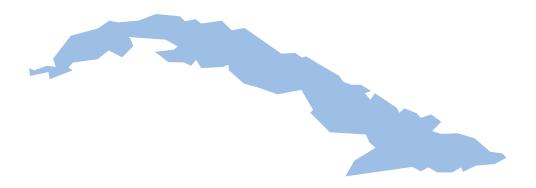


## **Cuba Economic Performance Assessment**



#### October 2009

This publication was produced by Nathan Associates Inc. for review by the United States Agency for International Development.

# **Cuba**Economic Performance Assessment

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Sponsored by the Economic Growth office of USAID's Bureau of Economic Growth, Agriculture and Trade (EGAT), under Contract No. PCE-I-00-00-00013-00, Task Order 004, the Country Analytical Support (CAS) Project, 2004–2006, Nathan Associates Inc. developed a standard methodology for producing analytical reports to provide a clear and concise evaluation of economic growth performance in designated countries receiving USAID assistance. The reports are tailored to meet the needs of USAID missions and regional bureaus for country-specific analysis. Each report contains:

- A synthesis of key data indicators drawn from numerous sources, including the World Bank, the International Monetary Fund, the Millennium Challenge Corporation, the United Nations, other international data sets, and host-country documents and data sources;
- International benchmarking to assess country performance in comparison to similar countries, groups of countries, and predicted values based on international data;
- An easy-to-read analytic narrative that highlights areas in which a country's performance is particularly strong or weak, to assist in the identification of future programming priorities.
- A convenient summary of the main findings, in the form of a Highlights Table and a Performance Scorecard (in lieu of an Executive Summary)

Under Contract No. GEG-I-00-04-00002-00, Task Order 004, 2006-2010, Nathan Associates continues to provide support to the EGAT Bureau by producing analytical reports evaluating economic growth performance in designated host countries. Through the same task order, Nathan is also developing a special template for countries emerging from crisis, assessing data issues in countries with large gaps in their data; conducting in-depth sector reviews based on the diagnostic analysis in the country reports; and providing other analytical support to the EGAT Bureau.

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Subject to EGAT consent, electronic copies of reports and materials relating to the CAS project are available at <a href="www.countrycompass.com">www.countrycompass.com</a>. For further information or hard copies of CAS publications, please contact:

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#### **HIGHLIGHTS OF CUBA'S PERFORMANCE**

	O COBACT EN CHIMAICE
Economic Growth	Cuba achieved strong GDP growth during 2005-2007, averaging 10.2 percent per year, but growth slowed in 2007-2008. Total and private investments are low.
Poverty and Inequality	Deprivation, measured by the UN Human Poverty Index, is low and malnutrition is practically non-existent. Yet, scattered and dated data show increasing inequality to levels comparable to the rest of Latin America.
Economic Structure	Cuba has a strong service sector and, like many developing countries, exhibits low productivity in agriculture.
Demography and Environment	Cuba's youth dependency ratio is low because of migration and low birth rates. The elderly dependency ratio is high as people live longer. The country is highly urbanized, yet scores above average on an international index of environmental performance.
Gender	Cuban women have wide access to education and health services. Cuba has a remarkably higher gross enrollment of females at all levels of education, yet women leave the labor force.
Fiscal and Monetary Policy	Government expenditures account for 65 percent of GDP. The government deficit is worsening due to the sudden and drastic drop in the world price of nickel and low productivity if sugar production. Unofficial inflation rate is about 5 percent per year.
Business Environment	Scant data shows poor regulatory quality, rule of law and government effectiveness. The business environment is not conducive to private sector growth.
Financial Sector	The financial sector remains controlled by the government, therefore credit and insurance markets are not free to allocate resources efficiently. Most indicators used to assess a market-oriented financial system are not available for Cuba.
External Sector	Despite high rates of export growth, trade as a percent of GDP remains relatively small.  Sugar, tobacco and nickel account for more than half of exports in 2006.
Economic Infrastructure	Cuba's telecom industry remains one of the weakest in the world. The electrical generation capacity has improved, enabling the island to be more self-sufficient.
Science and Technology	Cuba's performance in science and technology is strong, although there are signs of a slight deterioration.
Health	The Cuban government has made public healthcare a top policy priority, as is reflected in the government's expenditures. High life expectancy in Cuba is directly attributed to the nation-wide preventative healthcare system, which is one of the best regarded in Latin America.
Education	Cuba's education system is one of the best regarded in Latin America. Its net primary enrollment rate for 2007 is 98.4 percent and 98.2 percent for males and females respectively. This is higher than all the comparators.
Employment and Workforce	The official unemployment rate of 1.9 percent disguises real levels of unemployment. It is believed that workforce is under-utilized, and is a major drain on the fiscal accounts.
Agriculture	Agriculture employs 20 percent of the workforce, and is the main source of non-state jobs.  Agricultural value added has declined and productivity is low.

Note: The methodology used for diagnostic benchmarking is explained in Appendix A..

## CUBA: NOTABLE STRENGTHS AND WEAKNESSES—SELECTED INDICATORS

INDICATORS		
Selected Indicators, by Topic	Notable Strengths	Notable Weaknesses
Growth Performance		
Growth of labor productivity	X	
Investment capital-output ratio	X	
Gross fixed investment, % of GDP		X
Gross fixed private investment, % of GDP		X
Poverty and Inequality		
Human Poverty Index	X	
Population below minimum dietary energy consumption	X	
Demography and Environment		
Adult literacy rate	X	
Gender		
Gross enrollment rate, female, all levels	X	
Labor force participation rate, female		X
Fiscal and Monetary Policy		
Government expenditure, % of GDP		X
Overall budget balance, % of GDP		X
Business Environment		
Regulatory Quality Index		X
Government Effectiveness Index		X
Rule of Law Index		X
External Sector		
Trade, percent GDP		X
Export growth, goods and services	X	
Concentration of exports		X
Economic Infrastructure		
Telephone density, fixed and mobile lines		X
Internet user per 1000		X
Science and Technology		
Science and technology journal articles per million people	X	
Health		
Life expectancy at birth	X	
Public health expenditure, % of GDP	X	
Access to improved sanitation	X	

Selected Indicators, by Topic	Notable Strengths	Notable Weaknesses
Education		
Net primary enrollment rates	X	
Primary completion rates	X	
Youth literacy rates	X	
Gross Tertiary enrollment rate	X	
Agriculture		
Growth in agricultural value-added		X

Note: The chart identifies selective indicators for which the Cuba's performance is particularly strong or weak relative to benchmark standards, as explained in Appendix. Details are discussed in the text. Appendix B presents a full tabulation of the data and international benchmarks examined for this report, along with technical notes on the data sources and definitions.

### 1. Introduction

This report is one of a series of economic performance assessments prepared for the EGAT Bureau to provide USAID missions and regional bureaus with a concise evaluation of key indicators covering a broad range of issues relating to economic growth performance in designated host countries. The report draws on a variety of international data sources<sup>1</sup> and uses international benchmarking against reference group medians, comparator countries, and statistical norms to identify major constraints, trends, and opportunities for strengthening growth and reducing poverty. This study uses two other large, upper-middle income countries in the same region (UMI-LAC), Costa Rica and Dominican Republic, as comparators. In addition, Cuba's performance is compared to median values of all upper-middle-income (UMI) countries globally.

#### **METHODOLOGY**

The methodology used here is analogous to examining an automobile dashboard to see which gauges are signaling problems. Sometimes a blinking light has obvious implications—such as the need to fill the fuel tank. In other cases, it may be necessary to have a mechanic probe more deeply to assess the source of the trouble and determine the best course of action.<sup>2</sup> Similarly, the Economic Performance Assessment is based on an examination of key economic and social indicators, to see which ones are signaling problems. Some "blinking" indicators have clear implications, while others may require further study to investigate the problems more fully and identify appropriate courses for programmatic action.

The analysis is organized around two mutually supportive goals: transformational growth and poverty reduction.<sup>3</sup> Broad-based growth is the most powerful instrument for poverty reduction. At the same time, programs to reduce poverty and lessen inequality can help to underpin rapid and sustainable growth. These interactions can create a virtuous cycle of economic transformation and human development.

<sup>&</sup>lt;sup>1</sup> Sources include the World Bank, the International Monetary Fund, the Millennium Challenge Corporation, the United Nations (including the Millennium Development Goals database), the World Economic Forum, and host-country documents and data sources. This report reflects data available as of early June 2009.

<sup>&</sup>lt;sup>2</sup> Sometimes, too, the problem is faulty wiring to the indicator—analogous here to faulty data.

<sup>&</sup>lt;sup>3</sup> In USAID's white paper *U.S. Foreign Aid: Meeting the Challenges of the Twenty-first Century* (January 2004), transformational growth is a central strategic objective, both for its innate importance as a development goal and because growth is the most powerful engine for poverty reduction.

Transformational growth requires a high level of investment and rising productivity. This is achieved by establishing a strong *enabling environment for private sector development*, involving multiple elements: macroeconomic stability; a sound legal and regulatory system, including secure contract and property rights; effective control of corruption; a sound and efficient financial system; openness to trade and investment; sustainable debt management; investment in education, health, and workforce skills; infrastructure development; and sustainable use of natural resources.

In turn, the impact of growth on poverty depends on policies and programs that create opportunities and build capabilities for the poor. We call this the *pro-poor growth environment*. Here, too, many elements are involved, including effective education and health systems, policies facilitating job creation, agricultural development (in countries where the poor depend predominantly on farming), dismantling barriers to micro and small enterprise development, and progress toward gender equity.

The present evaluation must be interpreted with care. A concise analysis of selected indicators cannot provide a definitive diagnosis of economic performance problems, nor simple answers to questions about programmatic priorities. Instead, the aim of the analysis is to spot signs of serious problems affecting economic growth, subject to limits of data availability and quality. The results should provide insight about potential paths for USAID intervention, to complement on-the-ground knowledge and further in-depth studies.

The remainder of the report presents the most important results of the diagnostic analysis, in three sections: Overview of the Economy; Private Sector Enabling Environment; and Pro-Poor Growth Environment. Table 1-1 summarizes the topical coverage. Appendix A provides a brief explanation of the criteria used for selecting indicators, the benchmarking methodology, and a table showing the full set of indicators examined for this report.

Table 1-1
Topic Coverage

Overview of the Economy	Private Sector Enabling Environment	Pro-Poor Growth Environment
Growth Performance	• Fiscal and Monetary Policy	• Health
Poverty and Inequality	Business Environment	Education
Economic Structure	Financial Sector	•Employment and Workforce
Demographic and Environmental	External Sector	Agriculture
Conditions	Economic Infrastructure	
• Gender	Science and Technology	

#### **DATA QUALITY AND FORMAT**

In general, data on Cuba present problems of availability, reliability, timeliness, and transparency. As a result of these problems less than half of the data (about 48 percent) are available from our standard data sources. Distortions in the domestic price system and multiple exchange rates contribute to the reliability issue. Macroeconomic data, though regularly reported, are published only annually and usually are available only toward the end of the following year. Many gaps exist, and the definitions of the official statistics and the methodology used in deriving the indicators are not always clear. Furthermore, the absence of support to Cuba from the IMF and the World Bank make international comparisons difficult. Finally, national security concerns prevent authorities from releasing many economic indicators. When possible, other data sources, especially the UN Economic Commission for Latin America (ECLAC), and the Economist Intelligence Unit (EIU), which make estimations based on official figures from the Office of National Statistics (ONE by its acronym in Spanish), report on some of the gaps. Data reported for 2008 are considered preliminary. All of these problems with data in Cuba presented special challenges for the completion of this Economic Performance Assessment; thus, the data and our interpretation of the data should be interpreted with caution. The summary table on notable strengths and weaknesses is unavoidably limited to indicators for which data are available.

## 2. Overview of the Economy

This section reviews basic information on Cuba's macroeconomic performance, poverty and inequality, economic structure, demographic and environmental conditions, and indicators of gender equity. Some of the indicators cited here are descriptive rather than analytical and are included to provide context for the performance analysis.

#### **GROWTH PERFORMANCE**

According to the UN National Accounts database, Cuba's income per capita in 2007 (current U.S. dollars) amounted to \$4,641—between the levels of the Dominican Republic (\$3,932) and Costa Rica (\$6,580). This qualifies Cuba as an upper-middle-income country according to the World Bank's classification. These estimates are about 20 percent higher than the Economist Intelligence Unit (EIU) estimate of GDP per capita of \$3,584 for 2007. The discrepancy stems from the Cuban government's use of the market value of education and health services in GDP estimates and the difficulties in measuring prices and exchange rates. The government sets prices locally, and the official exchange rate of convertible pesos to U.S. dollars is set arbitrarily by the Cuban government, while there is a black market exchange rate that is much higher than the official rate.

Economic growth slowed from 7.0 percent in 2007 to 4.3 percent in 2008 and is expected to dip below 4 percent in 2009.<sup>6</sup> According to EIU estimates, Cuba achieved strong GDP growth in the 2005–2007 period, averaging 10.2 percent per year,<sup>7</sup> which was notably higher than average growth in UMI-LAC countries (4.5 percent) and UMI countries globally (5.6 percent). Growth accelerated in 2005–2006 (peaking at 11.0 percent in 2006), as major new trade agreements, investment commitments, and credit lines from Venezuela and China provided a significant boost to import capacity. The slowing growth reflects the effects of the global crisis. Declines in global nickel prices, demand for tourism, and export of health and educational services are driving the economic slowdown. Countering these external negative effects, the government's measures to

<sup>&</sup>lt;sup>4</sup> Three types of currencies are in circulation—the nonconvertible peso used for domestic transactions, the convertible peso used in hard-currency retail outlets, and the U.S. dollar.

<sup>&</sup>lt;sup>5</sup> EIU, Cuba Country Report, May 2009, p. 8.

<sup>&</sup>lt;sup>6</sup> Ibid, p. 3.

<sup>&</sup>lt;sup>7</sup> Ibid, p. 8.

increase real disposable income are expected to increase domestic demand, as is the easing of restrictions resulting from the changes in U.S. policy made since the change in administration.<sup>8</sup>

Strong GDP growth until 2007 improved Cuba's labor productivity during 2003–2007. Indeed, growth of labor productivity accelerated from 1.5 percent in 2002 to 12.0 percent in 2006, which exceeded the growth observed in Costa Rica (3.3 percent), and the Dominican Republic (7.2 percent), and was among the highest globally (the top-five average is 11.5 percent). This may reflect Cuba's highly educated human capital and the small increase in working-age population that accompanies a small population growth rate (see Demography and Environment, p. 18).

According to the incremental capital-output ratio (ICOR), those that invest in Cuba have exceptional rates of return—the country's ICOR was 1.2 for the 2003–2007 period (meaning that only \$1.20 of capital investment has been required to achieve an extra dollar of output), which is enviable when compared to Costa Rica's 3.0 ICOR and the Dominican Republic's ICOR of 3.8.9

Investment levels, mostly driven by the government in the development of water, gas, and electricity infrastructure show a steady improvement in the five years leading to 2007 but are still low. Of Gross domestic investment rose from 9.1 percent to 13.1 percent of GDP in the five years to 2007. These levels are well below the 19.9 percent in the average UMI-LAC country and Dominican Republic, below Costa Rica's 21.8 percent, and close to the worst performers in the world (the five worst-performing countries average 9.5 percent) (Figure 2-1).

Furthermore, private sector investment as a share in GDP has been extremely low and with a great degree of variability and shows a declining trend: from 3.2 percent in 2002 to 1.4 percent in 2006. This is below the average of the five worst global performers. Although the government claims to have embraced foreign investment, the rate of private sector investment indicates clearly that impediments to investment remain.

To increase investment, domestic savings needs to improve and the government will need to attract appropriate foreign investment.

<sup>&</sup>lt;sup>8</sup> Ibid, p. 15. and EIU Cuba Country Report, November 2008, p. 6

<sup>&</sup>lt;sup>9</sup> To attract foreign investment and increase exports the Cuban government allowed two export processing zones in 1997.

<sup>&</sup>lt;sup>10</sup> Organización Nacional de Estadísticas de Cuba. Anuario, Tablas de Inversiones, 2007.

15

Cuba's gross fixed investment, although improving, continues to be exceedingly low. Time Series Comparison to Other Countries, Most Recent Year Global Standing 12 Highest-five average 10 25 8 51.4 6 4 20 0 2003 2004 2005 2006 2007 PercentGDP Year Value 2003 9.1 10 2004 9.5 2005 10.3 CUB 2006 12.0 5 2007 13.1 Summary for 2003-2007 19.9 21.0 21.8 21.9 13.1 Five-year average 10.8 Cuba UMI-LAC UMI Trend growth rate 9.6 Lowest-five average Republic Source: Economic Intelligence Unit CAS code: 11S3

Figure 2-1 *Gross Fixed Investment (percentage of GDP)* 

#### **POVERTY AND INEQUALITY**

Very few data are available from Cuban official statistics or standard CAS sources on poverty and inequality. The scattered evidence that is available shows that the Cuban population does not suffer from deprivation, but that income inequality may be on the rise.

The UN Human Poverty Index (HPI), which is a broad measure of poverty that takes into account deprivation in health and education as well as income, gives Cuba a score of 4.7 for 2008. <sup>11</sup> By comparison, the global best-five HPI average is 2.5. Costa Rica has a slightly better score than Cuba of 3.8, but the UMI-LAC median and the score of the Dominican Republic are 6.8 and 9.6, respectively (Figure 2-2). Cuba exhibits extremely low levels of hunger, with the population below minimum dietary energy consumption at less than 2.5 percent in 2002. Again, Cuba scores among the best in the world for this indicator (the global best-five average is 2.5 percent), while the UMI-LAC median is 7 percent and the Dominican Republic's rate 27 percent.

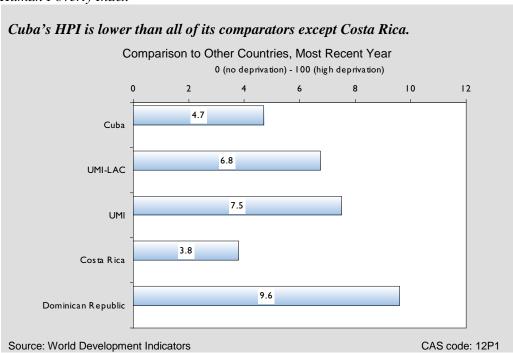
Some economists dispute these findings. They say that according to population surveys, poverty incidence and inequality increased between 1989 and 2006, with real wages and pensions declining (by 73 percent and 61 percent respectively) in real terms over the period. According to these economists some, these factors, combined with a reduction in goods that people receive as rationed quotas at subsidized prices and rising prices in agricultural markets make poverty in Cuba worse than the HPI indicates. <sup>12</sup>

<sup>&</sup>lt;sup>11</sup> The HPI ranges from 0 (no deprivation) to 100 (maximum deprivation).

<sup>&</sup>lt;sup>12</sup> Mesa-Lago, Carmelo, and Jorge Perez-Lopez, "Cuba's Aborted Reforms: Socioeconomic Effects, International comparisons, and Transitional Policies, 2006."

Furthermore, Carmelo Mesa-Lago says that income inequality has increased during the period 1986 to 1999. Estimates show that the total income received by the poorest quintile shrank from 11.3 percent to 4.3 percent, close to the regional median of 3.0 percent. <sup>13</sup> Economic reforms in the mid-1990s meant to stimulate growth also enabled unequal distribution of income among those with access to foreign currency and convertible peso markets and those who depend on nonconvertible Cuban peso income. Families receiving remittances, professional athletes, musicians, foreign company employees, and those engaged in informal sector activities benefited, while people employed by the state sector had no means of supplementing their income. <sup>14</sup>

Figure 2-2 *Human Poverty Index* 



#### **ECONOMIC STRUCTURE**

Cuba has a strong service sector and, like many developing countries, exhibits low productivity in agriculture. Nearly 20 percent of the labor force works in the agricultural sector yet it accounted for only 3.6 percent of value added in GDP in 2006. Agricultural value added in GDP has been on the decline in the five years leading to 2006, with an average growth rate of -12.7 percent. The service sector is the most productive, accounting for 59.4 percent of all employment and contributing 77.3 percent of GDP in 2006 (Figure 2-3). The size of the Cuban service sector is larger than those in all comparator economies.

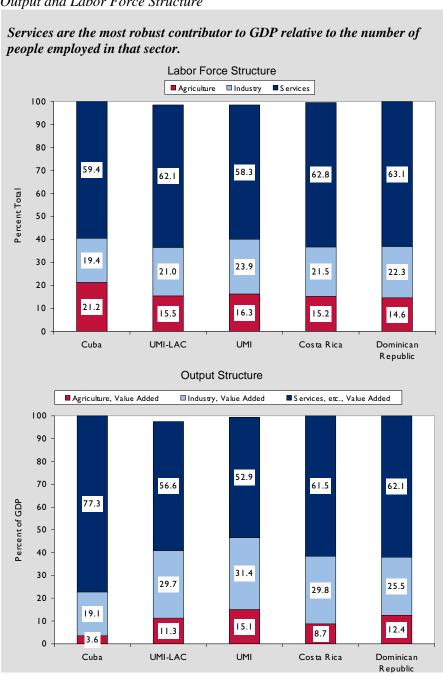
The Cuban government has long recognized the declining productivity in agriculture and has attempted to solve it. In 1993, radical structural reforms in agriculture were implemented—large-

<sup>&</sup>lt;sup>13</sup> Mesa-Lago, Carmelo. op. cit.

<sup>&</sup>lt;sup>14</sup> Economist Intelligence Unit, Cuba Country Report, Nov. 2007, pp. 19–20.

scale state-owned enterprises were dismantled in favor of smaller private cooperative production (see Agriculture, p. 35). <sup>15</sup> Similarly, self-sufficiency in staple food production was encouraged and price controls were abandoned. The reforms did not yield what was expected—productivity increases did not materialize. And it is estimated that there are still about 100,000 redundant workers and farmers in the sugar industry. <sup>16</sup>

Figure 2-3
Output and Labor Force Structure



<sup>&</sup>lt;sup>15</sup> Brian Pollitt, "Crisis and Reform in Cuba's Sugar Economy," *The Cuban Economy* (2004), 72–73.

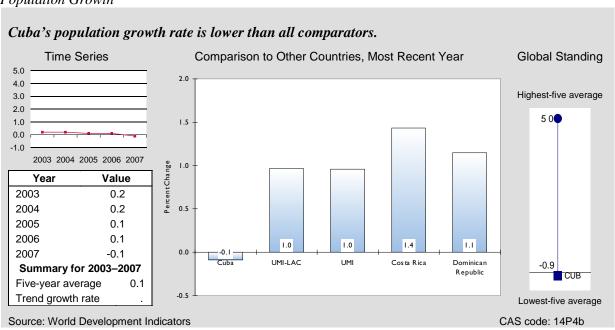
<sup>&</sup>lt;sup>16</sup> Ibid, p. 100.

