

## **Liberia**Economic Recovery 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 programming priorities; and
- 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, 2006-2008, Nathan has developed a special Economic Recovery template for countries emerging from crisis. This report is the is a pilot for the new template.

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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.nathaninc.com">www.nathaninc.com</a>. For further information or hard copies of CAS publications, please contact:

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## HIGHLIGHTS OF LIBERIA'S PERFORMANCE

Profile of Conflict and Recovery	Fifteen years of conflict displaced one-third of the population and destroyed most of the country's infrastructure. Since the election of President Sirleaf in 2005, the risk of renewed conflict in Liberia has declined considerably and the economy has grown rapidly.  Nevertheless, the country remains extremely fragile (its score on the Failed States Index was 92.9 in 2007) and is the poorest postconflict nation in the world, with per capita GDP of \$195.
Postconflict Economic Growth	Although GDP is estimated to have grown at 9.4 percent in 2007, up from 7.8 percent in 2006, this growth is driven largely by construction and services; GDP is still far below prewar levels. Improving governance and rule of law, maintaining security, and sustaining growth in investment will be needed to preserve peace, increase economic growth, and reduce poverty.
Poverty and Inequality	The incidence of poverty in Liberia is astronomically high and could jeopardize Liberia's nascent peace. Nearly half of the population lives on less than US\$ 0.5 PPP per day and approximately the same number is undernourished.
Economic Structure	Because mining and productive industries were decimated by poor governance and the civil war, agriculture now accounts for the vast majority of value added in the economy.
Demography and Environment	High birth rates and the return of refugees are straining Liberia's social services and environmental resources. Increasing urbanization is also putting added pressure on already poor infrastructure in the capital.
Gender	There are significant gender gaps in education and labor force participation in Liberia. To improve the situation, gender-mainstreaming should be incorporated into all facets of the country's economic recovery.
Economic Stabilization and Government Capacity	Liberia's government has taken significant steps towards creating a sound environment for economic growth and sustained peace. Inflation is relatively low, monetary policy is expansionary, and the government is taking prudent fiscal measures to implement a balanced budget. Nevertheless, government capacity is woefully low (though improving) and is delaying the implementation of certain government-financed programs.
Business Environment	Liberia has tremendous impediments to overcome to create a welcoming environment for both domestic and foreign private sector businesses. Major problems include poor adhesion to rule of law, high levels of corruption, and cumbersome red tape.
Financial Sector	Liberia's financial sector is underdeveloped and inefficient. Nonetheless, progress is being made: monetization and credit to the private sector are increasing and the interest rate spread is narrowing.
External Sector	Exports from Liberia are steadily increasing, FDI is on the rise, and the government is attracting large amounts of foreign aid to help with the rebuilding process. There is a pressing need to solve Liberia's external debt problems (the present value of debt was equal to 674 percent of GNI in 2006) and to build up foreign reserves, the lack of which is rendering the country vulnerable to external shocks. Although Liberia has entered the HIPC process, debt service will increase over levels when all debt was in arrears.
Economic Infrastructure	Liberia's infrastructure is extremely poor, and the lack of infrastructure is a huge obstacle to the rebuilding process. The railway network has been torn up for scrap, and roads are in very poor condition. ICT infrastructure is also extremely underdeveloped and the power grid is practically nonexistent.

Health	Health outcomes are very poor in Liberia, and the withdrawal of humanitarian NGOs is reducing the funding available. Life expectancy is about 45 years, child mortality is high, and the lack of access to improved sanitation and water sources for the majority of the population is exacerbating an already dire situation. The government is making efforts to increase health care spending, though more donor assistance is needed urgently.
Education	Education indicators for Liberia are old, which exemplifies the disruption in education caused by the civil war. Youth literacy and school attendance rates are low, and there is a lack of basic educational infrastructure and materials.
Employment and Workforce	Liberia's employment problems are immense because of its inability to provide work for those already in the labor force or to absorb new workers. In 2006, an estimated 78 percent of the workforce was unemployed.
Agriculture	Agricultural output has risen somewhat since the end of the war, but gains are stifled by weak infrastructure and poor governance. Rehabilitating the sector will likely be key to increasing economic growth and reducing poverty and inequality.

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

## LIBERIA: NOTABLE STRENGTHS AND WEAKNESSES—SELECTED INDICATORS

Selected Indicators, by Topic	Notable Strengths	Notable Weaknesses		
Postconflict Economic Growth				
Per capita GDP, PPP		х		
Real GDP growth	Х			
Gross fixed investment, percentage of GDP		х		
Poverty and Inequality				
Population living on less than \$1 PPP per day		х		
Population living below national poverty line		X		
Population below minimum dietary energy consumption		X		
Economic Structure				
Industry, value added, percent of GDP		Х		
Demography and Environment				
Youth dependency rate		х		
Urbanization rate		Х		
Gender and Children				
Female labor force participation rate		х		
Economic Stabilization and Government Capacity				
Government Effectiveness Index		х		
Inflation rate	Х			
Overall government budget balance, percentage of GDP	Х			
Money supply growth	X			
Business Environment				
Control of Corruption Index		х		
Voice and Accountability Index	х			
Rule of Law Index		X		
Ease of Doing Business ranking		X		
Financial Sector				
Domestic credit to the private sector		X		
Money supply, % GDP	х			
External Sector				
Aid, percentage of GNI	х			
Debt service ratio, percentage of exports		x		
Foreign Direct Investment, percentage of GDP		X		
Gross international reserves, months of imports		x		
Present value of debt, percentage of GNI		Х		

Selected Indicators, by Topic	Notable Strengths	Notable Weaknesses
Economic Infrastructure		
Telephone density		X
Internet users		X
Roads paved, percentage of total roads		X
Health		
Child mortality rate		x
Life expectancy at birth		x
Access to improved sanitation		x
Access to improved water source		X
Public health expenditure, percentage of GDP	X	
Education		
Net primary enrollment rate		x
Gross tertiary enrollment rate	Х	
Persistence to grade 5		X
Youth literacy rate		x
Employment and Workforce		
Unemployment rate		х
Rigidity of Employment Index	X	

Note: The chart identifies selective indicators for which Liberia's performance is particularly strong or weak relative to benchmark standards, as explained in the Appendix. Details are discussed in the text. The Data Supplement (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. The supplement is available at <a href="http://www.nathaninc.com/projects/projectdetails.asp?pid=138&pfid=0&rpid=4&rid=9">http://www.nathaninc.com/projects/projectdetails.asp?pid=138&pfid=0&rpid=4&rid=9</a>.

## 1. Introduction

This report is one of a series of economic recovery 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 recovery 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, preconflict levels, comparator countries, trends, and opportunities for strengthening growth and reducing poverty. This study uses two other countries from low-income Sub-Saharan African (LI-SSA) that have emerged from conflict, Mozambique and Sierra Leone, as comparators. Sierra Leone provides a good baseline for direct comparison, whereas Mozambique represents an aspiration. In addition, Liberia's performance is compared to the median values of other low-income (LI) and LI-SSA countries.

#### **METHODOLOGY**

The CAS methodology permits a rapid and inexpensive analysis of strengths and weaknesses of an economy. 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 Recovery Assessment is based on an examination of key economic, conflict, 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: sustainable growth and poverty reduction, similar to the one developed under the *Country Analytical Template* (April, 2005), but it is adapted to the particular circumstances of postconflict recovery settings.<sup>3</sup>

<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 February 2007.

<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.

Obtaining sustained peace, reducing poverty and achieving economic growth are goals that are influenced by human development outcomes where many elements are involved, including population growth, public provision of education and health services, job creation and workforce development (especially among youth), demographic composition, agricultural development, and progress towards gender equity. Countries affected by conflict are generally characterized by a lack of government capacity, minimal private sector activity, weak or damaged infrastructure, and a population that lives under uncertainty, often after fleeing war-torn regions.

Transformational growth requires a high level of investment and rising productivity, which are 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.

In countries such as Liberia, which have experienced ongoing conflict, the interaction between security conditions and economic performance must be taken into consideration. Overt conflict, or even the risk of serious conflict, can adversely affect growth; conversely, an end to conflict can deliver a peace dividend and a boost to economic growth and development. Not only can conflict affect the economy, economic conditions can exacerbate or ameliorate security problems.

The present evaluation must be interpreted with care. A concise analysis of selected indicators cannot provide a definitive diagnosis of economic performance problems or 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) and offer insight into potential paths for USAID intervention, complement on-the-ground knowledge, and point the way toward further in-depth studies.

Many USAID missions that commission the reports find them extremely helpful; for instance, in the design of new programs and the development of strategic plans; as a background resource for new staff, temporary duty assignments, and consultants; and for framing in-depth studies.

Two summary tables preceding the main report text highlight the essential findings of the analysis. The first presents an overview of Liberia's performance in a number of sectors or technical areas and the second identifies Liberia's strengths and weaknesses in these sectors and technical areas.

The remainder of the report presents the most important results of the diagnostic analysis, in three sections: Economy and Conflict Recovery Overview; Private Sector Enabling Environment; and

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Pro-Poor Growth Environment. Table 1-1 summarizes the topical coverage. The appendix 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* 

Economic and Conflict	Private Sector Enabling	Pro-Poor Growth
Recovery Overview	Environment	Environment
<ul> <li>Profile of Postconflict Recovery</li> <li>Postconflict Economic Growth</li> <li>Poverty and Inequality</li> <li>Economic Structure</li> <li>Demography and Environment</li> <li>Gender and Children</li> </ul>	<ul> <li>Economic Stabilization and Government Capacity</li> <li>Business Environment</li> <li>Financial Sector</li> <li>External Sector</li> <li>Economic Infrastructure</li> </ul>	<ul><li>Health</li><li>Education</li><li>Employment and Workforce</li><li>Agriculture</li></ul>

### DATA QUALITY AND FORMAT

The breadth and quality of economic data collected for Liberia are very poor. The World Bank gave Liberia an overall score of 17 percent on its 2007 Statistical Capacity Indicator index, including a zero in data collection. The data collection score should improve with the release of the Poverty Reduction Strategy Paper, the Demographic and Health Survey, the Core Welfare Indicators Survey, and other surveys later in 2008. Statistical practice is also very poor. In 2007, Liberia received a score of 10 percent, owing to a multitude of problems, including old base years and old manuals for certain economic indicators, and poor reporting techniques. Though statistical availability is better (at 45 percent), it is low in absolute terms. These data problems complicate our analysis in several sections of the report. Nevertheless, the data set was adequate for evaluating and highlighting a broad range of trends and issues in Liberia's postconflict recovery.

Major efforts are underway to build statistical capacity at the Liberia Institute of Statistics and Geo-Information Services (LISGIS), the national statistics agency, and the Central Bank of Liberia. LISGIS receives assistance from Afristat and Paris 2000, as well as from the UNDP. The World Bank is also planning assistance to LISGIS, while the IMF is providing assistance to the Central Bank of Liberia in national income accounting. LISGIS, with its limited staff, has difficulty assimilating all of this assistance but is in real need of improving its statistical practices. In the short term, other donors might consider providing financial assistance for LISGIS's planned activities, in coordination with its deputy director-general. In the longer term, pairing LSGIS with a developed-country statistics office, such as the Bureau of the Census in the United States, could increase Liberia's statistical capacity significantly. Such a long-term institutional relationship could provide short term technical assistance to LISGIS and send Liberians for on-the-job training in the developed-country agency.

## 2. Economy and Conflict Recovery Overview

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

## PROFILE OF CONFLICT AND RECOVERY

Liberia collapsed into civil war in 1980 and remains in an uneasy cycle of conflict and truce (see Exhibit 2-1). The latest significant conflict, which resulted in at least 1,000 deaths, was civil unrest from 2000 to 2003. It is estimated that 150,000 people lost their lives and that a third of the population was displaced in the civil war that diminished the country's GDP to one-eighth of its 1980 size. Liberia has long been notorious for corruption and poor political governance; under the National Transitional Government of Liberia (NTGL) established by the 2003 Accra Comprehensive Peace Accord (ACPA), proposals were made to improve governance, but the proposed reform was never carried out. The peace accord also led to the intervention of 15,000 military personnel from the United Nations Mission in Liberia (UNMIL), the second-largest peacekeeping mission in the world.<sup>4</sup> The ex-president, Charles Taylor, awaits trial in International Court in The Hague for war crimes, crimes against humanity, and violations of international humanitarian law committed in Sierra Leone during that country's 10-year civil war.

In response to the deterioration of economic governance under the NTGL, including auditors' evidence of corruption in the chairman's office, the Ministry of Finance, and state-owned enterprises, Liberia's international partners negotiated with the NTGL the Governance and Economic Management Assistance Program (GEMAP),<sup>5</sup> consisting of six components (financial management and accountability, improving budgeting and expenditure management, improving

<sup>&</sup>lt;sup>4</sup> The peacekeeping mission in Democratic Republic of Congo has 18,400 personnel, but it covers 20 times the land area and nearly 20 times the population of Liberia.

<sup>&</sup>lt;sup>5</sup> The United Nations looked closely at this attempt at robust economic intervention as an intermediate form of organization between the United Nation's assuming full sovereign authority (international trusteeship) and no sovereignty (transitional regime drawn from leaders of formerly warring parties). See Renata Dwan and Laura Bailey, "Liberia's Governance and Economic Management Assistance Programme (GEMAP): a joint review by the Department of Peacekeeping Operations' Peacekeeping Best Practices Section and the World Bank's Fragile States Group," May 2006.

procurement practices and granting of concessions, establishing effective processes to control corruption, supporting key institutions, and capacity building) and placing international experts with cosigning authority in major revenue-handling ministries, agencies, and state-owned enterprises.

## **Exhibit 2-1** *Chronology of Political Strife and Conflict*

The causes of Liberia's political strife and conflict hark back to its creation in 1847. From the country's beginnings, former slaves from the United States (known as Americo-Liberians) dominated political life. Discrimination against natives in education, jobs, and access to public services is at the origin of the bloody conflict that erupted in 1980.

1980–1985. In 1980, Samuel Doe seized power in a bloody coup in which President William Tolbert was assassinated, 13 of his cabinet members executed, and dozens of government officials imprisoned. After five years of military rule, elections that were characterized by widespread fraud continued Doe in power. A 1985 overthrow attempt was defeated, the leader executed, and a bloody ethnic purge initiated.

1989–1990. In December 1989 Charles Taylor's attempt to topple the Doe regime launched a seven-year war. Taylor's forces reached Monrovia, but international intervention—through the military arm of ECOWAS—repulsed them. In September 1990, a splinter group led by Prince Johnson captured and executed Doe.

1991–1996. In 1991 a transitional government established the first of a series of ruling coalitions in a cycle of failed pan-African or internationally negotiated peace accords and power-sharing arrangements interrupted by violence among the many factions. An April 1996 attempt to arrest Roosevelt Johnson, the leader of one faction, led to the death of 3,000 people. A supplemental agreement to a 1995 pact finally led to a cease-fire and to free elections in July 1996, in which Taylor and his National Patriotic Party won the

presidency and majorities in both houses of the legislature by wide margins.

1999–2003. In early 1999 Ghana, Nigeria, the United States, and Britain accused Liberia of fomenting war in neighboring Sierra Leone by arming the rebel insurgency in exchange for diamonds. In 2001, the United Nations imposed sanctions on Liberian diamond and timber exports and issued a travel ban on Liberian government officials in response to its continued support of this insurgency. In the interval, rebel operations beginning in the north of Liberia spilled into western, central, and southeastern regions, reaching 10 kilometers from Monrovia in 2003.

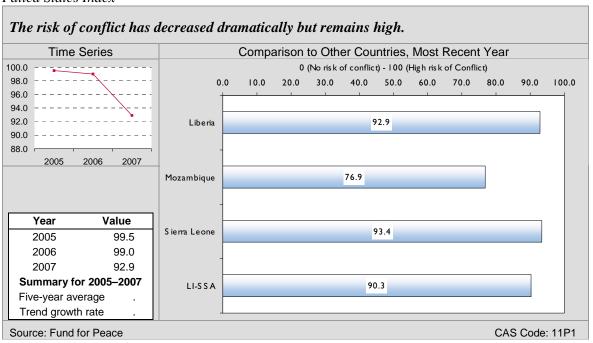
2003-2005. In mid-2003 international pressure mounted for a peacekeeping mission. In August, amid the arrival of Nigerian peacekeepers and U.S. Marines, Taylorwho had been indicted by a special U.N.-backed court for war crimes, crimes against humanity, and violations of international humanitarian law during Sierra Leone's 10-year civil war—resigned from office and fled to exile in Nigeria. Under the ACPA, signed in September, control of ministries, government agencies, and stateowned enterprises was apportioned among the competing factions. In October 2003, U.S. troops were replaced by UNMIL, with 15,000 military personnel to disarm combatants and maintain the cease-fire. In 2005 elections that were generally perceived as free and fair led to the election of Ellen Johnson Sirleaf, Africa's first female head of state, and an opposition-led legislature that included ex-warlords.

The years of civil war displaced a third of the population and left the country's infrastructure in ruins.

Liberia's fortunes began to improve with the election of Ellen Johnson Sirleaf as president in 2005.<sup>6</sup> When she was inaugurated in January 2006, she assumed authority over a country fraught with problems. The new government's efforts are bearing fruit in reducing the risks of further conflict and creating an environment that fosters economic growth. By reducing corrupt practices in customs (particularly by enforcing offshore inspection), establishing a large taxpayer unit, and other measures, the new government has increased revenue—from \$44.5 million in 2003 to \$85.6 million in 2005/6, which included the first six months of the Sirleaf regime, to \$148.3 million in 2006/7, and to an estimated \$185.7 million in 2007/8.<sup>7</sup>

Liberia's conflict-related risks and instability are quantified by the Failed States Index, developed by the Fund for Peace. In 2007, on the basis of a sum of ratings from 1 (best) to 10 (worst) for 12 social, economic, and political-military "indicators of instability," Liberia received a score of 92.9, an improvement from its scores of 99.0 in 2006 and 99.5 in 2005. It was the most improved country in the 2007 index. Sierra Leone scored slightly worse, with 93.4, while Mozambique was much more stable, with a score of 76.9 (Figure 2-1).





