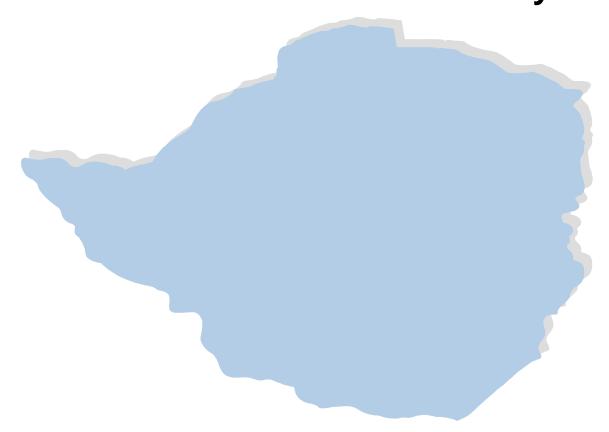


# **Zimbabwe**Economic Performance Assessment: A Benchmark Study



#### September 2007

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# Zimbabwe

Economic Performance Assessment: A Benchmark Study

#### **DISCLAIMER**

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

- A synthesis of key data indicators drawn from numerous sources, including the World Bank, the International Monetary Fund, the Millennium Challenge Corporation, the United Nations, other international data sets, and host-country documents and data sources;
- International benchmarking to assess country performance in comparison to similar countries, groups of countries, and predicted values based on international data;
- An easy-to-read analytic narrative that highlights areas in which a country's performance is particularly strong or weak, to assist in the identification of future programming priorities;
- A summary of 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 Associates continues to provide support to the EGAT Bureau by producing analytical reports evaluating economic growth performance in designated host countries. Through the same task order, Nathan is developing a template for countries emerging from crisis, assessing data issues in countries with large gaps in their data, conducting in-depth sector reviews based on the diagnostic analysis in the country reports, and providing other analytical support to the EGAT Bureau.

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

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## HIGHLIGHTS OF ZIMBABWE'S PERFORMANCE

Economic Growth	Zimbabwe's GDP is contracting rapidly (at an average annual rate of 5.8 percent in the past five years), as is its per capita income. The collapse has been driven by an attack on property rights and civil rights that led to a stifling policy regime and very low and inefficient levels of investment.
Poverty	The incidence and severity of poverty have increased drastically in the past ten years. A severe shortage of food and other necessities has left nearly half the population undernourished.
Economic Structure	Agriculture produces just 15 percent of GDP while employing 34 percent of the workforce, indicating very low labor productivity in this sector.
Demography and Environment	Extremely high HIV prevalence and mass emigration have resulted in falling population growth, while destructive policies have led to a decrease in urbanization. On the brighter side, the population is highly literate, and Zimbabwe scores well on environmental sustainability.
Gender	Gender parity in education is not matched by a similar equality in labor force participation. A disparity in life expectancy in favor of males reflects a gender differential in the impact of HIV/AIDS, combined with deteriorating health services for women.
Conflict Status	Zimbabwe's score for the 2007 Failed State Index signals a high risk of state collapse.  Contributing factors include population displacement, economic collapse, de-legitimization of the state, deteriorating public services, and sustained rights violations.
Fiscal and Monetary Policy	Zimbabwe's economy is in a state of collapse, characterized by hyperinflation, large (recorded) budget deficits, and uncontrolled growth of the money supply. Credible stabilization policies are urgently needed.
Business Environment	The institutional environment for doing business is poor and declining. Major problems include declines in the rule of law, in government effectiveness and regulatory quality, and an increase in corruption.
Financial Sector	Data showing a rise in monetization and credit to private sector disguise severe problems of inefficient credit subsidies, rapid printing of money, and strongly negative real interest rates.
External Sector	Exports are performing badly as the economy continues its tailspin. The official exchange rate is only a fraction of the parallel market rate. Foreign reserves were dangerously low at an estimated 0.8 months of exports in 2006 and foreign direct investment is drying up.
Economic Infrastructure	Infrastructure is deteriorating rapidly, constraining investment and eroding competitiveness.  Roads, air transport, the rail network and electricity, in particular, need attention. Urban water supplies are also inadequate.
Science and Technology	Zimbabwe's scientific and technological capacity is comparable to regional benchmarks, but many skilled workers have fled the country, and the adverse policy regime is blocking the integration of new technologies through foreign investment.
Health	Poor health conditions are affecting economic growth. Zimbabwe has one of the highest HIV prevalence rates (18.1%) and maternal mortality rates (1063/100,000), as well as an extremely low life expectancy (42.5 years).
Education	Primary and secondary enrollment, as well as youth literacy rates, are high; however, the quality of education is reportedly declining, and Zimbabwe is experiencing a massive brain drain.
Employment and Workforce	The unemployment rate has soared to 44.6 percent, according to official numbers. Unofficial estimates are far higher. Recent price controls are exacerbating an already dire situation.
Agriculture	Following the implementation of the infamous Fast Track Land Reform Scheme, agricultural productivity has plunged in a country once known as the breadbasket of southern Africa.

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

### ZIMBABWE: NOTABLE STRENGTHS AND WEAKNESSES— SELECTED INDICATORS

Selected Indicators	Strengths	Weaknesses
Growth Performance		
Real GDP growth		Х
Investment productivity—incremental capital-output ratio (ICOR)		X
Gross fixed capital formation, percentage of GDP		X
Poverty and Inequality		
Percentage of population living on less than \$2 PPP per day		х
Poverty headcount, below national poverty line		X
Population below minimum dietary consumption		X
PRSP status		x
Demography and Environment		
Adult literacy rate	X	
Environmental Performance Index	X	
Gender		
Girls' primary education completion rate	Х	
Female life expectancy at birth		x
Conflict Status		
Mounting demographic displacement		х
Chronic and sustained human flight		x
Severe economic decline		x
Criminalization and/or de-legitimization of the state		x
Deterioration of public services		X
Suspension or arbitrary application of human rights		X
Security apparatus operates as a "state within state"		X
Fiscal and Monetary Policy		
Government expenditure, percentage of GDP		x
Growth in the money supply		X
Inflation rate		X
Overall budget balance, including grants, percentage of GDP		X
Business Environment		
Ease of doing business ranking		х
Rule of Law Index		х
Control of Corruption Index		х
Regulatory Quality Index		Х
Government Effectiveness Index		Х

Selected Indicators	Strengths	Weaknesses		
Financial Sector				
Interest rate spread		Х		
Stock market capitalization rate, percentage of GDP	х			
Real interest rate		X		
External Sector				
Export growth goods and services		X		
Gross international reserves		Х		
Present value of debt, percentage of GNI		Х		
Inward FDI Potential Index		x		
Trade Policy Index		Х		
Ease of trading across borders		х		
Economic Infrastructure				
Roads, paved as percentage of total		Х		
Quality of infrastructure—air transport		Х		
Internet users per 1,000 people	х			
Science and Technology				
Scientific and technology journal articles, per million people	х			
FDI technology transfer index		X		
Health				
Life expectancy at birth		Х		
Maternal mortality rate		Х		
HIV prevalence		Х		
Education				
Net primary enrollment rate (%)	х			
Youth literacy rate (%)	X			
Net secondary school enrollment rate (%)	х			
Employment and Workforce				
Unemployment rate		х		
Firing costs, weeks of wages		Х		
Agriculture				
Cereal yield		Х		
Growth in agriculture value added		х		
Agricultural Policy Costs index		х		

Note: The chart identifies selective indicators for which Zimbabwe's performance is particularly strong or weak relative to benchmark standards, as explained in the Appendix. Details are discussed in the text. The separate Data Supplement 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/casreports">http://www.nathaninc.com/casreports</a>.

## 1. Introduction

This report is one of a series of economic performance assessments prepared for the EGAT Bureau to provide USAID missions and regional bureaus with a concise evaluation of key indicators covering a broad range of issues relating to economic growth performance in designated host countries. Because of Zimbabwe's unique political situation and broad economic collapse, USAID has requested that this report serve as a basis for planning future program priorities to help restore economic growth, contingent on a change in political conditions. The report draws on a variety of international data sources<sup>1</sup> and uses international benchmarking against reference group averages, comparator countries, and statistical norms to identify major constraints, trends, and opportunities for restoring growth and reducing poverty. This report reflects data available as of July 2007. At the request of the USAID mission in Harare, the study uses two neighboring countries, South Africa and Zambia, as comparators. Zambia provides a baseline for direct comparison, whereas South Africa represents the regional standard that Zimbabwe should aspire to achieve. In addition, Zimbabwe's performance is also compared to median values for other low-income countries in sub-Saharan Africa (LI-SSA).

#### **METHODOLOGY**

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

<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.

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

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

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

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

In countries that are suffering from political turmoil, such as Zimbabwe, risks associated with social unrest and security conditions are highly damaging to economic growth, and the economic distress in turn exacerbates security problems. By the same token, an end to the turmoil can deliver strong economic dividends, and successful economic recovery can help restore political stability. Accordingly, this report views economic performance in Zimbabwe through a conflict lens, and includes a separate section on conflict risk.

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

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

<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.

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Table 1-1. Topic Coverage

Overview of the	Conflict Status	Private Sector Enabling	Pro-poor Growth
Economy		Environment	Environment
<ul> <li>Growth performance</li> <li>Poverty and inequality</li> <li>Economic structure</li> <li>Demographic and environmental conditions</li> <li>Gender</li> </ul>	<ul> <li>Social indicators</li> <li>Economic indicators</li> <li>Political and military indicators</li> <li>Indicators of capacities of the state</li> </ul>	<ul> <li>Fiscal and monetary policy</li> <li>Business environment</li> <li>Financial sector</li> <li>External sector</li> <li>Economic infrastructure</li> <li>Science and technology</li> </ul>	<ul><li>Health</li><li>Education</li><li>Employment and workforce</li><li>Agriculture</li></ul>

#### **DATA QUALITY**

The breadth and quality of economic data collected for Zimbabwe, once very good, has seriously deteriorated. This is evident in the World Bank's Statistical Capacity Indicator, which declined by 15 points between 2005 and 2006, to a score of 53 percent. The Bank cites particular problems with Zimbabwe's failure to update its national accounts data and collect timely data on agriculture and poverty. Moreover, the inflation rate has reached such a high level, and the official exchange rate is so far from equilibrium, that even a basic indicator such as the dollar value of per capita income exhibits extreme volatility resulting from measurement problems. For the same reason, indicators defined as ratios to GDP are highly problematic in Zimbabwe. In short, serious data problems arise repeatedly in the analysis below.

# 2. Overview of the Economy

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

#### **GROWTH PERFORMANCE**

Over the past ten years Zimbabwe has experienced a pervasive economic collapse. The crisis can largely be attributed to economic mismanagement, poor governance, and loss of support from the international community, all compounded by periods of drought. The collapse was triggered by the government's decision in 1997 to ignore fiscal constraints in making large payments to veterans of the Independence struggle. Then, in the wake of political setbacks in 1998, the government announced the seizure of white-owned farms, which exacerbated the instability. Another pivotal event was the controversial *Fast Track Land Reform* scheme for involuntary land redistribution in 2000, which led to a precipitous decline in productivity and output in agriculture, formerly the mainstay of the economy. The economic contraction has been accentuated by linkage effects operating in reverse, with each declining industry causing hardship up and down the value chain.