#### **DEMOGRAPHY AND ENVIRONMENT**

Cuba has undergone the demographic transformation typical of a developed country through its strong performance in education and health care (see Education, p. 32 and Health, p. 31). Indeed, both birth and death rates are low when compared to the regional median, and these are reflected in the island's dependency ratio. The youth dependency ratio—the percentage of the population below 15 divided by the working-age population—has declined from 28.5 percent in 2003 to 26.4 percent in 2007. This level is nearly half the 44.7 percent of the UMI-LAC median and the 53.8 in the Dominican Republic, and still low when compared to Costa Rica's 40.8 percent. Conversely, the elderly dependency ratio in 2007 was 16.7 percent, which is higher than the UMI-LAC median ratio of 10.1 percent.

The annual population growth rate for Cuba averaged 0.1 percent for the five years to 2007, which is well below all benchmarks (1.0 percent average for UMI-LAC countries, 1.4 percent in Costa Rica, and 1.1 percent in the Dominican Republic) (Figure 2-4). Emigration has played a role in this low growth rate. According to official figures, net emigration since 2000 has averaged about 30,000 (0.3 percent of the population), two-thirds of which go to the United States under a bilateral migration agreement.<sup>17</sup>

Figure 2-4
Population Growth



Cuba scores very well on adult literacy rates on an absolute as well as a relative basis, which speaks well of the educational attainment of its population. In 2007, Cuba's adult literacy rate stood at 99.8 percent, which exceeds the UMI-LAC median of just 95.2 percent, the Dominican Republic's 89.1 percent, and even Costa Rica's 95.9 percent. In fact, Cuba's adult literacy rate equals the average of the global top five scores.

<sup>&</sup>lt;sup>17</sup> EIU, Cuba Profile 2007, pp. 18–19

Cuba is highly urbanized—75.6 percent of the people live in urban centers, with the capital Havana home to about 20 percent of the total population. <sup>18</sup> Cuba's urbanization rate is similar to the 73.2 percent average for UMI-LAC countries but high in comparison to the global UMI average of 67.9 percent, the regional comparators—Costa Rica's 62.7 percent and the Dominican Republic's 68.3 percent. This is consistent with the lower share agriculture has in Cuba's GDP. The economic crisis in 1990 raised internal migration to the capital, which has attracted much of the tourism trade and foreign investment activity. Legislation introduced in 1997 gave the authorities the power to limit internal migration, slowing the flow from countryside to city. Indeed, for the 2003-2007 period, the proportion of those living in urban areas has remained stable. However, internal migration still continues from the poorer eastern provinces where unemployment has been the highest to western provinces. <sup>19</sup> Intensifying urbanization could put pressure on urban infrastructure and services, which underscores the need for investment that will create more jobs in industry and services.

Cuba scores above average on an international Environmental Performance Index (EPI), which tracks national environmental protection. On a scale of 0 to 100 (with 100 for excellent), Cuba scored 80.7 in 2008, ranking 41st in the world (out of 133 countries tracked). Cuba is close to the UMI-LAC median (with a score of 79.7) and the Dominican Republic (83), but lags behind Costa Rica, which received a score of 90.5. According to the index, Cuba lags behind environmentally in water resources and sustainable energy.

#### **GENDER**

Gender equity enables faster economic growth by ensuring that the productive capacities of all citizens can be developed and used to full extent. In general Cuba performs well compared to all its comparators with respect to women's access to education and health services. Cuba has maintained a remarkably higher gross enrollment of females at all levels of education than its comparators. In 2007, all school age girls were enrolled in formal education, higher than all the comparators—and most notably, higher than gross male enrollment. There are signs of weakness in the Cuban system—the UNDP Human Development Index reports that Cuba's rate of 93.4 percent of females completing their primary education is lower than the average of UMI-LAC countries, 98.1 percent; furthermore, it is a decline from 2003, when Cuba reported a primary school completion rate of 97.5 percent for females.

As expected in a developed country, the life expectancy ratio between women and men in Cuba is higher than one. Women live an average of four years longer than men in Cuba—women's life expectancy is 80 years compared with men's 76 years. These life expectancies are comparable to those of Costa Rica, which has the highest rate in Latin America and is also known for its high-quality health care system.

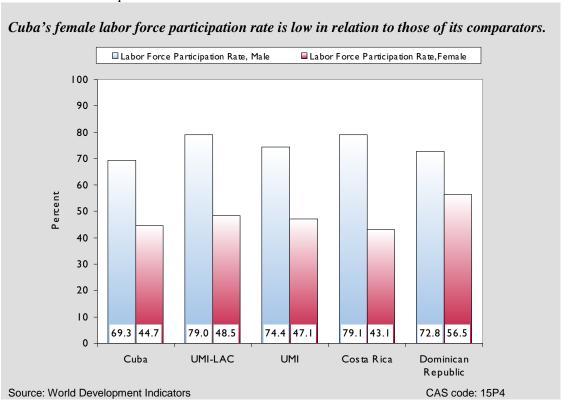
Women in Cuba have equal access to education and health care but do not participate in the labor force as much as men do. Only about 44.7 percent of women are economically active, compared

<sup>&</sup>lt;sup>18</sup> Economist Intelligence Unit, Cuba Profile 2007, p. 33

<sup>&</sup>lt;sup>19</sup> EIU, Cuba Country Profile 2007, p. 34

to 69.3 percent of men. This puts Cuba on par with Costa Rica but is a smaller rate than those of the Dominican Republic and the UMI and UMI-LAC medians (Figure 2-5).

Figure 2-5 *Labor Force Participation* 



## 3. Private Sector Enabling Environment

This section reviews key indicators of the enabling environment for encouraging rapid and efficient growth of the private sector. Sound fiscal and monetary policies are essential for macroeconomic stability, which is a necessary (though not sufficient) condition for sustained growth. A dynamic market economy also depends on basic institutional foundations, including secure property rights, an effective system for enforcing contracts, and an efficient regulatory environment that does not impose undue barriers on business activities. Financial institutions play a major role in mobilizing and allocating saving, facilitating transactions, and creating instruments for risk management. Access to the global economy is another pillar of a good enabling environment because the external sector is a central source of potential markets, modern inputs, technology, and finance, as well as competitive pressure for improving efficiency and productivity. Equally important is development of the physical infrastructure to support production and trade. Finally, developing countries need to adapt and apply science and technology to attract efficient investment, improve competitiveness, and stimulate productivity.

#### FISCAL AND MONETARY POLICY

The government plays a central part in the Cuban economy, with expenditures amounting to about 65 percent of GDP during the five years leading to 2007. The EIU estimates a deficit of 6.7 percent of GDP for 2008, worse than the 3.8 percent in 2007. The shortfall in revenue stems from the sudden and drastic drop in the world price of nickel, resulting in a possible drop of Cuba's nickel earnings by half for 2009. In addition, higher-than-expected expenditures are being driven by reconstruction associated with storm damages incurred in 2008. The EIU report predicts that in 2009, some of the pressure on the budget will be relieved by an expected drop in global food and fuel prices. <sup>21</sup> See Figure 3.1.

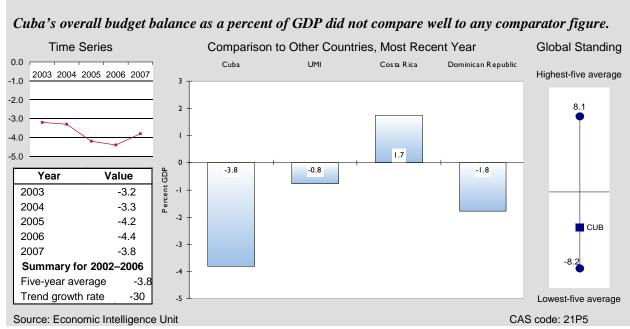
The Central Bank sets prices for most basic goods, except for agricultural goods, so it reports the official year-end inflation rate for 2008 as 0.8 percent. The EIU claims expected average inflation of 5 percent for 2009, taking into account the goods in convertible currency shops and black

<sup>&</sup>lt;sup>20</sup> EIU, Country Report Cuba, May 2009.

<sup>&</sup>lt;sup>21</sup> Ibid, p.6

market prices (neither of which is included in official figures).<sup>22</sup> This is lower than all the comparators, including the UMI-LAC and UMI medians.

Figure 3-1
Overall Budget Balance, Including Grants, Percent GDP



The Central Bank of Cuba sets policies to maintain the stability of the two domestic currencies circulating in Cuba: the Cuban peso (the nonconvertible currency used for domestic purchases), and the convertible peso (the currency that can be converted into foreign currency).<sup>23</sup> The central bank also controls credit, wages, and price adjustments. Cuba's informal and black market economy and the existence of different markets at different prices complicate monetary policy management, however. Cuban authorities recognize the need to move toward a single currency to assist in the integration of the domestic and external sectors.<sup>24</sup> This, however, is expected to progress slowly.

#### **BUSINESS ENVIRONMENT**

Institutional barriers to doing business, including corruption in government, are critical determinants for sustainable growth. The basic freedom to start, operate, and close a business in Cuba is limited by the national regulatory environment. Despite reforms in the 1990s hinting that Cuba could be transitioning to a market economy, many indicators now point to an increasingly difficult environment for private business.

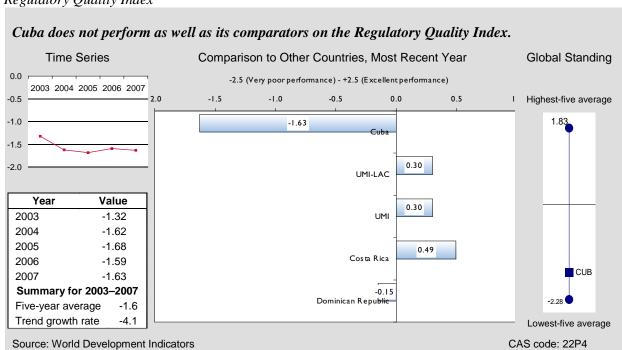
<sup>&</sup>lt;sup>22</sup> Ibid, p. 8.

<sup>&</sup>lt;sup>23</sup> Ibid, pp. 6–7

<sup>&</sup>lt;sup>24</sup> Ibid, p. 6.

Although many business environment indicators are not available for Cuba, the country's scores on the regulatory quality, rule-of-law, and government effectiveness indices are below the UMI-LAC medians, which are below the global UMI medians—not standards conducive to private business growth. <sup>25</sup> On the Rule of Law index, which is a broad gauge of the effectiveness of the legal system and the rule of law, Cuba scored -0.79 for 2007, which is below the UMI-LAC and UMI averages (both at -0.08) and the Dominican Republic's score (-0.55), and far below Costa Rica's score (0.44). Cuba's score for 2007 on the Regulatory Quality index—a broad gauge of the regulatory environment and market practices in a country—is -1.63, close to the Dominican Republic's score (-0.15) but lower than the UMI-LAC and UMI medians (both 0.30) and quite a bit lower than Costa Rica's score (0.49). Moreover, according to this indicator, Cuba's regulatory quality worsened considerably in the 2003–2007 period, from -1.32 to -1.63 (Figure 3-2).

Figure 3-2 Regulatory Quality Index



Cuba's score on Government Effectiveness in 2007 is -0.61, lower than the Dominican Republic's score of -0.46 and the UMI-LAC median of 0.12 and is far worse than Costa Rica's score of 0.39.

Cuba's score on Controlling Corruption Index is -0.21, worse than all the comparators except the Dominican Republic (with a score of -0.65). Cuba's complex interaction of government

<sup>&</sup>lt;sup>25</sup> The Control of Regulatory Quality, Rule of Law and Government Effectiveness Indices range in value from -2.5 (for poor) to 2.5 (for excellent). The values indicate standard deviations above (positive values) or below (negative values), with the global mean being 0.

institutions make it prone to corruption.<sup>26</sup> Enterprise managers are said to resort to illicit influence to obtain labor and raw materials.

Although other data for the business environment are not available, there is evidence of a difficult environment for private businesses in Cuba. Plants in export processing zones, for example, move in and out in a matter of weeks.<sup>27</sup> Part of the problem is that these plants are forced to purchase pesos at the official exchange rate, while parallel-market exchange rates are close to 26 times higher. Employers effectively pay \$1.50 per hour per worker due to exchange rate restrictions, while the workers earn only \$0.04 per hour. Thus, foreign investors are reluctant to invest, as is reflected in the gross fixed private investment rate of only 1.4 percent of GDP in 2006.

Cuba's reforms to encourage private investment remain focused on self-employment, private restaurants, and private renting of machinery. Mesa-Lago and Perez-Lopez claim that the Cuban government has set onerous restrictions on self-employment, like drastic increases in taxes, and has suspended the licenses of 40 professions previously authorized for self-employment. Likewise, according to the Heritage Foundation, besides exchange controls, other deterrents to private investment include delayed payments from Cuban state enterprises and onerous regulations. By the end of 2005, 60 of 313 "international economic associations" had been shut down because of alleged failure to fulfill their objectives. 30

Myriad reforms could improve the business environment. There have been calls to strengthen the legal system to control corruption, deregulate markets, lower the tax burden, privatize in a transparent manner, and introduce competitive procurement.

#### FINANCIAL SECTOR

A sound and efficient financial sector is key to mobilizing savings, fostering productive investment, and improving risk management. In Cuba, the financial sector remains controlled by the government. Thus, many indicators used in our template to assess a market-oriented financial system are not available.

The sole indicator available looks reasonably good. The ratio of broad money to GDP is a basic gauge of the degree of monetization of the economy and development of the banking system. For Cuba, the broad money supply averaged 42.0 percent of GDP over the five years to 2007, in line with the UMI median (44.0. percent) and exceeding the levels observed in the Dominican Republic (24.8 percent) and Costa Rica (25.0 percent).

<sup>&</sup>lt;sup>26</sup> Jorge Perez-Lopez, "Corruption and the Cuban Transition," *The Cuban Economy*, 2004.

<sup>&</sup>lt;sup>27</sup> Larry Willmore, "Export Processing Zones in Cuba," *The Cuban Economy*,p. 52.

<sup>&</sup>lt;sup>28</sup> EIU, Cuba Country Profile, 2007, p. 29

<sup>&</sup>lt;sup>29</sup> Mesa-Lago, Carmelo, and Jorge Perez-Lopez, "Cuba's Aborted Reforms: Socioeconomic Effects, International comparisons, and Transitional Policies, 2006."

<sup>&</sup>lt;sup>30</sup> Index of Economic Freedom 2008, Cuba, Heritage Foundation.

Indeed, the structural reforms of the mid-1990s resulted in an emerging financial system. The Central Bank (Banco Central de Cuba) now supervises the financial sector and conducts monetary policy; controls consumer credit, interest-bearing savings accounts, and promissory notes. The authorities are developing a market in financial securities. More than a dozen foreign banks have opened offices but operate with restrictions. Like other reforms, banking modernization has proceeded cautiously with the state retaining much control. <sup>31</sup>

Despite financial sector reforms alluded to above, Cuba's state-centered financial system cannot efficiently allocate financial resources and is a major constraint for entrepreneurship and private business investment. Programs that will deepen the reforms and accelerate the growth of a sound, increasingly market-oriented banking system are needed.

#### **EXTERNAL SECTOR**

Fundamental changes in international commerce and finance, including reduced transport costs, advances in telecommunications technology, and lower policy barriers, have fueled a rapid increase in global integration in the past 25 years. The international flow of goods and services, capital, technology, ideas, and people offers great opportunities for Cuba to boost growth and reduce poverty by stimulating productivity and efficiency, providing access to new markets and ideas, and expanding the range of consumer choice. At the same time, globalization creates new challenges, including the need for reforms to take full advantage of international markets, and cost-effective approaches to cope with the resulting adjustment costs and regional imbalances.

#### International Trade and Current Account Balance

The current account balance as a percent of GDP stood at 0.3 in 2007. Cuba's current account reflects growing exports in the services sector and the continued influx of remittances.<sup>32</sup> A growing tourism sector is fueled by the Euro market, and a growing health services sector is directed principally at Venezuela and other countries in Latin America. Cuba remains dependent on imports for fuel and food.<sup>33</sup> Exports grew rapidly in the five years leading to 2005. In 2000 export growth was a dismal -3.6 percent, but by 2005 the figure had risen to 45.9 percent (Figure 3-3).

Despite high rates of export growth, total trade as a percent of GDP remains relatively small—33.5 percent in 2007—not even half the UMI-LAC median of 99.3 percent. Costa Rica's and the Dominican Republic's rates of trade as a share of GDP (102.4 percent and 75.9 percent respectively) highlight the fact that the Cuban economy is still fairly closed. Similarly, trade in services, critical to keeping the current account in balance, is growing but is only 12.7 percent of GDP. This is comparable to Costa Rica's and the Dominican Republic's trade in sevices (at 20.7 percent and 18.0 percent respectively), but is lower than the UMI-LAC median of 29.7 percent, which demonstrates that further integration into the international market for services is possible.

<sup>&</sup>lt;sup>31</sup> EIU, Cuba Country Profile 2007, pp. 29–41

<sup>&</sup>lt;sup>32</sup> No hard data on remittances are available, but ECLAC reports that two-thirds of the Cuban population receives remittances.

<sup>&</sup>lt;sup>33</sup> EIU, Cuba Country Profile 2007. p 42.

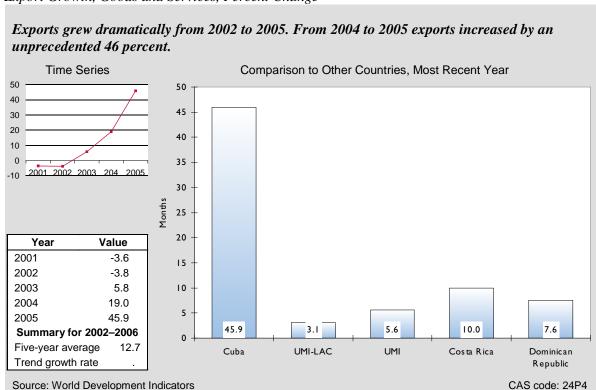


Figure 3-3

Export Growth, Goods and Services, Percent Change

The structure of goods exports is still heavily concentrated in food, ores, and metals, which accounted for nearly 74.9 percent of goods exports, but the growth in manufactured exports during 2001–2006 of 14.9 percentage points is a measureable improvement.

Cuba performs worse than all comparators in terms-of-trade policy as measured by the Trade Policy Index. The score of 64.4 for 2009 on an ascending scale to 100 is significantly below the averages for UMI-LAC and UMI and the Dominican Republic and Costa Rica. Increased effort is needed on the part of the government to improve in this area, if Cuba is going to be an active participant in the WTO.

Cuba's terms of trade improved dramatically through 2007, with the net barter terms of trade index score rising from 95.5 for 2003 to 143.5 for 2007, indicating that the value of Cuban exports is increasing on the world market. These gains may be lost during the current downturn.

## Foreign Investment, External Assistance, and International Reserves

There are conflicting statistics on Cuba's debt burden because of outstanding loans from the Soviet Union before its collapse. According to EIU estimates, the service ratio has been decreasing, reaching 10.8 percent of exports in 2007, thanks to rapid export growth in that period. Cuba's debt position remains below the UMI-LAC median of 11.7 percent, but above that of Costa Rica (2.6 percent) or the Dominican Republic (8.5 percent). Cuba's access to foreign assistance remains limited because it is a member of neither the World Bank, IMF, nor the Inter-American Development Bank, although in June 2009, it became a member of the Organization of

American States. Cuba receives multilateral assistance from the EU and UN while bilateral assistance comes from China and Venezuela.<sup>34</sup>

Few data are available on capital flows, foreign direct investment, and international reserves. U.S. investors are prohibited from investing in Cuba, and the strict U.S. laws on investment in Cuba may also deter other foreign investors. FDI flows are unreported by official sources and therefore difficult to gauge. Notable individual projects include joint ventures in telecoms and cigar distribution. Cuba does not report its international reserve position, but the EIU estimates that reserves in 2006 covered approximately 3.5 months of imports. Cuba's tight capital controls make it less vulnerable to external financial shocks, and therefore the need for large reserves is not so critical.

#### **ECONOMIC INFRASTRUCTURE**

Reliable physical infrastructure—for transportation, communications, power, and information technology—is critical for improving competitiveness and expanding productive capacity. Unfortunately the World Economic Forum's Global Competitiveness Report does not cover Cuba and so many quality indicators for infrastructure are not available.

Cuba's telecom industry remains one of the weakest in the world. Only 11.6 users per 100 people had access to the Internet in 2007, compared to the UMI-LAC average of 20 users (Figure 3-4). Telephone (fixed line and mobile phone) density is also significantly lower than the comparators. Fixed-line and mobile subscribers per 100 people were only 11 in 2007, while UMI-LAC countries reported an average telephone density of 40.9 users per 100 population.. A sure way for Cuba to expand its telecom industry is to allow private foreign firms to penetrate the market in a competitive manner.

The indicator that measures the quality of electricity supply is not available, but conclusions about the state of the electrical infrastructure can be drawn from press releases. Before 2006, Cuba's government considered its electrical system inefficient and poorly performing. The electrical generating plants broke down half of the time and caused frequent blackouts—losses due to blackouts were estimated at \$200 million for 2004.<sup>36</sup> As a result, the Cuban government declared an Energy Revolution in 2006 and called for conservation and sought to increase electricity-generating capacity through partnerships with Brazilian, French, Canadian, Spanish and Venezuelan companies. By 2008, residents replaced appliances with energy-saving appliances by the millions.<sup>37</sup> Cuba also introduced a residential electrical tariff that induces conservation. During the summer of 2009, there were blackout and shortages, and the government again called for conservation, indicating that reforms are still needed in this area.

<sup>&</sup>lt;sup>34</sup> EIU. Cuba Country Profile 2007. Page 43.

<sup>&</sup>lt;sup>35</sup> EIU. Cuba Country Profile 2007. Page 44.

<sup>&</sup>lt;sup>36</sup> Havana's Journal, Recurring Blackouts Plague Cuba, June 8, 2005.