<sup>&</sup>lt;sup>6</sup> President Sirleaf's election has also influenced Liberia's (and Africa's) focus on women's empowerment and gender equity.

<sup>&</sup>lt;sup>7</sup> IMF. March 2008. Country Report Number 08/108.

<sup>&</sup>lt;sup>8</sup> The Failed States Index assesses violent internal conflicts and measures the impact of mitigating strategies: <a href="http://www.fundforpeace.org/web/index.php?option=com\_content&task=view&id=99&Itemid=140">http://www.fundforpeace.org/web/index.php?option=com\_content&task=view&id=99&Itemid=140</a>.

<sup>&</sup>lt;sup>9</sup> The *social indicators* are demographic pressures, refugees and displaced persons, group grievance, human flight, and uneven development; *economic indicators* are economy and legitimacy of the state; and *political/military indicators* are public services, human rights, security apparatus, factionalized elites, and external influence. An unweighted sum of these indicators, the index ranges from 10 to 120 (best to worst).

Liberian scores on rule of law, political rights, and civil liberties have also improved. In 2006, Liberia received a score of 3.0 on the Political Rights index published by Freedom House, on which 1 is the best and 7 is the worst. This is a significant improvement over its 2003 score of 4.5 and on par with Mozambique's score of 3.0 in 2006.

Security sector reform remains a major requirement for ensuring political stability. UNMIL completed its disarmament program for former combatants in late 2004. Because the government is still training a new police force and a new national army (an army large enough to defend the country's borders but not so large as to pose a perceived threat to neighboring countries or threaten civilian authority), Liberian security still depends on UNMIL's strong and visible presence throughout the country. UNMIL fielded approximately 13,300 military personnel and 1,200 police with a budget of \$688 million (equivalent to 90 percent of Liberia's GDP) as of end-December 2007. Recognition of recent improvement in the security situation, together with growing needs elsewhere, however, led the United Nations to reduce the force ceiling by 2,450 troops and 458 police in October 2007. Improvement in the security sector has not yet led to changes in the Security Sector Reform indicator, but future improvement should be anticipated thanks to increased economic growth and the high level of investment in the sector.

## POSTCONFLICT ECONOMIC GROWTH

Conflict dampens economic growth by diverting resources into nonproductive military activities, impeding investment in physical capital and human resources, impairing fiscal capacity for other essential government expenditures, and imposing debt that will encumber future budgets. <sup>12</sup>
According to one influential study, civil wars reduce GDP per capita at an annual rate of 2.2 percent relative to estimates of the trend likely in the absence of conflict. <sup>13</sup> The impact on per capita income is especially pronounced in regions affected directly by instability. <sup>14</sup>

The economy is now a mere one-eighth of its prewar (1980) size. <sup>15</sup> Iron ore production ceased because of the exhaustion of high-grade deposits, unfavorable world prices, rising violence, and the cannibalization of the railroad lines serving the mining areas for scrap. Rubber production began a steady decline as over-age trees were not replaced. Exports of timber and diamonds, sources of employment and export earnings, were placed under sanction by the Security Council in 2001 to stop the revenues fueling conflicts in Sierra Leone, Guinea, and Côte d'Ivoire. Economic activity became concentrated around Monrovia. As a result, Liberia, which had a per

<sup>&</sup>lt;sup>10</sup> "Disarmament, Demobilization, Reintegration and Rehabilitation." United Nations Mission in Liberia. 2006. United Nations. 1 Oct. 2007: http://unmil.org/content.asp?ccat=ddrr.

<sup>&</sup>lt;sup>11</sup> UN Department of Peace Keeping Operations, www.un.org/depts/dpko/missions/unmil/facts.html

<sup>12</sup> Daniel Mejia, Conflict and Economic Growth: A Survey of the Theoretical Links, Webpondo, September 2004. http://www.webpondo.org/filesoctdic2004/conflict\_growth.pdf, accessed April 13, 2007.

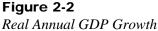
<sup>13</sup> Paul Collier, On the Economic Consequences of Civil War, Oxford Economic Papers 51 (1999), 168–83. http://www.worldbank.org/research/conflict/papers/cw-consq.pdf, accessed April 13, 2007.

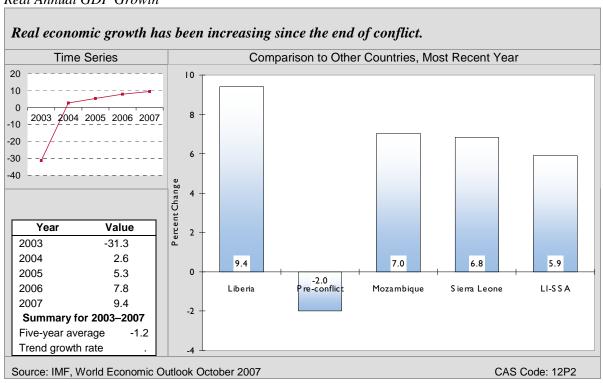
<sup>14</sup> Alberto Abadie and Javier Gardeazabal, The Economic Costs of Conflict: A Case Study of the Basque Country, July 2002. http://ksghome.harvard.edu/~aabadie/ecc.pdf, accessed April 13, 2007.

<sup>&</sup>lt;sup>15</sup> World Development Indicators 2006 and World Economic Outlook, October 2007.

capita GDP of \$880 in 1980 (in 1992 prices) is now the poorest postconflict nation and one of the poorest countries in the world, with real GDP per capita (in constant 1992 U.S. dollars) of \$121 in 2006 and \$126 in 2007, \$16 and per capita GDP PPP of \$357.

Liberia, however, is making significant progress in increasing economic growth and restoring economic stability. Driven mainly by donor inflows and a gradual recovery in the agricultural and services sectors (mostly construction) in 2006, the economy grew by 9.4 percent in 2007, if from a low base, and the IMF expects growth to increase to 9.5 percent in 2008, and to double digits in 2009 as forestry exports<sup>17</sup> and iron ore production resume (Figure 2-2).<sup>18</sup> This growth rate is somewhat higher than those in Mozambique and Sierra Leone (7.0 percent and 6.8 percent respectively) and notably higher than the LI-SSA median of 5.9 percent.





This performance will not be easy to sustain in the medium and long terms. Gross fixed investment, particularly gross fixed private investment, the driver of sustained economic growth, is woefully low by both regional and absolute standards. In 2005 (the latest year available), gross fixed investment accounted for just 16.5 percent of GDP, well below the average of 25.7 percent

<sup>&</sup>lt;sup>16</sup> International Monetary Fund, Liberia: Fourth Review of Performance under the Staff-Monitored Program and Request for Three-Year Arrangements under the Poverty Reduction and Growth Facility and Extended Fund Facility, February 27, 2008.

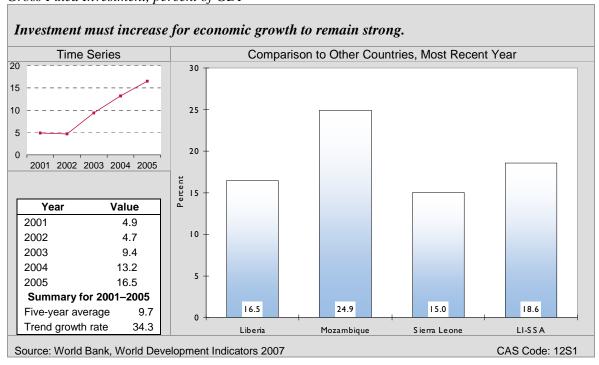
<sup>&</sup>lt;sup>17</sup> Land tenure issues are closely linked to increased earnings from forestry. For more information see Agriculture.

<sup>&</sup>lt;sup>18</sup> World Economic Outlook, October 2007.

for the five years after the end of Mozambique's conflict and the LI-SSA median of 18.6 percent. To maintain rapid economic growth, experience suggests that Liberia will have to increase gross fixed investment to approximately 20 percent of GDP. It may manage this rate in 2008/09 as major investments are made to reopen iron ore concessions. If growth higher than the LI-SSA average is sustained for several years before growth reverts to a lower long-term trend, this will reduce poverty, increase productivity, and foster economic and political stability. The IMF and World Bank, in preparation for the HIPC process, project that growth that is high during the postconflict recovery period but declines to a historic trend of 3.9 percent after 2016, would return real GDP to about 90 percent of the 1980 level by 2026, at which time real GDP per capita will be only about 31 percent of its 1980 level.

Liberia appears to be headed in the right direction. Increased political stability is supported by strong economic growth and a return to rule of law. But the country will be unable to achieve stability on its own. Private and public sector investment will be critical for fueling robust transformational economic growth. Donors will have to continue investing in Liberia, focusing on aid effectiveness and donor coordination. They will have to consider funding programs that foster peace and the rule of law and work with the government and the private sector to address other contributors to conflict and instability such as poverty (see Poverty and Inequality), unemployment (see Employment and Workforce), and poor health and education (see Health and Education). In the longer term, they will have to help Liberia develop a plan for ensuring that it does not become too dependent on donor funding.

Figure 2-3
Gross Fixed Investment, percent of GDP



## **POVERTY AND INEQUALITY**

Widespread poverty and income inequality are multidimensional conditions related to a lack of security, education, health, income, and employment opportunities. Moreover, high levels of poverty, and particularly high inequality, can fuel political instability. Although the lack of up-to-date, reliable data makes measuring current poverty conditions difficult and measuring inequality impossible, poverty levels in Liberia are clearly high, and there is an urgent need to improve the situation.

In 2006, a staggering 64 percent of the population was living below the national poverty line, <sup>19</sup> and in 2001 (the latest data available), 76.2 percent of the population were living on less than US\$1 PPP per day. This is extremely high in absolute terms and approximately twice the estimate for Mozambique (36.2 percent in 2002). Even more worrying is the estimate that almost half of Liberia's population lives on less than US\$0.50 PPP per day. <sup>20</sup>

Not surprisingly, food poverty is also a major problem. Before the war, Liberia achieved better than 50 percent food self-sufficiency. Rice and cassava production, after falling drastically, recovered in 1998 to 70 percent and 90 percent, respectively, of pre-war levels. In 2002 nearly half (49 percent) of Liberia's population was below the minimum dietary energy consumption threshold. This is somewhat lower than the average in Mozambique for the five years after conflict ended (58.0 percent) and on par with Sierra Leone's rate (50 percent), so it is not out of line for a postconflict environment. It is, however, 16 percentage points worse than the LI-SSA median (33 percent).

Facing these enormous problems, the government has been making a concerted effort to reduce poverty and inequality. After election in 2006, the government enacted the 150-Day Action Plan and in January 2007 released the Interim Poverty Reduction Strategy. Furthermore, the government expects to release its full Poverty Reduction Strategy shortly. The strategy should provide detailed information on all aspects of poverty and inequality and will set targets for the coming years. The government, however, will be unable to undertake the programs alone, and the donor community will have to provide support.

### **ECONOMIC STRUCTURE**

In looking at the composition of value added in Liberia, one must bear in mind that real GDP declined by 90 percent from 1987 to 1995. Although these numbers are estimates, this decline is by far the largest of the many protracted declines in sub-Saharan Africa, the next closest being Rwanda's 54 percent collapse between 1992 and 1994, and one of the largest in the world since

<sup>&</sup>lt;sup>19</sup> IMF. Liberia: Enhanced Initiative for Heavily Indebted Poor Countries—Decision Point Document, Debt Sustainability Analysis, and Staff Supplement. March 2008.

<sup>&</sup>lt;sup>20</sup> Liberia Interim Poverty Reduction Strategy Paper (2007)

<sup>&</sup>lt;sup>21</sup> Ibid.

<sup>&</sup>lt;sup>22</sup> This MDG indicator is a direct measure of the proportion of the population unable to obtain a level of dietary energy consumption needed to survive.

World War II.<sup>23</sup> Some sectors have increased their shares of the shrinking economy without growing, and the most severely affected sectors have fallen in both absolute and relative terms. In particular, the estimated shares of GDP originating in industry and services in 2007 were a mere 13 percent and 25.5 percent, <sup>24</sup> respectively (contrasting with the 1988 estimates of 23.9 percent in industry and 38 percent in services).<sup>25</sup> Consequently, 61.5 percent of Liberian GDP now originates in agriculture, compared with 38.1 percent in 1988.

These changes indicate that the structural transformation of the Liberian economy from agriculture to services—a central part of the development process—was all but wiped out by the war. Part of the reverse transformation can also be attributed to the abuse of Liberia's diamond and timber resources to fuel the war and the international sanctions on those industries that ensued. In particular, the value added from these industries and from iron ore, mainstays of preconflict Liberia, is a mere fraction of the former amount.

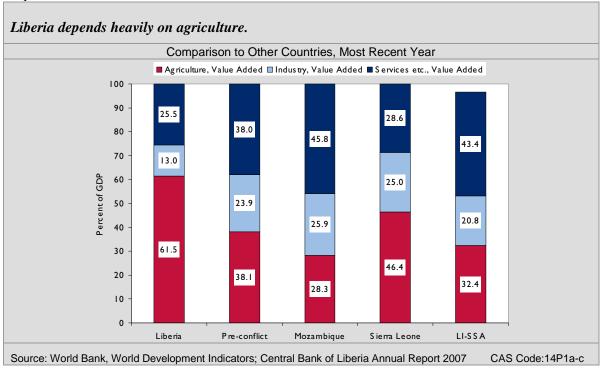
Not surprisingly, Liberia's 2007 figures for agriculture, industry, and services also compare unfavorably with the LI-SSA medians (32.4 percent, 20.8 percent, and 43.4 percent, respectively) and Mozambican sectors' shares in GDP for 2006 (28.3 percent, 25.9 percent, and 45.8 percent, respectively). They also compare unfavorably with Sierra Leone's 2006 structure.

<sup>&</sup>lt;sup>23</sup> Steve Radelet, "Reviving Economic Growth in Liberia." Center for Global Development Working Paper No. 133 (November 2007), p. 3.

<sup>&</sup>lt;sup>24</sup> Central Bank of Liberia Annual Report 2007.

<sup>&</sup>lt;sup>25</sup> World Development Indicators online database, accessed May 1, 2008.

Figure 2-4
Output Structure



There is room for optimism. Since 2004, agriculture's share of GDP has decreased by almost 3 percentage points and services' share has increased by 2.5 percentage points. By comparison, since the end of conflict in Mozambique, agriculture's share of GDP has decreased by more than 10 percentage points, indicating that with sound economic policies Liberia could move relatively quickly towards a less agriculture-dependent economy. Moreover, recent investments in iron ore and the lifting of UN sanctions on timber (see Agriculture) and diamonds, are milestones in Liberia's postconflict recovery. Investment and revenue generated from these industries, however, must be used wisely to promote development in other sectors.

### **DEMOGRAPHY AND ENVIRONMENT**

Demographic factors have major effects on security, poverty, growth potential, labor markets, and comparative advantages in international trade and the quality of public services. Population pressures are also related to conflict and environmental conditions.

Liberia's population, estimated at 3.5 million in 2008, has experienced varying growth rates in recent years. <sup>26</sup> Although the population growth rate for 2006 was estimated at 2.9 percent in the World Development Indicators, the population grew by 2.1 percent in 2008. Both rates are high in absolute terms, reflecting the return of refugees from neighboring countries and high fertility rates. The 2008 rate is the same as Mozambique's growth rate in 2006, significantly below Sierra Leone's growth rate of 2.8 percent, and the LI-SSA median of 2.5 percent.

<sup>&</sup>lt;sup>26</sup> Liberia Institute of Statistics and Geo-Information Services, June 2008. 2008 National Population and Housing Census, Preliminary Results. Monrovia, Liberia.

The higher growth rates in previous years also reflect the net migration rate of 26.9 per thousand persons in 2007, compared to 0.2 per thousand in both Mozambique and Sierra Leone. This migration rate, however, should be considered a one-time postconflict adjustment, not a trend. The UN-supervised return of internally displaced persons (IDPs) began in November 2004 and ended in April 2006. In that period, 312,015 IDPs and 9,732 "displaced returnees" living in Liberia's 35 IDP camps and spontaneous settlements as well as returnees from Sierra Leone received return assistance.<sup>27</sup>

One direct result of this demographic pressure is a high youth dependency ratio: 47 dependents for every 100 working-age adults (15–64 years). This is higher than the Mozambican rate, the LI-SSA median of 44 dependents, and Sierra Leone's 43 dependents. The high youth dependency rate, coupled with a substantial increase in population, will place pressure on already strained social services and environmental resources. Furthermore, population pressure on the land can be a cause of political instability in the absence of economic opportunity.

The capital, Monrovia, is also feeling the strain. Urbanization levels in Liberia are extremely high, partly as a result of the civil war, which caused people to flee violence in rural areas. Urban dwellers made up 58.8 percent of the total population in 2006, well above the rates for Mozambique (35.3 percent) and Sierra Leone (41.4 percent) and the LI-SSA median (35 percent). Since the war ended, urbanization has continued to increase as people move to Monrovia in search of economic opportunity, putting more pressure on the extremely limited government-provided services and basic infrastructure.

On the Environment Performance Index 2006, which tracks environmental health, air quality, water resources, biodiversity and habitat, productive natural resources, and sustainable energy, Liberia received a score of 51 out of 100. This is in line with the LI and LI-SSA median scores of 54.8 and 53.1, respectively, in 2006. Liberia's environmental issues include tropical rainforest deforestation, as the lack of electricity has spurred the use of charcoal; soil erosion, especially along the coast; loss of biodiversity as deforestation and uncontrolled hunting threaten wildlife; and pollution of coastal waters from oil residue and raw sewage. Moreover, because natural resources such as timber and diamonds were a source of conflict in the past, as economic activity increases, the government must enforce environmental standards to protect its natural assets.