Using the purchasing power parity (PPP) method of calculating GDP, Zimbabwe's per capita income in 2006 was \$2,437—a drop of more than 23 percent since 1998.<sup>4</sup> Although GDP per capita has been falling for ten years, it remains well above the median for low-income sub-Saharan African countries (LI-SSA) (\$1,172) and the income level in Zambia (\$1,083), but far below the level in South Africa (\$12,796).<sup>5</sup> Over the past five years, to 2006, GDP in constant prices contracted at an average annual rate of 5.8 percent (see Figure 2-1) This performance is

<sup>&</sup>lt;sup>4</sup> Real GDP per capita in constant US dollars is often used for comparisons over time. Using 2000 prices and exchange rates, GDP declined from US\$651 in 2002 to US\$502 in 2006, a drop of 22.9 percent in just four years. Both GDP in constant US dollars and in PPP are important but slightly different indicators of economic growth. Our standard CAS template uses GDP per capita in PPP dollars as it is easier to make comparisons across countries using the PPP method. Due to exchange rate and estimation problems, GDP in current US dollars which is one of our standard indicators, does not accurately portray the economic situation in Zimbabwe and has therefore been dropped from the analysis.

<sup>&</sup>lt;sup>5</sup> Per capita income figures in PPP terms and current US\$ terms for Zimbabwe, Zambia, and South Africa are recent IMF estimates.

among the world's worst. By comparison, Zambia has grown at an average rate of 6.0 percent, and South Africa by 5.0 percent.

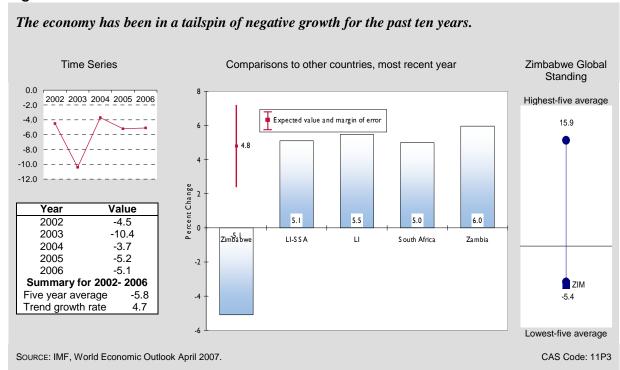


Figure 2-1. Real GDP Growth

Underpinning Zimbabwe's poor growth performance is a low rate of investment. Official estimates show that gross domestic investment averaged 13.7 percent of GDP in the last five years, and was 16.1 percent in 2006. These figures have to be treated with great caution because of distortions caused by high inflation, a misaligned exchange rate, and concerns that the government has diverted budget allocations for capital expenditure into consumption spending. Even taken at face value, however, the investment rate is below the LI-SSA average of 18.8 percent of GDP, and falls far short of investment rates in Zambia (26.5 percent) and South Africa (17.1 percent).<sup>6</sup> Furthermore, after accounting for government capital expenditure (see Fiscal and Monetary Policy), the estimated level of private investment has averaged just 3.2 percent of GDP over the past five years, which is not even enough to cover depreciation. Hence, the stock of capital in the private sector has been on a sustained decline.

The level of investment has not only been low, but also highly inefficient. This can be seen in the incremental capital-output ratio (ICOR), which is the amount of capital investment per unit of added output. For the period 2001–2005, the ICOR for Zimbabwe was negative, indicating that output has fallen steadily despite having 14 percent of GDP reportedly allocated to capital

<sup>&</sup>lt;sup>6</sup> Gross Fixed Investment as a percentage of GDP for South Africa and Zambia are IMF estimates.

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investment. In contrast, the ICOR averaged 4.1 over the five years to 1998; at that time, Zimbabwe had a payoff of one dollar per year in extra output for every \$4.1 of capital investment, which is a reasonably good level of investment productivity. By comparison, the benchmark for LI-SSA over the five years to 2004 was an ICOR of 4.6, showing that \$4.6 of investment has been required in the region per unit of added output. The corresponding ICOR value for Zambia was 5.1 and for South Africa 3.8 (Figure 2-2).

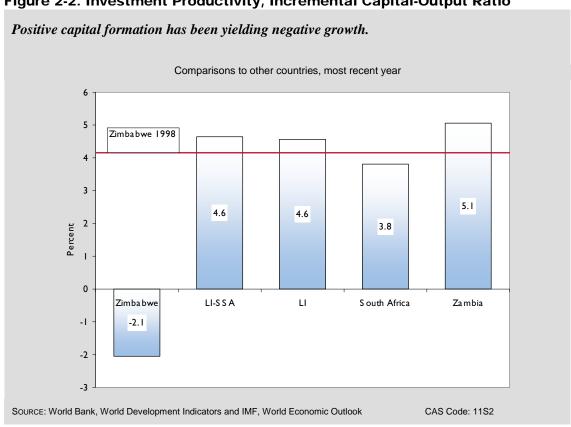


Figure 2-2. Investment Productivity, Incremental Capital-Output Ratio

Unfortunately, there is no way to obtain a useful estimate of labor productivity growth because the labor force data available are totally at odds with widespread and credible reports of massive emigration to neighboring countries due to the economic crisis.

Notwithstanding the data problems, these indicators reveal a startling decline in output and income, driven by very weak and inefficient investment. Reversing these trends will require a transformation of the adverse climate for private sector development involving larger issues of political and economic reform, as discussed below. Meanwhile, donors have to be prepared to help Zimbabwe rehabilitate its economy and rebuild institutions when the political landscape changes. Careful sequencing of donor support will be essential to ensure that resources are used effectively. The immediate priorities will be to restore law and order and bring rampant inflation under control. But early attention is also needed to strengthen the business environment and rehabilitate infrastructure in order to stimulate investment, enhance efficiency, and create jobs. As

these changes take place, Zimbabwe should experience a reversal of capital and labor flight, and rebound quickly from the current economic quagmire.

#### POVERTY AND INEQUALITY

In an economy characterized by declining per capita income, hyperinflation, high unemployment, and shortages of food, fuel, and foreign currency, it is no surprise that poverty is becoming more widespread and more severe. However, the poor quality of data and the rapidity of the economic collapse make it difficult to gauge current poverty and inequality conditions accurately.

The most recent household survey data come from a 2003 Poverty Assessment, which estimated that 72 percent of the population fell below the poverty line defined in terms of total consumption. This is 17 percentage points higher than the 1995 figure of 55 percent.<sup>7</sup> The incidence rate in Zimbabwe in 2003 was worse than the LI-SSA median of 42.1 percent, and even worse than the extremely high rate of 68.0 percent in Zambia (in 2004).<sup>8</sup>

The economic crisis has brought with it severe shortages in food and other necessities. Between 2002 and 2004, an average of 47.0 percent of the population could not fulfill their minimum dietary energy consumption needs. This deficiency rate is equal to that in Zambia, but 14 percentage points higher than the LI-SSA median (33.0 percent). The current rate is probably even higher, given that the cereal harvest in Zimbabwe this year has been poor. This is due to a combination of adverse weather conditions, deteriorating irrigation systems, the loss of service sector support in rural areas following the forced closure of the large-scale commercial farms, the lack of crucial agricultural inputs, and the imposition of the Grain Marketing Board as the solebuyer monopoly for grains at unattractive prices. According to the World Food Program (WFP), more than 4 million Zimbabweans face food shortages over the next nine months. 9 The crisis was worsened in June 2007 by price controls that prevented suppliers from recovering production costs and forced food processors to curtail production. This has reportedly caused many businesses to close, accentuating food shortages and affecting almost the entire population by the first weeks of August 2007. Currently, more than 70 percent of donor commitments to Zimbabwe involve providing food aid. 10 Humanitarian relief programs, though critical for immediate relief, are not sustainable solutions to the unfolding crisis.

<sup>&</sup>lt;sup>7</sup> The study team did not have access to the 2003 Poverty Assessment itself. Figures cited in the text are from the UNDP draft country program for Zimbabwe (2007–2009). The UNDP report does not provide details on the definition of the total consumption poverty line. See: <a href="http://www.undp.org.zw/images/stories/Docs/Zimbabwe%20Country%20Programme%20doc.pdf">http://www.undp.org.zw/images/stories/Docs/Zimbabwe%20Country%20Programme%20doc.pdf</a>

<sup>&</sup>lt;sup>8</sup> In 2000 an estimated 50 percent of the population in South Africa lived below the national poverty line. That poverty line, however, is much higher than in Zimbabwe and Zambia; hence, the percentage of South Africans living below the national poverty line is not a useful benchmark for Zimbabwe.

<sup>&</sup>lt;sup>9</sup> World Food Program, at <a href="http://www.wfp.org/country\_brief/indexcountry.asp?country=716">http://www.wfp.org/country\_brief/indexcountry.asp?country=716</a> (accessed July 30, 2007).

<sup>&</sup>lt;sup>10</sup> http://ocha.unog.ch/fts/reports/daily/ocha R10 E15182 07073007.pdf (accessed July 30, 2007).

The UNDP's Human Poverty Index (HPI) measures deprivation in terms of life expectancy, literacy, access to safe water, and child nutrition, For 2006, Zimbabwe received a score of 46.0 (see Figure 2-3), an improvement over its 2003 score of 52.0. In 1999, however, Zimbabwe's score was 29.2 and it ranked 53rd in the HPI. The 2006 HPI score also lies outside the upper bound of the expected value<sup>11</sup> for a country with Zimbabwe's characteristics, and falls well short of South Africa's score of 30.9. It is on par with Zambia's score of 45.6, even though per capita incomes in Zambia are much lower.

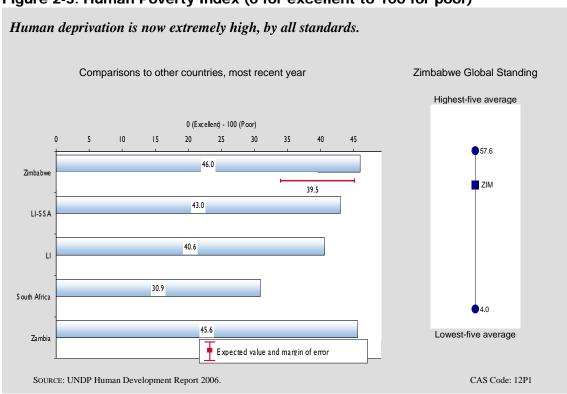


Figure 2-3. Human Poverty Index (0 for excellent to 100 for poor)

No recent data are available on the distribution of income as distinct from poverty rates. In 1995, just 4.6 percent of total incomes accrued to the poorest 20 percent of the population. This was below the expected value of 5.6 percent for Zimbabwe, though better than South Africa's 3.5 percent and Zambia's 3.6 percent. Given anecdotal reports of extreme increases in severe poverty among the countries' poorest, it is likely that inequality has increased considerably since that time.

In summary, rising poverty is a critical challenge in Zimbabwe. Retrograde economic and social policies, hyperinflation, declining incomes, and political distress have aggravated the situation. While humanitarian relief programs can alleviate some symptoms of destitution, a sustained

<sup>&</sup>lt;sup>11</sup> The expected value of an indicator for Zimbabwe throughout this report is based on our regression benchmarking methodology. Please see the CAS Methodology section at the end of the report for a detailed explanation of our benchmarking methodology.

period of rapid growth is needed to achieve a lasting reduction in poverty. This outcome hinges on an effective resolution of the political and economic crisis.

#### **ECONOMIC STRUCTURE**

In looking at the broad composition of value added in Zimbabwe, one must bear in mind that real GDP has declined by an estimated 52 percent since the Land Reform Program was launched. Thus, some sectors have increased as a percentage of the shrinking economy without actually growing. The most severely affected sectors, however, have fallen in both absolute and relative terms. In particular, the reported share of GDP originating in agriculture fell from 20 percent of GDP in 2001 to 17 percent by 2003 according to official figures, with recent estimates suggesting a further fall to 15 percent by 2006. 12 By comparison, agriculture accounts for 20.9 percent of Zambia's GDP and just 3.1 percent of South Africa's, reflecting a much greater degree of economic transformation.