<sup>&</sup>lt;sup>37</sup> Cuba: Viva la Revolución Energética, March 19, 2009. http://21stcenturysocialism.com/article/cuba\_viva\_la\_revolucion\_energetica\_01834 html

Cuba's Internet usage is low but increased substantially from 2006 to 2007. Comparison to Other Countries, Most Recent Year Time Series Global Standing 12 40 10 8 Highest-five average 35 6 2 30 0 2002 2004 2005 2006 2007 25 20 Year Value 2002 0.9 15 2004 1.3 2005 1.7 10 2006 2.1 2007 11.6 5 CUB **Summary for 20022007** 11.6 20.0 25.0 33.6 172 0.2 Five-year average Cuba UMI-LAC UMI Costa Rica Trend growth rate 56.5 Lowest-five average Republic Source: World Development Indicators CAS code: 25P1

Figure 3-4
Internet Users, Per 100 People

#### SCIENCE AND TECHNOLOGY

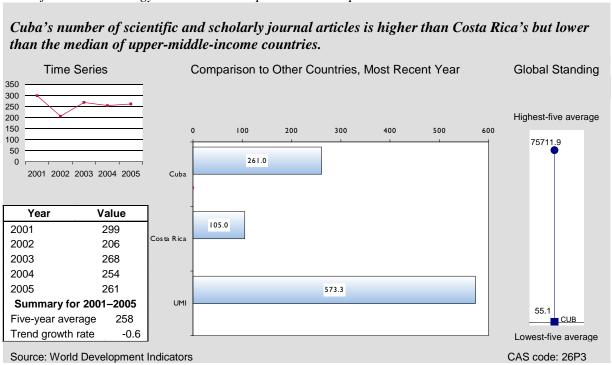
Science and technology are vital to a dynamic business environment and a driving force behind increased productivity and competitiveness. Even for lower-middle-income countries such as Cuba, transformational development depends on acquiring and adapting technology from the global economy. Lack of capacity to access and use technology prevents an economy from leveraging the benefits of globalization. Unfortunately, very few international indicators can be used to judge performance in this area for low- and lower-middle-income countries. This problem is compounded by Cuba's exclusion from the WEF Global Competitiveness Report.

From the two indicators that are available, the emerging picture is that science and technology capabilities in Cuba are strong when compared to other countries in the region and the global UMI median. These results are consistent with the provision of mass education and a high uptake in tertiary education, particularly in science and technology, as economically and socially important.<sup>38</sup>

The number of published scientific and technology journal articles per million people for 2005 (latest year of data) is 261, more than double that of Costa Rica (Figure 3-5), although over the five-year period (2001–2005) there was a decrease in journal articles. Cuba's performance in science and technology is nevertheless an asset that bodes well for Cuba's future prosperity if it can be leveraged in a market-oriented economy.

<sup>&</sup>lt;sup>38</sup> EIU, Cuba Country Profile 2007, p. 19

Figure 3-5 Scientific and Technology Journal Articles per Million People



## 4. Pro-Poor Growth Environment

Rapid growth is the most powerful and dependable instrument for poverty reduction, but the link from growth to poverty reduction is not mechanical. In some circumstances, income growth for poor households exceeds the overall rise in per capita income, while in other cases the poor are left far behind. A pro-poor growth environment stems from policies and institutions that improve opportunities and capabilities for the poor while reducing their vulnerabilities. Pro-poor growth is associated with investment in primary health and education, the creation of jobs and income opportunities, the development of skills, microfinance, agricultural development, and gender equality. This section focuses on four of these issues: health, education, employment and the workforce, and agricultural development.

#### **HEALTH**

The provision of basic health services is a major form of human capital investment and a significant determinant of growth and poverty reduction. Although health programs do not fall under the EGAT bureau, an understanding of health conditions can influence the design of economic growth interventions.

Life expectancy at birth is commonly regarded as the best overall indicator of a population's health conditions. In 2007 life expectancy in Cuba was 78.3 years. This is higher than the UMI-LAC median of 73.9 years but slightly lower than the life expectancy in Costa Rica of 78.8 years. Cuba's high life expectancy is directly attributed to its nationwide preventive health care system, which is one of the best-regarded in Latin America. The Cuban government has made public health care a top policy priority, as is reflected in government expenditures—7.1 percent of total GDP, almost double the UMI-LAC median of 3.5 percent (Figure 4-1).

In almost all health indicators Cuba performs better than Costa Rica and the Dominican Republic, and it outperforms the UMI-LAC average as well. The maternal mortality rate is impressively low; 45 per 100,000 live births (2005 data). Over a five-year time series, 99.9 percent of births were attended by skilled health professionals. This is not surprising in a country that has the highest ratio of doctors to population in the world: 628 doctors per 100,000 people.<sup>39</sup> Child immunization is also high, with 96 percent of children receiving vaccinations, slightly higher than the UMI and UMI-LAC medians.

<sup>&</sup>lt;sup>39</sup> EIU Country Profile 2007; UNDP, Human Development Report 2005.

CAS code: 31S6

Since the economic crisis in the 1990s, Cuba has worked at increasing its food supplies and improving nutritional standards. From 1996 to 2000 child malnutrition dropped by more than 50 percent. In 2004, 3.9 percent of children under five were considered to be malnourished—a much lower percentage than that reported by industrialized countries.

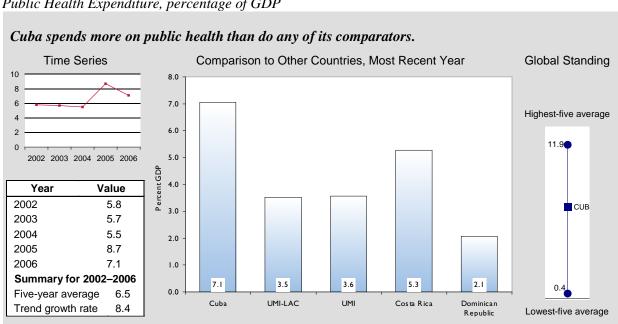


Figure 4-1
Public Health Expenditure, percentage of GDP

Cuba's access to improved sanitation is better than in comparator countries, with 98 percent of the population having access to adequate facilities for 2006, while Costa Rica had 96 percent and the Dominican Republic had 79 percent. At the same time, access to improved water sources is lower than in all comparators. In 2006, 91 percent of the Cuban population had access to improved water sources, while in Costa Rica 98 percent had access, and in the Dominican Republic 95 percent had access to improved water sources.

Overall, the country's superior performance on health indicators is a direct reflection of the importance that the government gives to providing high-quality public health care. The focus on preventive care has also contributed to the very low rate of HIV infection. HIV prevalence in Cuba is among the lowest in the world.

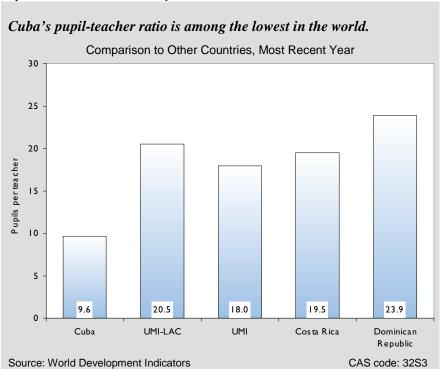
#### **EDUCATION**

Source: World Development Indicators

Cuba's education system is one of the best regarded in Latin America. Its net primary enrollment rate for 2007 was 98.4 percent for males and 98.0 percent for females. Both rates are higher than in all comparators: the UMI-LAC primary enrollment rates were 93.8 percent for males and 96 percent for females and the UMI rates were 92.1 percent for males and 92.7 percent for females. Cuba's primary completion rate averaged 93.6 percent in the five years to 2007, better than the rates of Costa Rica (91.4 percent) and the Dominican Republic (88.9 percent). And the pupil-teacher ratio of 9.6 to 1 (2007) is close to the global five lowest and is much better than

Costa Rica's 19.5 to 1 and the Dominican Republic's 23.9 (Figure 4-2). Such strong primary education indicators support Cuba's 100 percent youth literacy rate for 2007.

Figure 4-2
Pupil-teacher Ratio, Primary School



The Cuban government has made education a top priority as it has done with health care. In 2006, the government spent 3.0 percent of GDP on primary education, which is higher than all comparators, including Costa Rica, at 2.2 percent, and the Dominican Republic, at 1.2 percent. When educational expenditures are broken down per student as a percentage of GDP per capita, Cuba far exceeds the world's top performers, spending 51.1 percent on primary education, compared to Costa Rica's 17.0 percent. Public expenditure for secondary education is very high, at 60.1 percent of GDP per capita, compared to the average of the highest five countries in the world, which spend an average of 50.3 percent, and Cost Rica, which spends a comparatively low 17.1 percent.

Education in Cuba is free at all levels, and although the government gives great importance to tertiary education, spending 43.5 percent of per capita GDP per student while Costa Rica spends 35.0 percent, the rate of spending has been decreasing significantly—by 19.3 percent between 2003 and 2007 (Figure 4-3). The declining trend is expected to reverse as the country begins to focus more on retraining programs for workers and as a new university dedicated to science and technology is put into operation.

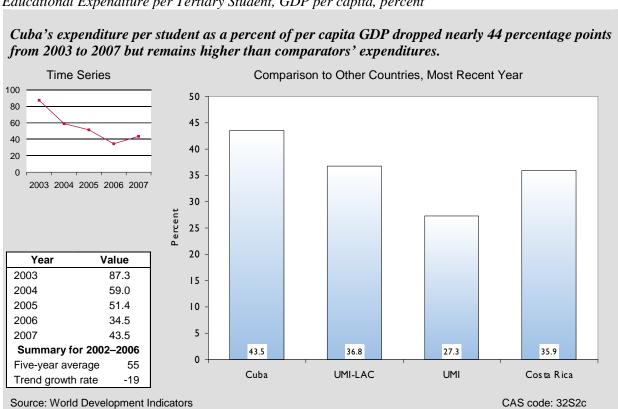


Figure 4-3

Educational Expenditure per Tertiary Student, GDP per capita, percent

#### **EMPLOYMENT AND WORKFORCE**

Cuba's labor force of 5.3 million and its workforce participation rate of 57 percent (2007) have stayed the same during 2003–2007. Such steadiness is expected in a country that has seen minimal population growth and whose main employer—the state—has remained constant for 25 years, although the share of the state in total employment slipped from 95 percent in 1990 to little less than 75 percent by the end of the decade.<sup>40</sup>

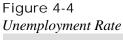
Official figures show an unemployment rate of 1.9 percent for 2006, which compares very favorably with the UMI-LAC median of 11.8 percent (Figure 4-4). Official figures disguise the real level of unemployment, however, because of the government's practice of keeping people employed until alternative employment is found. This has been a major drain on the fiscal accounts, as workers are retained on payroll even when production declines or ceases. ECLAC estimated that open unemployment and underemployment together totaled about 40 percent of the economically active population in the mid-1990s. With the economy's recovery, this estimate is likely to have fallen substantially, but in general the labor market is slack. <sup>41</sup>

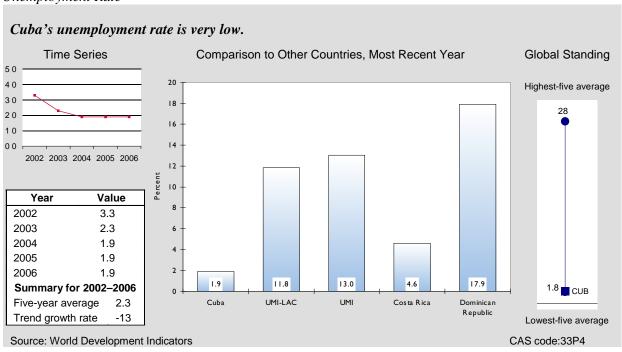
The economy thus faces the challenge of retraining workers "employed" in sluggish sectors, such as the sugar industry. In the meantime, the large informal economy occupies the country's excess

<sup>&</sup>lt;sup>40</sup> EIU Cuba Country Profile 2007, p. 17

<sup>&</sup>lt;sup>41</sup> Ibid, p. 19

labor, as is the case in many UMI-LAC countries. Reducing the real levels of workforce underutilization in Cuba could be accomplished with increased and sustained market-driven investment, which would also reduce the drain on public finances of paying unproductive workers.





#### **AGRICULTURE**

Agriculture's share in Cuba's economy is declining because of the demise of the sugar industry in the past 15 years, the lack of finance for agricultural inputs, and weak incentives for farmers. The sector is also producing inefficiently, accounting for just 5 percent of GDP (2002–2006) while employing about 20 percent of the workforce. Until 2002, sugar accounted for about one-half of the land under cultivation, <sup>42</sup> but reforms brought down the resources devoted to sugar production in favor of food production. <sup>43</sup> In the five years to 2006, agricultural value added experienced negative growth, with an average annual decline of 3.5 percent. The decline contrasts with positive growth in agriculture value added for all other comparators. Agricultural value added is 2.3 percent for the UMI-LAC median, 2.2 percent for UMI, 7.1 percent for Costa Rica for 2007, and 9.9 for the Dominican Republic for 2007 (Figure 4-5).

<sup>&</sup>lt;sup>42</sup> EIU, Cuba Country Profile 2007, pp. 27-34. The root cause of sugar's decline was the loss of preferential sugar export prices and cheap imported inputs under Soviet trading arrangements. At world market prices much of Cuba's sugar production is noncompetitive.

<sup>&</sup>lt;sup>43</sup> Ritter, Archibald, "The Cuban Economy of the Twenty-first Century: Recuperation or Relapse?" *The Cuban Economy*, p. 13.

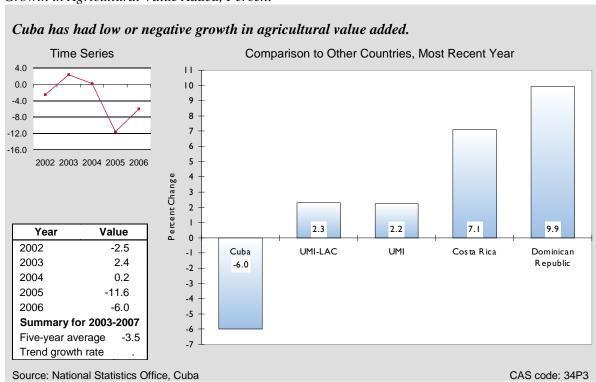


Figure 4-5
Growth in Agricultural Value Added, Percent

Besides persistent problems in the supply chain,<sup>44</sup> hurricanes and a severe drought during 2006–2008 resulted in poor harvests, affecting the sector's performance. Although cereal yields, at 2,881 kg per hectare (2007), exceed the UMI-LAC median of 3,096 kg, Costa Rica's and the Dominican Republic's superior performance (2,982 kg. and 4,310 kg) shows that there is still scope for improvement in productivity.

A series of reforms have been introduced to increase output and efficiency, among them the creation of cooperatives in the mid-1990s that replaced many large state holdings; the introduction of free agricultural markets, which opened opportunities to farmers to sell to the public directly at market prices; an influx of foreign investment and new sources of capital; and the establishment of urban farms by communities that boosted the supply of fresh vegetables and enabled price flexibility.<sup>45</sup>

Foreign investment in non-sugar agriculture has so far been restricted to the financing, management, and marketing of a handful of crops destined for export markets such as rum,

<sup>&</sup>lt;sup>44</sup> Delayed payments by state distributors have become a major disincentive to production and delivery of goods while depriving farmers of working capital to maintain yields (EIU Cuba Country Report, May 2007, 22–24).

<sup>&</sup>lt;sup>45</sup> Ibid, p. 35 and "Cuba: Evolución Económica durante 2006 y Perspectivas para 2007", CEPAL, November 2007, p. 9.

cigars, and fruit juices. The pace of inward investment has been inhibited not only by the threat of prosecution if the U.S. sanctions are violated, but also by state regulation and price controls.<sup>46</sup>

Agricultural performance remains important given the significant percentage of the workforce it employs. Furthermore, most nonstate jobs are in the agriculture sector, where traditional private small farmers have been joined by new farm cooperatives.<sup>47</sup> Progress in agricultural reforms that increase production would help the trade balance—Cuba's food import bill amounted to \$1.6 billion dollars in 2006.<sup>48</sup> In reform efforts, a number of fundamental constraints must be addressed. Chief among them are encouraging access to finance, foreign direct investment, improved irrigation and transportation infrastructure, and freer markets that can provide the right incentives to farmers.

<sup>&</sup>lt;sup>46</sup> Ibid, p. 36

<sup>&</sup>lt;sup>47</sup> EIU, Cuba Country Profile 2007, p. 18

<sup>&</sup>lt;sup>48</sup> CEPAL, Op. Cit., p. 9

# Appendix A. CAS Methodology

#### CRITERIA FOR SELECTING INDICATORS

The economic performance evaluation in this report is designed to balance the need for broad coverage and diagnostic value, on the one hand, and the requirement of brevity and clarity, on the other. The analysis covers 15 economic growth–related topics, and just over 100 variables. For the sake of brevity, the write-up in the text highlights issues for which the "dashboard lights" appear to be signaling problems, which suggest possible priorities for USAID intervention. The accompanying table provides a full list of indicators examined for this report. Appendix B contains the complete data set for Cuba, including data for the benchmark comparisons, and technical notes for every indicator.

For each topic, the analysis begins with a screening of *primary performance indicators*. These Level I indicators are selected to answer the question: Is the country performing well or not in this area? The set of primary indicators also includes descriptive variables such as per capita income, the poverty head count, and the age dependency rate.

When Level I indicators suggest weak performance, we review a limited set of *diagnostic* supporting indicators. These Level II indicators provide additional details, or shed light on why the primary indicators may be weak. For example, if economic growth is poor, one can examine data on investment and productivity as diagnostic indicators. If a country performs poorly on educational achievement, as measured by the youth literacy rate, one can examine determinants such as expenditure on primary education, and the pupil—teacher ratio.<sup>49</sup>

The indicators have been selected on the basis of the following criteria. Each must be accessible through USAID's Economic and Social Database or convenient public sources, particularly on the Internet. They should be available for a large number of countries, including most USAID client states, to support the benchmarking analysis. The data should be sufficiently timely to support an assessment of country performance that is suitable for strategic planning purposes. Data quality is another consideration. For example, subjective survey responses are used only when actual measurements are not available. Aside from a few descriptive variables, the indicators must also be useful for diagnostic purposes. Preference is given to measures that are widely used, such as Millennium Development Goal indicators, or evaluation data used by the Millennium Challenge Corporation. Finally, an effort has been made to minimize redundancy. If two indicators provide similar information, preference is given to one that is simplest to understand, or most widely used. For example, both the Gini coefficient and the share of income

<sup>&</sup>lt;sup>49</sup> Deeper analysis of the topic using more detailed data (Level III) is beyond the scope of this series.

A-2

accruing to the poorest 20 percent of households can be used to gauge income inequality. We use the income share because it is simpler and more sensitive to changes.

#### BENCHMARKING METHODOLOGY

Comparative benchmarking is the main tool used to evaluate each indicator. The analysis draws on several criteria, rather than a single mechanical rule. The starting point is a comparison of performance in Cuba relative to the average for countries in the same income group and region — in this case, upper-middle-income countries in Latin America and the Caribbean. For added perspective, three other comparisons are examined: (1) the global median for this income group; (2) respective values for two comparator countries; and (3) the average for the five best- and five worst-performing countries globally. Most comparisons are framed in terms of values for the latest year of data from available sources. Five-year trends are also taken into account when this information sheds light on the performance assessment. 51

For selected variables, a second source of benchmark values uses statistical regression analysis to establish an expected value for the indicator, controlling for income and regional effects. This approach has three advantages. First, the benchmark is customized to Cuba's specific level of income. Second, the comparison does not depend on the exact choice of reference group. Third, the methodology allows the quantification of the margin of error and establishment of a "normal band" for a country with Cuba's characteristics. An observed value falling outside this band on the side of poor performance signals a serious problem. 53

Finally, where relevant, Cuba's performance is weighed against absolute standards. For example, a corruption perception index below 3.0 is a sign of serious economic governance problems, regardless of the regional comparisons or regression result.

<sup>&</sup>lt;sup>50</sup> Income groups as defined by the World Bank for 2008. For this study, the average is defined in terms of the median so that value are not distorted by outliers.

<sup>&</sup>lt;sup>51</sup> The five-year trends are computed by fitting a log-linear regression line through the data points. The alternative of computing average growth from the end points produces aberrant results when one or both of those points diverges from the underlying trend.

 $<sup>^{52}</sup>$  This is a cross-sectional OLS regression using data for all developing countries. For any indicator, Y, the regression equation takes the form: Y (or ln Y, as relevant) = a + b \* ln PCI + c \* Region + error - where PCI is per capita income in PPP\$, and Region is a set of 0-1 dummy variables indicating the region in which each country is located. When estimates are obtained for the parameters a, b, and c, the predicted value for the Cuba is computed by plugging in Cuba-specific values for PCI and Region. Where applicable, the regression also controls for population size and petroleum exports (as a percentage of GDP).

<sup>&</sup>lt;sup>53</sup> This report uses a margin of error of 0.66 times the standard error of estimate (adjusted for heteroskedasticity, where appropriate). With this value, 25 percent of the observations should fall outside the normal range on the side of poor performance (and 25 percent on the side of good performance). Some regressions produce a very large standard error, giving a "normal band" that is too wide to provide a discerning test of good or bad performance.

