# 2013REPORT



Study conducted by Francesco Di Lorenzo, 2012 Hernando de Soto Fellow

and Property Rights by Hernando de Soto



## 2013 IPRI PARTNER ORGANIZATIONS



















































































































































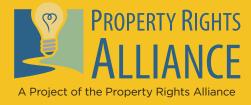


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# 2013REPORT

INTERNATIONAL PROPERTY RIGHTS INDEX

Study conducted by Francesco Di Lorenzo, 2012 Hernando de Soto Fellow



## 2013 INTERNATIONAL PROPERTY R



## GHTS INDEX RANKING BY QUINTILE



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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.

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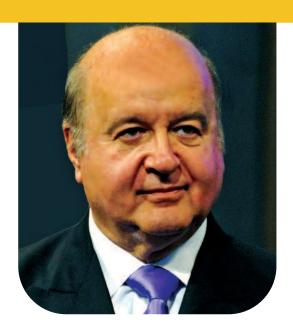
Digital copy and data are available at www.internationalpropertyrightsindex.org

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# 2013 IPRI INTRODUCTION

## HERNANDO DE SOTO

ast year I reported on my organization's (Institute for Liberty and Democracy – ILD) recent research into the economic roots of the Arab Spring. After 20 months of fieldwork – on top of ten years' experience working with a number of governments in the Middle East and North Africa (MENA) – we concluded that the Arab Spring was a massive rebellion against economic constraints to growth; primary among those obstacles is the widespread lack of enforceable property rights.

For an update on the ILD's findings, I recommend reading my colleague, Ana Lucia Camaiora's, case study on Tunisia in this edition (see p. 111). I think you'll find her report a boost from the gloomy news reports you've been reading about how the Arab Spring has failed – and turned into "the Arab Winter." To be sure, the new MENA governments all have their own political and economic challenges, to say the least. But from the point of view of those of us who care about expanding property rights throughout the developing world, there is a lot of good news coming out of the MENA region – where, according to conventional wisdom, the people are not supposed to even want to take part in a modern market economy.

Our research has demolished that myth with evidence that some 380 million Arabs are dependent on the market; their problem is that they hold most of their property and business assets without the protection of the law. We've published and debated our findings and recommendations for reform in the regional as well as international press, which have resulted in requests for proposals from MENA governments and partnerships with major business organizations to advance their own reform initiatives. Policymakers at the White House, the U.S. Congress, State Department, and 10 Downing Street have invited us to discuss our findings and reform recommendations.

In the face of such persistent distractions as political wrangling, weak economies, and a populace angry at the slow pace of change, MENA reformers need outside support and leadership to keep reform at the top of their political agendas. The irony is that getting U.S. and European leaders to focus on the importance of property rights to economic growth – and peace – in the Arab world has been a challenge, even with well-known advocates

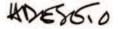
of the power of entrepreneurship and investment. I've finally figured out what the problem is, and it's a lesson that those of us promoting property rights must keep in mind.

Too many in the West, where property rights seems as natural as the air we breathe, have forgotten how important such rights were in helping Europe and the U.S. make the transition from the Old Regime into the Industrial Revolution. They tend to view property rights as essentially the protection of ownership – whether controlling assets, transferring real estate, distributing land, or marking parcel boundaries. What they miss is that property rights have evolved from those original functions to play other roles in modern society – like the feathers of a bird that might have originally evolved to keep that creature warm but later were adapted for flight. Similarly, as the modern economy evolved, property rights were adapted into the sine qua non of successful entrepreneurship – enabling entrepreneurs to collaborate to create wealth.

Here in Peru – and also in the Arab world – where property rights are scarce, the consequences of operating without the protection of the law are clear to anyone walking down a city street where one sees the same vendors and small business people working night and day – and getting nowhere –because they cannot collateralize their assets to get the credit and capital needed to prosper without property rights.

Property documentation is where owners carefully record on official paper or local ledgers their valuable assets. Such facts produce the trust that allows credit and capital to flow and global markets to work. They give players in the economy the means to interpret the situation that others are in and thus help everyone figure out how they can connect with each other. Thus, economic facts shine the lights on places and situations we cannot see. Such facts are beautifully designed short cuts to economic knowledge. And the closest we can get to those kinds of facts is through the legal property system.

The ILD's research in the MENA region has revealed that a massive number of Arabs – like billions of other ordinary people throughout the developing and post-Soviet world –are beginning to understand that their dreams of a better life depend not just on ambition, hard work or even talent. The first thing they must do is get inside the legal system. But even before they can implement the reforms to make that happen, reform-minded governments have their own obstacles to contend with – such as the resistance to "Western influence" and building a broad-based constituency for reform among their elites as well as the majority of their people. As the Arab world makes its transition to its own Industrial Revolution, they could use all our support.



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

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

What would the world be like without property rights? How would people live and organize themselves harmoniously? How would a company or a start-up defend its own trademarks and copyrights without a consolidated intellectual property rights system? How would democratic countries build and strengthen their free-market economies and improve their rule of law and governance without a fair and transparent legal and political environment?

These are some of the questions that Property Rights Alliance (PRA) tries to answer with the 2013 edition of the International Property Rights Index.

The International Property Rights Index, now in its seventh edition, provides those answers through metrics and international comparative analysis using political and economic data from 131 countries. This Index will provide an important source of information for all policymakers and business communities who want to understand how the three core components of property rights systems (Legal and Political Environment; Physical Property Rights; Intellectual Property Rights) are protected or affected in the world.

The PRA is committed to advocating for political, physical and intellectual property; these are the key pillars for improving rule of law, governing democratically, and boosting every free economy in the world.

On behalf of the Property Rights Alliance, I would like to thank all of those who contributed to the development of the 2013 International Property Rights Index. My true appreciation goes to PhD candidate Francesco Di Lorenzo, the 2012 Hernando De Soto Fellow and author of this year's index, who has provided an outstanding upgrade to this edition.

Last but the least, I would like to express my deep gratitude to Dr. Hernando de Soto for his longstanding and tireless efforts to promote and advocate property rights around the world. The International Property Rights Index is possible thanks to his inspiring work that allows PRA to create this eponymous fellowship that made this publication possible.

Sincerely,

Lorenzo Montanari

Executive Director of the Property Rights Alliance

Washington, DC, USA

Junio Tomom.

#### **FOREWORD**

Gerardo Bongiovanni President, Fundación Libertad Rosario, Argentina

Private property is fundamental for the basis of the organizations of a free market and democratic society. It means not just entitling people with the right to decide on property or goods but also the security and protection of these possessions such as, avoiding intrusions and external interferences. Only with the assurance that property will not be invaded, will peace and welfare be achieved.

Within this framework, John Locke established in his Second Treatise on Civil Government (1690) that the State's main objective should be the preservation of property. Along the same lines, Thomas Hobbes mentioned in his Leviathan (1651) the consequences of the absence of a State that protects the lives, liberties, and property of the individuals:

"In such a situation there is no opportunity for industry, because the fruit thereof is uncertain, and consequently no culture of the earth, no navigation, nor use of the items that may be imported by sea or comfortable buildings [...] and worse, there is constant fear and danger of violent death, and the life of man is solitary, poor, nasty, brutish and short".

Furthermore, it is the right to property that makes the voluntary transfer of assets that each individual possesses possible, resulting in exchange and economic growth. As Alberto Benegas Lynch (Jr.), states: "the right to property begins with the right to the own body and mind, and continues with the assets that have been appropriated by the first occupant, or, if applicable, the result of free and voluntary transactions between owners of property or providers of own services". In this context, prices arise from property rights transactions.

In turn, this economist says that private property can provide information so that scarce resources are allocated in the best possible way according to the tastes and preferences of the people, while recognizing rights that belong to human beings and enable them to follow their inclinations as such. The institutional framework and the corresponding justice and protection agencies acknowledge but do not establish or invent those rights.

In fact, respect for free decisions about goods and properties that belong to each person plays a central role in the development of nations. Only then, can genuine and lasting progress be achieved; otherwise, incentives for investment and production vanish and without them, social and economic stagnation occurs. This premise is demonstrated from the analysis of correlation between ownership and economic growth.

#### Property and Development Rights

Differences in the level of development between the different countries lead to the question of why some economies achieve a greater income per individual than others. Many theories have been outlined on this, such as the possession of natural resources, which fell under its own weight when it was shown that economies with little natural wealth had made significant developments.

Also, the accumulation of human and technological resources has been regarded as a determining factor; however, little research has been done on the necessary conditions for the latter to thrive. While these concepts will obviously affect the progress of an economy, it is natural to wonder what the aspects that allow us to have developed human and technological resources are.

As the economist Enrique Blasco Garma says, the difference between rich and poor nations lies in the strength with which the social network gets consensus to acknowledge individual rights and agree on activities. Precisely, 80% of the wealth in rich countries and almost 60% in the cases of the poorest countries can be explained by this factor. Similarly, at an aggregate level, it is concluded that 78% of the wealth in the world is attributed to this component.

Respect for property rights is a fundamental element for the wealth of a society. Property enables price formation, free and voluntary transactions, and therefore, economic development and growth. Hence, the importance of avoiding the external interferences

that threatens it. Individuals must know that they can freely decide on their assets as well as on the result of their work to operate in an economy. Only in a setting that provides this guarantee, will there be a place for investment and business development.

The international experience tells us what to do to get out of this vicious circle. Correlation between respect for property rights and development in countries is more than eloquent, as discussed above. Those countries where there is a stronger protection for private property are the ones that have a greater income per capita and less poverty.

Argentina must introduce structural reforms towards higher institutional quality. Then, it will be able to consolidate its growth and make it inclusive and far-reaching, rather than merely conjectural.

#### **International Property Rights Index**

The International Property Rights Index is quality research that was developed in 2007 by Property Rights Alliance (USA), which has been sponsored by more than 70 institutions from all continents, such as; Friedrich A.V. Hayek Institute, Institute for Public Affairs, Centre for Free Enterprise, and Libertad y Desarrollo.

The International Property Rights Index is the first international study measuring the importance of property rights, both physical and intellectual, as well as how property rights protect economic welfare. It is made of 10 variables, focusing on three areas: Legal and Political Environment (judicial independence, confidence in the courts, political stability, and corruption); Physical Property Rights (protection of property rights, property records, and access to credit); Intellectual Property Rights (protection of IP, strength of patents, and copyright piracy).

This research analyzes data from 131 countries all over the world, representing 98% of world GDP. It develops a measurement that ranks countries according to their protection of property rights. The scale of total classification of IPRI ranges from 0 to 10, where 10 stands for the strongest level of protection of property rights and 0 represents a lack of security regarding a country's property rights.

In this edition, apart from the general research, there will be four reports a) Tunisia and the Arab Spring, b) the system of property in Venezuela, c) the system of property rights in China, d) the system of property rights in Thailand.

I believe this new edition of the International Property Rights Index contributes the necessary analysis on the importance of giving value and fostering respect for property rights, considering that only by virtue of their stability can genuine and sustained development be achieved. Slowly, the world understands that institutional quality is, ultimately, what makes the differences for social and economic growth. Among the many social institutions, property has an undisputed prominent role. Only with defined and well-respected property rights, humanity has overcome poverty and precariousness. Property rights also manage to satisfy more and more needs, and increase the standard of living of the population.

I celebrate this new edition of the International Property Rights Index that not only enlightens us with a detailed analysis of the global picture, but also warns us about the dangers of unprotected property rights, the first step to autocracy and totalitarian regimes, as Hayek teaches us in Road to Serfdom.

It is a hope that future editions of the IPRI will continue to demonstrate improved conditions for property rights globally. That the protection of property becomes more and more institutionalized year after year. I'm sure that's the path that will lead us to a brighter and more successful future.

#### **ACKNOWLEDGEMENTS**

We would like to express our gratitude for Hernando de Soto's leadership in being at the forefront on discussions about the challenges posed by lack of secure property rights. His vision for creating a world with greater security of property rights continues to inspire our work on the index. We are honored to have the fellowship bear his name and are grateful for his continued support and guidance. We look forward to working with him and the scholars at the Lima-based Institute for Liberty and Democracy (ILD) in the future.

We are particularly thankful for the financial and intellectual support of Grover Norquist and the Americans for Tax Reform Foundation (ATRF). Needless to say, their support for the Hernando de Soto Fellowship program has made it possible for us to publish the International Property Rights Index (IPRI) annually. We are also thankful to the staff at Americans for Tax Reform (ATR) for their assistance throughout the project.

As Property Rights Alliance, we are immensely thankful to all the contributors for the four case studies on Tunisia, Venezuela, China, and Thailand. Special thanks go to the following: Dr. Ana Lucia Camaiora from the Institute for Liberty and Democracy for providing a special study on the lack of property rights in Tunisia as one of the main causes for sparking the Arab Spring; Prof. Luis Alfonso Herrera and Prof. Felipe Benitez from Centro de Divulgación del Conocimiento Económico (CEDICE) for their analysis on deteriorated status of the property rights in Venezuela; Prof. Xingyuan Feng, Prof. Christer Ljungwall, and Prof. Yeliang Xia from the Chinese Academy, Copenhagen Business School, and Peking University respectively- their outstanding research on the protection of property rights in China is illuminating and inspiring; last but not least, a sincere thanks goes out to Prof. Kriengsak Chareonwongsak, Senior Fellow, Harvard University for providing an interesting update about his previous case study published in the 2009 IPRI.

Special thanks are due to Gaurav Tiwari (2011 Hernando de Soto Fellow) for his time in helping us build on last year's index.

We extend, further, our special appreciation to the PRA's Associates Christopher Elmiger and Rachelle Korinko for their outstanding research assistance. Their efforts, knowledge, and hard work made it feasible to include the country profiles in the IPRI. A special thanks to PRA's Associate Heidi Kruger, Ph.D. student at ESADE Business School whose research interests are in the relationship between entrepreneurship and innovative.

We thank Giovanni Bongiovanni for his foreword to this year's index and we admire his tireless work on defending free-market principles and rule of law, not only in Argentina but also in Latin America, through his Think Tank Fundación Libertad. This year they celebrate their 25th anniversary.

We gratefully appreciate the continued support and commitment of our 74 international partner organizations from more than 50 countries, without them it would be impossible to promote and advocate property rights around the world. We welcome our new partners to this year's index.

Francesco di Lorenzo, 2012 Hernando de Soto Fellow, Property Rights Alliance

Lorenzo Montanari, Executive Director, Property Rights Alliance

#### PREMISE OF THE HERNANDO DE SOTO FELLOWSHIP PROGRAM

The International Property Rights Index (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 deal with this lack of a more broadly defined property rights assessment, in 2006 the PRA promoted the Hernando de Soto Fellowship. The fellowship provides a chance to develop and analyze global data in property rights and conceptually discuss them within the annual publication International Property Rights Index, presented here in its seventh edition.

#### ABOUT THE AUTHOR

Francesco Di Lorenzo is a Ph.D. candidate in Management Science at ESADE Business School (Universitat Ramon Llull) and a visiting research scholar at McDonough School of Business (Georgetown University).

His main research interests are in the Strategic Management and Economics and Management of Innovation areas. More specifically, they include: mobility of inventors, individual innovative performance, innovation routines, organizational learning, alliances, and evolutionary and behavioral theories of the firm. He was a visiting researcher at Bocconi University (Italy). He is a member of the Academy of Management (AOM), Strategic Management Society (SMS) and DRUID Society. His work has been presented at leading international conferences (including AOM, SMS) and currently under review in top academic journals.

His main teaching areas are: strategic management, international strategy and corporate strategy. He is a lecturer at ESADE Business School for the Master of Science in International Management and Undergraduate programs (both in English and Spanish). He is also a teaching assistant for the Executive MBA at McDonough School of Business.

Before starting the Ph.D. studies in ESADE, Francesco received a B.A. in Business and Economics and a MSc. in Business and Administration at Bocconi University. He worked for the United Nations as a junior analyst for UNICEF in the Programme Funding Office (PFO) in New York Headquarter, as a consultant for McKinsey&Co. and Accenture for the Management Consulting and Financial Markets division.

#### ABOUT THE CONTRIBUTORS

#### Case Study on Tunisia

Dr. Ana Lucia Camaiora, Legal Director of the Institute for Liberty and Democracy (ILD), Lima, Peru.

#### Case Study on Venezuela

Prof. Luis Alfonso Herrera and Prof. Felipe Benitez, Prof. Luis Alfonso Herrera and Prof. Felipe Benitez, Research Fellows at Centro de Divulgación del Conocimiento Económico (CEDICE), Caracas, Venezuela.

#### Case Study on China

Prof. Xingyuan Feng, Vice Director of Unirule Institute of Economics and Professor of Chinese Academy of Social Sciences, Beijing, China.

Prof. Christer Ljungwall, Associate Professor at the Department of International Economics and Management, Copenhagen Business School, Copenhagen, Denmark.

Prof. Yeliang Xia, Professor of School of Economics of Peking University, Beijing, China.

#### Case Study on Thailand

Prof. Kriengsak Chareonwongsak, Senior Fellow at Harvard University, Cambridge (MA), USA.

#### ABOUT THE 2013 INTERNATIONAL PROPERTY RIGHTS INDEX

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

This study is conducted annually, and compares the protection of property rights – physical and intellectual – across countries. Following the previous year's editions, a goal of the IPRI is to investigate the effects of a country's legal and political environment as well as the recognition and enforcement of physical and intellectual property rights on the economic development of a country. The 2013 edition of the IPRI compares 131 countries using three core components.

Due to expansions in the data available from our sources, this year the index was able to add the countries of Gabon, Haiti, Liberia, and Sierra Leone. The reader is reminded that some fluctuations in relative rankings could reflect changes in the sample of countries rather than substantive variation within a country's property rights regime. In order to better asses these changes in countries' performances, the author presents new tables demonstrating variation in the absolute IPRI scores as well as the component scores.

Since the first edition of the IPRI, the compilers of the index have tried to use the best data available while also maintaining the consistency and integrity of the index. By using the same weighing scheme as the previous year's index, the 2013 edition is able to remain congruous allowing for comparability of countries over time.

In order to better compare IPRI scores across time, country profiles have been included to demonstrate the progressions and regressions in a country's property rights regime.

Like the 2011 and 2012 IPRI, the gender equality component of the 2013 IPRI focuses exclusively on non-OECD countries. This is because the author believes it is important to understand how gender can impact land rights which in turn effects economic development.

The 2013 IPRI continues to build on previous years' indices and provide more comprehensive measures on property rights. While some aspects of the data collection and interpretation have continued to improve over the years, there are still a number of limitations and challenges present. We are confident that future editions of the report will be able to address and overcome these issues.

### **PARTNERS**

We would like to express our 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 feedback and ideas that allowed us to identify areas for improvement which will make the index an even more useful tool in advancing property rights.

This year, we have partnered with the following organizations:

Afghanistan's Economic And Legal Studies Organization (AELSO)	Afghanistan	www.aleso.org
Albanian Socio Economic Think Tank	Albania	www.aset-al.com
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Fundación Libertad	Argentina	www.libertad.org.ar
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Mexico

www.cidac.org

EBI Think Tank Institute Mongolia www.ebi.mn

Center for Entrepreneurship and Economic Development (CEED) Montenegro www.ceed-global.org

Center for Mozambican and International Studies Mozambique www.cemo-mozambique.org

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Alternate Solutions InstitutePakistanwww.asinstitute.orgPal-Think For Strategic StudiesPalestinian Territorieswww.palthink.org

Fundacion Libertad Panama www.fundacionlibertad.org.pa

 Institute for Liberty and Democracy
 Peru
 www.ild.org.pe

 Instituto de Libre Empresa
 Peru
 www.ileperu.org

Minimal Government Thinkers, Inc. Philippines www.minimalgovernment.net

Forum Obywatelskiego Rozwoju (FOR)

Ludwig von Mises Institute

Poland

www.mises.pl

Polish-American Foundation for Economic Research & Education (PAFERE)

Poland

www.pafere.org

Center for Institutional Analysis and Development (CADI)

Romania

www.cadi.ro

Center for Liberal-Democratic Studies Serbia www.clds.rs/newsite/naslovna.html

F. A. Hayek Foundation Slovakia www.hayek.sk/en

 The Free Market Foundation
 South Africa
 www.freemarketfoundation.com

 Civismo
 Spain
 http://www.civismo.org/es/inicio

EudoxaSwedenwww.eudoxa.seTimbroSwedenwww.timbro.se/enLiberales InstitutSwitzerlandwww.libinst.chInstitute of Future Studies for Development (IFD)Thailandwww.ifd.or.thAssociation for Liberal ThinkingTurkeywww.liberal.org.tr

The Ukrainian Reform Support Foundation Ukraine

Center for the Dissemination of Economic Knowledge (CEDICE) Venezuela www.cedice.org.ve

Zambia Institute for Public Policy Analysis (ZIPPA) Zambia

#### CHAPTER I: INDEX COMPOSITION AND COVERAGE

This chapter presents the concept behind developing the International Property Rights Index (IPRI), the three core components, and the 10 items used to compose it. Furthermore, this chapter includes detailed explanatory notes on the methodology employed during the creation of the index and the set of countries analyzed in the 2013 IPRI. This chapter concludes by pointing out some of the limitations of this study and presents future considerations.

#### The Concept

The IPRI was developed to serve as a barometer for the status of property rights across the world. The author reviewed a plethora of literature on property rights in order to conceptualize and operationalize what is meant by property rights. Following convention set in place by previously compiled indices, several experts and practitioners in the field of property rights have been consulted to finalize the set of core categories (hereto referred to as "components") as well as items that create the components.

The following are the three core components of the IPRI:

- 1. Legal and Political Environment
- 2. Physical Property Rights
- 3. Intellectual Property Rights

The Legal and Political Environment (LP) has a significant impact on the development and protection of physical and intellectual property rights. Consequently, the measures used for the LP are broad in scope. They serve to provide an insight into the impact of political stability and rule of law in a country.

The other two components of the index – Physical and Intellectual Property Rights (PPR and IPR) – reflect the two forms of property rights, both of which are crucial to the economic development of a country. The items included in these two categories account for both *de jure* rights and *de facto* outcomes of the countries considered.

#### **Items**

The 2013 IPRI is comprised of 10 items in total, which create the three components: LP, PPR, and IPR. While the author considered several items related to property rights, the final IPRI is specific to the core factors that are directly related to the strength and protection of physical and intellectual property rights. Furthermore, items for which data was available both more regularly and in a greater number of countries was given preference. This was done to ensure that the resulting scores were comparable across countries and years.

#### 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. As we continue to witness the recent events across the Middle East, a lack of property rights and economic freedom can breed economic and political instability. Therefore, the author considers the following four items as the building blocks of the LP component.

#### Judicial Independence

This variable examines the judiciary's freedom from influence by political and business groups. The independence of the judiciary is central for sound protection and sovereign support of the court system with respect to private property. (Source: World Economic Forum's 2012-2013 Global Competitiveness Index)

#### Rule of Law

This variable measures the extent to which agents of the labor force have confidence in and abide by the rules of society. In particular, it measures the quality of contract enforcement, police, courts, as well as, the likelihood of crime and violence. The variable combines several indicators; including, fairness, honesty, enforcement, speed, affordability of the court system, protection of private property rights, and accountability of the judicial and executive branches. This variable complements the judicial independence variable. (Source: World Bank Worldwide Governance Indicators, 2012 Update)

#### 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 able to acquire property or to develop trust in the validity of the rights attached.

(Source: World Bank Worldwide Governance Indicators, 2012 Update)

#### Control of 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. Similar 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 hinders respect for legal private property rights. (Source: World Bank Worldwide Governance Indicators, 2012 Update)

#### 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 for the access to credit which is necessary to convert property into capital. For these reasons, the following variables are used to measure private physical property rights.

#### 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 2012-2013 Global Competitiveness Index)

#### Registering Property

This variable reflects businesses' point of view on how difficult it is to register property in terms of both length of time and procedures necessary. According to The World Bank Group's Doing Business Report, the variable records the full sequence of procedures necessary to transfer the property title from seller to buyer when a business purchases land and buildings. 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 2013 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 2012-2013 Global Competitiveness Index)

#### Intellectual Property Rights (IPR)

The IPR component evaluates the protection of intellectual property (IP). 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.

#### 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 2012-2013 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 2005 Index of Patent Rights)

#### 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 2013 Special 301 Report, Ninth Annual BSA and IDC Global Software Piracy Study (2011))

#### Explanatory Notes on Methodology

The overall grading scale of the IPRI ranges from 0 to 10, where 10 is the highest value for a property rights system and 0 is the lowest value for a property rights system within a country. The same interpretative logic is applied to the three components and the items which form the components. While the average mechanisms applied assumes equal importance of each component for the final IPRI score (and also of each item for each component), the author acknowledges that weights could be applied in order to better capture relative importance of the different aspects of a property rights system of a country. Therefore, future IPRI reports are invited to further explore this issue.

The IPRI for 2013 focuses on the period from 2009 to 2013. Items are collected from different sources, which imply that they have different accessibility times for the most updated data available. The logic applied in the analysis has been to include the latest data available to the 2013 IPRI, and add accordingly any data from previous years. So, if an item was available only up until 2011 (because both the 2012 and 2013 were not made available yet from the data provider), we treat the 2011 as the most updated, therefore, as the 2013 data. Most of the items present a lag of 1 year (see **Appendix II**), so this "item time harmonization procedure" should not affect our analysis.

The 10 items included in the IPRI have been collected from different sources. Almost all the items needed to be rescaled from 0 to 10.

#### The Countries

The 2013 IPRI ranks a total of 131 countries from around the world. The selection of countries was solely determined by the constraint of available data. In order to increase the meaningfulness of the data and analysis, only country-year combinations respecting specific rules have considered; such as, 3 items for LP, 2 items for PPR, and 2 items for IPR. In other words, if a county in a specific year does not have data available for at least 3 items for LP, 2 items for PPR, and 2 items for IPR, it has been excluded from the analysis. The selected countries, 131 for the IPRI 2013, have been grouped in 7 regions: Latin America and Caribbean (LAC), Western Europe (WE), Central/Eastern Europe and Central Asia (CEECA), Middle East/North Africa (MENA), Africa (A), Asia and Oceania (AO), and North America (NA).

#### **Limitations and Future Considerations**

The data used in the construction of the IPRI is collected from third-party sources (ex. World Bank, World Economic Forum), and not generated by the author. While this helps to reduce the amount of potential bias, it limits the ability of the author to reconstruct any missing data.

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, the item, trademarks, was dropped from analysis because data was not up-to-date; this situation still persists. However, the author remains confident that in the future, reliable data will be available because of new developments in databases by authoritative sources. Additionally, the IPR data can significantly benefit from better measures of enforcement efforts in the area of intellectual property rights by national governments, private sector groups and non-profit organizations. 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, time-series aspects of the index continue to be used as the index enters its seventh year of publication. 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 the analysis. The author hopes 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 II: INDEX COMPOSITION AND COVERAGE

This chapter presents the results of the 2013 International Property Rights Index (IPRI). Below is a brief introduction of the data and the outputs. The results of the analysis are mainly presented following an ordinal logic. Starting from the ranking of the overall IPRI score, further analysis shows countries' ranking for each IPRI component and geographical areas. Variations between 2012 and 2013 of both individual IPRI components and of the overall IPRI score are considered. Finally, the chapter concludes with a descriptive analysis of the relationship between IPRI scores and some other important economic indicators.

#### **Brief Introduction on Data**

The IPRI's 2013 rankings are based on data obtained from official sources made publicly available by established international organizations (**Appendix I**). Most of these official sources collect their data from opinion surveys. Generally, experts in the inquired fields participate in the surveys by providing their judgments in numerical form. The rankings generated in the present document are based on experts' *perception* of the relative strength (or weakness) of a country's property rights system because it utilizes elite survey data collection methodology. These data are valid measures that approximate a country's real situation regarding the property rights system even though there is some subjectivity.

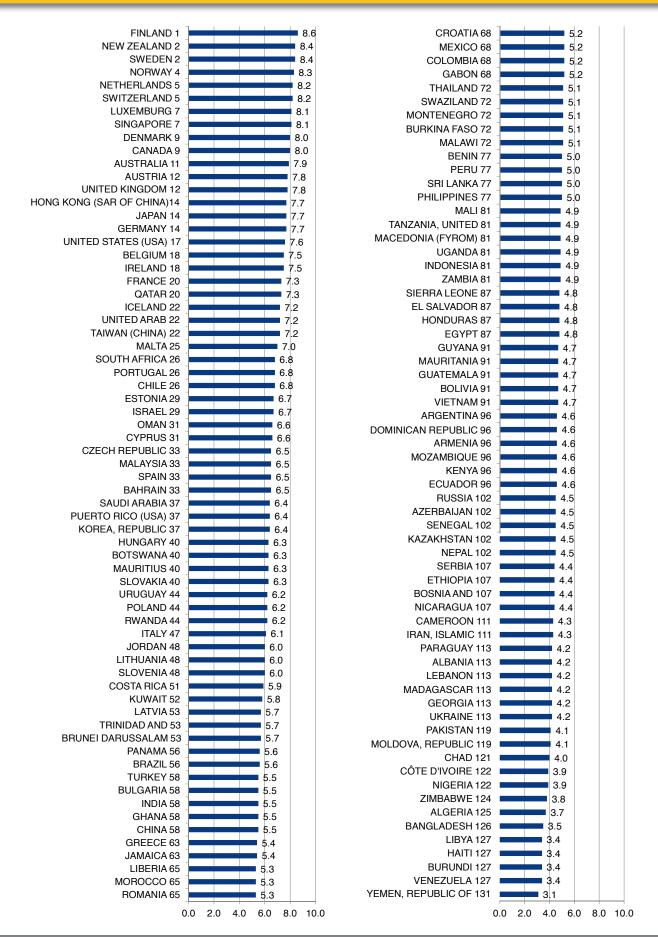
But, this limitation does not apply to every variable. In fact, some exceptions are; the number of procedures, level of piracy, and days necessary to register property (or to start a business). While these data are still collected using surveys, they do report *de facto* information (i.e. observational data).

Future versions of the IPRI Report should consider increasing the share of observational data in order to improve the reliability of the analysis. Some examples are data on property rights enforcement and the extent of formalization of property rights. These data are currently available for some more advanced economies. In spite of the trade-off between country data availability and global representation of the analysis' results, it would be appropriate to start a new data collection.

Finally, the collected data are gathered from different sources. This means that most data is provided in different styles (ordinal and cardinal) and on different scales. Consequently, the data is rescaled to 0-10 in order to compare between countries and within IPRI's individual component and overall score.

The 2013 IPRI Report provides rankings on the strength of the property rights system for 131 countries analyzed individually (both for 2013 and variation on the 2012 scores) as well as by different regions and economic indicators.

#### Figure 2: Ranking by IPRI Score



## Table 1: Ranking by IPRI Score

Country	IPRI	LP	PPR	IPR
FINLAND	8.6	8.9	8.3	8.6
NEW ZEALAND	8.4	8.9	8.2	8.2
SWEDEN	8.4	8.7	8.2	8.2
NORWAY	8.3	8.7	8.3	7.9
NETHERLANDS	8.2	8.6	7.7	8.3
SWITZERLAND	8.2	8.5	7.9	8.3
LUXEMBURG	8.1	8.5	7.6	8.2
SINGAPORE	8.1	8.3	8.2	7.9
DENMARK	8.0	8.6	7.2	8.1
CANADA	8.0	8.4	7.6	8.1
AUSTRALIA	7.9	8.3	7.4	7.9
AUSTRIA	7.8	7.8	7.4	8.1
UNITED KINGDOM (UK)	7.8	7.7	7.3	8.3
HONG KONG (SAR OF CHINA)	7.7	8.1	7.9	7.1
JAPAN	7.7	7.7	7.2	8.3
GERMANY	7.7	8.0	7.1	8.1
UNITED STATES (USA)	7.6	7.2	7.2	8.3
BELGIUM	7.5	7.6	6.8	8.1
IRELAND	7.5	8.1	6.5	7.9
FRANCE	7.3	7.3	6.7	7.9
QATAR	7.3	7.5	7.8	6.6
ICELAND	7.2	8.2	6.9	6.5
UNITED ARAB EMIRATES (UAE)	7.2	6.9	7.9	6.9
TAIWAN (CHINA)	7.2	6.8	7.8	7.1
MALTA	7.0	7.2	7.3	6.5
SOUTH AFRICA	6.8	5.7	7.1	7.5
PORTUGAL	6.8	6.5	6.7	7.1
CHILE	6.8	7.4	7.1	5.9
ESTONIA	6.7	7.1	6.9	6.0
ISRAEL	6.7	6.1	6.7	7.3
OMAN CYPRUS	6.6	6.3	7.8	5.7
CZECH REPUBLIC	6.6	6.7 6.3	7.0 6.4	6.1
MALAYSIA	6.5	5.7	7.7	6.1
SPAIN	6.5	6.4	6.3	6.7
BAHRAIN	6.5	5.5	8.1	5.9
SAUDI ARABIA	6.4	5.4	7.6	6.1
PUERTO RICO (USA)	6.4	6.3	6.1	6.9
KOREA, REPUBLIC	6.4	5.9	6.2	7.0
HUNGARY	6.3	6.0	5.9	6.9
BOTSWANA	6.3	7.1	6.9	5.0
MAURITIUS	6.3	6.7	7.1	5.0
SLOVAKIA	6.3	5.7	6.5	6.6
URUGUAY	6.2	7.1	6.2	5.2
POLAND	6.2	6.4	6.0	6.1
RWANDA	6.2	5.7	7.0	5.8
ITALY	6.1	5.6	6.1	6.6
JORDAN	6.0	5.3	6.8	5.8
LITHUANIA	6.0	5.8	6.3	5.9
SLOVENIA	6.0	6.5	5.7	5.8
COSTA RICA	5.9	6.3	6.2	5.1
KUWAIT	5.8	5.9	6.6	4.9
LATVIA	5.7	5.8	6.3	5.0
TRINIDAD AND TOBAGO	5.7	5.2	5.6	6.2
BRUNEI DARUSSALAM	5.7	7.0	5.4	4.6
PANAMA	5.6	4.3	7.0	5.5
BRAZIL	5.6	5.2	6.0	5.6
TURKEY	5.5	4.6	6.5	5.5
BULGARIA	5.5	4.8	6.0	5.7
INDIA	5.5	4.4	6.6	5.5
GHANA	5.5	5.3	5.7	5.6
CHINA	5.5	4.3	6.8	5.4
GREECE	5.4	5.0	5.3	5.9
JAMAICA	5.4	4.8	5.7	5.8
LIBERIA	5.3	4.3	6.2	5.3
MOROCCO	5.3	4.6	6.1	5.1

Country	IPRI	LP	PPR	IPR
ROMANIA	5.3	4.7	5.9	5.4
CROATIA	5.2	5.1	5.6	4.8
MEXICO	5.2	4.2	5.8	5.7
COLOMBIA	5.2	4.0	6.1	5.6
GABON	5.2	4.3	6.0	5.3
THAILAND	5.1	4.4	6.7	4.2
SWAZILAND	5.1	4.4	5.7	5.1
MONTENEGRO	5.1	5.3	6.4	3.6
BURKINA FASO	5.1	4.0	5.7	5.5
MALAWI	5.1	4.9	5.6	4.7
BENIN	5.0	4.2	5.5	5.3
PERU	5.0	3.9	6.6	4.5
SRI LANKA	5.0	4.7	5.8	4.4
PHILIPPINES MALI	5.0 4.9	3.5	6.1	5.3
TANZANIA, UNITED REPUBLIC OF		3.8	5.8	5.1
MACEDONIA (FYROM)	4.9 4.9	4.5 4.4	5.4 6.2	4.9
UGANDA	4.9	3.8	5.7	5.3
INDONESIA	4.9	4.0	6.7	4.1
ZAMBIA	4.9	4.8	6.3	3.7
SIERRA LEONE	4.8	3.9	5.2	5.2
EL SALVADOR	4.8	4.3	6.0	4.2
HONDURAS	4.8	4.1	5.9	4.4
EGYPT	4.8	4.0	5.7	4.7
GUYANA	4.7	4.2	5.6	4.3
MAURITANIA	4.7	3.4	5.5	5.3
GUATEMALA	4.7	3.6	6.3	4.1
BOLIVIA	4.7	3.9	5.7	4.5
VIETNAM	4.7	4.5	5.7	3.9
ARGENTINA	4.6	4.2	4.7	4.8
DOMINICAN REPUBLIC	4.6	4.0	5.7	4.0
ARMENIA	4.6	4.2	6.6	3.1
MOZAMBIQUE	4.6	4.3	5.3	4.3
KENYA	4.6	3.4	5.9	4.4
ECUADOR	4.6	3.3	5.5	4.9
RUSSIA	4.5	3.3	5.4	4.9
AZERBAIJAN	4.5	3.7	6.4	3.4
SENEGAL	4.5	4.0	5.4	4.2
KAZAKHSTAN	4.5	4.0	6.0	3.5
NEPAL	4.5	3.3	6.0	4.2
SERBIA	4.4	4.2	5.5	3.4
ETHIOPIA	4.4	3.2	5.3	4.8
BOSNIA AND HERZEGOVINA	4.4	4.2	5.4	3.5
NICARAGUA	4.4	3.6	5.5	4.1
CAMEROON	4.3	3.3	5.6	4.1
IRAN, ISLAMIC REPUBLIC OF PARAGUAY	4.3	3.5	5.6	3.9
ALBANIA	4.2	3.3 4.0	5.7 5.2	3.6
LEBANON	4.2	3.0	6.3	3.3
MADAGASCAR	4.2	3.5	5.1	4.0
GEORGIA	4.2	4.4	6.0	2.3
UKRAINE	4.2	3.6	4.8	4.3
PAKISTAN	4.1	3.0	5.8	3.5
MOLDOVA, REPUBLIC OF	4.1	4.0	5.8	2.5
CHAD	4.0	2.5	5.0	4.4
CÔTE D'IVOIRE	3.9	2.6	5.2	3.9
NIGERIA	3.9	2.9	4.7	4.1
ZIMBABWE	3.8	2.7	5.2	3.5
ALGERIA	3.7	3.3	4.5	3.4
BANGLADESH	3.5	3.2	4.6	2.7
LIBYA	3.4	3.3	4.4	2.5
HAITI	3.4	2.6	3.4	4.1
BURUNDI	3.4	2.3	4.4	3.5
VENEZUELA, BOLIVARIAN REPUBLIC OF	3.4	2.1	4.7	3.4
YEMEN, REPUBLIC OF	3.1	2.1	5.2	2.0

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

IPRI	LP	PPR	IPR
FINLAND 1	FINLAND 1	FINLAND 1	FINLAND 1
NEW ZEALAND 2	NEW ZEALAND 1	NORWAY 1	SWITZERLAND 2
SWEDEN 2	SWEDEN 3	NEW ZEALAND 3	UNITED KINGDOM (UK) 2
NORWAY 4	NORWAY 3	SINGAPORE 3	NETHERLANDS 2
NETHERLANDS 5	DENMARK 5	SWEDEN 3	UNITED STATES (USA) 2
SWITZERLAND 5	NETHERLANDS 5	BAHRAIN 6	JAPAN 2
LUXEMBURG 7	LUXEMBURG 7	HONG KONG (SAR OF CHINA) 7	NEW ZEALAND 7
SINGAPORE 7	SWITZERLAND 7	SWITZERLAND 7	LUXEMBURG 7
DENMARK 9	CANADA 9	UNITED ARAB EMIRATES (UAE) 7	SWEDEN 7
CANADA 9	SINGAPORE 10	OMAN 10	CANADA 10

Finland is #1 in the IPRI overall ranking. In fact, Finland is rated #1 in all three of the IPRI components. Interestingly, Scandinavian countries report high IPRI score rankings (e.g. Sweden #2, Norway #4, and Denmark #9). In general, Northern European countries show a strong property right system (Netherlands #5 and Luxemburg #7). Furthermore, Canada, New Zealand and Singapore are the only non-EU countries in the top 10 IPRI ranking. Looking at each IPRI component, notable countries for the PPR component are; Bahrain (#6), United Arab Emirates (#7), and Oman (#10). In regards to LP and IPR, those top 10 ranked countries mainly reflect the overall IPRI score ranking.