<sup>&</sup>lt;sup>27</sup> UN Humanitarian Information Center, update no. 61, April 1, 2006. Available at http://www.humanitarianinfo.org/Liberia/coordination/sectoral/IDPs/doc/UPDATE%20No%2061.doc

Increased urbanization is placing even greater pressure on city infrastructure and services. Comparison to Other Countries, Most Recent Year Time Series 70 60 59 58 60 57 56 55 50 54 2002 2003 2004 2005 2006 40 Percent Year Value 30 2002 55.8 2003 56.6 20 2004 57.3 2005 58.1 10 2006 58.8 Summary for 2002-2006 41.4 58.8 42.3 35.3 35.0 Five-year average 57.3 Trend growth rate 1.3 Liberia Pre-conflict LI-SSA Mozambique Sierra Leone Source: World Development Indicators 2007 CAS Code: 15P7

**Figure 2-5** *Percentage of Population in Urban Areas.* 

## **GENDER AND CHILDREN**

Gender equity promotes economic growth by ensuring that all citizens have the opportunity to develop and apply their full productive capacities. One comparison used to measure gender equality is male and female primary school completion rates. In 2006, only 57.5 percent of females completed their primary education in Liberia. This is lower than Sierra Leone's reported completion rate of 69.8 percent but higher than the 34.6 percent completion rate in Mozambique and the LI-SSA median of 36.5 percent. The gender differential in schooling is more than matched by a large gap in labor force participation. An estimated 83.8 percent of males were working or seeking jobs in 2006, but only 55.7 percent of women were doing the same. This 28 percentage point differential signifies a serious constraint on realizing Liberia's productive potential.

Conflict and disease have hurt Liberia's children. UNICEF estimates that approximately 230,000 Liberian children have been orphaned.<sup>28</sup> In addition, during the conflict, both the government and militia groups recruited child soldiers, and UNICEF reports that Liberian child soldiers are still being recruited along the country's borders with Guinea and Côte d'Ivoire.<sup>29</sup> The war also led to the decimation of educational infrastructure and the disruption of educational services that have resulted in low levels of youth literacy and a lack of educational opportunities for Liberia's youth (see Education).

<sup>&</sup>lt;sup>28</sup> UNICEF Statistics. http://www.childinfo.org/areas/hivaids/tables.php?cat=3. Accessed May 19, 2008.

<sup>&</sup>lt;sup>29</sup> UNICEF. http://www.unicef.org/infobycountry/liberia\_2513.html. Accessed May 22, 2008.

## Private Sector Enabling Environment

This section reviews indicators of the enabling environment for encouraging rapid and efficient growth of the private sector, including fiscal and monetary policy, the institutional environment for doing business, development of the financial sector, global integration, and economic infrastructure. Private sector development is essential for encouraging and supporting rapid and efficient growth. International experience shows that in conflict and postconflict economies, enabling environments tend to be weak and are characterized by rigid and outdated institutions, policies, and practices. Enabling environment reform is therefore often in order for economic expansion to take hold and recovery to advance. Caution in the sequencing of policies is merited because the elimination of state-supported enterprises, for instance, can trigger violence on the part of people facing unemployment or exacerbate social inequalities at the root of the conflict.

### **ECONOMIC STABILIZATION AND GOVERNMENT CAPACITY**

Governments' fiscal and monetary policies are the key instruments for ensuring macroeconomic stability. One of the main concerns in postconflict economies is to ensure that the central government has the capacity to maintain a sustainable fiscal balance and low and stable inflation and follow transparent policies that are accountable to the population. The government budget must therefore balance the needs for critical services to support growth and poverty reduction and for stimulation of the private sector. Because the government of Liberia is implementing a cash-based budget, deficit spending is not available as a fiscal instrument, while in an economy in which the U.S. dollar predominates, monetary policy is unavailable as a tool for growth and economic stimulation.

In general, Liberia is following prudent fiscal and monetary policies, and the government is making great efforts to improve transparency and accountability. This is exemplified by the government's adoption of the Governance and Economic Management Assistance Program (GEMAP), which promotes sound economic policies, improved governance and transparency, reduced corruption, and increased government capacity. Government capacity remains critically low, however, and the government needs urgent help to remedy this situation.

Despite this, inflation, a key indicator of macroeconomic stability, was relatively high, at 11.2 percent, in 2007, significantly worse than the LI-SSA median of 7.6 percent, Mozambique's 6.4 percent and Sierra Leone's 3.4 percent in the same year. Inflation has been driven largely by increases in food and fuel prices, not by imprudent fiscal and monetary policies. Maintaining a

stable macroeconomic environment, including achieving low inflation, will not only help Liberia attract foreign direct investment and induce confidence in the financial system, but will also probably decrease tensions that are caused by the reductions in purchasing power caused by the higher prices. Increasing the supply of basic foods, providing aid relief to the very poor, and disseminating clear public information on the issue should help reduce the tensions. In the medium term, the IMF expects Liberia's inflation rate to fall back into the single digits.<sup>30</sup>

Growth in the broad money supply (M2), the central indicator of monetary policy management, was 40.1 percent in 2007.<sup>31</sup> Though this number appears high compared to the LI-SSA median of 8.4 percent, Mozambique's 19.9 percent, and Sierra Leone's 21.4 percent, rapid growth in the money supply is needed to support Liberia's woefully undercapitalized and fragile banking sector (see Financial Sector). The increase is due almost entirely to U.S. dollar inflows: the U.S. dollar component of M2 grew by 23.5 percent and the Liberian dollar component by 10.9 percent, and the U.S. currency accounts for 61 percent of the money supply.<sup>32</sup>

Similarly, the government has taken important steps forward on the fiscal side by increasing revenues and expenditures to fund rebuilding while maintaining fiscal prudence by balancing the budget (Figure 3-1). In 2007, government revenues accounted for 21.9 percent of GDP,<sup>33</sup> higher than Mozambique's 14.1 percent and Sierra Leone's 12.5 percent. The 2007 rate is a 10 percentage point increase over 2003's rate. Government expenditures have also increased rapidly in recent years, and in 2007 government expenditures accounted for 18.3 percent of GDP, somewhat less than the 30.5 percent of GDP in Mozambique (2007) and the 21.4 percent in Sierra Leone (2007). Owing in part to the lack of government capacity in procurement, which has led to delays in procurement, government disbursements have not kept pace with commitments. As a result, the government posted a surplus of 3.8 percent of GDP in 2007.

This only emphasizes the pressing need to improve the capacity of the public sector. The World Bank Institute's (WBI) Government Effectiveness index <sup>34</sup> measures the quality of public and civil services, the degree of public sector independence from political pressure, the quality of policy formulation and implementation, and the credibility of the government's commitment to its policies. In 2006, Liberia received a poor score, of -1.37, which appears to be largely a result of low capacity rather than the government's lack of commitment to sound economic policies. This score is much worse than the already poor LI-SSA median of -0.82 and Mozambique's score of -0.30 and marginally worse than Sierra Leone's -1.10 (Figure 3-2). Nevertheless, there has been a significant improvement (of 0.07 points) since the new government took power.

<sup>&</sup>lt;sup>30</sup> IMF. Country Report No. 08/108, page 24.

<sup>&</sup>lt;sup>31</sup> Ibid.

<sup>&</sup>lt;sup>32</sup> The U.S. dollar was the official currency of Liberia from 1943 to 1982 and continues to be legal tender. Although public sector salaries (but not allowances, which account for a large share of compensation) are paid in Liberian dollars, the public may hold and use either currency.

<sup>&</sup>lt;sup>33</sup> IMF. Country Report No. 08/108. page 24.

<sup>&</sup>lt;sup>34</sup> Ranging from -2.5 for poor to +2.5 for excellent, with 0 being the global mean.

Figure 3-1
Overall Budget Balance, Including Grants, percent of GDP

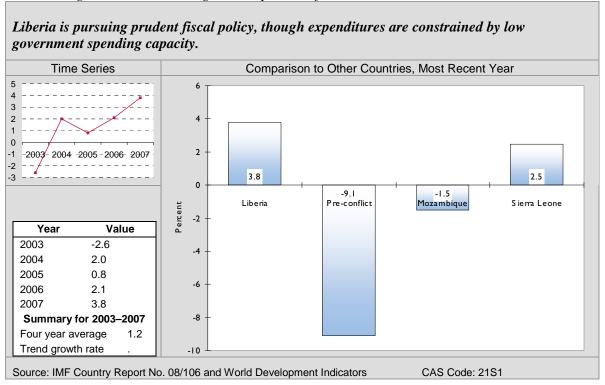
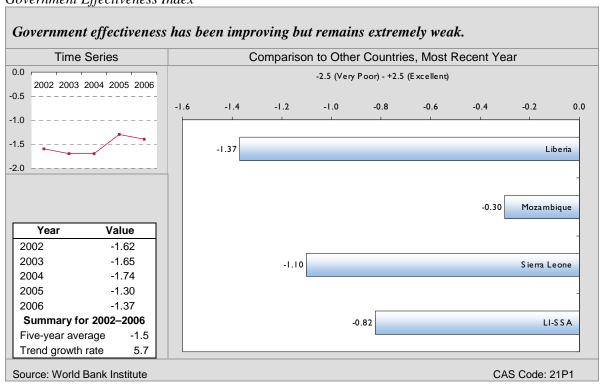


Figure 3-2
Government Effectiveness Index



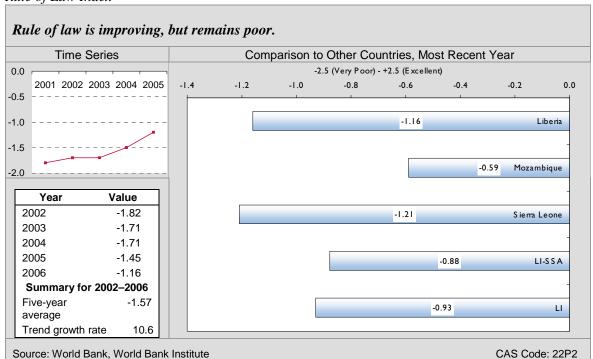
To compensate, donors might consider funding programs that in the short term provide staff and advisers (Liberian when possible) to fill many critically needed positions in government. In the medium to long term, however, Liberia will need assistance in building the capacity of its own citizens in the public and private sectors and ensuring that the President's call for inclusiveness is met when finding ways to encourage educated members of the Liberian diaspora, particularly the regional diaspora, to return and help in the rebuilding process.

## **BUSINESS ENVIRONMENT**

A primary institutional impediment to growth in postconflict countries is poor governance, including rampant corruption, weak private sector infrastructure, and an ineffective judicial framework. The challenges that Liberia has to overcome to create a welcoming environment for both domestic and foreign private sector businesses (the principal engine of economic growth) are immense. Maintaining the rule of law is a serious problem, corruption is rampant, and red tape is particularly cumbersome. Nonetheless, Liberia has improved significantly in almost all these areas since the end of conflict.

Maintaining rule of law and ensuring that the public has a voice are critical not only for improving the business-enabling environment but also for fostering long-term peace and security. The WBI Rule of Law index measures the extent to which all players have confidence and abide by the rules of society (on a scale from -2.5 for very poor to +2.5 for excellent performance). In 2006, Liberia received a score of -1.16. Though this is lower than the LI-SSA median of -0.88, Mozambique's -0.59, and on par with Sierra Leone's -1.21, it has improved significantly from its 2002 score of -1.82.

Figure 3-3
Rule of Law Index



The extent to which Liberia's citizens can participate in selecting their government and freely expressing themselves has also improved substantially since the end of conflict. The WBI's Voice and Accountability index improved from an abysmal -1.72 in 2003 to be on par with the LI-SSA median of -0.63. It remains worse, however, than Mozambique's -0.06 and Sierra Leone's -0.43.

Despite the government's efforts to improve governance and reduce corruption through GEMAP (see Economic Stabilization and Government Capacity), corruption levels are on par with regional benchmarks and high in absolute terms. This harms Liberia's prospects for attracting FDI beyond natural resources and stifles local entrepreneurship. In 2006, Liberia scored -0.85 on the WBI's Control of Corruption index, a marginal improvement of 0.31 points over the 2003 score, 0.01 points lower than the LI-SSA median of -0.84, somewhat worse than Mozambique's -0.57, and somewhat better than Sierra Leone's -1.22. Corruption has been entrenched in Liberia for many years, and it will take time to see significant improvement from GEMAP. Establishing a formal anticorruption commission, as proposed in late 2007, will accelerate the process of reducing corruption, though it must be carefully structured to be effective and it currently lacks sufficient funding for its operations.

Red tape is also a serious problem. The World Bank Group's global index of the ease of doing business ranked Liberia for the first time in 2007 on 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. In 2008 Liberia was ranked at 170, almost at the bottom of the 178 countries and basically unchanged from 169 out of 175 in 2007. This is very poor compared to the ranks of Mozambique and Sierra Leone in the same year, 134 and 160, respectively. The government, in conjunction with the private sector will have to work hard to improve these numbers.

Finally, personal security is a prerequisite for business confidence. Foreign investors may refuse to come if crimes against persons and property are widespread. Even if UNMIL has established adequate security in Liberia, the collapse of Timor-Leste into violence after UN peacekeeping forces left that country has led to reports that potential investors in Liberia are discounting the security established by UNMIL and are awaiting evidence of successful security reforms after UNMIL leaves. There are no statistics to test the veracity of this anecdotal evidence.

In conclusion, Liberia faces a difficult challenge in improving its business-enabling environment, particularly in maintaining rule of law, reducing corruption, reducing red tape, and improving institutional efficiency. Donors might therefore wish to consider funding programs that help reinstitute working courts of law, increase government and private sector transparency, and improve the legal and institutional environment for fostering private sector growth. Improvements in these areas should also solidify the peace by creating legitimate economic opportunities for those formerly involved in conflict and by reducing the practices that previously fueled it.

#### FINANCIAL SECTOR

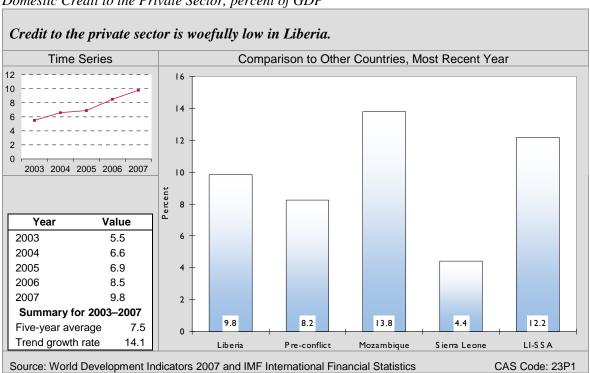
The financial sector is crucial for the resumption of normal economic activity in postconflict environments. These activities range from basic means of payment for monetary transactions to complex schemes for financing investment and trade. Depth, stability, and quality in financial institutions are fundamental for mobilizing savings, allocating financial resources, fostering

entrepreneurship, and improving risk management, all of which donor agencies must stimulate to ensure lasting peace. Historically, Liberia's low-income populations, SMEs, and local entrepreneurs have had limited access to formal financial services. Years of conflict stalled financial sector activity, further diminishing financial performance and service provision. Indicators signal progress since the last year of conflict, but further improvements are desperately needed for a healthy financial sector to develop.

The measure of money supply as a percentage of GDP is a principal indicator of the degree of monetization of the economy and the size and depth of the banking system. Despite a steady growth trend and being on par with regional benchmarks, Liberia's money supply of 26.2 percent of GDP in 2007 is low relative to absolute standards.<sup>35</sup>

Liberia's low volume of bank credit to the private sector also points to a weak financial system that is having difficulty mobilizing funds to finance business. Moreover, it points to a conservative banking system that has yet to determine how to provide credit to SMEs, especially in the agricultural sector. In 2006, domestic credit to the private sector was equivalent to 9.8 percent of GDP, low relative to Mozambique's 2006 value (13.8 percent) and the LI-SSA median (12.2 percent). Nevertheless, Liberia is exhibiting a positive trend, and credit to the private sector as a percentage of GDP has more than doubled since the conflict ended, which has put it on par with its preconflict level of 8.2 percent and far higher than Sierra Leone's 4.4 percent in 2006.

Figure 3-4
Domestic Credit to the Private Sector, percent of GDP



<sup>35</sup> IMF IFS, April 2008.

Liberia's interest rate spread,<sup>36</sup> though high by absolute standards, bodes well for the future. Since the end of conflict, the interest rate spread has decreased steadily, pointing to a financial sector that, although inefficient and perceived to be risky, is making headway toward greater efficiency and stabilization. In 2007, Liberia's interest rate spread was 11.3 percentage points,<sup>37</sup> somewhat worse than Mozambique's 8.2 points but better than Sierra Leone's 13.6 points and the LI-SSA median of 14.3 points. Supporting this trend is a marked improvement in nonperforming loans. Between 2003 and 2007 the ratio of nonperforming loans to total loans dropped significantly, from 62 percent to 19.2 percent.<sup>38</sup>

In summary, Liberia's financial sector, though poor, is making significant headway. Nonetheless, donor assistance to the financial sector is still desperately needed to increase domestic credit to the private sector and further improve the financial sector environment by promoting efficiency in financial intermediation, information sharing, and the entry of new banks to foster competition—though under agreement with the IMF, Liberia has placed a moratorium on opening new banks.

## **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. Postconflict countries, owing to their circumstances, may not take, or may not be able to take, full advantage of these new markets. Moreover, they often have large external debt burdens that have to be reduced.

The most important external sector performance indicators for evaluating a country's progress postconflict are the growth of its exports and its ability to attract international aid and foreign direct investment, reduce its debt service and the value of its debt, and build up international reserves to help the country cope with exogenous shocks.<sup>39</sup> In terms of export growth and its ability to attract foreign aid, Liberia is performing well; however, major impediments in terms of debt sustainability and low international reserves must be overcome.

Exports, though low in absolute terms (a mere estimated US\$158 million in 2006), increased significantly in volume between 2003 and 2006 (by approximately 35 percent in constant U.S. dollar terms in 2006 alone), which compares favorably with Mozambique's 5.0 percent increase and Sierra Leone's 36 percent decline in the same year. Moreover, the lifting of the UN sanctions

<sup>&</sup>lt;sup>36</sup> Measured as the difference between the average lending and borrowing interest rates charged by commercial or similar banks on domestic currency deposits

<sup>&</sup>lt;sup>37</sup> Computed from IMF IFS statistics.