CAS METHODOLOGY A-3

### **STANDARD CAS INDICATORS**

Indicator	Level	MDG, MCA, or EcGov <sup>a</sup>
Growth Performance		
Per capita GDP, in purchasing power parity Dollars	I	
Per capita GDP, in current US Dollars	I	
Real GDP Growth	I	
Growth of labor productivity	II	
Investment Productivity, incremental capital-output ratio (ICOR)	II	
Gross fixed investment, % GDP	II	
Gross fixed private investment, % GDP	II	
Poverty and Inequality		
Human poverty index (0 for excellent to 100 for poor)	I	
Income-share, poorest 20%	I	
Population living on less than \$1.25 PPP per day	I	MDG
Poverty Headcount, by national poverty line	I	MDG
PRSP Status	I	EcGov
Population below minimum dietary energy consumption	II	MDG
Economic Structure		
Employment or labor force structure	I	
Output structure	I	
Demography and Environment		
Adult literacy rate	I	
Youth dependency rate/ elderly dependency rate	I	
Environmental performance index (0 for poor to 100 for excellent)	I	
Population size and growth	I	
Urbanization rate	I	
Gender		
Girls primary completion rate, male, female	I	MCA
Gross enrollment rate, all levels, male, female	I	MDG
Life expectancy at birth, male, female	I	
Labor force participation rate, male, female	I	
Fiscal and Monetary Policy		
Govt. expenditure, % GDP	I	EcGov
Govt. revenue, excluding grants, % GDP	I	EcGov
Growth in the broad money supply	I	EcGov
Inflation rate	I	MCA
Overall govt. budget balance, including grants, % GDP	I	MCA, EcGov
Composition of govt. expenditure	II	
Composition of govt. revenue	II	
Composition of money supply growth	II	

A-4

Indicator	Level	MDG, MCA, or EcGov <sup>a</sup>
Business Environment		
Corruption perception index (1 for poor to 10 for excellent)	I	EcGov
Ease of doing business ranking	I	EcGov
Rule of law index (-2.5 for poor to 2.5 for excellent)	I	MCA, EcGov
Regulatory quality index (-2.5 for poor to 2.5 for excellent)	I	MCA, EcGov
Government effectiveness index (-2.5 for poor to 2.5 for excellent)	I	MCA, EcGov
Cost of starting a business	II	MCA, EcGov
Procedures to enforce a contract	II	EcGov
Procedures to register property	II	EcGov
Procedures to start a business	II	EcGov
Time to enforce a contract	II	EcGov
Time to register property	II	EcGov
Time to start a business	II	MCA, EcGov
Total tax payable by business	II	EcGov
Business costs of crime, violence, terrorism index (1 for poor to 7 for excellent)	II	
Senior manager time spent dealing with government regulations	II	EcGov
Financial Sector		
Domestic credit to private sector, % GDP	I	
Interest rate spread	I	
Money supply, % GDP	I	
Stock market capitalization rate, % of GDP	I	
Credit information index (0 for poor to 6 for excellent)	I	
Legal rights of borrowers and lenders index (0 for poor to 10 for excellent)	II	
Real Interest rate	II	
External Sector		
Aid, % GNI	I	
Current account balance, % GDP	I	
Debt service ratio, % exports	I	MDG
Export growth of goods and services	I	
Foreign direct investment, % GDP	I	
Gross international reserves, months of imports	I	EcGov
Gross Private capital inflows, % GDP	I	
Present value of debt, % GNI	I	
Remittance receipts, % exports	I	
Trade, % GDP	I	
Trade in services, % GDP	I	
Concentration of exports	II	
Inward FDI potential index	II	

CAS METHODOLOGY A-5

Indicator	Level	MDG, MCA, or EcGov <sup>a</sup>
Net barter terms of trade	II	
Real effective exchange rate (REER)	II	EcGov
Structure of merchandise exports	II	
Trade policy index	II	MCA, EcGov
Ease of trading across boarders ranking	II	EcGov
Economic Infrastructure		
Internet users per 1,000 people	I	MDG
Overall infrastructure quality index (1 for poor to 7 for excellent)	I	EcGov
Telephone density, fixed line and mobile	I	MDG
Quality of infrastructure—railroads, ports, air transport, and electricity	II	
Roads paved, % total roads	II	
Science and Technology		
Expenditure for R&D, % GDP	I	
FDI and technology transfer index (1 for poor to 7 for excellent)	I	
Availability of scientists and engineers index (1 for poor to 7 for excellent)	I	
Science & technology journal articles per million people	I	
IPR protection index (1 for poor to 7 for excellent)	I	
Health		
HIV prevalence	I	
Life expectancy at birth	I	
Maternal mortality rate	I	MDG
Access to improved sanitation	II	MDG
Access to improved water source	II	MDG
Births attended by skilled health personnel	II	MDG
Child immunization rate	II	MCA
Prevalence of child malnutrition (weight for age)	П	
Public health expenditure, % GDP	II	MCA, EcGov
Education		
Net primary enrollment rate -male, female, total	I	MDG
Primary completion rate, total	I	MDG
Youth literacy rate- male, female, total	I	
Net secondary enrollment rate	I	
Gross tertiary enrollment rate	I	
Education expenditure, primary, % GDP	II	MCA, EcGov
Expenditure per student, % GDP per capita—primary, secondary, and tertiary	II	EcGov
Pupil-teacher ratio, primary school	II	

A-6

Indicator	Level	MDG, MCA, or EcGov <sup>a</sup>
Employment and Workforce		
Labor force participation rate, total	I	
Rigidity of employment index (0 for minimum rigidity to 100 for maximum)	I	EcGov
Size and growth of the labor force	I	
Unemployment rate	I	
Economically active children, % children ages 7-14	I	
Firing costs, weeks of wages	II	EcGov
Agriculture		
Agriculture value added per worker	I	
Cereal yield	I	
Growth in agricultural value-added	I	
Agricultural policy costs index (1 for poor to 7 for excellent)	II	EcGov
Crop production index	II	
Livestock production index	II	
Agricultural export growth	II	

<sup>&</sup>lt;sup>a</sup> Level I = primary performance indicators, Level II = supporting diagnostic indicators

EcGov—Major indicators of economic governance, which is defined in USAID's Strategic Management Interim Guidance to include "microeconomic and macroeconomic policy and institutional frameworks and operations for economic stability, efficiency, and growth." The term therefore encompasses indicators of fiscal and monetary management, trade and exchange rate policy, legal and regulatory systems affecting the business environment, infrastructure quality, and budget allocations.

b MDG—Millennium Development Goal indicator MCA—Millennium Challenge Account indicator

# Appendix B. Data Supplement

				Growth Pe	erformance			
	Statistical Capacity Indicator, 0 (Doesn't meet criteria) - 100 (Meets all criteria)	Per capita GDP (PPP), U.S. Dollars (PPP)	Per capita GDP, Current U.S. Dollars	Real GDP Growth, Percent change	Growth of Labor Productivity, Percent change	growth	Gross Fixed Investment, Percent GDP	Gross Fixed Private Investment, Percent GDP
Indicator Number	11P0	11P1	11P2	11P3	11S1	11S2	11S3	11S4
Cuba Data								
Latest Year (T)		2007	2007	2008	2006	2007	2007	2006
Value Year T		11,150	4,641	4.3	12.0	1.2	13.1	1.4
Value Year T-1			4,986	7.3	11.2	1.8	12.0	3.3
Value Year T-2			4,100	12.1	4.2	2.3	10.3	2.6
Value Year T-3			3,651	11.2	3.6		9.5	2.5
Value Year T-4			3,440	5.8	1.5		9.1	3.2
Average Value, 5 year			4,164	8	6.5		10.8	2.6
Growth Trend			9.1	-10	52.8		9.6	-14.0
Benchmark Data								
Regression Benchmark								
Lower Bound								
Upper Bound								
Latest Year Costa Rica	2008	2008	2008	2008	2005	2007	2007	2001
Costa Rica Value Latest Year	73	10,752	6,580	2.9	3.3	3.0	21.8	16.1
Latest Year Dominican Republic	2008	2005	2005	2008	2005	2007	2007	2000
DR Value Latest Year	69	6,563	3,932	4.8	7.2	3.8	21.9	20.2
UMI-LAC	72.3	7,472	4,156	4.5	1.2	7.9	19.9	
UMI	73.0	8,757	4,314	5.6	0.9	4.4	21.0	19.5
High Five Avg.	91.1	50,231	47,058	14.3	11.5	123.3	51.4	
Low Five Avg.	24.6	472	160	0.3	-8.7	-72.1	9.5	

			Poverty and	d Inequality		
	Human Poverty Index, 0 (no deprivation) - 100 (high deprivation)	Income Share, Poorest 20%, Percent	Population Living on Less Than \$1.25 PPP per Day, Percent	Poverty Headcount, National Poverty Line, Percent	PRSP Status	Population Below Minimum Dietary Energy Consumption, Percent
Indicator Number	12P1	12P2	12P3	12P4	12P5	12S1
Cuba Data						
Latest Year (T)	2006					2003
Value Year T	4.7					< 2.5
Value Year T-1	4.7					2.5
Value Year T-2	4.7					
Value Year T-3	4.8					
Value Year T-4	5.0					
Average Value, 5 year	4.8					
Growth Trend	-1.4					
Benchmark Data						
Regression Benchmark					,	
Lower Bound						
Upper Bound						
Latest Year Costa Rica	2006	2005	2005	2004		2002
Costa Rica Value Latest Year	3.8	4.2	2.4	23.9		4.0
Latest Year Dominican Republic	2006	2005	2005	2004		2002
DR Value Latest Year	9.6	4.0	5.0	42.2		27.0
UMI-LAC	6.8					7.0
UMI	7.5					5.0
High Five Avg.	56.6	10.0	46.5	55.1		67.0
Low Five Avg.	2.5	2.7	2.0	15.2		2.5

			Economic	Structure		
	Labor Force Structure (Employment in agriculture), Percent	Labor Force Structure (Employment in industry), Percent	Labor Force Structure (Employment in services), Percent	•	Output structure (Industry, value added), Percent GDP	Output structure (Services, etc., value added), Percent GDP
Indicator Number	13P1a	13P1b	13P1c	13P2a	13P2b	13P2c
Cuba Data						
Latest Year (T)	2004	2004	2004	2006	2006	2006
Value Year T	21.2	19.4	59.4	3.6	19.1	77.3
Value Year T-1	21.7	20.2	58.1	4.3	19.1	76.6
Value Year T-2	21.7	20.2	58.1	5.5	20.3	74.2
Value Year T-3	21.7	20.2	58.1	5.8	20.6	73.6
Value Year T-4	27.1	19.1	53.8	5.9	21.5	72.7
Average Value, 5 year	22.7	19.8	57.5	5.0	20.1	74.9
Growth Trend	-4.9	0.3	2.0	-12.7	-3.1	1.6
Benchmark Data						
Regression Benchmark						
Lower Bound						
Upper Bound						
Latest Year Costa Rica	2005	2005	2005	2005	2005	2005
Costa Rica Value Latest Year	15.2	21.5	62.8	8.7	29.8	61.5
Latest Year Dominican Republic	2005	2005	2005	2005	2005	2005
DR Value Latest Year	14.6	22.3	63.1	12.4	25.5	62.1
UMI-LAC	15.5	21.0	62.1	11.3	29.7	56.6
UMI	16.3	23.9	58.3	15.1	31.4	52.9
High Five Avg.	67.9	38.9	80.4	63.6	67.6	80.6
Low Five Avg.	0.2	9.1	24.2	2.2	11.6	19.7

		Demography and Environment									
	Adult Literacy Rate, Percent	Youth Dependency Rate, Ratio Youth : Working Age Population	Elderly Dependency Rate, Ratio Elderly : Working Age Population	Environmental Performance Index, 0 (Very poor performance) - 100 (Very good performance)	Population Size, Million	Population Growth, Annual percent change	Population Living in Urban Areas, Percent	Resource Depletion, Percent GNI			
Indicator Number	14P1	14P2a	14P2b	14P3	14P4a	14P4b	14P5	14P6			
Cuba Data											
Latest Year (T)	2007	2007	2007	2008	2007	2007	2007				
Value Year T	99.8	26.4	16.7	80.7	11.3	-0.1	75.6				
Value Year T-1	99.8	27.1	16.4		11.3	0.1	75.6				
Value Year T-2		27.6	16.1	75.3	11.3	0.1	75.6				
Value Year T-3		28.1	15.9		11.2	0.2	75.6				
Value Year T-4		28.5	15.8		11.2	0.2	75.6				
Average Value, 5 year		27.6	16.2		11.3	0.1	75.6				
Growth Trend		-1.9	1.4		0.1		0.0				
Benchmark Data											
Regression Benchmark											
Lower Bound											
Upper Bound											
Latest Year Costa Rica	2007	2007	2007	2008	2007	2007	2007	2007			
Costa Rica Value Latest Year	95.9	40.8	9.0	90.5	4.5	1.4	62.7	0.1			
Latest Year Dominican Republic	2007	2007	2007	2008	2007	2007	2007	2007			
DR Value Latest Year	89.1	53.8	9.4	83.0	9.7	1.1	68.3	3.5			
UMI-LAC	95.2	44.7	10.1	79.7	3.3	1.0	73.2	1.5			
UMI	95.6	41.9	11.3	78.1	4.1	1.0	67.9	1.7			
High Five Avg.	99.8	97.7	28.7	89.1	626.4	5.0	100.0	65.9			
Low Five Avg.	36.2	19.9	2.8	37.4	0.0	-0.9	12.4				

				Ger	nder			
Indicator Number	Primary Completion Rate, Male, Percent 15P1a	Primary Completion Rate, Female, Percent 15P1b	Gross Enrollment Ratio, All Levels of Education, Male, Percent 15P2a	Gross Enrollment Ratio, All Levels of Education, Female, Percent 15P2b	Life Expectancy, Male, Years 15P3a	Life Expectancy, Female, Years 15P3b	Labor Force Participation Rate, Male, Percent 15P4a	Labor Force Participation Rate, Female, Percent 15P4b
	15114	15P10	15P24	15P2D	15234	15250	15P44	15P4D
Cuba Data Latest Year (T)	2007	2007	2007	2007	2006	2006	2007	2007
Value Year T	93.4	93.4	91.5	110.7	76.0	80.0	69.3	44.7
Value Year T-1	91.9	91.2	88.6	101.2	75.8	79.8	69.6	44.9
Value Year T-2	93.2	92.0	82.8	92.4	75.8	79.5	70.1	44.2
Value Year T-3	93.1	92.9	81.2	89.7			70.4	43.9
Value Year T-4	96.9	97.5	79.7	81.9			70.8	44.1
Average Value, 5 year	93.7	93.4	84.8	95.2			70.0	44.4
Growth Trend	-0.9	-1.0	3.6	7.2			-0.5	0.5
Benchmark Data								
Regression Benchmark								
Lower Bound								
Upper Bound								
Latest Year Costa Rica	2007	2007	2005	2005	2006	2006	2007	2007
Costa Rica Value Latest Year	89.8	93.0	71.6	74.4	76.3	81.1	79.1	43.1
Latest Year Dominican Republic	2007	2007	2004	2004	2006	2006	2007	2007
DR Value Latest Year	86.6	91.3	70.4	76.7	68.8	75.1	72.8	56.5
UMI-LAC	95.0	98.1	76.0	78.7	71.3	77.6	79.0	48.5
UMI	95.9	96.8	77.1	79.0	69.5	76.1	74.4	47.1
High Five Avg.			103.0	109.9	78.8	84.8	91.3	85.9
Low Five Avg.			31.6	22.3	39.3	40.0	56.7	17.8

					Fis	cal and Mone	etary Policy				
Indicator Number	Government Expenditure, Percent GDP	Government Revenue, excluding grants, Percent GDP 21P2	Money Supply Growth, Percent change 21P3		Overall Budget Balance, Including Grants, Percent GDP 21P5	Composition of Government Expenditure (Wages and salaries), Percent 21S1a	Composition of Government Expenditure (Goods and services), Percent 21S1b	Composition of Government Expenditure (Interest payments), Percent 21S1c	Composition of Government Expenditure (Subsidies and other current transfers), Percent 21S1d	Composition of Government Expenditure (Capital Expenditure), Percent 21S1e	Composition of Government Expenditure (Other Expenditure), Percent 2151f
	21P1	ZIPZ	21P3	21P4	2125	21518	21510	21310	21510	2151e	21511
Cuba Data	2007	2007	2007	2000	2007						
Latest Year (T)	2007	2007	2007	2008	2007						
Value Year T	0.6	0.7	0.1	0.8	-3.8						
Value Year T-1	0.6	0.6	0.0	0.0	-4.4						
Value Year T-2	0.7	0.7	0.3	0.1	-4.2						
Value Year T-3	0.6	0.6	0.1	0.0	-3.3						
Value Year T-4	0.7	0.7		0.0	-3.2						
Average Value, 5 year	0.6	0.7		0.2	-3.8						
Growth Trend	0.0				-6.3						
Benchmark Data											
Regression Benchmark											
Lower Bound											
Upper Bound											
Latest Year Costa Rica		2007	2007	2008	2007						
Costa Rica Value Latest Year		24.7	18.5	13.4	1.7						
Latest Year Dominican Republic		2006	2007	2008	2006						
DR Value Latest Year		18.1	22.1	10.6	-1.8						
UMI-LAC			12.7	5.8							
UMI		27.9	17.8	6.8	-0.8						
High Five Avg.		46.1	4,490.3	26.2	8.1						
Low Five Avg.		8.6	-1.1	1.4	-8.2						

<sup>\*</sup> global high excluding Zimbabwe

					Fiscal an	d Monetary	/ Policy (con	t'd)			
	Composition of Government Revenue (Taxes on income, profits and capital gains), Percent	on goods and services), Percent	•	Composition of Government Revenue (Social contributions), Percent	Composition of Government Revenue (Other taxes), Percent	Composition of Government Revenue (Grants and other revenue), Percent	Composition of Money Supply Growth (Domestic credit to the public sector), Percent	Composition of Money Supply Growth (Domestic credit to the private sector), Percent	Composition of Money Supply Growth (Domestic credit to non- financial public enterprises), Percent	Composition of Money Supply Growth (Net foreign assets, reserves), Percent	Growth (Other items net), Percent
Indicator Number	21S2a	21S2b	21S2c	21S2d	21S2e	21S2f	21S3a	21S3b	21S3c	21S3d	21S3e
Cuba Data											
Latest Year (T)	·										·
Value Year T											
Value Year T-1											
Value Year T-2											
Value Year T-3											
Value Year T-4											
Average Value, 5 year											
Growth Trend											
Benchmark Data											
Regression Benchmark											
Lower Bound											
Upper Bound		٠									
Latest Year Costa Rica	2007	2007	2007	2007	2007	2007					
Costa Rica Value Latest Year	15.8	38.1	5.1	30.0	2.5	8.6					
Latest Year Dominican Republic	2006	2006	2006	2006	2006	2006					
DR Value Latest Year	19.8	52.6	13.6	1.3	3.7	9.0					
UMI-LAC											
UMI	14.1	37.5	4.8	24.1	1.8	14.2					
High Five Avg.	54.0	64.4	40.9	46.9	18.8	78.3					
Low Five Avg.	1.9	4.8	-1.6	0.4	0.0	3.9					

	Business Environment													
	Control of Corruption Index, - 2.5 (Very poor performance) to +2.5 (Excellent performance)	Business Index, Index Rank (1 - 181)	(Excellent performance)	Index, -2.5 (Very poor performance) to +2.5 (Excellent performance)	(Excellent performance)	Cost of Starting a Business % GNI per Capita, Percent GNI per Capita	Procedures	Procedures to Register Property, Procedures	Procedures to Start a Business, Procedures	Time to Enforce a Contract, Days				
Indicator Number	22P1	22P2	22P3	22P4	22P5	22S1	22S2	22S3	22\$4	22S5				
Cuba Data														
Latest Year (T)	2007		2007	2007	2007									
Value Year T	-0.21		-0.79	-1.63	-0.61									
Value Year T-1	-0.26		-0.79	-1.59	-0.64									
Value Year T-2	-0.26		-1.13	-1.68	-0.84									
Value Year T-3	-0.31		-1.10	-1.62	-0.65									
Value Year T-4	-0.30		-1.17	-1.32	-0.59									
Average Value, 5 year	-0.27		-1.00	-1.57	-0.67									
Growth Trend	8.8		11.1	-4.1	-0.6									
Benchmark Data														
Regression Benchmark														
Lower Bound														
Upper Bound														
Latest Year Costa Rica	2007	2009	2007	2007	2007	2009	2009	2009	2009	2009				
Costa Rica Value Latest Year	0.39	117	0.44	0.49	0.39	20.5	40	6	12	877				
Latest Year Dominican Republic	2007	2009	2007	2007	2007	2009	2009	2009	2009	2009				
DR Value Latest Year	-0.65	97	-0.55	-0.15	-0.46	19.4	34	7	8	460				
UMI-LAC	-0.18	79	-0.08	0.30	0.12	25.4	42.0	6.0	8.5	658.0				
UMI	-0.12	75	-0.08	0.30	0.12	17.5	37.0	6.0	8.0	600.0				
High Five Avg.	2.4	179	2.0	1.8	2.2	574.0	53.7	13.9	18.5	1,611.6				
Low Five Avg.	-1.6	3	-1.9	-2.3	-1.9	0.5	22.9	1.6	2.4	182.6				

		Business Environment (cont'd)									
	Time to Register Property, Days	Time to Start a Business, Days	Total Tax Payable by Business, Percent operating profit	Business Costs of Crime and Violence, 1 (Significant costs) - 7 (No significant costs)	Senior Manager Time Spent Dealing with Government Regulations, Percent						
Indicator Number	22S6	22S7	22S8	22S9	22S10						
Cuba Data											
Latest Year (T)											
Value Year T											
Value Year T-1											
Value Year T-2											
Value Year T-3											
Value Year T-4											
Average Value, 5 year											
Growth Trend											
Benchmark Data											
Regression Benchmark											
Lower Bound											
Upper Bound											
Latest Year Costa Rica	2009	2009	2009	2008	2005						
Costa Rica Value Latest Year	21	60	55.7	3.8	9.6						
Latest Year Dominican Republic	2009	2009	2009	2008	2005						
DR Value Latest Year	60	19	35.7	3.3	8.8						
UMI-LAC	47.0	29.2	50.8	3.4							
UMI	51.5	29.3	41.5	4.3							
High Five Avg.	485.8	287.7	243.1	6.6	20.0						
Low Five Avg.	2.1	4.3	11.5	2.1	2.5						

				Financia	al Sector			
	Percent GDP	Interest Rate Spread, Percent	Percent GDP	Stock Market Capitalization Rate, Percent GDP	Credit Information Index, 0 (Poor) - 6 (Excellent)	Legal Rights of Borrowers and Lenders, 0 (Very poor performance) - 10 (Excellent)	Real Interest Rate, Percent	Number of Microfinance Borrowers, Borrowers
Indicator Number	23P1	23P2	23P3	23P4	23P5	23S1	23S2	23S3
Cuba Data								
Latest Year (T)			2007					
Value Year T			40.0					
Value Year T-1			40.0					
Value Year T-2			50.0					
Value Year T-3			40.0					
Value Year T-4			40.0					
Average Value, 5 year			42.0					
Growth Trend			0.0					
Benchmark Data								
Regression Benchmark								
Lower Bound								
Upper Bound								
Latest Year Costa Rica	2007	2007	2007	2007	2009	2009	2007	
Costa Rica Value Latest Year	44.3	6.4	25.0	7.7	5	5	3.2	
Latest Year Dominican Republic	2007	2007	2007		2009	2009	2007	
DR Value Latest Year	33.4	8.9	24.8		6	3	9.6	
UMI-LAC	46.3	6.5	50.7	31.9	0.0	6.2	6.2	
UMI	41.6	6.2	44.0	30.0	4.0	6.0	3.7	
High Five Avg.	196.0	52.6	200.2	219.4	6.0	9.8	35.4	
Low Five Avg.	3.0	1.6	8.4	0.5		0.4	-20.7	