Tab	اد عا	<b>Bottom</b>	10 Co	untries

IPRI	LP	PPR	IPR
CÔTE D'IVOIRE 122	PAKISTAN 122	CHAD 122	SERBIA 120
NIGERIA 122	LEBANON 122	UKRAINE 123	VENEZUELA, 120
ZIMBABWE 124	NIGERIA 124	VENEZUELA 124	ALBANIA 120
ALGERIA 125	ZIMBABWE 125	ARGENTINA 124	LEBANON 125
BANGLADESH 126	CÔTE D'IVOIRE 126	NIGERIA 124	ARMENIA 126
LIBYA 127	HAITI 126	BANGLADESH 127	BANGLADESH 127
HAITI 127	CHAD 128	ALGERIA 128	MOLDOVA, REPUBLIC OF 128
BURUNDI 127	BURUNDI 129	LIBYA 129	LIBYA 128
VENEZUELA 127	VENEZUELA 130	BURUNDI 129	GEORGIA 130
YEMEN, REPUBLIC OF 131	YEMEN, REPUBLIC OF 130	HAITI 131	YEMEN, REPUBLIC OF 131

The Republic of Yemen is #131 in the IPRI overall ranking. Most of the bottom 10 countries are African, except for Bangladesh (#126), Haiti (#127) and Venezuela (#127). Looking at individual IPRI components, it is interesting to note that for the IPR score there is a significant presence of CEECA countries, such as Georgia (#130), Moldova (#128), Armenia (#126), Albania (#120) and Serbia (#120).

More comprehensively, <u>Figure 3</u> presents the IPRI rankings by quintile for all the 131 countries in our sample. In general, the number of countries belonging to each quintile increases from the top 20% to the bottom 20%. In this sense, qualitative assessment of the overall IPRI score ranking suggests a "right" skewedness of the overall IPRI score by quintile.

### Figure 3: IPRI Ranking by Quintile

Top 20 percent	2nd Quintile	3rd Quintile	4th Quintile	Bottom 20 percent
Finland New Zealand Sweden Norway Netherlands Switzerland Luxemburg Singapore Denmark Canada Australia Austria United Kingdom (UK) Hong Kong (SAR of China) Japan Germany United States (USA) Belgium	Ireland France Qatar Iceland United Arab Emirates (UAE) Taiwan (China) Malta South Africa Portugal Chile Estonia Israel Oman Cyprus Czech Republic Malaysia Spain Bahrain Saudi Arabia Puerto Rico (USA) Korea, Republic Hungary	Botswana Mauritius Slovakia Uruguay Poland Rwanda Italy Jordan Lithuania Slovenia Costa Rica Kuwait Latvia Trinidad and Tobago Brunei Darussalam Panama Brazil Turkey Bulgaria India Ghana China Greece Jamaica Liberia	Morocco Romania Croatia Mexico Colombia Gabon Thailand Swaziland Montenegro Burkina Faso Malawi Benin Peru Sri Lanka Philippines Mali Tanzania, United Republic of Macedonia (FYROM) Uganda Indonesia Zambia Sierra Leone El Salvador Honduras Egypt Guyana Mauritania Guatemala Bolivia	Argentina Dominican Republic Armenia Mozambique Kenya Ecuador Russia Azerbaijan Senegal Kazakhstan Nepal Serbia Ethiopia Bosnia and Herzegovina Nicaragua Cameroon Iran, Islamic Republic of Paraguay Albania Lebanon Madagascar Georgia Ukraine Pakistan Moldova, Republic of Chad Côte d'Ivoire Nigeria Zimbabwe Algeria Bangladesh Libya Haiti Burundi Venezuela, Bolivarian Repub Yemen, Republic of

**Table 4: Summary Statistics** 

Indicator	Mean	Median	Deviation	Minimum	Maximum
IPRI	5.6	5.3	1.4	3.1	8.6
LP	5.2	4.7	1.8	2.1	8.9
PPR	6.2	6.1	1.0	3.4	8.9
IPR	5.4	5.3	1.6	2.0	8.6

Table 4 shows summary statistics for the 2013 IPRI and its component scores. LP and IPR report a higher standard deviation (respectively 1.8 and 1.6) and a lower minimum (respectively 2.1 and 2.0) compared to PPR. These general descriptive statistics suggest that there are significant differences among countries and likely a clustering effect that might explain lower mean values and higher standard deviations for LP and IPR compared to PPR.

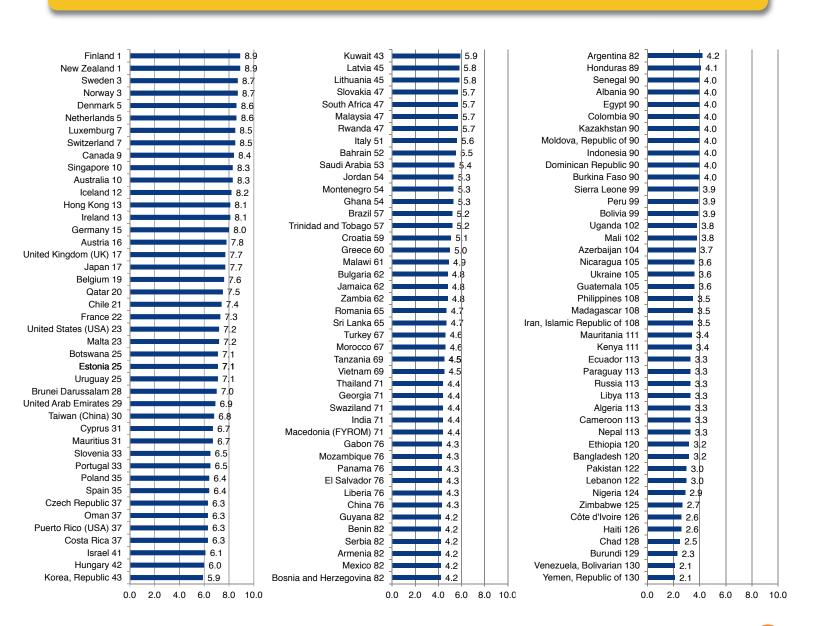
#### Ranking by Components

The IPRI is based on three core components that are assessed independently for each country. The following <u>Figures (4-6)</u> show and comment on the 131 countries' scores and rankings (individually) for each of the core components of the index (LP, PPR and IPR).

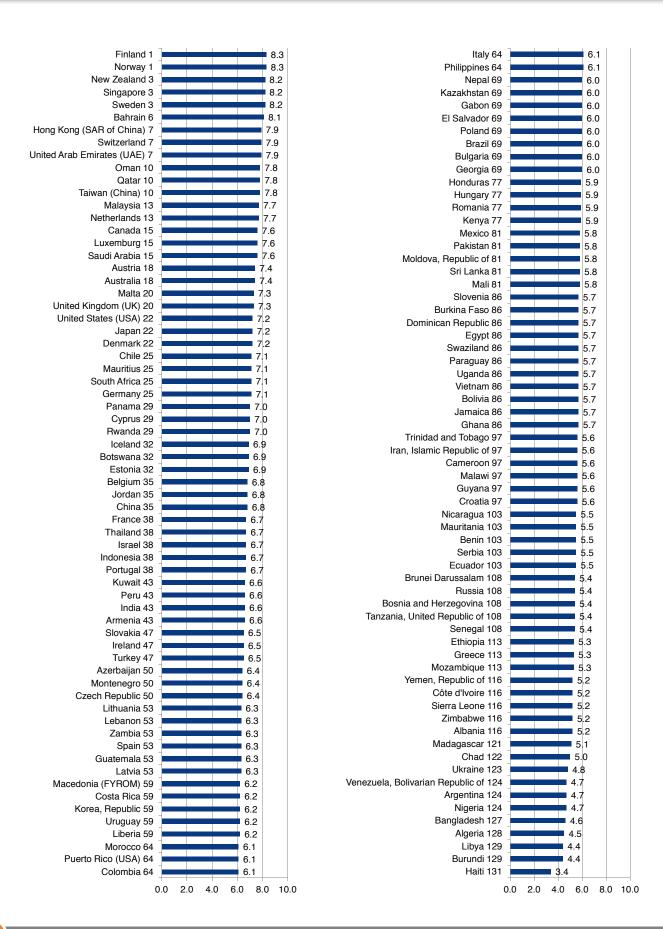
A comparison between the 2012 and 2013 scores are presented in <u>Tables 5–8</u>. In particular, the tables show 2012's value, 2013's value, and the change in absolute value between the two periods: this information is provided both for the IPRI score and for each of its components (LP, PPR and IPR).

Among those countries reporting an increase in the IPRI score between 2012 and 2013, Algeria, Denmark and Greece deserve a special mention. All three of these countries had a 0.3 point increase in their IPRI score from 2012 to 2013. At the other end of the continuum, Bolivia shows the most significant decrease with a 0.3 point loss. Furthermore, there are four new entrants into this year's IPRI, Gabon, Haiti, Liberia and Sierra Leone. Consequently, there is no historical data available for them.

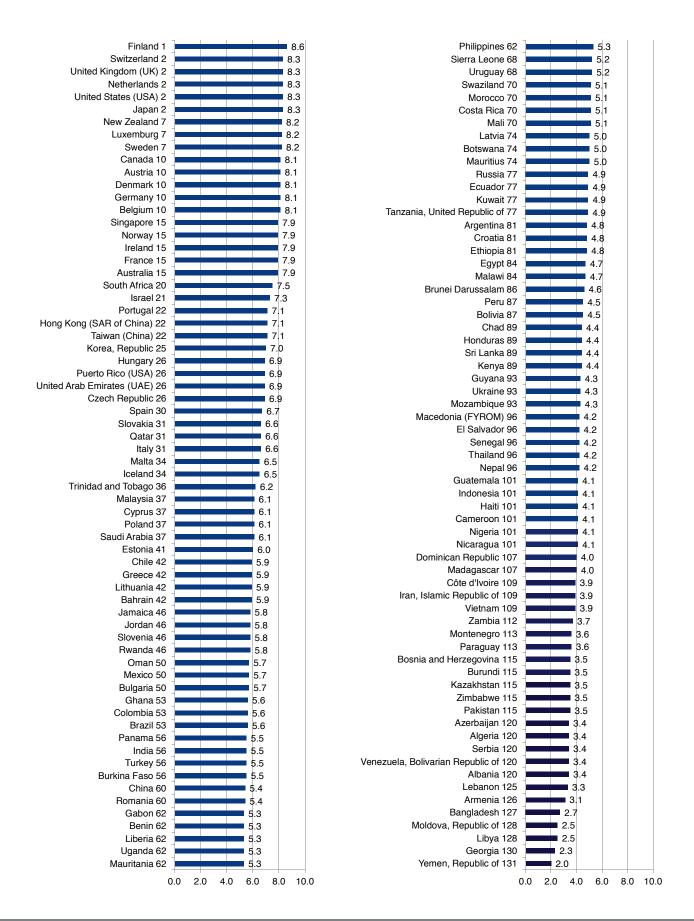
Figure 4: Ranking by LP Score



#### Figure 5: Ranking by PPR Score



#### Figure 6: Ranking by IPR Score



## Table 5: Changes in IPRI Score (2012-2013)

Country	Change	IPRI 2013	IPRI 2012
ALBANIA	(0.2)	4.2	4.4
ALGERIA	(0.3)	3.7	4.0
ARGENTINA	0.0	4.6	4.6
ARMENIA	0.2	4.6	4.4
AUSTRALIA	0.1	7.9	7.8
AUSTRIA	0.0	7.8	7.8
AZERBAIJAN	0.1	4.5	4.4
BAHRAIN	(0.2)	6.5	6.7
BANGLADESH	(0.1)	3.5	3.6
BELGIUM	0.0	7.5	7.5
BENIN	(0.1)	5.0	5.1
BOLIVIA BOSNIA AND HERZEGOVINA	0.3	4.7	4.4
BOTSWANA	0.1	6.3	6.3
BRAZIL	0.0	5.6	5.5
BRUNEI DARUSSALAM	0.1	5.7	5.6
BULGARIA	0.1	5.5	5.4
BURKINA FASO	0.1	5.1	5.0
BURUNDI	0.0	3.4	3.4
CAMEROON	0.0	4.3	4.3
CANADA	0.0	8.0	8.0
CHAD	(0.1)	4.0	4.1
CHILE	0.1	6.8	6.7
CHINA	0.0	5.5	5.5
COLOMBIA	0.0	5.2	5.2
COSTA RICA	0.1	5.9	5.8
CÔTE D'IVOIRE	0.1	3.9	3.8
CROATIA	0.0	5.2	5.2
CYPRUS	(0.2)	6.6	6.8
CZECH REPUBLIC	0.1	6.5	6.4
DENMARK	(0.3)	8.0	8.3
DOMINICAN REPUBLIC	0.1	4.6	4.5
ECUADOR	0.1	4.6	4.5
EGYPT	(0.3)	4.8	5.1
EL SALVADOR	(0.1)	4.8	4.9
ESTONIA	0.0	6.7	6.7
ETHIOPIA FINLAND	(0.1)	4.4	4.5
FRANCE	(0.1)	7.3	8.6 7.4
GABON	5.2	5.2	0.0
GEORGIA	0.0	4.2	4.2
GERMANY	0.0	7.7	7.7
GHANA	0.0	5.5	5.5
GREECE	(0.3)	5.4	5.7
GUATEMALA	0.1	4.7	4.6
GUYANA	0.1	4.7	4.6
HAITI	0.1	3.4	3.3
HONDURAS	0.0	4.8	4.8
HONG KONG (SAR OF CHINA)	0.1	7.7	7.6
HUNGARY	(0.1)	6.3	6.4
ICELAND	0.0	7.2	7.2
INDIA	0.1	5.5	5.4
INDONESIA	0.1	4.9	4.8
IRAN, ISLAMIC REPUBLIC OF	0.1	4.3	4.2
IRELAND	(0.1)	7.5	7.6
ISRAEL	0.1	6.7	6.6
ITALY	0.0	6.1	6.1
JAMAICA	(0.1)	5.4	5.5
JAPAN	0.0	7.7	7.7
JORDAN KAZAKHSTAN	0.1	6.0	5.9
KENYA	0.2	4.5 4.6	4.3
KOREA, REPUBLIC	0.1	6.4	6.2
KUWAIT	(0.1)	5.8	5.9
LATVIA	0.1	5.7	5.6
LEBANON	(0.1)	4.2	4.3
	(5)		

Country	Change	IPRI 2013	IPRI 2012
LIBERIA	5.3	5.3	0.0
LIBYA	3.4	3.4	0.0
LITHUANIA	0.0	6.0	6.0
LUXEMBURG MACEDONIA (FYROM)	(0.1)	8.1	8.2
MADAGASCAR	0.2	4.9 4.2	4.7 4.2
MALAWI	(0.1)	5.1	5.2
MALAYSIA	0.0	6.5	6.5
MALI	0.1	4.9	4.8
MALTA	0.0	7.0	7.0
MAURITANIA	0.1	4.7	4.6
MAURITIUS	0.1	6.3	6.2
MEXICO	0.1	5.2	5.1
MOLDOVA, REPUBLIC OF	0.1	4.1	4.0
MONTENEGRO	(0.1)	5.1	5.2
MOROCCO	0.0	5.3	5.3
MOZAMBIQUE NEPAL	0.1	4.6 4.5	4.7 4.4
NETHERLANDS	0.1	8.2	8.1
NEW ZEALAND	0.2	8.4	8.2
NICARAGUA	0.3	4.4	4.1
NIGERIA	0.0	3.9	3.9
NORWAY	0.0	8.3	8.3
OMAN	0.0	6.6	6.6
PAKISTAN	(0.1)	4.1	4.2
PANAMA	0.1	5.6	5.5
PARAGUAY	0.1	4.2	4.1
PERU	0.0	5.0	5.0
PHILIPPINES	0.2	5.0	4.8
POLAND	0.1	6.2	6.1
PORTUGAL PUERTO RICO (USA)	0.0	6.8	6.8
QATAR	0.1	7.3	7.2
ROMANIA	(0.1)	5.3	5.4
RUSSIA	0.0	4.5	4.5
RWANDA	0.2	6.2	6.0
SAUDI ARABIA	(0.1)	6.4	6.5
SENEGAL	(0.1)	4.5	4.6
SERBIA	0.1	4.4	4.3
SIERRA LEONE	4.8	4.8	0.0
SINGAPORE	0.0	8.1	8.1
SLOVAKIA	0.0	6.3	6.3
SLOVENIA	0.0	6.0	6.0
SOUTH AFRICA SPAIN	0.1	6.8 6.5	6.7 6.5
SRI LANKA	0.0	5.0	5.0
SWAZILAND	(0.1)	5.1	5.2
SWEDEN	(0.1)	8.4	8.5
SWITZERLAND	(0.1)	8.2	8.3
TAIWAN (CHINA)	0.1	7.2	7.1
TANZANIA, UNITED REPUBLIC OF	(0.1)	4.9	5.0
THAILAND	0.1	5.1	5.0
TRINIDAD AND TOBAGO	0.1	5.7	5.6
TURKEY	0.2	5.5	5.3
UGANDA	0.0	4.9	4.9
UKRAINE UNITED ARAB EMIRATES (UAE)	0.2	7.2	7.0
UNITED KINGDOM (UK)	0.2	7.8	7.7
UNITED STATES (USA)	0.1	7.6	7.5
URUGUAY	0.0	6.2	6.2
VENEZUELA	0.0	3.4	3.4
VIETNAM	0.0	4.7	4.7
YEMEN, REPUBLIC OF	0.1	3.1	3.0
ZAMBIA	0.2	4.9	4.7
ZIMBABWE	0.1	3.8	3.7

## Table 6: Changes in LP Score (2012-2013)

Country	Change	<b>LP</b> 2013	LP 2012
ALBANIA	(0.2)	4.0	4.2
ALGERIA	(0.1)	3.3	3.4
ARGENTINA	0.0	4.2	4.2
ARMENIA	0.0	4.2	4.2
AUSTRALIA	0.1	8.3	8.2
AUSTRIA	(0.2)	7.8	8.0
AZERBAIJAN	(0.1)	3.7	3.8
BAHRAIN	(0.3)	5.5	5.8
BANGLADESH BELGIUM	(0.1) 0.1	7.6	7.5
BENIN	(0.1)	4.2	4.3
BOLIVIA	0.1	3.9	3.8
BOSNIA AND HERZEGOVINA	0.0	4.2	4.2
BOTSWANA	0.1	7.1	7.0
BRAZIL	0.0	5.2	5.2
BRUNEI DARUSSALAM	0.1	7.0	6.9
BULGARIA	0.0	4.8	4.8
BURKINA FASO	(0.3)	4.0	4.3
BURUNDI	(0.1)	2.3	2.4
CAMEROON	(0.1)	3.3	3.4
CANADA	0.0	8.4	8.4
CHAD	0.0	2.5	2.5
CHILE	0.0	7.4	7.4
CHINA	0.0	4.3	4.3
COLOMBIA	0.1	4.0	3.9
COSTA RICA	(0.1)	6.3	6.4
CÔTE D'IVOIRE	0.1	2.6	2.5
CROATIA CYPRUS	(0.1)	5.1	5.2
CZECH REPUBLIC	0.3)	6.7	7.0 6.2
DENMARK	(0.2)	8.6	8.8
DOMINICAN REPUBLIC	0.1	4.0	3.9
ECUADOR	0.1	3.3	3.2
EGYPT	(0.7)	4.0	4.7
EL SALVADOR	0.0	4.3	4.3
ESTONIA	0.0	7.1	7.1
ETHIOPIA	(0.1)	3.2	3.3
FINLAND	0.1	8.9	8.8
FRANCE	0.0	7.3	7.3
GABON	4.3	4.3	0.0
GEORGIA	0.1	4.4	4.3
GERMANY	(0.1)	8.0	8.1
GHANA	0.1	5.3	5.2
GREECE	(0.2)	5.0	5.2
GUATEMALA	0.1	3.6	3.5
GUYANA HAITI	0.0	4.2	4.2
HONDURAS	0.0	2.6 4.1	2.6 3.9
HONG KONG (SAR OF CHINA)	0.2	8.1	8.1
HUNGARY	0.0	6.0	6.0
ICELAND	0.1	8.2	8.1
INDIA	0.0	4.4	4.4
INDONESIA	0.1	4.0	3.9
IRAN, ISLAMIC REPUBLIC OF	0.1	3.5	3.4
IRELAND	(0.1)	8.1	8.2
ISRAEL	0.1	6.1	6.0
ITALY	0.0	5.6	5.6
JAMAICA	0.1	4.8	4.7
JAPAN	0.0	7.7	7.7
JORDAN	0.0	5.3	5.3
KAZAKHSTAN	(0.2)	4.0	4.2
KENYA PERURUS	0.2	3.4	3.2
KOREA, REPUBLIC	(0.4)	5.9	5.8
KUWAIT LATVIA	(0.4)	5.9	6.3
LEBANON	(0.1)	5.8 3.0	5.8 3.1
LLDAINOIN	(0.1)	5.0	0.1

Country	Change	LP 2013	LP 2012
LIBERIA	4.3	4.3	0.0
LIBYA	3.3	3.3	0.0
LITHUANIA	0.0	5.8	5.8
LUXEMBURG	(0.1)	8.5	8.6
MACEDONIA (FYROM)	0.1	4.4	4.3
MADAGASCAR	0.1	3.5	3.4
MALAWI MALAYSIA	(0.1)	4.9 5.7	5.0
MALI	(0.1)	3.8	5.8 4.0
MALTA	(0.2)	7.2	7.4
MAURITANIA	0.1	3.4	3.3
MAURITIUS	0.2	6.7	6.5
MEXICO	0.1	4.2	4.1
MOLDOVA, REPUBLIC OF	0.2	4.0	3.8
MONTENEGRO	(0.1)	5.3	5.4
MOROCCO	0.0	4.6	4.6
MOZAMBIQUE	(0.1)	4.3	4.4
NEPAL	0.1	3.3	3.2
NETHERLANDS	0.1	8.6	8.5
NEW ZEALAND	0.1	8.9	8.8
NICARAGUA	0.3	3.6	3.3
NIGERIA NORWAY	0.0	2.9 8.7	2.9
OMAN	(0.1)	6.3	8.6 6.4
PAKISTAN	0.0	3.0	3.0
PANAMA	0.0	4.3	4.2
PARAGUAY	0.1	3.3	3.1
PERU	0.1	3.9	3.8
PHILIPPINES	0.2	3.5	3.3
POLAND	0.0	6.4	6.4
PORTUGAL	(0.1)	6.5	6.6
PUERTO RICO (USA)	0.1	6.3	6.2
QATAR	(0.2)	7.5	7.7
ROMANIA	(0.2)	4.7	4.9
RUSSIA	0.0	3.3	3.3
RWANDA	0.0	5.7	5.7
SAUDI ARABIA	(0.4)	5.4	5.8
SENEGAL	0.0	4.0	4.0
SERBIA SIERRA LEONE	0.1 3.9	4.2 3.9	0.0
SINGAPORE	0.0	8.3	8.3
SLOVAKIA	0.0	5.7	5.7
SLOVENIA	0.1	6.5	6.4
SOUTH AFRICA	0.1	5.7	5.6
SPAIN	0.2	6.4	6.2
SRI. LANKA	0.1	4.7	4.6
SWAZILAND	(0.3)	4.4	4.7
SWEDEN	0.0	8.7	8.7
SWITZERLAND	(0.1)	8.5	8.6
TAIWAN (CHINA)	0.1	6.8	6.7
TANZANIA, UNITED REPUBLIC OF		4.5	4.5
THAILAND	0.1	4.4	4.3
TRINIDAD AND TOBAGO	0.2	5.2	5.0
TURKEY	0.1	4.6	4.5
UGANDA	(0.1)	3.8	3.9
UKRAINE	0.1	3.6	3.5
UNITED ARAB EMIRATES (UAE) UNITED KINGDOM (UK)	(0.1)	6.9 7.7	6.7
UNITED STATES (USA)	(0.1) 0.1	7.7	7.8 7.1
URUGUAY	0.0	7.1	7.1
VENEZUELA	(0.1)	2.1	2.2
VIETNAM	0.0	4.5	4.5
YEMEN, REPUBLIC OF	(0.1)	2.1	2.2
ZAMBIA	0.1	4.8	4.7
ZIMBABWE	0.2	2.7	2.5

## Table 7: Changes in PPR Score (2012-2013)

Country	Change	PPR 2013	PPR 2012
ALBANIA	(0.3)	5.2	5.5
ALGERIA	(0.5)	4.5	5.0
ARGENTINA	(0.1)	4.7	4.8
ARMENIA	0.4	6.6	6.2
AUSTRALIA	0.0	7.4	7.4
AUSTRIA	(0.1)	7.4	7.5
AZERBAIJAN	0.2	6.4	6.2
BAHRAIN	(0.1)	8.1	8.2
BANGLADESH	(0.1)	4.6	4.7
BELGIUM BENIN	(0.2)	6.8	7.0
BOLIVIA	0.4)	5.5 5.7	5.9 5.1
BOSNIA AND HERZEGOVINA	0.0	5.4	5.2
BOTSWANA	(0.1)	6.9	7.0
BRAZIL	0.1	6.0	5.9
BRUNEI DARUSSALAM	0.0	5.4	5.4
BULGARIA	0.2	6.0	5.8
BURKINA FASO	0.1	5.7	5.6
BURUNDI	0.1	4.4	4.3
CAMEROON	0.2	5.6	5.4
CANADA	0.1	7.6	7.5
CHAD	(0.1)	5.0	5.1
CHILE	0.2	7.1	6.9
CHINA	(0.1)	6.8	6.9
COLOMBIA	(0.1)	6.1	6.2
COSTA RICA	0.2	6.2	6.0
CÔTE D'IVOIRE	0.2	5.2	5.0
CROATIA	(0.1)	5.6	5.7
CYPRUS	(0.2)	7.0	7.2
CZECH REPUBLIC DENMARK	(0.5)	7.2	6.3 7.7
DOMINICAN REPUBLIC	0.1	5.7	5.6
ECUADOR	0.1	5.5	5.4
EGYPT	(0.1)	5.7	5.8
EL SALVADOR	0.0	6.0	6.0
ESTONIA	(0.1)	6.9	7.0
ETHIOPIA	(0.2)	5.3	5.5
FINLAND	0.0	8.3	8.3
FRANCE	(0.2)	6.7	6.9
GABON	6.0	6.0	0.0
GEORGIA	(0.1)	6.0	6.1
GERMANY	0.1	7.1	7.0
GHANA	(0.1)	5.7	5.8
GREECE	(0.4)	5.3	5.7
GUATEMALA	0.1	6.3	6.2
GUYANA HAITI	0.1	5.6 3.4	5.5 3.4
HONDURAS	0.0	5.9	5.9
HONG KONG (SAR OF CHINA)	0.0	7.9	7.8
HUNGARY	(0.4)	5.9	6.3
ICELAND	0.0	6.9	6.9
INDIA	0.1	6.6	6.5
INDONESIA	0.1	6.7	6.6
IRAN, ISLAMIC REPUBLIC OF	0.1	5.6	5.5
IRELAND	(0.1)	6.5	6.6
ISRAEL	0.2	6.7	6.5
ITALY	0.0	6.1	6.1
JAMAICA	(0.2)	5.7	5.9
JAPAN	0.1	7.2	7.1
JORDAN	0.2	6.8	6.6
KAZAKHSTAN	0.4	6.0	5.6
KENYA PEDUBUC	(0.1)	5.9	6.0
KOREA, REPUBLIC	0.2	6.2	6.0
KUWAIT LATVIA	(0.1)	6.6	6.7
LEBANON	(0.2)	6.3	6.2 6.5
LLDAINOIN	(U.2)	0.0	0.0

Country	Change	PPR 2013	PPR 2012
LIBERIA	6.2	6.2	0.0
LIBYA	4.4	4.4	0.0
LITHUANIA	0.0	6.3	6.3
LUXEMBURG	0.2)	7.6 6.2	7.8
MACEDONIA (FYROM) MADAGASCAR	(0.2)	5.1	5.8 5.3
MALAWI	0.0	5.6	5.6
MALAYSIA	0.0	7.7	7.5
MALI	0.2	5.8	5.6
MALTA	0.0	7.3	7.3
MAURITANIA	0.1	5.5	5.4
MAURITIUS	0.0	7.1	7.1
MEXICO	0.1	5.8	5.7
MOLDOVA, REPUBLIC OF	0.1	5.8	5.7
MONTENEGRO	0.0	6.4	6.4
MOROCCO	0.0	6.1	6.1
MOZAMBIQUE	0.0	5.3	5.3
NEPAL	0.1	6.0	5.9
NETHERLANDS NEW ZEALAND	0.1	7.7	7.6
<u> </u>	0.4	8.2	7.8
NICARAGUA NIGERIA	0.3	5.5 4.7	5.2 4.6
NORWAY	(0.1)	8.3	8.4
OMAN	0.1	7.8	7.7
PAKISTAN	(0.1)	5.8	5.9
PANAMA	0.2	7.0	6.8
PARAGUAY	0.0	5.7	5.7
PERU	(0.1)	6.6	6.7
PHILIPPINES	0.3	6.1	5.8
POLAND	0.2	6.0	5.8
PORTUGAL	(0.2)	6.7	6.9
PUERTO RICO (USA)	0.1	6.1	6.0
QATAR	0.2	7.8	7.6
ROMANIA	0.1	5.9	5.8
RUSSIA	0.0	5.4	5.4
RWANDA SAUDI ARABIA	0.2	7.0	6.8
SENEGAL	(0.2)	7.6 5.4	7.8 5.5
SERBIA	(0.1)	5.5	5.6
SIERRA LEONE	5.2	5.2	0.0
SINGAPORE	0.0	8.2	8.2
SLOVAKIA	0.0	6.5	6.5
SLOVENIA	(0.1)	5.7	5.8
SOUTH AFRICA	0.1	7.1	7.0
SPAIN	(0.2)	6.3	6.5
SRI LANKA	(0.2)	5.8	6.0
SWAZILAND	(0.2)	5.7	5.9
SWEDEN	(0.2)	8.2	8.4
SWITZERLAND	0.0	7.9	7.9
TAIWAN (CHINA)	0.1	7.8	7.7
TANZANIA, UNITED REPUBLIC OF		5.4	5.4
THAILAND	0.1	6.7	6.6
TRINIDAD AND TOBAGO	0.1	5.6	5.5
TURKEY UGANDA	0.2	6.5	6.3
UKRAINE	0.1	5.7 4.8	5.6 4.4
UNITED ARAB EMIRATES (UAE)	0.4	7.9	7.6
UNITED KINGDOM (UK)	0.1	7.3	7.0
UNITED STATES (USA)	0.0	7.2	7.2
URUGUAY	0.0	6.2	6.2
VENEZUELA, BOLIVARIAN REPUBLIC OF		4.7	4.6
VIETNAM	(0.1)	5.7	5.8
YEMEN, REPUBLIC OF	0.1	5.2	5.1
ZAMBIA	0.4	6.3	5.9
ZIMBABWE	0.1	5.2	5.1

## Table 8: Changes in IPR Scores (2012-2013)

County	Change	IPR 2013	IPR 2012
ALBANIA	0.0	3.4	3.4
ALGERIA	(0.3)	3.4	3.7
ARGENTINA	0.0	4.8	4.8
ARMENIA	0.4	3.1	2.7
AUSTRALIA	0.1	7.9	7.8
AUSTRIA	0.1	8.1	8.0
AZERBAIJAN	0.1	3.4	3.3
BAHRAIN	(0.2)	5.9	6.1
BANGLADESH	0.0	2.7	2.7
BELGIUM BENIN	0.1	8.1 5.3	8.0 5.1
BOLIVIA	0.2	4.5	4.2
BOSNIA AND HERZEGOVINA	0.0	3.5	3.5
BOTSWANA	0.0	5.0	4.9
BRAZIL	0.1	5.6	5.5
BRUNEI DARUSSALAM	0.2	4.6	4.4
BULGARIA	0.1	5.7	5.6
BURKINA FASO	0.3	5.5	5.2
BURUNDI	0.0	3.5	3.5
CAMEROON	0.0	4.1	4.1
CANADA	0.0	8.1	8.1
CHAD	(0.2)	4.4	4.6
CHILE	0.0	5.9	5.9
CHINA	0.0	5.4	5.4
COLOMBIA	0.1	5.6	5.5
COSTA RICA	0.1	5.1	5.0
CÔTE D'IVOIRE	0.0	3.9	3.9
CROATIA	0.0	4.8	4.8
CYPRUS	(0.1)	6.1	6.2
CZECH REPUBLIC	0.1	6.9	6.8
DENMARK DOMINICAN REPUBLIC	0.3)	8.1 4.0	3.9
ECUADOR	0.0	4.9	4.9
EGYPT	0.0	4.7	4.7
EL SALVADOR	(0.1)	4.2	4.3
ESTONIA	0.1	6.0	5.9
ETHIOPIA	0.1	4.8	4.7
FINLAND	0.0	8.6	8.6
FRANCE	0.0	7.9	7.9
GABON	5.3	5.3	0.0
GEORGIA	0.0	2.3	2.3
GERMANY	0.0	8.1	8.1
GHANA	0.0	5.6	5.6
GREECE	(0.2)	5.9	6.1
GUATEMALA	0.1	4.1	4.0
GUYANA	0.2	4.3	4.1
HAITI HONDURAS	(0.1)	4.1	4.0
HONG KONG (SAR OF CHINA)	(0.1) 0.1	7.1	7.0
HUNGARY	0.0	6.9	6.9
ICELAND	0.0	6.5	6.5
INDIA	0.1	5.5	5.4
INDONESIA	0.1	4.1	4.0
IRAN, ISLAMIC REPUBLIC OF	0.1	3.9	3.8
IRELAND	(0.1)	7.9	8.0
ISRAEL	0.0	7.3	7.3
ITALY	0.0	6.6	6.6
JAMAICA	0.0	5.8	5.8
JAPAN	0.0	8.3	8.3
JORDAN	0.0	5.8	5.8
KAZAKHSTAN	0.4	3.5	3.1
KENYA	0.2	4.4	4.2
KOREA, REPUBLIC	0.2	7.0	6.8
KUWAIT	0.1	4.9	4.8
LATVIA	0.2	5.0	4.8
LEBANON	0.0	3.3	3.3

County	Change	IPR 2013	IPR 2012
LIBERIA	5.3	5.3	0.0
LIBYA	2.5	2.5	0.0
LITHUANIA	0.0	5.9	5.9
LUXEMBURG	(0.1)	8.2	8.3
MACEDONIA (FYROM)	0.2	4.2	4.0
MADAGASCAR	0.2	4.0	3.8
MALAWI	(0.2)	4.7	4.9
MALAYSIA	(0.1)	6.1	6.2
MALI	0.2	5.1	4.9
MALTA	0.1	6.5	6.4
MAURITANIA	0.1	5.3	5.2
MAURITIUS	0.0	5.0	5.0
MEXICO	0.2	5.7	5.5
MOLDOVA, REPUBLIC OF	0.0	2.5	2.5
MONTENEGRO	(0.1)	3.6	3.7
MOROCCO MOZAMBIQUE	0.1)	5.1 4.3	5.2 4.3
NEPAL	0.0	4.3	4.3
NETHERLANDS	0.1	8.3	8.2
NEW ZEALAND	0.1	8.3	8.0
NICARAGUA	0.2	4.1	3.9
NIGERIA	0.0	4.1	4.1
NORWAY	0.0	7.9	7.9
OMAN	0.0	5.7	5.7
PAKISTAN		3.5	
PANAMA	(0.1) 0.1	5.5	3.6 5.4
PARAGUAY	0.0	3.6	3.6
PERU	0.0	4.5	4.5
PHILIPPINES	0.0	5.3	5.2
POLAND	0.0	6.1	6.1
PORTUGAL	0.0	7.1	7.0
PUERTO RICO (USA)	0.1	6.9	6.8
QATAR	0.2	6.6	6.4
ROMANIA	0.0	5.4	5.4
RUSSIA	0.1	4.9	4.8
RWANDA	0.2	5.8	5.6
SAUDI ARABIA	0.1	6.1	6.0
SENEGAL	(0.1)	4.2	4.3
SERBIA	0.1	3.4	3.3
SIERRA LEONE	5.2	5.2	0.0
SINGAPORE	0.0	7.9	7.9
SLOVAKIA	0.0	6.6	6.6
SLOVENIA	0.1	5.8	5.7
SOUTH AFRICA	0.1	7.5	7.4
SPAIN	(0.1)	6.7	6.8
SRI LANKA	(0.1)	4.4	4.5
SWAZILAND	0.2	5.1	4.9
SWEDEN	(0.2)	8.2	8.4
SWITZERLAND	0.0	8.3	8.3
TAIWAN (CHINA)	0.1	7.1	7.0
TANZANIA, UNITED REPUBLIC OF	(0.1)	4.9	5.0
THAILAND	0.1	4.2	4.1
TRINIDAD AND TOBAGO	(0.1)	6.2	6.3
TURKEY	0.3	5.5	5.2
UGANDA	0.0	5.3	5.3
UKRAINE	0.1	4.3	4.2
UNITED ARAB EMIRATES (UAE)	0.1	6.9	6.8
UNITED KINGDOM (UK)	0.1	8.3	8.2
UNITED STATES (USA)	0.0	8.3	8.3
URUGUAY	0.0	5.2	5.2
VENEZUELA, BOLIVARIAN REPUBLIC OF	(0.1)	3.4	3.5
VIETNAM	0.1	3.9	3.8
YEMEN, REPUBLIC OF	0.3	2.0	1.7
ZAMBIA	0.1	3.7	3.6
ZIMBABWE	0.0	3.5	3.5

#### Regional Distribution of IPRI

Figure 7 shows the 2013 average IPRI and individual component scores by region. See Appendix III for the list of countries and related regions. An interesting finding is that for the most developed economies (represented by regions NA and WE) IPR scores, by regional averages, are the highest compared to any other region. This suggests that there is a systematic difference in protection of innovation and knowledge, which generates implications for multinational firms willing to invest in those areas in which IPR is low (or lower). So, IPRI is consistent with the global picture on property right protection systems, which are more developed and sophisticated in most developed economies, therefore enhancing dynamic and innovative competitive environments.

