

CHAPTER VII: DATA SOURCES

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

Subjective versus Objective Data

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

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

Data Sources

World Economic Forum (WEF) – Global Competitiveness Index

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

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

World Bank Institute (WBI) – Worldwide Governance Indicators

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

World Bank Group (WB) – Doing Business

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

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

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

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

Ginarte-Park (GP) – Index of Patent Rights

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

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

International Intellectual Property Alliance (IIPA) – Special 301 Report

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

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

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

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