					E	xternal Secto	or				
Indicator Number	External Aid, Percent GNI 24P1	Current Account Balance, Percent GDP 24P2	Debt Service ratio, Percent Exports 24P3	Exports Growth, Goods and Services, Percent change 24P4	Foreign Direct	Gross International	Gross Private Capital Inflows, Percent GDP 24P7	Present Value of Debt, Percent GNI 24P8	Remittance Receipts, Percent Exports 24P9	Total Trade, Percent GDP 24P10	Trade in Services, Percent GDP 24P11
Cuba Data	2411	2472	2453	2464	2473	2460	2417	2410	241 7	24110	24611
Latest Year (T)		2007	2007	2005						2007	2007
Value Year T		0.3	10.8	45.9						33.5	12.7
Value Year T-1			10.4	19.0						27.6	10.2
Value Year T-2		0.0	14.7	5.8						25.2	9.4
Value Year T-3		0.3	12.9	-3.8						24.8	8.5
Value Year T-4		0.1	14.1	-3.6						28.0	9.5
Average Value, 5 year			12.6	12.7						27.8	10.1
Growth Trend			-7.5							4.7	7.6
Benchmark Data											
Regression Benchmark											
Lower Bound											
Upper Bound											
Latest Year Costa Rica	2007	2007	2007	2007	2007	2007	2005	2007	2007	2007	2007
Costa Rica Value Latest Year	0.2	-6.0	2.6	10.0	7.2	3.2	4.3	35.3	5.0	102.4	20.7
Latest Year Dominican Republic	2007	2007	2007	2007	2007	2007	2005	2007	2007		2007
DR Value Latest Year	0.4	-5.6	8.5	7.6		1.7	4.6	33.1	28.6		
UMI-LAC	0.2	-5.1	11.7	3.1	6.8	2.9		57.7	4.0		29.7
UMI	0.4	-5.6	6.8	5.6		3.4	4.6	60.5	5.2	102.3	20.3
High Five Avg.	47.0	29.8	38.2		87.7	16.8	197.8	370.8	185.4		125.3
Low Five Avg.	0.0	-27.4	0.7		-2.4	0.3	-4.2	5.2	0.1	30.1	4.9

					Externa	I Sector (Co	nt'd)				
	Concentration of Exports, Percent	Inward FDI Potential Index, 0 (Very poor performance) to 1 (Excellent performance)	100	Real Effective Exchange Rate (REER), Index: 2000 = 100	Structure of Merchandise Exports (Agricultural raw materials exports), Percent	Structure of Merchandise Exports (Fuel exports), Percent	Structure of Merchandise Exports (Manufactures exports), Percent	Structure of Merchandise Exports (Ores and metals exports), Percent	Structure of Merchandise Exports (Food exports), Percent	Trade Policy Index, 0 (Very poor) - 100 (Excellent)	Ease of Trading Across Borders Ranking, Index Rank (1 - 181)
Indicator Number	24S1	24S2	24S3	24S4	24S5a	24S5b	24S5c	24S5d	24S5e	24S6	24S7
Cuba Data	2004		2007		2024	2007	2027	2007	222/	2000	
Latest Year (T)	2006		2007		2006	2006	2006	2006	2006	2009	
Value Year T	53.7		143.5		0.1	0.0	23.8	2.1	10.5	64.4	
Value Year T-1	53.8		115.5		0.1	0.8	26.8	48.8	23.3	60.8	
Value Year T-2	65.7		108.0		0.1	0.5	21.5	47.7	30.2	60.2	
Value Year T-3	65.2		109.5		0.2		19.0	39.1	40.1	60	
Value Year T-4	68.7		95.5		0.2	0.4	13.4	32.7	53.3	61	
Average Value, 5 year	61.4		114.4		0.2	0.6	20.9		31.5	61.4	
Growth Trend	-6.8		8.7		-12.4	-151.2	14.9	-53.1	-37.8	1.1	
Benchmark Data											
Regression Benchmark											
Lower Bound											·
Upper Bound											
Latest Year Costa Rica	2006	2006	2007	2007	2007	2007	2007	2007	2007	2009	2009
Costa Rica Value Latest Year	32.6	0.2	84.9	95.3	2.2		62.5	1.5	30.0	81.8	94
Latest Year Dominican Republic	2006	2006	2007	2007	2001	2001	2001	2001	2001	2009	2009
DR Value Latest Year	20.6	0.2	94.7	100.9	1.6		34.2	1.7	40.8	73.0	32
UMI-LAC	51.7	0.2	100.9	90.8	0.7	1.0	39.6	1.8	40.1	72.0	90
UMI	38.2	0.2		95.9	1.3		52.4	3.7	16.1	75.2	92.0
High Five Avg.	97.5	0.5	120.7	144.6	44.3		94.9		95.0	87.9	178.8
Low Five Avg.	7.3	0.1	70.2	59.1	0.0		0.9	0.0	0.4	15.3	3.0

				Econ	omic Infrastru	ucture			
	Internet Users, Users per 100 people		Mobile, Telephones per 100 people	Overall Infrastructure Quality, 1 (Poor) - 7 (Excellent)	1 (Poor) - 7 (Excellent)	Index, 1 (Poor) - 7 (Excellent)	1 (Poor) - 7 (Excellent)	Quality of Infrastructure - Electricity Supply Index, 1 (Poor) - 7 (Excellent)	Roads, Paved, Percent
Indicator Number	25P1	25P2	25P3	25P4	25S1a	25S1b	25S1c	25S1d	25S2
Cuba Data									
Latest Year (T)	2007		2007						
Value Year T	11.6		11.0						
Value Year T-1	2.1		9.9						
Value Year T-2	1.7		8.8						
Value Year T-3	1.3		7.5						
Value Year T-4	0.9		6.8						
Average Value, 5 year	3.5		8.8						
Growth Trend	56.5		12.5						
Benchmark Data									
Regression Benchmark									
Lower Bound									
Upper Bound									
Latest Year Costa Rica	2007	2007	2007	2008	2008	2008	2008	2008	2006
Costa Rica Value Latest Year	33.6	2.4	66.0	2.6	4.9	2.3	1.2	5.5	25.2
Latest Year Dominican Republic	2007		2007	2008	2008	2008	2008	2008	
DR Value Latest Year	17.2		66.0	3.3	5.6	3.8	1.3	1.5	
UMI-LAC	20.0	2.6	40.9	3.3	4.4	3.3	1.7	4.6	
UMI	25.0	2.5	93.7	3.4	4.2	3.4	2.4	4.4	71.6
High Five Avg.	82.6	4.2	176.6	6.6	6.7	6.6	6.5	6.8	100.0
Low Five Avg.	0.2	1.5	3.4	1.8	2.5	1.6	1.1	1.6	9.4

		Science and	Technology	
	FDI Technology Transfer Index, 1 (Poor) - 7 (Excellent)	Availability of Scientists and Engineers, 1 (Non existent) - 7 (Widely available)	Scientific and Technology Journal Articles, Articles per Million people	IPR Protection, 1 (Poorly enforced) - 7 (Among the best)
Indicator Number	26P1	26P2	26P3	26P4
Cuba Data				
Latest Year (T)			2005	
Value Year T			261	
Value Year T-1			254	
Value Year T-2			268	
Value Year T-3			206	
Value Year T-4			299	
Average Value, 5 year			257.6	
Growth Trend			-0.6	
Benchmark Data				
Regression Benchmark				
Lower Bound				
Upper Bound				
Latest Year Costa Rica	2008	2008	2005	2008
Costa Rica Value Latest Year	5.7	4.5	105	3.5
Latest Year Dominican Republic	2008	2008		2008
DR Value Latest Year	5.1	3.5		3.4
UMI-LAC	5.1	4.2		3.5
UMI	4.9	4.3	573.3	3.4
High Five Avg.	6.1	5.9	75,711.9	6.2
Low Five Avg.	3.6	2.7	55.1	2.0

					Health				
	HIV Prevalence, Percent	Life Expectancy at Birth, Years	Maternal Mortality Rate, Deaths per 100,000 live births	Access to Improved Sanitation, Percent	Access to Improved Water Source, Percent	Births Attended by Skilled Health Personnel, Percent	Rate, Percent	for Age, Percent	Public Health Expenditure, Percent GDP
Indicator Number	31P1	31P2	31P3	31S1	31S2	31S3	31S4	31S5	31S6
Cuba Data									
Latest Year (T)	2007	2007	2005	2006	2006	2007	2007	2000	2006
Value Year T	0.1	78.3	45	98.0	91.0	99.9	96.0	3.9	7.1
Value Year T-1	0.1	78.0					92.5		8.7
Value Year T-2	0.1	77.8				99.9	98.5		5.5
Value Year T-3	0.1	76.9				99.9	93.5		5.7
Value Year T-4	0.1	77.0		98.0	91.0		85.0	9.3	5.8
Average Value, 5 year	0.1	77.6					93.1		6.5
Growth Trend	0.0	0.5					2.3		8.4
Benchmark Data									
Regression Benchmark									
Lower Bound									
Upper Bound									
Latest Year Costa Rica	2007	2007	2005	2006	2006	2004	2007		2006
Costa Rica Value Latest Year	0.4	78.8	30	96.0	98.0	98.5	89.5		5.3
Latest Year Dominican Republic	2007	2007	2005	2006	2006	2007	2007	2002	2006
DR Value Latest Year	1.1	72.3	150	79.0	95.0	97.8	87.5	4.2	2.1
UMI-LAC	0.5	73.9	58.5	92.5	95.0	99.5	95.7		3.5
UMI	0.5	72.5	52.0	91.0	97.0	99.7	95.7		3.6
High Five Avg.	21.8	81.6	1,720.0	100.0	100.0		99.0		11.9
Low Five Avg.	0.1	41.8	2.6	8.4	39.0		37.7		0.4

					Educa	tion				
Indicator Number	Net Primary Enrollment Rate, Total, Percent 32P1a	Net Primary Enrollment Rate, Female, Percent 32P1b	Net Primary Enrollment Rate, Male, Percent 32P1c	Primary Completion Rate, Total, Percent 32P2	Youth Literacy Rate, Total, Percent 32P3a	Youth Literacy Rate, Male, Percent 32P3b	Youth Literacy Rate, Female, Percent 32P3c	Net Secondary Enrollment Rate, Total, Percent 32P4	Gross Tertiary Enrollment Rate, Total, Percent 32P5	Expenditure on Primary Education, Percent GDP 32S1
Cuba Data	52. Tu	52. 12	<b>52.</b> 15	<b>01.</b> 1	02. 0u	02. 00	52. 55	<u> </u>	02. 0	020.
Latest Year (T)	2007	2007	2007	2007	2007	2007	2007	2007	2007	2006
Value Year T	98.2	98.0	98.4	93.4	100.0	100.0	100.0	85.6	109.0	3.0
Value Year T-1	96.6	96.9	96.3	91.6				87.0	87.9	3.0
Value Year T-2	96.5	96.2	96.8	92.6				86.4	62.7	3.0
Value Year T-3	97.6	96.9	98.2	93.0				85.0	54.6	3.0
Value Year T-4	98.4	97.8	98.9	97.2				84.3	33.6	3.0
Average Value, 5 year	97.4	97.2	97.7	93.6				85.7	69.6	3.0
Growth Trend	-0.1	0.0	-0.3	-0.9				0.5	28.3	-0.5
Benchmark Data										
Regression Benchmark										
Lower Bound										
Upper Bound										
Latest Year Costa Rica				2007	2007	2007	2007	2007	2005	2006
Costa Rica Value Latest Year				91.4	98.0	97.6	98.5	64.2	25.3	2.2
Latest Year Dominican Republic	2007	2007	2007	2007	2007	2007	2007	2007	2004	2006
DR Value Latest Year	82.4	82.6	82.1	88.9	96.0	95.0	97.0	61.5	34.5	1.2
UMI-LAC	94.6	96.0	93.8	95.3	98.0	98.0	98.5	75.4	25.3	1.7
UMI	93.2	92.7	92.1	96.5	98.3	98.3	98.5	78.1	37.2	1.7
High Five Avg.	99.4	99.2	99.4		99.9	99.9	99.9	97.1	79.6	6.5
Low Five Avg.	41.4	36.0	46.7		48.0	56.3	39.5	7.7	0.6	0.2

		Educatio	n (cont'd)	
	Educational	Educational	Educational	
	Expenditure per Student, Primary, Percent, GDP per capita	Expenditure per Student, Secondary, Percent, GDP per capita	Expenditure per Student, Tertiary, Percent, GDP per capita	Pupil-teacher Ratio, Primary School, Pupils per Teacher
Indicator Number	32S2a	32S2b	32S2c	32S3
Cuba Data				
Latest Year (T)	2007	2007	2007	2007
Value Year T	51.1	60.1	43.5	9.6
Value Year T-1	33.8	43.0	34.5	10.0
Value Year T-2	37.3	44.2	51.4	10.3
Value Year T-3	37.7	41.1	59.0	10.2
Value Year T-4	36.6	40.0	87.3	10.7
Average Value, 5 year	39.3	45.7	55.2	10.2
Growth Trend	5.6	8.6	-19.3	-2.3
Benchmark Data				
Regression Benchmark				
Lower Bound				
Upper Bound				
Latest Year Costa Rica	2004	2004	2004	2007
Costa Rica Value Latest Year	17.0	17.1	35.9	19.5
Latest Year Dominican Republic	2007	2007		2007
DR Value Latest Year	10.3	4.7		23.9
UMI-LAC	13.5	16.9	36.8	20.5
UMI	14.6	17.8	27.3	18.0
High Five Avg.	28.6	50.3	519.9	63.3
Low Five Avg.	6.5	6.8	10.4	9.9

			Emplo	yment and W	orkforce		
	Labor Force Participation Rate, Total, Percent	Rigidity of Employment Index, 0 (Minimum rigidity) - 100 (Maximum rigidity)	Size of the Labor Force, People	Growth of the Labor Force, Annual percent change	Unemployment Rate, Percent	Economically Active Children, (Ages 7-14), Percent	Firing Costs, Weeks of wages
Indicator Number	33P1	33P2	33P3a	33P3b	33P4	33P5	33S1
Cuba Data							
Latest Year (T)	2007		2007	2007	2006		
Value Year T	57.0		5,231,845	0.1	1.9		
Value Year T-1	57.2		5,228,537	0.7	1.9		
Value Year T-2	57.1		5,193,153	0.5	1.9		
Value Year T-3	57.1		5,167,918	0.0	2.3	,	
Value Year T-4	57.4		5,170,318	0.1	3.3	,	
Average Value, 5 year	57.2		5,198,354	0.3	2.3	,	
Growth Trend	-0.1		0.4		-13.0		
Benchmark Data							
Regression Benchmark							
Lower Bound							
Upper Bound							
Latest Year Costa Rica	2007	2009	2007	2007	2007	2004	2009
Costa Rica Value Latest Year	61.4	28.0	1,994,405	2	4.6	5.7	35
Latest Year Dominican Republic	2007	2009	2007	2007	2005	2005	2009
DR Value Latest Year	64.6	28.0	4,212,443	1.3	17.9	5.8	88
UMI-LAC		22.0	1,776,634	1.8	11.8		37
UMI	59.2	29.0	2,205,387	1.5	13.0		33
High Five Avg.	87.1	72.4	315,591,526	6	28.0		226
Low Five Avg.	44.8		52,572	-1	1.8		

	Agriculture									
	Agriculture Value Added per Worker, US Dollars, Constant 2000	Cereal Yield, Kilograms per hectare	Growth in Agricultural Value- Added, Percent change	Fertilizer Consumption, 100 grams per hectare of arable land	Agricultural Policy Costs Index, 1 (Excessively burdensome) - 7 (Balances all interests)	Crop Production Index, Index: 1999- 2001 = 100	Livestock Production Index, Index: 1999- 2001 = 100	Growth, Percent change		
Indicator Number	34P1	34P2	34P3	34P4	34S1	34S2	34S3	34S4		
Cuba Data										
Latest Year (T)		2007	2006	2005		2005	2005	2006		
Value Year T		2,881.1	-6.0	224.2		105.6	91.2	24.7		
Value Year T-1		2,782.8	-11.6	189.8		118.1	85.9	8.7		
Value Year T-2		2,561.5	0.2	165.0		113.2	89.8	-13.8		
Value Year T-3		2,921.5	2.4	429.9		111.0	91.6	9.8		
Value Year T-4		3,188.7	-2.5	626.8		106.8	96.3	3.0		
Average Value, 5 year		2,867.1	-3.5	327.2		110.9	91.0	6.5		
Growth Trend		-2.5		-28.7		0.4	-1.7			
Benchmark Data										
Regression Benchmark										
Lower Bound										
Upper Bound										
Latest Year Costa Rica	2005	2007	2007	2005	2008	2005	2005	2007		
Costa Rica Value Latest Year	4,642.8	2,982.1	7.1	10,345.2	4.3	111.5	100.3	-17.6		
Latest Year Dominican Republic	2005	2007	2007	2001	2008	2005	2005			
DR Value Latest Year	4,943.1	4,310.3	9.9	890.2	3.8	103.9	114.5			
UMI-LAC	3,569.2	3,096.0	2.3	1,059.2	3.7	100.0	100.0	-1.7		
UMI	2,956.4	2,767.0	2.2	811.6	3.6	103.8	104.2	10.2		
High Five Avg.	50,342.2	7,695.3	15.9	17,297.0	5.2	142.7	155.4	362,806.7		
Low Five Avg.	75.8	438.2	-374.7	3.0	2.6	70.4	85.4	-59.8		

# **Technical Notes**

The following technical notes identify the source for each indicator, provide a concise definition, indicate the coverage of USAID countries, and comment on data quality where pertinent. For reference purposes, a CAS code is also given for each indicator. In many cases, the descriptive information is taken directly from the original sources, as cited.

#### STATISTICAL CAPACITY

#### **Statistical Capacity Indicator**

Source World Bank, updated annually, at <a href="http://go.worldbank.org/20WZB3DB90">http://go.worldbank.org/20WZB3DB90</a>

Definition Provides and evaluation of a country's' statistical practice, data collection activities and key indicator availability against a set of criteria consistent with international recommendations. The score ranges from 0 to 100 with a score of 100 indicating that the country meets all the criteria.

Coverage: Data are available for the vast majority of USAID countries.

CAS Code # 01P1

#### **GROWTH PERFORMANCE**

#### Per capita GDP, in Purchasing Power Parity Dollars

Source World Bank International Comparison Program, at http://go.worldbank.org/VMCB80AB40

Definition This indicator adjusts per capita GDP measured in current U.S. dollars for differences in purchasing power, using an estimated exchange rate reflecting the purchasing power of the various local currencies.

Coverage Data are available for about 65 USAID countries. CAS Code #11P1

#### Per capita GDP, in current US Dollars

Source IMF World Economic Outlook database, updated every 6 months, at:

#### http://www.imf.org/external/ns/cs.aspx?id=28

Definition GDP per capita is gross domestic product divided by midyear population. GDP is the sum of gross value added by all resident producers plus any product taxes, less any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources.

Coverage Data are available for about 85 USAID countries. CAS Code #11P2

#### Real GDP Growth

Source IMF World Economic Outlook database, updated every six months; latest country data from IMF Article IV consultation reports:

#### www.imf.org/external/np/sec/aiv/index.htm

Definition Annual percentage growth rate of GDP at constant local currency prices

Coverage Data are available for about 85 USAID countries. CAS Code #11P3

#### **Growth of Labor Force Productivity**

Source World Development Indicators. Estimated by calculating the annual percentage change of the ratio of GDP (constant 2000 US\$) (NY.GDP.MKTP.KD) to the population ages 15 and older who participate in the labor force, which in turn is the product of the total population (SP.POP.TOTL) times the product of the percentage of the population in this age group 15 or older (SP.POP.1564.IN.ZS + SP.POP.65UP.TO.ZS) and the labor force participation rate (SL.TLF.CACT.ZS).

Definition Labor productivity is defined here as the ratio of GDP (in constant prices) to the size of the working-age population age 15 and older that participate in the labor force.

Coverage Data are available for about 85 USAID countries. CAS Code # 11SI

### Investment Productivity, Incremental Capital-Output Ratio (ICOR)

Source International benchmark data computed from World Development Indicators most recent publication year, based on the five-year average of the share of fixed investment (NE.GDI.FTOT.ZS) and the five-year average GDP growth (NY.GDP.MKTP.KD.ZG). Updated figures for the target country are computed from IMF Article IV consultation reports.

Definition The ICOR shows the amount of capital investment incurred per extra unit of output. A high value represents low investment productivity. The ICOR is calculated here as the ratio of the investment share of GDP to the growth rate of GDP, using five-year averages for both the numerator and denominator.

Coverage Data are available for about 81 USAID countries. CAS Code #11S2

#### **Gross Fixed Investment, Percentage of GDP**

Source IMF Article IV consultation report for latest country data <a href="www.imf.org/external/np/sec/aiv/index.htm">www.imf.org/external/np/sec/aiv/index.htm</a>; international benchmark from the World Development Indicators, most recent publication series NE.GDI.FTOT.ZS.

Definition Gross fixed investment is spending on replacing or adding to fixed assets (buildings, machinery, equipment and similar goods).

Coverage Data are available for about 84 USAID countries. CAS Code # 11S3

#### **Gross Fixed Private Investment, Percentage of GDP**

Source IMF Article IV consultation report, for latest country data <a href="www.imf.org/external/np/sec/aiv/index.htm">www.imf.org/external/np/sec/aiv/index.htm</a>; World Development Indicators, for international comparison data (explanation below). The estimation of this indicator involves taking the difference between gross fixed capital formation (percent of GDP) (NE.GDI.FTOT.ZS) and government capital expenditure (percent of GDP). The latter term is the

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product of government capital expenditure (percent of total expenditure) (GB.XPK.TOTL.ZS) and total government expenditure (percent of GDP) (GB.XPD.TOTL.GD.ZS).

Definition This indicator measures gross fixed capital formation by nongovernment investors, including spending for replacement or net addition to fixed assets (buildings, machinery, equipment, and similar goods).

Coverage Available from World Development Indicators 2004 for about 38 USAID countries. Starting in 2005, WDI no longer reports government capital expenditure, which is needed to compute this variable. The reason is that the World Bank has adopted a new system for government finance statistics, which switches from reporting budget performance based on cash outlays and receipts, to a modified accrual accounting system in which government capital formation is a balance sheet entry, and only the consumption of fixed capital (that is, a depreciation allowance) is treated as an expense. The template will include this variable when the required data can be obtained from IMF Article IV consultation report or national data sources. Group and regression benchmarks will be computed from WDI 2004 (since group averages tend to be relatively stable).