On the other hand, PPR tends to be the highest within the IPRI in less developed economies. This result suggests that less developed economies grouped by region (A, AO, CEECA, LAC and MENA) are more focused in two aspects of the development of property protection systems: first, they focus on "hard" production factors, such as land; second, access to credit (functional to initiative capital intensive business activities) is a priority for these economies in order to generate economic activity and development.

Therefore, these regional average values for IPRI, and specifically for its components, suggest that property rights systems have an interesting, significant relationship with economic specialization within the regions. More developed economies, which focus on production, report highest values for IPR, while less developed economies report highest values for PPR, in relative terms. While a causality argument is not proposed here, it is interesting to descriptively highlight this result.

10.0 9.0 8.0 7.0 6.0 5.0 4.0 3.0 2.0 1.0 0.0 Middle East Latin Asia and CEE and North Western America and All Countries and North Africa Oceania Central Asia America Europe Carribean Africa IPRI 6.0 4.8 6.0 5.2 5.0 5.7 7.8 7.5 ■LP 5.7 7.7 4.1 5.6 4.9 4.4 5.2 7.8 PPR 7.4 6.5 5.7 6.7 6.0 5.8 6.6 7.1 IPR 5.9 5.2 8.2 4.7 5.7 4.7 4.9 7.6

Figure 7: Average Scores by Region and Component

### **IPRI** and Economic Outcomes

The underlining assumption of the IPRI is that there is a relationship between a property rights regime and the economic performance of a country. In particular, the more effective the property rights regime, the better the expected economic performance. In this sense, the IPRI report focuses on three main economic indicators; Household Income (HI), Gross Domestic Product (GDP) and Foreign Direct Investments (FDI).

The following are some of the main conclusions. According to the distribution of the average HI income per IPRI quintiles (i.e. group of countries per IPRI score), countries with a high IPRI score are associated with high levels of HI per capita. Regarding the relationship between IPRI and FDI, countries with strong property rights regimes received more investment from foreign economic entities (FDI) compared to low IPRI scoring countries. Finally, countries with low per capita GDP growth are characterized with low IPRI scores.

## Figure 8: Average per Capita Income by IPRI Quintile

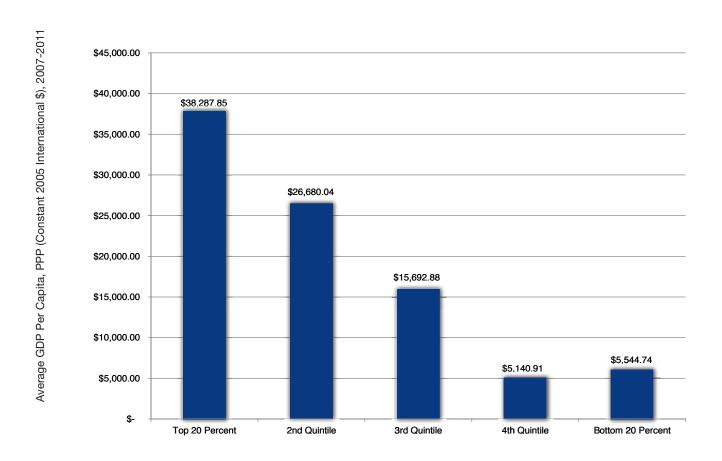


Figure 8 shows that, on average, countries in the top quintile of IPRI scores (i.e. top 20%) show a per capita income approximately seven times that of the bottom quintile countries. Statistics for Figure 8 are based on the averages of the IPRI scores for years 2009–2013 and corresponding data on average GDP per capita in Purchasing Power Parity (PPP) terms for the years 2007–2011. The same relationship is observed when using only the last year of the IPRI scores and high income per capita data.

Figure 9 shows the relationship between the IPRI scores (index and related components) and GDP per capita. Overall, the relationships are strong and significant. In particular, the correlation coefficient between IPRI values and GDP per capita values is 0.79 (p<0.001). With regard to the individual components (Figures 10-12), the strongest relationship reported in LP, whose correlation coefficient is 0.80 (p<0.001). PPR and IPR correlate with GDP per capita with correlation coefficients of 0.70 (p<0.001) and 0.71 (p<0.001), respectively. We can conclude that there is a positive, strong and significant relationship between fortitude of property rights systems and individual level measures of country performance, such as GDP per capita.

Figure 9: Relationship between IPRI and GDP Per Capita

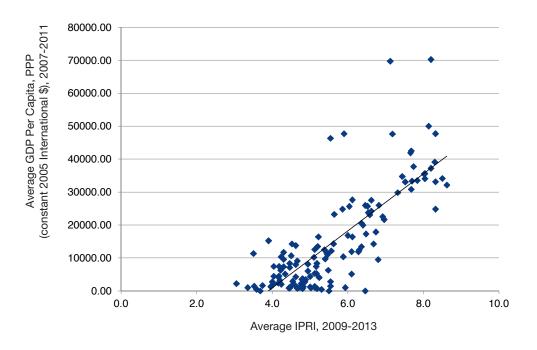


Figure 10: Relationship between LP and GDP per Capita

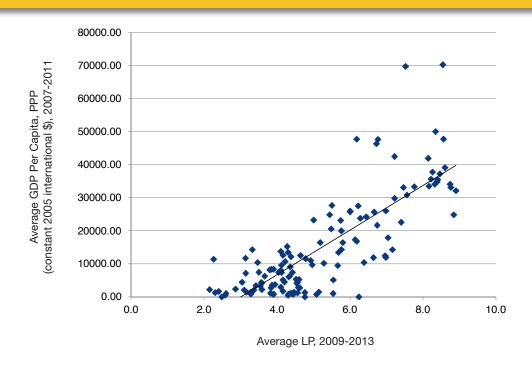


Figure 11: Relationship Between PPR and GDP Per Capita

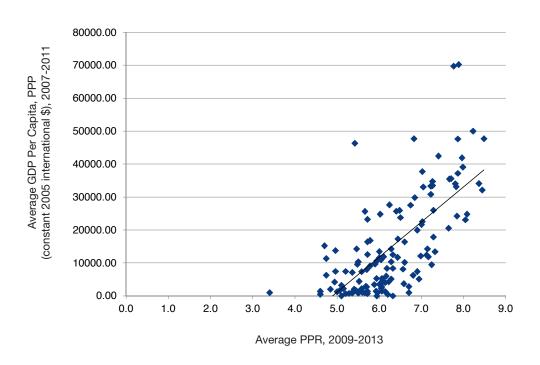
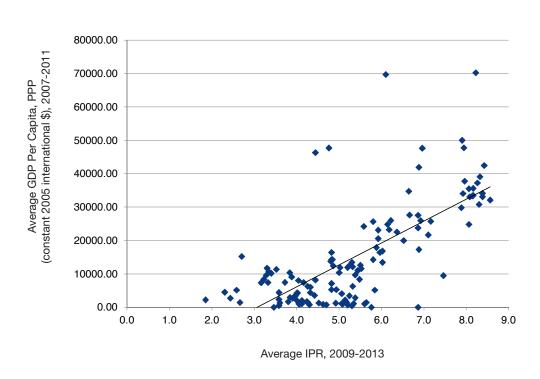


Figure 12: Relationship between IPR and GDP per Capita



To further investigate the role that the protection of property rights plays for a country's economic development and performance, the relationship between the IPRI (and its components) and FDI is considered. Figure 13 shows that that there is a positive relationship between the average IPRI score and average FDI inflows measured as a percentage of GDP. Similarly, Figures 14–16 shows that countries with a well-established legal system and stable political environment (and with strong protection of physical property rights) receive more FDI compared to those countries with low levels. However, this relationship appears to be weaker for the IPR component. The correlation coefficients between IPRI (and its components) and FDI values show weak significance. This suggests that a relationship might not be statistically significant (and therefore more properly validated) when approaching more appropriate analysis design, such as regression analysis.

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

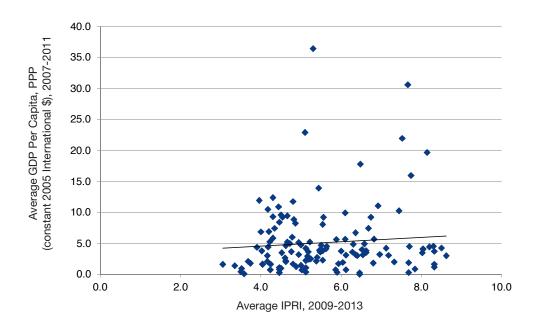


Figure 14: Relationship between LP and FDI Inflows as a % of GDP

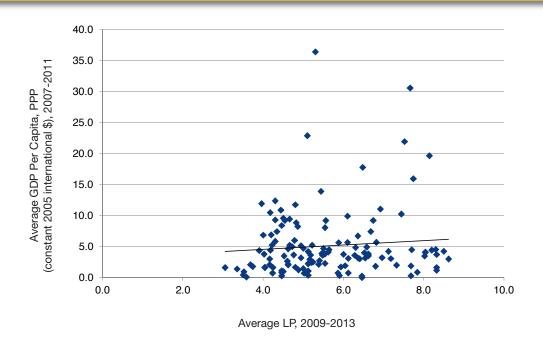


Figure 15: Relationship between PPR and FDI Inflows as a % of GDP

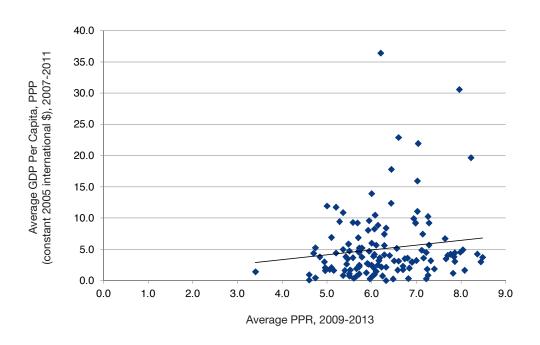
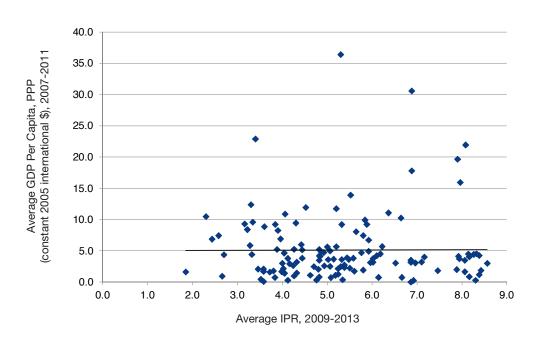
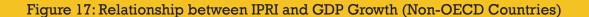
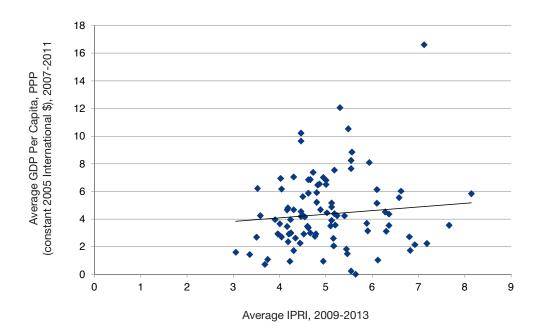


Figure 16: Relationship between IPR and FDI Inflows as a % of GDP



Finally, Figures 17-19 show results for the relationship between IPRI values and the GDP growth rate values. In general, the most developed economies (those likely to be grouped in the top 20% of average HI) are characterized by more mature markets compared to less developed economies, having, thus, low absolute GDP growth rates. In fact, it would be interesting to explore the relationship between IPRI values and the GDP growth rate values within and between the two groups of OECD and non-OECD countries.





As expected, Figures 17–19 show that, in general, all samples of countries' IPRI values are negatively related to the GDP growth rate with a correlation coefficient of -0.31 (p<0.001). But, when considering non-OECD countries, such relationship is positive within this group of non-OECD countries (correlation coefficient is 0.09) but not significant. The relationship is negative (correlation coefficient is -0.22) and still not significant for the group of OECD countries. These results suggest that the overall negative and significant relationship between IPRI values and GDP growth rate values is clearly not consistent in the sample. Likely, lack of data for non-OECD countries, both for IPRI and for economic performance indicators in terms of time-series availability does bias these correlation coefficients. However, it is still interesting to note such an opposite effect when considering different groups within the entire sample analyzed.

Figure 18: Relationship between IPRI and GDP Growth (OECD Countries)

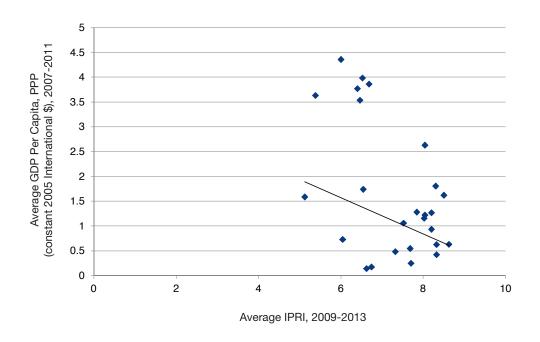
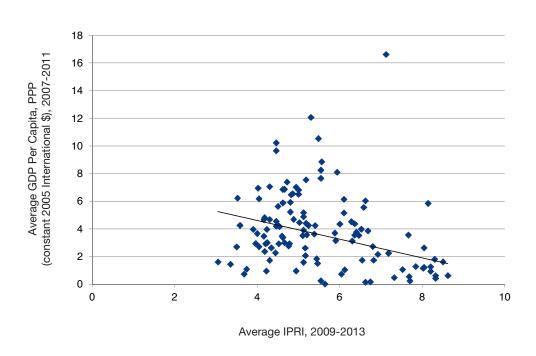


Figure 19: Relationship between IPRI and GDP Growth (All Countries)



### Conclusion

The 2013 International Property Rights Index (IPRI) serves as a barometer on the status of the development of physical and intellectual property rights across the world. As in previous years, the index has revealed the important relationship between property rights, economic freedom, and a country's level of development.

The results of the IPRI analysis suggests that the most developed economies are characterized by high values of IPRI and its related components, which implies that there is a positive relationship between economic development and strength of property rights regimes. In addition, this finding is also confirmed when looking closer to specific groups, such as different regions or different average household income groups.

While causality is not estimated in this report, it is certainly interesting to note that a qualitative assessment of these relationships presented above indicates that property rights systems can be considered an important factor when studying the economic development and performance of a country. Despite not considering the costs faced by countries to develop and maintain their advanced property rights systems, there is still an observable relationship between the effectiveness of the property rights system and a country's economic development.

Future IPRI reports ought to more systematically explore the relationship between IPRI values and economic performance of the sampled countries. In fact, a more appropriate design (i.e. regression analysis) would help the IPRI to be assessed as, perhaps, an antecedent of economic success, which in turn implies stronger normative claims on the need to invest in the creation of sophisticated property rights regimes.

## CHAPTER III: IPRI AND GENDER EQUALITY

Gender equality is often taken for granted in developed countries when considering the freedom to engage in economically productive activities where property is a fundamental production input. However, this is not the case for many developing countries, in which 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 prevent women from earning an income, but they also reiterate conditions that force women to remain impoverished.

This chapter highlights the importance of gender equality in a property rights fashion with respect to economic development. With this objective stated, it presents an additional component of the IPRI specifically focused in a subset of countries where the hazard of gender discrimination is usually high.

### 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 have overwhelmingly 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 such as 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 as following:

## IPRI(GE) = IPRI + 0.2\*GE

A weight of 0.2 for the gender equality measure is arbitrary. The author has 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 20.

### Figure 20: 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. They indicate the quality of women's ownership rights with respect to the three following aspects: one, women's access to bank loans; two, their right to acquire and own land; and three, 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 2012 (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 GID-DB-2012)

### Women's Social Rights

This variable covers broader aspects of women's equality. It is composed of several features 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 previous 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 repudiation is excluded. (Source: OECD GID-DB 2012)

### 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. A minimum score (0) means complete discrimination against women, while maximum score (10) 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 rescale the data from 0 to 10.

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 implies that their IPRI(GE) score would be 10 + .2(10) = 12.

### Results

Table 9 presents the results of the IPRI, with the integrated gender equality (GE) variables. This year, 84 countries are scored and ranked for gender equality. Data from the primary source of GE has been updated and is readily available for many non-OECD countries. However, OECD countries are overwhelmingly industrialized countries with high respect for gender equality. These countries are not expected to exhibit much or 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.

As indicated in <u>Table 10</u>, Singapore still tops the ranking for the IPRI(GE) with a score of 9.9, followed by Hong Kong with a score of 9.7. The remaining countries in the top 10 are more geographically dispersed with countries from the Middle East, Africa, and Latin America. Burundi has the lowest IPRI(GE) score at 4.1.

# Table 9: Ranking by GE Score

Rank	Country	IPRI(GE)	GE
1	HONG KONG (SAR OF CHINA)	9.7	10.0
1	MAURITIUS	8.3	10.0
1	TRINIDAD AND TOBAGO	7.7	10.0
1	PANAMA	7.6	10.0
1	CROATIA	7.2	10.0
1	ARGENTINA	6.6	10.0
1	RUSSIA	6.5	10.0
1	UKRAINE	6.2	10.0
1	VENEZUELA, BOLIVARIAN REPUBLIC OF	5.4	10.0
10	SINGAPORE	9.9	9.0
10	URUGUAY	8.0	9.0
10	COSTA RICA	7.7	9.0
10	PERU	6.8	9.0
10	KAZAKHSTAN	6.3	9.0
10	PARAGUAY	6.0	9.0
16	MALAYSIA	8.2	8.5
17	PHILIPPINES	6.6	8.0
17	MACEDONIA (FYROM)	6.5	8.0
17	EL SALVADOR	6.4	8.0
17	SERBIA	6.0	8.0
17	ALGERIA	5.3	8.0
22	LIBERIA	6.9	7.9
23	JAMAICA	6.9	7.7
23	THAILAND	6.6	7.7
23	VIETNAM	6.2	7.7
23	NEPAL	6.0	7.7
27	MOLDOVA, REPUBLIC OF	5.6	7.5
28	KUWAIT	7.3	7.3
28	INDONESIA	6.4	7.3
28	GUATEMALA	6.2	7.3
28	NICARAGUA	5.9	7.3
28	GEORGIA	5.7	7.3
33	SOUTH AFRICA	8.2	7.0
33	BAHRAIN	7.9	7.0
33	HONDURAS	6.2	7.0
33	BOLIVIA	6.1	7.0
33	ARMENIA	6.0	7.0
33	DOMINICAN REPUBLIC	6.0	7.0
33	ECUADOR	6.0	7.0
33	BOSNIA AND HERZEGOVINA	5.8	7.0
41	SENEGAL	5.9	6.8
41	MADAGASCAR	5.6	6.8

Rank	Country	IPRI(GE)	GE
43	COLOMBIA	6.5	6.7
43	HAITI	4.7	6.7
45	MALAWI	6.4	6.6
46	BRAZIL	6.9	6.5
47	ALBANIA	5.4	6.2
48	INDIA	6.7	6.0
48	CHINA	6.7	6.0
48	MOROCCO	6.5	6.0
48	ZIMBABWE	5.0	6.0
52	PAKISTAN	5.3	5.8
53	ZAMBIA	6.0	5.7
53	AZERBAIJAN	5.6	5.7
55	RWANDA	7.3	5.5
56	MAURITANIA	5.8	5.4
57	BOTSWANA	7.4	5.3
57	LEBANON	5.3	5.3
59	SRI LANKA	6.0	5.2
59	ETHIOPIA	5.4	5.2
61	MALI	5.9	5.1
61	CÔTE D'IVOIRE	4.9	5.1
63	BANGLADESH	4.5	5.0
64	MOZAMBIQUE	5.5	4.7
65	GHANA	6.4	4.6
66	KENYA	5.5	4.5
67	EGYPT	5.7	4.4
68	TANZANIA, UNITED REPUBLIC OF	5.7	4.2
68	IRAN, ISLAMIC REPUBLIC OF	5.1	4.2
68	LIBYA	4.2	4.2
71	SAUDI ARABIA	7.2	4.0
71	JORDAN	6.8	4.0
71	BURKINA FASO	5.9	4.0
74	GABON	5.9	3.7
74	SIERRA LEONE	5.5	3.7
74	CHAD	4.7	3.7
77	CAMEROON	5.0	3.5
78	NIGERIA	4.6	3.3
78	BURUNDI	4.1	3.3
80	SWAZILAND	5.7	3.2
81	OMAN	7.2	3.0
82	UNITED ARAB EMIRATES (UAE)	7.6	2.0
83	BENIN	5.3	1.7
84	UGANDA	5.2	1.3

# Table 10: Ranking by IPRI(GE)

Rank	Country	IPRI(GE)	GE
1	SINGAPORE	9.9	9.0
2	HONG KONG (SAR OF CHINA)	9.7	10.0
3	MAURITIUS	8.3	10.0
4	MALAYSIA	8.2	8.5
4	SOUTH AFRICA	8.2	7.0
6	URUGUAY	8.0	9.0
7	BAHRAIN	7.9	7.0
8	TRINIDAD AND TOBAGO	7.7	10.0
8	COSTA RICA	7.7	9.0
10	PANAMA	7.6	10.0
10	UNITED ARAB EMIRATES (UAE)	7.6	2.0
12	BOTSWANA	7.4	5.3
13	KUWAIT	7.3	7.3
13	RWANDA	7.3	5.5
15	CROATIA	7.2	10.0
15	SAUDI ARABIA	7.2	4.0
15	OMAN	7.2	3.0
18	LIBERIA	6.9	7.9
18	JAMAICA	6.9	7.7
18	BRAZIL	6.9	6.5
21	PERU	6.8	9.0
21	JORDAN	6.8	4.0
23	INDIA	6.7	6.0
23	CHINA	6.7	6.0
25	ARGENTINA	6.6	10.0
25	PHILIPPINES	6.6	8.0
25	THAILAND	6.6	7.7
28	RUSSIA	6.5	10.0
28	MACEDONIA (FYROM)	6.5	8.0
28	COLOMBIA	6.5	6.7
28	MOROCCO	6.5	6.0
32	EL SALVADOR	6.4	8.0
32	INDONESIA	6.4	7.3
32	MALAWI	6.4	6.6
32	GHANA	6.4	4.6
36	KAZAKHSTAN	6.3	9.0
37	UKRAINE	6.2	10.0
37	VIETNAM	6.2	7.7
37	GUATEMALA	6.2	7.3
37	HONDURAS	6.2	7.0
41	BOLIVIA	6.1	7.0
42	PARAGUAY	6.0	9.0

Rank	Country	IPRI(GE)	GE	
42	SERBIA	6.0	8.0	
42	NEPAL	6.0	7.7	
42	ARMENIA	6.0	7.0	
42	DOMINICAN REPUBLIC	6.0	7.0	
42	ECUADOR	6.0	7.0	
42	ZAMBIA	6.0	5.7	
42	SRI LANKA	6.0	5.2	
50	NICARAGUA	5.9	7.3	
50	SENEGAL	5.9	6.8	
50	MALI	5.9	5.1	
50	BURKINA FASO	5.9	4.0	
50	GABON	5.9	3.7	
55	BOSNIA AND HERZEGOVINA	5.8	7.0	
55	MAURITANIA	5.8	5.4	
57	GEORGIA	5.7	7.3	
57	EGYPT	5.7	4.4	
57	TANZANIA, UNITED REPUBLIC OF	5.7	4.2	
57	SWAZILAND	5.7	3.2	
61	MOLDOVA, REPUBLIC OF	5.6	7.5	
61	MADAGASCAR	5.6	6.8	
61	AZERBAIJAN	5.6	5.7	
64	MOZAMBIQUE	5.5	4.7	
64	KENYA	5.5	4.5	
64	SIERRA LEONE	5.5	3.7	
67	VENEZUELA, BOLIVARIAN REPUBLIC OF	5.4	10.0	
67	ALBANIA	5.4	6.2	
67	ETHIOPIA	5.4	5.2	
70	ALGERIA	5.3	8.0	
70	PAKISTAN	5.3	5.8	
70	LEBANON	5.3	5.3	
70	BENIN	5.3	1.7	
74	UGANDA	5.2	1.3	
75	IRAN, ISLAMIC REPUBLIC OF	5.1	4.2	
76	ZIMBABWE	5.0	6.0	
76	CAMEROON	5.0	3.5	
78	CÔTE D'IVOIRE	4.9	5.1	
79	HAITI	4.7	4.7 6.7	
79	CHAD	4.7 3.7		
81	NIGERIA	4.6	4.6 3.3	
82	BANGLADESH	4.5	5.0	
83	LIBYA	4.2	4.2	
84	BURUNDI	4.1	3.3	

Table 10 presents the rankings by GE score. There are 9 countries that show the maximum score (10), which are: Hong Kong, Mauritius, Trinidad and Tobago, Panama, Croatia, Argentina, Russia, Ukraine and Venezuela. These are the countries in which the GE component registers more equality in business development opportunity across genders. Within the top countries of GE components there is fairly diversified regional representation. This is not observed when considering the bottom of the GE score ranking: in fact, countries from Africa and Middle East (e.g. Benin, Uganda, Burundi, Oman) suggest a regional pattern for gender discrimination when considering access to business development inputs.

The IPRI(GE) presents a useful tool to understand the repercussions of gender inequality in property rights for economic development. It would be desirable that in the future more data become available to allow a more nuanced understanding of women's rights when studying business development opportunities and property rights. Nevertheless, the current IPRI(GE) is a good approximation of the situation of property rights for the non-OECD countries.

### CHAPTER IV: COUNTRY PROFILES

This chapter provides a country profile for each country ranked in the index.

The country profiles show the IPRI, component scores, and the compounded annual growth rate (CAGR) for the period 2009 to 2013. They include comments and descriptions that identify trends or changes in the overall IPRI and component scores. In addition, they also discuss any significant variation in the items compounding each of the three components. This allows the readers not only to see larger trends but also to understand the driving factors behind the presented changes. Additionally, particularly strong or weak features of the countries' property rights regimes, as measured in the index, are indicated.

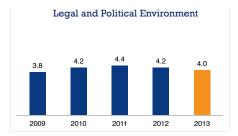
From a methodological standpoint, the IPRI 2013 Country Profile section is based on an effort of providing a list of countries that are characterized by a major coverage of data. This decision is based on the objective to increase the interpretability and the reliability of the statistics offered. In addition, the reader is reminded that all IPRI scores are on a 0–10 scale.

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.

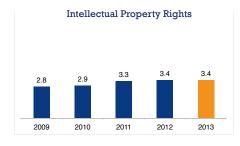
Hereafter the legend for the codes of each region:

Code	Region
A	Africa
AO	Asia and Oceania
CEECA	Central/Eastern Europe and Central Asia
LAC	Latin America and Caribbean
MENA	Middle East and North Africa
NA	North America
WE	Western Europe

### ALBANIA (CEECA)









### World Rank: 113 Regional Rank: 21

### C.A.G.R.

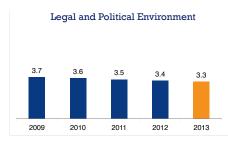
Legal and Political Environment: +1.3% Physical Property Rights: -3.1% Intellectual Property Rights: +5.0% IPRI Index: 0.0%

From 2009 to 2013, the IPRI score for Albania has not changed. While there were improvements in the *Legal and Political Environment* and *Intellectual Property Rights* component scores, the effects were negated by a decrease in the *Physical Property Rights* component score. Since 2009, the *Physical Property Rights* component has been steadily decreasing, while the other two components have fluctuated slightly.

Between 2012 and 2013, the *Legal and Political Environment* component has decreased by 0.2 points from a score of 4.2 to 4.0. This overall

decline in the *Legal and Political Environment* component is mainly due to a 0.5 point decline in the Judicial Independence item. Furthermore, the *Physical Property Rights* component has decreased by 0.3 points to a score of 5.2. This reduction occurred mostly because the item Access to Loans decreased by 0.4 points between 2012 and 2013. However, the *Intellectual Property Rights* component score has not changed, remaining at 3.4.

### ALGERIA (MENA)









World Rank: 125 Regional Rank: 14

### C.A.G.R.

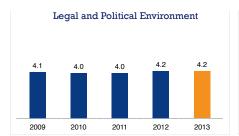
Legal and Political Environment: -2.8% Physical Property Rights: -2.1% Intellectual Property Rights: -2.7% IPRI Index: -2.5%

From 2009 to 2013, the overall Algerian IPRI score has decreased by 2.5%. In general, each of the three IPRI components has experienced negative variation. In fact, between 2012 and 2013, the IPRI score depreciated by 0.3 points to a score of 3.7.

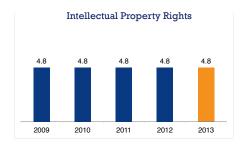
This decline is evident from a 0.5 point decrease in the *Physical Property Rights* component score which declined from 5.0 to 4.5 from 2012 to 2013. The two items Access to Loans and Protection of Physical Property Rights decreased by 0.7 and 0.8 points respectively. There was also a 0.3 point reduction in the *In-*

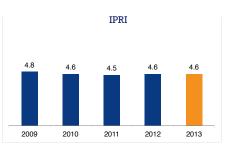
tellectual Property Rights component score to 3.4. This decline was most evident in the 0.6 point decline of Protection of Intellectual Property Rights. However, the Legal and Political Environment component has remained relatively stable.

### ARGENTINA (LAC)









### World Rank: 96 Regional Rank: 17

### C.A.G.R.

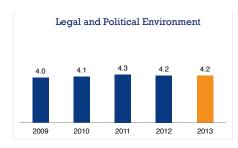
Legal and Political Environment: +0.6% Physical Property Rights: -3.4% Intellectual Property Rights: 0.0% IPRI Index: -1.1%

From 2009 to 2013, the overall Argentinian IPRI score decreased by 1.1%, but remained stable at 4.6 between 2012 and 2013.

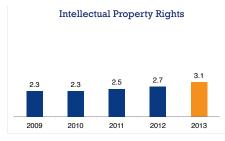
During 2012-2013 Argentina's Physical Property Rights score worsened slightly by 0.1 points to 4.7. Argentina's Intellectual Property Rights component score was stable between 2012 and 2013. Although, the item Protection of Intellectual Property Rights fell by 0.1 points but, Copyright Piracy grew last year by 0.1 points. While the Patent Protection item did not change. Consequently, the overall Intellectual Property Rights component score remains

balanced. Furthermore, the Legal and Political Environment component scores have not changed between 2012 and 2013.

### ARMENIA (CEECA)









World Rank: 96 Regional Rank: 15

### C.A.G.R.

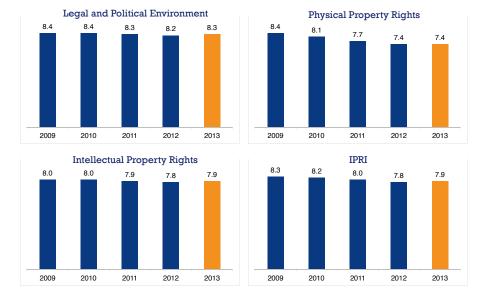
Legal and Political Environment: +1.2% Physical Property Rights: +0.4% Intellectual Property Rights: +7.7% IPRI Index: +1.7%

From 2009 to 2013, the overall Armenian IPRI score has increased by 1.7% to a score of 4.6. Between 2012 and 2013, Armenia's IPRI score increased by 0.2 points.

The driving force behind the increase between 2012 and 2013 is due to an increase in the *Intellectual Property Rights* component score which improved by 0.4 points to 3.1 from 2.7. The variation in *Intellectual Property Rights* is due to an increase in the Protection of Intellectual Property Rights by 0.6. Furthermore, the *Physical Property Rights Score* increased by 0.4 points. This increase can be attributed to the 0.8

point increase in the item of Protection of Physical Property Rights. Unlike the other components, *Legal and Political Environment*, has not changed from 2012: it has remained stable at a score of 4.2.

### AUSTRALIA (AO)



World Rank: 11 Regional Rank: 3

### C.A.G.R.

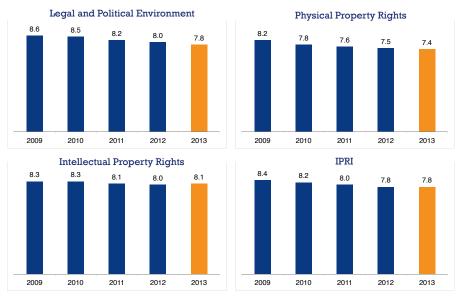
Legal and Political Environment: -0.3% Physical Property Rights: -3.1% Intellectual Property Rights: -0.3% IPRI Index: -1.2%

From 2009 to 2013, the Australian IPRI score decreased by 1.2% to a score of 7.9 in 2013 from 8.3 in 2009. However, between 2012 and 2013 Australia had a slight increase (0.1) in the overall IPRI score.

The Legal and Political Environment component score marginally improved by 0.1 points to 8.3 due to an increase in the Control of Corruption item by 0.2 points and 0.1 point increases in Political Stability and Rule of Law. Although the item Judicial Independence declined by 0.2 points. Australia's Intellectual Property Rights Component score increased by

0.1 points between 2012 and 2013 because the Copyright Piracy item increased by 0.1 points. Furthermore, the component *Physical Property Rights* remained unchanged between 2012 and 2013.

### AUSTRIA (WE)



World Rank: 12 Regional Rank: 8

### C.A.G.R.

Legal and Political Environment: -2.4% Physical Property Rights: -2.5% Intellectual Property Rights: -0.6% IPRI Index: -1.8%

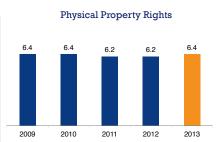
From 2009 to 2013, the overall Austrian IPRI score decreased by 1.8%, from 8.4 in 2009 to 7.8 in 2013. However, the IPRI from 2012 to 2013 has remained the same.

The Legal and Political Environment component score fell by 0.2 points to 7.8, which is driven by a decline in the Judicial Independence item by 0.5 points and also a 0.4 point decline in the Control of Corruption item. Austria's Physical Property Rights component score marginally declined between 2012 and 2013, due, in part, to a 0.1 point decrease in the Protection of Physical Property Rights item. Furthermore,

the Intellectual Property Rights component score marginally increased over the same period because of a 0.1 point improvement in the Copyright Piracy item.

### AZERBAIJAN (CEECA)

# Legal and Political Environment 3.8 4.1 3.8 3.8 3.7 2009 2010 2011 2012 2013







### World Rank: 102 Regional Rank: 16

### C.A.G.R.

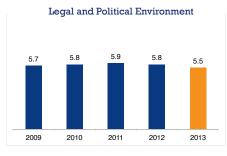
Legal and Political Environment: -0.7% Physical Property Rights: 0.0% Intellectual Property Rights: +4.1% IPRI Index: +0.6%

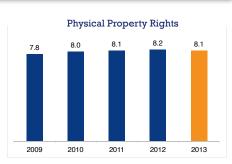
From 2009 to 2013, the overall Azerbaijani IPRI score increased by 0.6%, from 4.4 to 4.5. This slight increase is most attributable to the larger increase in the component *Intellectual Property Rights*.

Between 2012 and 2013 Azerbaijan's *Legal* and *Political Environment* score fell slightly by 0.1 points to 3.7. This is due to a rather large decline (0.4) in Political Stability. However, the *Physical Property Rights* component score grew by 0.2 points from 2012 to 2013. This increase can be attributed to the 0.4 point growth of the Access to Loan item. Furthermore, there was a

slight increase in the Intellectual Property Rights component score, which can be attributed to a 0.3 point increase in the Protection of Intellectual Property Rights item score.

### BAHRAIN (MENA)









attributable to a 0.3 decline in the Protection of Intellectual Property Rights item.

World Rank: 33 Regional Rank: 6

### C.A.G.R.

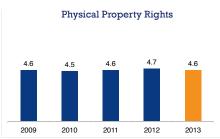
Legal and Political Environment: -0.9% Physical Property Rights: +0.9% Intellectual Property Rights: +0.9% IPRI Index: +0.4%

From 2009 to 2013, the overall Bahraini IPRI score increased by 0.4%. However, between 2012 and 2013 each of the three components decreased slightly.