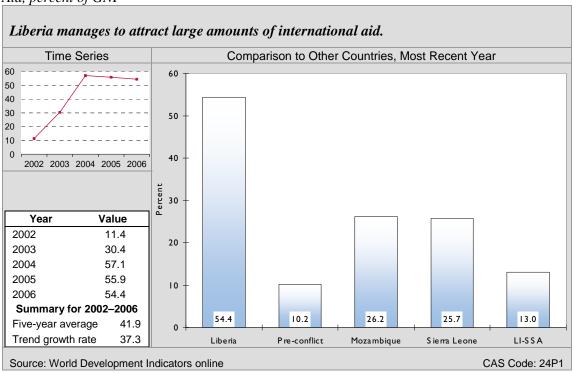
<sup>&</sup>lt;sup>38</sup> IMF. March 2008. Country Report Number 08/108. page 28.

<sup>&</sup>lt;sup>39</sup> For many developing countries, remittances are an important source of income. Unfortunately, a significant methodological problem hinders estimating remittances in Liberia. Because the U.S. dollar is an official currency, alongside the Liberian dollar, remittances are "internal," and no institutional method is available to track them as is done with foreign exchange transactions. Remittances not from the United States are often converted in the country of origin. The CBL has requested assistance from the IMF in finding indirect methods for measuring such flows.

on diamond and timber exports in 2007 should increase Liberian exports significantly and raise much needed foreign currency in the coming years.

Liberia has also attracted large amounts of foreign aid that will be critical in funding the recovery process. In 2006, foreign aid accounted for 54.4 percent of GNI, which is in line with Mozambique's postconflict five-year 58.0 percent average and well above Sierra Leone's 25.7 percent in 2006. Much of this represents the budget of UNMIL, however, which is essential to maintaining the peace and the environment for business but does not contribute directly to an increase in productive capital. <sup>40</sup>

Figure 3-5
Aid, percent of GNI



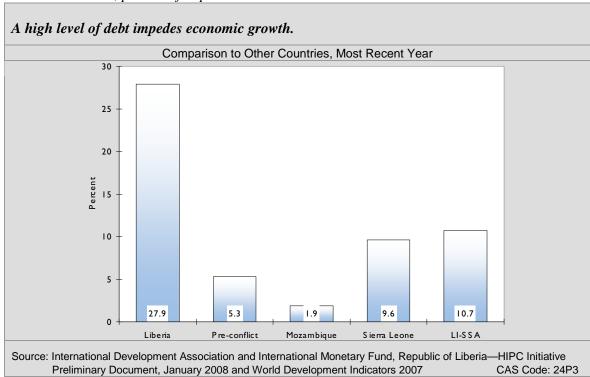
Owing to investment in Liberia's mineral sector, and iron ore in particular, FDI jumped from a mere 1 percent of GDP in 2006 to 16.4 percent of GDP in 2007. This is well above all benchmarks, including Mozambique's 2006 level of 2.2 percent, Sierra Leone's 4.1 percent, and Mozambique's five-year postconflict average of 4.6 percent.

The inflows have improved Liberia's international reserves, but they remain woefully low. In 2007, they accounted for a miniscule 1.5 months of imports, rendering the country extremely vulnerable to external shocks. This is far below the LI-SSA median of 3.1 months and Mozambique and Sierra Leone's 4 months. Thus, Liberia must include provisions in its macroeconomic plan to build up foreign exchange reserves.

<sup>&</sup>lt;sup>40</sup> UNMIL's approved budget for 2007/08 is \$688 million.

Most pressing, however, is Liberia's external debt problems. In fiscal 2006/07, Liberia's debt service ratio—after HIPC and MDRI assistance—was equal to 27.9 percent of exports. <sup>41</sup> This exceeds all comparators—the LI-SSA median of 10.7 percent of exports and Sierra Leone's 9.6 percent (2006), as well as Liberia's own 5.3 percent in 1988 (Figure 3-6). Furthermore, in 2006 (the latest year available), the present value of Liberia's debt was a staggering 673.7 percent of GNI. This dwarfs all benchmarks: the present value of debt was 36.9 percent on average in LI-SSA, 45.5 percent in Mozambique, and 83.5 percent in Sierra Leone.

**Figure 3-6** *Debt Service Ratio, percent of Exports* 



This level of debt is obviously unsustainable. Although Liberia has cleared its arrears to the World Bank, the African Development Bank, and the IMF, and in April 2008 met with the Paris Club to negotiate forgiveness of bilateral debts, until the country reaches the HIPC completion point, it will be unable to borrow the new funds that it urgently needs to finance its recovery. Furthermore, because Liberia was making no payment on its debt, transition to HIPC will raise rather than lower debt service requirements. Liberia's debt situation is complicated by the structure of its debt, for which there is no comparator country. At the end of June 2007, before clearance of arrears to the multilateral banks, commercial creditors held 34 percent of Liberia's debt. "Vulture funds" are known to have purchased some of this debt; this may complicate the resolution of its commercial indebtedness.

The completion of the PRS (see Poverty and Inequality) should also help Liberia achieve the HIPC completion point and result in the write-off of most of the remaining debt. In light of these

<sup>&</sup>lt;sup>41</sup> IDA and IMF, Liberia HIPC Initiative Preliminary Document, January 2008.

findings, donors must make the achievement of HIPC status the top priority for Liberia. Achieving HIPC status will create stability that is likely to attract FDI.

## **ECONOMIC INFRASTRUCTURE**

A country's physical infrastructure—for transportation, ICT, and energy—is a critical determinant of success in all aspects of postconflict reconstruction and development. Without sufficient infrastructure, advances in health, education, and economic growth are severely impeded. Implementation of solid infrastructure catalyzes all aspects of development, including enhancing productive capacity and improving competitiveness.

Liberia's infrastructure is extremely poor, and in some aspects, nonexistent. Data are not available to assess Liberia's overall infrastructure quality, but quantitative and qualitative data are available for the individual sectors.

Transportation infrastructure is crucial for both domestic economic and trade-related activity. In Liberia this is particularly true because its core economic activities (agriculture, timber, iron ore, and rubber) require physical access to markets. Currently the railway network is nonfunctioning, civil aviation is limited to UN flights that fly up country, and the Port of Monrovia, one of two operating ports, accounts for 98 percent of traffic.<sup>42</sup> Road conditions are very poor, particularly in rural areas, because of a complete lack of maintenance during the conflict combined with heavy rains. In 2006 only 6.2 percent of roads were paved. Liberia falls below all comparators in this regard: Sierra Leone (8.0 percent), Mozambique (18.7 percent), and the LI-SSA median (12.6 percent).

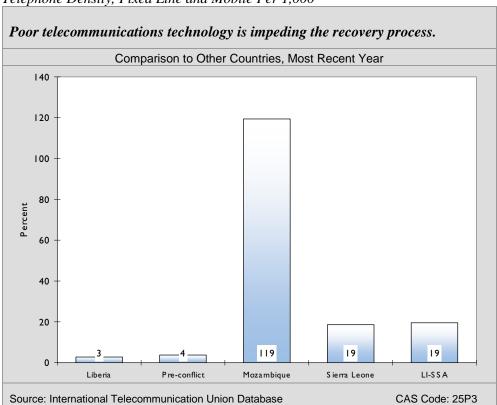
ICT infrastructure is also critically underdeveloped. Telephone density (fixed and mobile) in Liberia is 3 subscribers per 1,000 people—a dramatically low number compared to 119 subscribers per 1,000 people for Mozambique and 19 for both Sierra Leone and the LI-SSA median (Figure 3-7). Equally dramatic is Internet usage as measured by users per 1,000 people. The LI-SSA median is 2 users, and Mozambique and Sierra Leone have 7 and 2 users per 1,000 people, respectively. Liberia, in stark contrast, has 0.3 users per 1,000 people. This means that only approximately 1,000 people throughout the country use the Internet. Given the critical role that ICT plays in creating linkages with the global economy, low ICT penetration has critical consequences for economic growth.

Electric power is almost completely absent. The country's only hydroelectric installation was destroyed during the conflict when its spillway was closed and the earthen dam catastrophically eroded; all copper transmission lines have long since been looted. Monrovia has yet to be fully electrified, although low-voltage installations were inaugurated in six neighborhoods in 2006. The reliance on generators as the source of power creates very high energy costs for all sectors. As a result, donors, including USAID, have been helping Liberia increase the supply of

<sup>&</sup>lt;sup>42</sup> World Bank Project Information Document, Infrastructure Rehabilitation Project, Government of Liberia, July 2006. Buchanan carries 2 percent of port traffic and the ports of Harper and Greenville are expected to be rehabilitated by private operators once timber exports resume.

electricity. For instance, USAID's Emergency Power Program is helping to increase Liberia's electricity generation capacity from 3 megawatts to 10 megawatts by the end of September 2008.

**Figure 3-7** *Telephone Density, Fixed Line and Mobile Per 1,000* 



The state of Liberia's transportation, ICT, and energy infrastructure has grave implications for the competitiveness of the business environment, economic productivity, and other development initiatives. Donors therefore should make funding the rehabilitation of all three sectors high priorities.

# 4. Pro-Poor Growth Environment

This section reviews the conditions and performance in certain sectors crucial to poverty reduction. Rapid growth can be one of the most powerful and dependable instruments for poverty reduction and preventing relapse into conflict. Growth without development intensifies inequality and breeds hostility; thus pro-poor growth is a critical component of Liberia's postconflict reconstruction. A pro-poor growth environment stems from policies and institutions that improve opportunities and capabilities for the poor while reducing their vulnerability by improving livelihoods, building assets, and enhancing mechanisms to cope with shocks. In fragile states and postconflict countries, however, these policies and institutions are often weak or nonexistent. Sustainable economic development hinges on the implementation of programs to improve primary health and education, job creation, labor market skills, and agricultural development, especially important given Liberia's large, poor rural population.

#### **HEALTH**

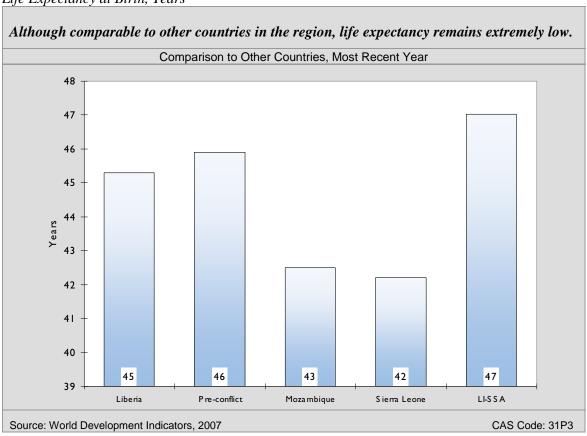
The provision of basic health services is a major form of human capital investment and a significant determinant of economic growth and poverty reduction. Although health programs do not fall under the EGAT bureau, an understanding of the health status of a population can influence the design of economic recovery interventions. Conflict adds to the complexities of coordination and provision of basic health care by interrupting the supply of drugs and services or by damaging health infrastructure.

Liberia performs poorly on a majority of indicators of health status. Life expectancy at birth is commonly regarded as the best overall indicator of the health status of a population; in Liberia life expectancy was just 45.3 years in 2006. Though similar to the extremely low life expectancies in Mozambique (42.5 years) and Sierra Leone (42.2 years) and the LI-SSA median (47 years), it is tragically low.

Because Liberia's youth population is so large, the health of its children has a direct impact on the future security and productivity of the economy, the delivery of public services, and the education of future generations. Liberia has a high child mortality rate; approximately 235 per 1,000 children in a given year die before reaching the age of five. Although this is below Sierra Leone's rate of 282, it is significantly higher than Mozambique's child mortality rate of 145 and the LI-SSA median of 148. Furthermore, child malnutrition is also a concern. In 2000 (latest year available) approximately 26.5 percent of Liberian children under five were underweight—although this number is relatively old, it is probably representative of the current situation. This

rate is somewhat worse than Mozambique's 21.2 percent (2003) and the LI-SSA median of 25.8 percent and very poor in absolute terms.

Figure 4-1
Life Expectancy at Birth, Years



Major infectious diseases in Liberia include diarrhea, malaria, cholera, yellow fever, skin infections due to poor hygiene, and acute respiratory infections. Preventable diseases, especially malaria and measles, are among the leading causes of death for children. <sup>43</sup> In response, UNICEF has helped to vaccinate about one million children against polio and has aided 185 health facilities that now perform routine immunizations. <sup>44</sup>

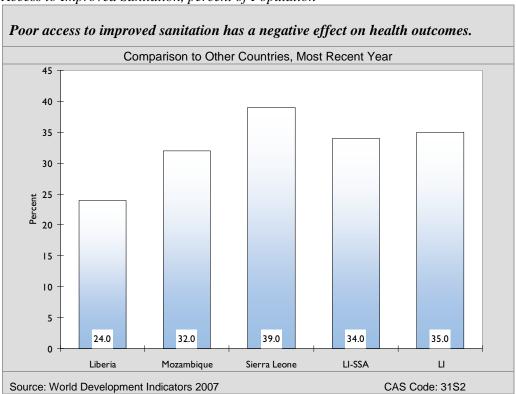
The high prevalence of preventable diseases is related to the extremely low access to improved water and sanitation, two of the most important determinants of health outcomes (Figure 4-2). In 2006, only 24 percent of Liberia's population had access to improved sanitation. This is far below all other benchmarks: the LI-SSA median (34 percent), Mozambique (32 percent), and Sierra Leone (39 percent). However, in 2004 approximately 61 percent of the population had access to

<sup>&</sup>lt;sup>43</sup> "Liberia." <u>Epidemic and Pandemic Alert and Response (EPR)</u>. 2007. World Health Organization. 1 Oct. 2007: http://www.who.int/csr/don/archive/country/lbr/en/; "Health Crisis in Liberia—the Long Road to Recovery." 18 Sept. 2003. World Health Organization. 1 Oct. 2007 http://www.who.int/features/2003/09b/en/.

<sup>&</sup>lt;sup>44</sup> "At a Glance: Liberia." UNICEF.

an improved water source, on par with the LI-SSA median of 60 percent and above Mozambique's and Sierra Leone's rates, 43 percent and 57 percent, respectively.

Figure 4-2
Access to Improved Sanitation, percent of Population



According to the IPRS, the prevalence of HIV/AIDS among adults in Liberia was estimated to be 5.2 percent in 2006; early results of the Demographic and Health Survey for Liberia, however, apparently indicate a far lower level of 1.5 percent. Though this is good news—much lower than Mozambique's 16.1 percent and the LI-SSA median of 3 percent and even slightly lower than Sierra Leone's 1.6 percent—the government and donor organizations will have to provide sustained support to prevent the virus from reaching epidemic levels, which could easily happen as mobility is restored.

Data indicate that the government is indeed committed to improving health conditions. In 2004 public health expenditure as a percentage of GDP was 3.6 percent, up from 0.9 percent in 2002. This is above the LI-SSA median of 2 percent, Mozambique's 2.7 percent, and Sierra Leone's 1.9 percent. Yet Liberia's GDP is very low, and financing for health programs is still a major problem for Liberia. Furthermore, the withdrawal of NGOs that provided humanitarian relief health services immediately after the conflict shifts a heavy budgetary burden to the government.

As a result, strong donor support will be needed to make gains in health outcomes; to this end, DFID has assisted the Ministry of Health in establishing strong financial management mechanisms that will reassure potential donors of the effective use of resources channeled into the health care system. More fundamentally, however, a long period of rapid economic growth is needed to overcome budget constraints that prevent the expansion of health services.

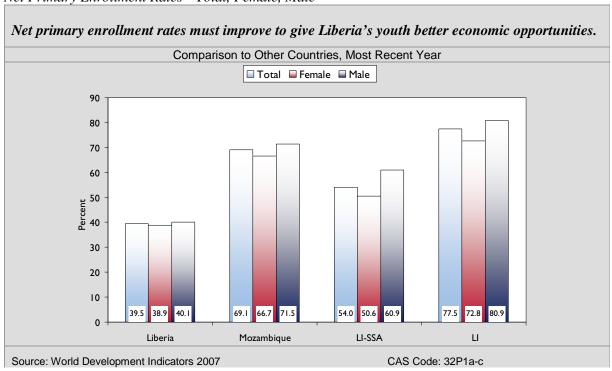
#### **EDUCATION**

Education, like health, is a fundamental investment in human capital and a basic input for transformational growth and poverty reduction. Education—particularly primary school for girls—is strongly associated with better family health and nutrition, greater opportunities, smaller family size, and other profound socioeconomic changes. In addition, in conflict and postconflict environments, education can diminish grievances by eliminating historic inequalities in educational access and fostering equal economic opportunities. In Liberia, a well-founded and broad-based education system could also help steer the large youth population away from violence toward more productive economic activities.

The educational data for certain indicators are largely outdated; education was disrupted during the civil war. Nevertheless, the data that are available were sufficient for us to carry out a meaningful analysis and highlight the dire situation in Liberia.

In 2004, Liberia's youth literacy was low in absolute terms, at 67.4 percent of persons between 15 and 24 years old; though on par with the LI-SSA median (69.5 percent). The low literacy rate is a major effect of the civil war and is reflected in the extremely low net primary enrollment rates. In 2006, net primary enrollment was just 39.5 percent (40.1 percent for males and 38.9 percent for females). This is lower than Mozambique's 69.1 percent and the LI-SSA median of 54 percent (Figure 4-3). Moreover, according to UNICEF, two-thirds of children are taught by unqualified teachers. 45

Figure 4-3
Net Primary Enrollment Rates—Total, Female, Male



<sup>&</sup>lt;sup>45</sup> UNICEF. http://www.unicef.org/infobycountry/liberia 2513.html. Accessed May 22, 2008.

Our data on secondary and tertiary are outdated—the latest are from 2000—and appear to be unreliable. It is clear, however, that secondary schools and universities, like primary schools, lack adequately stocked libraries and laboratories, which are critical to ensuring that graduates have the skills needed to promote technology and economic development. Moreover, they also lack electricity and other basic amenities, which keeps students from maximizing their potential.

Government expenditure on primary education, 1.9 percent of GDP (2004), falls short of the LI-SSA median (2.1 percent) and the levels observed in Mozambique (2.6 percent) and Sierra Leone (2.1 percent). Public expenditure on primary education will need to increase substantially if primary enrollment rates and youth literacy are to increase significantly.