Manufacturing has also declined more sharply than the economy as a whole, falling from about 19 percent of GDP in 2001 to 16 percent in 2003 and an estimated 15 percent by 2006. Mining accounts for a fairly small proportion of GDP because its value-added processes fall under manufacturing. But mining's direct share of GDP rose from 3.8 percent in 2001 to 4.9 percent in 2003. Investments in platinum mining have boosted the sector's contribution to GDP to an estimated 6.4 percent by 2006.

The contribution of services to GDP fell marginally from 58.9 percent in 2001 to an estimated 57.2 percent in 2006. The 2006 figure is significantly higher than the expected value for a country with characteristics similar to Zimbabwe's (46.3 percent), far above Zambia's 42.0 percent, yet well below South Africa's 66.1. However, the structure of the service sector itself has changed markedly over this period. Most notably, the value added in social services dropped from 10.8 percent of GDP in 2001 to an estimated 7.0 percent in 2006 while contributions from hotel and restaurants and financial services increased from 17.6 and 8.6 percent in 2001 to an estimated 23.0 and 12.5 percent in 2006, respectively.

In 2005/06, an estimated 32.4 percent of the labor force worked in agriculture, with 65.8 percent working in industry and services combined. <sup>13</sup> These numbers reveal an economic structure that is more developed than average for LI-SSA, with a median labor force share in agriculture of 78.0 percent; for Zambia, the corresponding figure is fully 85.0 percent of the labor force. Here, too, South Africa is far more developed, with only 10.3 percent of the workforce in agriculture. Comparing the output and workforce structures in Zimbabwe, one can see that labor productivity is extremely poor in the agricultural sector because approximately a third of the labor force is producing just 15 percent of GDP (see Figure 2-4).

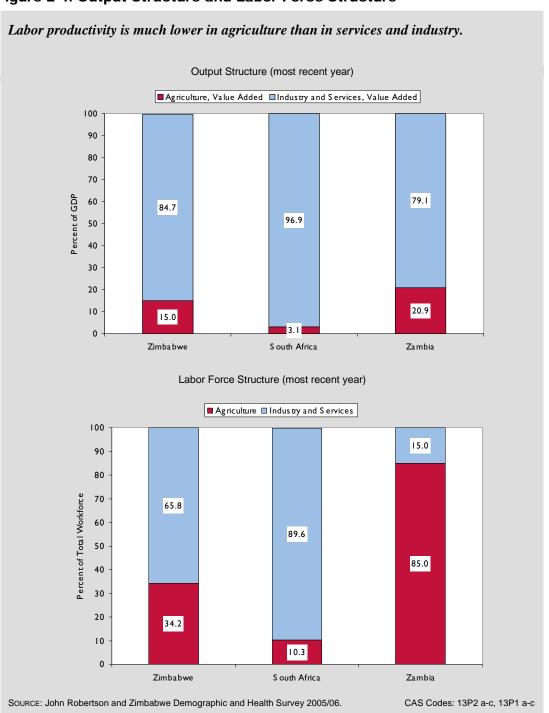
<sup>&</sup>lt;sup>12</sup> We thank John Robertson, a leading independent Zimbabwean economist, for supplying up-to-date estimates of the economic structure.

<sup>13 2005-06</sup> Zimbabwe Demographic and Health Survey, pp. 37-38.

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If donor programs resume in Zimbabwe, they will need to reverse regressive structural trends by promoting policies that stimulate agricultural productivity, economic diversification, and a general move away from agriculture as major source of low-wage employment. The poor quality of official data on output and employment over the past few years highlights the need for donor assistance to update and improve the collection and dissemination of basic economic statistics.

Figure 2-4. Output Structure and Labor Force Structure



#### **DEMOGRAPHY AND ENVIRONMENT**

According to statistical reports, Zimbabwe's population of 13 million has been growing very slowly, at an average rate of 0.6 percent over the five years to 2005. Among other things, the low growth trend reflects high mortality rates from HIV/AIDS (see Health), as well as an exodus to neighboring South Africa and Botswana and other countries to flee the oppressive political regime and economic collapse. The HIV/AIDS factor is also responsible for a dramatic increase in the number of orphans since 1998. UNICEF estimates that approximately 1.3 million Zimbabwean children have lost a parent, placing an additional financial burden on surviving relatives. 14

Another clear result of the retrograde policies in place in Zimbabwe is the reversal of the trend toward urbanization. The urban population as a percentage of the total population increased from 33.0 percent in 1998 to 34.5 percent in 2002, then fell to 31.6 percent in 2006/06, according to the Zimbabwe Demographic and Health Survey 2005-06. This is well below the expected value of 42.7 percent for a country with Zimbabwe's characteristics and South Africa's 57.4 percent, and significantly lower than Zambia's 36.2 percent (Figure 2-5).

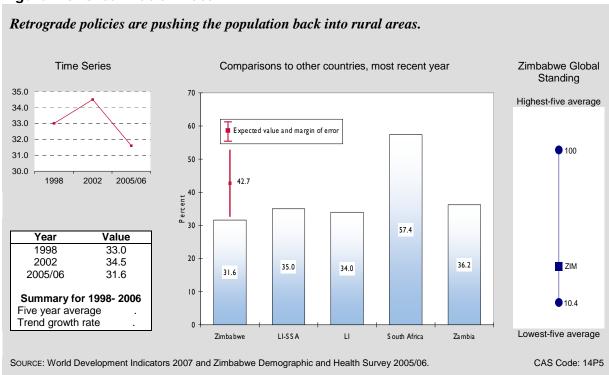


Figure 2-5. Urbanization Rate

<sup>&</sup>lt;sup>14</sup> See <a href="http://www.unicef.org/infobycountry/zimbabwe\_1403.html">http://www.unicef.org/infobycountry/zimbabwe\_1403.html</a>. Counting both orphans and vulnerable children, USAID/Harare estimates the figure at around 3 million, or nearly one-fourth of the entire population. See <a href="http://www.usaid.gov/stories/zimbabwe/fp\_zimbabwe\_aids.html">http://www.usaid.gov/stories/zimbabwe/fp\_zimbabwe</a> aids.html

OVERVIEW OF THE ECONOMY 13

As a legacy of past success in education, the population is highly literate, at least by regional standards. The estimated adult literacy rate of 89.4 percent in 2004 exceeds the upper bound of the expected value for Zimbabwe (61.4 percent) by more than 18 percentage points. It is also 36 percentage points higher than the median for LI-SSA (53.2 percent), far above the corresponding figure for Zambia (68.0 percent) and, surprisingly, even better than in South Africa (82.4 percent). This strong base of human capital can facilitate a rapid transition back to a healthy growth path once the climate for private sector development improves. The human resource base ought to be improving further, especially given the relatively low youth dependency rate of 0.71 children per adult of working age (2005 estimate). In reality, prospects for the future are much more grim because of a marked decline in the quality of the education system due in part to the emigration of qualified teachers.

Despite the economic crisis, Zimbabwe has been rated reasonably well on many aspects of environmental sustainability. The country scored of 63.0 out of a possible 100 in 2006 on the Environmental Performance Index, which incorporates a variety of indicators of environmental stress and ecosystem vitality. That score surpasses the expected value of 52.5 for Zimbabwe, as well as Zambia's score of 54.4, and narrowly beats South Africa's score of 62.0. Nonetheless, EPI subcomponent scores show serious deficiencies in dependence on nonrenewable energy and poor performance in wildlife protection. Zimbabwe was once a model of wildlife protection, the country's wildlife heritage has been decimated in recent years by poaching and mismanagement of conservation areas.

#### **GENDER**

Gender equity enables faster economic growth by ensuring that all citizens can develop and apply their full productive capacities. Comparisons of life expectancy at birth are often used as a proxy for discerning gender differentials in access to health care and healthy living standards. In Zimbabwe, the average male and female life expectancies were 43.0 and 42.0 years, respectively, in 2005. These low expectancies reflect a tragic combination of widespread HIV/AIDS, poor nutrition, and severe poverty. That men are living longer than women is attributable to Zimbabwean women's very high maternal mortality rate and the more severe effect of HIV/AIDS on women in sub-Saharan Africa. In nearly every other country, women outlive men—by around 3 years in low-income countries, and by more than 5 years in countries with an advanced human development.

Zimbabwe's performance on gender equity in education is better than most benchmarks. For instance, the 78.6 percent primary education completion rate for girls in 2003 (latest year of data) is well above the upper bound of the 70.7 percent expected value for a country with Zimbabwe's characteristics. It is also far better than the LI-SSA median of 41.5 percent, as well as Zambia's 65.7 percent. Compared to South Africa's 98.7 percent, however, girls' education in Zimbabwe leaves a great deal to be desired. It must be noted, though, that Zimbabwe's 2003 figure reflects a

<sup>&</sup>lt;sup>15</sup> According to the World Health Organization statistics, life expectancy for males and females in 2004 were 37.0 and 34.0, respectively. The abrupt jump in life expectancies in 2005 is presumably due to a change in estimation methodology.

steep decline in performance—down nearly 8 percentage points in just five years. A similar decline is also evident in the gross enrollment rates at all levels of schooling for both male and female students. In 2004, this figure was 54.0 percent for males and 51.0 percent of females, representing a decline of 7 percentage points for females and 8 percentage points for males in just four years (to 2004). These extraordinary reversals are symptomatic of the economic crisis.

The relatively small gender differential in schooling is accompanied by a larger gap in labor force participation. Thus, an estimated 85.0 percent of males were either working or seeking jobs in 2005, but only 65.0 percent of the women (Figure 2-6). This gender inequality in the labor market weakens the country's productive potential. Even so, Zimbabwe's gender gap in labor force participation is a below the LI-SSA average of 23 percentage points, South Africa's huge gap of 32 percentage points, and Zambia's 23 percentage points.

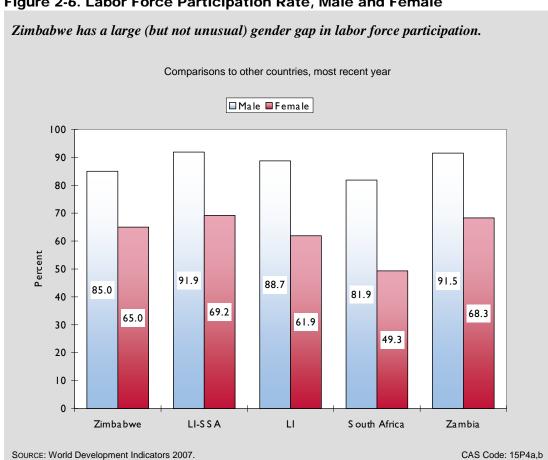


Figure 2-6. Labor Force Participation Rate, Male and Female

## 3. Conflict Risk

Conflicts can dampen 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 a debt burden that will encumber future budgets. <sup>16</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>17</sup> The impact on per capita income is especially pronounced in regions affected directly by instability. <sup>18</sup>

In light of the potential adverse effects of conflict on economic growth, it is important to examine the risks in Zimbabwe, given the current political and economic climate and the degree of social unrest. The Conflict Assessment System Tool (CAST) developed by the Fund for Peace (FfP) assesses states' vulnerability to violent internal conflict and societal dysfunction by rating 12 factors in three categories: social, economic, and political/military. Each indicator is scored on a scale of 1 to 10, with 10 as the worst score.

To rate each state, FfP uses a computerized content analysis technique to process thousands of news articles and documents from approximately 12,000 sources. FfP researchers combine the results of this analysis with statistical data. A score of 90 or more indicates "critical danger." A maximum possible score of 120 indicates "state collapse."

#### THE CAST SCORES

In 2007, the CAST score for Zimbabwe was 111.8, up from 108.9 in 2006. This signals a very high risk of state collapse. For comparison, the score for South Africa was 57.4, and for Zambia 80.6. Table 3-1 shows the 2007 score for Zimbabwe for each indicator. All but three are in the critical range of 9.0 or above, and even the exceptions are close to this threshold. The acute risk of conflict in Zimbabwe is highly damaging to prospects for economic recovery.