Bahrain's Legal and Political Environment component score fell significantly from 5.8 to 5.5. The main reasons for the reduction are because three of the four items Rule of Law (-0.2), Political Stability (-0.5), and Control of Corruption (-0.4) declined. The component Physical Property Rights decreased marginally. Finally, the Intellectual Property Rights component score decreased from 6.1 to 5.9. This decline is

### BANGLADESH (AO)

# 3.2 3.4 3.3 3.3 3.2 2009 2010 2011 2012 2013







attributed to a 0.3 point decrease in the Access to Loans item score.

# World Rank: 126 Regional Rank: 19

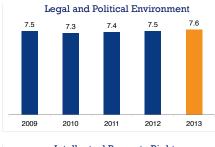
### C.A.G.R.

Legal and Political Environment: 0.0% Physical Property Rights: 0.0% Intellectual Property Rights: +1.9% IPRI Index: +0.7%

From 2009 to 2013, the overall Bangladesh IPRI score increased by 0.7%. In the last period, 2012 to 2013, the IPRI score fell by 0.1 points to 3.5 due to a decline in both *Legal and Political Environment* and *Physical Property Rights* components scores. However, between 2012 and 2013 the *Intellectual Property Rights* component score did not change.

The decline in the *Legal and Political Environment* score (from 3.3 to 3.2) is driven by a 0.5 point fall in the Judicial Independence item from 4.6 to 4.1. Furthermore, the *Physical Property Rights* component score decrease is best

### BELGIUM (WE)









## World Rank: 18 Regional Rank: 11

### C.A.G.R.

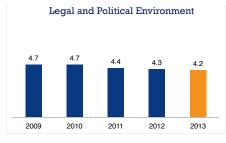
Legal and Political Environment: 0.3% Physical Property Rights: -1.8% Intellectual Property Rights: -0.3% IPRI Index: -0.7%

From 2009 to 2013, the Belgian IPRI score decreased by 0.7%. However, from 2012 to 2013 the IPRI remained stable at 7.5. In general, the improvements in the *Legal and Political Environment* and the *Intellectual Property Rights* component scores are balanced out by the decline of the *Physical Property Rights* component score.

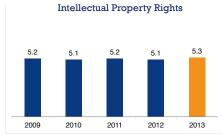
Belgium's Legal and Political Environment had a slight improvement from a score of 7.5 to 7.6. This increase is driven by the 0.2 point improvements in Control of Corruption and Political Stability. Also, the Intellectual Property

Rights component increase is attributable to a 0.3 point increase in the Protection of Intellectual Property Rights. However, the *Physical Property Rights* component decreased by 0.2 points due to 0.2 point losses in Access to Loans and Protection of Physical Property Rights items.

### BENIN (A)









### World Rank: 77 Regional Rank: 11

### C.A.G.R.

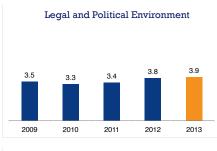
Legal and Political Environment: -2.8% Physical Property Rights: 0.0% Intellectual Property Rights: +0.5% IPRI Index: -0.5%

From 2009 to 2013, the IPRI score of Benin decreased by 0.5% from 5.1 in 2009 to 5.0 in 2013. After a significant improvement in Benin's IPRI score in 2011, the country has since seen a decline in the score, and it is now, in fact, lower than it was in 2009.

Between 2012 and 2013 there was a significant loss in the *Physical Property Rights* component, a decline of 0.4 points due to reductions in Protection of Physical Property Rights by 0.7 points and by a 0.6 point loss in Access to Loans. The *Legal and Political Environment* component fell only by 0.1 points during the

same time period. On the other hand, the *Intellectual Property Rights* component score improved between 2012 and 2013 from 5.1 to 5.3. This rise is due to a 0.3 point increase in the item Protection of Intellectual Property Rights.

### BOLIVIA (LAC)









Bolivia's Legal and Political Environment score marginally improved between 2012 and 2013.

World Rank: 91 Regional Rank: 14

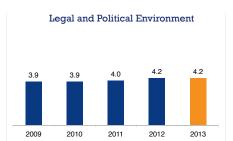
### C.A.G.R.

Legal and Political Environment: +2.7% Physical Property Rights: +4.4% Intellectual Property Rights: +4.3% IPRI Index: +4.1%

From 2009 to 2013, the overall Bolivian IPRI score increased by 4.1%. In fact, since 2010 each of the three component scores have improved.

In the 2012 to 2013 time-period Bolivia improved the *Physical Property Rights* component by 0.6 points from 5.1 to 5.7. This increase was driven primarily by a 1 point increase in Access to Loans. Furthermore, the *Intellectual Property Rights* component score increased from 4.2 to 4.5. This improvement is partially due to an increase of the Protection of Intellectual Property Rights item score by 0.9 points.

### BOSNIA AND HERZEGOVINA (CEECA)









# Rank: 107

C.A.G.R.

Regional Rank: 19

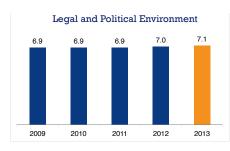
### Legal and Political Environment: +1.9% Physical Property Rights: +0.9% Intellectual Property Rights: +2.3%

IPRI Index: +1.8%

From 2009 to 2013, the IPRI score of Bosnia and Herzegovina increased by 1.8%. Over the same period it increased from 4.1 to 4.4.

While the Physical Property Rights component score increased by 0.2 points between 2012 and 2013 the other two components (Legal and Political Environment and Intellectual Property Rights) remained unchanged. The improvement in Physical Property Rights is largely due to a 0.6 point increase in the Protection of Physical Property Rights.

### BOTSWANA (A)









Regional Rank: 2

### C.A.G.R.

World Rank: 40

Legal and Political Environment: +0.7% Physical Property Rights: -1.4% Intellectual Property Rights: +2.7% IPRI Index: +0.4%

From 2009 to 2013, the IPRI score of Botswana increased by 0.4%. Minimal variations between the three component scores balanced out and, consequently, the IPRI remained at 6.3 from 2012 to 2013.

Botswana's Physical Property Rights component score declined by 0.1 points from 7.0 to 6.9. This was driven by 0.4 point decrease in Protection of Physical Property Rights, while Access to Loans and Registering Property scores remained the same between 2012 and 2013. On the other hand, the Legal and Political Environment component score increased by

0.1 points, due to 0.2 point improvements in both Political Stability and Judicial Independence. Furthermore, the Intellectual Property Rights increased by 0.1 points because of a 0.2 point increase in Protection of Intellectual Property Rights.

### BRAZIL (LAC)







2013

### World Rank: 56 Regional Rank: 6

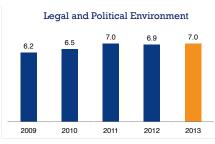
### C.A.G.R.

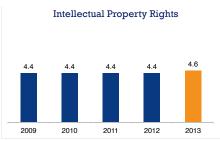
Legal and Political Environment: +2.6% Physical Property Rights: 0.0% Intellectual Property Rights: +1.4% IPRI Index: +1.4%

From 2009 to 2013, the overall Brazilian IPRI score increased by 1.4%. In the 2012-2013 time period two components of IPRI grow, but the Legal and Political Environment component remained the same. Consequently, Brazil's IPRI increased by 0.1 points between 2012 and 2013. Brazil's Legal and Political Environment score did not change because a decline in Political Stability was balanced out by growth in Control of Corruption and Judicial Independence. Furthermore, the Physical Property Rights score increased by 0.1 points to 6.0, which was driven by a 0.4 point improvement in the Protection of

Physical Property Rights. Similarly *Intellectual Property Rights* increased by 0.1 points due to a 0.4 point increase in Protection of Intellectual Property Rights.

### BRUNEI DARUSSALAM (AO)









World Rank: 53 Regional Rank: 9

### C.A.G.R.

Legal and Political Environment: +3.1% Physical Property Rights: 0.0% Intellectual Property Rights: +1.1% IPRI Index: +1.8%

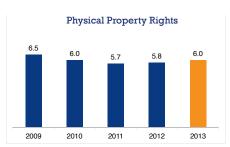
From 2009 to 2013, the overall IPRI score of Brunei Darussalam increased by 1.8%. From 2012 to 2013, the IPRI score increased by 0.1 points.

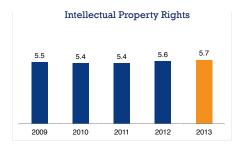
From 2012 to 2013 there was no variation observed for the *Physical Property Rights* score. However, the *Legal and Political Environment* component improved by 0.1 points, and was driven by a 0.2 point increase in Rule of Law and 0.4 point increase in Judicial Independence. There was a 0.3 point decline in Political Stability over the same time. Brunei Darussalam's *Intellectual Property Rights* score also

grew during 2012- to 2013. The 0.2 point increase is due to improvements in the item of Protection of Intellectual Property Rights.

### **BULGARIA** (CEECA)

# 4.8 4.7 4.8 4.8 4.8 2009 2010 2011 2012 2013







2012 to 2013 the Legal and Political Environment component did not change.

### World Rank: 58 Regional Rank: 9

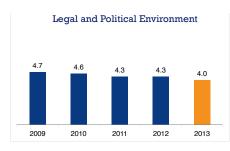
### C.A.G.R.

Legal and Political Environment: 0.0% Physical Property Rights: -2.0% Intellectual Property Rights: +0.9% IPRI Index: -0.4%

From 2009 to 2013, the overall Bulgarian IPRI score decreased by 0.4%. Despite improvements over the last year, the IPRI score is still depressed below 2009 levels at 5.5.

Bulgaria's *Physical Property Rights* score improved 0.2 points from 2012. This improvement was driven by higher scores in Access to Loans and Protection of Physical Property Rights, increases of 0.3 points in both cases. Furthermore, there was a slight improvement in the item of Protection of Intellectual Property Rights which aided in raising the overall *Intellectual Property Rights* component. However, from

### BURKINA FASO (A)









increase in Protection of Physical Property Rights.

### World Rank: 72 Regional Rank: 8

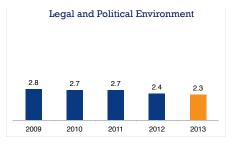
### C.A.G.R.

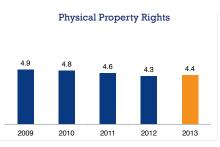
Legal and Political Environment: -4.0% Physical Property Rights: +1.4% Intellectual Property Rights: +0.5% IPRI Index: -0.5%

From 2009 to 2013, the IPRI score in Burkina Faso decreased by 0.5%. However, between 2012 and 2013 the IPRI grew from 5.0 to 5.1.

A 0.3 points decline in Legal and Political Environment was the result of a significant loss of 0.8 points in Political Stability and a 0.4 point loss in Rule of Law. However, Burkina Faso's Physical Property Rights score grew by 0.1 points while the Intellectual Property Rights component increased by 0.3 points. The improvement in Physical Property Rights was due to an increase in Access to Loans. The increase in Intellectual Property Rights is due to 0.6 point

## BURUNDI (A)









Regional Rank: 28

### C.A.G.R.

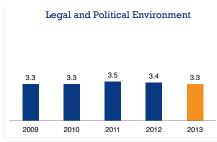
World Rank: 127

Legal and Political Environment: -4.8% Physical Property Rights: -2.7% Intellectual Property Rights: -1.4% IPRI Index: -2.7%

Between 2009 and 2013, the IPRI score in Burundi decreased by 2.7%. In fact, it has decreased from 3.8 points in 2009 to 3.4 points in 2012 and 2013.

Burundi's Legal and Political Environment component score dropped by 0.1 points due to a 0.4 point drop in Political Stability. There was, on the other hand, a 0.1 point improvement in the Physical Property Rights component because Access to Loans increased. There was not, however, a change in the Intellectual Property Rights component between 2012 and 2013.

### CAMEROON (A)









### World Rank: 111 Regional Rank: 22

### C.A.G.R.

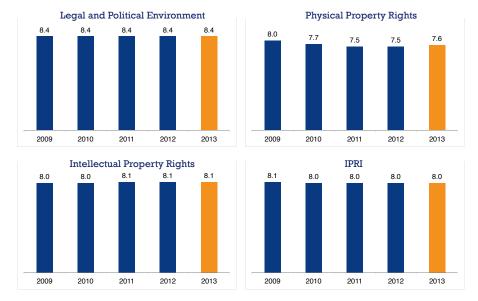
Legal and Political Environment: 0.0% Physical Property Rights: +0.9% Intellectual Property Rights: 0.0% IPRI Index: 0.0%

The minimal amount of variation in the IPRI score between 2009 and 2013 means that the IPRI score has not changed from 2009. Also, Cameroon's IPRI score has remained the same for the second consecutive year. A drop in Legal and Political Environment is balanced by a slight improvement in Physical Property Rights and Intellectual Property Rights has not changed.

Legal and Political Environment shrank 0.1 points because of a 0.4 point decline in Judicial Independence. The *Physical Property Rights* component score improved by 0.2 points due

to higher scores in Access to Loans and Protection of Physical Property Rights. The Intellectual Property Rights component did not change between 2012 and 2013 because there were offsetting changes to the Protection of Intellectual Property Rights and Copyright Piracy items.

### CANADA (NA)



This increase is best attributed to the increased rating in the Access to Loans item.

### World Rank: 9

Regional Rank: 1

### C.A.G.R.

Legal and Political Environment: 0.0% Physical Property Rights: -1.3% Intellectual Property Rights: +0.3% IPRI Index: -0.3%

From 2009 to 2013, the overall Canadian IPRI score decreased by 0.3%. However, the IPRI

score for Canada remained the same, at 8.0, for the fourth consecutive year. Canada remains the highest ranked country in its region.

In the 2012 to 2013 there was no variation observed in both the Legal and Political Environment and the Intellectual Property component. However, there was some variation between the items. Corruption Control and Rule of Law declined by 0.1, but Political Stability increased by 0.3 points. The component Physical Property Rights saw a 0.1 point increase in score.

### CHAD (A)



2013

2011

2012

World Rank: 121 Regional Rank: 24

### C.A.G.R.

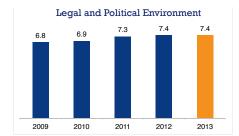
Legal and Political Environment: +5.7% Physical Property Rights: 0.0% Intellectual Property Rights: 0.0% IPRI Index: 1.3%

From 2009 to 2013, the IPRI score in Chad increased by 1.3%. During the 2012 to 2013 period the IPRI in Chad actually decreased by 0.1 points, in part because both Property Rights and Intellectual Property Rights components decreased.

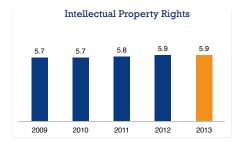
Between 2012 and 2013 there was no variation observed in Legal and Political Environment, like the two previous periods. A 0.1 point decrease is observed in Chad's Physical Property Rights score which is driven by a decrease in ratings for Access to Loans by 0.2 points. The component Intellectual Property

Rights decreased by 0.2 points, which is mainly driven by a 0.3 point reduction in the Protection of Intellectual Property Rights item.

### CHILE (LAC)









from the previous time period.

### World Rank: 26

Regional Rank: 1

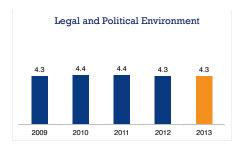
### C.A.G.R.

Legal and Political Environment: +2.1% Physical Property Rights: -1.0% Intellectual Property Rights: +0.9% IPRI Index: +0.7%

From 2009 to 2013, the overall Chilean IPRI score increased by 0.7%. Between 2012 and 2013, Chile saw a modest increase (0.1) in their overall IPRI.

The component Legal and Political Environment remained static, even though there was some variation among the items. Also, the score for Intellectual Property Rights remains the same despite small variation between item scores. Physical Property Rights improved by 0.2 points, due to improvements in Access to Loans and Protection of Physical Property Rights. Registering Property remains the same

### CHINA (AO)









World Rank: 58

Regional Rank: 10

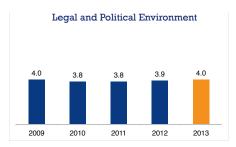
### C.A.G.R.

Legal and Political Environment: 0.0% Physical Property Rights: +0.7% Intellectual Property Rights: +0.9% IPRI Index: +0.5%

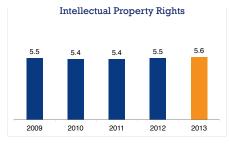
From 2009 to 2013, the overall Chinese IPRI score increased by 0.5%. However, the IPRI has remained static for the fourth year in row, and each component reports little or no change.

No variation is observed between 2012 and 2013 for the *Legal and Political Environment* component despite slight variation between items. Furthermore, *Intellectual Property Rights* remains the same at a score of 5.4. The component *Physical Property Rights* does, however, decline by 0.1 points. The decline is best evidenced by a 0.3 point decrease in the Protection of Physical Property Rights item score.

### COLOMBIA (LAC)









# 0.1 points. However, *Physical Property Rights* decreased by 0.1 points due to deterioration by 0.2 points in both Access to Loans and Protection of Physical Property Rights.

### World Rank: 68 Regional Rank: 9

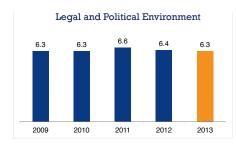
### C.A.G.R.

Legal and Political Environment: 0.0% Physical Property Rights: -1.2% Intellectual Property Rights: +0.5% IPRI Index: -0.5%

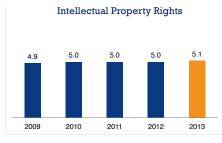
From 2009 to 2013, the overall Colombian IPRI score decreased by 0.5%. Between 2012 and 2013, the IPRI score does not change, but remains at 5.2.

Legal and Political Experience increased modestly (0.1) over the 2012 and 2013 period. Three of the four items had improvements in their ratings. The item Judicial Independence actually experienced a 0.5 point decrease. The component Intellectual Property Rights increased by 0.1 points between 2012 and 2013. The items Protection of Intellectual Property Rights and Copyright Piracy also increased by

## COSTA RICA (LAC)









Protection of Intellectual Property Rights.

World Rank: 51 Regional Rank: 4

### C.A.G.R.

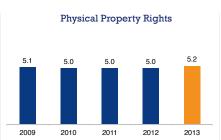
Legal and Political Environment: 0.0% Physical Property Rights: -1.6% Intellectual Property Rights: +1.0% IPRI Index: 0.0%

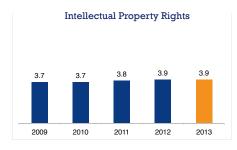
Between 2009 and 2013 IPRI score for Costa Rica has not changed. From 2012 to 2013 the IPRI increased by 0.1 points.

Costa Rica's Legal and Political Environment component score shrank by 0.1 points due to losses in all four items. However, Physical Property Rights increased by 0.2 points from 2012 to 2013. The improvements are evidenced by increases by 0.3 points in the items Access to Loans and Protection of Physical Property Rights. Furthermore, the component Intellectual Property Rights increased by 0.1 points due to a 0.2 point improvement in the item score of

### CÔTE D'IVOIRE (A)

2.1 2.2 2.6 2.5 2.6 2.009 2010 2011 2012 2013







# World Rank: 122 Regio

Regional Rank: 25

### C.A.G.R.

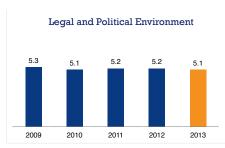
Legal and Political Environment: +5.5% Physical Property Rights: +0.5% Intellectual Property Rights: +1.3% IPRI Index: +2.0%

Between 2012 and 2013, the IPRI score for Côte d'Ivoire increased by 2.0 %. Also in 2013 the IPRI score improved 0.1 points, due to increases in *Legal and Political Environment* and *Physical Property Rights*. However, the *Intellectual Property Rights* component score remained static from 2012 to 2013.

The 0.1 point improvement in the Legal and Political Environment score is due to improvements in the items Judicial Independence and Political Stability. Furthermore, a 0.5 point increase in Access to Loans led to a 0.2 point increase in the Physical Property Rights

component score. However, the *Intellectual Property Rights* score remained stable at 3.9 from 2012 to 2013, despite minor variations in the items Protection of Intellectual Property Rights and Copyright Piracy.

### CROATIA (CEECA)









### World Rank: 68 Regional Rank: 12

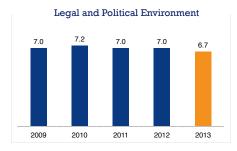
C.A.G.R.

Legal and Political Environment: -1.0% Physical Property Rights: -0.9% Intellectual Property Rights: -0.5% IPRI Index: -0.5%

From 2009 to 2013, the overall Croatian IPRI score decreased by 0.5%. From 2010 to 2013 the IPRI score has remained at 5.2.

Between 2012 to 2013, the Legal and Political Environment component fell by 0.1 points, mainly due to a 0.4 point decline in Judicial Independence. Furthermore, there was a 0.1 point decline in the Physical Property Rights component score which can be attributed to a 0.1 point decline in Access to Loans and a 0.2 point decline in Protection of Physical Property Rights. From 2012 to 2013 the Intellectual Property Rights score saw no change.

### CYPRUS (MENA)









World Rank: 31 Regional Rank: 4

### C.A.G.R.

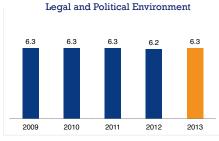
Legal and Political Environment: -1.1% Physical Property Rights: -2.0% Intellectual Property Rights: -0.4% IPRI Index: -1.1%

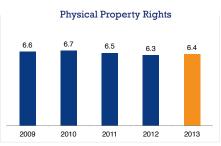
From 2009 to 2013, the IPRI score for Cyprus decreased by 1.1%. In fact, from 2012 to 2013 the IPRI decreased by 0.2 points, from 6.8 to 6.6. This decline in IPRI occurred due to a reduction in scores of all three components.

Legal and Political Environment fell 0.3 points from 2012 to 2013 which is mostly driven by a 0.8 point decrease in Judicial Independence, a 0.2 point decline in Control of Corruption and a 0.3 point decline in Rule of Law. Cyprus did, however, see an increase of 0.3 points in the item Political Stability. Cyprus's Physical Property Rights component decreased by 0.2 points

to 7 due to a significant (0.6 points) decrease in Access to Loans. Furthermore, *Intellectual Property Rights* saw a decline of 0.3 points because of a 0.3 decrease in Protection of Intellectual Property Rights item score.

### CZECH REPUBLIC (CEECA)









World Rank: 33 Regional Rank: 2

### C.A.G.R.

Legal and Political Environment: 0.0% Physical Property Rights: -0.8% Intellectual Property Rights: +0.4% IPRI Index: -0.4%

From 2009 to 2013, the overall Czech Republican IPRI score decreased by 0.4%. During the 2012 and 2013 period IPRI slightly improved, by 0.1 points. Each component score similarly improved by 0.1 points.

The increase in *Legal and Political Environment* is a result of improvements in Political Stability and Rule of Law. The *Physical Property Rights* component score saw improvements in Registering Property Rights. Finally, *Intellectual Property Rights* improved due to increases in Copyright Piracy and Protection of Intellectual Property Rights.

### DENMARK (WE)

## 

decline is due to a 0.9 point decrease in Protection of Intellectual Property Rights.

### World Rank: 9

Regional Rank: 7

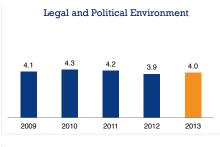
### C.A.G.R.

Legal and Political Environment: -0.9% Physical Property Rights: -4.3% Intellectual Property Rights: -1.5% IPRI Index: -2.1%

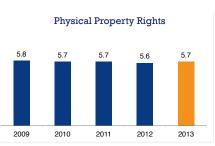
From 2009 to 2013, the IPRI score of Denmark decreased by 2.1%. Between 2012 and 2013 the IPRI fell by 0.3 points down to 8.0. All three components decreased during this period.

Legal and Political Environment decreased by 0.2 points due to a significant loss, 0.8 points, in Judicial Independence. Also, the Physical Property Rights score decreased by 0.5 points. This decline can be attributed to the 0.7 point decreases in both Access to Loans and Protection of Physical Property Rights. Furthermore, the component Intellectual Property Rights decreased by 0.3 points from 2012 to 2013. This

### DOMINICAN REPUBLIC (LAC)









World Rank: 96 Regional Rank: 17

### C.A.G.R.

Legal and Political Environment: -0.6% Physical Property Rights: -0.4% Intellectual Property Rights: -1.2% IPRI Index: -0.5%

From 2009 to 2013, the IPRI score for the Dominican Republic decreased by 0.5%. In 2013 the IPRI score for the Dominican Republic grew by 0.1 points to 4.6

Over 2012 to 2013, all three of the components increased by 0.1 points. The growth in the Legal and Political Environment component score occurred due to increases by 0.1 points in three of the four items. The item Judicial Independence did, however, decrease by 0.1 points. The 0.1 point increase in Physical Property Rights is due to increases in both Access to Loans and Protection of Physical

Property Rights. Intellectual Property Rights improved as a result of a 0.3 point increase in the item Protection of Intellectual Property Rights.

### ECUADOR (LAC)







2013

### World Rank: 96 Regional Rank: 17

### C.A.G.R.

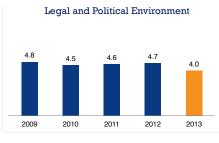
Legal and Political Environment: +1.6% Physical Property Rights: +1.4% Intellectual Property Rights: +0.5% IPRI Index: +1.1%

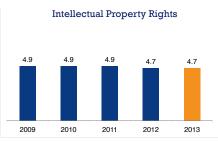
From 2009 to 2013, the overall Ecuadorian IPRI score increased by  $1.1\,\%$ . During the 2012 to 2013 period the IPRI score for Ecuador continues to improve.

While Intellectual Property Rights remains the same at 4.9, Legal and Political Environment and Physical Property Rights increase by 0.1 points each. The component Legal and Political Environment increases due to improvements in the scores of both Judicial Independence and Control of Corruption. However, Political Stability did decline by 0.2 points from 2012 to 2013. Furthermore, in Physical Property Rights the

items Access to Loans and Protection of Physical Property Rights increased during this time, but Registering Property decreased.

### EGYPT (MENA)









World Rank: 87 Regional Rank: 11

### C.A.G.R.

Legal and Political Environment: -4.5% Physical Property Rights: -2.5% Intellectual Property Rights: -1.0% IPRI Index: -2.4%

From 2009 to 2013, the overall Egyptian IPRI score decreased by 2.4%. In fact, from 2012 to 2013 Egypt experienced a significant decline in its IPRI, from 5.1 to 4.8. This 0.3 point decline is due mainly to a 0.7 point drop in the *Legal and Political Environment* component.

The significant decrease in the *Legal and Political Environment* component is because of declines in all four items. Judicial Independence decreased by 0.9 points, Political Stability decreased by 0.8 points, Rule of Law decreased by 0.6 points, and finally Control of Corruption decreased by 0.3 points. Further-

more, Physical Property Rights saw a 0.1 point decline driven by a 0.2 point loss in Protection of Physical Property. However, Intellectual Property Rights remained stable from 2012 to 2013.

### EL SALVADOR (LAC)

# 4.4 4.3 4.3 4.3 4.3 4.3 2009 2010 2011 2012 2013







### World Rank: 87 Regional Rank: 12

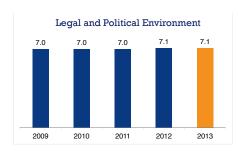
# C.A.G.R.

Legal and Political Environment: -0.6% Physical Property Rights: -2.0% Intellectual Property Rights: -0.6% IPRI Index: -1.5%

From 2009 to 2013, the overall El Salvadorian IPRI score decreased by 1.5%. Between 2012 and 2013 the IPRI decreased by 0.1 points, although both *Legal and Political Environment* and *Physically Property Rights* did not change.

El Salvador's Legal and Political Environment experienced no change from last year and remains at 4.3 despite slight variations within the items. Furthermore, Physical Property Rights remains at 6.0. There was, however, a 0.1 point decline in Intellectual Property Rights. This decrease is evidenced by 0.3 point drop in Protection of Intellectual Property Rights.

### ESTONIA (CEECA)









### World Rank: 29 Regional Rank: 1

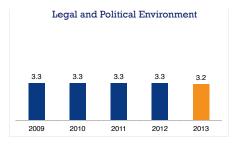
### C.A.G.R.

Legal and Political Environment: +0.4% Physical Property Rights: -3.3% Intellectual Property Rights: +0.4% IPRI Index: -0.7%

From 2009 to 2013, the IPRI score for Estonia decreased by 0.7%. While its IPRI did not change in 2013, Estonia continues to hold the highest score for Central and Eastern Europe at 6.7 points. Over the period 2012 to 2013, Legal and Political Environment held constant at 7.1.

Physical Property Rights declined for the fourth year in a row due to 0.2 point loss in Protection of Physical Property Rights. Estonia's Intellectual Property Rights score improved by 0.1 points driven by a 0.2 point increase in Copyright Piracy.

### ETHIOPIA (A)









### World Rank: 107 Regional Rank: 21

### C.A.G.R.

Legal and Political Environment: -0.8% Physical Property Rights: -0.5% Intellectual Property Rights: +1.6% IPRI Index: 0.0%

From 2009 to 2013, the overall Ethiopian IPRI score has not changed. In general, the overall improvement in *Intellectual Property Rights* is balanced out by the negative variation of the *Physical Property Rights* and *Legal and Political Environment* score. Between 2012 and 2013 the IPRI score dropped by 0.1 points.

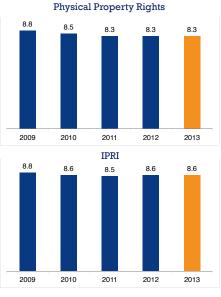
Legal and Political Environment decreased by 0.1 points despite increases in three of the four items. Furthermore, Physical Property Rights fell by 0.2 points to 5.2. This decline is driven by a 0.5 point loss in Protection of Physical Property. On the other hand, Intellectual Property Rights

increased by 0.1 points from 2012 to 2013. The increase is due to a 0.1 point increase in Protection of Intellectual Property Rights.

### FINLAND (WE)



Legal and Political Environment



World Rank: 1 Regional Rank: 1

### C.A.G.R.

Legal and Political Environment: -0.6% Physical Property Rights: -1.5% Intellectual Property Rights: 0.0% IPRI Index: -0.6%

From 2009 to 2013, the overall IPRI score for Finland decreased by 0.6%.

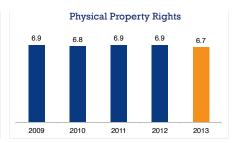
Despite continuing to lead the world in property rights, the IPRI remains stable at 8.6 points in 2013.

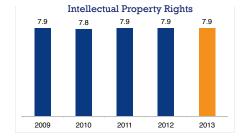
From 2012 to 2013 both the *Intellectual Property Rights* and *Physical Property Rights* components remain unchanged. However, from 2012 to 2013 *Legal and Political Environment* increased by 0.1 points. This increase is because of improvements in both Control of Corruption and Judicial Independence.

### FRANCE (WE)

7.3 7.1 7.1 7.3 7.3

2009 2010 2011 2012 2013







### World Rank: 20 F

Regional Rank: 13

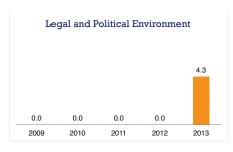
### C.A.G.R.

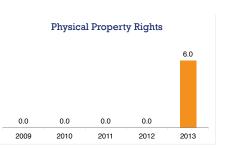
Legal and Political Environment: 0.0% Physical Property Rights: -0.7% Intellectual Property Rights: 0.0% IPRI Index: -0.3%

From 2009 to 2013, the overall French IPRI score decreased by 0.3%. From 2012 to 2013 IPRI slightly decreased from 7.4 to 7.3.

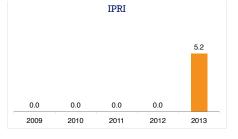
From 2012 to 2013 there was no variation observed for both *Legal and Political Environment* and *Intellectual Property Rights* components. Over the same period, there was a 0.2 decline in the *Physical Property Rights* score. This decrease is because of losses in both Access to Loans and Protection of Physical Property Rights by 0.3 points.

### GABON (A)









Stability is 5.7.

### World Rank: 68

Regional Rank: 7

### C.A.G.R.

Legal and Political Environment: 0.0% Physical Property Rights: 0.0% Intellectual Property Rights: 0.0% IPRI Index: 0.0%

This is the first year that Gabon has been included in the IPRI index. Consequently, there are no meaningful C.A.G.R. values. Gabon's IPRI score for 2013 is 5.2.

Gabon's highest scoring component is *Physical Property Rights* with a score of 6.0. The items Registering Property and Protection of Physical Property Rights are relatively high, around a score of 7, but Access to Loans is extremely low at a score of 3.7. The lowest ranked component for Gabon is *Legal and Political Environment*. Control of Corruption is 3.5, Judicial Independence is 3.8, Rule of Law is 4.0, and Political

## GEORGIA (CEECA)

### Legal and Political Environment **Physical Property Rights** 6.1 4.3 2009 2013 2009 2013 2010 2011 2012 2010 2011 IPRI **Intellectual Property Rights** 2.3 2.3 2.3 2.3 0.0 0.0

the Intellectual Property Rights component score has not changed over the 2012-2013 period.

2009

2010

2013

2012

### World Rank: 113 Regional Rank: 21

### C.A.G.R.

Legal and Political Environment: 3.2% Physical Property Rights: -0.5% Intellectual Property Rights: 0.0% IPRI Index: +0.8%

From 2010 to 2013, the overall Georgian IPRI score increased by  $0.8\,\%$ . However, from 2012 to 2013 the IPRI score remained the same at 4.2 points.

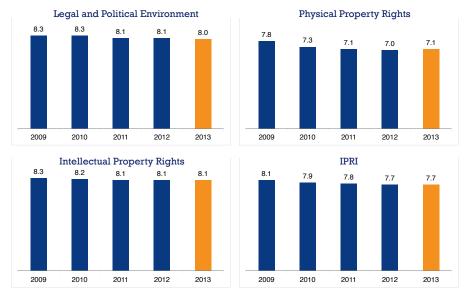
While Legal and Political Environment improved by 0.1 points driven by a 0.2 point increase in Control of Corruption and a 0.1 point increase in Rule of Law, the 0.1 point decrease in Political Stability was moot. The Physical Property Rights component score fell by 0.1 points to 6.0. This decline is attributable to a 0.2 point drop in both Protection of Physical Property Rights and Access to Loans. However,

### GERMANY (WE)

2010

2011

2009



World Rank: 14 Regional Rank: 10

### C.A.G.R.

2013

Legal and Political Environment: -0.9% Physical Property Rights: -2.3% Intellectual Property Rights: -0.6% IPRI Index: -1.3%

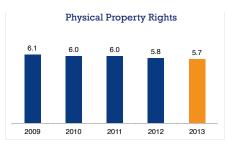
Between 2009 and 2013 the overall IPRI score of Germany decreased by 1.3%. From 2012 to 2013 the IPRI score saw no change, it remains at 7.7 points.

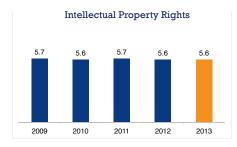
While the Intellectual Property Rights component score experienced no change from 2012 to 2013, the Legal and Political Environment score dropped from 8.1 to 8.0. This decrease is driven by 0.1 point drops in both Rule of Law and Judicial Independence. However, the component score for Physical Property Rights increased by 0.1 points over the same period. The increase is attributable to a 0.3 point

increase in Access to Loans and a 0.1 point improvement in the Protection of Intellectual Property Rights.

### GHANA (A)

# Legal and Political Environment 5.1 5.0 5.1 5.2 5.3 2009 2010 2011 2012 2013







because of increases in both Political Stability and Control of Corruption.

### World Rank: 58

Regional Rank: 5

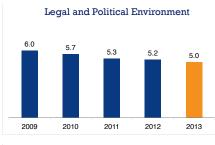
### C.A.G.R.

Legal and Political Environment: +1.0% Physical Property Rights: -1.7% Intellectual Property Rights: -0.4% IPRI Index: -0.4%

From 2009 to 2013, the overall IPRI score for Ghana decreased by 0.4%. However, from 2012 to 2013 there was no variation in the IPRI

Intellectual Property Rights remained stable at 5.6. However, data for Copyright Piracy remains unavailable. The Physical Property Rights component score decreased by 0.1 points from 2012 to 2013. This decline is due, in part, to a decline in the Protection of Physical Property Rights. Furthermore, the component Legal and Political Environment increased by 0.1 points between 2012 and 2013. The improvement is

### GREECE (WE)









World Rank: 63 Regional Rank: 19

### C.A.G.R.

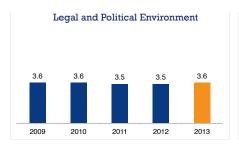
Legal and Political Environment: -4.5% Physical Property Rights: -5.7% Intellectual Property Rights: -1.2% IPRI Index: -3.8%

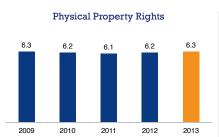
Between the years 2009 and 2013, the overall IPRI score for Greece decreased by 3.8%. Also, from 2012 to 2013 the IPRI fell by 0.3 points due to declining scores in all three components.

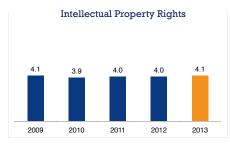
Between 2012 and 2013, the Legal and Political Environment component score decreased by 0.2 points. This decline is made evident by losses in Control of Corruption (-0.1), Rule of Law (-0.1), and Judicial Independence (-0.4). Physical Property Rights also fell this year because of decreases in two items, Access to Loans and Protection of Physical Property Rights which fell by 0.8 and 0.4 points, respec-

tively. Furthermore, Intellectual Property Rights in Greece declined by 0.2 points. In this component, the items Copyright Piracy and Protection of Intellectual Property Rights declined by 0.2 and 0.3 points respectively.

### **GUATEMALA (LAC)**









### World Rank: 91 Regional Rank: 14

### C.A.G.R.

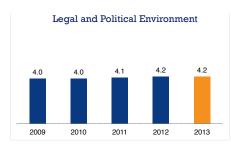
Legal and Political Environment: 0.0% Physical Property Rights: 0.0% Intellectual Property Rights: 0.0% IPRI Index: 0.0%

Between the years 2009 and 2013, the overall Guatemalan IPRI score has not changed. In general, all components have remained at roughly the same value as they were in 2009. However, from 2012 to 2013, IPRI did improve by 0.1 points, and in fact, in all components increased by 0.1 points.