Data Quality National statistics offices may have different methodologies for breaking down total government expenditure into current and capital components. In particular, the data on "development expenditure" in many countries include elements of current expenditure.

CAS Code #11S4

#### **POVERTY AND INEQUALITY**

#### **Human Poverty Index**

Source UNDP, Human Development Report <a href="http://hdrstats.undp.org/indicators/18.html">http://hdrstats.undp.org/indicators/18.html</a> for most recent edition; updates may be found at <a href="http://hdr.undp.org/en/statistics/data/">http://hdr.undp.org/en/statistics/data/</a>.

Definition The index measures deprivation in terms of not meeting target levels for specified economic and quality-of-life indicators. Values are based on (1) percentage of people not expected to survive to age 40, (2) percentage of adults who are illiterate, and (3) percentage of people who fail to attain a "decent living standard," which is subdivided into three (equally weighted) separate items: (a) percentage of people without access to safe water, (b) percentage of people without access to health services, and (c) percentage of underweight children. The HPI ranges in value from 0 (zero deprivation incidence) to 100 (high deprivation incidence).

Coverage Data are available for about 60 USAID countries. CAS Code #12P1

#### **Income Share, Poorest 20 Percent**

Source World Development Indicators, most recent publication series SI.DST.FRST.20. These are World Bank staff estimates based on primary household survey data obtained from government statistical agencies and World Bank country departments. Alternative source for target countries: the country's Poverty Reduction Strategy Paper: <a href="http://www.imf.org/external/np/prsp/prsp.asp">http://www.imf.org/external/np/prsp/prsp.asp</a>

Definition Share of total income or consumption accruing to the poorest quintile of the population.

Coverage Data are available for about 59 USAID countries, if one goes back to 1997; for the period since 2000, data are available for about 35 USAID countries.

CAS Code # 12P2

# Percentage of Population Living on Less than \$1.25 PPP per Day

Source World Development Indicators, most recent publication series SI.POV.DDAY, original data from Development Research Group. Alternative source for target countries: the country's Poverty Reduction Strategy Paper:

http://www.imf.org/external/np/prsp/prsp.asp

Definition The indicator captures the percentage of the population living on less than \$1.25 a day at 2005 international prices. As a result of revisions in PPP exchange rates, poverty rates for individual countries cannot be compared with poverty rates reported in WDI editions prior to 2009

Coverage Data are available for about 59 USAID countries going back to 1997; data for 2000 or later are available for about 40 USAID countries.

Data Quality Poverty data originate from household survey questionnaires that can differ widely; even similar surveys may not be strictly comparable because of difference in quality.

CAS Code #12P3

#### Poverty Headcount, National Poverty Line

Source World Development Indicators, most recent publication series SI.POV.NAHC. Alternative source: the country's Poverty Reduction Strategy Paper: http://www.imf.org/external/np/prsp/prsp.asp

Definition The percentage of the population living below the national poverty line. National estimates are based on population-weighted estimates from household surveys

Coverage Data available for only 19 countries for 2000 or later; data are available for about 49 countries going back to 1997. For most target countries, data can be obtained from the PRSP.

Data Quality Measuring the percentage of people below the "national poverty line" has the disadvantage of limiting international comparisons because of differences in the definition of the poverty line. Most lower-income countries, however, determine the national poverty line by the level of consumption required to have a minimally sufficient food intake plus other basic necessities.

CAS Code #12P4

#### **PRSP Status**

Source World Bank/IMF. A list of countries with a Poverty Reduction Strategy Paper can be found at <a href="http://www.imf.org/external/np/prsp/prsp.asp">http://www.imf.org/external/np/prsp/prsp.asp</a>

Definition Yes or no variable showing whether a country has (or not) completed a PRSP (introduced by the World Bank and IMF to ensure host-country ownership of poverty reduction programs).

Coverage: All countries having PRSPs are so indicated. CAS Code #12P5

# Percent of Population below Minimum Dietary Energy Consumption

Source UN Millennium Indicators Database at <a href="http://millenniumindicators.un.org/unsd/mdg/Data.aspx">http://millenniumindicators.un.org/unsd/mdg/Data.aspx</a>, based on FAO estimates.

Definition: Proportion of the population in a condition of undernourishment. The FAO defines undernourishment as the condition of people whose dietary energy consumption is continuously below a minimum dietary energy requirement for maintaining a healthy life and carrying out light physical activity.

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Coverage Data are available for about 82 USAID countries. CAS Code # 12S1

#### **ECONOMIC STRUCTURE**

#### **Employment or Labor Force Structure**

Source World Development Indicators, most recent publication series SL.AGR.EMPL.ZS for agriculture, series SL.IND.EMPL.ZS for industry, and series SL.SRV.EMPL.ZS for services. Alternative source: CIA World Fact Book:

 $\frac{https://www.cia.gov/library/publications/the-world-factbook/index.html}{}$ 

Definition Employment in each sector is the proportion of total employment recorded as working in that sector. Employees are people who work for a public or private employer and receive remuneration in wages, salary, commission, tips, piece rates, or pay in kind. Agriculture includes hunting, forestry, and fishing. Industry includes mining and quarrying (including oil production), manufacturing, electricity, gas and water, and construction. Services include wholesale and retail trade and restaurants and hotels; transport, storage, and communications; financing, insurance, real estate, and business services; and community, social, and personal services.

Coverage Data are available for about 37 USAID countries. For most target countries, data can be obtained from PRSP.

Data Quality Employment figures originate with International Labor Organization. Some countries report labor force structure instead of employment, thus the data must be checked carefully before comparisons are made.

CAS Code #13P1

#### **Output Structure**

Source World Development Indicators, most recent publication series NV.AGR.TOTL.ZS for value added in agriculture as a percentage of GDP; series NV.IND.TOTL.ZS for the share of industry; and NV.SRV.TETC.ZS for the share of services.

Definition The output structure is composed of value added by major sector of the economy (agriculture, industry, and services) as percentages of GDP, where value added is the net output of a sector after all outputs are added up and intermediate inputs are subtracted. Value added is calculated without deductions for depreciation of fabricated assets or depletion and degradation of natural resources. Agriculture includes forestry, hunting, and fishing, as well as cultivation of crops and livestock production. Industry includes manufacturing, mining, construction, electricity, water, and gas. Services include wholesale and retail trade (including hotels and restaurants), transport, and government, financial, professional, and personal services such as education, health care, and real estate services.

Coverage Data are available for about 86 USAID countries.

Data Quality A major difficulty in compiling national accounts is the extent of unreported activity in the informal economy. In developing countries a large share of agricultural output is either not exchanged (because it is consumed within the household) or not exchanged for money. This production is estimated indirectly using estimates of inputs, yields, and area under cultivation. This approach can differ from the true values over time and across crops. Ideally, informal activity in industry and services is measured through regular enterprise censuses and surveys. In most developing countries such surveys are infrequent, so prior survey results are extrapolated.

CAS Code #13P2

#### **DEMOGRAPHY AND ENVIRONMENT**

#### **Adult Literacy Rate**

Source World Development Indicators, most recent publication series SE.ADT.LITR.ZS, based on UNESCO calculations.

Definition Percentage of people ages 15 and older who can read and write a short, simple statement about their daily life.

Coverage Data are available for about 66 USAID countries.

Data Quality In practice, literacy is difficult to measure. A proper estimate requires census or survey measurements under controlled conditions. Many countries estimate the number of illiterate people from self-reported data, or by taking people with no schooling as illiterate.

CAS Code # 14P1

#### **Youth Dependency Rate**

Source World Development Indicators, most recent publication series.

Definition Youth dependency rate is calculated as the percentage of the population below age 15 (WDI SP.POP.0014.TO.ZS) divided by the working-age population (those ages 15–64) (WDI SP.POP.1564.TO.ZS)

Coverage Data are available for about 89 USAID countries. CAS Code #14P2a

#### **Elderly Dependency Rate**

Source World Development Indicators, most recent publication series.

Definition This is calculated as percentage of the population over age 65 (WDI SP.POP.65UP.TO.ZS) divided by working-age population (those ages 15–64) (WDI SP.POP.1564.TO.ZS)

Coverage Data are available for about 89 USAID countries. CAS Code #14P2b

#### **Environmental Performance Index**

Source Center for International Earth Science Information Network (CIESIN) at Columbia University, and the Center for Environmental Law and Policy at Yale University. <a href="http://epi.yale.edu/CountryScores">http://epi.yale.edu/CountryScores</a>.

Definition The Environmental Performance Index (EPI) is a composite index of national environmental protection, which tracks (1) environmental health, (2) air quality, (3) water resources, (4) biodiversity and habitat, (5) productive natural resources, and (6) sustainable energy. The index is a weighted average of these six policy categories, with more weight given environmental health, (i.e., EPI =  $0.5 \times 10^{-5}$  environmental health +  $0.1 \times 10^{-5}$  (air quality + water resources + productive natural resources + biodiversity and habitat + sustainable energy)). The index values range from 0 (very poor performance) to 100 (very good performance).

Coverage Data are available for about 80 USAID countries.

Data quality The 2006 pilot EPI and 2008 EPI differ in several strucutural and substantive areas. As a result comparison between both years are not appropriate.

CAS Code #14P3

#### Population Size and Growth

Source World Development Indicators, most recent publication series SP.POP.TOTL for total population, and series SP.POP.GROW for the population growth rate.

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Definition Total population counts all residents regardless of legal status or citizenship—except refugees not permanently settled in the country of asylum. Annual population growth rate is based on the de facto definition of population.

Coverage Data are available for about 88 USAID countries. CAS Code # 14P4

#### Population Living In Urban Areas

Source World Development Indicators, most recent publication series SP.URB.TOTL.IN.ZS.

*Definition* Urban population is the share of the total population living in areas defined as urban in each country. The calculation considers all residents regardless of legal status or citizenship, except refugees.

Coverage Data are available for about 86 USAID countries.

Data Quality The estimates are based on national definitions of what constitutes an urban area; since these definitions vary greatly, cross-country comparisons should be made with caution.

CAS Code #14P5

#### Resource Depletion, Percent GNI

Source World Development Indicators, most recent publication series: NY.ADJ.DNGY.GN.ZS (energy), NY.ADJ.DMIN.GN.ZS (minerals), NY.ADJ.DFOR.GN.ZS (forests). Sum of energy depletion + mineral depletion + net forest depletion, as a percentage of gross national income.

Definition Resource depletion, as a percent of GNI is an indicator of environmental sustainability.

Energy depletion is equal to the product of unit resource rents and the physical quantities of energy extracted. It covers crude oil, natural gas, and coal.

Mineral depletion is equal to the product of unit resource rents and the physical quantities of minerals extracted. It refers to bauxite, copper, iron, lead, nickel, phosphate, tin, zinc, gold, and silver.

Net forest depletion is calculated as the product of unit resource rents and the excess of roundwood harvest over natural growth.

Coverage Data are available for about 80 USAID countries.

Data Quality Though each component is itself constructed from an estimate, the methodology is reasonably sound. Note however, the World Bank does not provide an estimate of soil depletion.

CAS Code #14P6

#### **GENDER**

#### **Primary Completion Rate, Male and Female**

Source World Development Indicators, most recent publication series: SE.PRM.CMPT.MA.ZS (male), SE.PRM.CMPT.FE.ZS (female). Based on data from United Nations Education, Scientific, and Cultural Organization (UNESCO) Institute of Statistics.

*Definition* Primary completion rate is the percentage of students completing the last year of primary school. It is calculated by taking the total number of students in the last grade of primary school, minus the number of repeaters in that grade, divided by the total number of children of official graduation age.

Coverage Data are available for about 128 USAID countries.

Data Quality Completion rates are based on data collected during annual school surveys, typically conducted at the beginning of the school year. The indicator does not measure the quality of the education.

CAS Code #15P1

# Gross Enrollment Ratio, All Levels of Education, Male and Female

Source United Nations Organization for Education, Science, and Culture UNESCO: http://stats.uis.unesco.org/unesco/TableViewer/document.aspx?ReportId=136&IF\_Language=eng&BR\_Topic=0

Definition The number of students enrolled in primary, secondary, and tertiary levels of education by gender, regardless of age, expressed as a percentage of the population of official school age for the three levels by gender.

Coverage Data are available for about 80 USAID countries.

Data Quality Enrollment ratios are based on data collected during annual school surveys, typically conducted at the beginning of the school year.

CAS Code #15P2

#### Life Expectancy, Male and Female

Source Estimated from UNDP Human Development Indicators:

http://hdrstats.undp.org/indicators/271.html and http://hdrstats.undp.org/indicators/270.html for most recent edition; updates may be found at http://hdr.undp.org/en/statistics/data/.

Definition The number of years a newborn male or female infant would live if prevailing patterns of age and sex-specific mortality rates at the time of birth were to stay the same throughout the child's life.

Coverage Data are available for about 85 USAID countries. CAS Code #15P3

#### Labor Force Participation Rate, Male and Female

Source World Development Indicators, most recent publication series: SL.TLF.CACT.MA.ZS (male)

SL.TLF.CACT.FE.ZS (female). Based on data from International Labour Organization (ILO)

Definition The proportion of the population ages 15 and older that is economically active: all people who supply labor for the production of goods and services during a specified period. It includes both the employed and the unemployed.

Coverage Data are available for about 88 USAID countries. CAS Code #15P4

#### **FISCAL AND MONETARY POLICY**

In the World Development Indicators for 2005, the World Bank adopted the Government Finance Statistics 2001 system for government budget statistics, switching from data based on cash outlays and receipts to a system with revenues booked on receipt and expenses booked on accrual, in accordance with the IMF's Government Financial Statistics (GFS) Manual, 2001. On the revenue side, the changes are minor, and comparisons to the old system may still be valid. There is a major change, however, in the reporting of capital outlays, which are now treated as balance sheet entries; only the annual capital consumption allowance (depreciation) is reported as an expense. Hence, the data on total expense is not comparable to the former data on total expenditure. In addition, WDI 2005 now provides data on the government's cash surplus/deficit; this differs from the previous concept of the overall budget balance by excluding net lending minus repayments (which are now a financing item under net

acquisition of financial assets). Most countries do not use the new GFS system, so country coverage of fiscal data in WDI 2005 is limited. For this reason, the template continues to use data from IMF Article IV consultations and domestic country websites on a cash outlays and receipts system.

## Government Expenditure, Percentage of GDP

Source IMF Article IV consultation report for latest country data <a href="https://www.imf.org/external/np/sec/aiv/index.htm">www.imf.org/external/np/sec/aiv/index.htm</a>;

*Definition* Total expenditure of the central government as a percent of GDP.

Coverage Data available for about 70 percent of USAID countries.

CAS Code # 21P1

# Government Revenue, excluding grants, Percentage of GDP

Source IMF Article IV consultation report for latest country data <a href="http://www.imf.org/external/np/sec/aiv/index.htm">http://www.imf.org/external/np/sec/aiv/index.htm</a>; World Development Indicators for benchmarking data (GC.REV.XGRT.GD.ZS). Original data from the IMF, Government Finance Statistics Yearbook and data file, and World Bank estimates.

Definition Government revenue includes all revenue to the central government from taxes and non-repayable receipts (other than grants), measured as a share of GDP. Grants represent monetary aid going to the central government that has no repayment requirement.

Gaps Data missing for about 24 USAID countries.

*CAS Code # 21P2* 

# **Growth in Broad Money Supply**

Source Latest country data are from national data sources or from IMF Article IV consultation report: <a href="https://www.imf.org/external/np/sec/aiv/index.htm">www.imf.org/external/np/sec/aiv/index.htm</a>. Benchmarking data are from World Development Indicators, most recent publication, series FM.LBL.MQMY.ZG. Original source of WDI data is IMF, International Financial Statistics, and World Bank estimates.

Definition Average annual growth rate in the broad money supply, M2 (money plus quasi-money) measured as the change in end-of-year totals relative to the preceding year. M2 comprises the sum of currency outside banks, checking account deposits other than those of the central government, and the time, savings, and foreign currency deposits of resident sectors other than the central government. M2 corresponds to the sum of lines 34 and 35 in the IMF's International Financial Statistics.

Coverage Data are available for about 81 USAID countries. CAS Code #21P3

## Inflation Rate

Source IMF World Economic Outlook database, updated every six months, at

http://www.imf.org/external/ns/cs.aspx?id=28

Definition Inflation as measured by the consumer price index reflects the annual percentage change in the cost to the average consumer of acquiring a basket of goods and services that may be fixed or changed at specific intervals.

Coverage: Data are available for about 85 USAID countries.

Data Quality: For many developing countries, figures for recent years are IMF staff estimates. Additionally, data for some countries are for fiscal years.

CAS Code # 21P4

# Overall Budget Balance, Including Grants, Percentage of GDP

Source For countries using the new GFS system (see explanation at the beginning of this section), benchmarking data on the government's cash surplus/deficit are obtained from World Development Indicators, most recent publication series GC.BAL.CASH.GD.ZS. For countries that are not yet using the new system, benchmarking data on the overall budget balance are obtained from WDI 2004, series GB.BAL.OVRL.GD.ZS. Latest country data are obtained from national data sources or from IMF Article IV consultation reports:

www.imf.org/external/np/sec/aiv/index.htm.

Definition The cash surplus/deficit is revenue (including grants) minus expenses, minus net acquisition of nonfinancial assets. This is close to the previous concept of *overall budget balance*, differing only in that it excludes net lending (which is now treated as a financing item, under net acquisition of financial assets).

For countries that are not using the new GFS system, the template will continue to focus on the *overall budget balance*, using data from the alternative sources indicated above. The overall budget deficit is defined as the difference between total revenue (including grants) and total expenditure.

Both concepts measure the central government's financing requirement, which must be met by domestic or foreign borrowing. As noted above, they differ in that the new cash surplus/deficit variable excludes net lending (which is usually a minor item).

Coverage Data are available in WDI 2006 for less than half USAID countries.

CAS Code # 21P5

# **Composition of Government Expenditure**

Source The latest country and benchmark data are taken from national data sources or from IMF Article IV consultation reports:

www.imf.org/external/np/sec/aiv/index.htm.

Definition Central government expenditure, broken down into the following six categories: (1) wages and salaries; (2) goods and services; (3) interest payments; (4) subsidies and other current transfers; (5) capital expenditures; and (6) other expense.

Coverage Data are available for the majority of USAID countries

Data Quality Many countries report their revenue in noncomparable categories. Budget data are compiled by fiscal year. If the fiscal year differs from the calendar year, ratios to GDP may be calculated by interpolating budget data from two adjacent fiscal years.

CAS Code # 21S1

# **Composition of Government Revenue**

Source The latest country and comparison country data are taken from national data sources or from IMF Article IV consultation reports: www.imf.org/external/np/sec/aiv/index.htm. Benchmarking data are taken directly from WDI 2005 database: (1) taxes on and services (% of revenue), GC.TAX.GSRV.RV.ZS; (2) taxes on income, profits and capital gains (% of revenue), series GC.TAX.YPKG.RV.ZS; (3) taxes on international trade (% of revenue), series GC.TAX.INTT.RV.ZS; (4) other taxes (% of revenue), series GC.TAX.OTHR.RV.ZS; (5) social security contributions (% of revenue), series GC.REV.SOCL.ZS; and (6) grants and other revenue (% of revenue), series GC.REV.GOTR.ZS.

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Definition Breakdown of central government revenue sources by categories outlined above. Each source of revenue is expressed as a percentage of total revenue.

Coverage Data are available for about 46 USAID countries.

Data Quality Many countries report their revenue in noncomparable categories. If the fiscal year differs from the calendar year, then the ratios to GDP may be calculated by interpolating budget data from two adjacent fiscal years.

CAS Code # 21S2

# Composition of Money Supply Growth

Source Constructed using national data sources or IMF Article IV consultation reports: www.imf.org/external/np/sec/aiv/index.htm.

Definition Identifies the sources of the year-to-year change in the broad money supply (M2), disaggregated into five categories: (1) net domestic credit to the public sector, (2) net domestic credit to the private sector, and (3) net foreign assets (reserves), (4) net credit to non-financial public enterprises, and (5) other items, net. Each component is expressed as a percentage of the annual change (December to December) in M2.

Coverage Data are available for about 86 USAID countries. CAS Code # 21S3

## **BUSINESS ENVIRONMENT**

## **Control of Corruption Index**

Source World Bank Institute <a href="http://www.govindicators.org">http://www.govindicators.org</a>

Definition The Control of Corruption index is an aggregation of various indicators that measure the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests. Index ranges from -2.5 (for very poor performance) to +2.5 (for excellent performance).

This is also an MCC indicator, under the criterion of ruling justly. The MCC rescales the values as percentile rankings relative to the set of MCA eligible countries, ranging from a value from 0 (for very poor performance) to 100 (for excellent performance). Some country reports use the MCC scaling

Coverage Data are available for nearly all USAID countries.

Data Quality This indicator uses perception and opinions gathered from local businessmen as well as third-party experts; thus, the indicator is largely subjective. Also standard errors are large. For both reasons, international comparisons are problematic, though widely used.

CAS Code # 22P1

# **Ease of Doing Business Index**

Source World Bank, Doing Business Indictors <a href="http://www.doingbusiness.org/">http://www.doingbusiness.org/</a>

Definition The Ease of Doing Business index ranks economies from 1 to 181. The index is calculated as the ranking on the simple average of country percentile rankings on each of the 10 topics covered in Doing Business: starting a business, dealing with licenses, hiring and firing, registering property, getting credit, protecting investors, paying taxes, trading across borders, enforcing contracts, and closing a business

Coverage Data are available for nearly all USAID countries.

CAS Code # 22P2

### Rule of Law Index

Source World Bank Institute, http://www.govindicators.org

This indicator is based on the perceptions of the legal system, drawn from 12 data sources.

*Definition* The Rule of Law index is an aggregation of various indicators that measure the extent to which agents have confidence in and abide by the rules of society. Index ranges from -2.5 (for very poor performance) to +2 5 (for excellent performance).

Coverage Data are available for nearly all USAID countries.

Data Quality This index is best used with caution for relative comparisons between countries in a single year, because the standard errors are large. Using the index to track a country's progress over time is also difficult because the index does not compensate for changes in the world average. For instance, if the world average decreases in a given year, a country whose score appears to increase may not actually have tangible improvements in its legal environment.