<sup>&</sup>lt;sup>16</sup> Daniel Mejia, Conflict and Economic Growth: A Survey of the Theoretical Links, Webpondo, September 2004. <a href="http://www.webpondo.org/filesoctdic2004/conflict\_growth.pdf">http://www.webpondo.org/filesoctdic2004/conflict\_growth.pdf</a>, accessed April 13, 2007.

<sup>&</sup>lt;sup>17</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>&</sup>lt;sup>18</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.

Table 3-1. Component Ratings of Zimbabwe 2007 CAST Scores

Category	CAST Score		
SOCIAL			
Mounting demographic pressures	9.7		
Massive movement of refugees or internally displaced persons	8.7		
Legacy of vengeance- seeking group grievance or group paranoia	8.8		
Chronic and sustained human flight	9.1		
ECONOMIC			
Uneven economic development along group lines	9.5		
Sharp and/or severe economic decline	10.0		
POLITICAL AND MILITARY			
Criminalization and/or de-legitimization of the state	9.5		
Progressive deterioration of public services	9.6		
Suspension or arbitrary application of human rights	9.7		
Security apparatus operates as a "state within a state"	9.5		
Rise of factionalized elites	9.0		
Intervention of other states or external political actors	8.7		

The score of 9.7 for demographic pressure reflects a variety of factors. First, various reports estimate that the government's April 2005 Operation *Murambatsvina* (Restore Order), which destroyed thousands of homes and businesses in poor urban slums, left.500,000 to 700,000 people homeless. <sup>19</sup> Second, as highlighted in the Health section of this report, Zimbabwe faces a continuing public health crisis with approximately 350,000 HIV/AIDS victims in immediate need of antiretroviral drugs and 600,000 more lacking adequate care and support. <sup>20</sup> Potable water and food are in short supply, and outbreaks of waterborne illnesses are common.

The score of 9.1 for human flight reflects that thousands of Zimbabweans, including many highly educated workers, attempt to illegally enter South Africa and other neighboring countries each week. In the first five months of 2007, South Africa deported 57,600 illegal immigrants back to Zimbabwe.<sup>21</sup> Economic development received a score of 9.5. An estimated 72 percent of the

<sup>&</sup>lt;sup>19</sup> The lower figure was reported by the BBC news (http://news.bbc.co.uk/2/hi/Africa/4416820.stm, accessed July 16, 2007); the higher figure number was provided by USAID/Harare.

<sup>&</sup>lt;sup>20</sup> Human Rights Watch, Essential Background; 2006 Overview of human rights issues in Zimbabwe (http://hrw.org/englishwr2k7/docs/2007/01/11/zimbab14720.htm).

<sup>&</sup>lt;sup>21</sup> Orla Guerin, Zimbabwe's starving border jumpers, BBC News, May 10 2007 (http://news.bbc.co.uk/2/hi/africa/6642619.stm).

CONFLICT RISK 17

population lives in poverty, unemployment is extremely high, and income inequality is very high (see the sections on Poverty and the Labor Force).<sup>22</sup>

On the economic decline indicator, Zimbabwe received the worst possible score of 10. As mentioned, the economy has been in a severe downward spiral for the past ten years since the government started to violate standard maxims of economic management and to undermine property rights. A series of political decisions crippled commercial agriculture, eliminating tens of thousands of jobs, scaring away investment, and stimulating capital flight. In 2006, the official inflation rate topped 1,000 percent as the government resorted to printing money as a primary source of funding to sustain operations, and to purchase the foreign currency needed to pay international debts. In July 2007, official year-on-year inflation topped 7,500 percent, and unofficial estimates are much higher (see Fiscal and Monetary Policy). The imposition of price controls in June 2007 led to more acute shortages and the arrest of more than 1,000 business owners for violating the price controls.<sup>23</sup>

The score of 9.5 on legitimacy of the state reflects the judgment of independent observers that the parliamentary election of 2000, the presidential election in 2002, and the parliamentary election of 2005 were neither free nor fair. Security forces have abused and intimidated the MDC, the main opposition party, and the President has sanctioned excessive force against opposition demonstrators, including a violent crackdown on a peaceful prayer meeting in Harare in March 2007. The government has also curtailed freedom of the press, shutting down several newspapers and jamming foreign radio broadcasts, while forcibly evicting citizens and demolishing homes.<sup>24</sup>

Zimbabwe scored 9.6 on public services. A large portion of the populace now faces hunger on a daily basis and lacks access to health care. In the category of human rights, Zimbabwe received an extremely poor score of 9.7. Arbitrary arrests, detentions, and brutal beating by police and security forces have been common. Peaceful protests are often violently disrupted by police, and members of the opposition and the press are regularly intimidated and abused.<sup>25</sup>

The security apparatus received a score of 9.5 because of the high level of military involvement with the ruling party and military influence in policy formulation. In addition, government-backed youth militias and bands of "veterans" of the liberation war operate with impunity. Economic collapse has eroded salaries in the armed forces, allegedly leading them into criminality, including cross-border armed robbery.<sup>26</sup>

<sup>&</sup>lt;sup>22</sup> CIA Factbook (https://www.cia.gov/library/publications/the-world-factbook/geos/zi.html).

<sup>&</sup>lt;sup>23</sup> BBC News, Mass Zimbabwe arrests over prices, July 9, 2007 (http://news.bbc.co.uk/2/hi/africa/6688755.stm).

<sup>&</sup>lt;sup>24</sup> U.S. Department of State, Country Reports on Human Rights Practices–2006; Zimbabwe, March 6, 2007 (http://www.state.gov/g/drl/rls/hrrpt/2006/78765.htm).

<sup>&</sup>lt;sup>25</sup> Human Rights Watch, Essential Background; 2006 Overview of human rights issues in Zimbabwe (http://hrw.org/englishwr2k7/docs/2007/01/11/zimbab14720.htm).

<sup>&</sup>lt;sup>26</sup> International Crisis Group, Zimbabwe's Continuing Self-Destruction, Africa Briefing N°38, June 6, 2006 (http://www.crisisgroup.org/home/index.cfm?id=4162&l=1).

#### INDICATORS OF STATE CAPACITIES

A country's ability to cope with the pressures described above depends on the strength of its institutions. The FfP also rates the legitimacy, representativeness, and professional competence of a state's executive and legislative leadership, police, military, civil service, and judicial service by quality quintile. All of Zimbabwe's ratings are in the bottom quintile.

These ratings reflect the basic observation that power is concentrated squarely in the hands of President Mugabe, who has ruled since Independence in 1980 and was reelected in highly flawed elections in 2005. He is increasingly using state force and a variety of policy instruments to serve his own interests and those of his collaborators at the expense of the rest of the country. Corruption in government—military, police, and civil service—is widespread and increasing largely due to the collapse of government salaries in the face of economic woes, poor governance by state-institution leaders, and an absence of checks and balances. Many state organizations lack the resources to deliver effective services and the judiciary has lost its independence. The executive branch not only influences judicial decisions, but also reportedly intimidates judges who do not follow the party line.

In summary, if the political climate were to change in Zimbabwe and donors were to resume normal programming, it would be essential that initial measures help to re-establish law and order and calm social unrest. Rebuilding state capacity and rehabilitating the economy will require stabilizing security.

# Private Sector Enabling Environment

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

#### FISCAL AND MONETARY POLICY

Destructive fiscal and monetary policies are a leading cause of Zimbabwe's economic tailspin. The most obvious sign of macroeconomic instability is hyperinflation. According to official Reserve Bank statistics, prices rose by more than 1,000 percent in 2006, by far the highest inflation rate in the world (see Figure 4-1). Independent Zimbabwean economists estimate that the true inflation rate may have reached 10,000 percent during the first half of 2007.<sup>27</sup> By comparison, the expected value for a country with Zimbabwe's characteristics is 5.6 percent, and the inflation rates in South Africa and Zambia are 4.6 percent and 9.2 percent, respectively. Even in the 1990s, inflation was high and rising, averaging 28.6 percent; this was an early sign of irresponsible macroeconomic management.

Unless the government attacks hyperinflation with strong and credible macroeconomic policies, capital and labor will continue to flee, poverty will deepen, pressures leading to social unrest will likely intensify, and economic recovery will be an impossible dream. The government's efforts to

<sup>&</sup>lt;sup>27</sup> This estimate was provided by Dr. John Robertson, a leading independent economist in Zimbabwe.

cure inflation through arbitrary price controls only diminishes the legal supply of basic goods, accentuates shortages, and enhances the incentive for black market activity.

The hyperinflation is a result of both fiscal and monetary mismanagement over the past ten years. On the fiscal side, the IMF reports that the budget deficit, including grants, stood at 10.0 percent of estimated GDP in 2006.<sup>28</sup> This is nearly triple the deficit of 3.0 percent of GDP achieved 1998,<sup>29</sup> and more than six times the expected value of 1.5 percent for Zimbabwe. In comparison, South Africa virtually balanced its budget<sup>30</sup> (see Figure 4-2).

The fiscal deficit has been driven by uncontrolled spending, but both expenditures and revenues

have been extraordinarily high relative to GDP. According to IMF estimates, government expenditure reached 53.5 percent of GDP in 2006, more than double the expected value of 24.7 percent, South Africa's 26.4 percent, and Zambia's 22.8 percent. The main components of expenditure have been capital projects (24.3 percent) and emoluments for government employees (29.9 percent). The available data probably overstate the actual size of government expenditure relative to GDP due to the problems of measuring GDP in the context of rampant inflation and expanding black market activity; even so, the indicators show that the government is absorbing an extremely large share of resources in the formal economy. In addition, a recent IMF report shows that the government has used the central bank to finance enormous "quasi-fiscal" expenditures by providing foreign exchange to favored enterprises at highly favorable rates, price supports to exporters, and subsidized credit to farmers and public enterprises.31

Government revenue, too, is extremely high as a percentage of estimated GDP, and this ratio has risen rapidly over the past five years to reach 43.3 percent in 2006. This is far

IMF Program Status for Zimbabwe

Between 2001 and 2006, Zimbabwe was in continuous arrears to the General Resources Account of the IMF. As a result, the IMF suspended Zimbabwe's voting rights. Zimbabwe then paid back these arrears in full in February 2006; however, it was still in arrears to the Poverty Reduction and Growth Facility-Exogenous Shocks Facility (PRGF-ESF). Because of this debt and policy mismanagement, the IMF suspended technical assistance and removed Zimbabwe from the list of PRGF-ESF-eligible countries. The voting ban and other sanctions remain in place.

higher than the expected value of 25.8 percent, South Africa's 26.5 percent, and Zambia's 16.9 percent. Even in 1998, the revenue ratio in Zimbabwe was already very high by benchmark standards at 30.9 percent of GDP. Fundamentally, the government in a low-income country should be leaving a much larger share of the economic pie in the hands of the private sector in order to foster sustainable growth.

<sup>&</sup>lt;sup>28</sup> IMF, Regional Economic Outlook for Sub-Saharan Africa April 2007, Washington DC.

<sup>&</sup>lt;sup>29</sup> IMF, Article IV Consultation–Staff Report, 2000.

<sup>&</sup>lt;sup>30</sup> The same report recorded Zambia as having a 20 percent surplus; this, however, is an anomaly as grants in 2006 included debt relief equivalent to 21.4 percent of GDP.

<sup>&</sup>lt;sup>31</sup> IMF Working Paper, Central Bank Quasi-Fiscal Losses and High Inflation in Zimbabwe, April 2007.