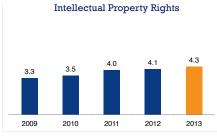
There were improvements in three of four items of *Legal and Political Environment*, and these marginal improvements allowed the component score to increase by 0.1 points to 3.6. Furthermore, *Physical Property Rights* increased by 0.1 points due to a 0.2 point growth

in Protection of Physical Property Rights. The 0.1 point increase in Intellectual Property Rights is due to a 0.2 point increase in Protection of Intellectual Property Rights and a 0.1 point increase in Copyright Piracy.

### GUYANA (LAC)









provement in Physical Property Rights is due to a 0.5 point increase in Access to Loans.

World Rank: 91 Regional Rank: 14

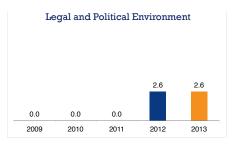
### C.A.G.R.

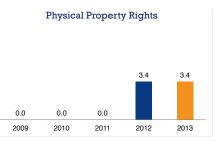
Legal and Political Environment: +1.2% Physical Property Rights: -1.3% Intellectual Property Rights: +6.8% IPRI Index: +1.7%

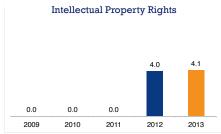
From 2009 to 2013, the overall IPRI score of Guyana increased by 1.7 %. The IPRI score in Guyana experienced a small increase from 4.6 in 2012 to 4.7 in 2013.

While Legal and Political Environment remained constant from 2012 to 2013, there was some variation in the subcomponents. However, both Intellectual Property Rights and Physical Property Rights saw some improvement in 2013 over the 2012 scores. The 0.2 point increase in Intellectual Property Rights is attributable to a 0.3 point increase in Protection of Intellectual Property Rights. The 0.1 point im-

### HAITI (LAC)









### World Rank: 127 Regional Rank: 22

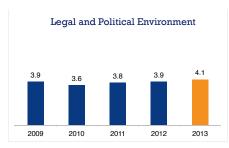
### C.A.G.R.

Legal and Political Environment: 0.0% Physical Property Rights: 0.0% Intellectual Property Rights: +2.5% IPRI Index: +3.0%

From 2012 to 2013, the overall IPRI for Haiti has increased by 3.0%. The IPRI score increased from 3.3 in 2012 to 3.4 in 2013.

Between 2012 and 2013 Legal and Political Environment and Physical Property Rights remained the same at scores of 2.6 and 3.4 respectively. The component Intellectual Property Rights, however, increased by 0.1 points. This increase is largely due to a 0.1 point improvement in the item Protection of Intellectual Property Rights.

### HONDURAS (LAC)









World Rank: 87

Regional Rank: 12

### C.A.G.R.

Legal and Political Environment: +1.3% Physical Property Rights: -2.4% Intellectual Property Rights: -0.6% IPRI Index: -1.0%

Between 2009 and 2013, the IPRI score for Honduras decreased by 1.0%. In 2013 IPRI score experienced no change from 2012.

From 2012 to 2013. Legal and Political Environment increase by 0.2 points to a score of 4.1. This increase is due to improvements in Control of Corruption (0.1), Political Stability (0.2), and Judicial Independence (0.3). During the same period, Physical Property Rights remained unchanged at 5.9. On the other hand, Intellectual Property Rights declined by 0.1 points. This decline is due to 0.2 point loss in Protection of Intellectual Property Rights.

### HONG KONG (SAR OF CHINA) (AO)

### Legal and Political Environment Physical Property Rights 2012 2013 2009 2010 2013 2009 2011 IPRI **Intellectual Property Rights** 7.6 2012 2013 2013 2011 2009

improvement in Physical Property Rights is due to 0.3 point improvement in Access to Loans.

### World Rank: 14 Regional Rank: 4

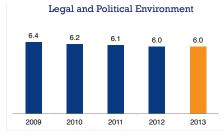
### C.A.G.R.

Legal and Political Environment: -0.3% Physical Property Rights: -0.9% Intellectual Property Rights: +1.5% IPRI Index: 0.0%

From 2009 to 2013, the overall IPRI score of Hong Kong has not changed, although there was a slight improvement (0.1) in it from 2012 to 2013.

Legal and Political Environment was static from 2012 to 2013, but there was some variation between the items. Both Intellectual Property Rights and Physical Property Rights components increased by 0.1 points from 2012 to 2013. The improvement in the Intellectual Property Rights component is evidenced by a 0.1 increase in Protection of Intellectual Property Rights and a 0.2 point increase in Copyright Piracy. The

### HUNGARY (CEECA)









### World Rank: 40 Regional Rank: 3

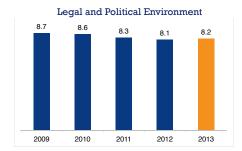
### C.A.G.R.

Legal and Political Environment: -1.6% Physical Property Rights: -4.5% Intellectual Property Rights: 0.0% IPRI Index: -1.9%

Between 2009 and 2013, the overall Hungarian IPRI score decreased by 1.9%. The IPRI score of Hungary in 2013, is slightly lower (0.1 points) than it was in 2012.

From 2012 to 2013, the Legal and Political Environment and the Intellectual Property Rights component scores did not change. There was, however, a 0.4 point decrease in the component Physical Property Rights. A 0.7 point drop in Protection of Physical Property Rights and a 0.3 point loss in Access to Loans were the causes of the significant decline in Physical Property Rights.

### ICELAND (WE)









### World Rank: 22 Regional Rank: 14

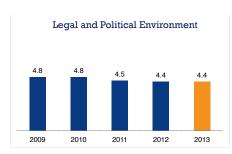
### C.A.G.R.

Legal and Political Environment: -1.5% Physical Property Rights: -4.8% Intellectual Property Rights: -1.5% IPRI Index: -2.6%

From 2009 to 2013, the overall Icelandic IPRI score decreased by 2.6%. However, in 2013 the IPRI score held stable the third year in a row.

Physical Property Rights and Intellectual Property Rights did not experience any change from 2012 to 2013. Legal and Political Environment did, however, improve by 0.1 points. From 2012 to 2013 there was a 0.4 point increase in Political Stability, and the improvement in Control of Corruption is offset by the decline in Judicial Independence.

### INDIA (AO)









of Physical Property Rights.

World Rank: 58 Regional Rank: 10

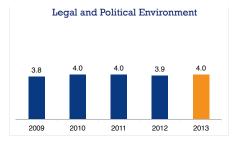
### C.A.G.R.

Legal and Political Environment: -2.2% Physical Property Rights: -1.5% Intellectual Property Rights: +0.9% IPRI Index: -0.9%

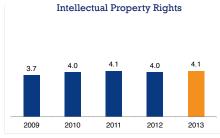
From 2009 to 2013, the overall IPRI score for India decreased by 0.9%. However, from 2012 to 2013 the IPRI score grew by 0.1 points.

Between 2012 and 2013, the Legal and Political Environment component score did not change. However, Intellectual Property Rights increased by 0.1 points because of a 0.2 point improvement in Protection of Intellectual Property Rights and a 0.1 point improvement in Copyright Piracy. Furthermore, Physical Property Rights improved between 2012 and 2013 by 0.1 points. This improvement is because of the 0.2 point increase in Protection

### INDONESIA (AO)









### World Rank: 81 Regional Rank: 15

### C.A.G.R.

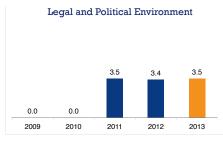
Legal and Political Environment: +1.3% Physical Property Rights: +2.4% Intellectual Property Rights: +2.6% IPRI Index: +2.2%

From 2009 to 2013, the overall Indonesian IPRI score increased by 2.2%. Between 2012 and 2013, IPRI in Indonesia grew by 0.1 points. There were improvements in all three component scores. *Legal and Political Environment* improved by 0.1 points to a score of 4.0. Both Control of Corruption and Political Stability improved over last year's score.

The 0.1 point rise in Protection of Physical Property Rights caused the *Physical Property Rights* component score to improve by 0.1 points. Indonesia's *Intellectual Property Rights* component score also improved by 0.1 points

in 2013. This increase is due to rises in both Copyright Piracy and Protection of Intellectual Property Rights.

### IRAN, ISLAMIC REPUBLIC OF (MENA)









Property Rights increased due to improvements in Protection of Intellectual Property Rights.

World Rank: 111 Regional Rank: 12

### C.A.G.R.

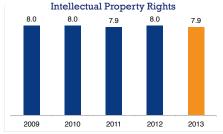
Legal and Political Environment: 0.0% Physical Property Rights: +1.8% Intellectual Property Rights: +1.3% IPRI Index: +1.2%

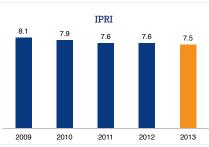
From 2011 to 2013, the overall Iranian IPRI score increased by 1.2%. Data was not available for 2009 and 2010. In 2013 the IPRI of Iran increased by 0.1 points. In fact, each of the three components improved by 0.1 points between 2012 and 2013.

The Legal and Political Environment score increased by 0.1 points to 3.5. This is due to increases in both Political Stability and Judicial Independence. The Physical Property Rights component improved by 0.1 points, and was driven by a 0.3 point increase in Protection of Physical Property Rights. Furthermore, Intellectual

### IRELAND (WE)







Intellectual Property Rights.

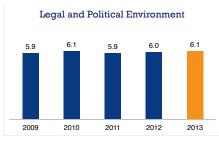
### World Rank: 18 Regional Rank: 11

### C.A.G.R.

Legal and Political Environment: -0.6% Physical Property Rights: -5.4% Intellectual Property Rights: -0.3% IPRI Index: -1.9%

Between the year 2009 and 2013, the overall IPRI score of Ireland decreased by 1.9%. During the 2012 to 2013 period, IPRI fell 0.1 points to 7.5 after remaining stable for the last two years. From 2012 to 2013 each of the three components saw a 0.1 point drop. The decline in Legal and Political Environment is due to a 0.3 decline in the Control of Corruption item. Physical Property Rights declined due to a 0.3 decrease in Access to Loans and a 0.1 point drop in Protection of Physical Property Rights. Intellectual Property Rights component score decreased because of a 0.3 point decline in Protection of

### ISRAEL (MENA)









World Rank: 29 Regional Rank: 3

### C.A.G.R.

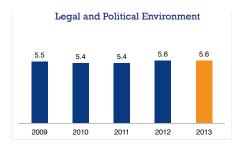
Legal and Political Environment: +0.8% Physical Property Rights: -0.4% Intellectual Property Rights: +0.3% IPRI Index: +0.4%

From 2009 to 2013, the overall Israeli IPRI score increased by 0.4%. In the last period, between 2012 and 2013, IPRI grew slightly for the second year in a row.

Legal and Political Environment experienced a 0.1 point growth this year due to improvements in three of four items. Judicial Independence is the only one that decreased, and it was by 0.4 points. A 0.8 point increase in Israel's Registering Property item attributed to the 0.2 point improvement in Physical Property Rights, despite decreases in scores of Protection of Physical Property Rights and Access to Loans.

No variation is observed between 2012 and 2013 in Intellectual Property Rights, it is stable at a score of 7.3.

### ITALY (WE)









Copyright Piracy.

### World Rank: 47 Regional Rank: 18

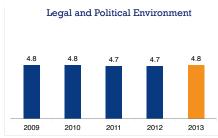
### C.A.G.R.

Legal and Political Environment: +0.5% Physical Property Rights: -2.0% Intellectual Property Rights: -1.1% IPRI Index: -0.8%

Between the years 2009 and 2013, the overall Italian IPRI score decreased by 0.8%. In fact, the IPRI score and three component scores did not change at all from the 2012 scores.

While Political Stability and Control of Corruption improved from 2012 these were offset by a decline in Judicial Independence, thus forcing the *Legal and Political Environment* component to remain at 5.6. Similarly, *Physical Property Rights* remained at 6.1 due to offsetting values in Access to Loans and Registering Property. Finally, *Intellectual Property Rights* remained at 6.6 despite a 0.1 point increase in

### JAMAICA (LAC)









World Rank: 63 Regional Rank: 8

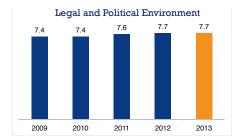
### C.A.G.R.

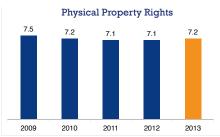
Legal and Political Environment: 0.0% Physical Property Rights: -2.9% Intellectual Property Rights: 0.0% IPRI Index: -1.3%

Between 2009 and 2013, the overall Jamaican IPRI score decreased by 1.3%. In 2013 IPRI decreased by 0.1 points to 5.4 from 5.5 in 2012.

Legal and Political Environment increased by 0.1 points from 2012 to 2013. This increase is due to item improvements in Rule of Law and Political Stability. Between 2012 and 2013, Physical Property Rights declined by 0.2 points. This component decline is because of 0.2 point decreases in both Access to Loans and Protection of Physical Property Rights. From 2012 to 2013, Intellectual Property Rights remained stable at 5.8 points.

### JAPAN (AO)









### World Rank: 14 Regional Rank: 4

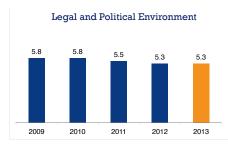
### C.A.G.R.

Legal and Political Environment: +1.0% Physical Property Rights: -1.0% Intellectual Property Rights: -0.3% IPRI Index: -0.3%

From 2009 to 2013, the overall Japanese IPRI score decreased by 0.3%. However, between 2012 and 2013 the IPRI score remained at 7.7 points.

From 2012 to 2013, Legal and Political Environment and Intellectual Property Rights remained constant at 7.7 and 8.3 respectively. The component Physical Property Rights, in fact, increased by 0.1 points. This improvement can be attributed to the 0.2 point increase in Protection of Physical Property Rights.

### JORDAN (MENA)









### World Rank: 48 Regional Rank: 8

### C.A.G.R.

Legal and Political Environment: -2.2% Physical Property Rights: -1.8% Intellectual Property Rights: 0.0% IPRI Index: -1.2%

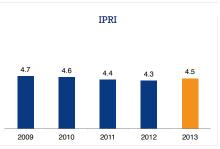
From 2009 to 2013, the overall IPRI score of Jordan decreased by 1.2%. However, in the last period, 2012 to 2013, Jordan's IPRI score improved by 0.1 points to 6.0.

The component Legal and Political Environment remain stable at a value of 5.3 despite minute variations in the items. Similarly, Intellectual Property Rights remained constant at 5.8. There was, however, a 0.2 point improvement in the component Physical Property Rights. The improvement here is due to increases in the scores of Access to Loans and Protection of Physical Property Rights.

### KAZAKHSTAN (CEECA)







2013

### World Rank: 102 Regional Rank: 16

### C.A.G.R.

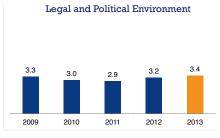
Legal and Political Environment: -1.2% Physical Property Rights: -2.0% Intellectual Property Rights: 0.0% IPRI Index: -1.1%

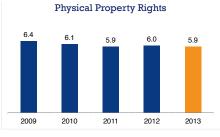
Between 2009 and 2013, the overall IPRI score for Kazakhstan decreased by 1.1%. IPRI improved by 0.2 points in 2013 from 2012. This increase is due mostly to improvements in both *Physical Property Rights* and *Intellectual Property Rights*.

Legal and Political Environment is the only component that decreased from 2012 to 2013. The decline is driven primarily by a 1.2 point loss in Political Stability. Physical Property Rights increased by 0.4 points. This large increase is due to a 0.3 point increase in Access to Loans and a 0.7 point increase in Protection of

Physical Property Rights. Furthermore, *Intellectual Property Rights* also increased between 2012 and 2013 by 0.4 points. This improvement is due to a 0.7 point increase in Protection of Intellectual Property Rights.

### KENYA (A)









World Rank: 96 Regional Rank: 18

### C.A.G.R.

Legal and Political Environment: +0.7% Physical Property Rights: -2.0% Intellectual Property Rights: +1.2% IPRI Index: 0.0%

From 2009 to 2013, the overall Kenyan IPRI score has not changed. However, between 2012 and 2013, Kenya did experience a 0.1 point improvement in the IPRI score.

Between 2012 and 2013, Legal and Political Environment increased by 0.2 points due to a 0.7 point improvement in Judicial Independence and 0.2 point in Control of Corruption. Consequently, the 0.2 point drop in Political Stability was easy absorbed. Furthermore, Intellectual Property Rights improved by 0.2 points, which is mostly due to a 0.3 point increase in Protection of Intellectual Property Rights. How-

ever, the *Physical Property Rights* component score fell by 0.1 points in 2013. This is because there was a decrease of 0.4 points in Access to Loans and a 0.1 point drop in Protection of Physical Property Rights.

### KOREA, REPUBLIC (AO)

Legal and Political Environment

Physical Property Rights

7.5

6.6

6.1

6.0

2009

2010

2011

2012

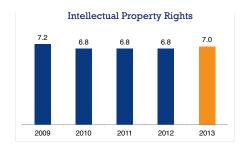
2013

2009

2010

2011

2012





2013

### World Rank: 37 Regional Rank: 8

### C.A.G.R.

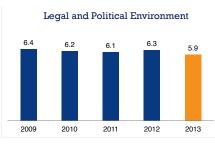
Legal and Political Environment: -2.0% Physical Property Rights: -4.6% Intellectual Property Rights: -0.7% IPRI Index: -2.2%

From 2009 to 2013, the overall Korean IPRI score decreased by 2.2%. However, between 2012 and 2013 the IPRI score increased by 0.2 points to a score of 6.4.

Between 2012 and 2013, Legal and Political Environment increased by 0.1 points. This is due mainly to a 0.3 point gain in Political Stability and 0.1 point increase of Control of Corruption. Physical Property Rights increased by 0.2 points to 6.2 during the same period. These improvements are due to a 0.3 point increase in Access to Loans and a 0.2 point improvement in Protection of Physical Property Rights. Finally,

the component Intellectual Property Rights increased by 0.2 points between 2012 and 2013. This improvement is due to higher ratings of the Protection of Intellectual Property Rights item.

### KUWAIT (MENA)









World Rank: 52 Regional Rank: 9

### C.A.G.R.

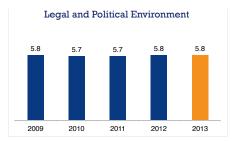
Legal and Political Environment: -2.0% Physical Property Rights: -2.5% Intellectual Property Rights: +2.7% IPRI Index: -0.8%

From 2009 to 2013, the overall IPRI score of Kuwait decreased by 0.8%. After three years without changes in the IPRI score, IPRI of Kuwait fell slightly, by 0.1 points, to 5.8 in 2013.

Between 2012 and 2013, the component Legal and Political Environment decreased by 0.4 points, and, in fact, each of the four item's scores dropped during this time. Control of Corruption is the biggest offender with a 0.6 point decrease. The component Physical Property Rights decreased by 0.1 points which is due, in part, to a 0.6 point decline in Access to Loans. On the other hand, Intellectual Property Rights

increased from 2012 to 2013. The 0.1 point improvement is due to 0.3 point increase in Protection of Intellectual Property Rights and a 0.1 point increase in Copyright Piracy.

### LATVIA (CEECA)









0.2 point improvement in Copyright Piracy.

### World Rank: 53 Regional Rank: 8

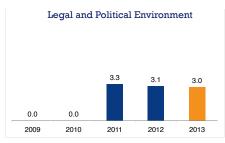
### C.A.G.R.

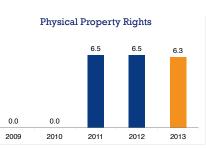
Legal and Political Environment: 0.0% Physical Property Rights: -1.9% Intellectual Property Rights: +1.0% IPRI Index: -0.4%

From 2009 to 2013, the overall IPRI score for Latvia decreased by 0.4%. However, in 2013 Latvia has an improvement of 0.1 points driven by slight increases in *Physical Property Rights* and *Intellectual Property Rights*.

From 2012 to 2013, Legal and Political Environment remained the same at a score of 5.8. The improvement in Latvia's Physical Property Rights is due to improvements in Access to Loans and Protection of Physical Property Rights. Furthermore, the 0.2 point improvement in Intellectual Property Rights is due to a 0.3 point increase in Protection of Intellectual Property Rights and a

### LEBANON (MENA)









World Rank: 113 Regional Rank: 13

### C.A.G.R.

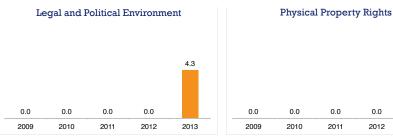
Legal and Political Environment: -4.7% Physical Property Rights: -1.6% Intellectual Property Rights: 0.0% IPRI Index: -2.3%

From 2011 to 2013, the overall Lebanese IPRI score decreased by 2.3%. Since Lebanon was first rated in the index, in 2011, the IPRI score has decreased by 0.1 points every year. Currently, the IPRI score for Lebanon is 4.2.

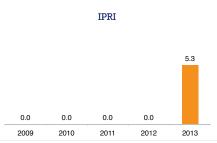
Between 2012 and 2013, Legal and Political Environment component score decreased by 0.1 points to 3.0. The three items that declined over this time period are Judicial Independence, Rule of Law, and Control of Corruption. During the same period, Physical Property Rights declined by 0.2 points. This decline is due to 0.3 point losses in both Access to Loans

and Protection of Physical Property Rights. Intellectual Property Rights, on the other hand, remained the same from 2012 to 2013.

### LIBERIA (A)







0.0

2012

2013

### World Rank: 65

Regional Rank: 6

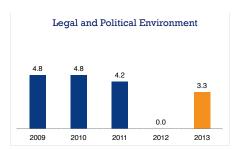
### C.A.G.R.

Legal and Political Environment: 0.0% Physical Property Rights: 0.0% Intellectual Property Rights: 0.0% IPRI Index: 0.0%

This is the first year that Liberia has been measured for the index. The current IPRI score for Liberia is 5.3.

The component score of Physical Property Rights is the highest with a score of 6.2. The main contributors are a 7.4 score for Registering Property and a score of 6.2 for Protection of Property Rights. Access to Loans is 5.0. The lowest component score is Legal and Political Environment with a score of 4.3. Liberia's Rule of Law score is only 3.1 and the Political Stability score is 4.0.

### LIBYA (MENA)









World Rank: 127

Regional Rank: 15

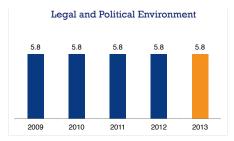
### C.A.G.R.

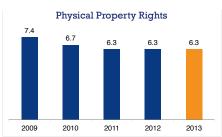
Legal and Political Environment: -8.9% Physical Property Rights: -2.7% Intellectual Property Rights: -2.8% IPRI Index: -5.1%

Between the years 2009 to 2013, the overall Libyan IPRI score has decreased by 5.1%. Data was not available for 2012. However, between 2011 and 2013 IPRI dropped by 0.3 points.

Between 2011 and 2013, the Legal and Political Environment in Libya has declined by 0.9 points. Furthermore, Intellectual Property Rights dropped 0.1 points to a score of 2.5. Physical Property Rights, on the other hand, increased by 0.1 points between 2011 and 2013.

### LITHUANIA (CEECA)









### World Rank: 48

Regional Rank: 6

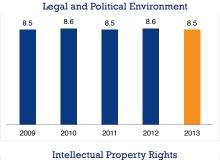
### C.A.G.R.

Legal and Political Environment: 0.0% Physical Property Rights: -3.9% Intellectual Property Rights: -0.8% IPRI Index: -1.6%

From 2009 to 2013, the overall Lithuanian IPRI score decreased by 1.6%. There was no variation observed in the 2012-2013 period in either all three components or in general IPRI.

Even though Legal and Political Environment was static, Judicial Independence increased slightly. Similarly, there were offsetting changes to the *Physical Property Right* component for both items Access to Loans and Protection of Physical Property Rights. Also, while Protection of Intellectual Property Rights increased, the component score of *Intellectual Property Rights* was stable at a score of 5.9.

### LUXEMBURG (WE)









World Rank: 7

Regional Rank: 6

### C.A.G.R.

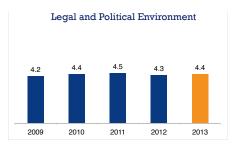
Legal and Political Environment: 0.0% Physical Property Rights: -1.3% Intellectual Property Rights: +0.3% IPRI Index: -0.3%

Between the years 2009 and 2013, the overall IPRI score of Luxemburg decreased by -0.3%. In fact, between 2012 and 2013 the IPRI decreased by 0.1 points. Furthermore, each of the components slightly decreased from 2012 to 2013.

The component Legal and Political Environment decreased by 0.1 points over the 2012 to 2013 time period. This decline is due, in part, to reductions in Political Stability and Judicial Independence. Physical Property Rights declined by 0.2 points over the same period. Access to Loans fell by 0.4 points, and Protection

of Physical Property Rights fell by 0.1 points. *Intellectual Property Rights* also declined by 0.1 points between 2012 and 2013. This decline is due to 0.1 point loss in Protection of Intellectual Property Rights.

### MACEDONIA (FYROM) (CEECA)









crease in Protection of Intellectual Property Rights.

### World Rank: 81

Regional Rank: 14

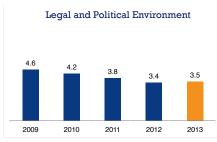
### C.A.G.R.

Legal and Political Environment: +1.2% Physical Property Rights: +2.1% Intellectual Property Rights: +3.9% IPRI Index: +2.2%

From 2009 to 2013, the overall Macedonian IPRI score increased by 2.2%. The IPRI score is up by 0.2 points from 2012 in 2013, the IPRI in 2013 is 4.9 points.

Due to improvements in Rule of Law and Political Stability Macedonia's *Legal and Political Environment* component score increased by 0.1 points to 4.4 point. *Physical Property Rights* increased by 0.4 points because of 0.5 point increases in both Access to Loans and Protection of Physical Property Rights. Furthermore, *Intellectual Property Rights* increased by 0.2 points. This increase is due solely to a 0.5 point in-

### MADAGASCAR (A)









ble to both losses in Access to Loans and Protections of Physical Property Rights.

### World Rank: 113 Regional Rank: 23

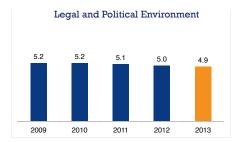
### C.A.G.R.

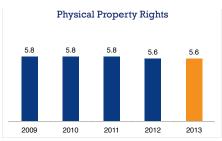
Legal and Political Environment: -6.6% Physical Property Rights: -1.9% Intellectual Property Rights: -2.4% IPRI Index: -3.3%

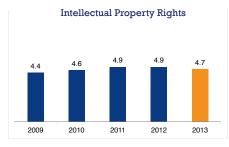
From 2009 to 2013, the overall IPRI score of Madagascar decreased by 3.3%. The IPRI score remained unchanged from 2012 at 4.2 points.

The Legal and Political Environment component score rose by 0.1 points due to a 0.4 point increase in Political Stability. Between 2012 and 2013, Intellectual Property Rights increased by 0.2 points to 4.0. The increase is attributed to a 0.4 point improvement in the Protection of Intellectual Property Rights. However, Physical Property Rights decreased by 0.2 points between 2012 and 2013. This decline is attributa-

### MALAWI (A)









### World Rank: 72 Regional Rank: 8

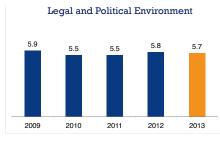
### C.A.G.R.

Legal and Political Environment: -1.5% Physical Property Rights: -0.9% Intellectual Property Rights: +1.7% IPRI Index: 0.0%

Between the years 2009 and 2013 the overall IPRI score of Malawi has not changed. However, between 2012 and 2013, the IPRI score decreased by 0.1 points.

From 2012 to 2013 Legal and Political Environment decreased by 0.1 points. The decline is due to decreases in both Judicial Independence and Political Stability by 0.2 and 0.3 points, respectively. Intellectual Property Rights fell by 0.2 points due to 0.4 point decline in Protection of Intellectual Property Rights. Over this same period the component Physical Property Rights has not changed.

### MALAYSIA (AO)









### World Rank: 33 Regional Rank: 7

### C.A.G.R.

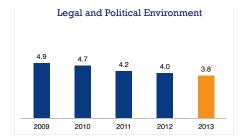
Legal and Political Environment: -0.9% Physical Property Rights: +1.7% Intellectual Property Rights: +0.4% IPRI Index: +0.4%

Between the years 2009 and 2013 the overall Malaysian IPRI score increased by 0.4%. In 2013 the IPRI has not changed from last year's score of 6.5.

From 2012 to 2013, the Legal and Political Environment component score decreased by 0.1 points. This decline is because both Control of Corruption and Judicial Independence realized small decreases in scores. During the same period, Intellectual Property Rights also declined by 0.1 points. The decline in Intellectual Property Rights is due to a 0.2 point drop in Protection of Intellectual Property Rights. However,

Physical Property Rights grew by 0.2 points from 2012 to 2013. This increase is due mainly to a 0.5 point increase in Registering Property.

### MALI (A)









### World Rank: 81 Regional Rank: 12

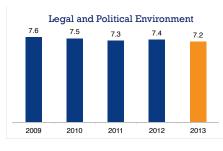
### C.A.G.R.

Legal and Political Environment: -6.2% Physical Property Rights: 0.0% Intellectual Property Rights: -1.0% IPRI Index: -1.9%

From 2009 to 2013, the overall IPRI score of Mali decreased by 1.9%. In the last period (2012 to 2013) the IPRI realized a small gain of 0.1 points due to improvements in IPR and PPR. The Legal and Political Environment decreased by 0.2 points from 2012 to 2013. This loss is, in part, a result of a 0.8 point decline in Political Stability. However, during this period Physical Property Rights and Intellectual Property Rights increased by 0.2 points. A 0.2 point improvement in the Protection of Physical Property Rights and a 0.3 point improvement in Access to Loans assisted in the higher rankings.

Intellectual Property Rights improved due to a 0.2 point increase in Protection of Intellectual Property Rights.

### MALTA (WE)









Rights component.

### World Rank: 25

### Regional Rank: 15

### C.A.G.R.

Legal and Political Environment: -1.3% Physical Property Rights: +1.4% Intellectual Property Rights: +1.2% IPRI Index: +0.4%

Between 2009 and 2013, the overall IPRI score of Malta increased by 0.4%. However, the 2013 IPRI score did not change from the 7.0 score in 2012.

Rule of Law and Political Stability both declined by 0.3 points, and this translated into a 0.2 point loss for *Legal and Political Environment*. Between 2012 and 2013 *Intellectual Property* increased by 0.1 points. This change is made evident by a 0.1 point increase in the item Protection of Physical Property Rights. However, between 2012 and 2013 there was no change in the *Physical Property* 

### MAURITANIA (A)

### 4.2 3.6 3.4 3.3 3.4 2009 2010 2011 2012 2013







of Intellectual Property Rights.

### World Rank: 91 Regional Rank: 17

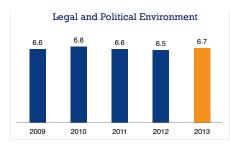
### C.A.G.R.

Legal and Political Environment: -5.1% Physical Property Rights: -1.7% Intellectual Property Rights: +0.5% IPRI Index: -2.0%

From 2009 to 2013, the overall Mauritanian IPRI score decreased by 2.0%. From 2012 to 2013, Mauritania's IPRI improved by 0.1 points to 4.7.

Legal and Political Environment rose 0.1 points because Control of Corruption and Judicial Independence increased by 0.3 points. Furthermore, Mauritania's Physical Property Rights component score also improved by 0.1 points, and is driven by a 0.3 point increase in Access to Loans. Finally, Intellectual Property Rights increased by 0.1 points. This increase is due to a 0.3 point rise in the item Protection

### MAURITIUS (A)









World Rank: 40 Regional Rank: 2

### C.A.G.R.

Legal and Political Environment: +0.4% Physical Property Rights: +0.4% Intellectual Property Rights: -0.5% IPRI Index: +0.4%

Between 2009 and 2013, the overall IPRI score of Mauritius increased by 0.4%. A slight improvement (increase of 0.1 points) in IPRI was also seen in the last period, 2012 to 2013.

While both *Intellectual Property Rights* and *Physical Property Rights* remained constant at 5.0 and 7.1 respectively: *Legal and Political Environment* increased by 0.2 points. The increase is due to a 0.7 point increase in Political Stability and a 0.3 point improvement in Judicial Independence.

### MEXICO (LAC)







2013

erty Rights increased by 0.2 points over the same period. This increase is mainly due to the 0.4 point increase in Protection of Intellectual Property Rights.

### World Rank: 68 Regional Rank: 9

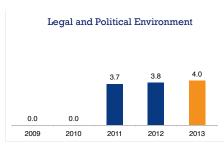
### C.A.G.R.

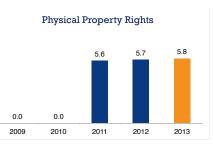
Legal and Political Environment: -0.6% Physical Property Rights: 0.0% Intellectual Property Rights: +1.4% IPRI Index: 0.0%

From 2009 to 2013, the overall Mexican IPRI score has not changed. IPRI did, however, improve by 0.1 points in the 2012 to 2013 period driven by improvements in all three components.

Due to slight increases in all items of the *Legal* and *Political Environment* component, it improved by 0.1 points between 2012 and 2103. During the same time period, *Physical Property Rights* increased by 0.1 points due to 0.3 point and 0.2 point increases in Access to Loans and Protection of Physical Property Rights, respectively. Furthermore, Mexico's *Intellectual Prop-*

### MOLDOVA, REPUBLIC OF (CEECA)









World Rank: 119 Regional Rank: 24

### C.A.G.R.

Legal and Political Environment: +4.0% Physical Property Rights: +1.8% Intellectual Property Rights: +4.3% IPRI Index: +2.5%

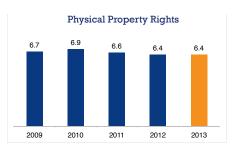
Between the years 2011 and 2013 the overall Moldovan IPRI score increased by 2.5%. There was a 0.1 point increase in the general IPRI score in 2013. Data for Moldova are unavailable in 2009 and 2010.

Due to a 0.5 point gain in Political Stability and a 0.2 point gain in Control of Corruption the component *Legal and Political Environment* increased by 0.2 points in 2013 over 2012. Furthermore, Moldova's *Physical Property Rights* component score increased by 0.1 points during this time period. This growth is due to a 0.2 point increase in Access to Loans and a 0.1

point increase in Protection of Physical Property Rights. The component Intellectual Property Rights did not vary between 2012 and 2013 despite a 0.1 point increase in Protection of Intellectual Property Rights.

### MONTENEGRO (CEECA)

### Legal and Political Environment 4.8 5.3 5.6 5.4 5.3 2009 2010 2011 2012 2013







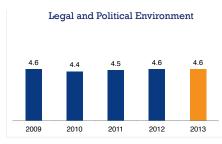
### World Rank: 72 Regional Rank: 13

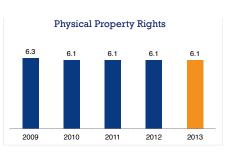
### C.A.G.R.

Legal and Political Environment: +2.5% Physical Property Rights: -1.1% Intellectual Property Rights: +5.6% IPRI Index: +1.5%

Between 2009 and 2013, the overall IPRI score for Montenegro increased by 1.5%. After three years at 5.2, IPRI fell by 0.1 points to 5.1 in 2013. Between 2012 and 2013, Legal and Political Environment decreased by 0.1 points. This decrease is mostly attributable to a 0.4 point decline in Judicial Independence. Furthermore, Intellectual Property Rights decreased by 0.1 points which was caused by a 0.1 point decline in Protection of Intellectual Property Rights. During this same period, Physical Property Rights did not vary: it remained at 6.4.

### MOROCCO (MENA)









### World Rank: 65 Re

Regional Rank: 10

### C.A.G.R.

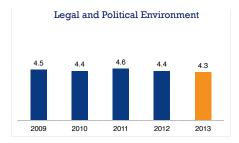
Legal and Political Environment: 0.0% Physical Property Rights: -0.8% Intellectual Property Rights: +0.5% IPRI Index: 0.0%

Between the year 2009 and 2013, the overall Moroccan IPRI score has not changed. In fact, Morocco's IPRI score remained static from 2012 to 2013. The IPRI remains at a score of 5.3.

Both Legal and Political Environment and Physical Property Rights components remained unchanged at 4.6 and 6.1 respectively. Even though Control of Corruption and Judicial Independence declined over this period, it was offset by an increase in Political Stability. Furthermore, the variation in items Access to Loans and Protection of Physical Property Rights balanced each other out, and Physical

Property Rights remained unchanged. However, Intellectual Property Rights declined by 0.1 points from 2012 to 2013. This is due to decreases in both Protection of Intellectual Property Rights and Copyright Piracy.

### MOZAMBIQUE (A)









### World Rank: 96 Regional Rank: 18

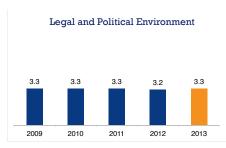
### C.A.G.R.

Legal and Political Environment: -1.1% Physical Property Rights: -0.5% Intellectual Property Rights: 0.0% IPRI Index: -0.5%

Between 2009 and 2013, the overall IPRI score of Mozambique decreased by 0.5%. After two static years in a row (2011 and 2012) Mozambique's IPRI fell in 2013 by 0.1 points due to a decrease in *Legal and Political Environment*.

Decreases in three of the four items of *Legal* and *Political Environment* caused it to fall by 0.1 points between 2012 and 2013. During this period both *Intellectual Property Rights* and *Physical Property Rights* remained stable. There were, however, variations among the items in each of the components albeit not enough to increase or decrease the component score.

### NEPAL (AO)









due to a 0.2 point increase in Protection of Intellectual Property Rights.

World Rank: 102 Regional Rank: 17

### C.A.G.R.

Legal and Political Environment: 0.0% Physical Property Rights: -0.4% Intellectual Property Rights: +0.6% IPRI Index: 0.0%

From 2009 to 2013, the overall IPRI score of Nepal has not changed. However, between 2012 and 2013 the IPRI score improved by 0.1 points. In fact, all three components gained 0.1 points during this time period.

