5 (average)<br>1 (worst) | The original data was rescaled to a scale of 0 - 10. | 2009 | 124 | OECD Gender, Institutions and Development Database (GID-DB) http://www.oecd.org/dev/gender/gid | 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)<br>0.5 (average)<br>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) http://www.oecd.org/dev/gender/gid | 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 |
|---|---|
| Africa | ANGOLA |
| Africa | BENIN |
| Africa | BOTSWANA |
| Africa | BURKINA FASO |
| Africa | BURUNDI |
| Africa | CAMEROON |
| Africa | CHAD |
| Africa | COTE D'IVOIRE |
| Africa | ETHIOPIA |
| Africa | GHANA |
| Africa | KENYA |
| Africa | MADAGASCAR |
| Africa | MALAWI |
| Africa | MALI |
| Africa | MAURITANIA |
| Africa | MAURITIUS |
| Africa | MOZAMBIQUE |
| Africa | NIGERIA |
| Africa | RWANDA |
| Africa | SENEGAL |
| Africa | SOUTH AfricaRICA |
| Africa | SWAZILAND |
| Africa | TANZANIA |
| Africa | UGANDA |
| Africa | ZAMBIA |
| Africa | ZIMBABWE |
| Asia and Oceania | AUSTRALIA |
| Asia and Oceania | BANGLADESH |
| Asia and Oceania | BRUNEI |
| Asia and Oceania | CHINA |
| Asia and Oceania | HONG KONG |
| Asia and Oceania | INDIA |

| Region | Country |
|---|---|
| Asia and Oceania | INDONESIA |
| Asia and Oceania | JAPAN |
| Asia and Oceania | MALAYSIA |
| Asia and Oceania | NEPAL |
| Asia and Oceania | NEW ZEALAND |
| Asia and Oceania | PAKISTAN |
| Asia and Oceania | PHILIPPINES |
| Asia and Oceania | SINGAPORE |
| Asia and Oceania | SOUTH KOREA |
| Asia and Oceania | SRI LANKA |
| Asia and Oceania | TAIWAN |
| Asia and Oceania | THAILAND |
| Asia and Oceania | VIETNAM |
| Central/Eastern Europe and Central Asia | ALBANIA |
| Central/Eastern Europe and Central Asia | ARMENIA |
| Central/Eastern Europe and Central Asia | AZERBAIJAN |
| Central/Eastern Europe and Central Asia | BOSNIA AND HERZEGOVINA |
| Central/Eastern Europe and Central Asia | BULGARIA |
| Central/Eastern Europe and Central Asia | CROATIA |
| Central/Eastern Europe and Central Asia | CZECH REPUBLIC |
| Central/Eastern Europe and Central Asia | ESTONIA |
| Central/Eastern Europe and Central Asia | GEORGIA |
| Central/Eastern Europe and Central Asia | HUNGARY |
| Central/Eastern Europe and Central Asia | KAZAKHSTAN |
| Central/Eastern Europe and Central Asia | LATVIA |
| Central/Eastern Europe and Central Asia | LITHUANIA |
| Central/Eastern Europe and Central Asia | MACEDONIA |
| Central/Eastern Europe and Central Asia | MOLDOVA |
| Central/Eastern Europe and Central Asia | MONTENEGRO |
| Central/Eastern Europe and Central Asia | POLAND |
| Central/Eastern Europe and Central Asia | ROMANIA |
| Central/Eastern Europe and Central Asia | RUSSIA |

| Region | Country |
|---|---|
| Central/Eastern Europe and Central Asia | SERBIA |
| Central/Eastern Europe and Central Asia | SLOVAKIA |
| 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 | IRAN |
| 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 | LEBANON |
| 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 KINGDO |

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# End Notes

[i] For more information on the fellowship, see *http://www.propertyrightsalliance.org/hernando-soto-fellowship-program-a2865*

[ii] As defined by the World Intellectual Property Organization (WIPO) at *http://www.wipo.int/about-ip/en/*

[iii] GDP per capita data are from the World Development Indicators Online (2010).

[iv] FDI inflows data are from the World Development Indicators Online (2010). Please note that data on Luxembourg are removed from the data set. Luxembourg's FDI inflows as a percentage of GDP averaged over 300 percent over 2005–2009, which is more than eight times higher than the highest percentage among all other countries. Thus, Luxembourg presents a clear outlier whose removal is necessary for this analysis.

[v] 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.

[vi] GDP growth data are from the World Development Indicators Online (2010). Developing countries are defined as low-income and lower-middle income countries, according to the World Bank country classification available at *http://data.worldbank.org/about/country-classifications*. In total, 49 countries are classified as developing. Additionally, data on GDP growth for Angola were excluded from the analysis. Angola experience unusually high growth levels for three of the years under study (21%, 19%, and 20% from 2005-2007) while the previous five year period averaged a more reasonable 6.8%. GDP growth data for Zimbabwe were also eliminated as only two years during a period of hyperinflation were available.

[vii] In one case, the social rights score actually exceeds the 0–10 scale. Jamaica's score for social rights is 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 minor change in the overall gender equality score (from 8.1 to 8.0). Other countries with a literacy ratio slightly over 10 that do not cause their social rights score to be over 10.0 are not top coded.

# NOTES

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 2011 edition contains the ranking of 129 economies, which represents 97 percent of the world GDP.

The 2011 edition contains the IPRI rankings, rankings by IPRI core components, regional distribution of IPRI scores, and changes in IPRI scores since 2010. The 2011 edition again 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.

The 2011 report features a variety of case studies on 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 2011 IPRI include the following: immigration and Property, The Nisga'a Landholding Transition Act, A Half Century of Land Reform Experience in Nepal, The Coase Theorem and Informal Property Rights, and Preservation vs. Property Rights in Hong Kong.

In its effort to produce the IPRI, PRA has secured the support of 67 think tanks and policy organizations in 53 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 2011 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.

**www.internationalpropertyrightsindex.org**

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