## **II: Selected Definitions**

#### Attainment rates

These rates measure the highest level of education in which individuals were enrolled. The data reflect the attainment rates for the population that is over age 25. Attainment rates do not imply that all students completed this level of education.

# Citation statistics over 5-year time periods

The Institute for Scientific Information (ISI) database is used to track publication and citation statistics, and typically attributes citations to the year the paper was published. Recent years therefore show dramatically lower citation numbers than earlier years, as there has been less time for newer papers to be cited.

To track trends in citations over time, ISI developed a 5-year-window approach. Each 5-year block measures citations made in a time period for only those papers published in that period. More recent 5-year windows are therefore comparable to older time periods, and growth or decline in citation numbers over time can be noted.

#### GDP per capita

Real GDP per capita is expressed in constant dollars using the Chain index (1985 international prices). For years up to the early 1990s, data are supplied directly from the *Penn World Tables* do not have data for a more recent year, the World Bank's figures for GDP per capita are consulted. Because the World Bank figures are expressed in 1987 international dollars, the rate of change of GDP per capita from year to year is extracted from the World Bank data and applied to the *Penn World Table* base. The

resulting figure is expressed in 1985 dollars. Data are courtesy of John Gallup, Center for International Development, Harvard University.

#### Gross enrollment ratio

The gross enrollment ratio is the total enrollment at a given educational level, regardless of age, divided by the population of the age group that typically corresponds to that level of education. The specification of age groups varies by country, based on different national systems of education and the duration of schooling at the first and second levels. For tertiary education, the ratio is expressed as a percentage of the population in the 5-year age group following the official secondary school-leaving age. Gross enrollment ratios may exceed 100 percent if individuals outside the age cohort corresponding to a particular educational level are enrolled in that level.

### **Human Development Index (HDI)**

This index measures the average achievements in a country in three basic dimensions of human development—longevity, knowledge, and a decent standard of living. A composite index, the HDI, thus contains three variables: life expectancy, educational attainment (adult literacy and combined primary, secondary, and tertiary enrollment), and real GDP per capita (in dollars adjusted for purchasing-power parity). The HDI is calculated by the United Nations Development Programme.

#### Life expectancy at birth

This is the number of years a newborn infant would live if prevailing patterns of mortality at the time of birth were to stay the same throughout the child's life.

Public current spending on higher education as percentage of total public current spending on education

This measures the percentage of public spending on education that is devoted to tertiary education. Only current spending (i.e., recurring, noncapital expenses) is considered.

Public expenditure on education as percentage of GNP

This measures the total public expenditure on education (both current and capital expenses) expressed as a percentage of the gross national product (GNP) for a given year. This indicator shows the proportion of a country's wealth generated during a given year that has been devoted by government authorities to the development of education.

Public expenditure on education as percentage of government expenditure

This measures the total public expenditure on education (both current and capital expenses) expressed as a percentage of total government expenditure in a given year. This indicator shows the proportion of a government's total expenditure for a given year that has been spent on education.

## Tertiary education

Education at the tertiary level (International Standard Classification of Education, ISCED, levels five, six, and seven), includes universities, teachers' colleges, and higher professional schools—requiring as a minimum condition of admission the successful completion of education at the secondary level, or evidence of the attainment of an equivalent level of knowledge.