CAS Code #22P3

## Regulatory Quality Index

Source World Bank Institute;

http://www govindicators org

Definition The regulatory quality index measures the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development. It is computed from survey data from multiple sources. The index values range from -2.5 (very poor performance) to +2.5 (excellent performance).

This is also an MCC indicator, under the criterion of encouraging economic freedom. The MCC rescales the values as percentile rankings relative to the set of MCA eligible countries, ranging from a value from 0 (for very poor performance) to 100 (for excellent performance). Some country reports use the MCC scaling.

Gaps Data are available for nearly all USAID countries.

Data Quality This index is best used with caution for relative comparisons between countries in a single year, because the standard errors are large. It is also difficult to use the index to track a country's progress over time because the index does not compensate for changes in the world average. For instance, if the world average decreases in a given year, a country whose score appears to increase may not actually have tangible improvements in their legal environment.

CAS Code #22P4

# **Government Effectiveness Index**

Source World Bank Institute, http://www.govindicators.org

**Definition**: This index, based on 17 component sources, measures "the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies." The index values range from -2.5 (very poor performance) to +2.5 (excellent performance).

Coverage Data are available for nearly all USAID countries. CAS Code #22P5

# Cost of Starting a Business

Source World Bank, Doing Business; Starting a Business category:

 $\frac{http://www.doingbusiness.org/ExploreTopics/StartingBusine}{ss/}$ 

Definition Legally required cost to starting a simple limited liability company, expressed as percentage of GNI per capita.

Coverage Data are available for nearly all USAID countries.

CAS Code #22S1

### **Procedures to Enforce a Contract**

Source World Bank, Doing Business; Enforcing Contracts category:

 $\frac{http://www.doingbusiness.org/ExploreTopics/EnforcingCont}{racts/}$ 

Definition The number of procedures required to enforce a valid contract through the court system, with *procedure* defined as any interactive step the company must take with government agencies, lawyers, notaries, etc. to proceed with enforcement action.

Coverage Data are available for nearly all USAID countries. CAS Code # 22S2

## **Procedures to Register Property**

Source World Bank, Doing Business; Registering Property category:

 $\underline{http://www.doingbusiness.org/ExploreTopics/RegisteringPro}\\ \underline{perty/}$ 

*Definition* Number of procedures required to register the transfer of title for business property. A procedure is defined as any step involving interaction between a company or individual and a third party that is necessary to complete the property registration process.

Coverage Data are available for nearly all USAID countries. CAS Code #22S3

## Procedures to Start a Business

Source World Bank, Doing Business; Starting a Business category:

http://www.doingbusiness.org/ExploreTopics/StartingBusiness/

Definition The number of procedural steps required to legalize a simple limited liability company. A procedure is an interaction of a company with government agencies, lawyers, auditors, notaries, and the like, including interactions required to obtain necessary permits and licenses and complete all inscriptions, verifications, and notifications to start operations.

Coverage Data are available for nearly all USAID countries. CAS Code # 22S4

# Time to Enforce a Contract

Source World Bank, Doing Business; Enforcing Contracts category:

http://www.doingbusiness.org/ExploreTopics/EnforcingCont racts/

Definition Minimum number of days required to enforce a contract through the court system.

Coverage Data are available for nearly all USAID countries. CAS Code # 22S5

# **Time to Register Property**

Source World Bank, Doing Business; Registering Property category:

http://www.doingbusiness.org/ExploreTopics/RegisteringProperty/

Definition The time required to accomplish the full sequence of procedures to transfer a property title from the seller to the

buyer when a business purchases land and a building in a peri-urban area of the country's most populous city. Every required procedure is included whether it is the responsibility of the seller, the buyer, or where it is required to be completed by a third party on their behalf.

Coverage Data are available for nearly all USAID countries. CAS Code #22S6

#### Time to Start a Business

Source World Bank, Doing Business; Starting a Business category:

http://www.doingbusiness.org/ExploreTopics/StartingBusiness/

*Definition* The number of calendar days needed to complete the required procedures for legally operating a business. If a procedure can be speeded up at additional cost, the fastest procedure, independent of cost, is chosen.

Coverage Data are available for nearly all USAID countries. CAS Code #22S7

## **Total Tax Payable by Business**

Source World Bank, Doing Business, Paying Taxes Category:

http://www.doingbusiness.org/ExploreTopics/PayingTaxes/

Definition The amount of taxes payable by a medium-sized business in the second year of operation, expressed as share of commercial profits. The total amount of taxes is the sum of all the different taxes payable after accounting for deductions and exemptions. The taxes withheld but not paid by the company are excluded. The taxes included can be divided into five categories: profit or corporate income tax, social security contributions and other labor taxes paid by the employer, property taxes, turnover taxes and other small taxes (such as municipal fees and vehicle and fuel taxes). Commercial profits are defined as sales minus cost of goods sold, minus gross salaries, minus administrative expenses, minus other deductible expenses, minus deductible provisions, plus capital gains (from the property sale) minus interest expense, plus interest income and minus commercial depreciation.

Coverage: Data are available for nearly all USAID countries CAS Code #22S8

# **Business Costs of Crime, Violence and Terrorism Index**

Source Global Competitiveness Report, World Economic Forum

Definitions The index measures executives' perceptions of the business costs of terrorism in their respective country. Executives grade, on a scale from 1 to 7, whether crime, violence and terrorism impose (1) significant costs on business, or (7) do not impose significant costs on business.

Coverage Data are available for about 52 USAID countries. Data Quality Comparisons between countries are difficult, because the data are based on executive perceptions.

CAS Code #22S9

# Senior Manager Time Spent Dealing with Government Regulations

Source World Bank Enterprise Surveys, Bureaucracy section, <a href="https://www.enterprisesurveys.org">www.enterprisesurveys.org</a>

*Definitions* Average percentage of senior managers' time that is spent in a typical week dealing with requirements imposed by government regulations such as taxes, customs, labor regulations, licensing and registration, and dealings with officials, and completing forms.

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Coverage Data available for about 80 USAID countries.

Data Quality Same-timeframe comparisons between countries may be difficult; 15-20 enterprise surveys are conducted per year, with country updates expected approximately every three to five years. Surveys are taken of hundreds of entrepreneurs per country who describe the impact of their country's investment climate on their firm.

CAS Code #22S10

### FINANCIAL SECTOR

## Domestic Credit to Private Sector, Percentage of GDP

Source IMF-International Financial Statistics financial section, where available; IMF Article IV consultation reports or national data sources for latest country data; World Development Indicators, most recent publication series FS.AST.PRVT.GD.ZS for benchmarking data. The WDI data originate with the IMF, International Financial Statistics and data files, and World Bank estimates.

Definition Domestic credit to private sector refers to end of year financial resources provided to the private sector, such as through loans, purchases of non-equity securities, and trade credits and other accounts receivable, that establish a claim for repayment. For some countries, these claims include credit to public enterprises.

Coverage Data are available for about 82 USAID countries. CAS Code # 23P1

#### **Interest Rate Spread**

Source World Development Indicators, most recent publication series FR.INR.LNDP. Original data from IMF, International Financial Statistics and data files.

Definition The difference between the average lending and borrowing interest rates charged by commercial or similar banks on domestic currency deposits.

Coverage Data are available for about 66 USAID countries. CAS Code # 23P2

# Money Supply, Percentage of GDP

Source Latest country data obtained from national data sources or IMF Article IV consultation reports: <a href="https://www.imf.org/external/np/sec/aiv/index.htm">www.imf.org/external/np/sec/aiv/index.htm</a>. Benchmarking data from World Development Indicators, most recent publication series FM.LBL.MQMY.GD.ZS. WDI data originate from IMF, International Financial Statistics and data files, and World Bank and OECD GDP estimates.

Definition Money supply (M2), also called broad money, is defined as the end of year nonbank private sector's holdings of notes, coins, and demand deposits, plus savings deposits and foreign currency deposits. Ratio of M2 to GDP is calculated to assess the degree of monetization of an economy.

Coverage Data are available for about 81 USAID countries.

Data Quality In some countries M2 includes certificates of deposits, money market instruments, and treasury bills.

CAS Code # 23P3

# Stock Market Capitalization Rate, Percentage of GDP

Source World Development Indicators, most recent publication, series CM.MKT.LCAP.GD.ZS.

Definition This variable is defined as the market capitalization, also known as market value (the share price times the number of shares outstanding), of all the domestic

shares listed on the country's stock exchange as a percentage of GDP.

Coverage Data are available for about 54 USAID countries. CAS Code # 23P4

### **Credit Information Index**

Source World Bank, Doing Business; Getting Credit Category:

http://www.doingbusiness.org/ExploreTopics/GettingCredit/

Definition The credit information index measures rules affecting the scope, accessibility and quality of credit information available through either public or private credit registries. The index ranges from 0 to 6, with higher values indicating the availability of more credit information, from either a public registry or a private bureau, to facilitate lending decisions.

Coverage Data are available for nearly all USAID countries.

Data Quality The indicator is subjective, as it is based on an opinion poll.

CAS Code # 23P5

## Legal Rights of Borrowers and Lenders Index

Source World Bank Doing Business; Getting Credit category:

http://www.doingbusiness.org/ExploreTopics/GettingCredit/ The index is based on data collected through research of collateral and insolvency laws supported by survey data on secured transactions laws.

Definition The index measures the degree to which collateral and bankruptcy laws facilitate lending. It ranges in value from 0 (very poor performance) to 10 (excellent performance). It includes three aspects related to legal rights in bankruptcy, and seven aspects found in collateral law.

Coverage Data are available for nearly all USAID countries.

CAS Code # 23S1

## **Real Interest Rate**

Source World Development Indicators, most recent publication series FR.INR.RINR.

Definition Real interest rate is the lending interest rate adjusted for inflation, as measured by the GDP deflator.

Coverage Data are available for about 68 USAID countries.

CAS Code # 23S2

# **Number of Active Microfinance Borrowers**

Source The Mix Market.

 $\frac{http://www.mixmarket.org/en/demand/demand.quick.search.}{asp.}$ 

Definition An aggregate of the number of current borrowers from microfinance institutions as reported by microfinance institutions to The Mix Market.

Coverage Data are available for about 68 USAID countries.

Data Quality Data are only available for those microfinance institutions that report to the Mix Market and data are not always updated in a timely fashion.

CAS Code # 23S3

## **EXTERNAL SECTOR**

### Aid, Percentage of GNI

Source Latest country data obtained from national data sources or IMF Article IV consultation reports: <a href="https://www.imf.org/external/np/sec/aiv/index.htm">www.imf.org/external/np/sec/aiv/index.htm</a>. Benchmarking data from World Development Indicators, most recent publication series DT.ODA.ALLD.GN.ZS.

Definition The indicator measures official development assistance from OECD countries and official aid from non-OECD countries, as a percentage of the recipient's gross national income.

Coverage Data are available for about 84 USAID countries.

Data Quality Data do not include aid given by recipient countries to other recipient countries, and may not be consistent with the country's balance sheets, because data are collected from donors.

CAS Code #24P1

### **Current Account Balance, Percentage of GDP**

Source Latest country data from national data sources or IMF Article IV consultation reports: <a href="https://www.imf.org/external/np/sec/aiv/index.htm">www.imf.org/external/np/sec/aiv/index.htm</a>. Benchmarking data from IMF World Economic Outlook (WEO) database, most recent publication.

Definition Current account balance is the sum of net exports of goods, services, net income, and net current transfers. It is presented here as a percentage of a country's gross domestic product.

Coverage Data are available for about 79 USAID countries.

CAS Code # 24P2

# **Debt Service ratio**

Source Latest country data obtained from national data sources or IMF Article IV consultation reports:

www.imf.org/external/np/sec/aiv/index.htm. Benchmarking data from World Development Indicators, most recent publication, series DT.TDS.DECT.EX.ZS, based on World Bank, Global Development Finance data.

Definition The debt service is the sum of interest and principal payments made by or due from a country in a given year, expressed as a percentage of exports of goods and

Coverage Data are available for about 77 USAID countries.

Data Quality See data quality comments to the Present value of debt, percent of GNI regarding quality of debt data reported.

CAS Code # 24P3

# **Exports Growth, Goods and Services**

Source Latest country data obtained from national data sources or IMF Article IV consultation reports:

www.imf.org/external/np/sec/aiv/index.htm. Benchmarking data from World Development Indicators, most recent publication, series NE.EXP.GNFS.KD.ZG, based on World Bank national accounts data, and OECD National Accounts data files.

Definitions Annual growth rate of exports of goods and services based on constant local currency units. Exports include the value of merchandise, freight, insurance, transport, travel, royalties, license fees, and other services, such as communication, construction, financial, information, business, personal, and government services. They exclude

labor and property income (formerly called factor services), as well as transfer payments.

Coverage Data are available for about 81 USAID countries. CAS Code # 24P4

## Foreign Direct Investment, Percentage of GDP

Source Latest country data obtained from national data sources or IMF Article IV consultation reports: <a href="https://www.imf.org/external/np/sec/aiv/index.htm">www.imf.org/external/np/sec/aiv/index.htm</a>. Benchmarking data from World Development Indicators, most recent publication, series BX.KLT.DINV.DT.GD.ZS, based on IMF, International Financial Statistics and Balance of Payments databases, World Bank, Global Development Finance, and World Bank and OECD GDP estimates.

Definition Foreign direct investment is the net inflow of investment to acquire a lasting management interest (10 percent or more of voting stock) in an enterprise operating in an economy other than that of the investor. It is the sum of equity capital, reinvestment of earnings, other long-term capital, and short-term capital as shown in the balance of payments. This series shows net inflows in the reporting economy.

Coverage Data are available for about 82 USAID countries. CAS Code #24P5

### **Gross International Reserves, Months of Imports**

Source Latest country data obtained from national data sources or IMF Article IV consultation reports:

www.imf.org/external/np/sec/aiv/index.htm. Benchmarking data from World Development Indicators, most recent publication, series FI.RES.TOTL.MO.

Definition Gross international reserves comprise holdings of monetary gold, special drawing rights (SDRs), the reserve position of members in the IMF, and holdings of foreign exchange under the control of monetary authorities expressed in terms of the number of months of imports of goods and services.

Coverage Data are available for about 77 USAID countries. CAS Code # 24P6

# **Gross Private Capital Inflows, Percentage of GDP**

Source Latest country data obtained from national data sources or IMF Article IV consultation reports: <a href="https://www.imf.org/external/np/sec/aiv/index.htm">www.imf.org/external/np/sec/aiv/index.htm</a> Benchmarking data derived from the International Financial Statistics (sum of lines 78BED and 78BGD, divided by GDP).

Definition Gross private capital inflows are the sum of the direct and portfolio investment inflows recorded in the balance-of-payments financial account. The indicator is calculated as a ratio to GDP in U.S. dollars.

Coverage Information on coverage is not easily accessible.

Data Quality Capital flows are converted to U.S. dollars at the IMF's average official exchange rate for the year shown.

CAS Code #24P7

# Present Value of Debt, Percentage of GNI

Source World Development Indicators, most recent publication series DT.DOD.PVLX.GN.ZS, based on Global Development Finance data.

Definition Present value of debt is the sum of short-term external debt plus the discounted sum of total debt service payments due on public, publicly guaranteed, and private non-guaranteed long-term external debt over the life of

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existing loans. The indicator measures the value of debt relative to the  $\mbox{GNI}.$ 

Coverage Data are available for about 80 USAID countries.

Data Quality: The coverage and quality of debt data vary widely across countries because of the wide spectrum of debt instruments, the unwillingness of governments to provide information, and a lack of capacity in reporting. Discrepancies are significant when exchange rate fluctuations, debt cancellations, and rescheduling occur.

*CAS Code # 24P8* 

### Remittances Receipts, Percentage of Exports

Source Latest country data obtained from national data sources or IMF Article IV consultation reports: <a href="https://www.imf.org/external/np/sec/aiv/index.htm">www.imf.org/external/np/sec/aiv/index.htm</a>. Benchmarking data are obtained from World Development Indicators, most recent publication and remittances data compiled by the World Bank at <a href="https://go.worldbank.org/QOWEWD6TA0.">https://go.worldbank.org/QOWEWD6TA0.</a>. The figure is constructed by dividing workers' remittances (receipts), by exports of goods and services, WDI series BX.GSR.GNFS.CD.

Definition Workers' remittances are current transfers by migrants who are employed or intend to remain employed for more than a year in another economy in which they are considered residents. The indicator is the ratio of remittances to exports.

Coverage: Data are available for all USAID countries.

CAS Code # 24P9

### Trade, Percentage of GDP

Source Latest country data obtained from national data sources or IMF Article IV consultation reports: <a href="https://www.imf.org/external/np/sec/aiv/index.htm">www.imf.org/external/np/sec/aiv/index.htm</a>. Benchmarking data from World Development Indicators, most recent publication, series NE.TRD.GNFS.ZS.

*Definition* The sum of exports and imports of goods and services divided by the value of GDP, all expressed in current U.S. dollars.

Coverage Data available for about 84 USAID countries.

CAS Code # 24P10

## Trade in Services, Percentage of GDP

Source Latest country data obtained from national data sources or IMF Article IV consultation reports: <a href="https://www.imf.org/external/np/sec/aiv/index.htm">www.imf.org/external/np/sec/aiv/index.htm</a>. Benchmarking data from the World Development Indicators, most recent publication, series BG.GSR.NFSV.GD.ZS.

Definition Trade in services is the sum of service exports and imports divided by the value of GDP, all in current U.S. dollars.

Coverage Data available for about 80 USAID countries.

CAS Code # 24P11

# Concentration of Exports

Source Constructed with ITC COMTRADE data by aggregating the value for the top three export product groups (SITC Rev.3) and dividing by total exports. Raw data: <a href="http://www.intracen.org/tradstat/sitc3-3d/indexre.htm">http://www.intracen.org/tradstat/sitc3-3d/indexre.htm</a>

Definition The percentage of a country's total merchandise exports consisting of the top three products, disaggregated at the SITC (Rev. 3) 3-digit level.

Coverage Available for about 74 USAID countries.

Data Quality Smuggling is a serious problem in some countries. For countries that do not report trade data to the

United Nations, ITC uses partner country data. There are a number of shortcomings with this approach: ITC does not cover trade with other nonreporting countries; transshipments may hide the actual source of supply; and reporting standards include transport cost and insurance in measuring exports but exclude these items when measuring imports.

CAS Code # 24S1

### **Inward FDI Potential Index**

Source UNCTAD. Indicator is available at <a href="http://www.unctad.org/Templates/WebFlyer.asp?intItemID=2472&lang=1">http://www.unctad.org/Templates/WebFlyer.asp?intItemID=2472&lang=1</a>.

Definition Inward FDI Potential Index measures an economy's attractiveness to foreign investors, capturing factors (apart from market size) that are expected to have an impact. The index ranges in value from 0 (for very poor performance) to 1 (for excellent performance). It is an unweighted average of the scores of 12 normalized economic and social variables

Coverage Data are available for about 77 USAID countries. CAS Code # 24S2

### **Net Barter Terms of Trade**

Source World Development Indicators, most recent publication, series TT.PRI.MRCH.XD.WD

*Definition* Net barter terms of trade are calculated as the ratio of the export price index to the corresponding import price index measured relative to the base year 2000.

Coverage Data are available for about 51 USAID countries.

CAS Code # 24S3

## Real Effective Exchange Rate (REER)

Source IMF Article IV consultation reports: www.imf.org/external/np/sec/aiv/index.htm;

Definition The REER is an index number with base 2000=100, which measures the value of a currency against a weighted average of foreign currencies. It is calculated as the nominal effective exchange rate divided by a price deflator or index of costs. The IMF defines the REER so that an increase in the value represents a real appreciation of the home currency, and a decrease represents a real depreciation.

Coverage Information on coverage is not easily accessible.

Data Quality Changes in real effective exchange rates should be interpreted with caution. For many countries the weights from 1990 onward take into account trade in 1988-90, and an index of relative changes in consumer prices is used as the deflator.

CAS Code # 24S4

# Structure of Merchandise Exports

Source World Development Indicators, most recent publication. Exports from five categories are used: Food exports series TX.VAL.FOOD.ZS.UN; Agricultural raw materials exports series TX.VAL.AGRI.ZS.UN; Manufactures exports series TX.VAL.MANF.ZS.UN; Ores and metals exports series TX.VAL.MMTL.ZS.UN; and Fuel exports series TX.VAL.FUEL.ZS.UN.

Definition This indicator reflects the composition of merchandise exports by major commodity groups—food, agricultural raw materials, fuels, ores and metals, and manufactures.

Coverage Data are available for about 78 USAID countries.

Data Quality The classification of commodity groups follows the Standard International Trade Classification

(SITC) revision 1, but most countries report using later revisions of the SITC. Tables are used to convert data reported in one system to another and this may introduce errors of classification. Shares may not sum to 100 percent because of unclassified trade.

*CAS Code # 24S5* 

## **Trade Policy Index**

Source Index of Economic Freedom, Heritage Foundation: <a href="http://www.heritage.org/Index/">http://www.heritage.org/Index/</a>. The Trade Policy Score (index) is one component of the Index of Economic Freedom.

Definition The index measures the degree to which government hinders the free flow of foreign commerce, based on a country's weighted average tariff rate (weighted by imports from the country's trading partners), with adjustments for non-tariff barriers and corruption in the customs service. The countries are ranked on a 0-to-100 scale, with a higher score representing greater freedom (low barriers to trade)—a switch from the 5-1 ranking of previous Indexes (in which lower numbers denoted greater freedom).

Coverage Data are available for about 83 USAID countries.

Data Quality The index is subjective and at times inconsistent in its treatment of tariffs.

CAS Code # 24S6

# **Ease of Trading Across Borders Ranking**

Source World Bank, Doing Business, Trading Across Borders category:

http://www.doingbusiness.org/ExploreTopics/TradingAcross Borders/

Definitions The 181 economies covered by the Doing Business report are ranked on the ease with which one may import into and export out of the economy. The ranking is based on a simple average of the economy's ranking on each of the composite indicators for Trading Across Borders: number of documents to import and export, cost to import and export, and time to import and export.

Coverage Data are available for nearly all USAID countries. CAS Code # 24S7

# **ECONOMIC INFRASTRUCTURE**

## Internet Users per 100 people

Source World Development Indicators, most recent publication series IT.NET.USER.P2, derived from the International Telecommunication Union database.

Definition Indicator quantifies the number of Internet users, defined as those with access to the worldwide network, per 100 people.

Coverage Data are available for about 88 USAID countries. CAS Code # 25P1

# Logistics Performance Index, Infrastructure

Source World Bank, Logistics Performance Index (LPI) www.worldbank.com/lpi. The Infrastructure Quality is one component of the Logistics Performance Index.