Figure 4-1. Inflation Rate

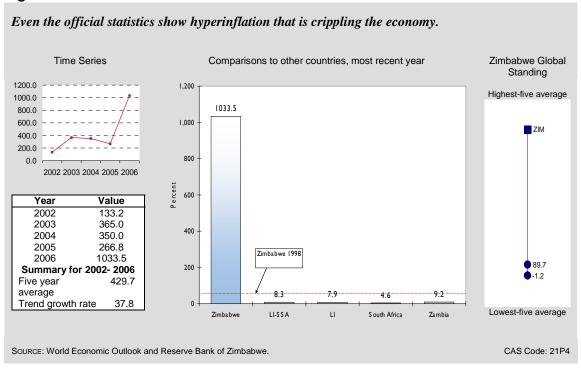
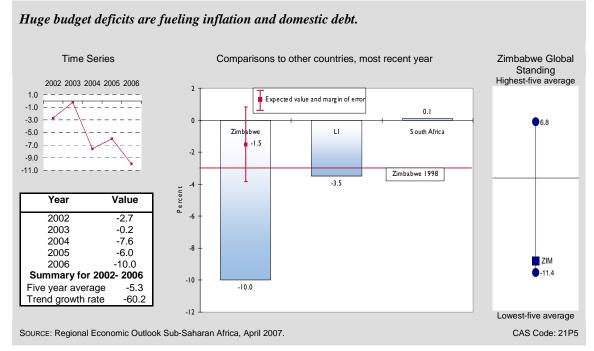


Figure 4-2. Overall Budget Balance, including Grants, % of GDP



While the budget has been a major source of macroeconomic instability, poor monetary policy has been the immediate impetus for high inflation. According to Reserve Bank of Zimbabwe, the nominal money supply increased by 1,044 percent in 2006, approximately 70 times the expected value of 15.0 percent, and Zambia's 14.6 percent. The corresponding figure for South Africa was 23.1 percent. In 2006, 79.1 percent of the increase in broad money was for credit to government; in effect, the government is printing money at a reckless rate to finance public programs. For the past two years, money supply growth has outpaced measured inflation, creating a reservoir of hidden inflation via the black market, and pressures for even faster inflation in the future.

Once a change in the political landscape allows donors to resume support for economic programs in Zimbabwe, the restoration of macroeconomic stability should be one of the top priorities for immediate attention. Other countries that have suffered extremely high inflation have been able to reduce rates to manageable levels within one to two years through a steadfast commitment to fiscal and monetary adjustments. A substantial commitment of donor support will be needed, however, to minimize the contraction effect on income and production from such adjustments.

#### BUSINESS ENVIRONMENT

Institutional barriers to doing business, including corruption in government, are another critical determinant of private sector development and prospects for sustainable growth. To compound the severe economic mismanagement in Zimbabwe, the business environment is poor and deteriorating.

Zimbabwe ranks near the bottom of the World Bank's global index of the Ease of Doing Business—153 out of 175 countries rated in 2006 and a drop of eight places from 2005. Zimbabwe's ranking for 2006 is far worse than the expected value of 129, and puts the country 124 places behind South Africa and 51 places behind Zambia. Still, some requirements in Zimbabwe remain less onerous than the average for the region. This includes the number of procedures required to enforce a contract (33 versus an average of 36 for LI-SSA), register property (4 versus 6) and start a business (10 versus 11), as well as the time required to register property (30 days versus 98 days). The corresponding figures for South Africa are 26, 6 and 9 procedures, and 23 days; and for Zambia, 21, 6, and 6 procedures, and 70 days. For the time required to start a business (96 days), however, Zimbabwe performs particularly badly compared to the LI-SSA average of 43 days and 35 days for both South Africa and Zambia.

Doing Business scores are based on an assessment of formal procedures. For Zimbabwe, however, the formal regulations are far less important for business development than the poor quality of governance. This is clearly seen in the World Bank Institute's (WBI) indices for government effectiveness, rule of law, and regulatory quality. These indices are expressed on a scale of -2.5 to +2.5, with a global mean of 0.0. In 2006, the Government Effectiveness index for Zimbabwe was -1.5, versus an expected value of -0.7, and scores of 0.8 and the -0.7 for South Africa and Zambia, respectively. The latest score is a far cry from Zimbabwe's standing ten years earlier (-0.4). The indices for rule of law and regulatory quality have also declined drastically, falling from -0.7 for both scores in 1996 to -1.7 for rule of law and -2.2 for regulatory quality in 2006. These indices will surely decline further in light of developments in 2007, including

accelerating inflation, the imposition of price controls, and reports that the government seeks to confiscate capital in foreign-owned companies.<sup>32</sup>

Hand in hand with poor governance has been a sharp increase in perceived corruption. According to WBI's Control of Corruption index, (also on a scale of -2.5 to +2.5), the score for Zimbabwe plunged from -0.2 (52nd percentile) in 1996 to -1.4 (4th percentile) in 2006. Corruption is now considerably worse than in neighboring Zambia and many other low-income countries in sub-Saharan Africa, not to mention South Africa, where it is far less pervasive (Figure 4-3).

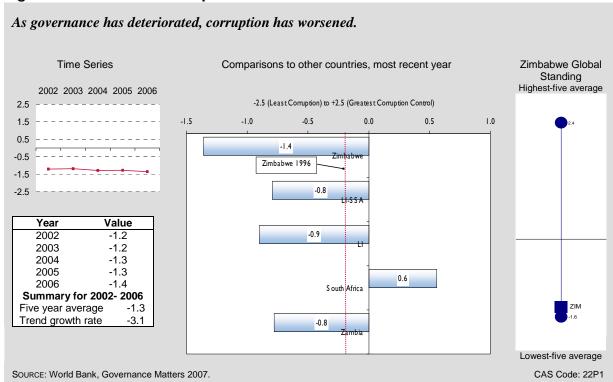


Figure 4-3. Control of Corruption Index

These governance problems severely affect the business environment. By all indications, these adverse conditions are the result of the current government's political strategy that rewards supporters and undermines the economic base of other constituencies. This strategy is being pursued at the expense of the general economy and the welfare of the general population. Despite the sharp decline in economic activity and per capita income, government supporters still benefit from access to credit, foreign exchange, and scarce commodities (such as gasoline) on highly preferential terms. Other policies serving the same end include the redistribution of farm land, the prospective redistribution of other foreign-owned capital, and deeply negative real interest rates on savings vehicles (see Financial Sector).

<sup>&</sup>lt;sup>32</sup> Mail and Guardian, July 23, 2007. Zimbabwe to Debate Nationalization. <a href="http://www.mg.co.za/articlePage.aspx?area=/breaking\_news/breaking\_news/breaking\_news/articleid=314751">http://www.mg.co.za/articlePage.aspx?area=/breaking\_news/breaking\_news/breaking\_news/articleid=314751</a>. Accessed July 31, 2007.

With Zimbabwe performing poorly on vital indicators of the basic business environment, donors will need to see clear signs of a fundamental transformation in the political situation before resuming support for economic growth programs. Particularly important are convincing measures to restore the rule of law, re-establish property rights, and dismantle the most serious barriers to market-driven private sector development. Red tape, as such, is not the critical factor at this stage. Thus, most programs dealing with regulatory quality and capacity should probably be sequenced later in the recovery process. However, easy-to-implement measures such as helping the government to streamline business registration could be undertaken early to facilitate the recovery of private investment.

#### FINANCIAL SECTOR

A sound and efficient financial sector is a key to mobilizing savings, fostering productive investment, and improving risk management. In Zimbabwe, financial sector indicators paint a very unusual but generally grim picture.

One basic indicator of financial development is the degree of monetary deepening, measured by the ratio of broad money (currency plus bank deposits) to GDP. In Zimbabwe, this ratio increased from 23.3 percent in 2002 to 42.5 percent by 2006.<sup>33</sup> A rise in the ratio is typically a positive sign. In this case, however, the enormous increase over a short period largely reflects the printing of money at an alarming rate, along with underestimation of prices in the measurement of GDP, rather than healthy financial development (see Fiscal and Monetary Policy).

Another primary indicator is domestic credit to the private sector. In Zimbabwe, credit to the economy (excluding government) rose from 18.2 percent of the GDP in 2001 to 27.0 percent in 2005. Both figures are much better than the credit ratio for Zambia (7.6 percent) and the LI-SSA median (10.8 percent); South Africa is on a different plateau of financial sophistication, with a credit ratio of 143.5 percent of the GDP. As with the monetization ratio, the increase in credit to the economy largely reflects monetary mismanagement rather than financial deepening. In particular, the Reserve Bank has been channeling large volumes of credit to agriculture, public enterprises, and local authorities at interest rates far below the rate of inflation. The loans are financed by issuing domestic debt that commercial banks and pension funds are required to purchase, and by printing money.<sup>34</sup> In addition, informed reports indicate that the government imposed a statutory reserve requirement of as much as 60 percent of bank deposits at a zero interest rate between January 2004 and June 2006, effectively. These mechanisms have severely drained the economy's financial resources by appropriating savings to politically driven uses.

Favorable interest rates in government-directed credits effectively provide a bountiful subsidy that does not appear on the government budget. Indeed, the IMF estimates that the real interest

<sup>&</sup>lt;sup>33</sup> Under usual circumstances, we normally calculate the ratio of broad money to GDP as end of period broad money as a percentage of GDP for the period. Owing to the hyperinflation, it was calculated as an average of broad money over the whole period as a percentage of GDP for the period.

<sup>&</sup>lt;sup>34</sup> IMF Working Paper, Central Bank Quasi-Fiscal Losses and High Inflation in Zimbabwe, April 2007, p. 10-11.

rate on bank loans averaged *minus* 27.7 percent in the five years to 2005, becoming increasingly negative over the period.<sup>35</sup> This compares to an average of *plus* 10.7 percent for LI-SSA, 5.6 percent in South Africa, and 7.7 percent in Zambia. The negative rates mean that borrowers repay the banks less than the amount received after adjusting for inflation. Furthermore, negative real interest rates completely negate the critical role of interest rates as a price mechanism for screening out inefficient or unproductive investments. To the extent that official statistics understate inflation, the true "cost" of borrowing is even more negative. <sup>36</sup>

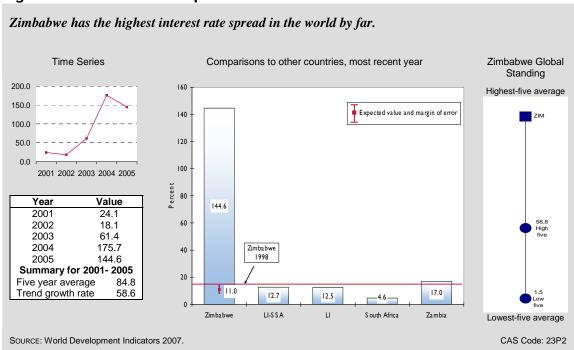


Figure 4-4. Interest Rate Spread

Another sign of inefficiency in the banking sector is the extremely high spread between the interest rate on loans and deposits. In 1998, the interest rate spread for Zimbabwe was 13.0 percent. It now has one of the highest spreads in the world—in 2005, 144.6 percent, compared to the expected value of 11.0 percent, South Africa's 4.6 percent, and Zambia's 17.0 percent (Figure 4-4). Given that lending rates are negative in real terms, the large spread indicates that depositors receive a yield so negative as to constitute a confiscation of wealth. These are ideal conditions for provoking capital flight and the hoarding of foreign currency and commodities, in lieu of financial savings. In all respects, the economy is suffering from intense financial repression, which works at cross purposes to the development of a sound and efficient financial sector.

<sup>35</sup> Ibid.

<sup>&</sup>lt;sup>36</sup> Taking into account the tax-deductibility of interest expenses, the effective real interest rate is even more strongly negative, because the tax deduction reduces the financial cost of borrowing.