Legal and Political Environment grew by 0.1 points due to a 0.2 point increases in Judicial Independence and Political Stability. Furthermore, a significant 0.4 point gain in the item Protection of Physical Property Rights helped lead to a 0.1 point higher Physical Property Rights component score. Furthermore, the 0.1 point increase in Intellectual Property Rights is

### **NETHERLANDS (WE)**

2009

# | Regal and Political Environment | Physical Property Rights | Regalation | Regalat

2009

2013

2012

World Rank: 5 Regional Rank: 4

### C.A.G.R.

Legal and Political Environment: +0.6% Physical Property Rights: -2.4% Intellectual Property Rights: 0.0% IPRI Index: -0.6%

From 2009 to 2013, the overall IPRI score of the Netherlands decreased by 0.7%. After two static years in a row (2011 and 2012) Netherland's IPRI increased in 2013 by 0.1 points. In fact, each of the three components increased between 2012 and 2013.

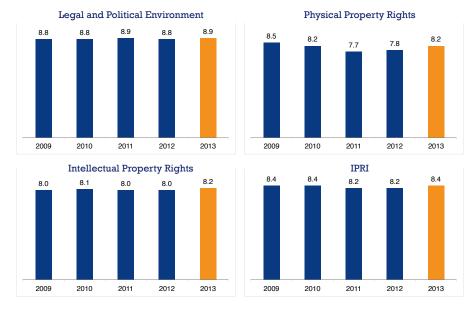
Judicial Independence and Political Stability gained 0.1 and 0.3 points, respectively, and this led to a 0.1 point increase in the *Legal and Political Environment* component. Even though Access to Loans decreased by 0.2 points, Protection of Physical Property Rights increased by 0.3 points. Consequently, the overall *Physical* 

Property Rights component increased 0.1 points. The Intellectual Property Rights component increased by 0.1 points from 2012 to 2013. This increase is driven by a 0.2 point increase in Protection of Intellectual Property Rights and a 0.1 point increase in Copyright Piracy.

2013

### NEW ZEALAND (AO)

2011



World Rank: 2 Regional Rank: 1

### C.A.G.R.

Legal and Political Environment: +0.3% Physical Property Rights: -0.9% Intellectual Property Rights: +0.6% IPRI Index: 0.0%

Between the years 2009 and 2013, the overall IPRI score for New Zealand has not changed. Although, in 2013 the IPRI of New Zealand improved by 0.2 points to a score of 8.4. New Zealand is number one in the regional rating and second all over the world in IPRI.

Legal and Political Environment saw a small increase (0.1 points) this year. Political Stability and Rule of Law experienced 0.4 and 0.1 point increases, respectively. Furthermore, *Physical Property Rights* increased by 0.4 points during this time period. This increase is due to significant increases in Access to Loans (0.6

points) and Protection of Physical Property Rights (0.4 points). Between 2012 and 2013, New Zealand's *Intellectual Property Rights* component score grew by 0.2 points due to 0.4 point increase in Protection of Intellectual Property Rights.

### NICARAGUA (LAC)

3.6 3.7 3.5 3.3 3.6 2009 2010 2011 2012 2013







### World Rank: 107 Regional Rank: 20

### C.A.G.R.

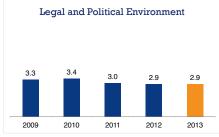
Legal and Political Environment: 0.0% Physical Property Rights: +2.4% Intellectual Property Rights: +1.3% IPRI Index: +1.2%

From 2009 to 2013, the overall Nicaraguan IPRI score increased by 1.2%. In the last period from 2012 to 2013, the IPRI score gained 0.3 points to a score of 4.4.

Between 2012 and 2013, the Legal and Political Environment component score increased by 0.3 points to a score of 3.6. This increase can be attributed to increases in all four of the items. Furthermore, increases in Access to Loans and Protection of Physical Property Rights allowed for a 0.3 point increase in the Physical Property Rights component. The Intellectual Property Rights component increased

by 0.2 points during this time. The increase is due to a 0.7 point improvement in the Protection of Intellectual Property Rights item score.

### NIGERIA (A)









World Rank: 122 Regional Rank: 25

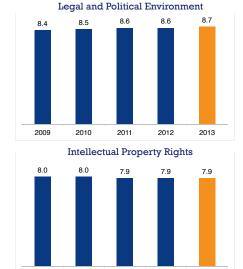
### C.A.G.R.

Legal and Political Environment: -3.2% Physical Property Rights: -2.5% Intellectual Property Rights: 0.0% IPRI Index: -1.8%

Between the years 2009 and 2013, the overall Nigerian IPRI score decreased by 1.8%. However, the 2013 IPRI score has remained at 3.9, for the third year in a row.

Both components Intellectual Property Rights and Legal and Political Environment remained stagnant at 4.1 and 2.9 respectively over the recent period, 2012 to 2013. The component Physical Property Rights has, however, increased by 0.1 points during the same time frame. This marginal improvement is due to a 0.1 point increase in Protection of Physical Property Rights.

### NORWAY (WE)



2012

2013





Property Rights.

2009

### World Rank: 4 Regional Rank: 3

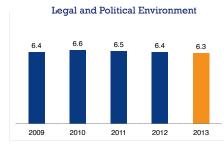
### C.A.G.R.

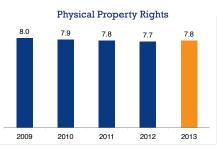
Legal and Political Environment: +0.9% Physical Property Rights: -1.7% Intellectual Property Rights: -0.3% IPRI Index: -0.3%

Between the years 2009 and 2013, the overall Norwegian IPRI score decreased by 0.3%. In the current period (2013) the IPRI score saw no variation for the fourth year in a row.

Control of Corruption and Political Stability gained 0.2 and 0.1 points, respectively which led to a 0.1 point improvement of *Legal and Political Environment*, in general. However, there was a 0.1 point decrease in the *Physical Property Rights* component score which is driven primarily by a 0.2 point decline in Access to Loans. Between 2012 and 2013, there was no change in the component of *Intellectual* 

### OMAN (MENA)









World Rank: 31 Regional Rank: 4

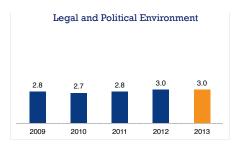
### C.A.G.R.

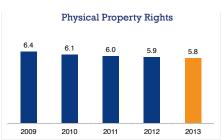
Legal and Political Environment: -0.4% Physical Property Rights: -0.6% Intellectual Property Rights: +1.4% IPRI Index: 0.0%

From 2009 to 2013, the overall IPRI score for Oman has not changed. Furthermore, in 2013 Oman's IPRI remained at 6.6. The IPRI has not changed in the past three years.

Between 2012 and 2013, the component *Legal* and *Political Environment* declined by 0.1 points. This decrease is because of a 0.5 point drop in Control of Corruption and a 0.1 point decrease in Political Stability. There was, however, a 0.3 point gain in Access to Loans which resulted in a 0.1 point increase in *Physical Property Rights*. Between 2012 and 2013, the component *Intellectual Property Rights* was stable at 5.7.

### PAKISTAN (AO)









in the Intellectual Property Rights component.

### World Rank: 119 Regional Rank: 18

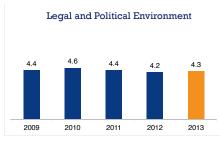
### C.A.G.R.

Legal and Political Environment: +1.7% Physical Property Rights: -2.4% Intellectual Property Rights: -1.4% IPRI Index: -1.2%

From 2009 to 2013, the overall Pakistani IPRI score decreased by 1.2%. Over the 2012 to 2013 period IPRI of Pakistan lost 0.1 points due to declining scores in *Physical Property Rights* and *Intellectual Property Rights*.

Legal and Political Environment remained static from 2012 to 2013 at 3.0 because changes in items balanced out each other. Physical Property Rights decreased by 0.1 points due mostly to a 0.5 point decrease in Access to Loans. Furthermore, losses of 0.2 points in both Protection of Intellectual Property Rights and Copyright Piracy forced a 0.1 point decline

### PANAMA (LAC)









World Rank: 56 Regional Rank: 6

### C.A.G.R.

Legal and Political Environment: -0.6% Physical Property Rights: -0.7% Intellectual Property Rights: +1.4% IPRI Index: 0.0%

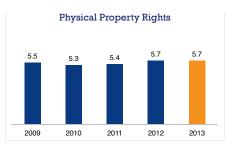
Between 2009 and 2013, the overall IPRI score of Panama has not changed. However, in 2013 the IPRI improved by 0.1 points up to 5.6 from last year's 5.5. In fact, there were improvements in each of the component scores from 2012 to 2013.

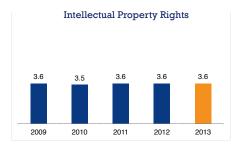
There was a 0.3 point improvement in Judicial Independence and 0.2 point increase in Rule of Law which resulted in an overall increase of Legal and Political Environment by 0.1 points in 2013 over the 2012 score. Furthermore, the Physical Property Rights score increased by 0.2 points, with Access to Loans increasing by 0.5

points. Protection of Physical Property Rights also gained 0.2 points. *Intellectual Property Rights* component increased by 0.1 points between 2012 and 2013. This increase is largely due to improvements in the Protection of Intellectual Property Rights item.

### PARAGUAY (LAC)

### 2.8 3.0 3.0 3.1 3.3 2009 2010 2011 2012 2013







### World Rank: 113 Regional Rank: 21

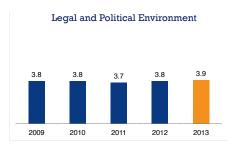
### C.A.G.R.

Legal and Political Environment: +4.2% Physical Property Rights: +0.9% Intellectual Property Rights: 0.0% IPRI Index: +1.2%

From 2009 to 2013, the overall IPRI score of Paraguay increased by 1.2%. Continuing a three-year trend, Paraguay's IPRI score increased by 0.1 points in 2013.

Between 2012 and 2013, Legal and Political Environment increased by 0.2 points. This improvement is driven by higher scores in three of four sub-categories. Only Control of Corruption remained at the same level in 2013 as it was in 2012. During this time, however, both Physical Property Rights and Intellectual Property Rights remained the same at scores of 5.7 and 3.6 respectively.

### PERU (LAC)









component Intellectual Property Rights remains at 4.5 during this period.

World Rank: 77 Regional Rank: 11

### C.A.G.R.

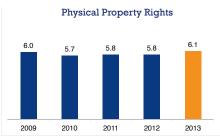
Legal and Political Environment: +0.7% Physical Property Rights: +0.8% Intellectual Property Rights: +0.6% IPRI Index: +0.5%

From 2009 to 2013, the overall Peruvian IPRI score increased by 0.5%. There was, however, no variation observed in Peru's IPRI between 2012 and 2013. The score remained stable at 5.0 for the second year in a row.

A 0.4 point increase in Political Stability and 0.1 points in Control of Corruption outweighed the 0.2 point loss in Judicial Independence, and the *Legal and Political Environment* score grew by 0.1 points in this period. Between 2012 and 2013 *Physical Property Rights* decreased by 0.1 points, and is due mostly to a 0.1 point decline in Protection of Physical Property Rights. The

### PHILIPPINES (AO)

### 3.6 3.4 3.3 3.3 3.5 2009 2010 2011 2012 2013







Intellectual Property Rights.

### World Rank: 77 Regional Rank: 13

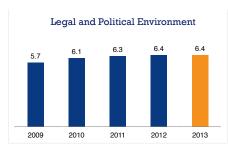
### C.A.G.R.

Legal and Political Environment: -0.7% Physical Property Rights: +0.4% Intellectual Property Rights: 0.0% IPRI Index: 0.0%

From 2009 to 2013, the overall IPRI score of the Philippines has not changed. In 2013 the IPRI increased by 0.2 points because of increases in all three of the component scores.

Legal and Political Environment gained 0.2 points from 2012 to 2013 because all four of the items increased. A 0.7 points increase in Protection of Physical Property Rights and 0.2 point increase in Access to Loans resulted in a 0.3 point gain in the component Physical Property Rights. Over the same period, Intellectual Property Rights improved by 0.1 points due, in part, to a 0.6 point increase in Protection of

### POLAND (CEECA)









World Rank: 44 Regional Rank: 5

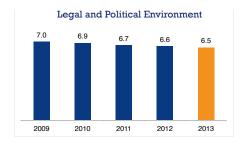
### C.A.G.R.

Legal and Political Environment: +2.9% Physical Property Rights: +1.7% Intellectual Property Rights: +1.3% IPRI Index: +2.1%

From 2009 to 2013, the overall IPRI score of Poland increased by 2.1%. The last period, 2012 to 2013, the IPRI improved by 0.1 points to a score of 6.2.

Between 2012 and 2013 components Legal and Political Environment and Intellectual Property Rights did not change. Physical Property Rights, on the other hand, increased by 0.2 points. This improvement is due to a rather large increase, 1.3 points, in Registering Property. This increase was able to offset the two declining scores of Access to Loans and Protection of Physical Property Rights.

### PORTUGAL (WE)









### World Rank: 26 Regional Rank: 16

### C.A.G.R.

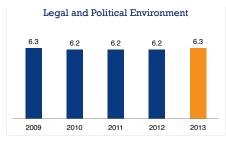
Legal and Political Environment: -1.8% Physical Property Rights: -2.1% Intellectual Property Rights: -0.3% IPRI Index: -1.4%

From 2009 to 2013, the overall IPRI score of Portugal decreased by 1.4%. However, there was no variation observed between the 2012 and 2013 period. Portugal's IPRI has remained at 6.8.

Between 2012 and 2013, Legal and Political Environment decreased by 0.1 points due to reductions in scores of three of the four items. During this time Control of Corruption increased by 0.1 points, while the other three Judicial Independence, Rule of Law, and Political Stability decreased by 0.1 points. Physical Property Rights also fell by 0.1 points from 2012 to

2013. The decline here is due to a 0.6 point reduction in Access to Loans. However, from 2012 to 2013 the scores for *Intellectual Property Rights* actually increased by 0.1 points. This increase is due to a 0.3 point improvement in Protection of Intellectual Property Rights.

### PUERTO RICO (USA) (LAC)









a result of a 0.2 point increase in Protection of Intellectual Property Rights.

World Rank: 37 Regional Rank: 2

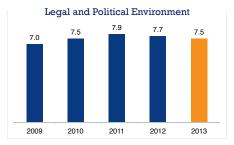
### C.A.G.R.

Legal and Political Environment: 0.0% Physical Property Rights: -2.3% Intellectual Property Rights: +0.4% IPRI Index: -0.8%

From 2009 to 2013, the overall Puerto Rican IPRI score decreased by 0.8%. However, in 2013 the IPRI improved by 0.1 points to 6.4.

A 0.5 point gain in Political Stability and a 0.2 point increase in Judicial Independence gain by 0.5 and 0.2 points resulted in a 0.1 point increase in the *Legal and Political Environment* component score. *Physical Property Rights* increased by 0.1 points between 2012 and 2013. This increase is due mainly to a 0.2 point improvement in Access to Loans and Protection of Physical Property Rights. Furthermore, *Intellectual Property Rights* increased by 0.1 points as

### QATAR (MENA)









### World Rank: 20 Regional Rank: 1

### C.A.G.R.

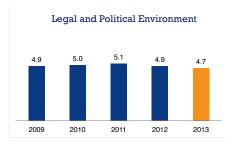
Legal and Political Environment: +1.7% Physical Property Rights: +0.7% Intellectual Property Rights: +2.8% IPRI Index: 1.8%

From 2009 to 2013, the overall IPRI score of Qatar increased by 1.8%. Between 2012 and 2013, there was a 0.1 point improvement in Qatar's IPRI score.

During the same period, the component Legal and Political Environment decreased by 0.2 points. This decline is due to a 1.1 point reduction in the item Control of Corruption. However, both Physical Property Rights and Intellectual Property Rights increased by 0.2 points from 2012 to 2013. Despite a 0.5 point reduction in Access to Loans, there was a 1.1 increase in Protection of Physical Property

Rights and this allowed *Physical Property Rights* to increase to a score of 7.8. Furthermore, the 0.2 point improvement in *Intellectual Property Rights* is largely due to a 0.4 increase in Protection of Intellectual Property Rights.

### ROMANIA (CEECA)









World Rank: 65 Regional Rank: 11

### C.A.G.R.

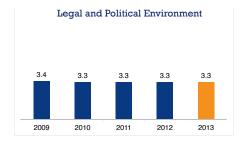
Legal and Political Environment: -1.0% Physical Property Rights: -1.2% Intellectual Property Rights: -0.5% IPRI Index: -0.9%

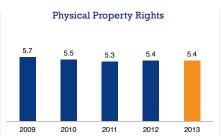
Between the years 2009 and 2013, the overall Romanian IPRI score decreased by 0.9%. In 2013 Romania's IPRI fell 0.1 points to a score of 5.3

From 2012 to 2013 there was a 0.2 point decrease in Legal and Political Environment this decline is due to a 0.3 point decline in Political Stability and a 0.6 point decrease in Judicial Independence. However, there was a 0.1 point increase in Physical Property Rights because of a 0.2 point increase in Access to Loans. Between 2012 and 2013, the component Intellectual Property Rights remained unchanged at a value

of 5.4. Despite slight variations between the items within Intellectual Property Rights the general score remained the same.

### RUSSIA (CEECA)









### World Rank: 102 Regional Rank: 16

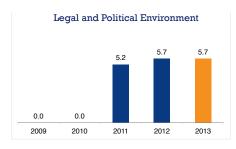
### C.A.G.R.

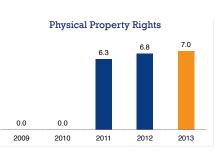
Legal and Political Environment: -0.7% Physical Property Rights: -1.3% Intellectual Property Rights: +0.5% IPRI Index: -0.5%

Between 2009 and 2013, the overall Russian IPRI score decreased by 0.5%. However, in the 2013 period Russia's IPRI did not change. This was the fourth year in a row without any variation in the IPRI.

The components Legal and Political Environment and Physical Property Rights remained at constant scores of 3.3 and 5.4 respectively. There was a 0.1 point improvement in Russia's Intellectual Property Rights score from 2012 to 2013. This increase is due to higher rankings in both Copyright Piracy and Protection of Intellectual Property Rights.

### RWANDA (A)









Protection of Intellectual Property Rights.

### World Rank: 44 Regional Rank: 4

### C.A.G.R.

Legal and Political Environment: +4.7% Physical Property Rights: +5.4% Intellectual Property Rights: +3.6% IPRI Index: +5.2%

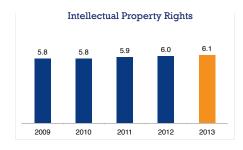
From 2011 to 2013, the overall Rwandan IPRI score increased by 5.2%. Between 2012 and 2013 Rwanda's IPRI increased by 0.2 points to a score of 6.2.

While Intellectual Property Rights and Physical Property Rights increased from 2012 to 2013, Legal and Political Environment did not. Legal and Political Environment remained at 5.7 during this period. The 0.2 point improvement in Physical Property Rights is due to a 0.7 point increase in Access to Loans. Furthermore, the 0.2 point increase in Intellectual Property Rights is because of a 0.3 point improvement in

### SAUDI ARABIA (MENA)

### Legal and Political Environment 5.3 5.4 5.5 5.8 5.4 2009 2010 2011 2012 2013







### World Rank: 37 Regional Rank: 7

### C.A.G.R.

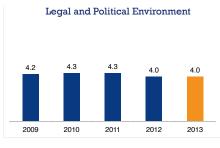
Legal and Political Environment: +0.5% Physical Property Rights: +0.3% Intellectual Property Rights: +1.3% IPRI Index: +0.8%

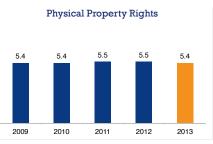
From 2009 to 2013, the overall Saudi Arabian IPRI score increased by 0.8%. However, from 2012 to 2013, the IPRI of Saudi Arabia decreased by 0.1 points.

Between 2012 and 2013, Legal and Political Environment decreased by 0.4 points. This decline is due to the fact that all items decreased from 2012 to 2013. In fact, Control of Corruption declined by 0.9 points and Judicial Independence by 0.4 points. Also, Physical Property Rights declined by 0.2 points due to a 0.7 point reduction in Access to Loans. Conversely, Intellectual Property Rights

increased by 0.1 points to a score of 6.1. This increase is because of a 0.1 point improvement in Copyright Piracy.

### SENEGAL (A)









World Rank: 102 Regional Rank: 20

### C.A.G.R.

Legal and Political Environment: -1.2% Physical Property Rights: 0.0% Intellectual Property Rights: -0.6% IPRI Index: -0.5%

From 2009 to 2013, the overall IPRI score of Senegal decreased by 0.5%. In fact, from 2012 to 2013 Senegal's IPRI score fell by 0.1 points.

For the period 2012 to 2013, the Legal and Political Environment component score did not change. The minor variations in items such as Rule of Law and Judicial Independence were cancelled out by increases in Control of Corruption and Political Stability. Physical Property Rights and Intellectual Property Rights both decreased by 0.1 points during this period. Physical Property Rights decreased due to reductions in both Access to Loans and Protec-

tion of Physical Property Rights. A 0.2 point reduction in Protection of Intellectual Property Rights led to a 0.1 point decrease in *Intellectual Property Rights*.

### SERBIA (CEECA)



2009

2013

2012

World Rank: 107 Regional Rank: 19

### C.A.G.R.

Legal and Political Environment: +0.6% Physical Property Rights: -0.4% Intellectual Property Rights: +1.5% IPRI Index: +0.6%

From 2009 to 2013, the overall Serbian IPRI score increased by 0.8%. Between the years 2012 and 2013, Serbia's IPRI improved by 0.1 points due to improvements in Legal and Political Environment and Intellectual Property Rights.

The component Legal and Political Environment improved by 0.1 points from 2012 to 2013. This increase is driven by improvements in three of the four items. Furthermore, Intellectual Property Rights increased by 0.1 points to a score of 3.4. This increase is due to improvements in Protection of Intellectual Property Rights and Copyright Piracy. On the other hand,

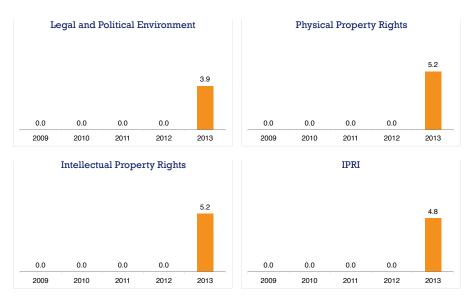
the component *Physical Property Rights* decreased by 0.1 points during the same period. The decline is due to reductions in Protection of Physical Property Rights.

2013

### SIERRA LEONE (A)

2010

2011



is Patent Protection with a score of 6.0. There are not, however, scores for Copyright Piracy.

World Rank: 87 Regional Rank: 16

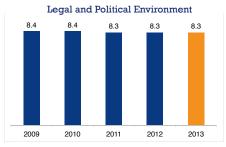
### C.A.G.R.

Legal and Political Environment: 0.0% Physical Property Rights: 0.0% Intellectual Property Rights: 0.0% IPRI Index: 0.0%

This is the first year that Sierra Leone was able to participate in the IPRI. Their overall IPRI score for 2013 is 4.8.

The lowest component score is 3.9 for the Legal and Political Environment component. The item Rule of Law is 3.3 and Control of Corruption is 3.6. The other two item scores are 4.6 and 4.0 for Political Stability and Judicial Independence respectively. The other two components have the same score of 5.2. The highest scoring item in Physical Property Rights is Registering Property with a score of 7.8. The highest scoring item for Intellectual Property Rights

### SINGAPORE (AO)









### World Rank: 7

Regional Rank: 2

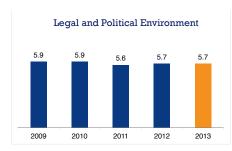
### C.A.G.R.

Legal and Political Environment: -0.3% Physical Property Rights: -0.6% Intellectual Property Rights: 0.0% IPRI Index: -0.3%

From 2009 to 2013, the overall IPRI score for Singapore decreased by 0.3%. However, Singapore's IPRI has remained stable at 8.1 since 2011.

In 2013, all three of the component scores have remained at their 2012 levels. While there were minor deviations in Control of Corruption and Political Stability, they were able to balance out each other and not affect the *Legal and Political Environment* score. The other two components varied even less, and consequently, *Intellectual Property Rights* and *Intellectual Property Rights* remained constant.

### SLOVAKIA (CEECA)









### World Rank: 40

Regional Rank: 3

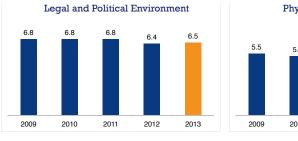
### C.A.G.R.

Legal and Political Environment: -0.9% Physical Property Rights: -3.8% Intellectual Property Rights: +0.8% IPRI Index: -1.2%

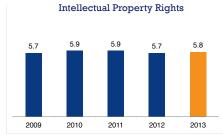
Between the years 2009 and 2013, the overall Slovakian IPRI score decreased by 1.2%. However, from 2012 to 2013 Slovakia's IPRI score remains stable at 6.3. Furthermore, there was no variation between the component scores for Slovakia between 2012 and 2013.

Despite, the static nature of the component scores there was some variation between items. Political Stability in Slovakia declined by 0.2 points, but Control of Corruption improved by 0.1 points. There was also a 0.2 point improvement in Copyright Piracy.

### SLOVENIA (CEECA)









### World Rank: 48 Regional Rank: 6

### C.A.G.R.

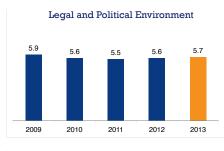
Legal and Political Environment: -1.1% Physical Property Rights: +0.9% Intellectual Property Rights: +0.4% IPRI Index: 0.0%

From 2009 to 2013, the overall IPRI score of Slovenia has not changed. The slight improvement in IPRI from 2011 has since been reduced back to the 2009 score of 6.0.

Between 2012 and 2013, the component *Legal* and *Political Environment* increased by 0.1 points. This improvement is largely due to the 0.2 point gain in Control of Corruption and the 0.1 point gains in Rule of Law and Political Stability. *Intellectual Property Rights* also saw a gain of 0.1 points from 2012 to 2013. This increase is due to a 0.1 point improvement in Copyright Piracy and a 0.2 point gain in Protection of In-

tellectual Property Rights. *Physical Property Rights*, on the other hand, fell by 0.1 points during this year. The decline is largely due to a 0.2 drop in Access to Loans.

### SOUTH AFRICA (A)









### World Rank: 26 Regional Rank: 1

### C.A.G.R.

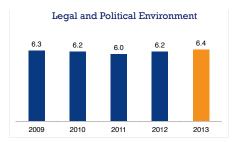
Legal and Political Environment: -0.9% Physical Property Rights: -2.0% Intellectual Property Rights: -0.3% IPRI Index: -1.1%

From 2009 to 2013, the overall South African IPRI score decreased by 1.2%. However, South Africa's IPRI slightly improved, by 0.1 points, in 2013 due to improvements in all component scores.

The component Legal and Political Environment improved by 0.1 points from 2012 to 2013. The item which had a major improvement this year was Judicial Independence, the gain was 0.5 points. Physical Property Rights also increased by 0.1 points between 2012 and 2013. The improvement is due to a 0.3 point gain in Access to Loans and a 0.1 point increase in Pro-

tection of Physical Property Rights. Furthermore, *Intellectual Property Rights* increased by 0.1 points during this period. This increase is mostly attributable to a 0.5 point gain in Protection of Intellectual Property Rights.

### SPAIN (WE)









### World Rank: 33 Regional Rank: 17

### C.A.G.R.

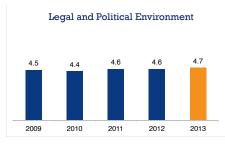
Legal and Political Environment: +0.4% Physical Property Rights: -3.9% Intellectual Property Rights: -1.1% IPRI Index: -1.5%

Between the year 2009 and 2013 the overall IPRI score of Spain decreased by 1.5%. In fact, Spain's IPRI score has remained at 6.5 since 2011.

However, between 2012 and 2013, the component Legal and Political Environment increased by 0.2 points. This improvement is largely due to a 0.6 point gain in Political Stability. During this same time, Intellectual Property Rights and Physical Property Rights actually declined. Physical Property Rights declined by 0.2 points because a 0.5 point loss in Access to Loans. Furthermore, Intellectual Property Rights

declined by 0.1 points because of a 0.2 point reduction in Protection of Intellectual Property Rights and a 0.1 point decrease in Copyright Piracy.

### SRI LANKA (AO)









World Rank: 77 Regional Rank: 13

### C.A.G.R.

Legal and Political Environment: +1.1% Physical Property Rights: -2.8% Intellectual Property Rights: +1.2% IPRI Index: -0.5%

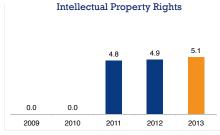
From 2009 to 2013, the overall Sri Lankan IPRI score decreased by 0.5%. There was, however, no variation in the IPRI score from 2012 to 2013. This is the third year in a row without any changes.

From 2012 to 2013, Legal and Political Environment improved by 0.1 points due to improvements in Control of Corruption (0.1 points), Rule of Law (0.1 points), and Political Stability (0.4 points). Access to Loans and Protection of Physical Property Rights fell by 0.5 and 0.2 points respectively. This resulted in a 0.2 point decrease in the component Physical Property

Rights score for 2013. Furthermore, Intellectual Property Rights declined by 0.1 points due to a 0.3 point loss in Protection of Intellectual Property Rights. The 0.2 point gain in Copyright Piracy was unable to negate the overall loss in the component Intellectual Property Rights.

### SWAZILAND (A)

## Legal and Political Environment Physical Property Rights 6.2 5.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 2009 2010 2011 2012 Intellectual Property Rights IPRI





2013

### World Rank: 72 Regional Rank: 8

### C.A.G.R.

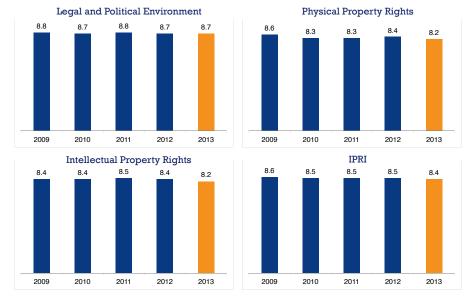
Legal and Political Environment: -3.2% Physical Property Rights: -4.1% Intellectual Property Rights: +3.1% IPRI Index: -1.0%

Between 2011 and 2013, the overall IPRI score for Swaziland decreased by 1.0%. In the 2012-2013 period IPRI decreased by 0.1 points due to declining scores in *Legal and Political Environment* and *Physical Property Rights*.

From 2012 to 2013, Legal and Political Environment decreased by 0.3 points. This loss is mostly driven by a 0.8 point decrease in Political Stability and 0.4 points in Judicial Independence. Furthermore, Swaziland's Physical Property Rights score decreased by 0.2 points, during the same period, due to a 0.4 point drop in Protection of Physical Property Rights and 0.1

points in Access to Loans. On the other hand, *Intellectual Property Rights* improved by 0.2 points because of a 0.4 point increase in Protection of Intellectual Property Rights.

### SWEDEN (WE)



World Rank: 2

Regional Rank: 2

### C.A.G.R.

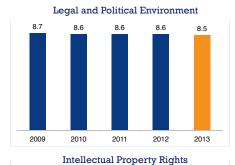
Legal and Political Environment: -0.3% Physical Property Rights: -1.2% Intellectual Property Rights: -0.6% IPRI Index: -0.6%

From 2009 to 2013, the overall Swedish IPRI score decreased by 0.6%. Between 2012 and 2013 Sweden's IPRI score decreased by 0.1 points, to 8.4.

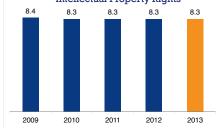
The component Legal and Political Environment remained the same between 2012 and 2013 at 8.7. The minor variations in Judicial Independence and Control of Corruption are balanced by an increase in Political Stability. There were, however, 0.2 point losses for both Physical Property Rights and Intellectual Property Rights. The reduction in Physical Property Rights is due to a 0.5 point decline in Protection

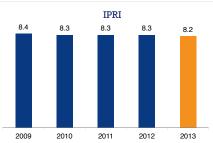
of Physical Property Rights and a 0.3 point loss in Registering Property. Furthermore, the loss of 0.2 points in *Intellectual Property Rights* can be attributed to a 0.6 point decline in Protection of Intellectual Property Rights.

### SWITZERLAND (WE)









### World Rank: 5

Regional Rank: 4

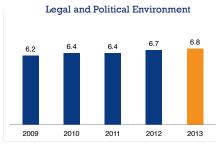
### C.A.G.R.

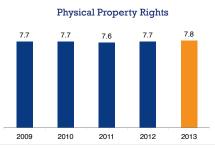
Legal and Political Environment: -0.6% Physical Property Rights: -0.9% Intellectual Property Rights: -0.3% IPRI Index: -0.6%

From 2009 to 2013, the overall IPRI score of Switzerland decreased by 0.6%. In fact, from 2012 to 2013 Switzerland's IPRI score decreased by 0.1 points.

Two components, *Physical Property Rights* and *Intellectual Property Rights* remained at last year's levels in 2013. The scores were 7.9 and 8.3 respectively. The component *Legal and Political Environment* decreased by 0.1 points. The declines were due to 0.1 point losses in Judicial Independence, Control of Corruption, and Political Stability.

### TAIWAN (CHINA) (AO)









World Rank: 22

Regional Rank: 6

### C.A.G.R.

Legal and Political Environment: +2.3% Physical Property Rights: +0.3% Intellectual Property Rights: +1.1% IPRI Index: +1.1%

From 2009 to 2013, the overall Taiwanese IPRI score increased by 1.1%. In the 2012 to 2013 Taiwan's IPRI score improved by 0.1 points. This is the third year in a row with a 0.1 point improvement.

From 2012 to 2013, the component Legal and Political Environment improved by 0.1 points. This increase is largely driven by a 0.3 point improvement in Control of Corruption and a 0.2 point increase in Political Stability. Physical Property Rights also increased by 0.1 points, due to a 0.4 point improvement in Access to Loans. From 2012 to 2013, Intellectual Property Rights

also increased by 0.1 points to a score of 7.1. This improvement is attributable to the 0.3 point gain in Protection of Intellectual Property Rights.

# TANZANIA, UNITED REPUBLIC OF (A)

# 4.6 4.6 4.6 4.5 4.5 2009 2010 2011 2012 2013







#### World Rank: 81 Regional Rank: 12

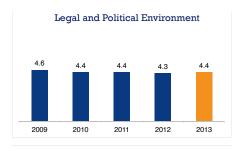
#### C.A.G.R.

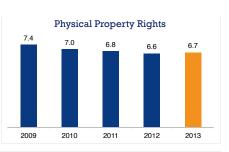
Legal and Political Environment: -0.5% Physical Property Rights: -0.9% Intellectual Property Rights: +1.0% IPRI Index: -0.5%

From 2009 to 2013, the overall IPRI score of Tanzania decreased by 0.5%. Tanzania's IPRI score decreased by 0.1 points in 2013.

While Legal and Political Environment and Physical Property Rights remains unchanged between 2012 and 2013, Intellectual Property Rights declined by 0.1 points. Intellectual Property Rights declined because of a 0.3 point loss in Protection of Intellectual Property Rights.

# THAILAND (AO)









Intellectual Property Rights component improved by 0.1 points.

World Rank: 72 Regional Rank: 12

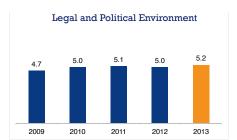
#### C.A.G.R.

Legal and Political Environment: -1.1% Physical Property Rights: -2.5% Intellectual Property Rights: -0.6% IPRI Index: -1.4%

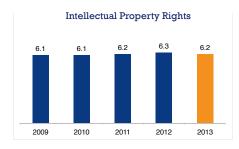
Between the years 2009 and 2013 the overall IPRI score of Thailand decreased by 1.4%. However, in the 2012 to 2013 period Thailand's IPRI improved 0.1 points to 5.1.

A Significant (0.6 points) improvement in Political Stability was able to balance out decreases in Judicial Independence and Rule of Law. Consequently, Legal and Political Environment improved by only 0.1 points. Physical Property Rights also improved by 0.1 points due to gains in Protection of Physical Property Rights and Access to Loans. Due to a 0.1 point improvement in Copyright Piracy, Thailand's

# TRINIDAD AND TOBAGO (LAC)









#### World Rank: 53 Regional Rank: 5

#### C.A.G.R.

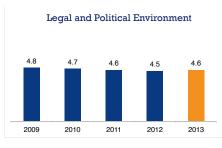
Legal and Political Environment: +2.6% Physical Property Rights: -2.1% Intellectual Property Rights: +0.4% IPRI Index: +0.4%

From 2009 to 2013, the overall IPRI score of Trinidad and Tobago increased by 0.4%. Furthermore, Trinidad and Tobago's IPRI gained 0.1 points from 2012 to 2013.

The component Legal and Political Environment increased by 0.2 points. This increase is attributable to a 0.4 point gain in Political Stability and 0.1 point increase in Control of Corruption. For Physical Property Rights, Registering Property and Protection of Physical Property Rights increased by 0.5 and 0.1 points, respectively, while Access to Loans fell by 0.3 points. These derivations led to a 0.1

point increase in *Physical Property Rights*. Trinidad and Tobago's *Intellectual Property Rights* score, on the other hand, decreased by 0.1 points. This reduction is due to a 0.2 point decline in Protection of Intellectual Property Rights.

# TURKEY (CEECA)









World Rank: 58 Regional Rank: 9

#### C.A.G.R.

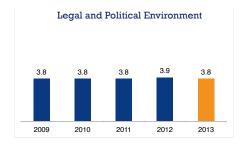
Legal and Political Environment: -1.1% Physical Property Rights: 0.0% Intellectual Property Rights: +0.9% IPRI Index: 0.0%

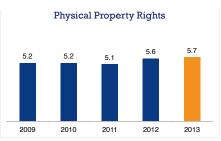
From 2009 to 2013, the overall IPRI score of Turkey has not changed. However, after three static years at 5.3, the IPRI improved by 0.2 points in 2013.