On a positive note, Liberia, which suffered a severe brain drain during the years of conflict, is seeing educated people return to help rebuild the country.

In conclusion, there is a pressing need to invest in renovating school and university structures and increasing the population's ability to access education. Liberia will also require public transportation and electricity (see Infrastructure), as well as educational materials and training for new teachers. Because the government lacks the resources to achieve these goals, substantial donor assistance is needed.

#### EMPLOYMENT AND WORKFORCE

The most important mechanism for delivering the benefits of growth to postconflict societies is to provide earning opportunities, whether in informal activities, self-employment, or formal jobs. In 2006, the labor force participation rate in Liberia was 69.8 percent, well below Mozambique's 83.9 percent, Sierra Leone's 76.2 percent, and the LI-SSA median of 79.9 percent.

Liberia's employment problems are immense, and as the government is acutely aware, unemployment can contribute to a resumption of conflict if not dealt with effectively. The most worrisome problem is the inability of the economy to absorb the people (particularly young males) entering the workforce—either those entering for the first time or those reentering after the return to peace—and provide work for those already in the workforce. According to the Liberian Ministry of Labor, an estimated 85 percent of those seeking employment in the formal sector were unemployed in 2006, up from approximately 80 percent in 2005 and 75 percent in 2004. Lack of opportunity in the formal sector has led to an estimated 77.2 percent (2007) of the employed working in the informal sector.

One bright spot is the decreasing, albeit high, share of the public sector in formal sector employment. In the past, incompetent (even illiterate and innumerate) partisans were brought into the civil service by the factions that controlled the government, but ghost workers are being eliminated, and civil service reform has begun. In 2007, those working for the government made up 23 percent of those employed in the formal sector, down from 47 percent just two years

<sup>46</sup> Ibid.

earlier.<sup>47</sup> Nonetheless, the number of government workers still strains the government budget (see Economic Stabilization and Government Capacity).

To help alleviate some of these problems, donors might wish to consider funding private sector—led workforce development programs to help Liberia with its economic recovery and help mitigate future problems that could arise because of a lack of employable skills.

#### **AGRICULTURE**

Because of the lack of internationally comparable data on agriculture in Liberia, in this section we do not use our standard benchmarking methodology. Statistics from other sources, however, enabled us to undertake a useful analysis of the agricultural sector.

As we saw in Economic Structure, agriculture (including forestry) accounts for the vast majority of value added in Liberia. As a result of poor governance, conflict, and economic sanctions, however, in absolute terms agricultural production plummeted during Liberia's decade and a half of civil war, from an estimated \$459 million (in constant 2000 U.S. dollars) in 1988 to \$283 million in 2005. <sup>48</sup> Not surprisingly, productivity has also been hard hit as well, with cereal productivity falling from 1,290 kg/ha in 1998 to 917 kg/ha in 2006. <sup>49</sup>

Since the end of the war, agricultural output has increased somewhat; between 2004 and 2006, it is estimated that it rose by 8.6 percent in real terms.<sup>50</sup> This improvement, however, is due largely to increases in charcoal and rice production<sup>51</sup> and belies poor performance in logging, which suffered from UN sanctions, and rubber, which is has not maintained its competitiveness because of declining yields on old trees<sup>52</sup> and a lack of investment in new trees, and to the dire state of infrastructure (see Economic Infrastructure).

Given the importance of the agricultural sector, its revitalization holds one of the keys to Liberia's economic recovery. In September 2006, the UN lifted its ban on log exports, and the country is overhauling the logging industry governance system; in March 2008 an international contract established the chain of custody that will permit the resumption of exports, and the first concessions were rebid. With a new round of bidding underway, Liberia has to be careful to ensure that the process is socially inclusive, taking into account not just the forestry code but also traditional land law. USAID and the U.S. Forest Service provide oversight through GEMAP, as does the Liberia Forestry Initiative, a multinational, multiagency, multi-NGO agency. Nevertheless, the issue requires continual monitoring.

<sup>&</sup>lt;sup>47</sup> Central Bank of Liberia Annual Report 2007.

<sup>&</sup>lt;sup>48</sup> Nathan Associates estimates based on World Development Indicators data.

<sup>&</sup>lt;sup>49</sup> Economic Intelligence Unit database, 2006.

<sup>&</sup>lt;sup>50</sup> Central Bank of Liberia Annual Report 2006.

<sup>&</sup>lt;sup>51</sup> Value added from charcoal and wood increased from \$71 million in 2005 to \$81 million in 2007. Over the same period, value added from rice increased from \$32 million to \$40 million. Source: Central Bank of Liberia Annual Report 2007.

 $<sup>^{52}</sup>$  Value added from rubber fell from \$42 million in 2005 to \$39 million in 2007 (Central Bank of Liberia Annual Report 2007).

In July 2007, the World Bank approved a US\$37 million grant to help the Liberian government reestablish basic infrastructure and revive the agricultural sector. Much more needs to be done, however, if the sector is to be truly revitalized. Donors will have to consider funding programs to help Liberia produce higher value—added products, and the sector will require a corresponding revival of efficient banking services (see Financial Sector) and market-oriented programs to support the growth of both family and large-scale commercial activities.

## Appendix A. CAS Methodology

#### CRITERIA FOR SELECTING INDICATORS

The economic recovery 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 approximately 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. The Data Supplement (Appendix B) contains the complete data set for Liberia, including data for the benchmark comparisons, and technical notes for every indicator.<sup>53</sup>

The first level identifies critical constraints by examining a limited number of *primary indicators* that address the questions: What are the conflict-related obstacles to economic growth? What are the economic performance obstacles to peace? How intense is/was the conflict episode? How delicate is the situation? In addition, some Level I indicators are descriptive variables such as per capita income, structure of the labor force, and the occurrence of youth bulge. The second level of analysis examines *supporting indicators* that shed light on *why* performance is strong or weak.

When Level I indicators suggest weak performance, we review a limited set of *diagnostic* supporting indicators. Level II indicators reflect constraints or determinants of performance outcomes or provide additional detail to help diagnose the problems.<sup>54</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

<sup>53</sup> The Data Supplement is available on line at <a href="http://www.nathaninc.com/projects/projectdetails.asp?pid=138&pfid=0&rpid=4&rid=9">http://www.nathaninc.com/projects/projectdetails.asp?pid=138&pfid=0&rpid=4&rid=9</a> .

<sup>&</sup>lt;sup>54</sup> The distinction between Level I and Level II indicators is not always clear-cut. In many cases, it is difficult to find readily available discerning and broadly applicable diagnostic indicators.

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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 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. For some particularly important indicators, we apply these criteria loosely because of a lack of data on conflict and postconflict countries.

#### BENCHMARKING METHODOLOGY

Comparative benchmarking is the main tool used to evaluate each indicator. The benchmarking analysis draws on several criteria, all related to postconflict and neighboring situations.

- *Preconflict*. The baseline is the value of the indicator for Liberia before the conflict started around 1988.
- *Income-Region*. Variables are also examined against the median of low-income Sub-Saharan Africa.
- Two comparator countries. When pertinent, the indicator values are compared to values of two
  comparator countries, Mozambique and Sierra Leone, where so designated by the USAID
  mission in the target country or by USAID/EGAT/EG.

When possible, time-series data for the past five years are examined to get the values and the five-year average growth rate. In interpreting the indicators, the most recent value, the multiyear average, or growth rates can be examined. In most cases, however, this time analysis is not possible because of data limitations.

Finally, when relevant, Liberia's performance is weighed against absolute standards. For example, a double-digit inflation rate is a sign of macroeconomic problems, regardless of the regional comparisons or other benchmark results.

## **POSTCONFLICT CAS INDICATORS**

Indicator	Level a	MDG, MCA, EcGov, CAS std b
Profile of Conflict and Recovery		
Failed State Index score	I	
Episode of significant violence, highest magnitude in previous 10 years	I	
Type of conflict, highest magnitude in previous 10 years	I	
Magnitude of societal-systemic impact, highest magnitude in previous 10 years	I	
Disarmament, Demobilization and Reintegration	II	
Human Rights Index	II	
Refugees and IDPs per capita	II	
Postconflict Economic Growth		
Per capita GDP, \$PPP	I	CAS std, I;
Real GDP growth	I	CAS std, I;
Gross fixed investment, % GDP	II	CAS std, II;
Poverty and Inequality		
Income share, poorest 20%	I	CAS std, I;
Population living on less than \$1 PPP per day	I	MDG; CAS std, I;
Population living below national poverty line	I	MDG; CAS std, I;
Human Poverty Index	I	
Population below minimum dietary energy consumption	II	MDG; CAS std, II;
Economic Structure	·	
Output structure	I	CAS std, I;
Labor force structure	I	CAS std, I;
Adjusted savings: energy depletion, % GNI	II	
Adjusted savings: mineral depletion, % GNI	II	
Demography and Environment	<u> </u>	
Adult literacy rate	I	CAS std, I;
Youth dependency rate	I	CAS std, I;
Youth bulge	I	
Environmental performance index	I	CAS std, I;
Population growth rate	I	CAS std, I;
Rural population density	I	
Percentage of population living in urban areas	I	CAS std, I;
Frequency and scope of natural disasters	II	
Net migration rate	II	
Gender and Children		
Gender empowerment measure	I	
Girls' primary completion rate	I	MCA; CAS std, I;
onto primary completion rate	1	1,10,1, 0,10 0,0,1,

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Indicator	Level a	MDG, MCA, EcGov, CAS std b
Gross enrollment rate, all levels of education, male and female	I	MDG; CAS std, I;
Life expectancy, male and female	I	CAS std, I;
Labor force participation rate, male and female	I	CAS std, I;
Internally displaced females, per capita	II	
Use of child soldiers, government and political groups	II	
<b>Economic Stabilization and Government Cap</b>	acity	
Govt. Effectiveness Index	I	
Govt. expenditure, % non-oil GDP	I	EcGov; CAS std, I;
Govt. revenue, % non-oil GDP	I	EcGov; CAS std, I;
Money supply growth	I	EcGov; CAS std, I;
Inflation rate	I	MCA; CAS std, I;
Overall govt. budget balance, including grants, % non-oil GDP	II	MCA, EcGov; CAS std, I;
Interest payments and total govt. expenditure	II	CAS std, II;
Subsidies and other current transfers and total govt. expenditure	II	CAS std, II;
Institutional capacity	II	
Business Environment	<u>'</u>	
Control of corruption index	I	CAS std, I;
Rule of law index	I	MCA, EcGov; CAS std, I;
Voice and accountability	I	
Ease of doing business index	I	EcGov; CAS std, I;
Time to start a business	II	MCA; EcGov; CAS std, II;
Procedures to start a business	II	EcGov; CAS std, II;
Cost of starting a business	II	MCA; EcGov; CAS std, II;
Time to enforce a contract	II	EcGov; CAS std, II;
Procedures to enforce a contract	II	EcGov; CAS std, II;
Cost to enforce a contract, % claim	II	
Time to register property	II	EcGov; CAS std, II;
Financial Sector		
Domestic credit to private sector, % GDP	I	CAS std, I;
Interest rate spread	I	CAS std, I;
Money supply, % GDP	I	CAS std, I;
Real Interest rate	II	CAS std, II;
Banking sector default rates	II	
External Sector		
Aid, % GNI	I	CAS std, I;
Current account balance, % GDP	I	CAS std, I;
Debt service ratio, % exports	I	MDG; CAS std, I;

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Indicator	Level a	MDG, MCA, EcGov, CAS std b
Export growth of goods and services	I	CAS std, I;
Foreign direct investment, % GDP	I	CAS std, I;
Gross international reserves, months of imports	I	EcGov; CAS std, I;
Present value of debt, % GNI	I	CAS std, I;
Remittance receipts, % exports	I	CAS std, I;
Concentration of exports	I	CAS std, II;
Logistics Performance Index – customs	II	
Trade in goods and services, % GDP	II	CAS std, I;
Real effective exchange rate (REER)	II	EcGov; CAS std, II;
Country credit ranking	II	
Economic Infrastructure	<u>'</u>	
Logistics Performance Index – infrastructure	I	
Number of electrical outages (days)	I	
Telephone density, fixed line and mobile per 1000	I	CAS std, I;
Internet users per 1000 people	II	MDG; CAS std, I;
Roads paved, % total roads	II	CAS std, II;
Percentage of households with access to electricity	II	
Overall infrastructure quality	II	EcGov; CAS std, I;
Quality of infrastructure— air, ports, railroads, electricity, and roads	II	CAS std, II;
Health	<u>'</u>	
Child mortality rate (per 1000 live births)	I	
Maternal mortality rate	I	MDG; CAS std, I;
Life expectancy at birth	I	CAS std, I;
HIV prevalence	II	CAS std, I;
Access to improved sanitation	II	MDG; CAS std, II;
Access to improved water source	II	MDG; CAS std, II;
Prevalence of child malnutrition (weight for age)	II	CAS std, II;
Public health expenditure, % GDP	II	MCA, EcGov; CAS std, II;
Education	'	
Net primary enrollment rate	I	MDG; CAS std, I;
Net secondary enrollment rate	I	CAS std, I;
Gross tertiary enrollment rate	I	CAS std, I;
Persistence in school to grade 5	I	MDG; CAS std, I;
Youth literacy rate	I	CAS std, I;
Education expenditure, primary, % GDP	II	MCA, EcGov; CAS std, II;
Pupil-teacher ratio, primary school	II	CAS std, II;
Employment and Workforce	,	
Labor force participation rate	I	CAS std, I;

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Indicator	Level a	MDG, MCA, EcGov, CAS std b
Rigidity of employment index	I	EcGov; CAS std, I;
Economically active children, % children ages 7-14	I	CAS std, I;
Unemployment rate, 15-24 year olds	I	
Informal sector employment, % labor force	II	
Agriculture		
Agriculture value added per worker	I	CAS std, I;
Crop production index	II	EcGov; CAS, std, II;
Agricultural export growth	II	CAS, std, II;

 $<sup>^{</sup>a}$  Level I = primary performance indicators, Level <math>II = supporting diagnostic indicators

MCA—Millennium Challenge Account indicator;

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;

CAS std -Standard CAS template indicator for template version, December 2006.

b MDG—Millennium Development Goal indicator;

## Appendix B. Data Supplement

				Profile of Confli	ct and Recovery			
	Statistical capacity indicator	Failed State Index score	Episode of significant violence, highest magnitude in previous 10 years		Magnitude of societal-systemic impact, highest magnitude in previous 10 years	Disarmament, Demobilization and Reintegration	Human Rights Index	Refugee and IDPs per capita
Indicator Number	01P1	11P1	11P2	11P3	11P4	11S1	11S2	11S3
Liberia Data								
Latest Year (T)	2007	2007	2003	2003	2003		2006	2006
Value Year T	17	92.9	1	CV	1	1	3.0	0.04
Value Year T-1	18	99.0	1				3.0	0.07
Value Year T-2	18	99.5	1			•	3.0	0.01
Value Year T-3	18		1				4.5	0.11
Value Year T-4						•	4.5	0.09
Average Value, 5 year							3.6	0.06
Growth Trend							-12.2	-17.4
Benchmark Data								
Pre-Conflict							2.8	
Latest Year Mozambique	2007	2007	1992	1992	1992		2006	2005
Mozambique Value Latest Year	69	76.9	1	CW	6	1	3.0	0.00
Latest Year Sierra Leone	2007	2007	2001	2001	2003		2006	2005
Sierra Leone Value Latest Year	46	93.4	1	CW	3	1	2.5	0.01
LI-SSA Median	57	90.3				1	3.0	
Low Income Median	59	90.9				1	3.0	

	Postco	nflict Economic	Growth		Po	verty and Inequa	lity	
	Per capita GDP, \$PPP	Real GDP growth	Gross fixed investment, % GDP	Incomes-share, poorest 20%	Population living on less than \$1 PPP per day	Population living below national poverty line	Human Poverty Index	Population below minimum dietary energy consumption
Indicator Number	12P1	12P2	12S1	13P1	13P2	13P3	13P4	13S1
Liberia Data								
Latest Year (T)	2007	2007	2005		2001	2006		2002
Value Year T	357	9.4	16.5		76.2	64.0		49.0
Value Year T-1	333	7.8	13.2					
Value Year T-2	312	5.3	9.4					
Value Year T-3	306	2.6	4.7					
Value Year T-4	274	-31.3	4.9					
Average Value, 5 year	316.5	-1.2	9.7					
Growth Trend	6.2		34.3					
Benchmark Data								
Pre-Conflict		-2.0						
Latest Year Mozambique	2007	2007	2006	2002	2002	2003	2005	2002
Mozambique Value Latest Year	830	7.0	24.9	5.4	36.2	54.1	50.6	45.0
Latest Year Sierra Leone	2006	2007	2006	2003		2004	2006	2002
Sierra Leone Value Latest Year	888	6.8	15.0	6.5		70.2	51.9	50.0
LI-SSA Median	951.1	5.9	18.6				39.8	33.0
Low Income Median	1,717.0	6.0	19.9	7.0	34.2	43.0	38.1	29.0

				Economic	Structure			
	Output Structure (agriculture, value added, % GDP)	Output Structure (industry, value added, % GDP)	(service, value	Employment or labor force in agriculture, % total	Employment or labor force in industry, % total	Employment or labor force in service, % total		Adjusted savings: Mineral depletion, % GNI
Indicator Number	14P1a	14P1b	14P1c	14P2a	14P2b	14P2c	14S1a	14S1b
Liberia Data								
Latest Year (T)	2007	2007	2007	2007	2007	2007	2006	2006
Value Year T	61.5	13.0	25.5	23.8	7.1	69.1	0.0	0.0
Value Year T-1	61.5	13.0	25.5	9.2	1.9	88.9	0.0	0.0
Value Year T-2	63.7	13.0	23.2	8.3	1.7	90.0	0.0	0.0
Value Year T-3	64.3	12.7	23.0				0.0	0.0
Value Year T-4			•	•	•		0.0	0.0
Average Value, 5 year							0.0	0.0
Growth Trend							0.0	
Benchmark Data								
Pre-Conflict	38.1	23.9	38.0				0.0	29.1
Latest Year Mozambique	2006	2006	2006				2006	2006
Mozambique Value Latest Year	28.3	25.9	45.8				11.5	0.0
Latest Year Sierra Leone	2006	2006	2006				2006	2006
Sierra Leone Value Latest Year	46.4	25.0	28.6				0.0	0.0
LI-SSA Median	32.4	20.8	43.4				0.0	0.0
Low Income Median	32.1	24.0	43.1				0.0	0.0