Aside from macroeconomic stability, another requirement for financial development is an effective regulatory environment. In this regard, the World Bank's Doing Business report gives Zimbabwe a moderate score of 6.0 on its index of Legal Rights of Borrowers and Lenders for 2006 (on a scale of 0 to 10, from poor to excellent); this is below Zambia's score of 7.0, but considerably better than the median of 4.0 for LI-SSA. Yet the Bank gives Zimbabwe the lowest possible score (0.0) on its index of Credit Information depth, which gauges "the rules affecting the scope, accessibility and quality of credit information available through either public or private credit registries." Effective distribution of high quality credit information will be very important for facilitating the expansion of bank credit beyond prime clients once the current regime of financial repression ends.

For a low-income country, Zimbabwe has a relatively well-developed equities market. Stock market capitalization amounted to 71.2 percent of the GDP in 2005, far better than the LI-SSA median of 14.3 percent or Zambia's low ratio of 13.6 percent; South Africa again is on a far higher plateau, at 236.0 percent. Because of the underestimation of GDP caused by the spread of black market transactions and unrecorded inflation, this measure is likely to overestimate the strength of the stock market. Nevertheless, there have been real increases in recent years, reflecting the fact that an equity claim on real assets serves as a hedge against inflation.

On balance, the financial sector is being used as an instrument for economic mismanagement rather than being developed as a cornerstone for sustainable growth. The combination of directed credits and highly negative interest rates feeds inflation and inefficiency, while stimulating capital flight. Without a major improvement in governance and monetary management, these outcomes will continue. When conditions change, the financial sector is likely to recover on its own merits, though donor support, including sustainable approaches to microfinance, may be useful in accelerating the expansion of access to credit by non-prime clients.

#### EXTERNAL SECTOR

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

Following independence in 1980, Zimbabwe took steps to liberalize trade and attract foreign investment, but also announced its intention to establish a socialist state. As a result very little new investment arrived, and the business climate remained unattractive until improvements took

<sup>&</sup>lt;sup>37</sup> World Bank, Doing Business; Getting Credit Category: Methodology & Surveys http://www.doingbusiness.org/MethodologySurveys/GettingCredit.aspx

place with the launch of a Structural Adjustment Program in 1991, with IMF support. However, IMF conditionality also dismantled some of the mechanisms used for political patronage and prompted demands for other benefits such as war pensions and land transfers. In response, the government started a process that led to a deterioration of both macroeconomic stability and property rights. Trade and investment policies also shifted into reverse, driven by intense nationalism and a disregard for economic consequences of the populist program, including the advent of hyperinflation. With the official exchange rate tightly controlled, one result was an extreme overvaluation of the currency since 2001 (which also creates strong incentives for corruption). For the 12 months ending in July 2007, the official rate was 250 Zimbabwean dollars to one U.S. dollar, but over that period the black market rate increased from Z\$650 per U.S. dollar to a range of Z\$150,000 to Z\$300,00 one.<sup>38</sup>

The huge gap between official and open market exchange rates makes it very difficult to gauge external sector trends using indicators based on local currency values. Some indicators, though, are measured directly in foreign exchange. It is thus very clear that exports are rapidly declining, the external debt burden is rising, foreign investment is low, foreign exchange reserves are dangerously depleted, and Zimbabweans are increasingly relying on remittances and food aid.

# **International Trade and Current Account Balance**

The most common indicator of trade openness is the ratio of exports plus imports (goods and services) to GDP. For Zimbabwe the ratio was 71.5 percent in 2006 using the official exchange rate and the IMF estimate of GDP. Given the aforementioned measurement problems, this number is almost meaningless. Looking back to 1998, when Zimbabwe's political problems were just beginning to take shape, one can obtain a solid figure of 88.0 percent. When the current macroeconomic problems are brought under control and the exchange rate is allowed to reach equilibrium, this ratio will be a reasonable target at which to aim in the reconstruction process.

The poor economic policy environment has caused export earnings to plummet in dollar terms despite high world prices for most commodities. Over the five years to 2006, exports declined at an average annual rate of 3.6 percent.<sup>39</sup> In contrast, the expected value for a country with Zimbabwe's characteristics is a growth rate of plus 3.9 percent. In comparison, South African exports grew by 4.9 percent in 2005, and exports from Zambia by 12.6 percent. In 1998, Zimbabwe's exports grew by 19.9 percent, so rapid trade growth is feasible under the right conditions.

The decline in exports is unquestionably related to poor economic policies and a very difficult business environment. But trade policies are also a major factor. This can be seen in Zimbabwe's poor score of 42.6 percent in 2007 on the Heritage Foundation's Trade Freedom Index (on a scale

<sup>&</sup>lt;sup>38</sup> The lower rate was provided by John Robertson in a communication on July 11, 2007. The higher rate was reported in a Guardian Unlimited story, *U.S. Predicts Regime Change in Zimbabwe as Hyperinflation Destroys the Economy*, on June 22, 2007. See

http://www.guardian.co.uk/zimbabwe/article/0,,2108910,00.html, accessed July 31, 2007

<sup>&</sup>lt;sup>39</sup> Reserve Bank of Zimbabwe.

of 0 to 100, from least to most free). This is 26.6 percentage points lower than South Africa's score of 68.8 percent and 18.2 percentage points below Zambia's score of 60.8.

Furthermore, the World Bank's Doing Business report for 2007 ranks Zimbabwe 168 out of 175 countries on the ease of trading across borders. Zimbabwe's rank is much worse than the LI-SSA median of 145 and South Africa's 67, but comparable to Zambia's poor rank of 170<sup>40</sup> (Figure 4-5). In addition to the economic policy environment, rising world oil prices have meant that Zimbabwe's terms of trade fell from 100 to 78.4 between 2000 (the index base year) and 2006. This shows that the unit value of Zimbabwe's exports declined by 21.6 percent relative to the unit cost of imports. In this regard, most other low-income countries have been better prepared to weather hikes in oil prices. Over the same period, the average terms of trade for LI-SSA only fell by 6.1 percent to 93.9, while South Africa's terms of trade rose to 109.6 and Zambia's to 204.3 (because of high copper prices).<sup>41</sup>

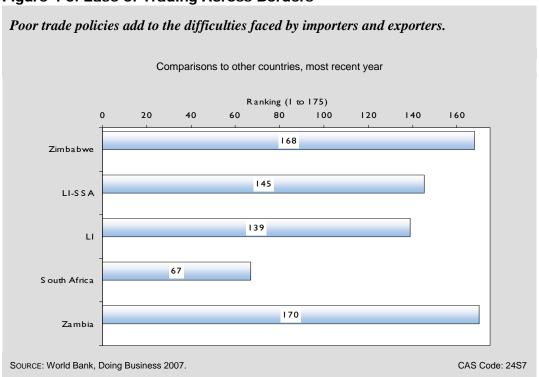


Figure 4-5. Ease of Trading Across Borders

According to the IMF reports, Zimbabwe's current account deficit, excluding grants, was 5.0 percent of GDP in 2006. Taking grants into account the deficit was 3.9 percent of GDP, down

<sup>&</sup>lt;sup>40</sup> One reason for the low scores in Zambia and Zimbabwe is that the Doing Business methodology is based on a standardized case involving a shipment by sea through the nearest port, and both countries are landlocked.

<sup>&</sup>lt;sup>41</sup> IMF, Regional Economic Outlook for Sub-Saharan Africa April 2007, Washington DC. Other references in this section to IMF estimates are from the same source.

from 11.2 percent in 2005. The 2006 number is in line with the expected value of 3.1 percent, and better than South Africa's 6.4 percent, but considerably worse than Zambia's deficit of 0.4 percent. Even so, it would be a mistake to see this as a sign of improvement. Rather it is testament to the lack of access to foreign capital inflows and a negligible pool of foreign reserves; in short, the country lacked the means to finance a larger inflow of imports. The IMF also estimates that Zimbabwe's external debt at the end of 2006 at US\$4,700 million, of which arrears totaled US\$2,700 million. This has earned Zimbabwe, which once had an impeccable debt service record, the lowest credit rating possible.

No recent data are available on remittances to Zimbabwe —a major component of the current account in many developing countries. Nonetheless, numerous reports suggest that remittances from family members are now essential to the survival of many poor households. 42 Because of the prevailing governance problems, most of the money is not sent through official channels, and is therefore not detected in the balance of payments data.

# Foreign Investment, External Assistance, and International Reserves

Foreign direct investment (FDI) can catalyze productivity gains and growth by transferring technology, developing human capital, enhancing competition, and expanding access to foreign markets. In 2005 (latest year of available data), the flow of FDI into Zimbabwe reached 2.3 percent of estimated GDP. 43 Considering the political situation, this is surprisingly high. Still, it is far less than the 1998 figure of 7.3 percent, as well as the expected value of 4.1 percent and Zambia's 6.2 percent; in South Africa, FDI inflows amounted to just 0.3 percent of GDP in 2004. An article in the *Financial Gazette* of Harare suggests that recent FDI flows were stimulated in large part by a package of incentives to foreign mining firms.<sup>44</sup> However, the article also reports rising doubt among investors about the government's promises, and worries about the extreme shortage of foreign currency reserves. It appears that some mining companies are considering pulling out of Zimbabwe, not least because of the government's announced consideration of nationalizing or indigenizing foreign-owned assets. International corporations are normally keen on natural resource investments even in countries with a poor business climate. Zimbabwe, however, receives one of the lowest scores in the world on UNCTAD's index of Inward FDI Potential, at 0.04 on a scale of 0 to 1 (poorest to best). This compares to an average for LI-SSA of 0.10, South Africa's 0.18, and Zambia's 0.09.

<sup>&</sup>lt;sup>42</sup> A recent survey by the International Organization for Migration In London (Mapping Exercise Zimbabwe, December 2006) found that the majority of expatriate Zimbabweans in the UK send remittances home. Large remittances flows are undoubtedly coming from South Africa and other neighboring countries, as well, though no data are available.

<sup>&</sup>lt;sup>43</sup> Calculated using absolute FDI statistics from UNCTAD's World Investment Report 2006 and GDP estimates from the IMF's World Economic Outlook April 2007. As this would amount to about US\$100 million, it could represent the capital inflow to Zimbabwe Platinum Mine, which is the only significant investment project.

<sup>&</sup>lt;sup>44</sup> See http://allafrica.com/stories/200706140920.html accessed on July 24, 2007.

Foreign assistance is another vital source of foreign currency for most low-income countries. Because of the data problems mentioned above, our usual benchmark of measuring foreign aid relative to GDP does not provide useful information in this instance; in absolute terms, aid to Zimbabwe plummeted from US\$369 million to US\$187 million between 1996 and 2004, before rising to close to US\$368 million in 2005.<sup>45</sup> Most of that rise, however, is in the form of health and emergency relief.<sup>46</sup>

The extreme shortage of foreign currency reserves is also extremely troubling. According to IMF estimates, gross reserves accounted for just 0.8 months of imports in 2006, well below the expected value of 3.3 months for a country with Zimbabwe's characteristics, South Africa's 3.3 months, and Zambia's 3 months. Moreover, the IMF generally recommends that countries retain foreign exchange reserves between 3 and 4 months worth of imports, as a minimal cushion against external shocks (Figure 4-6).