The component Legal and Political Environment increased by 0.1 points over the 2012 to 2013 period. This increase is driven by improvements in the Control of Corruption and Judicial Independence scores. Furthermore, Physical Property Rights increased by 0.2 points up to a score of 6.5. The improvements are due to a 0.5 point increase in Protection of Physical Property Rights and a 0.3 point increase in Ac-

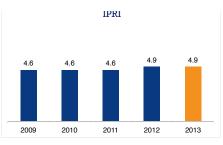
cess to Loans. The component *Intellectual Property Rights* also increased by 0.3 points from 2012 to 2013. This increase is due to a 0.8 point increase in the item Protection of Intellectual Property Rights.

# UGANDA (A)









during this same time period.

#### World Rank: 81 Regional Rank: 12

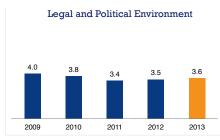
#### C.A.G.R.

Legal and Political Environment: 0.0% Physical Property Rights: +2.3% Intellectual Property Rights: +2.0% IPRI Index: +1.6%

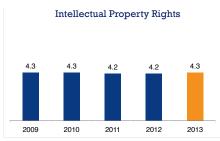
From 2009 to 2013, the overall Ugandan IPRI score increased by 1.6%. However, Uganda's 2013 IPRI score did not change from the 2012 score.

Even though the IPRI score did not change from 2012 to 2013, Uganda's Legal and Political Environment component score declined by 0.1 points due to a 0.3 point loss in Judicial Independence. Physical Property Rights, on the other hand, increased by 0.1 points. This improvement is because of a 0.5 point increase in Access to Loans. The component Intellectual Property Rights remained unchanged at 5.3

# UKRAINE (CEECA)









0.2 point increases in both Protection of Intellectual Property Rights and Copyright Piracy.

World Rank: 113 Regional Rank: 21

#### C.A.G.R.

Legal and Political Environment: -2.6% Physical Property Rights: -2.9% Intellectual Property Rights: 0.0% IPRI Index: -2.2%

From 2009 to 2013, the overall IPRI score of Ukraine decreased by 2.2%. While the last two years the IPRI of Ukraine remained static, the 2013 period saw a 0.2 point improvement.

From 2012 to 2013, the component Legal and Political Environment increased by 0.1 points as result of a 0.6 point increase in Judicial Independence. Furthermore, a 0.4 point improvement in Access to Loans and a 0.6 point increase in Registering Property, led to a 0.4 point gain in Physical Property Rights for the Ukraine. During the same period, Intellectual Property Rights improved by 0.1 points due to

# UNITED ARAB EMIRATES (UAE) (MENA)

## **Physical Property Rights** Legal and Political Environment 8.1 6.7 2013 2009 2013 2009 2012 2010 2011 2012 **Intellectual Property Rights** IPRI 7.3 2013 2013 2012 2009

World Rank: 22Regional Rank: 2

#### C.A.G.R.

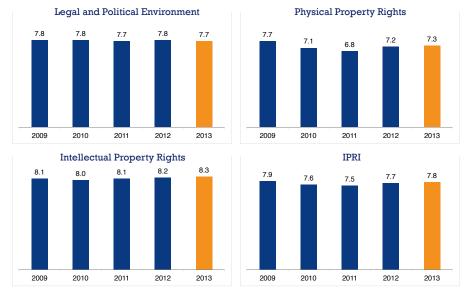
Legal and Political Environment: +0.4% Physical Property Rights: -0.6% Intellectual Property Rights: 0.0% IPRI Index: -0.3%

Between the years 2012 and 2013 the overall IPRI score for the United Arab Emirates decreased by 0.3%. However, the 2012 to 2013 period is the first year with improvements in the United Arab Emirates' IPRI in three years. From 2012 to 2013, there were, in fact, improvements in all three components.

Legal and Political Environment gained 0.2 points from 6.7 up to 6.9 points. This improvement is due to increases in all four of the items. Furthermore, there was a 0.3 point gain in Physical Property Rights due to increases in Protection of Physical Property Rights and Access to

Loans. While Registering Property saw no change this year, a 9.7 score is worth noting. Finally, the component *Intellectual Property Rights* increased by 0.1 points because of a 0.3 point increase in Protection of Intellectual Property Rights.

# UNITED KINGDOM (UK) (WE)



World Rank: 12 Regional Rank: 8

#### C.A.G.R.

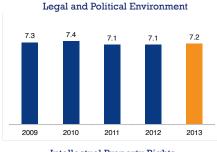
Legal and Political Environment: -0.3% Physical Property Rights: -1.3% Intellectual Property Rights: +0.6% IPRI Index: -0.3%

From 2009 to 2013, the overall IPRI score of the United Kingdom decreased by 0.3%. However, the IPRI score between 2012 and 2013 increased by 0.1 points.

Three of four items in the component *Legal* and *Political Environment* decreased from 2012 to 2013, which led to a 0.1 point decrease in the component score. However, both *Physical Property Rights* and *Intellectual Property Rights* increased by 0.1 points. This improvement in *Physical Property Rights* is attributable to the 0.3 point increase in Protection of Physical Property Rights and a 0.1 point increase in Access to

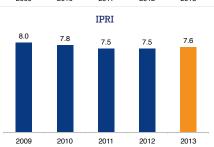
Loans. The 0.1 point increase in *Intellectual Property Rights* is due to a 0.3 point increase in Protection of Intellectual Property Rights and a 0.1 point increase in Copyright Piracy.

# UNITED STATES (USA) (NA)









#### World Rank: 17 Regional Rank: 2

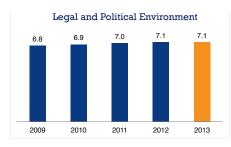
#### C.A.G.R.

Legal and Political Environment: -0.3% Physical Property Rights: -2.9% Intellectual Property Rights: -0.9% IPRI Index: -1.3%

From 2009 to 2013, the overall IPRI score in the United States decreased by 1.3%. The period 2012 to 2013 was the first time that the IPRI score for the United States improved.

From 2012 to 2013, the component *Legal and Political Environment* increased by 0.1 points, this improvement is due to a 0.4 point increase in Political Stability. The components *Physical Property Rights* and *Intellectual Property Rights* remained at their respective levels 7.2 and 8.3 during this time period.

# URUGUAY (LAC)









World Rank: 44 Regional Rank: 3

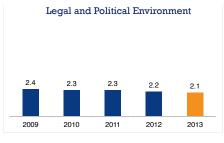
#### C.A.G.R.

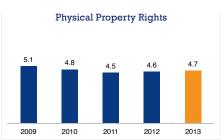
Legal and Political Environment: +1.1% Physical Property Rights: +0.8% Intellectual Property Rights: 0.0% IPRI Index: +0.8%

Between the years 2009 and 2013 the overall IPRI score of Uruguay increased by 0.8%. However, 2013 IPRI score remained unchanged.

In fact, each of the components Legal and Political Environment, Physical Property Rights, and Intellectual Property Rights remained at the 2012 levels in 2013. While Political Stability did improve in Uruguay it did not affect the Legal and Political Environment Component. Similarly, improvements in Copyright Piracy did not alter the 5.2 score of Intellectual Property Rights.

# VENEZUELA, BOLIVARIAN REPUBLIC OF (LAC)









### World Rank: 127 Regional Rank: 22

#### C.A.G.R.

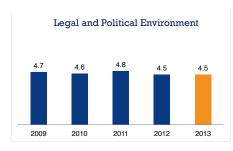
Legal and Political Environment: -3.3% Physical Property Rights: -2.0% Intellectual Property Rights: -1.4% IPRI Index: -2.1%

From 2009 to 2013, the overall Venezuelan IPRI score decreased by 2.1%. However, Venezuela's IPRI score remains unchanged for the past three years. The IPRI is steady at 3.4. Venezuela still counts among the bottomranked nations in this year's IPRI.

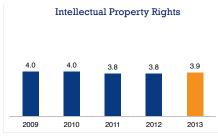
Legal and Political Environment declined by 0.1 points to 2.1 because of a 0.6 point loss in Judicial Independence. Furthermore, Intellectual Property Rights declined by 0.1 points due to a 0.2 point reduction in the item Protection of Intellectual Property Rights. Between 2012 and 2013, Physical Property Rights actually in-

creased by 0.1 points. This increase is attributable to a 0.3 point improvement in Access to Loans.

# VIETNAM (AO)









Intellectual Property Rights and Copyright Piracy.

World Rank: 91 Regional Rank: 16

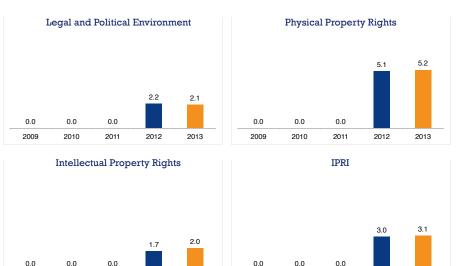
#### C.A.G.R.

Legal and Political Environment: -1.1% Physical Property Rights: -2.5% Intellectual Property Rights: -0.6% IPRI Index: -1.5%

Between 2009 and 2013 the overall IPRI score of Vietnam decreased by 1.5%. Although, there was no variation in Vietnam's IPRI from 2012 to 2013.

Vietnam's Legal and Political Environment score did not change between 2012 and 2013. The Physical Property Rights component score, on the other hand, decrease by 0.1 points. This decrease is due to a 0.1 point loss in Access to Loans and a 0.3 points reduction in the Protection of Physical Property Rights. Vietnam's Intellectual Property Rights score improved by 0.1 points due to increases in Protection of

# YEMEN, REPUBLIC OF (A)



World Rank: 131 Regional Rank: 29

#### C.A.G.R.

Legal and Political Environment: -4.5% Physical Property Rights: +2.0% Intellectual Property Rights: +17.6% IPRI Index: +3.3%

This is the second year that Yemen has been measured in the IPRI. The overall IPRI score of Yemen increased by +3.3% in the last two years. However, the score is relatively low at 3.1. From 2012 to 2013, the Legal and Political Environment component fell 0.1 points to 2.1. This decline is due to losses in Control of Corruption, Rule of Law, and Political Stability. Physical Property Rights and Intellectual Property Rights, on the other hand, increased between 2012 and 2013. Physical Property Rights increased by 0.1 points because of a 0.4 point gain in Access to Loans. Intellectual

Property Rights increased by 0.3 points due to a 0.5 point increase in Protection of Intellectual Property Rights.

2009

2010

2011

2012

2013

# ZAMBIA (A)

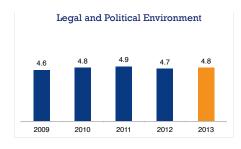
2009

2010

2011

2012

2013









World Rank: 81 Regional Rank: 12

#### C.A.G.R.

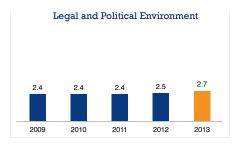
Legal and Political Environment: +1.1% Physical Property Rights: -0.4% Intellectual Property Rights: +1.4% IPRI Index: +0.5%

From 2009 to 2013, the overall Zambian IPRI score increased by 0.5%. Zambia's IPRI score shows a 0.2 point gain in the 2012 to 2013 period. From 2012 to 2013 all component scores improved.

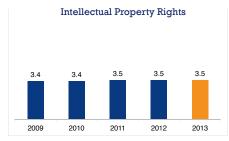
Zambia's Legal and Political Environment score increased by 0.1 points with the item Control of Corruption gaining 0.2 points. The Physical Property Rights score increased by 0.4 points during the same period. This improvement is due to 0.5 point increases in Access to Loans and Protection of Physical Property Rights. Furthermore, Intellectual Property Rights

increased by 0.1 points from 2012 to 2013. The improvement is largely a result of a 0.3 point gain in Protection of Intellectual Property Rights.

# ZIMBABWE (A)









World Rank: 124 Regional Rank: 27

#### C.A.G.R.

Legal and Political Environment: +3.0% Physical Property Rights: -0.9% Intellectual Property Rights: +0.7% IPRI Index: +0.7%

From 2009 to 2013, the overall IPRI score of Zimbabwe increased by 0.7%. In the 2012 to 2013 period there was a 0.1 point gain in Zimbabwe's IPRI.

Between 2012 and 2013, the *Legal and Political Environment* component score increased by 0.2 points to 2.7 due to gains in Judicial Independence, Political Stability and Rule of Law. Furthermore, a 0.3 points increase in the Protection of Physical Property Rights led to Zimbabwe's *Physical Property Rights* score to improve by 0.1 points up to 5.2. *Intellectual Property Rights*, however, remained at 3.5 during this period.

# **CHAPTER V: CASE STUDIES**

#### **CASE STUDY:**

#### PROPERTY AND BUSINESS RIGHTS IN TUNISIA

The Arab Spring: A massive clamor for access to property and business rights

By Dr. Ana Lucía Camaiora, Legal Director, Institute for Liberty and Democracy

It all started in Tunisia, at 11:30 a.m. on December 17, 2010 in the small city of Sidi Bouzid, when the fruit vendor Mohammed Bouazizi lit himself on fire and sparked the Arab Spring – thus making him the world's most famous informal entrepreneur.

At the Institute for Liberty and Democracy (ILD) we knew the Bouazizis of the developing world very well. We quickly recognized the Tunisian street vendor's self-immolation as a desperate protest against the kind of real and devastating legal constraints on doing business and scratching out a living that are endemic in the developing and post-Soviet world. It, thus, occurred to us that Bouazizi might be representative of an emerging Arab underclass that runs businesses and occupies property but without having the legal tools to generate capital, guarantee credit, and create additional value.

To find out more about the facts behind the Arab Spring, we went to Tunisia to obtain firsthand information. By December 2012, we reached the conclusion that the **Arab Spring was, in fact, a massive economic revolution**. This doesn't deny the enormous role of political leadership in toppling so many dictators and frightening so many more to listen to the demands of their people; but it may help to explain why the revolt initiated in Tunisia spread so quickly across the otherwise culturally diverse national and traditional boundaries of MENA countries.

The ILD team soon discovered that Bouazizi's desperate protest was not only the catalyst for revolution but a protest against institutional obstacles to do business and to access property rights. More surprising, he was not alone: within two months of his famous public self-immolation, 63 others across the MENA region also set themselves afire, every one of them a small business entrepreneur, like Bouazizi. We have interviewed 20% of the protestors who survived their self-immolations and their families. What we learned was that the primary reason these protestors gave for this drastic action was "expropriation."

In Western countries, the right to control and transform property is protected by law. In MENA, the poor entrepreneur's "right" to transact relies on their contact with local authorities, not the law. We estimate that some 380 million MENA people share this vulnerability because they rely on the region's extralegal economies. Little wonder that the self-immolations of their peers sent millions of other Arabs without property rights into the streets to demand change – and inclusion into the legal systems of their countries.

Based on our analysis of the history of economic development in Europe, the U.S. and Japan, along with our own experiences assisting reform-minded governments in Latin America, Asia, Africa, ex-Soviet Europe, and now the MENA region, ILD believes that an efficient an inclusive institutional framework must contain the following three basic legal tools indispensable for everyone, and particularly the poor, to contribute to and reap the benefits of economic growth:

Formal fungible property rights that not only allow assets to be identified, but also allow ordinary people to move them in the
market to capture as much economic value as possible. Property rights also protect people from arbitrary expropriation of
their assets;

<sup>1</sup> The ILD is a Peruvian organization with more than 25 years analyzing the informal sector in our own country and worldwide -including the past 10 years in the Middle East- and assisting heads of state and governments in reforming their institutional frameworks in order to create inclusive free-market economies under one rule of law.

<sup>2 29</sup> in Algeria, 5 in Egypt, 4 in Morocco, 1 in Saudi Arabia, 2 in Syria, 22 in Tunisia and 1 in Yemen. All these self-immolators were extralegal entrepreneurs. They ran businesses as diverse as restaurants, information technology, real estate, eyeglass vending, taxis, wholesale vegetables, etc. More than 60% of them survived

<sup>3</sup> Although they have some differences, we use in this article the words "informal" and "extralegal" as synonymous, to refer to legal activities that are developed outside the law, without the legal means to divide labor, generate capital and create additional value.

- Legal mechanisms that increase productivity through the creation of **business organizational forms** for an efficient division of labor, limited liability, issuance of shares, and raising capital; and,
- Legal mechanisms for enterprises to operate in expanded markets, acquiring the capacity to gain access to networks beyond
  family members and circles of acquaintances (in other words, mechanisms that allow everyone to contract with anyone, without
  great risk of fraud or breach).

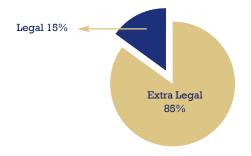
Tunisia already has many of these legal mechanisms. According to Tunisian laws and regulations, for example, all citizens should be able to incorporate a business that allows them to raise capital from partners, limit their liability, organize labor efficiently, as well as to use their property as collateral for credit, and to enforce public and private commitments over the long term.

In practice, however, these legal tools – essential for prosperity – are not easily accessible to all Tunisians. ILD researchers have discovered that:

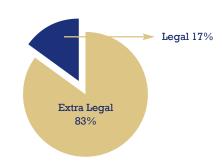
The amount of extralegal property and businesses in Tunisia is massive "Dead capital" in Tunisia is worth some US\$ 115 billion. It consists of:

- US\$ 22 billion in extralegal business assets. We estimate that there are some 524,000 extralegal enterprises in Tunisia representing 85% of all enterprises in the country.
- US\$ 93 billion in extralegal real estate assets. We estimate that there are 2 million extralegal dwellings in Tunisia housing some 9 million people, which represents 83% of the total population.

#### **Business Assets in Tunisia**



#### Real Estate Assets in Tunisia



The dead capital accumulated in business and real estate assets (US\$ 115 billion) in Tunisia is equivalent to:

- 12 times Tunisia's net international reserves accumulated up to 2010 (US\$ 9.8 billion).
- 11 times the capital value of the companies listed on the Bourse de Tunis in 2010 (US\$ 10.7 billion).
- 5 times the stock of external debt to 2010 (US\$ 21.6 billion).
- 4 times the foreign direct investment received since 1976 (US\$ 25.9 billion).
- 3 times the savings sent from abroad by Tunisian workers from 1976 to 2010 (US\$ 38.5 billion).

<sup>4</sup> Informal or extralegal assets are assets that cannot be used (for instance, to sell, lease, pledge, or transfer free of charge) optimally because their holders cannot comply with one or more existing legal provisions governing their use.

<sup>5</sup> This sum was obtained by estimating the present value of the stream of future annual net income of companies operating without complying with legal requirements to operate or those operating legally but which are not constituted as legal entities.

<sup>6</sup> This sum was obtained by estimating the current replacement cost, adjusted to take into account the average age of dwellings representing various areas that were identified as containing properties that are not complying with one or more existing legal provisions regulating them.

#### Tunisia's informal economy is the nation's biggest employer

Our study shows that the formal private sector employs some 900,000 people and the public sector approximately 600,000; while the extralegal sector employs about one million people. In other words, Tunisia has a large and vibrant extralegal economy that employs close to 40% of the country's workforce.<sup>7</sup>

In addition, there are 1.3 million people whose human capital is not optimally invested in economic activities.8

#### There are too many constraints to legality

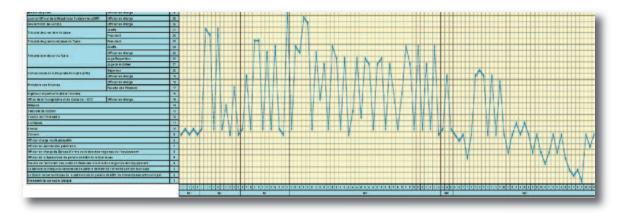
Why does a stunning majority of Tunisian entrepreneurs remain extralegal? The answer is simple: because they just cannot deal with the complexities and high costs of the legal system.

Perhaps Bouazizi and other extralegal entrepreneurs could have done more to become legal, but in most cases it is impossible. For example, the attempt to legalize street vendors just before the December 2010 Revolution (*Arrêté du Ministre de l'Intérieur et du Développement Local*) contains an inapplicable procedure: the prerequisite for achieving the license for street vending (*Carte de commerçant détaillant ambulant*) is an official authorization for "setting up in a public place" (*Autorisation d'occupation du domaine public*) – that, in practice, no one has been able to obtain.

Also, Bouazizi's dream of creating a legal enterprise just to establish a small sole proprietorship firm was way beyond the means of a poor businessman like him:

- To incorporate such organizational form (Societé Unipersonelle a Responsabilité Limité) takes 55 administrative steps during 142 days and requires spending some US\$ 3,233 (twelve times Bouazizi's monthly net income, not including maintenance and exit costs).
- To regularize a property title and obtain a building permit takes more than 800 days and cost US\$ 8,590.
- To record a deed in the property registry (*Conservation de la Propriété Foncière*), an indispensable requirement for using real estate property as collateral, would entail 499 days of red tape and a cost of US\$ 2,976.

### Procedure to Regularize a Property Title and Obtain a Building Permit



<sup>7</sup> Estimates from OECD, Development Centre working paper 31-Mar-09; National Statistical Institute; Statistical indicators on Tunisia, 2010; Public Sector employment & Labor Markets in Arabs countries; Darwin College University of Cambridge UK 1996; our fieldwork interviews.

<sup>8</sup> Workers who offer their services to business enterprises classified as extralegal (571,000 workers) plus individual workers with very limited skills who have created their own source of employment (411,000 workers), and people who want to work but who are struggling because they are trying to enter the market for the first time without basic skills or because they are over-qualified for the jobs available or because the knowledge and experience gained in previous jobs are obsolete.

Government efforts to facilitate business activity in Tunisia did not consider the conditions of the majority of Tunisian entrepreneurs. For example, we found that 85% of the businesses in Tunisia, which are sole traders, are not eligible for the benefits of the *Guichet Unique* ("one-stop shop") created to speed-up legal procedures to start up a business.

In the area of real estate, there is no doubt that over the last 30 years there has been considerable progress in advancing access to adequate shelter for a very large segment of the Tunisian population (mostly through the efforts of individual builders). However, many Tunisians inhabit houses affected by different types and levels of extra-legality. In fact, we have found:

- Extralegal properties of informal origin: Logements anarchiques or gurbivilles (slums) not regularized by the State; upgraded informal settlements (logements anarquiques regularizes); illegal subdivisions of State owned land; informal subdivision of private land; and,
- Extralegal properties of formal origin: Dwellings with restricted economic use (e.g. historic towns, such as Medina); transferring apartment units not yet regularized (e.g. private apartment units and apartments in social housing projects); and buildings constructed without legal authorization.

Each of these types of informal real estate has to be regularized through a procedure that is expensive, unknown and, in some cases, nonexistent.

Due to these high costs and cumbersome procedures, the legal tools for development are accessible only to those with resources to spare or with "connections" within the State apparatus. With such an exclusionary and discriminatory legal framework, no matter how enterprising or talented Tunisian entrepreneurs might be, they will not be able to carry out the sophisticated combinations that create employment and add value to the economy.

But this is not only a Tunisian problem. Our research in the MENA region shows that other countries also have high levels of extra-legality. In Egypt, for instance, we have estimated the value of the extralegal economy at US\$ 350 billion, with 82% of businesses and 92% of real estate informally held. In the Libyan capital of Tripoli, 85% of businesses and 90% of real estate are held informally.

As in Tunisia, this is a consequence of an inefficient institutional and legal framework. In Algeria, for example, our preliminary study found that to establish and operate a *fast food* restaurant in the Rouiba, an entrepreneur has to go through a procedure that involves 86 administrative steps that take 222 days to complete and costs US\$ 11,592; this, without mentioning a number of inevitable problems and obstacles for owners to use their properties (interested parties often find it impossible to establish precisely who owns a given property through the *Registre Foncier* – Land Registry –; nor can prospective buyers be sure that constructions were built following legal specifications. It is not uncommon that the parcel on which the building has been erected is registered in the name of several owners – joint ownership/*propriété à l'indivision* –; banks are reluctant to authorize mortgage loans, because they know the chances of their getting access to the collateral are slim at best). More worrisome is the fact that lately all sorts of home and villa extensions are popping up in cities everywhere with practically no enforcement of planning laws.

This list of findings is by no means exhaustive, but it does go a long way to explain why the Arab Spring is a protest against broad-based legal and economic constraints. It also reinforces the argument that reforms to expand investment and entrepreneurship have not only a large constituency in MENA but also one that is willing to endure great sacrifices in the name of what Bouazizi called "the right of the poor to buy and sell."

#### So why don't Arab governments remove these constraints?

Because the only way that anyone can know about the constraints to obtaining property and business rights that most ordinary people in the MENA region face is by identifying the people who suffer these constraints and then offering them procedures whereby they can speedily complain about their plight – and thus inform the government about the many obstacles to economic growth in their country.

And why don't Arab authorities install such information mechanisms? Generally, because they are not aware that those most affected by these constraints are citizens who live and operate in the informal economy – outside the official rule of law – and thus are more likely to be identified as "tax evaders" or "criminals" than as "businessmen" or "entrepreneurs." The result is that the constraints remain invisible.

To persuade governments to remove constraints, however, it is not enough simply to help them see the constraints; you need to prove to political leaders that the people suffering these constraints form a constituency large enough to counter the resistance of those who have an interest in preserving the status quo. Politicians and high-level administrators, no matter their country, are never eager to overturn the status quo; to opt for fundamental reforms; they must be convinced that they will not be punished for overturning the status quo but rewarded.

That is why it is so important that the new leaders in the Middle East and North Africa – and their counterparts in the West eager to spread democracy and free markets throughout the developing world – understand that the majority of MENA's people are already in the market; and what they are demanding are the property and business rights they need to prosper. Governments who continue to ignore the economic roots of the Arab Spring revolutions are likely to experience more unrest and instability; those that advance the institutional reforms needed to get property and business rights into the hands of their poor majorities will be rewarded with peace and economic growth.

#### CASE STUDY:

# STATUS OF PROPERTY IN VENEZUELA

by Prof. Luis Alfonso Herrera, attorney at law; Prof. Felipe Benitez, political scientist - Research Fellows, Cedice Libertad

#### I. EXECUTIVE SUMMARY

Since 2005, as recorded in several case studies and reports, and with a stronger emphasis since 2007 (when the Venezuelan government proposed to reform the Constitution of 1999), a systematic policy of disregard for tangible and intangible property rights has been implemented.

This policy involves the implementation, by means of laws, executive orders, acts of government, administrative acts, and judgments from the Supreme Tribunal of Justice and other Venezuelan courts, of a number of political and "legal" measures aimed, implicitly (the national government denies the claims of any attempt at extinguishing private property) at: (i) preventing the emergence of new owners (reserve of some activities to the State; conversion of goods that used to be private property into state property; declaration of public utility; or basic need of private goods; et al.) and (ii) removing the status of owners of means of production and other assets (housing, for instance) from individuals who had legitimately acquired such a legal and economic status.

This policy has been mirrored in actions: such as, expropriation; in the absence of expropriation, related assurances; intervention and administrative rescue; court action to "secure" goods; and out-of-court occupation; among others. In all these cases, assets have become state property in default of fair and prior compensation for holders. Therefore, according to the economic field, such policy has taken shape into various forms, namely:

- a) Violations and threats on property rights concerning urban and agrarian lands: legal reserve of ownership of agrarian lands on behalf of the Republic (national power); legal declarations of public benefit of urban "unused" lands; administrative measures to rescue agrarian "state" laws; administrative measures to occupy idle agrarian lands; and administrative measures to rescue "unused" urban lands.
- b) Violations and threats on private property rights related to the means of production: legal declarations of public use and social interest of any and all means of production (goods appropriate to produce other goods or supply services); enforcement of expropriation as an administrative sanction; expropriation ad hoc procedures without prior fair compensation; special legal declarations (banks, food, fishery, etc.) of public benefit or public utility (house building, education, health, etc.), standing, overall and unlimited exchange control; sub-legal declarations of necessaries (in a large number of foodstuffs, drugs, services, etc.); and administrative measures of intervention, seizure, and operation of companies.
- c) Violations and threats on private property rights in terms of industrial or intellectual inventions: termination of the regulations of the Andean Community of Nations and revival of the old Venezuelan Law of Industrial Property of 1955, administrative (registry) inactivity and refusal to foster and protect (resolve claims) intangible property rights by the Industrial Property Registry Office for ideological reasons, unresponsiveness and tolerance of violations of intangible property rights (piracy), and drafting of a Bill of Intangible Property in order to turn intangible property into a concession and declare it in the social interest.
- d) Threats on private property rights in the area of housing and lands and inventions of indigenous people: legal and sub-legal declarations of public benefit and public utility of house building; intense regulation of the whole marketing chain of goods for house building and house marketing; abolishment of lease agreements; administrative steps towards seizure and intervention of companies engaged in house building; disregard of private property of dwellings built by the national government and implementation of forms different from property, such as awards and the "family" or "multi-family" property; national government failure to delimitate the lands inhabited by indigenous people; and to foster and protect their intangible property rights.

In this way, the current domestic legal and sub-legal framework, particularly decree-laws and laws issued in 2007-2008 and 2010-2012, during the effective term of the third and fourth Enabling Laws invested in the Venezuelan president during his 12 years in office, is mostly – 85% or more – against property rights.

In a nutshell, two ways have been taken to disregard property in Venezuela: (i) denial of originally legitimate legal forms, such as expropriation; exchange control; reserve of activities; declaration of public benefit; public utility or necessaries; as well as extreme, out-of-proportion administrative intervention and legal measures to secure goods, ignoring the Constitution and (ii) the creation of unconstitutional legal forms contrary to property, including administrative rescue of lands; seizure of companies; award of lands instead of ownership; social property; etc., all of which cover the State reserve of economic activities and goods (housing, means of production), which used to be private property.

#### II. RECOMMENDATIONS:

#### a) Framework endpoints:

- i.) Highlighting the status of private property as a nonexpendable, key human right, and the essence for human progress.
- ii.) Establishing the preeminence of private property over state property, particularly any assets and sectors where there is historical evidence of the age-old advantages of the former.
- iii.) Undertaking to regulate tenancy of urban and rural lands, provided that deeds are delivered, as well as delivery of equity capital or production assets, such as programs for house building or support to private economic entrepreneurship.
- iv.) Banning any involvement of foreigners in the public registry of documents.

#### b) Short-term actions:

- i.) Reintroducing the mandatory nature of the Expropriation Law of 2002 to commence and enforce any such expropriation.
- ii.) Banning, by means of decree, all organs of the Executive Office from implementing any form of intervention which may violate the constitutional rights and liberties with regard to property rights, except for the cases listed in the Expropriation Law of 2002.
- iii.) Controlling the potential actions of State bodies that may jeopardize the aforementioned rights.
- iv.) Abrogating the delivery of substitute deeds (award, continued occupancy, agrarian deeds, family and multifamily property, etc.) as pseudo-equivalents of absolute private property, or adjusting their contents in the event of proceedings intended to determine ownership.
- v.) Decreeing administrative emergency of the appropriate agencies (Ministry of Agriculture and Lands, National Lands Institute, Ministry of Light Industries and Trade, Ministry of Housing and Land Layout and Planning, Office of the Solicitor General, among others) to promptly determine the overall status of seizures by means of expropriation (companies and farms), lands recovery (plots of land), squatting, and usurpation (housing, real estate, farms, etc.).
- vi.) Making appeals against unconstitutional articles or any articles that openly interfere with economic freedom contained in the legal instruments that have been developed over the past 11 years, particularly the legal instruments drafted under the umbrella of the Enabling Law and approved in the legislative term of 2005-2010. A few examples are; Law of Lands and Agrarian Development, Law of Urban Lands, Emergency Law on Plots of Land and Housing, Law for the Defense of People in the Access to Goods and Services, Law of Exchange-Related Offenses, Law of Family and Multifamily Property, Lease Law, and Law of Fair Costs and Prices.

- xi.) Decreeing acknowledgment of ownership of productive improvements made with the use of individually owned assets on agricultural lands.
- viii.) Making policies and regulations intended to secure money (savings and inflation) and free use of money, as well as access to foreign currency.
- ix.) Restoring the necessary framework to enable transnational companies to repatriate dividends, in order to spur foreign investment.
- x.) Airing the illegal and amoral character of squatting of any kind whatsoever and non-acceptance under a free, democratic government.
- xi.) Acting to refuse, control, or punish any future related cases that may emerge.
- xii.) Setting a socially and politically pedagogic, widespread strategy aimed at clarifying the democratic and progressive character of the aforementioned actions.

#### c) Medium-term actions:

- i.) Making the current legal framework operational so that policy making leads to democratization of state property.
- ii.) Completing the National Cadastre Program; currently, only 10% of the information on tenancy, ownership, location, area, and land usability and assessment is updated and validated.
- iii.) Digitalizing, streamlining and removing red tape from public registry and notary offices.
- iv.) Intertwining public registry of property with Cadastre in order to enhance legal security of real estate and help update the Cadastre contents.
- v.) Including in elementary and secondary education subject matters that illustrate the link among property, economic progress, political freedom, and social development.

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#### CASE STUDY:

#### PROTECTION OF PROPERTY RIGHTS AS A KEY TO ECONOMIC SUCCESS IN CHINA

#### By Xingyuan Feng\* Christer Ljungwall\*\* and Yeliang Xia\*\*\*

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In 2010, China became the world's second largest economy in terms of GDP and joined the list of middle-income economies with a per-capita GDP of USD 5,432 and 6,100 in 2011 and 2012. However, a number of political, economic and social problems have created a bottleneck in maintaining sustainable economic growth. As has been seen in many other middle-income economies, this can result in a "middle-income trap". To escape this "trap", China must work to improve the efficiency of production factors to maintain high economic growth over an extended period of time. This is a necessary step for any country that ultimately wishes to move into the high-income bracket.

Looking back the short history of China's reform and opening policy since 1978, one can find that the resurgence and development of the private sector has been the key to China's economic success. Since then, the number of non-state enterprises has increased considerably. In 1978, there were only 140,000 self-employed individuals, but by 2011 there were 9.677 million of private enterprises and 37.565 million individual business households. Between 1992 and 2011, the number of private enterprises and individual business households maintained an average annual growth rate of 28.15% and 4.54%, respectively. In 2011, the number of employees in private enterprises reached 103.536 million and the total amount of registered capital of those enterprises totaled RMB 11.7 trillion. The number of employees working in individual business households reached over 57.764 million, and their total registered capital reached RMB 900.6 billion. These are only two types of non-state enterprises and do not include a range of others including limited liability companies, shareholding companies, partnerships, cooperatives, shareholding cooperatives and collective enterprises. In contrast, there were only 261,944 state-owned or –controlled companies in 2011.

It is estimated that the contribution of the non-state economy (including the farming sector) to China's GDP was between 66% -74.9% in 2011. There were 235.4 million employees in non-state enterprises, accounting for 30.8% of all employment in urban and rural areas. In contrast, SOEs accounted for only 8.8% of total employment in China. In terms of technological innovation, non-state enterprises have also taken a dominant position in secondary sectors. In 2011, non-state industrial enterprises with an annual turnover from main business activities of RMB 20 million or more have registered 131,986 patents, accounting for 65% of all patents in China. Of these, the number of patents created by private enterprises was 41,366, accounting for 26.1% of all patents, 2.5 times the number of patents registered by SOEs.

The resurgence of the private sector coincided with the gradual re-emergence and selective introduction of private property rights. Reforms began with the household responsibility system in agriculture during late 1970s, which gave farmers land use rights, but not private ownership of land. While collective ownership of land remained in effect, the conferral of land use rights to farmers greatly increased production. This kind of reform has been labeled a "Pareto improvement" in the sense that there were no losers in this reform. In fact, the origins of the household responsibility system came from 18 farm households in Xiaogang Village, a small, poor village in Anhui Province, which adopted the system illegally in December 1978. It was initially tolerated by local government officials, then later officially accepted and extended nationwide by the central government.

The spontaneous formation of individual business households (*getihu*) and private enterprises (*siying qiye*) in China represented the country's next step towards private property rights. Entrepreneurs in non-state enterprises were initially suppressed, but then gradually tolerated and ultimately recognized by the government. In the early 1980s, the rural collectively owned cottage industries, also known as collectively-owned "township and village enterprises" (TVEs) mushroomed, and both rural and urban markets grew significantly. Meanwhile, individual business households emerged organically and were tolerated as they could provide supplementary production support or services that complemented state-owned enterprises and TVEs. In 1982, the constitution was amended to protect the legal status of individual business households. At the same time, many private entrepreneurs began forming larger private businesses, most of which were 'red hat' companies, formally collective owned, but in practice, completely private. It was

only in the late-1980s that the government began to tolerate and gradually allow the existence of private enterprises. In 1988, constitutional amendments gave legal status to private enterprises, with the caveat that it should be a complement to the publicly-owned economy. In 1992, the Communist Party proposed that economies under various ownership systems coexist with public ownership in the long-term and develop together while public ownership maintained a dominant position. Since then, China's private sector has developed rapidly. In 2004, the constitution was amended further to provide protection of citizens' "lawful property rights".

Another source of private sector development is privatization has taken place in China. In the early 1980s, collective ownership through TVEs gained momentum and began to compete with state-ownership. The advantage of collective ownership over state ownership was that personal liability was more visible. By the end of the 1990s, TVEs accounted for half of the country's industrial output, yet they continued to face soft budget constraints similar to state-owned enterprises. At the very beginning, state-owned enterprises controlled resources, but later the dual-track pricing system, which lasted until the early 1990s, allowed some resources to be allocated directly to market entities like TVEs, though at higher prices. This was undoubtedly the consequence of the Pareto improvement concept. At its inception, the dual-track pricing system emerged as an ad hoc method of carrying out transactions between the SOEs and TVEs, spurred by the potential for profit in the market. The central government attempted several times to stop these transactions, but it was unable to effectively eliminate the dual-track system. In the end, the central government recognized such a system.

The actual economic development shows that there was an efficiency gap between enterprises with different ownership models. Private ownership outperformed all others and eventually led to two waves of privatization. The first wave took place more or less between 1992 and 1995, during which the reform of state-owned enterprises was characterized by a "transformation of operational mechanisms" while collective enterprises were more transitional, involving full or partial privatization.