				D	emography and	Environment				
	Adult literacy rate	Youth dependency rate	Youth bulge	Environmental performance index	Population growth rate	Rural population density	Percentage of population living in urban areas	Frequency of natural disasters	Scope of natural disasters	Net migration rate
Indicator Number	15P1	15P2	15P3	15P4	15P5	15P6	15P7	15S1a	15S1b	15S2
Liberia Data										
Latest Year (T)	2006	2006		2006	2008	2005	2006	2007	2006	2007
Value Year T	55.0	47.2		51.0	2.1	377.5	58.8	2.0	0.0	26.9
Value Year T-1		47.1				373.9	58.1	0.0	21.4	
Value Year T-2	51.9	47.0			2.9	374.1	57.3	1.0	0.0	
Value Year T-3		46.9				377.5	56.6	0.0	602.6	
Value Year T-4		46.9				376.2	55.8	1.0	20.6	
Average Value, 5 year		47.0				375.8	57.3	0.8	128.9	
Growth Trend		0.2				-0.03	1.3			
Benchmark Data										
Pre-Conflict		46.8			0.1	320.9	42.3	0.0	0.0	
Latest Year Mozambique		2006		2007	2006	2005	2006	2007	2006	2007
Mozambique Value Latest Year		43.8		53.9	2.1	305.7	35.3	4.0	35.9	0.2
Latest Year Sierra Leone	2004	2006		2007	2006	2005	2006	2007	2006	2007
Sierra Leone Value Latest Year	34.8	42.9		40.0	2.8	552.1	41.4	0.0	0.0	0.2
LI-SSA Median	53.2	43.9		53.1	2.5	352.3	35.0	1.7	52.4	0.0
Low Income Median	58.6	42.8		54.8	2.2	439.3	31.6	1.7	95.7	0.0

					Gen	der and Chil	dren				
	Gender empowerment	Girls' primary completion rate	Male gross enrollment rate	Female gross enrollment rate	Male life expectancy at birth	Female life expectancy at birth	Male labor force participation rate	Female labor force participation rate	Internally displaced females per capita	Use of Child Soldiers - Government	Use of Child Soldiers - Political
Indicator Number	16P1	16P2	16P3a	16P3b	16P4a	16P4b	16P5a	16P5b	16S1	16S2a	16S2b
Liberia Data											
Latest Year (T)		2006					2006	2006		2004	2004
Value Year T		57.5			•		83.8	55.7		1	1
Value Year T-1			•		•		83.9	55.8			
Value Year T-2							84.1	55.7			
Value Year T-3							84.4	55.8			
Value Year T-4							84.6	55.8			
Average Value, 5 year							84.2	55.8			
Growth Trend			•		•		-0.2	-0.01			
Benchmark Data											
Pre-Conflict			•		•		85.3	55.8			
Latest Year Mozambique		2006	2004	2004	2005	2005	2006	2006		2004	2004
Mozambique Value Latest Year		34.6	53.0	44.0	42.0	43.6	82.8	84.9		2	0
Latest Year Sierra Leone		2007	2004	2004	2005	2005	2006	2006		2004	2004
Sierra Leone Value Latest Year		69.8	75.0	55.0	40.2	43.4	94.6	58.5		2	2
LI-SSA Median		36.5	49.5	43.0	50.3	53.0	88.0	65.3		1	1
Low Income Median		52.5	53.0	46.0	55.6	59.3	85.2	60.3		1	1

				Economic Stabili	zation and Gove	rnment Capacity			
	Govt. effectiveness index	Govt. expenditure, % GDP	Govt. revenue, % GDP	Money supply growth	Inflation rate	Overall govt. budget balance, including grants, % GDP	Interest payments/total govt. expenditure	Subsidies and other current transfers/total govt. expenditure	Institutional Capacity
Indicator Number	21P1	21P2	21P3	21P4	21P5	21S1	21S2	21S3	21S4
Liberia Data									
Latest Year (T)	2006	2007	2007	2007	2007	2007	2006/07	2006/07	
Value Year T	-1.37	18.3	21.9	40.1	11.2	3.8	0.4	15.5	
Value Year T-1	-1.30	12.9	14.8	34.4	5.9	2.1	1.9	15.2	
Value Year T-2	-1.74	15.5	16.1	35.7	7.0	0.8			
Value Year T-3	-1.65	11.6	12.9	49.3	3.6	2.0			
Value Year T-4	-1.62	14.5	11.9	8.3	10.3	-2.6			
Average Value, 5 year	-1.54	14.6	15.5	33.6	7.6	1.2			
Growth Trend	5.74	5.7	13.6	27.9	6.6				
Benchmark Data									
Pre-Conflict				14.5		-9.1			
Latest Year Mozambique	2006	2007	2007	2006	2007				
Mozambique Value Latest Year	-0.30	30.5	14.1	19.9	6.4	-1.5			
Latest Year Sierra Leone	2006	2007	2007	2006	2007	2004			
Sierra Leone Value Latest Year	-1.10	21.4	12.5	21.4	3.4	2.5			
LI-SSA Median	-0.82			8.4	7.6				
Low Income Median	-0.89	16.1	12.7	8.2	7.2	-2.2			

					Busines	s Environment					
	Control of corruption Index	Rule of law index	Voice and Accountability	Ease of Doing Business ranking	Time to start a business (days)	start a	Cost of starting a business, % GNI per Capita	enforce a	Procedures to enforce a contract	Cost to enforce a contract, % of claim	Time to register property (days)
Indicator Number	22P1	22P2	22P3	22P4	22S1	22 <b>S</b> 2	22S3	22S4	22S5	22\$6	22 <b>S</b> 7
Liberia Data											
Latest Year (T)	2006	2006	2006	2007	2007	2007	2007	2007	2007	2007	2007
Value Year T	-0.85	-1.16	-0.55	170	99	12.0	493.3	1,280	41	35	50
Value Year T-1	-1.12	-1.45	-0.79								
Value Year T-2	-1.25	-1.71	-1.52	169							
Value Year T-3	-1.21	-1.71	-1.72								
Value Year T-4	-1.20	-1.82	-1.70								
Average Value, 5 year	-1.13	-1.57	-1.26								
Growth Trend	7.67	10.66	30.35								
Benchmark Data											
Pre-Conflict											
Latest Year Mozambique	2006	2006	2006	2007	2007	2007	2007	2007	2007	2007	2007
Mozambique Value Latest Year	-0.57	-0.59	-0.06	134	29	10.0	21.6	1010	31	142.5	42
Latest Year Sierra Leone	2006	2006	2006	2007	2007	2007	2007	2007	2007	2007	2007
Sierra Leone Value Latest Year	-1.22	-1.21	-0.43	160	26	9.0	1,075.2	515	40	150	235
LI-SSA Median	-0.84	-0.88	-0.63	155	40.0						94.0
Low Income Median	-0.91	-0.93	-0.87	147	43.2						72.0

			Financial Sector		
	Domestic credit to private sector, % GDP	Interest rate spread	Money supply, % GDP	Real Interest rate	Banking sector default rates
Indicator Number	23P1	23P2	23P3	23S1	23S2
Liberia Data					
Latest Year (T)	2007	2007	2007	2006	
Value Year T	9.8	11.3	26.2	2.7	
Value Year T-1	8.5	12.1	23.5	3.1	
Value Year T-2	6.9	13.6	21.3	16.9	
Value Year T-3	6.6	14.3	18.8	14.0	
Value Year T-4	5.5	11.8	15.2	-4.8	
Average Value, 5 year	7.5	12.6	21.0		
Growth Trend	14.1	-2.5	13.1		
Benchmark Data					
Pre-Conflict	8.2	7.6	22.2	8.2	
Latest Year Mozambique	2006	2006	2006	2006	
Mozambique Value Latest Year	13.8	8.2	28.5	11.9	
Latest Year Sierra Leone	2006	2006	2006	2006	
Sierra Leone Value Latest Year	4.4	13.6	18.7	8.6	
LI-SSA Median	12.2	14.3	21.9	11.9	
Low Income Median	14.3	12.3	25.8	7.8	

	External Sector												
	Aid , % GNI	Current Account Balance, % GDP		Export growth of goods and services	Foreign direct investment, % GDP	Gross international reserves, months of imports	Present value of debt, % GNI		Concentration of exports	Trade Logistics Performance Index - Customs (score)	Trade in goods and services, % GDP	Real effective exchange rate (REER)	Country credit ranking
Indicator Number	24P1	24P2	24P3	24P4	24P5	24P6	24P7	24P8	24P9	24S1	24S2	24S3	24S4
Liberia Data													
Latest Year (T)	2006	2007	2006/07	2006	2007	2007	2006	2006	2007	2007	2006		
Value Year T	54.4	30.7	27.9	34.8	16.4	1.5	673.7	27.8	97.8	2	99.6		
Value Year T-1	55.9	31.0		15.3	1.0	1.0	1,086.8	20.6	99.7		90.0		
Value Year T-2	57.1	13.3		84.4	0.0	0.2	760.3				88.4		
Value Year T-3	30.4	5.6		-4.3	0.0	0.2					77.3		
Value Year T-4	11.4	14.2			0.0	0.3					47.8		
Average Value, 5 year	41.9	19.0			3.5	0.6					80.6		
Growth Trend	37.3	32.6			493.2	48.3					16.2		
Benchmark Data													
Pre-Conflict	10.2	-8.4	5.3		10.0	0.0		0.0			89.9		
Latest Year Mozambique	2006	2006	2006	2006	2006	2005	2006	2005	2005	2007	2006		
Mozambique Value Latest Year	26.2	-9.3	1.9	5.0	2.2	4.0	45.5	0.3	75.9	2.2	79.4		
Latest Year Sierra Leone	2006	2006	2006	1995	2006	2005	2006	2005	2002	2007	2006		
Sierra Leone Value Latest Year	25.7	-7.0	9.6	-36.1	4.1	4.0	83.5	0.9	91.7	2	67.9		
LI-SSA Median	13.0	-6.0	10.7	6.0	2.1	3.1	36.9	5.4	75.1	2.2	58.0		
Low Income Median	11.3	-3.6	7.0	6.2	1.6	3.6	37.5	8.5	66.0	2.1	68.1		

						Econom	ic Infrastructu	ıre			-
	Logistics Performance Index - Infrastructure (score)	Number of electrical outages (days)	Telephone Density, fixed line and mobile per 1000	Internet users per 1000 people	Roads paved, % total roads	Percentage of households with access to electricity	Overall Infrastructure Quality	•	Quality of Infrastructure - Port Infrastructure Quality Index (1 for poor to 7 for excellent)	Rail Development Index (1 for poor to 7 for	Quality of Infrastructure - Electricity Supply Index (1 for poor to 7 for excellent)
Indicator Number	25P1	25P2	25P3	25S1	25S2	25S3	25\$4	25S5a	25S5b	25S5c	25S5d
Liberia Data											
Latest Year (T)	2007		2005	2001	2006						
Value Year T	2.1		2.8	0.3	6.2						
Value Year T-1			2.7	0.2	6.2						
Value Year T-2			2.3	0.1	6.2						
Value Year T-3			2.4	0.0	6.2						
Value Year T-4			2.6	0.0	6.1		-				
Average Value, 5 year			2.5	0.1	6.2						
Growth Trend			2.7	56.0	0.3						
Benchmark Data											
Pre-Conflict			3.8								
Latest Year Mozambique	2007		2006	2004	1999		2007	2007	2007	2007	2007
Mozambique Value Latest Year	2.1		119.4	7.1	18.7		2.2	3.4	2.7	1.8	3.3
Latest Year Sierra Leone	2007		2002	2004	2002						
Sierra Leone Value Latest Year	1.8		18.6	1.9	8.0						
LI-SSA Median	2.1		18.9	2.2	12.6		2.4	3.4	2.5	1.6	2.5
Low Income Median	2.1	44.5	72.9	11.0	14.4		2.4	3.4	2.5	1.8	2.7

	Quality of Roads
Indicator Number	25S5e
Liberia 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	
Pre-Conflict	
Latest Year Mozambique	
Mozambique Value Latest Year	
Latest Year Sierra Leone	
Sierra Leone Value Latest Year	
LI-SSA Median	
Low Income Median	

	Health										
	Child mortality rate	Maternal mortality rate	Life expectancy at birth	HIV prevalence	Access to improved sanitation	Access to improved water source	Prevalence of child malnutrition (weight for age)	Public health expenditure, % GDP			
Indicator Number	31P1	31P2	31P3	31S1	31S2	31S3	31S4	31S5			
Liberia Data											
Latest Year (T)	2005	2000	2006	2006	2006	2004	2000	2004			
Value Year T	235	760	<i>4</i> 5.3	5.2	24.0	61.0	26.5	3.6			
Value Year T-1			44.9					2.0			
Value Year T-2					27.0			0.9			
Value Year T-3								1.6			
Value Year T-4			43.7			•		1.2			
Average Value, 5 year								1.8			
Growth Trend			•					24.8			
Benchmark Data											
Pre-Conflict			45.9			55.0					
Latest Year Mozambique	2005	2000	2006	2005	2004	2004	2003	2005			
Mozambique Value Latest Year	145	1000	42.5	16.1	32.0	43.0	21.2	2.7			
Latest Year Sierra Leone	2005	2000	2006	2005	2004	2004	2000	2005			
Sierra Leone Value Latest Year	282	2,000	42.2	1.6	39.0	57.0	27	1.9			
LI-SSA Median	148	990	47.0	3.0	34.0	60.0	25.8	2.0			
Low Income Median	122	740	54.9	1.7	35.0	61.0	27.6	1.9			

	Education										
	Net primary enrollment rate - Total	Net primary enrollment rate · Female	Net primary enrollment rate Male	Net secondary enrollment rate	Gross tertiary enrollment rate	Persistence in school to grade 5 - Total	grade 5 -	Persistence in school to grade 5 - Male	Youth literacy rate	Education expenditure, primary, % GDP	Pupil-teacher ratio, primary school
Indicator Number	32P1a	32P1b	32P1c	32P2	32P3	32P4a	32P4b	32P4c	32P5	32S1	32S2
Liberia Data											
Latest Year (T)	2006	2006	2006	2000	2000	2001/02	2001/02	2001/02	2004	2006	2006
Value Year T	39.5	38.9	40.1	17.1	15.5	31.2	26.6	34.6	67.4	1.9	19.3
Value Year T-1					7.9					1.9	
Value Year T-2										1.9	
Value Year T-3									34.7		
Value Year T-4				•	•		•	•			
Average Value, 5 year				,			•	,			
Growth Trend											
Benchmark Data											
Pre-Conflict									57.2		
Latest Year Mozambique	2006	2006	2006	2006	2005	2004	2004	2004		2007	2006
Mozambique Value Latest Year	69.1	66.7	71.5	4.2	1.5	62.4	58.4	66.0		2.6	67.4
Latest Year Sierra Leone				2007	2002				2004	2007	2007
Sierra Leone Value Latest Year				22.8	2.1				47.6	2.1	44.2
LI-SSA Median	54.0		60.9	16.7	2.0	69.7	69.0	68.2	69.5	2.1	44.1
Low Income Median	77.5	72.8	80.9	19.3	2.8	69.3	68.2	67.9	70.3	2.0	44.3

			Employment a	Agriculture					
	Labor force participation rate	Rigidity of employment index	Economically active children, % children ages 7-14	Unemployment rate, 15-24 year old- Total	Unemployment rate, 15-24 year old- Males	Informal Sector employment	Agriculture value added per worker	Crop Production Index	Agricultural Export Growth
Indicator Number	33P1	33P2	33P3	33P4a	33P4b	33S1	34P1	34S1	34S2
Liberia Data									
Latest Year (T)	2006	2007			2006	2007		2004	
Value Year T	69.8	31			85.0	77.2		99.3	
Value Year T-1	69.9			-		77.9		96.9	
Value Year T-2	69.9					76.0		97.0	
Value Year T-3	70.1							99.9	
Value Year T-4	70.2				•			102.6	
Average Value, 5 year	70.0							99.1	
Growth Trend	-0.1				•			-1.0	
Benchmark Data									
Pre-Conflict	72.9							104.7	
Latest Year Mozambique	2006	2007					2005	2004	
Mozambique Value Latest Year	83.9	54					156.6	107.4	
Latest Year Sierra Leone	2006	2007	2000					2004	
Sierra Leone Value Latest Year	76.2	51	74.0					115.0	
LI-SSA Median	79.9	42	36.2				228.4	108.2	
Low Income Median	76.3	38	33.1				287.6	108.5	

## **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 when 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:

http://web.worldbank.org/WBSITE/EXTERNAL/DATASTA TISTICS/0,.contentMDK:20541648~pagePK:64133150~piP K:64133175~theSitePK:239419,00.html

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

Coverage: Data are available for the majority of USAID

countries.

CAS Code: 01P1

#### PROFILE OF CONFLICT AND RECOVERY

#### **Failed States Index score**

Source: Fund for Peace, Failed States Index, http://www.fundforpeace.org/web/index.php?option=com\_co ntent&task=view&id=229&Itemid=366

Definition: The Failed States Index assesses violent internal conflicts and measures the impact of mitigating strategies. Published annually by Fund for Peace, the index rates 12 social, economic, and political or military indicators, including Mounting Demographic Pressures, Massive Movement of Refugees or Internally Displaced Persons, Legacy of Vengeance-Seeking Group Grievance or Group Paranoia, Chronic and Sustained Human Flight, Uneven Economic Development along Group Lines, Sharp and/or Severe Economic Decline, Criminalization and/or Delegitimization of the State, Progressive Deterioration of Public Services, Suspension or Arbitrary Application of the Rule of Law and Widespread Violation of Human Rights; Security Apparatus Operates as a "State Within a State;" Rise of Factionalized Elites; and Intervention of Other States or External Political Actors. Each indicator is ranked on a scale of 1 (low) to 10 (high). A high ranking reflects high intensity or pressure on the state (more likely to foster conflict), whereas a low ranking reflects lower intensity or pressure on the state (less likely to foster conflict). The rankings for the 12 indicators are combined to determine the country's overall

Coverage: Data are available for all USAID countries.

