Technical Notes and Sources

The present section complements the Data Tables by providing additional information for those indicators that enter the composition of the Networked Readiness Index 2010–2011 and that are not derived from the World Economic Forum’s Executive Opinion Survey.

The number next to the variable corresponds to the number of the Data Table that shows ranks and scores for all countries/economies on this particular indicator.

For variables 3.04, 3.05, 8.04, and 8.05, we have divided the raw values by the population figures relative to the year of each corresponding data point. For variables 4.04, 4.05, 4.06, 4.07, 4.08, 5.06, and 5.07, we have divided the raw values by the PPP conversion factor to market exchange rate ratio figures relative to the year of each corresponding data point.

The source of population figures is The World Bank, World Development Indicators Online (accessed in January 2011). The sources of the PPP conversion factor to market exchange rate ratio figures are The World Bank, World Development Indicators Online (accessed in January 2011) and the International Monetary Fund, World Economic Outlook (October 2010).

The data used in this Report represent the most recent available figures from various international agencies and national authorities at the time when the data collection took place. It is possible that some data have been updated or revised since then.

Pillar 1: Market environment

1.07 Total tax rate
Sum of profit tax, labor tax and social contributions, property taxes, turnover taxes, and other taxes, as a share (% of commercial profits | 2010
The total tax rate measures the amount of taxes and mandatory contributions payable by the business in its second year of operation, expressed as a share of commercial profits. The total amount of taxes is the sum of five different types of taxes and contributions payable after accounting for deductions and exemptions: profit or corporate income tax, social contributions and labor taxes paid by the employer, property taxes, turnover taxes, and other small taxes. For more details about the methodology employed and the assumptions made to compute this indicator, visit http://www.doingbusiness.org/methodologysurveys/
Source: The World Bank, Doing Business 2011

1.08 Time required to start a business
Number of days required to start a business | 2010
For details about the methodology employed and the assumptions made to compute this indicator, visit http://www.doingbusiness.org/methodologysurveys/
Source: The World Bank, Doing Business 2011

1.09 Number of procedures required to start a business
Number of procedures required to start a business | 2010
The list of procedural steps compiled for each economy traces the chronology of a commercial dispute before the relevant court. A procedure is defined as any interaction, required by law or commonly used in practice, between the parties or between them and the judge or court officer. This includes steps to file and serve the case, steps for trial and judgment, and steps necessary to enforce the judgment. For more details about the methodology employed and the assumptions made to compute this indicator, visit http://www.doingbusiness.org/methodologysurveys/
Source: The World Bank, Doing Business 2011

Pillar 2: Political and regulatory environment

2.08 Software piracy rate
Unlicensed software units as a percentage of total software units installed | 2009
This measure covers piracy of all packaged software that runs on personal computers (PCS), including desktops, laptops and ultra-portables, including netbooks. This includes operating systems, systems software such as databases and security packages, business applications and consumer applications such as games, and personal finance and reference software. The study does not include software that runs on servers or mainframes. For more information about the methodology, refer to the study available at http://www.bsa.com/globalstudy
Source: Business Software Alliance/International Data Corporation, Global Software Piracy Study 2009 (May 2010)

2.09 Number of procedures to enforce a contract
Number of procedures to resolve a dispute, counted from the moment the plaintiff files a lawsuit in court until payment | 2010
The list of procedural steps compiled for each economy traces the chronology of a commercial dispute before the relevant court. A procedure is defined as any interaction, required by law or commonly used in practice, between the parties or between them and the judge or court officer. This includes steps to file and serve the case, steps for trial and judgment, and steps necessary to enforce the judgment. For more details about the methodology employed and the assumptions made to compute this indicator, visit http://www.doingbusiness.org/methodologysurveys/
Source: The World Bank, Doing Business 2011
3.05 Electricity production per capita
Electricity production (kWh) per capita | 2007

Electricity production is measured at the terminals of all alternator sets in a station. In addition to hydropower, coal, oil, gas, and nuclear power generation, it covers generation by geothermal, solar, wind, and tide and wave energy as well as that from combustible renewables and waste. Production includes the output of electricity plants designed to produce electricity only, as well as that of combined heat and power plants.