The second wave began after 1996, when state-owned enterprise reform was characterized by a modernization of corporate structures. A policy of "managing large enterprises well and being flexible toward small enterprises" allowed many collective enterprises to privatize.

Since 2006, renationalization sped up with a government policy of creating mega SOEs through the merging of existing SOEs that could be global players. With this, SOEs strengthened their positions while government imposed monopolies that controlled the upper streams of industrial chains. They also dictated the 'market prices' of basic resources such as petroleum while private companies and consumers were forced to accept them. SOEs also began to acquire private enterprises or enter competitive sectors almost without any competition. In China, SOEs can be established by government order without the need for legislative approval. State-owned petroleum companies also launched campaigns to expand in the retailing sector by acquiring or forcing privately owned gas stations out of business. The monopoly of SOEs is even protected in the 2007 Anti-Monopoly Law, which states that government imposed monopolies in sectors that are essential to the national economy or 'security of the state' are exempted from the law.

Does China really need SOEs to safeguard the national economy or the "state security"? The answer is no. According to a report by the Unirule Institute of Economics, SOEs remained profitable as the bookkeeping record between 2001 and 2009, but they ran actually losses during that period of time. The reason is that SOEs paid very little or even nothing for land and raw materials, paid less interest on loans, less tax, and received massive government subsidies. When all of these are put together, the total is greater than the profit on the book. This is enough to prove that we cannot rely on SOEs, which are clear loss makers, to safeguard our economy and our future.

At the same time, government has relied too much on increases in fiscal spending to maintain high economic growth. The fiscal stimulus package of 2008, which totaled RMB 4 trillion, marked a speeding up in fiscal spending. The central government encouraged local governments to establish many local financing vehicle companies to raise debt and finance local spending in 2009. As a result, the total balance of direct and indirect debt held local governments today is at least RMB 24.7 trillion, or 47.56% of GDP. Total government debt reached RMB 46.48 trillion in the end of 2012, making up 85.65% of GDP.

Renationalization and excessive fiscal spending not only led to the crowding out of private investment and private sector development, it also delayed the adjustment of ownership and industrial structures in the Chinese economy. A slowing in external demand for Chinese goods and services as well as increases in labor costs, manufacturers in coastal areas are facing a crisis. Similar to other countries, this economic slowdown is part of a long-term trend after years of high-speed growth. High levels of debt financing makes it almost impossible for the government to launch a new wave of large-scale economic stimulus programs as it would affect fiscal

stability. In May 2013, the National Development and Reform Commission (NDRC), formerly the Planning Commission, submitted a new urbanization plan to the State Council that would cost RMB 40 trillion. This plan is said to have been sacked by the new Premier Li Keqiang over worry of China's debt situation. The National Audit Office released a new report on government debt in 36 local jurisdictions. According to the report, the ratio of government debt to local GDP at the end of 2012 was over 100%, reaching as high as 188.95% of the 15 audited provincial capital cities. The default rate exceeded 10% in two provincial capital cities, reaching 16.36%. 20% of repayments by local financing vehicle companies in the 36 jurisdictions were financed by new borrowings, which suggests high financial risk. Since most of the borrowings are bank loans, the banking sector has accumulated a high number of non-performing loans. Non-performing loans are mainly hidden in new loans following loan restructuring. Fiscal risks that spill over to into financial risks create a precarious situation that could lead to a fatal collapse of the financial system.

Furthermore, Chinese urbanization is pressing forward at the expense farmers' property rights. Land allocation is being carried out on a massive scale with farmers being compensated the very minimum possible. Future urbanization should take farmers' property rights into account and be pushed forward in full cooperation with the private sector.

In summary, the only way out of an all-out crisis is to boost private sector development and better protect the property rights of farmers and private entrepreneurs. Policies should include the introduction of an independent judiciary that guarantees citizens the ability to protect their property rights against government discretion, local democracy to increase government responsibility and fiscal transparency, privatization of SOEs and state-owned banks, free market entry of non-state enterprises in all economic sectors and the financial sector, new public management which allows more private participation in public infrastructure, and land reform which at the very least allows land transfers at fair market prices and enforces land allocation based on due process and proper compensation.

#### CASE STUDY:

# THAILAND'S TITLES PROJECT SEEN FROM THE PERSPECTIVE OF ECONOMIC DEVELOPMENT

By Prof. Kriengsak Chareonwongsak, Senior Fellow, Harvard University

#### INTRODUCTION

Property rights are an important fundamental requirement for capitalism. Theoretical and empirical studies show that completeness in private property rights creates fair opportunities for access to property, frees owners to exercise their rights, eases property transfer, motivates highest effective property use, and builds an effective economic system.

Property rights systems in many countries are not complete. Property rights laws in developing countries are usually enforced ineffectively, which causes slow growth for such economies with a high incidence of poverty. So, property rights systems that are complete and enforced effectively are the key to remedy the problems, although each country has unique property rights systems. The answer of how to improve the property rights system in a country should be based on a contextual understanding of the problems of that country.

This article aims to evaluate the completeness of the property rights system in Thailand and the impact of an incomplete property rights system. The method used is that of documentary research. This article focuses only on the land title system.

The framework of this article uses four components of efficient property rights structure, including universality, exclusivity, transferability, and enforceability.

#### THE FORMS OF LAND OWNERSHIP IN THAILAND

There are two main forms of land ownership in Thailand, which are public and private land ownership.

#### Public Land Ownership

Many kinds of public land ownership refer to:

- Natural Resources: In mountainous regions, National Forest Reserves, Conservation Areas, mineral sources, water resources
  for the conservation of aquatic animals, etc.
- Public Areas: This land is reserved by the State for the combined benefit of the general public. Land of this type is, for example, grassland, cemeteries, brook and river bank areas, highways, lakes, etc.
- Government Property: This is land which belongs to the government. Government property is owned for government benefit.
- Other Land: Such as, Crown Property, Privy Purse property, Religious Property.

#### Private Land Ownership

There are many types of private land ownership in Thailand, each of which is officially accepted by the State. These are divided into four main categories according to specific land title documentation (Department of Lands, 2008b).

<sup>9</sup> This is widely accepted in society where property is clearly identified by its owner and the boundary of ownership is clearly stated.

<sup>10</sup> A property owner has absolute inviolable rights over his or her property. In addition, the beneficial gains from an owner's property ownership are for the owner only.

<sup>11</sup> Property rights can be transferred to different owners, either voluntarily or legally.

<sup>12</sup> This indicates the right to protect and prevent other people from gaining certain property benefits and to protect the use of property by others without the owner's permission.

#### Preemptive Certificate: NS-2

It accepts that a person holding preemptive certificate has a right to gain any benefits from a certain piece of land for a certain period. The condition for gaining benefits from the land is that the person who receives a preemptive certificate needs to work on the land and begin to earn benefit from it within six months. This must be done within a three year period and requires that at least 75% of the land be used.

#### Certificate of Utilization: NS-3, NS-3K

The Certificate of Utilization is a formal certificate guaranteeing an owner's utilization of the land. However, this type of ownership guarantees only an owner's right of possession, not their right of ownership, this being their right to use, sell, rent, and use the land as mortgage collateral. The land owner also has the right to present a certificate of utilization in order to request a land title deed. If a land owner leaves his or her land without any beneficial use having been made of that land, and will instead allow other persons to possess the land openly and with intention to own it for more than one year continuously, the owner will have no right to sue and reclaim their right of possession to that land. This is what we call adverse possession.

#### Land Title Deed: NS-4

A Land Title Deed is a certificate for the ownership of land released per the Land Code. The title deed has been issued by using GPS to set the area and boundaries of the land, which is a very accurate method. The owner who owns a Land Title Deed document earns the completeness of land ownership, for example, the right to make a benefit from the land, the right to let other people rent the land, the right to sell the land, the right to prevent anyone using the land illegally, and the right to use the land as mortgage collateral, etc.

#### SPK 4-01

SPK 4-01 is a document title deed which the Land Reform Committee allocates to people. During the first step of the Agricultural Land Reform project, the State would buy private land for the hire-purchase of agriculturists. Later, the State department would collect degraded forest land and release it for use free of charge. SPK 4-01 limits the benefits to only agriculturists who do not own their own land, and to anyone who wants to be an agriculturist. Land will be allocated to them at no more than 50 rai (or 0.08 square kilometers) per family.

# Thailand's Structure of Land Ownership

Thailand has a total area of around 320.7 million rai or 513,115.02 square kilometers. Of this, 48.63% is owned by the public sector, and another 51.37% is private property.

For public land, most is Forest Area, with 68.76% of all public land or around 33.44% of the total country area (Table 1).

For privately documented land title deeds, land ownership counts as 62.04% of the total private ownership or about 31.87% of the total land in the country (as per <u>Table 2</u>). The continuous growth of completed private sector land ownership is observable with more land title deeds in use, compared to fewer types of other land title documents (<u>Table 3</u>).

# Table 1: Public Property

Types of Land	Square Kilometers	Percent of Total Public Property
Forest Area *	171,585.65	68.76
Public Area **	12,238.60	4.90
Government property ***	20,369.82	8.16
Others **	45,348.45	18.17
Total	249,542.52	100.00

Note: \*Information as of 2011 \*\* Information as of March 31, 2013 \*\*\* Information as of February 2013

Source: Royal Forest Department (2011), Department of Land (2013), Treasury Department (2009), and Treasury Department (2013)

Table 2: Number of land title documents and their areas in Thailand, September 2011

Land Title Documents	Number of Plots	Area	
		(Sq. Km)	Percent of Total Private Property
Preemptive Certificate (NS-2)	139,511	1,977.33	0.75
NS-3	1,076,223	15,809.95	6.00
NS-3K	3,391,523	27,862.55	10.57
Title Deed (NS-4)	28,475,046	163,533.43	62.04
SPK 4-01*	3,310,448	54,389.24	20.64
Total	36,001,965	263,572.50	100.00

Note: \* Information as of March 31, 2013

Source: Department of Lands (2011) and Agricultural Land Reform Office (2013)

Table 3: Areas with some type of land title documents in Thailand, 1995 – 2011 (Sq. km)

Land Title Documents	1995	2001	2008	2011
Preemptive Certificate (NS-2)	6,591.47	5,838.56	2,307.23	1,977.33
NS-3	30,529.15	25,764.11	16,541.71	15,809.95
NS-3K	78,391.35	60,852.76	31,072.42	27,862.55
Title Deed (NS-4)	66,143.00	113,186.11	146,965.36	163,533.43
SPK 4-01	n.a.	4,026.56	46,205.95	54,389.24 *
Total	n.a.	209,668.10	243,092.67	263,572.50

Note: \* Information as of March 31, 2013

Source: Department of Lands (2008a), Department of Lands (2011), Agricultural Land Reform Office (2003), and Agricultural

Land Reform Office (2013)

# THE COMPLETENESS OF THAILAND'S LAND PROPERTY RIGHTS

An analysis of each type of land title found that private land provides more complete property rights than public land does (Table 4).

Table 4: The completeness of each type of land ownership

Type of Land	Universality	Exclusivity	Transferability	Enforceability
1. Public Property				
National Forest Reserve	Many areas are not accepted	No	No	Ineffective
Public Areas	Most places have clear boundaries	To make social benefit	No	Ineffective
Government Property	Most places have unclear boundaries	To make government benefits	No	Ineffective in some places
Others	Yes	To make a specified benefit	Some places can transfer to private sector	Yes
2. Private Property				
Preemptive Certificate (NS-2)	Yes	There is limitation on the period of land use	Can be inherited. Can ask for land title deed or certificate of utilization	Yes
NS - 3	The boundary of ownership is unclear	Yes. But cannot be mortgage collateral	Yes	Ineffective to prevent others from benefiting from the owner's property
NS – 3K	Yes	Yes	Yes	Yes, can have adverse possession within one year
Title Deed	Yes	Yes	Some places can transfer to private sector	Yes, can have a dverse possession within ten years
SPK 4-01	Yes	For agricultural purposes only	Only as an inheritance	Yes

#### The completeness of public land property rights

Almost all public land lacks completeness of property rights due to unclear land ownership boundaries, especially for National Forest Reserves. The scale of the map of National Forest Reserves is often 1:50,000 which is a cause for high deviation with 1 millimeter on the map equivalent to 50 meters of National Forest Reserves by real area. Likewise, government property still has unclear land ownership boundaries, only 12.95% of the total government property has been surveyed. By contrast, Public Areas have quite clear boundaries, with 87.16% of their total area has been surveyed (Table 5)

The incompleteness of public land property rights also results from limitations to benefit earning, for example, where it is forbidden for individuals to make profit from National Forest Reserves. Public areas provide benefits only for society, while government property can provide benefits only for the government. In addition, the incompleteness of public property is also due to its non-transferability.

Table 5: Number and areas of some types of public property in Thailand, March 31st, 2013

Туре		Public Area	Government Property
Total	Amount (plot)	156,122	More than 180,838 *
Total	Area (Sq. Km)	12,238.60	20369.82 *
Officially surveyed	Amount (plot)	142,838	31,615
	Area (Sq. Km)	10,667.95	2,637.96
	Percent as per the total area	87.16	12.95
In process /	Amount (plot)	13,284	More than 149,223
haven't had official survey	Area (Sq. Km)	1,570.65	17,731.86
	Percent as per the total area	12.84	87.05

Note: \* Information as of February 2013

Source: Department of Land (2013), Treasury Department (2009), and Treasury Department (2013)

#### The completeness of private land property rights

The documentation of private land title completeness, from the most to the least property rights can be described as follows: Land title deeds provide the most complete property rights. The next in completeness is NS-3K because it provides the same property rights as the Land Title Deed, but the adverse possession of NS-3K land takes only one year while a Land Title Deed takes ten years. NS-3 is the third, because property rights under NS-3 are the same as for NS-3K, though if no official area records exist, the land cannot be used as mortgage collateral.

NS-2 provides the second least in property rights, less than NS-3, due to the benefit possession period limitation and non-transferability to others exempt by heritage. However, NS-2 can be used to request a land title deed or certificate of utilization. SPK 4-01 provides the least amount of property rights as land used only for agriculture and transferable only by inheritance.

#### THE IMPACTS OF INCOMPLETE PROPERTY RIGHTS ON ECONOMIC DEVELOPMENT

Incomplete property rights for both public and private land causes impacts on Thailand's economic development, as follows:

#### Poverty among agriculturists

Most of the poor in Thailand are agriculturists. In 2003, there were 4.28 million poor agriculturists in Thailand, or 61% of all poor people (NSO, 2003).

The cause of poverty among agriculturists is their lack of property rights, with 40% of poor agriculturists not owning their own land, and with agriculturists who rent the land having less labor income than those who own the land.

Agriculturists tend to lack land ownership, as we can see from a decreased quantity of land owned by agriculturists (<u>Table 6</u>) and from agricultural farms that are on average smaller, having shrunk from 0.0423 sq. km per household in 1986 to 0.036 sq. km per household in 2005. This record is consistent with the research of some human rights groups who found that the north of Thailand has more farmers who lack land and that this group of farmers is poorer and must depend on others more (Cohen, 1983; Ganjanapan, 1984).

Table 6: Type of farm holding land in Thailand

Farm Hold		ng Land	Owned	l	Others		
	Sq. km	(%)	Sq. km	(%)	Sq. km	(%)	
1994	211,965.71	100	174,909.51	82.52	37,056.20	17.48	
1999	210,146.21	100	172,316.92	82.00	37,829.29	18.00	
2005	208,441.59	100	149,162.39	71.56	59,279.20	28.44	
2011	238,794.285	100	114,530.69	47.96	124,263.59	52.04	

Source: Office of Agricultural Economics (various years).

The economic structure of Thailand has changed from its emphasis on the agricultural sector to the industrial sector and the service sector, which gives more GDP output and higher employment, whereas, the agricultural sector gives less GDP output and lower employment.

Poor agriculturists who lack land or who have to rent land have no choice but to invade forest or public areas. Some move from upcountry areas to the city and become a labor source for industry or services. However, this causes a new poverty problem in the city and slums.

#### Property rights clustered in the hands of the rich

Though the government tries to solve the problem of poverty among agriculturists by allocating land to agricultural households, the agriculturists cannot keep that ownership. Mostly, they sell their rights to capitalists. This problem always happens to land with incomplete ownership rights, especially SPK 4-01 which has many limitations, as mentioned above. It is estimated that around 10% of the total SPK 4-01 land has been possessed by capitalists (Matichon, 2002). In addition, there are many SPK 4-01 land plots that are larger than what it is limited by law, which is 50 rai (0.08 sq. km) per family. More than 24% of the total SPK 4-01 is larger than 60 rai, or 0.096 sq. km (Table 7).

Table 7: The amount of plots and total area of each SPK 4-01 plot size, 2003

Plot size (sq. km)	Amount	Total Area (sq. km)	Percent of total area
Below 0.064	756,020	15,922.92	56.42
0.064 - 0.096	102,909	5,520.98	19.56
0.096 and above	70,856	6,777.71	24.02
Total	929,785	28,221.61	100.00

Source: National Statistical Office (2003).

The major reason for selling SPK 4-01 to the black market is its land-use limitations, its usage being only for agriculture. As we know, agriculture is a high risk activity; there is a high possibility for agriculturalists to suffer a loss or to be indebted. Thus, agriculturalists need to sell their land, although it is prohibited by law, in order to pay debts. Sometimes the agriculturalist will want to borrow money from the bank, but will not be able to use SPK 4-01 land as mortgage collateral, thus, such agriculturalists will have to access a black loan with a higher interest rate.

In addition, allocating a degraded forest area as SPK 4-01 and giving it to an agriculturalist free of charge causes a moral hazard problem. Agriculturalists may assume that they can sell this land and wait for a new area to be re-allocated to them by the government, or that if they deforest or occupy those degraded forests, then the government will give them the SPK 4-01 title deed again. This easy condition to get the land would make it easy for them to sell the land as well.

#### Low Productivity

50% of all agricultural land is without land title documentation. When agriculturists lack stable rights, it is an obstacle to land productivity because they lack the incentive to develop the land, thus resulting in lower productivity. This problem is confirmed from the Total Factor Productivity (TFP) of the agricultural sector during 2002-2007. It decreased 0.6% per year, whereas the overall TFP grows by 0.8% per year (NESDB2008). In addition, the productivity per rai of Thailand is very low compared to the world average and the big countries of rice production (Table 8).

A great number of agriculturists in Thailand since their birth, have lived and used their own land for a long time but might not own a land title document of any kind, or else they own one with unclear landmarks. Previously, with the announcement of government natural sanctuary areas, conflicts have resulted between people and state departments (Thailand Research Fund, 2006). The seriousness of the problem related to these conflicts hasn't been recorded officially, but according to the information of "The Assembly of the Poor," there are 87 cases of conflicts in forest areas, and 15 cases in Public Areas.

Another problem is where government land reform projects overlap with National Forest Reserves. Many state departments, for example, the Department of Public Welfare and the Cooperatives Promotion Department, etc. do not coordinate when they designate land reform project areas. People cannot ask for any land title document when these state departments allocate areas to them (The Commission on Land Ownership Problem Study, 2005).

Another cause of conflict is unclear ownership boundaries, especially for natural sanctuary areas (National Forest Reserves, permanent forests, government property, national parks, and Public Areas) that are not clearly landmarked (The Commission on Land Ownership Problem Study, 2005) though official records may show them mapped. Thus, the private sector cannot request a land title document for an area close to a natural sanctuary area.

Table 8: World Rice Yield

Country/Region	Yield (Metric tons per hectare)							
, 3	2005/2006	2006/2007	2007/2008	2008/09	2009/10	2010/11	2011/12	
World	4.08	4.07	4.08	4.25	4.23	4.25	4.37	
United States	7.44	7.70	8.12	7.68	7.94	7.54	7.92	
China	6.26	6.23	6.25	6.56	6.59	6.55	6.69	
Iran	5.47	5.63	5.71	3.95	4.85	4.06	4.19	
Pakistan	3.18	3.03	3.12	3.55	3.64	3.57	3.38	
Vietnam	4.72	4.81	4.86	5.30	5.33	5.55	5.61	
Thailand	2.70	2.69	2.69	2.78	2.81	2.88	2.82	

Source: USDA (various years).

#### Land under-utilization and soil-degradation

More problems surround the issue of utilization from public land rather than private land. According to one survey by the Land Institute Foundation, it was found that 70.5% of Thailand's total private land area is fairly utilized and another 29.5% remains under-utilized. This is due to speculation, or alternatively is a land ownership management problem (Table 9). Another study shows that the utilization rate for public property is quite low, with one example given of government property where only 28.24% was in use for any purpose (Krungthep Dhurakij, 2003). Apart from that, around 1/2 of Thailand's total land area was of wasteland quality, for example, comprising of acidic, alkaline, or depleted soils, etc. (Land Development Department, 2006).

The cause of this problem is unclear land markings and also allowing state officers, capitalists, and local influential persons to enter an area and make profit from it. In some cases, when any one person owns too much land, some of it will be abandoned and remain useless. Not only that, most private property is subject to speculation, and the owners do not intend to use the land.

The major reason why many public lands are not utilized is that there is a lot of public land, but a shortage of state officers. Thus, there are insufficient people to take care of all of Thailand's public land. Another reason is a lack of clear ownership, especially for Public Areas, which people can use together. For this reason, there is no motivation to care for local public area maintenance. Besides, Thailand's Country Planning Law (City Planning Law) and Land Development Law cannot effectively force (Land Institute Foundation, 2001) or result in land misuse or inappropriate land efficiency, for example, the selling of topsoil, requests for mining permission, and sand pumping in public areas, which causes land degradation.

Table 9: The utilization rate from some types of land title documentation

Type of Land	Utilization rate (Percent per total land type area)
NS-3	72.50
NS-3K	68.40
Land Title Deed	66.21
Total of private property	70.50

Source: Land Institute Foundation (2001).

#### The problem of trespass

State property intrusion has become a major trespass problem, for example, with the property of the State Railway of Thailand. Among other state departments, the State Railway of Thailand owns a lot of land, especially land located on railway sidings. Many people invade this area, and build houses, creating slum areas on railway sidings. In addition, the illegal issuing of land title deeds for overlapped railway land is a rumored problem in Thailand.

Another problem is the intrusion into natural sanctuary areas, for example, National Forest Reserves, Conservation Forests, etc. Some may bribe state officers to issue an NS-3K document for land located in natural sanctuary areas (Post Digital, 2008), or else they may intrude into such a forest area and deforest it until it becomes a degraded forest area. Such people will then work with state officers to issue title deed documents, before being able to sell these areas or use them as mortgage collateral with the bank.

A survey of illegal intrusions found that over a total land area of 9,509.10 sq. km, intrusions had taken place on 80,707 public plots in 59 provinces, with 337,557 intruders responsible for these acts of intrusion. Government owned areas were most intruded, to the amount of 16.65% of all government property (Table 10).

Table 10: Public Property intruded

Type of Land	Intruded Land (km)	Percent of total land type
Government property	3,340.10	16.65
National Forest Reserves	2,769.19	1.20
Public Area	1,704.56	14.59
National Parks	910.06	23.44
Others	785.19	21.44
Total	9,509.10	3.52

Source: The Ministry of Interior (2008).

Intrusion is a problem for one major reason; landmarks are unclear and uncontrollable when it comes to forbidding people from making profit off the land. This is because much land has been declared off-limits by the state; because they are areas deemed impossible for thorough state management (National Economic and Social Development Board, 2004).

Other reasons include corrupt civil servants who will issue title deed documents of any kind for land where its status is unclear, whether public land or degraded forest land deforested by people who have no personal work zone.

### Conclusion and Suggestions

#### Conclusion:

From all the studies and analysis above, these conclusions may follow:

- Thailand lacks a unified system of land management; land ownership information is incorrect, and corrupt civil servants abound.
- Private land has more complete property rights than public property. Land title deeds supply the most complete property rights and this type of documentation is being issued more and more.
- Most public land is unclear with regard to its land ownership, for example, with overlapped land boundaries, unclear landmarks, etc. This causes many problems including conflict, land trespass, and land under-utilization.
- · Land with complete property rights will have less management problems.
- Limitations of land use cannot be enforced effectively, for example SPK 4-01 is prohibited by law to sell or transfer the land to others, but however this is inapplicable as people illegally sell the land to capitalists.

#### Suggestions:

From all the studies and analysis above, these conclusions may follow:

#### Integrated land management

The departments involved should cooperate with each other to solve the overlapped area problem, and should also work together to correct any integrated map and development data based on land ownership. Making official records requires technology for more precision. Making clear landmarks is another required factor that needs to be done. Lastly, it is necessary for people to access the database easily.

#### Changing all land title documents to be the same type

This can be done by changing every type of land title document for private property to be countrywide land title deeds. This will allow everyone equal rights to the land that they possess. In addition, it will cause land management to be more effective and will reduce problems due to the incompleteness of land ownership (Thailand Research Fund, 2006).

There are many arguments for changing SPK 4-01 to be a land title deed. On the objecting side, is fear that this will allow even more land to fall into the hands of capitalists (Ganjanapan, 2000). Then, agriculturalists will intrude into forest areas again. However, with limitations to holding SPK 4-01, inability to sell and intransferability, the land will not be able to be sold at a good price since capitalists will be aware of this limitation. Besides, those in possession of SPK 4-01 will lack freedom to earn a living and it will be difficult for them to find a cheap loan because they cannot bring their land into use as mortgage collateral (Prachachart Thurakij, 2002). This is why it is difficult for agriculturalists to earn a better living. Regarding the problem of forest intrusion, there is less worry about this because most agriculturalists' children are turning to other occupations.

#### Reforming land taxation

This can be done by changing the method to calculate taxation, from income-based to asset-based assessment, or by calculating the estimated land price. However, some other factors need to be considered as well, for example, the amount and size of the owned area, the characteristics of land use, etc. This is to prevent land concentration and land speculation.

Land taxation reform will require an updated database on land ownership. This will help to evaluate the land concentration situation, and will help in the examination of characteristic land use as well (with satellite pictures able to be used). This will also link together and process data from many departments.

#### Establishing a National Land Bank (Land Institute Foundation, 2001)

There are around 811,871 families in Thailand that don't have a workplace area and there are 1–1.5 million agriculturalist families that need to rent a work place area (Wathanyu, 2001). The National Land Bank will reallocate empty or abandoned land to the poor, for example, buying abandoned land from the private sector and elsewhere and allocating it to poor people, thus the land is able to be brought to profitable use, instead of being left idle.

#### Land innovation development

Land title deeds can be issued for public areas where the community can together receive benefit under the name of a community land title deed. This would reduce conflict over the use of public areas and would also prevent influential people from taking over public areas as though it is their own property (Prachadhrama Press, 2001). This method would result in responsible people rising up to manage and maintain the public area. Another land management innovation is to build a network, which includes the State, the community, and NGOs in order to develop a management system for the natural sanctuary area (Mahatthanawisan, 2000). These networks could work together for the management, examination, and maintenance of the natural sanctuary area.

The completeness of land property rights is the most effective system in reducing the conflict due to the ownership over the certain land, causing the highest land utilization, highest benefit earning for possessor, and making the owner free to earn their livings and using the land.

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# APPENDIX I: 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. The author has mainly conducted an update of the previous data and years IPRI, and thus, used 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, 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 reflects 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. Perception-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 intentionally, and it, therefore, integrated a large amount of data stemming from the experience and perceptions of experts in the field. In the future, the author will continue to consider alternative compositions of subjective and objective data.

#### Subjective versus Objective Data

#### 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 (144 for 2012-2013). The rankings are drawn from a combination of publicly available hard data points 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 2012-2013 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 <u>Appendix II</u>. For more detailed information, visit: http://gcr.weforum.org.

#### 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 annually, so the most recent report (2012) contains data gathered from multiple years within the last decades through 2011. 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 2013 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 to 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 2013 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: 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://nw08.american.edu/~wgp.

The original index contains scores for 122 countries for 2005. Scores for two countries were added following the methodology in Ginarte & Park (1997) precisely. 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 item stems 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 has 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: www.iipa.com/2013\_SPEC301\_TOC.htm.

The 2013 Special 301 Report data on business software piracy is complemented with the data from the Ninth Annual BSA and IDC Global Software Piracy Study (2011) available at http://globalstudy.bsa.org/2011.

#### 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 five GID-DB variables, which are incorporated in the GE component, are related to women's access to land and 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: www.oecd.org/dev/gender/qid.

# APPENDIX II: DETAILED METHODOLOGY

# LP Sources

Variable Name	Original Scale	Data Modifications	Year	Number of Countries	Source	Detailed Information about Data Source
Judicial Independence	l = no, heavily influenced; T = yes, entirely independent	The original data was rescaled to a scale of 0 - 10.	2011- 2013	144	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.	2012	215	World Bank Institute - Governance Matters 2012: Worldwide Governance Indicators, 1996-2011 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.	2012	215	World Bank Institute - Governance Matters 2012: Worldwide Governance Indicators, 1996-2011 http://info.worldbank.org/g overnance/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.	2012	215	World Bank Institute - Governance Matters 2012: Worldwide Governance Indicators, 1996-2011 http://info.worldbank.org/g overnance/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.	2012-2013	144	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.	2013	185	The World Bank Group - Doing Business 2011 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.	2012-2013	144	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	l (worst) - 7 (best)	The original data was rescaled to a scale of 0 - 10.	2012-2013	144	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. http://www1.american.ed u/cas/econ/faculty/park/ Web%20Page%20Up- date%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.	2011	111	International Intellectual Property Alliance's Special 301 Report submitted to the U.S. Trade Representative http://www.iipa.com/2013_ SPEC301_TOC.htm. Additional data was obtained from Ninth Annual BSA and IDC Global Software Piracy Study http://globalstudy.bsa.org/ 2011	Special 301 is an annual review process used in fighting international copyright piracy. It starts with the submission of public comments, of which IIPA's annual report is one of the most extensive and useful in terms of data.

# **GE Sources**

Variable Name	Original Scale	Data Modifications	Year	Number of Countries	Source	Detailed Information about Data Source
Women's Access to Land Ownership	0 (best) 0.5 (average) 1 (worst)	The original data was rescaled to a scale of 0 - 10.	2012	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) 0.5 (average) 1 (worst)	The original data was rescaled to a scale of 0 - 10.	2012	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) 0.5 (average) 1 (worst)	The original data was rescaled to a scale of 0 - 10.	2012	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) 0.5 (average) 1 (worst)	The original data was rescaled to a scale of 0 - 10.	2012	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) 0.5 (average) 1 (worst)	This component of the gender equality indicator is a simple composite of four variables in the GID-DB. The original data of each variable was rescaled to a scale of 0 - 10 and then averaged to determine this score.	2012	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

Code	Region	Country
A	Africa	BENIN
A	Africa	BOTSWANA
A	Africa	BURKINA FASO
A	Africa	BURUNDI
A	Africa	CAMEROON
A	Africa	CHAD
A	Africa	CÔTE D'IVOIRE
A	Africa	ETHIOPIA
A	Africa	GABON
A	Africa	GHANA
A	Africa	KENYA
A	Africa	LIBERIA
A	Africa	MADAGASCAR
A	Africa	MALAWI
A	Africa	MALI
A	Africa	MAURITANIA
A	Africa	MAURITIUS
A	Africa	MOZAMBIQUE
A	Africa	NIGERIA
A	Africa	RWANDA
A	Africa	SENEGAL
A	Africa	SIERRA LEONE
A	Africa	SOUTH AFRICA
A	Africa	SWAZILAND
A	Africa	TANZANIA, UNITED REPUBLIC OF
A	Africa	UGANDA
A	Africa	YEMEN, REPUBLIC OF
A	Africa	ZAMBIA
A	Africa	ZIMBABWE
AO	Asia & Oceania	AUSTRALIA
AO	Asia & Oceania	BANGLADESH
AO	Asia & Oceania	BRUNEI DARUSSALAM

Code	Region	Country
AO	Asia & Oceania	CHINA
AO	Asia & Oceania	HONG KONG (SAR OF CHINA)
AO	Asia & Oceania	INDIA
AO	Asia & Oceania	INDONESIA
AO	Asia & Oceania	JAPAN
AO	Asia & Oceania	KOREA, REPUBLIC
AO	Asia & Oceania	MALAYSIA
AO	Asia & Oceania	NEPAL
AO	Asia & Oceania	NEW ZEALAND
AO	Asia & Oceania	PAKISTAN
AO	Asia & Oceania	PHILIPPINES
AO	Asia & Oceania	SINGAPORE
AO	Asia & Oceania	SRI LANKA
AO	Asia & Oceania	TAIWAN (CHINA)
AO	Asia & Oceania	THAILAND
AO	Asia & Oceania	VIETNAM
CEECA	Central/Eastern Europe & Central Asia	ALBANIA
CEECA	Central/Eastern Europe & Central Asia	ARMENIA
CEECA	Central/Eastern Europe & Central Asia	AZERBAIJAN
CEECA	Central/Eastern Europe & Central Asia	BOSNIA & HERZEGOVINA
CEECA	Central/Eastern Europe & Central Asia	BULGARIA
CEECA	Central/Eastern Europe & Central Asia	CROATIA
CEECA	Central/Eastern Europe & Central Asia	CZECH REPUBLIC
CEECA	Central/Eastern Europe & Central Asia	ESTONIA
CEECA	Central/Eastern Europe & Central Asia	GEORGIA
CEECA	Central/Eastern Europe & Central Asia	HUNGARY
CEECA	Central/Eastern Europe & Central Asia	KAZAKHSTAN
CEECA	Central/Eastern Europe & Central Asia	LATVIA
CEECA	Central/Eastern Europe & Central Asia	LITHUANIA
CEECA	Central/Eastern Europe & Central Asia	MACEDONIA (FYROM)
CEECA	Central/Eastern Europe & Central Asia	MOLDOVA, REPUBLIC OF
CEECA	Central/Eastern Europe & Central Asia	MONTENEGRO

Code	Region	Country
CEECA	Central/Eastern Europe & Central Asia	POLAND
CEECA	Central/Eastern Europe & Central Asia	ROMANIA
CEECA	Central/Eastern Europe & Central Asia	RUSSIA
CEECA	Central/Eastern Europe & Central Asia	SERBIA
CEECA	Central/Eastern Europe & Central Asia	SLOVAKIA
CEECA	Central/Eastern Europe & Central Asia	SLOVENIA
CEECA	Central/Eastern Europe & Central Asia	TURKEY
CEECA	Central/Eastern Europe & Central Asia	UKRAINE
LAC	Latin America & Caribbean	ARGENTINA
LAC	Latin America & Caribbean	BOLIVIA
LAC	Latin America & Caribbean	BRAZIL
LAC	Latin America & Caribbean	CHILE
LAC	Latin America & Caribbean	COLOMBIA
LAC	Latin America & Caribbean	COSTA RICA
LAC	Latin America & Caribbean	DOMINICAN REPUBLIC
LAC	Latin America & Caribbean	ECUADOR
LAC	Latin America & Caribbean	EL SALVADOR
LAC	Latin America & Caribbean	GUATEMALA
LAC	Latin America & Caribbean	GUYANA
LAC	Latin America & Caribbean	HAITI
LAC	Latin America & Caribbean	HONDURAS
LAC	Latin America & Caribbean	JAMAICA
LAC	Latin America & Caribbean	MEXICO
LAC	Latin America & Caribbean	NICARAGUA
LAC	Latin America & Caribbean	PANAMA
LAC	Latin America & Caribbean	PARAGUAY
LAC	Latin America & Caribbean	PERU
LAC	Latin America & Caribbean	PUERTO RICO (USA)
LAC	Latin America & Caribbean	TRINIDAD & TOBAGO
LAC	Latin America & Caribbean	URUGUAY
LAC	Latin America & Caribbean VENEZUELA	A, BOLIVARIAN REPUBLIC OF
MENA	Middle East & North Africa	ALGERIA
MENA	Middle East & North Africa	BAHRAIN
MENA	Middle East & North Africa	CYPRUS

Code	Region	Country
MENA	Middle East & North Africa	EGYPT
MENA	Middle East & North Africa	IRAN, ISLAMIC REPUBLIC OF
MENA	Middle East & North Africa	ISRAEL
MENA	Middle East & North Africa	JORDAN
MENA	Middle East & North Africa	KUWAIT
MENA	Middle East & North Africa	LEBANON
MENA	Middle East & North Africa	LIBYA
MENA	Middle East & North Africa	MOROCCO
MENA	Middle East & North Africa	OMAN
MENA	Middle East & North Africa	QATAR
MENA	Middle East & North Africa	SAUDI ARABIA
MENA	Middle East & North Africa	UNITED ARAB EMIRATES (UAE)
NA	North America	CANADA
NA	North America	UNITED STATES (USA)
WE	Western Europe	AUSTRIA
WE	Western Europe	BELGIUM
WE	Western Europe	DENMARK
WE	Western Europe	FINLAND
WE	Western Europe	FRANCE
WE	Western Europe	GERMANY
WE	Western Europe	GREECE
WE	Western Europe	ICELAND
WE	Western Europe	IRELAND
WE	Western Europe	ITALY
WE	Western Europe	LUXEMBURG
WE	Western Europe	MALTA
WE	Western Europe	NETHERLANDS
WE	Western Europe	NORWAY
WE	Western Europe	PORTUGAL
WE	Western Europe	SPAIN
WE	Western Europe	SWEDEN
WE	Western Europe	SWITZERLAND
WE	Western Europe	UNITED KINGDOM (UK)

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 shows the link between property rights protection and economic development. The 2013 edition contains the ranking of 131 countries, which represents 98 percent of world gross domestic product and 93 percent of world population.

The 2013 edition contains the IPRI rankings, rankings by IPRI core components, regional distribution of IPRI scores, and changes in IPRI scores from 2012. The 2013 edition again features individual country profiles, which provide the historic progression of IPRI scores and their components, point to any advances and variations, and show strong or weak aspects of countries' property rights. Additionally, to account for gender-based disparities existing in developing countries regarding property rights, a specific chapter is dedicated to gender equality.

In its effort to produce the IPRI, PRA has secured the support of 74 think tanks and policy organizations in 57 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 2013 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