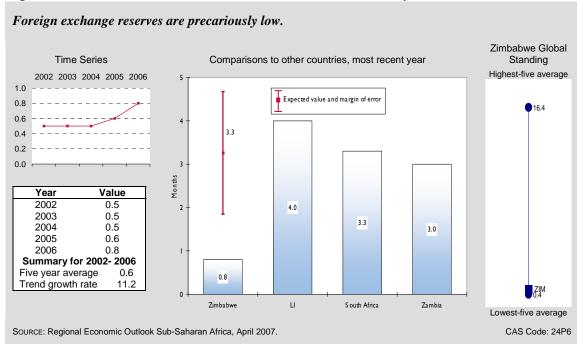


Figure 4-6. Gross International Reserves, Months of Imports

## **Debt**

Our fiscal analysis showed that the government and the monetary authorities have been issuing mountains of debt, largely domestic debt. Zimbabwe was able to stave off the burden from foreign debt for several years, but as real GDP declined the debt burden as a percentage of GDP rose considerably. According to the 2007 World Development Indicators, public and publicly

<sup>&</sup>lt;sup>45</sup> World Development Indicators 2007.

<sup>46</sup> http://www.oecd.org/dataoecd/12/60/1883524.gif, accessed July 31, 2007.

guaranteed debt fluctuated around US\$3 billion between 1995 and 2005. But the most recent IMF Article IV consultation report for Zimbabwe (October 2005) shows that the debt actually rose to \$4.9 billion in 2004. This higher figure includes accumulated arrears rather than new borrowing, as Zimbabwe has qualified for very little external credit. Over the same period, real GDP fell by an estimated 25 percent, which accentuated the increase the debt burden.

If the political situation changes in Zimbabwe, there will most likely be a pressing need for donors to help the government restructure the escalating international and domestic debt, negotiating debt relief as part of a reconstruction program and to avoid penalizing citizens for economic mismanagement by the current leadership.

# **ECONOMIC INFRASTRUCTURE**

A sound system of physical infrastructure—for transportation, communications, power, and information technology—is necessary for competitiveness and productive capacity and relies heavily on an enabling macroeconomic and political environment. Zimbabwe once had some of the best infrastructure in sub-Saharan Africa, but quality has been deteriorating, compounding other disincentives to investment. The World Economic Forum (WEF), which compiles an annual index of infrastructure quality based on a survey of executive opinion in each country, scored Zimbabwe 2.9 on a scale of 1 to 7 (poor to excellent) in 2006, a drop of more than one full point from its 2002 score of 4.0. Yet Zimbabwe still fares well relative to cohort comparisons, including the expected value of 2.6, the median for LI-SSA of 2.2, and Zambia's latest score of 1.9. South Africa outshines other countries in the region with a score of 4.6, showing what can be achieved with a well-managed economy.

Finding a good indicator for benchmarking road quality is difficult. One widely used proxy is the percentage of roads that are paved. According to a World Bank report, about 17.0 percent of roads in Zimbabwe were paved in 2006.<sup>47</sup> This falls short of all benchmarks—LI-SSA at 18.6 percent, South Africa at 17.3 percent in 2001, and Zambia at 22.0 percent in 2001 (Figure 4-7). The 2006 figure is also a drop of 2 percentage points since 2002, possibly reflecting the withdrawal of donor support for the road sector. The World Bank report estimates that it will cost about US\$1.7 billion to restore the road network to "good" condition. It also notes that institutional weaknesses, lack of modern information management systems, and poor local capacity are major deterrents to improving Zimbabwe's roads.

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<sup>&</sup>lt;sup>47</sup> World Bank, Zimbabwe Infrastructure Assessment Note for Roads, Railways and Water Sectors, 2006, Executive Summary (p. X).

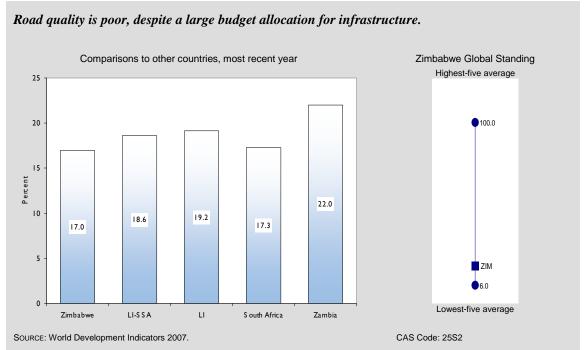


Figure 4-7. Paved Roads as Percent of Total

For a landlocked country like Zimbabwe, railroad and air transport systems are critical elements of the physical infrastructure. The WEF has downgraded Zimbabwe's railroads rating from 3.4 in 2002 to 2.7 in 2006. This is still above the LI-SSA median and Zambia's score, both of which are 1.6, though below South Africa's score of 3.5. Foreign exchange and fuel shortages, as well as poor availability of locomotives are serious constraints in the railroad sector. <sup>48</sup> The WEF rating for the quality of air transport has also deteriorated to 2.6 in 2006, from 3.3 five years earlier, putting Zimbabwe well below the LI-SSA median (3.1), and the scores for Zambia (4.6) and South Africa (5.8).

The story is similar for electricity infrastructure, where the WEF rating for Zimbabwe has fallen from 3.6 in 2002 to just 2.2 in 2006, below the LI-SSA median (2.6) and well below scores for Zambia (5.5) and South Africa (4.1). A return to the 2002 score is a minimum indicator for where the country ought to be, were the political and economic situation less damaging to the economy (Figure 4-8).

<sup>&</sup>lt;sup>48</sup> World Bank, *Zimbabwe Infrastructure Assessment Note for Roads, Railways and Water Sectors*, 2006, p. xii. .

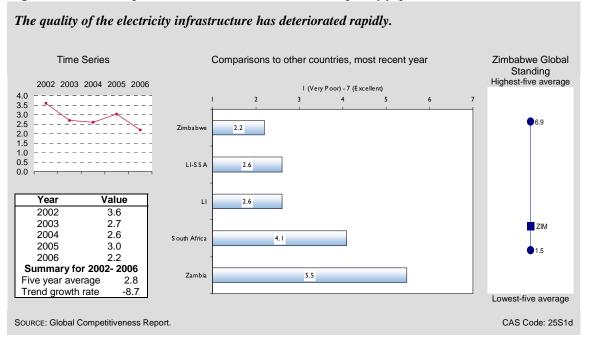


Figure 4-8. Quality of Infrastructure—Electricity Supply

For modern economic growth, information and communications infrastructure is just as important as transportation and electricity. The number of Internet users in Zimbabwe has grown almost tenfold in the five years to 2005, to reach to 76.9 users per 1,000 people. Compared to the LI-SSA median of 5.5 or Zambia's 20.1, Zimbabwe's performance is remarkably good. Nonetheless, Zimbabwe is at risk of being left behind, as illustrated by South Africa's figure of 108.8 Internet users per 1,000 people. Telephone density, the number of fixed line and mobile phones per 1,000 people, stood at 55.2 in 2004, showing that Zimbabwe is still faring better than Zambia (33.7). Nonetheless, it lags far behind the expected value of 123.9, and even further below South Africa's exemplary standard of 473.1.

Moreover, Zimbabwe's economic decline has compelled many technically skilled people to emigrate in search of better prospects for career development and job security. Economic assistance to Zimbabwe will have to factor in the urgent need to attract engineers, technicians, managers, administrators and other professionals back to the country, and to rehabilitate training institutions that are needed to attract new talent into each profession and trade.

Overall, the quality of infrastructure is now an impediment to investment and a drag on competitiveness. The government rightly identified infrastructure development as a priority in the 2006 National Economic Development Priority Plan (NEDPP), and allocated a large fraction of the budget to capital projects (see Fiscal Policy). Until the larger problems of macroeconomic instability and political unrest have been addressed, however, infrastructure investment will not put the economy onto the path of rapid growth. Conversely, once underlying conditions improve, infrastructure investment can provide a strong direct and indirect stimulus to growth.

# SCIENCE AND TECHNOLOGY

Science and technology are vital to a dynamic business environment and a driving force behind increased productivity and competitiveness. Even for a low-income country like Zimbabwe, transformational development depends on acquiring and adapting technology from the global economy. Inability to access and use technology prevents an economy from leveraging the benefits of globalization.

Unfortunately, very few international indicators can be used to judge performance in this area for low- and lower-middle-income countries. From the limited information that is available, it appears that Zimbabwe's science and technology capability is comparable to regional benchmarks, despite the economic and political crisis. For example, the WEF compiles an annual index of the availability of scientists and engineers based on executive perceptions. For 2006, Zimbabwe received a score of 3.9 (on a scale of 1 to 7, from worst to best) placing the country 89th out of 125 countries rated. Though this is not a particularly good score, in absolute terms, it is on par with the LI-SSA median and the score for Zambia, and virtually the same as South Africa's score of 3.8.

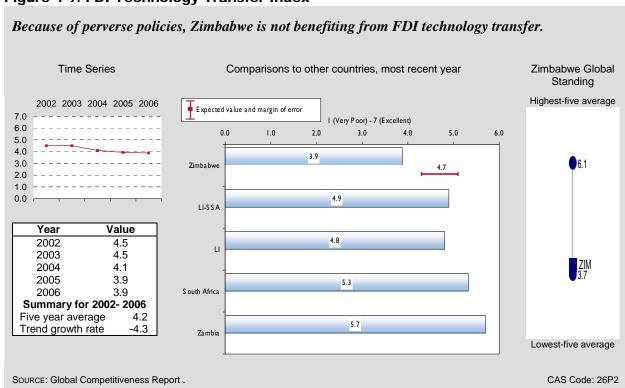


Figure 4-9. FDI Technology Transfer Index

On WEF's FDI Technology Transfer Index, which gauges the degree to which FDI integrates new technology into an economy (again on a scale of 1 to 7) Zimbabwe scored 3.9 in 2006, more than half a point lower than in 2002, far short of the LI-SSA median of 4.9, Zambia's 5.7, and South Africa's 5.3. This is not surprising, given that there has been almost no high-technology

foreign investment in Zimbabwe in recent years (Figure 4-9). On WEF's Intellectual Property Rights Index, Zimbabwe scored 2.9 in 2006. This is slightly higher than the LI-SSA median (2.8) and Zambia (2.4), but well below the impressive score for South Africa (5.1).

Yet Zimbabwe has had the advantage of a relatively strong base of intellectual resources. In 2003 (latest data), the country produced 96 scientific and technology journal articles per million people. This compares very favorably with the average for LI-SSA (14) and with Zambia (26 in 1999), though, here too, vastly below South Africa (2,364 in 2003). Despite Zimbabwe's remarkable educational achievements for a low-income country (see Education section), the economic crisis is preventing the country from even approaching its full potential in science and technology performance.

# 5. Pro-Poor Growth Environment

Rapid growth is the most powerful and dependable instrument for poverty reduction; and conversely, economic contraction is a breeding ground for poverty intensification. In either direction, the link from growth to poverty reduction is not mechanical. The trend in income growth for poor households often deviates from the overall trend in per capita income. The deviation is most favorable to the poor when policies and institutions improve opportunities and capabilities for disadvantaged citizens while reducing their vulnerabilities. Pro-poor development is associated with investment in primary health and education, the creation of jobs and income opportunities, the development of skills, the extension of microfinance, agricultural development, and gender equality. This section focuses on four of these issues: health, education, employment and the workforce, and agricultural development.

# **HEALTH**

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

Life expectancy at birth is commonly regarded as the best overall indicator of health status of a population. Mainly as a result of HIV/AIDS, life expectancy in Zimbabwe has fallen precipitously from 58.6 years in 1990 to an estimated 43.0 and 42.0 years for males and females, respectively, in 2005—among the lowest in the world.<sup>49</sup> By comparison, the median life expectancy for LI-SSA is 46.4 years, for Zambia 38.4 years, and for South Africa 47.7 years. All of these figures are heavily affected by premature deaths from HIV/AIDS. Indeed, the Zimbabwe Demographic and Health Survey (2005-06) estimates that 18.1 percent of the population aged 15 to 49 are infected, while UNAIDS estimates 20.1 percent. In either case, HIV prevalence has declined since 2003, when an estimated 22.1 percent of the population in that age cohort was HIV positive.