Sources: The World Bank, World Development Indicators Online (accessed in January 2011); US Central Intelligence Agency (CIA) The World Factbook (accessed in January 2011)

3.06 Tertiary education enrollment rate
Gross tertiary education enrollment rate (%) | 2008

Tertiary enrollment rate is the ratio of total enrollment, regardless of age, to the population of the age group that officially corresponds to the tertiary education level. Tertiary education, whether or not leading to an advanced research qualification, normally requires, as a minimum condition of admission, the successful completion of education at the secondary level.

Sources: The World Bank, World Development Indicators Online (accessed in January 2011); national sources

Pillar 4: Individual readiness

4.03 Adult literacy rate
Adult literacy rate (%) | 2008

Adult literacy is defined as the percentage of the population aged 15 years and over who can both read and write with understanding a short, simple statement on his/her everyday life. Whenever data come from economies classified by the World Bank as high income, we assume a rate of 99 percent, in accordance with the approach adopted by the United Nations Development Programme (UNDP) in calculating the 2009 edition of the Human Development Index.

Sources: World Bank, Ed Stats Database (accessed in January 2011); national sources

4.04 Residential telephone installation fee
One-time residential telephone installation fee (PPP $) | 2009

This measure refers to the one-time charge involved in applying for residential basic telephone service. Taxes should be included. If not included, it should be specified in a note including the applicable tax rate. The amount is adjusted for purchasing power parity (PPP) and expressed in international dollars.

Sources: International Telecommunication Union, The World Telecommunication/ICT Indicators Database 2010 (accessed in December 2010); national sources

4.05 Residential monthly telephone subscription
Monthly subscription for residential telephone service (PPP $) | 2009

Monthly subscription refers to the recurring fixed charge for subscribing to the public switched telephone network. The charge should cover the rental of the line but not the rental of the terminal (for example, the telephone set) where the terminal equipment market is liberalized. In some cases, the rental charge includes an allowance for free or reduced-rate call units. If there are different charges for different exchange areas, the largest urban area is used. The amount is adjusted for purchasing power parity (PPP) and expressed in international dollars.

Sources: International Telecommunication Union, The World Telecommunication/ICT Indicators Database 2010 (accessed in December 2010); national sources
Pillar 5: Business readiness

5.05 Business telephone installation fee

One-time business telephone installation fee (PPP $) | 2009
Installation (or connection) refers to the one-time charge involved in applying for business basic telephone service. The amount is adjusted for purchasing power parity (PPP) and expressed in international dollars.

Sources: International Telecommunication Union, The World Telecommunication/ICT Indicators Database 2010 (accessed in December 2010); national sources

5.06 Business monthly telephone subscription

Monthly subscription for business telephone service (PPP $) | 2009
Monthly subscription refers to the recurring fixed charge for subscribing to the public switched telephone network. The charge should cover the rental of the line but not the rental of the terminal (for example, the telephone set) where the terminal equipment is installed. In some cases, the rental charge includes an allowance for free or reduced-rate call units. If there are different charges for different exchange areas, the largest urban area is used. The amount is adjusted for purchasing power parity (PPP) and expressed in international dollars.

Sources: International Telecommunication Union, The World Telecommunication/ICT Indicators Database 2010 (accessed in December 2010); national sources

Pillar 7: Individual usage

7.01 Mobile telephone subscriptions

Mobile telephone subscriptions (post-paid and pre-paid) per 100 population | 2009
Mobile telephone subscriptions refer to subscriptions to a public mobile telephone service that provides access to the public switched telephone network using cellular technology, including number of pre-paid SIM cards active during the past three months. This includes both analogue and digital cellular systems (IMT-2000, Third Generation, and 3G and 4G) subscriptions, but excludes mobile broadband subscriptions via data cards or USB modems. Subscriptions to public mobile data services, private trunked mobile radio, telemeting or radio paging services are also excluded. It includes all mobile cellular subscriptions that offer voice communications.