CAS Code: 11P1

## **Episode of Significant Violence, Highest Magnitude in Previous 10 years**

Source: Center for Systemic Peace, Major Episodes of Political Violence, from Marshall, Monty G. 1998-2006. "Current Status of the World's Major Episodes of Political Violence," bimonthly reports to the U.S. government's Political Instability Task Force,

http://members.aol.com/CSPmgm/warlist.htm.

Definition: The variable tells the date and duration of the conflict episode with the highest magnitude in the past 10 years and whether the conflict is ongoing. At times delineating the exact beginning or end of a conflict is difficult, so the years presented are considered most likely to capture the transformative periods of the episodes.

Coverage: Data available for all USAID countries.

CAS Code: 11P2

#### Type of Conflict, Highest Magnitude in Previous 10 years

Source: Center for Systemic Peace, Major Episodes of Political Violence, from Marshall, Monty G. 1998–2006. "Current Status of the World's Major Episodes of Political Violence," bimonthly reports to the U.S. government's Political Instability Task Force:

http://members.aol.com/CSPmgm/warlist.htm.

Definition: This variable tries to capture the characteristics of the conflict episode with the highest magnitude in the last 10 years. The first letter (C, E, I) denotes what caused the violence: a civil-intrastate (C) episode involving rival political groups; ethnic-intrastate conflict (E) involving the state agent and a distinct ethnic group; or international event-interstate (I), usually involving two or more states, but possibly denoting a distinct polity resisting foreign domination (colonialism). The second letter (V, W, N) denotes episodes of violence (V)—i.e., the use of instrumental violence without necessarily exclusive goals; war-violence (W) between distinct, exclusive groups with the intent to impose a unilateral result to the contention; or independence (I)—an attempt to forcibly remove foreign domination.

Coverage: Data available for all USAID countries.

CAS Code: 11P3

## Magnitude of Societal-Systemic Impact, Highest Magnitude in Previous 10 years

Source: Center for Systemic Peace, Major Episodes of Political Violence, from Marshall, Monty G. 1998–2006, "Current Status of the World's Major Episodes of Political Violence," bimonthly reports to the U.S. government's Political Instability Task Force,

 $\underline{http://members.aol.com/CSPmgm/warlist.htm}.$ 

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*Definition:* This variable captures the highest magnitude of conflict episode in the last 10 years. From episodes in which the number of deaths is under 2,000, to extensive, systematic, and indiscriminate destruction of human resources and/or physical infrastructure with persistent and adverse effects.

Coverage: Data available for all USAID countries.

CAS Code: 11P4

#### Disarmament, Demobilization, and Reintegration

Source: Graduate Institute of International Studies in Geneva, Switzerland, Small Arms Survey, Cumulative Index 2001–2006, Search for "Where are DDR programmes currently being implemented?"

http://www.unddr.org/whatisddr.php#11

Data are also available from the UN DDR Resource Centre http://www.unddr.org/.

Definition: This indicator is a yes/no indicator that shows whether the military powers that perpetuated conflict are reforming through a formal UN-led Disarmament, Demobilization and Reintegration program.

Coverage: Data available for only UN-sponsored DDR programs, covering about 13 countries.

CAS Code: 11S1

#### **Human Rights Index**

Source: Mark Gibney and Matthew Dalton, "Political Terror Scale 1980–2005," University of North Carolina Asheville, North Carolina, 2006:

http://www.politicalterrorscale.org/ptsdata.html

Definition: This variable shows the degree to which countries experience government-induced violence against their own population (1 is best and 5 is worst). The scores range from countries under secure rule of law with no imprisonment for their views, to violence in the form of assassinations and torture extended to the whole population. State-sponsored political terror (defined here as coercion directed at personal security) targets predominantly groups opposed to the state. It could lead eventually to the escalation of violence by pushing moderates to espouse radical ideas (after becoming less convinced that peaceful resolution is possible), or by increasing the cost of collective action, thus making resorting to violent means more attractive or economically viable.

Coverage: Data are available for 179 countries.

CAS Code: 11S2

#### Refugees and IDPs per Capita

Source: Derived from United Nations High Commissioner for Refugees, Global Refugee Trends, Table 2, refugees, asylum-seekers, internally displaced persons (IDPs), returnees (refugees and IDPs), stateless persons, and others of concern to UNHCR by country of origin. <a href="http://www.unhcr.org/statistics.html">http://www.unhcr.org/statistics.html</a> and World Development Indicators.

Definition: Number of refugees and IDPs divided by total population. Refugees include persons recognized under the 1951 Convention relating to the Status of Refugees, its 1967 Protocol, the 1969 OAU Convention Governing the Specific Aspects of Refugee Problems in Africa, those recognized in accordance with the UNHCR Statute, persons granted a complementary form of protection, and persons granted temporary protection. Internally displaced persons (IDPs) are defined as "persons or groups of persons who have been forced or obligated to flee or leave their homes or places of

habitual residence, in particular as a result of avoiding or in order to avoid the effect of armed conflict, situations of generalized violence, violations of human rights, or natural or manmade disasters, and who have not crossed an internationally recognized state border." (Guiding Principles on Internal Displacement, Introduction, para. 2). Unlike refugees, who have been deprived of the protection of their state of origin, IDPs remain legally under the protection of national authorities of their country of habitual residence. Internally displaced persons are those forced to flee their homes because their lives were at danger, but unlike refugees, they did not cross international borders. Estimates come from various sources, including the Internal Displacement Monitoring Center, United Nations High Commission for Human Rights, and United Nations Office for the Coordination of Humanitarian Affairs. Total population is based on the de facto definition of population, which counts all residents regardless of legal status or citizenship—except for refugees not permanently settled in the country of asylum, which are generally considered part of the population of their country of origin.

Coverage: 75 USAID countries

CAS Code: 11S3

#### POSTCONFLICT ECONOMIC GROWTH

#### Per capita GDP, \$PPP

Source: International Monetary Fund (IMF) World Economic Outlook database, updated every 6 months:

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

*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: 12P1

#### **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: 12P2

#### Gross Fixed Investment, Percentage of GDP

Source: IMF Article IV consultation reports for latest country data; 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: 12S1

#### **POVERTY AND INEQUALITY**

#### Income Share, Poorest 20%

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. An alternative source is the country's Poverty Reduction Strategy Paper:

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

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

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

CAS Code: 13P1

#### Population Living on Less than \$1 PPP per Day

Source: World Development Indicators, most recent publication series SI.POV.DDAY, original data from national surveys. An alternative source is the country's Poverty Reduction Strategy Paper:

 $\underline{http://www.imf.org/external/np/prsp/prsp.asp}$ 

*Definition:* The indicator captures the percentage of the population living on less than \$1.08 a day at 1993 international prices.

Coverage: Data are available for about 59 USAID countries going back to 1997; data for 2000 or later are available for about 35 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 differences in quality.

CAS Code: 13P2

#### Population Living below National Poverty Line

Source: World Development Indicators, most recent publication series SI.POV.NAHC. An alternative source is 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 are available for only 19 countries for 2000 or later; data are available for about 49 countries going back to 1997. For most countries, data can be obtained from the PRSP.

Data quality: Measuring the percentage of people living 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: 13P3

#### **Human Poverty Index**

Source: UNDP, Human Development Report. http://hdr.undp.org/statistics/data/indicators.cfm?x=18&y=1 &z=1 for most recent edition; updates may be found at http://hdr.undp.org/en/ Definition: The index measures deprivation in terms of not meeting target levels for specific economic and quality-of-life indicators. Values are based on (1) the percentage of people not expected to survive to age 40, (2) the percentage of adults who are illiterate, and (3) the percentage of people who fail to attain a "decent living standard," which is subdivided into three (equally weighted) items: (1) the percentage of people without access to safe water, (2) the percentage of people without access to health services, and (3) the percentage of underweight children. The HPI ranges in value from 0 (zero incidence of deprivation) to 100 (high incidence of deprivation).

Coverage: Data are available for about 60 USAID countries.

CAS Code: 13P4

## 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.

Coverage: Data are available for about 82 USAID countries.

CAS Code: 13S1

#### **ECONOMIC STRUCTURE**

#### **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

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most developing countries such surveys are infrequent, so prior survey results are extrapolated.

CAS Code: 14P1a-c

#### **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. An alternative source is the CIA World Fact Book:

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 countries, data can be obtained from the PRSP.

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

CAS Code: 14P2a-c

#### Adjusted Savings: Energy Depletion, percentage of GNI

Source: World Development Indicators, most recent publication series NY.ADJ.DNGY.GN.ZS.

Definition: 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.

Coverage: Data are available for about 88 USAID countries.

CAS Code: 14S1a

#### Adjusted Savings: Mineral Depletion, percentage of GNI

Source: World Development Indicators, most recent publication series NY.ADJ.DMIN.GN.ZS.

*Definition:* 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.

Coverage: Data are available for about 88 USAID countries.

CAS Code: 14S1b

#### **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 aged 15 and over 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: 15P1

#### 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: 15P2

#### Youth Bulge

Source: Obtained from individual country sources.

*Definition:* Youth bulge is calculated as the percentage of the population ages 15–24 divided by the total population (WDI SP.POP.TOTL)

Coverage: Data are available for about 35 USAID countries.

CAS Code: 15P3

#### **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/Home">http://epi.yale.edu/Home</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 giving more weight to environmental health (EPI =  $0.5 \times \text{Environmental}$  Health +  $0.1 \times \text{(Air Quality + Water Resources + Productive}$  Natural Resources + Biodiversity and Habitat + Sustainable Energy)). The index values range from 0 (for very poor performance) to 100 (for 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: 15P4

#### **Population Growth Rate**

Source: World Development Indicators, most recent publication series SP.POP.GROW.

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

Coverage: Data are available for about 88 USAID countries.

CAS Code: 15P5

#### **Rural Population Density**

Source: World Development Indicators, most recent publication series EN.RUR.DNST

Definition: Rural population density (rural population per sq. km of arable land) is the rural population divided by the arable land area. Rural population is calculated as the difference between the total population and the urban population. 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. Estimates are from the Food and Agriculture Organization and World Bank population estimates.

Coverage: Nearly all relevant countries.

CAS Code: 15P6

#### Percentage of 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; because these definitions vary greatly, cross-country comparisons should be made with caution.

CAS Code: 15P7

#### Frequency and Scope of Natural Disasters

Source: Centre for Research on the Epidemiology of Disasters, Emergency Events Database,

 $\underline{http://www.emdat.be/Database/DisasterProfile/profiles.php}$ 

Definition: This indicator measures the human-impact effects of natural disasters and the frequency of these occurrences. Natural disasters are defined as natural hazard events that have at least one of the following human-impact effects: 10 or more people reported killed, 100 people reported affected, declaration of a state of emergency, or call for international assistance. The scope is measured by the total number of people affected. This includes the number of people suffering from physical injuries, trauma, or an illness requiring medical treatment as a direct result of a disaster, the number of people needing immediate assistance for shelter, and the people requiring immediate assistance during a period of emergency; it can also include displaced or evacuated people.

Coverage: Data are available for nearly all USAID countries.

CAS Code: 15S1a-b

Net migration rate

Source: CIA World Factbook, https://www.cia.gov/library/publications/the-world-factbook/

Definition: Net migration rate (migrants per 1,000 population) is the difference between the number of persons entering and leaving a country during the year per 1,000 persons (based on midyear population). An excess of persons entering the country is referred to as net immigration (e.g., 3.56 migrants per 1,000 population); an excess of persons leaving the country as net emigration (e.g., -9.26 migrants per 1,000 population).

Coverage: Data are available for nearly all USAID countries.

Data quality: The source does not specify the estimating methodology.

CAS Code: 15S2

#### **GENDER AND CHILDREN**

#### **Gender Empowerment Measure**

Source: UNDP, Human Development Report, http://hdrstats.undp.org/indicators/279.html.

Definition: Captures gender inequality in three areas: political participation and decision-making power, as measured by women's and men's participation in parliamentary seats; economic participation and decision-making power, as measured by two indicators – women's and men's percentage shares of positions as legislators, senior officials and managers and women's and men's percentage shares of professionals and technical positions; and power over economic resources, as measured by estimated earned income

Coverage: Data are available for half of USAID countries.

CAS Code: 16P1

#### **Girls' Primary Completion Rate**

Source: World Development Indicators, most recent publication series: SE.PRM.CMPT.FE.ZS

*Definition:* Primary completion rate is the percentage of students completing the last year of primary school. It is 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 80 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: 16P2

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

Source: UNDP Human Development Report <a href="http://hdr.undp.org/en/statistics/">http://hdr.undp.org/en/statistics/</a> and <a href="http://hdrstats.undp.org/indicators/">http://hdrstats.undp.org/indicators/</a>

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

Coverage: Data are available for about 80 USAID countries.

*Data quality:* Enrollment rates are based on data collected during annual school surveys, typically conducted at the beginning of the school year.

CAS Code: 16P3a-b

#### Life Expectancy, Male and Female

Source: Estimated from UNDP Human Development Indicators:

http://hdrstats.undp.org/indicators

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

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Coverage: Data are available for about 85 USAID countries.

CAS Code: 15P4a-b

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

Source: Derived from World Development Indicators, but the precise computation differs according to the edition of WDI used:

To calculate the female labor force participation rate using WDI 2007: the numerator is the labor force, female (percent of total labor force) (SL.TLF.TOTL.FE.ZS) times labor force, total (SL.TLF.TOTL.IN); the denominator is simply population ages 15–64, female (SP.POP.1564.FE.IN). Using WDI 2006, the denominator (female population, ages 15–64), can be estimated only by multiplying the total population (SP.POP.TOTL) by the percentage of the population ages 15–64 (SP.POP.1564.IN.ZS) and the percentage of females in the total population (SP.POP.TOTL.FE.ZS).

To calculate the male labor force participation rate using WDI 2004: the numerator is calculated by subtracting the female labor force, derived above, from the total labor force (SL.TLF.TOTL.IN). The denominator is population ages 15–64, male (SP.POP.1564.MA.IN). Using WDI 2006 and subsequent years, the denominator is an estimate of the male population, ages 15–64, calculated as the total population (SP.POP.TOTL) multiplied by the percentage ages 15–64 (SP.POP.1564.IN.ZS) and the percentage of males in the total population, where the final factor is computed as 100 minus the percentage of females in the total population (SP.POP.TOTL.FE.ZS).

Definition: The percentage of the working-age population that is in the labor force. The labor force is made up of people who meet the International Labour Organization definition of the economically active population: 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: 16P5a-b

#### **Internally Displaced Females per Capita**

Source: UNHCR, 2005 Global Refugee Trends, Annex, Table 14, <a href="http://www.unhcr.org/statistics.html">http://www.unhcr.org/statistics.html</a> and World Development Indicators, most recent publication series SP.POP.TOTL.

*Definition:* Internally displaced women protected or assisted by UNHCR, 2005, divided by total population estimates.

Coverage: Data are available for 14 USAID countries.

Data quality: Most of the world's internal-displacement situations are not covered by UNHCR and are thus not reflected in these statistics.

CAS Code: 16S1

#### Use of Child Soldiers, Government and Political

Source: Text in country reports of Child Soldiers.org, <a href="http://www.child-soldiers.org/regions/regions">http://www.child-soldiers.org/regions/regions</a>, and The UN DDR Resource Centre <a href="http://www.unddr.org/">http://www.unddr.org/</a>

Definition: The 2002 Optional Protocol to the UN Convention on the Rights of the Child set 18 as the minimum age for participation in hostilities, for compulsory recruitment by governments, and all recruitment into armed groups. The use of child solider is therefore defined as an

individual under the age of 18 participating in government forces or in armed political groups.

Coverage: Data are available for approximately 70 percent of USAID countries.

Data quality: Information for country entries was gathered from a wide range of sources, including governments, UN agencies and peacekeeping missions, other intergovernmental organizations, news media, academic sources, and human rights and humanitarian organizations. Information was also provided by coalition members and partners and by local nongovernmental organizations, journalists, lawyers, activists, and others in many countries.

CAS Code: 16S2a-b

## ECONOMIC STABILIZATION AND GOVERNMENT CAPACITY

In the World Development Indicators for 2005, the World Bank adopted a new 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 are not comparable to the former data on total expenditure. In addition, WDI 2005 provides data on a 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). Many countries do not use the GFS system, so country coverage of fiscal data in WDI 2005 is limited. For these reasons, the template will continue to use some data from WDI 2004, along with new data from WDI 2005 and subsequent WDI series, as appropriate.

#### **Government Effectiveness Index**

Source: World Bank Institute, Governance Indicators, (Kaufmann, Kraay and Mastruzzi, September 2006) http://web.worldbank.org/WBSITE/EXTERNAL/WBI/EXT WBIGOVANTCOR/0,contentMDK:21045735~pagePK:64168445~menuPK:1866365~piPK:64168309~theSitePK:1740530,00.html

Definition: Based on perception surveys from 17 sources, this index measures the quality of public and civil services and the degree of the public sector's independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies.

Coverage: Data are available for all USAID countries.

CAS Code: 21P1

#### **Government Expenditure, Percent of GDP**

Source: IMF Article IV Reviews for latest country data: www.imf.org/external/np/sec/aiv/index.htm

World Development Indicators for benchmarking data (GC.XPN.TOTL.GD.ZS). Original data from the IMF, Government Finance Statistics Yearbook, and World Bank estimates.

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

Coverage: Data are available for about 70 percent of USAID countries.

CAS Code: 21P2

#### Government Revenue, Percent of GDP

Source: IMF Article IV reviews for latest country data: www.imf.org/external/np/sec/aiv/index.htm;

World Development Indicators for benchmarking data (GB.RVC.TOTL.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 nonrepayable receipts (other than grants), measured as a share of GDP. Grants represent monetary aid going to the central government that has no repayment requirement.

Coverage: Data are missing for about 24 USAID countries.