Definition The LPI ranks countries on a scale of 1 to 5 (lowest to highest) in terms of IT, telecommunications and transportation infrastructure. It is based on a survey of more than 800 logistics professionals who each operate in at least eight countries.

Coverage Data are available for about 80 USAID countries. CAS Code # 25P2

# Telephone Density, Fixed Line and Mobile per 100 people

Source World Development Indicators, most recent publication series IT.TEL.TOTL.P3, derived from the International Telecommunication Union database.

Definition The indicator is the sum of subscribers to telephone mainlines and mobile phones per 100 people. Fixed lines represent telephone mainlines connected to the public switched telephone network. Mobile phone subscribers refer to users of cellular-based technology with access to the public switched telephone network.

Coverage Data are available for about 88 USAID countries. CAS Code #25P3

### **Overall Infrastructure Quality Index**

Source Global Competitiveness Report, World Economic Forum

http://www.weforum.org/en/initiatives/gcp/Global%20Competitiveness%20Report/index.htm.

Definition The index measures executives' perceptions of general infrastructure in their respective country. Executives grade, on a scale from 1 to 7, whether general infrastructure in their country is poorly developed (1) or among the best in the world (7).

Coverage Data are available for about 52 USAID countries.

Data Quality Comparisons between countries are difficult because the data are based on executives' perceptions.

CAS Code # 25P4

# Quality of infrastructure—Railroads, Ports, Air Transport and Electricity

Source Global Competitiveness Report, World Economic Forum

http://www.weforum.org/documents/gcr0809/index.html.

*Definitions* The index measures executives' perceptions of general infrastructure in their respective country. Executives grade, on a scale from 1 to 7, whether railroads, ports, air transport, and electricity are poorly developed (1) or among the best in the world (7).

Coverage Data are available for about 52 USAID countries.

Data Quality Comparisons between countries are difficult because the data are based on executive perceptions.

CAS Code #25S1

# Roads, paved (% total)

Source World Development Indicators, most recent publication series IS.ROD.PAVE.ZS

Definitions Paved roads are roads surfaced with crushed stone (macadam) and hydrocarbon binder or bituminized agents, with concrete, or with cobblestones.

Coverage Data are available for nearly all USAID countries. CAS Code #25S2

## SCIENCE AND TECHNOLOGY

# FDI Technology Transfer Index

Source Global Competitiveness Report, World Economic Forum

http://www.weforum.org/documents/gcr0809/index.html.

Definition The index measures executives' perceptions of FDI as a source of new technology for the country. Executives grade, on a scale from 1 to 7, whether foreign direct investment in their country brings little new

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technology (1), or is an important source of new technology (7).

Coverage Data are available for about 52 USAID countries.

Data Quality Comparisons between countries are difficult because the data are based on executive perceptions.

CAS Code # 26P1

# **Availability of Scientists and Engineers Index**

Source Global Competitiveness Report, World Economic Forum

http://www.weforum.org/documents/gcr0809/index.html.

*Definitions* The index measures executives' perceptions of the availability of scientists and engineers in their respective country. Executives grade, on a scale from 1 to 7, whether scientists and engineers in their country are nonexistent (1) or rare, or widely available (7).

Coverage Data are available for about 52 USAID countries.

Data Quality Comparisons between countries are difficult because the data are based on executive perceptions.

CAS Code #26P2

# Science and Technology Journal Articles, per Million People

Source World Development Indicators, most recent publication, series IP.JRN.ARTC.SC

Definitions The indicator refers to published scientific and engineering articles in physics, biology, chemistry, mathematics, clinical medicine, biomedical research, engineering and technology, and earth and space sciences per one million population.

Coverage Data are available for about 82 USAID countries. CAS Code #26P3

## **IPR Protection Index**

Source Global Competitiveness Report, World Economic Forum

http://www.weforum.org/documents/gcr0809/index.html.

*Definitions* The index measures executives' perceptions of the availability of the quality of intellectual property rights protection in their respective country. The scale ranges from 1(for poorly enforced) to 7 (among the best in the world).

Coverage Data are available for about 52 USAID countries.

Data Quality Comparisons between countries are difficult because the data are based on executive perceptions.

CAS Code #26P4

# **HEALTH**

# **HIV Prevalence**

Source UNAIDS for most recent country data: <a href="http://data.unaids.org/pub/GlobalReport/2008/20080813\_gr08">http://data.unaids.org/pub/GlobalReport/2008/20080813\_gr08</a> prev1549\_1990\_2007\_en.xls . World Development Indicators, most recent publication for benchmark data, series SH.DYN.AIDS.ZS.

 $Definition\$  Percentage of people ages 15–49 who are infected with HIV.

Coverage Data are available for about 79 USAID countries.

Data Quality UNAIDS/WHO estimates are based on all available data, including surveys of pregnant women, population-based surveys, household surveys conducted by Kenya, Mali, Zambia, and Zimbabwe, and other surveillance information.

CAS Code # 31P1

# Life Expectancy at Birth

Source World Development Indicators, most recent publication, (SP.DYN.LE00.IN)

*Definition* Life expectancy at birth indicates the number of years a newborn infant would live on average if prevailing patterns of mortality at the time of his or her birth were to stay the same throughout his or her life.

Coverage Data are available for about 88 USAID countries.

Data Quality Life expectancy at birth is estimated on the basis of vital registration or the most recent census/survey. Extrapolations may not be reliable for monitoring changes in health status or for comparative analytical work.

CAS Code # 31P2

## **Maternal Mortality Rate**

Source UN Millennium Indicators Database, http://millenniumindicators.un.org/unsd/mdg/Data.aspx based on WHO, UNICEF and UNFPA data.

Definition The indicator is the number of women who die during pregnancy and childbirth, per 100,000 live births.

Coverage Data are available for about 87 USAID countries.

Data Quality Household surveys attempt to measure maternal mortality by asking respondents about survival of sisters. The estimates pertain to 12 years or so before the survey, making them unsuitable for monitoring recent changes.

CAS Code # 31P3

## Access to Improved Sanitation

Source World Development Indicators, most recent publication, series SH.STA.ACSN.

Definition The indicator is the percentage of population with at least adequate excreta disposal facilities (private or shared, but not public) that can effectively prevent human, animal, and insect contact with excreta.

Coverage Data are available for about 82 USAID countries. CAS Code #31S1

# Access to Improved Water Source

Source World Development Indicators, most recent publication series SH.H2O.SAFE.ZS

Definition The indicator is the percentage of the population with reasonable access to an adequate amount of water from an improved source, such as a household connection, public standpipe, borehole, protected well or spring, or rain water collection

Coverage Data are available for about 83 USAID countries.

Data Quality Access to drinking water from an improved source does not ensure that the water is adequate or safe.

CAS Code # 31S2

## Births Attended by Skilled Health Personnel

Source World Development Indicators, most recent publication, series SH.STA.BRTC.ZS.

Definition The indicator is the percentage of deliveries attended by personnel trained to give the necessary supervision, care, and advice to women during pregnancy, labor, and the postpartum period, to conduct interviews on their own, and to care for newborns.

Coverage Data are available for about 62 USAID countries.

Data Quality Data may not reflect improvements in maternal health; maternal deaths are underreported; and rates of maternal mortality are difficult to measure.

*CAS Code # 31S3* 

#### **Child Immunization Rate**

Source World Development Indicators, most recent publication, estimated by averaging two series: Immunization, DPT (% of children ages 12–23 months) (SH.IMM.IDPT) and Immunization, measles (% of children ages 12–23 months) (SH.IMM.MEAS).

*Definition* Percentage of children under one year of age receiving vaccination coverage for four diseases: measles and diphtheria, pertussis (whopping cough), and tetanus (DDPT).

Coverage Data are available for about 88 USAID countries. CAS Code #31S4

## Prevalence of Child Malnutrition—Weight for Age

Source World Development Indicators, most recent publication, series SH.STA.MALN.ZS.

Definition The indicator is based on the percentage of children under age five whose weight for age is more than minus two standard deviations below the median for the international reference population ages 0–59 months.

Coverage Data are available for about 55 USAID countries. CAS Code # 31S5

### Public Health Expenditure, Percentage of GDP

Source Latest data for host country is obtained from the MCC:

http://www.mcc.gov/selection/scorecards/2007/index.php.

International benchmarking data from World Development Indicators, most recent publication (SH.XPD.PUBL.ZS), based on World Health Organization, World Health Report, and updates and from the OECD, supplemented by World Bank poverty assessments and country and sector studies.

Definition Public health expenditure consists of recurrent and capital spending from government (central and local) budgets, external borrowings and grants (including donations from international agencies and nongovernmental organizations), and social (or compulsory) health insurance funds

Coverage Data are available for about 88 USAID countries. CAS Code #31S6

# **EDUCATION**

# Net Primary Enrollment Rate—Female, Male and Total

Source UNESCO Institute for Statistics, http://stats.uis.unesco.org/ReportFolders/reportfolders.aspx

Definition The indicator measures the proportion of the population of the official age for primary, secondary, or tertiary education according to national regulations who are enrolled in primary schools. Primary education provides children with basic reading, writing, and mathematics skills along with an elementary understanding of such subjects as history, geography, natural science, social science, art, and music.

Coverage Data are available for about 80 USAID countries.

Data Quality Enrollment rates are based on data collected during annual school surveys, which are typically conducted at the beginning of the school year, and do not reflect actual rates of attendance during the school year. In addition, school administrators may report exaggerated enrollments because teachers often are paid proportionally to the number of pupils enrolled. The indicator does not measure the quality of the education provided.

CAS Code # 32P1

### Primary Completion Rate—Total

Source World Development Indicators, most recent publication, series SE.PRM.CMPT.ZS (total). Based on data from United Nations Education, Scientific, and Cultural Organization (UNESCO) Institute of Statistics.

*Definition*: Primary completion rate is the percentage of students completing the last year of primary school. It is calculated by taking the total number of students in the last grade of primary school, minus the number of repeaters in that grade, divided by the total number of children of official graduation age.

Coverage Data are available for about 128 USAID countries CAS Code # 32P2

## Youth Literacy Rate—Female, Male, and Total

Source World Development Indicators, most recent publication, series SE.ADT.1524.LT.ZS.

Definition The indicator is an estimate of the percent of people ages 15–24 who can, with understanding, read and write a short, simple statement on their everyday life.

Coverage Data are available for about 67 USAID countries.

Data Quality Statistics are out of date by two to three years.

CAS Code #32P3

# Net Secondary Enrollment Rate, Total

Source World Development Indicators, most recent publication, series SE.SEC.NENR. Based on data from the United Nations Educational, Scientific, and Cultural Organization (UNESCO) Institute for Statistics.

Definitions Net enrollment ratio is the ratio of children of official school age based on the International Standard Classification of Education 1997 who are enrolled in school to the population of the corresponding official school age. Secondary education completes the provision of basic education that began at the primary level and aims at laying the foundations for lifelong learning and human development by offering more subject- or skill-oriented instruction using more specialized teachers.

Coverage Not available for draft.

Data Quality Break in series between 1997 and 1998 due to change from International Standard Classification of Education (ISCED) 76 to ISCED97. Recent data are provisional.

CAS Code #32P4

# **Gross Tertiary Enrollment Rate, Total**

Source World Development Indicators, most recent publication, series SE.TER.ENRR. Based on data from the UNESCO Institute for Statistics.

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

Coverage Not available for draft.

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Data Quality Break in series between 1997 and 1998 due to change from International Standard Classification of Education (ISCED) 76 to ISCED97. Recent data are provisional.

CAS Code #32P5

### Expenditure on Primary Education, Percentage of GDP

Source Millennium Challenge Corporation:

 $\underline{http://www.mcc.gov/selection/scorecards/2007/index.php.}$ 

Definition The indicator is the total expenditures on education by all levels of government, as a percent of GDP.

Coverage Data are available for about 58 USAID countries.

Data Quality The MCC obtains the data from national sources through U.S. embassies.

CAS Code #32S1

## **Educational Expenditure per Student, Percentage of GDP** per capita-Primary, Secondary and Tertiary

Source World Development Indicators, most recent publication series SE.XPD.PRIM.PC.ZS (primary); SE.XPD.SECO.PC.ZS (secondary); and SE.XPD.TERT.PC.ZS (tertiary).

Definition Public expenditure per student (primary, secondary or tertiary) is defined as the public current expenditure on education divided by the total number of students, by level, as a percentage of GDP per capita.

Coverage Data are available for about 50, 47, and 45 USAID countries (for primary, secondary, and tertiary expenditure, respectively).

Data Quality Education statistics should be interpreted with caution because the data are out of date by 2 or 3 years; also, the statistics reflects solely public spending, generally excluding spending by religious schools, which play a significant role in many developing countries. Data for some countries and for some years refer to spending by the ministry of education only.

CAS Code # 32S2

## Pupil-teacher Ratio, Primary School

Source World Development Indicators, most recent publication series SE.PRM.ENRL.TC.ZS.

Definition Primary school pupil-teacher ratio is the number of pupils enrolled in primary school divided by the number of primary school teachers (regardless of their teaching assignment).

Coverage Data are available for about 76 USAID countries.

Data Quality The indicator does not take into account differences in teachers' academic qualifications, pedagogical training, professional experience and status, teaching methods, teaching materials and variations in classroom conditions - all factors that could also affect the quality of teaching/learning and pupil performance.

CAS Code # 32S3

## **EMPLOYMENT AND WORKFORCE**

# Labor Force Participation Rate

Source: World Development Indicators, most recent publication series: SL.TLF.CACT.ZS. Based on data from International Labour Organization (ILO).

Definition The proportion of the population ages 15 and older that is economically active: all people who supply labor for the production of goods and services during a specified period. It includes both the employed and the unemployed.

Coverage Data are available for about 88 USAID countries.

CAS Code #33P1

# Rigidity of Employment Index

Source World Bank, Doing Business, Employing workers category:

http://www.doingbusiness.org/ExploreTopics/EmployingWor kers/

Definition Rigidity of employment index is a measure of labor market rigidity constructed as the average of the Difficulty of Hiring index, Rigidity of Hours index and Difficulty of Firing index. Index ranges in value from 0 (minimum rigidity) to 100 (maximum rigidity).

Coverage Data are available for nearly all USAID countries.

Data Quality Subindices are compiled by the World Bank from survey responses to in-country specialists.

CAS Code # 33P2

## Size and Growth of the Labor Force

Source Size of labor force from World Development Indicators (SL.TLF.TOTL.IN); annual percentage change calculated from size data.

Definition The indicator measures the size of the labor supply, and its annual percent change. Labor force is made up of people who meet the International Labor Organization definition of the economically active population: all people who are able to supply labor for the production of goods and services during a specified period, including both the employed and the unemployed. Although national practices vary in the treatment of groups such as the armed forces and seasonal or part-time workers, in general, the labor force includes the armed forces, the unemployed, and first-time job-seekers, but excludes homemakers and other unpaid caregivers and workers in the informal sector.

Coverage Data are available for about 88 USAID countries. CAS Code #33P3

# **Unemployment Rate**

World Development Indicators, most recent publication series SL.UEM.TOTL.ZS.

Definition The unemployment rate refers to the share of the labor force that is without work but available for and seeking employment. For this purpose, informal sector workers and own-account workers (including subsistence farmers) are counted as employed.

Coverage Data are available for about 50 USAID countries.

Data Quality Definitions of labor force and unemployment differ by country, making international comparisons inaccurate.

CAS Code # 33P4

# **Economically Active Children, Percentage Children Ages**

Source World Development Indicators, most recent publication series SL.TLF.0714.ZS. Derived from the Understanding Children's Work project based on data from ILO, UNICEF, and the World Bank.

Definitions Economically active children refer to children involved in economic activity for at least one hour in the reference week of the survey.

CAS Code # 33P5

## Firing Costs, Weeks of Wages

Source World Bank, Doing Business, Employing Workers Category:

 $\underline{http://www.doingbusiness.org/ExploreTopics/EmployingWorkers/}.$ 

Definitions The firing cost indicator measures the cost of advance notice requirements, severance payments, and penalties due when terminating a redundant worker, expressed in weekly wages. One month is recorded as 4 and 1/3 weeks

Coverage Data available for nearly all USAID countries. CAS Code # 33S1

# **AGRICULTURE**

## Agriculture Value Added per Worker

Source World Development Indicators, most recent publication series EA.PRD.AGRI.KD, derived from World Bank national accounts files and Food and Agriculture Organization, Production Yearbook and data files.

Definition Agriculture value added per worker is a basic measure of labor productivity in agriculture. Value added in agriculture measures the output of the agricultural sector (ISIC divisions 1–5)—forestry, hunting, fishing, cultivation of crops, and livestock production—less the value of intermediate inputs. Data are in constant 2000 U.S. dollars.

Coverage Data are available for about 80 USAID countries. CAS Code # 34P1

#### Cereal Yield

Source World Development Indicators, most recent publication series AG.YLD.CREL.KG based on Food and Agriculture Organization Production Yearbook and data files.

Definition Cereal yield, measured as kilograms per hectare

Definition Cereal yield, measured as kilograms per hectare of harvested land, includes wheat, rice, maize, barley, oats, rye, millet, sorghum, buckwheat, and mixed grains. Production data on cereals relate to crops harvested for dry grain only.

Coverage Data are available for about 84 USAID countries.

Data Quality Data on cereal yield may be affected by a variety of reporting and timing differences. The FAO allocates production data to the calendar year in which the bulk of the harvest took place. But most of a crop harvested near the end of a year will be used in the following year. Cereal crops harvested for hay or harvested green for food, feed, or silage, and those used for grazing, are generally excluded. But millet and sorghum, which are grown as feed for livestock and poultry in Europe and North America, are used as food in Africa, Asia, and countries of the former Soviet Union. So some cereal crops are excluded from the data for some countries and included elsewhere, depending on their use.

*CAS Code # 34P2* 

# **Growth in Agricultural Value-Added**

Source The latest country data are taken from national data sources or from IMF Article IV consultation reports: <a href="http://www.imf.org/external/np/sec/aiv/index.htm">http://www.imf.org/external/np/sec/aiv/index.htm</a>. The benchmarking data are from World Development Indicators, most recent publication series NV.AGR.TOTL.KD.ZG

Definition The indicator measures the annual growth rate for agricultural value added, in constant local currency. Regional group aggregates are based on constant 2000 U.S. dollars. Agriculture corresponds to ISIC divisions 1–5 and includes

forestry, hunting, and fishing, as well as cultivation of crops and livestock production. Value added is the net output of a sector after all outputs are added up and intermediate inputs are subtracted. It is calculated without deductions for depreciation of fabricated assets or depletion and degradation of natural resources.

Coverage Data are available for about 84 USAID countries. CAS Code # 34P3

# Fertilizer Consumption (100 grams per hectare of arable land)

Source World Development Indicators, most recent publication series AG.CON.FERT.ZS, derived from Food and Agriculture Organization Production Yearbook and data files

Definition Fertilizer consumption (100 grams per hectare of arable land) measures the quantity of plant nutrients used per unit of arable land. Fertilizer products cover nitrogenous, potash, and phosphate fertilizers (including ground rock phosphate). Traditional nutrients--animal and plant manures-are not included. The time reference for fertilizer consumption is the crop year (July through June). Arable land includes land defined by the FAO as land under temporary crops (double-cropped areas are counted once), temporary meadows for mowing or for pasture, land under market or kitchen gardens, and land temporarily fallow. Land abandoned as a result of shifting cultivation is excluded.

Coverage Data available for

CAS Code #34P4

## **Agricultural Policy Costs Index**

 ${\it Source} \quad {\it Global \ Competitiveness \ Report, \ World \ Economic \ Forum}$ 

http://www.weforum.org/documents/gcr0809/index.html.

Definition The index measures executives' perceptions of agricultural policy costs in their respective country. Executives grade, on a scale from 1 to 7, whether the cost of agricultural policy in a given country is excessively burdensome (1), or balances all economic agents' interests (7).

Coverage Data are available for about 52 USAID countries.

Data Quality Comparisons between countries are difficult because the data are based on executives' perceptions.

CAS Code # 34S1

# **Crop Production Index**

Source World Development Indicators, most recent publication series AG.PRD.CROP.XD, based on FAO statistics.

Definition Crop production index shows agricultural production for each year relative to the period 1999–2001 = 100. The index includes production of all crops except fodder crops. Regional and income group aggregates for the FAO's production indices are calculated from the underlying values in international dollars, normalized to the base period.

Coverage Data are available for about 85 USAID countries.

Data Quality Regional and income group aggregates for the FAO's production indices are calculated from the underlying values in international dollars, normalized to the base period 1999–2001. The FAO obtains data from official and semiofficial reports of crop yields, area under production, and livestock numbers. If data are not available, the FAO makes estimates. To ease cross-country comparisons, the FAO uses international commodity prices to value production expressed in international dollars (equivalent in purchasing power to the U.S. dollar). This method assigns a single price

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to each commodity so that, for example, one metric ton of wheat has the same price regardless of where it was produced. The use of international prices eliminates fluctuations in the value of output due to transitory movements of nominal exchange rates unrelated to the purchasing power of the domestic currency.

Coverage: Data are available for about 85 USAID countries. CAS Code # 34S2

#### **Livestock Production Index**

Source: World Development Indicators, most recent publication series AG.PRD.LVSK.XD, based on FAO.

Definition: Livestock production index shows livestock production for each year relative to the base period 1999–2001=100. The index includes meat and milk from all sources, dairy products such as cheese, and eggs, honey, raw silk, wool, and hides and skins.

Coverage: Data are available for about 85 USAID countries.

Data Quality: See comments on the Crop Production Index.

CAS Code # 34S3

## **Agriculture Export Growth**

Source: World Development Indicators, most recent publication series TX.VAL.AGRI.ZS.UNs, Agricultural raw materials exports (% of merchandise exports), based on World Bank staff estimates from the COMTRADE database maintained by the United Nations Statistics Division; and series TX.VAL.MRCH.CD.WT, Merchandise exports (current US\$), based on data from the World Trade Organization.

Definitions: Agricultural raw materials comprise SITC section 2 (crude materials except fuels), excluding divisions 22, 27 (crude fertilizers and minerals excluding coal, petroleum, and precious stones), and 28 (metalliferous ores and scrap). Merchandise exports show the f.o.b. value of goods provided to the rest of the world valued in U.S. dollars. Data are in current U.S. dollars. The indicator is calculated by multiplying agricultural raw materials by merchandise exports. The annual growth rate is then calculated from the resulting series.

Coverage: Not available for draft.

CAS Code # 34S4