7.02 Cellular subscriptions with data access

Percentage of cellular subscriptions with data access at broadband speed | 2009
Cellular subscriptions are subscriptions to mobile cellular networks with access to data communications (e.g., the Internet) at broadband downstream speeds (here defined as greater than or equal to 256 kilobits per second). Note that this corresponds to potential mobile broadband subscriptions and not active mobile broadband subscriptions. The denominator corresponds to the total number of post-paid and pre-paid subscriptions. Subscribers to fixed wireless, public mobile data services, or radio paging services are not included.

Sources: Authors’ calculations; International Telecommunication Union, The World Telecommunication/ICT Indicators Database 2010 (accessed in December 2010); national sources

7.03 Households with a personal computer

Percentage of households equipped with a personal computer | 2009
The proportion of households with a computer is calculated by dividing the number of households with a computer by the total number of households. A computer refers to a desktop or a laptop computer. It does not include equipment with some embedded computing abilities such as mobile cellular phones, personal digital assistants (PDAs), or TV sets.

Sources: International Telecommunication Union, The World Telecommunication/ICT Indicators Database 2010 (accessed in December 2010); national sources
7.04 Broadband Internet subscribers per 100 population | 2009
A broadband Internet connection is any dedicated connection to the Internet of 256 kilobits per second or faster, in both directions. Broadband subscribers refers to the sum of DSL, cable modem, and other broadband (for example, fiber optic, fixed wireless, apartment LANs, satellite connections) subscribers.

7.05 Internet users per 100 population | 2009
Internet users are people with access to the worldwide network.

Pillar 8: Business usage

8.04 Local office patent applications
Number of patent applications filed by residents at the national patent office per million population | 2009
Patent application counts are based on the filing date and the country of residence (or nationality, in the absence of a valid residence) of the first-named applicant. For more information about this indicator, refer to Box 3 in Chapter 1.1.
Sources: World Intellectual Property Organization (WIPO); national sources

8.05 Patent Cooperation Treaty applications
Number of international applications filed through the Patent Cooperation Treaty per million population | 2010
Application counts are based on the international filing date and country of residence of the first-named applicant. Data for Hong Kong SAR, Puerto Rico, and Taiwan are not available as these economies are not members of the United Nations. For more information about this indicator, refer to Box 3 in Chapter 1.1.
Source: World Intellectual Property Organization (WIPO)

8.06 High-tech exports
High-technology products as a percentage of total goods exports | 2009
The value of high-technology exports is expressed as a percentage of the value of the country’s total goods exports (excluding re-exports). According to the World Bank, high-technology exports are products with high R&D intensity, as in aerospace, computers, pharmaceuticals, and scientific instruments. The classification of high-technology comes from the United Nations Industrial Development Organization (UNIDO) and corresponds to product groups 5, 6, 7, and 8 (excluding categories 667 and 68) in the SITC revision 3 product classification.
Sources: Authors’ calculation; United Nations COMTRADE database (accessed in December 2010)

Pillar 9: Government usage

9.03 Government Online Service Index
The Government Online Service Index assesses the quality of government’s delivery of online services | 2010
This index captures a government’s performance in delivering online services to the citizens. There are four stages of service delivery: (Emerging, Enhanced, Transactional, and Connected). Every online service is assigned to a particular stage according to its degree of sophistication. In each country, the performance of the government in each of the four stages is measured as the number of services provided as a percentage of the maximum services in the corresponding stage. Examples of services include online presence, deployment of multimedia content, governments’ solicitation of citizen input, widespread data sharing, and use of social networking. For more details about the methodology, visit the UN’s Global E-Government Survey 2010’s page at http://www2.unpan.org/egovkb/global_reports/10report.htm.

9.04 E-Participation Index
The E-Participation Index assesses the quality, relevance, usefulness, and willingness of government websites for providing online information and participatory tools and services to the people | 2010
This Index captures the extent to which governments create an environment in which citizens can be more active and support their governments. The index takes into account e-participation in all its aspects, ranging from e-information to e-consultation and e-decision making. For more details about the methodology, visit the UN’s Global E-Government Survey 2010’s page at http://www2.unpan.org/egovkb/global_reports/10report.htm.