CAS Code: 21P3

#### **Money Supply Growth**

Source: Latest country data are from national data sources or IMF Article IV Reviews:

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

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 quasimoney) measured as the change in end-of-year totals relative to the preceding year. M2 is made up of 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 (IFS).

Coverage: Data are available for about 81 USAID countries.

CAS Code: 21P4

#### **Inflation Rate**

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

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: 21P5

#### Overall Government Budget Balance, including Grants, Percent of GDP

Source: For countries using the new GFS system (see explanation at the beginning of this section), benchmarking data on a government's cash surplus or 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. The latest country data are obtained from national data sources or from IMF Article IV Reviews: www.imf.org/external/np/sec/aiv/index.htm.

Definition: The cash surplus or 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 GFS system, the template will continue to focus on the overall budget balance, using data from alternative sources. 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 that 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 2005 for 41 USAID countries.

CAS Code: 21S1

#### Interest Payments/Total Government Expenditure

Source: National data sources or IMF Article IV consultative reports: www.imf.org/external/np/sec/aiv/index.htm.

Definition: Interest payments as a percent of total expenditure.

Coverage: Data are available for about half of USAID countries. WDI stopped reporting government expenditures in 2005. The template will include this variable when the required data can be obtained from IMF Article IV consultation reports or national data sources for the target country and the comparison countries.

Data quality: Many countries report 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: 21S2

#### Subsidies and Other Current Transfers/Total **Government Expenditure**

Source: National data sources or IMF Article IV consultative reports: www.imf.org/external/np/sec/aiv/index.htm.

Definition: Subsidies and other current transfers as a percent of total expenditure.

Coverage: Data are available for about half of USAID countries. WDI stopped reporting government expenditures in 2005. The template will include this variable when the required data can be obtained from IMF Article IV consultation reports or national data sources for the target country and the comparison 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: 21S3

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#### **Institutional Capacity**

Source: Fund for Peace, content analysis <a href="http://www.fundforpeace.org">http://www.fundforpeace.org</a>

*Definition:* Fund for Peace computes this index by analyzing leadership, police, military, civil service, and judiciary capacity, applying a rating to each element on a 1 (worst) to 5 (best) scale and summing the result.

Coverage: Data are available for all USAID countries.

CAS Code: 21S4

#### **BUSINESS ENVIRONMENT**

#### **Control of Corruption Index**

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

*Definition:* The Control of Corruption index is an aggregation of 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 the "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 and 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

#### Rule of Law Index

Source: World Bank Institute: http://www.worldbank.org/wbi/governance/govdata2002/index.html. This indicator is based on perceptions of the legal system, drawn from 12 data sources.

*Definition:* The Rule of Law Index is an aggregation of indicators that measure the extent to which agents have confidence in and abide by the rules of society. It 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 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 their legal environment.

CAS Code: 22P2

#### Voice and Accountability

Source: World Bank Institute, Governance Indicators, (Kaufmann, Kraay, and Mastruzzi, September 2006) http://web.worldbank.org/WBSITE/EXTERNAL/WBI/EXT

WBIGOVANTCOR/0,,contentMDK:21045735~pagePK:641 68445~menuPK:1866365~piPK:64168309~theSitePK:17405 30,00.html

Definition: Based on seven representative sources, this index measures the government's capacity to transfer power in a legitimate manner and offer civil liberties and political rights. Although this is a subjective index of perception, the index is based on a broad range of sources: 31 data sources produced by 25 organizations, ranging from international organizations to political and business risk-rating agencies (Afrobarometer, Latinobarometro), think tanks, and NGOs.

Coverage: Data are available for all USAID countries.

CAS Code: 22P3

#### Ease of Doing Business Index

Source: World Bank, Doing Business Indictors http://www.doingbusiness.org/

Definition: The Ease of Doing Business index ranks economies from 1 to 175. 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 in 2006: 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: 22P4

#### Time to Start a Business

Source: World Bank, Doing Business; Starting a Business category; http://www.doingbusiness.org/

*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: 22S1

#### Procedures to Start a Business

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

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: 22S2

#### Cost of Starting a Business

Source: World Bank, Doing Business; Starting a Business category; http://www.doingbusiness.org/

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

Coverage: Data are available for nearly all USAID countries.

CAS Code: 22S3

#### Time to Enforce a Contract

Source: World Bank, Doing Business; Enforcing Contracts category: <a href="http://www.doingbusiness.org/">http://www.doingbusiness.org/</a>

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: 22S4

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

Source: World Bank, Doing Business; Enforcing Contracts category: http://www.doingbusiness.org/

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, and the like, to proceed with enforcement action.

Coverage: Data are available for nearly all USAID countries.

CAS Code: 22S5

#### Cost to Enforce a Contract, Percent of Claim

Source: World Bank, Doing Business; Enforcing Contracts category: <a href="http://www.doingbusiness.org/">http://www.doingbusiness.org/</a>

Definition: Cost is recorded as a percentage of the claim, assumed to be equivalent to 200% of income per capita. Only official costs required by law are recorded, including court and enforcement costs and average attorney fees where the use of attorneys is mandatory or common.

Coverage: Data are available for nearly all USAID countries.

CAS Code: 22S6

#### **Time to Register Property**

Source: World Bank, Doing Business; Registering Property category: <a href="http://www.doingbusiness.org/">http://www.doingbusiness.org/</a>

Definition: The time required to accomplish the full sequence of procedures to transfer a property title from seller to buyer when a business purchases land and a building in a periurban area of the country's most populous city. Every required procedure is included, whether it is the responsibility of the seller, the buyer, or a third party on their behalf.

Coverage: Data are available for nearly all USAID countries.

CAS Code: 22S7

#### **FINANCIAL SECTOR**

#### **Domestic Credit to Private Sector, Percent of GDP**

Source: IMF Article IV reviews 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 IMF International Financial Statistics and data files and World Bank estimates.

Definition: Domestic credit to the private sector refers to financial resources provided to the private sector, such as through loans, purchases of nonequity 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 are 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, Percent of GDP

Source: Latest country data obtained from national data sources or IMF Article IV reviews: <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 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

#### Real Interest Rate

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

Definition: The 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: 23S1

#### **Banking Sector Default Rates**

Source: IMF, Financial Soundness Indicators, Coordinated Compilation Exercise for Financial Soundness Indicators: core series of nonperforming loans to total loans, <a href="http://dsbb.imf.org/Applications/web/fsi/fsihome/">http://dsbb.imf.org/Applications/web/fsi/fsihome/</a>

Definition: This is calculated by taking the value of nonperforming loans as the numerator and the total value of the loan portfolio (including nonperforming loans, and before the deduction of specific loan loss provisions) as the denominator

Coverage: Data are available for 29 USAID countries.

CAS Code: 23S2

#### **EXTERNAL SECTOR**

#### Aid, Percent of GNI

Source: Latest country data obtained from national data sources or IMF Article IV Reviews: www.imf.org/external/np/sec/aiv/index.htm

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-

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APPENDIX B

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, Percent 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 are from World Development Indicators, most recent publication series BN.CAB.XOKA.GD.ZS, based on IMF, Balance of Payments Statistics Yearbook and data files, World Bank staff estimates, and World Bank and OECD GDP estimates.

*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 GDP.

Coverage: Data are available for about 79 USAID countries.

CAS Code: 24P2

#### **Debt Service Ratio, Percent of Exports**

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

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: Total debt service is the sum of principal repayments and interest actually paid in foreign currency, goods, or services on long-term debt, interest paid on short-term debt and repayments (repurchases and charges) to the IMF. Debt is considered as a percent of exports of goods and services, which includes income and workers' remittances.

Coverage: Data are available for about 77 USAID countries.

Data quality: See Data Quality comments on the present value of debt, percent of GNI, about the of debt data reported.

CAS Code: 24P3

#### **Export Growth of Goods and Services**

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

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, Percent of GDP

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

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

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 reviews:

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 are made up of 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 the number of months of imports of goods and services.

Coverage: Data are available for about 77 USAID countries.

CAS Code: 24P6

#### Present Value of Debt, Percent 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 nonguaranteed, long-term external debt over the life of existing loans. The indicator measures the value of debt relative to the GNI.

Coverage: Data are available for about 80 USAID countries.

Data quality: The coverage and quality of debt data vary widely among 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: 24P7

#### Remittance Receipts, Percent of Exports

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

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

Benchmarking data are obtained from World Development Indicators, most recent publication. The figure is constructed by dividing workers' remittances (receipts), series

BX.TRF.PWKR.CD, by exports of goods and services, 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 about 74 USAID countries.

CAS Code: 24P8

#### **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: http://www.intracen.org/tradstat/sitc3-3d/indexre.htm

*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: Data are 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. This approach has a number of shortcomings: ITC does not cover trade with nonreporting countries; transshipments may hide the actual source of supply; and transport cost and insurance are included in measuring exports but excluded in measuring imports.

CAS Code: 24P9

#### Trade Logistics Performance Index—Customs

Source: Latest country score obtained from World Bank Logistics Performance Index country scorecard: http://info.worldbank.org/etools/tradesurvey/modela.asp

Definition: The Logistics Performance Index is a simple average of a country's score on seven dimensions: the efficiency and effectiveness of clearance process by customs and other border control agencies; the quality of transport and IT infrastructure for logistics; the ease and affordability of arranging shipments; competence in the local logistics industry (e.g., transport operators, customs brokers); ability to track and trace shipments; domestic logistics costs (e.g., local transportation, terminal handling, warehousing); and the timeliness of shipments in reaching destination. This indicator captures the first dimension.

Coverage: Data available for about 150 countries.

CAS Code: 24S1

#### Trade in Goods and Services, as a 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: 24S2

#### Real Effective Exchange Rate (REER)

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

Definition: The REER is an index number with base 1995=100 that 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 REER 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: 24S3

#### **Country Credit Ranking**

Source: Institutional Investor Magazine

http://www.iimagazinerankings.com/countrycredit/GlobalRanking.asp

Definition: Institutional Investor Magazine measures individual countries' creditworthiness by asking senior economists and risk managers for their predictions on credit risk, exchange rate risk, valuation correction, and risk impact.

Coverage: Data are available for about 80 USAID countries.

CAS Code: 24S4

#### **ECONOMIC INFRASTRUCTURE**

#### **Logistics Performance Index, Infrastructure**

Source: Latest country score obtained from World Bank Logistics Performance Index country scorecard: http://info.worldbank.org/etools/tradesurvey/modela.asp

Definition: The Logistics Performance Index is a simple average of a country's score on seven factors: the efficiency and effectiveness of the clearance process by customs and other border control agencies; the quality of transport and IT infrastructure for logistics; the ease and affordability of arranging shipments; competence in the local logistics industry (e.g., transport operators, customs brokers); the ability to track and trace shipments; domestic logistics costs (e.g., local transportation, terminal handling, warehousing); and the timeliness of shipments in reaching destination. This indicator captures the second dimension.

Coverage: Data available for about 150 countries.

CAS Code: 25P1

#### **Number of Electrical Outages (Days)**

Source: World Bank, Enterprise Surveys, Infrastructure. http://www.enterprisesurveys.org/

*Definition:* This indicator shows the average number of days per year the surveyed establishment experienced power outages or surges in the public grid.

Coverage: Data available for a small number of countries.

CAS Code: 25P2

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#### Telephone Density, Fixed Line and Mobile

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 1,000 people. Fixed lines represent telephone main lines 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

#### Internet Users per 1,000 People

Source: World Development Indicators, most recent publication series IT.NET.USER.P3, 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 1,000 people.

Coverage: Data are available for about 88 USAID countries.

CAS Code: 25S1

#### Roads Paved, Percent of Total Roads

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

#### Percentage of Households with Access to Electricity

Source: Obtained from individual country sources.

Definition: Access to electricity is defined as the percentage of households that have electrical power.

Coverage: Data are available for about 25 USAID countries.

CAS Code: 25S3

#### **Overall Infrastructure Quality**

Source: Global Competitiveness Report 2006–2007, World Economic Forum. The indicator can be found in the Data Tables, Section V. General Infrastructure; 5.01.

Definition: The index measures executives' perceptions of general infrastructure in their respective countries. 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: 25S4

### Quality of Infrastructure—Air, Ports, Railroads, Electricity, and Roads

Source: Global Competitiveness Report 2006-2007, World Economic Forum. The indicators can be found in the Data Tables, Section V. General Infrastructure, 5.02, 5.03, 5.04, and 5.05 for railroad, port; air transport, and electricity, respectively.

Definition: The index measures executives' perceptions of general infrastructure in their respective countries. 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 executives' perceptions.

CAS Code: 25S5 a-e

#### **HEALTH**

#### Child Mortality Rate (per 1,000 Live Births)

Source: World Development Indicators, most recent publication series SH.DYN.MORT.

*Definition:* The number of children dying before reaching the age of five, per 1,000 live births in a given year, if subject to current age-specific mortality rates.

Coverage: Data are available for about 87 USAID countries.

CAS Code: 31P1

#### **Maternal Mortality Rate**

Source: Millennium Development Goals Indicators, <a href="http://millenniumindicators.un.org/unsd/mdg/Data.aspx">http://millenniumindicators.un.org/unsd/mdg/Data.aspx</a> 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 their sisters. The estimates pertain to 12 years or so before the survey, making them unsuitable for monitoring recent changes.

CAS Code: 31P2

#### Life Expectancy at Birth

Source: World Development Indicators, most recent publication, males SP.DYN.LE00.MA.IN, females SP.DYN.LE00.FE.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, by sex.

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 or survey. Extrapolations may not be reliable for monitoring changes in health status or for comparative analytical work.

CAS Code: 31P3

#### **HIV Prevalence**

Source: UNAIDS for most recent country data: http://data.unaids.org/pub/GlobalReport/2006/2006\_GR\_AN\_N2\_en.pdf. 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: 31S1

#### Access to Improved Sanitation

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

*Definition:* The indicator is the percentage of the 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.

Data quality: The coverage rates may include nonfunctioning systems.

CAS Code: 31S2

#### **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: 31S3

#### 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: 31S4

#### **Public Health Expenditure, Percent of GDP**

*Source:* Latest data for host country are obtained from the MCC: http://www.mcc.gov/selection/scorecards/2007/.

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 borrowing and grants (including donations from international agencies and NGOs), and social (or compulsory) health insurance funds.

Coverage: Data are available for about 88 USAID countries.

CAS Code: 31S5

#### **EDUCATION**

#### Net Primary Enrollment Rate, Total, Male and Female

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: 32P1a-c

#### **Net Secondary Enrollment Rate**

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: Data are available for half of USAID countries.

Data quality: A break the in series between 1997 and 1998 is due to a change from International Standard Classification of Education (ISCED) 76 to ISCED97. Recent data are provisional.

CAS Code: 32P2

#### **Gross Tertiary Enrollment Rate**

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: Data are available for nearly all USAID countries.

Data quality: A break in the series between 1997 and 1998 is due to a change from International Standard Classification of Education (ISCED) 76 to ISCED97. Recent data are provisional.

CAS Code: 32P3

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#### Persistence in School to Grade 5, Total, Male and Female

Source: World Development Indicators, most recent publication series SE.PRM.PRS5.FE.ZS (female); SE.PRM.PRS5.MA.ZS (male); and SE.PRM.PRS5.ZS (total).

*Definition:* The indicator is an estimate of the proportion of the population entering primary school who reach grade 5, for female, male, and total students.

Coverage: Data are available for about 48 USAID countries.

CAS Code: 32P4a-c

#### **Youth Literacy Rate**

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: 32P5

#### **Education Expenditure, Primary, Percent of GDP**

Source: Millennium Challenge Corporation:

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

*Definition:* The indicator is the total expenditure 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

#### 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 affect the quality of teaching and learning and pupil performance.

CAS Code: 32S2

#### **EMPLOYMENT AND WORKFORCE**

#### **Labor Force Participation Rate**

Source: Derived from World Development Indicators, but the precise computation differs according to whether a particular country study uses the 2004 WDI or 2005 and subsequent-year WDI.

To calculate the total labor force participation rate using WDI 2004: the numerator is Labor force, total (SL.TLF.TOTL.IN), and the denominator is Population ages 15–64, total (SP.POP.1564.TO). Using WDI 2005 and subsequent years, the denominator is calculated as the total population

(SP.POP.TOTL) times the percentage of the population in the age group 15–64 (SP.POP.1564.IN.ZS).

Definition: The percentage of the working age population that is in the labor force. The labor force is made up of people who meet the International Labour Organization definition of the economically active population: 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 in 2007, Employing workers category:

 $\frac{http://www.doingbusiness.org/ExploreTopics/EmployingWor}{kers/}$ 

*Definition:* The 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. The index ranges in value from 0 (minimum rigidity) to 100 (maximum rigidity).

Coverage: Data are available for nearly all USAID countries.

Data quality: Compiled by the World Bank from survey responses to in-country specialists.

CAS Code: 33P2

## Economically Active Children, Percent of Children ages 7–14

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.

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

Coverage: Data are available for 35 USAID countries.

CAS Code: 33P3

## Unemployment rate (15–24-year-old males, and total 15–24 year olds)

Source: World Development Indicators, most recent publication series SL.UEM.1524.MA.ZS.

Definitions: Youth unemployment refers to the share of the labor force ages 15–24 without work but available for and seeking employment.

Coverage: Data are available for 35 USAID countries.

Data quality: Definitions of labor force and unemployment differ by country; thus caution is needed when benchmarking.

CAS Code: 33P4a-b

#### Informal Sector Employment, percentage of Labor Force

Source: Normally obtained from national sources such as a labor market survey.

Definition: Informal sector employment is defined as economic activities that fall outside the formal economy regulated by economic and legal institutions. It is economic activity that is not taxed or included in the government's GNP.

Coverage: Data are available for about 20 USAID countries.

Data quality: The indicator is inherently difficult to calculate and the methodology may differ by country; thus caution is needed when benchmarking.

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 1995 U.S. dollars.

Coverage: Data are available for about 80 USAID countries.

CAS Code: 34P1

#### 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 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: 34S1

#### **Agricultural Export Growth**

Source: World Development Indicators, most recent publication series TX.VAL.AGRI.ZS.UNs, Agricultural raw materials exports (percentage 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.

Definition: 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: Data are available for about 85 USAID countries.

CAS Code: 34S2