<sup>&</sup>lt;sup>49</sup> The website for Zimbabwe's Central Statistics Office reports a life expectancy of 45 years based on the 2002 population census. Figures cited in the text are from the latest World Health Organization Statistical Information System at <a href="http://www.who.int/whosis/en/index.html">http://www.who.int/whosis/en/index.html</a>.

Another indicator of health in Zimbabwe is its tragically high maternal mortality rate (MMR) of 1,068 per 100,000 live births, as measured by the 2002 census. This rate is one-third higher than the upper bound of the expected value of 625, far worse than Zambia's rate of 750, and well above the median of 990 for LI-SSA (Figure 5-1). The high MMR is surprising given that a relatively high fraction of births in Zimbabwe are attended by skilled health personnel. The 2005-06 Demographic and Health Survey estimates that 79.7 percent of deliveries are attended by either a doctor, nurse, midwife, or trained traditional birth attendant. The corresponding benchmarks are 47.0 percent for the LI-SSA median, 43.4 percent for Zambia in 2002, and a remarkable 92.0 percent for South Africa in 2003.

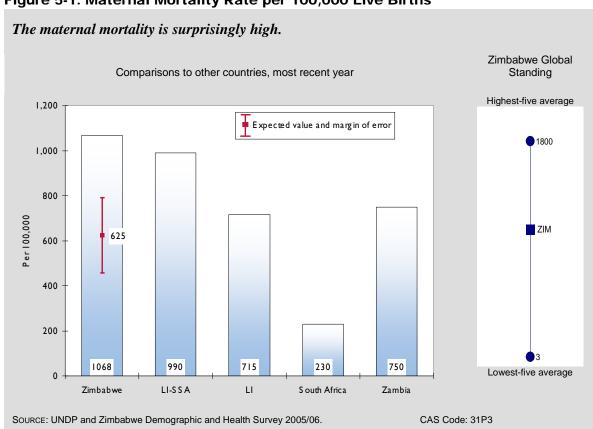


Figure 5-1. Maternal Mortality Rate per 100,000 Live Births

Access to improved water and sanitation are among the most important determinants of health outcomes. In 2005-06, only 42.0 percent of Zimbabwe's population had access to improved sanitation, according to Demographic and Health Survey results.<sup>51</sup> While this level of access to sanitation surpasses the LI-SSA median of 34.0 percent, it is far below the achievements in

<sup>&</sup>lt;sup>50</sup> The 2005-06 Demographic and Health Survey estimates the MMR to be far lower, at 555 deaths per live birth. However, the survey notes that this estimate is based on a small number of maternal mortality events. The 2002 census result is a more reliable figure.

<sup>&</sup>lt;sup>51</sup> 2005-06 Demographic and Health Survey. p. 20.

Zambia (55.0 percent) and South Africa (65.0 percent). For the same period, 75.8 percent of Zimbabweans had access to an improved water source. In this case, Zimbabwe's performance is far above the LI-SSA median of 59.5 percent and Zambia's 58.0 percent (in 2002), though still below South Africa (88.0 percent in 2004).<sup>52</sup> Equally important, the 2005 estimates for Zimbabwe represent a decline from 2002, when 57.0 percent of the people had access to improved sanitation, and 83.0 percent had access to clean water—another sign that the development process has been working in reverse.

The data indicate that Zimbabwe performs relatively well in providing child health care services. Child immunization rates are very good by regional standards. An average of 87.5 percent of children were immunized against DPT and measles in 2005—a jump of 5 percentage points over the previous year. This exceeds the LI-SSA median (71.2 percent) and Zambia's rate (82.0), and nearly matches the rate in South Africa (88.0 percent). Child malnutrition, at 16.6 percent in 2005-06, though high in absolute terms, is far less than the LI-SSA median (25.6 percent) and the incidence in Zambia (23.0 percent in 2003). Nonetheless, this figure represents a troubling increase in child malnutrition from 13.0 percent the previous year.

Access to health care is a fundamental human need, and good health is essential for a productive workforce. It is thus incumbent on the government and the international community to invest in health care, curtail the spread of HIV, reduce maternal mortality, improve child nutrition, and limit the ravages of other preventable health problems. Government expenditure statistics suggest that Zimbabwe is heading in the right direction, as public health expenditures have risen from 2.1 percent of GDP in 2002 to 4.3 percent in 2006. But this improvement is more apparent than real, as the decline in real GDP and the severe under-reporting of inflation combine to inflate the ratio. Indeed, in real terms, public health expenditures may actually be falling, as other health indicators suggest an overall deterioration in public health services.

# **EDUCATION**

Investment in human capital is a cornerstone of economic growth and development. Thus far, the economic and political turmoil in Zimbabwe has not eroded key indicators of education access, in which Zimbabwe generally outperforms most African countries. According to the Zimbabwe Demographic and Health Survey 2005-06, which was released in early 2007, the net primary enrollment rate in 2005/06 was 91.4 percent, which is 17 percentage points higher than the expected value of 74.3 percent, and marginally better than the enrollment rates in South Africa (87.1 percent) and Zambia (88.9 percent). The survey also shows virtually no difference in enrollment rates for males (91.3 percent) and females (91.6 percent). Moreover, net secondary school enrollment rates for both males and females were about 44 percent, much above the LI-SSA median of 20.2 percent and Zambia's 23.7 percent, though significantly lower than South Africa's 61.7 percent (see Figure 5-2).

Youth literacy is very high. According to the Demographic and Health Survey 2005-06, 95.8 percent of youths are literate. This achievement is more than 24 percentage points better than the

<sup>&</sup>lt;sup>52</sup> Ibid, p. 19.

expected value of 70.7 percent, as well as youth literacy rates in South Africa (93.9 percent) and Zambia (69.5). As with enrollment rates, there is no disparity between males and females, according to findings from the survey.

These impressive statistics must be interpreted in light of widespread reports that the *quality* of education has declined greatly in the current political and economic climate. Moreover, Zimbabwe is suffering a severe brain drain as many educated people flee the country to escape repression and seek better opportunities. Once the political climate changes, some of these emigrants will return spontaneously to help rebuild the country, but the government and its international partners will also have to encourage and facilitate this process.

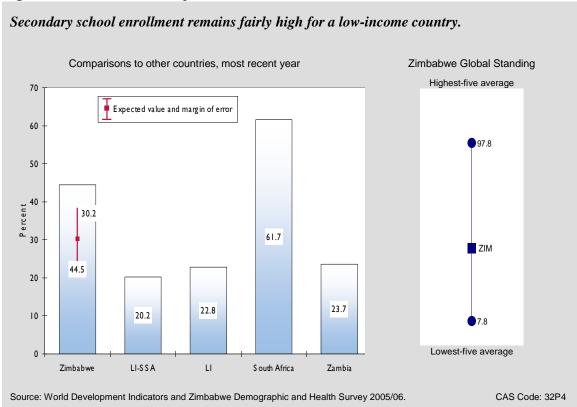


Figure 5-2. Net Secondary School Enrollment Rate

# **EMPLOYMENT AND WORKFORCE**

The Zimbabwean workforce was estimated at 5.8 million people in 2005, including informal sector workers. Investment and job-creation in the past ten years has been so low that very few young people have found gainful employment. Indeed, estimated employment in the formal sector has fallen from 1,323,000 to 972,000 over the past decade.<sup>53</sup> Consequently, more and more

<sup>&</sup>lt;sup>53</sup> These estimates are from John Robertson in direct correspondence, August 2006.

workers face a harsh choice between reverting to subsistence activity, pursuing black market activities, living on humanitarian assistance, or fleeing the country. Considering that millions seem to have emigrated, government statistics showing continued growth of the labor force and a steady labor force participation rate must be viewed with great skepticism.

Probably the most reliable figures on the labor force are in the 2005-06 Demographic and Health Survey, which found the unemployment rate to be 44.6 percent. This is almost four times the expected value of 9.1 percent, 75 percent higher than South Africa's very high unemployment rate of 25.5 percent (2006), and well above the rate of 16.0 percent in Zambia (2005).<sup>54</sup> The latest data for Zimbabwe also mark an enormous worsening compared to the unemployment rate of 6.1 percent recorded in 1997 (Figure 5-3). The recent imposition of price controls has reportedly resulted in more businesses shutting down, which can only force more workers out of their jobs. Indeed, many news articles cite an unemployment rate of 80 percent (but without attribution to solid data).<sup>55</sup>

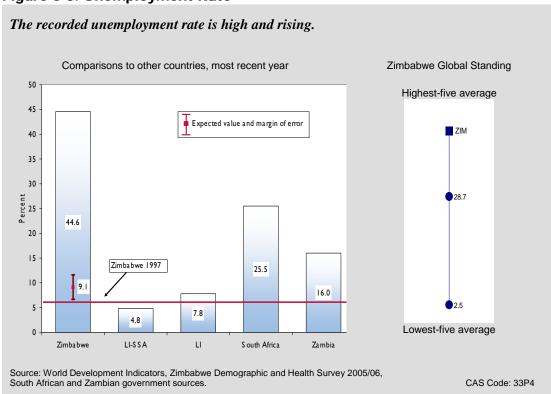


Figure 5-3. Unemployment Rate

<sup>&</sup>lt;sup>54</sup> Unemployment rates for South Africa and Zambia are from national labor force surveys. See: www.statssa.gov.za/keyindicators/lfs.asp and www.zamstats.gov.zm/soc/lforce.asp

<sup>&</sup>lt;sup>55</sup> According to John Robertson, this figure is based on the assumption that about 3,600,000 additional adults would seek to join the existing formal sector employees if opportunities arose, and that their departure from informal activities would make little or no difference to GDP or family incomes.

Job creation, first and foremost, requires a transformation in the business environment to attract investment. But institutional impediments in the labor market itself will also need to be lessened. The World Bank's Rigidity of Employment index measures the difficulty of hiring and firing workers. For 2006, Zimbabwe received a score of 34.0 on employment rigidity. This is better than the LI-SSA median of 49.8, and even South Africa's score of 41.0, though not nearly as good as Zambia's score of 23.0. One component stands out: the Bank estimates that firing a worker in Zimbabwe in 2006 would cost an employer an astronomical 446 weeks of wages—more than eight years' worth of wages. This compares to 37 weeks as the LI-SSA average, 24 weeks for South Africa, and a very high 178 weeks for Zambia. Policies and regulations that lower the cost of firing are vital to job creation because high costs make it much more risky to hire workers in the first place.

# **AGRICULTURE**

In the discussion of Economic Structure, we saw that labor productivity is very low in agriculture, with an estimated 34 percent of the workforce producing just 15 percent of GDP. Agricultural value added per worker in 2004 (latest year) was just \$236 (in constant 2000 prices). This compares very unfavorably with the expected value of \$458, and a productivity figure of \$2,499 per worker for South Africa. In Zambia, however, labor productivity in agriculture is even lower, at \$219 per worker (Figure 5-4).

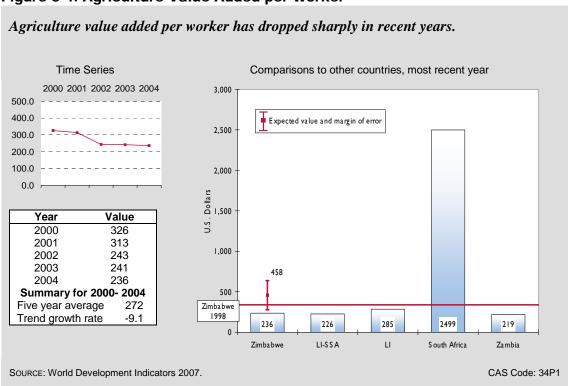


Figure 5-4. Agriculture Value Added per Worker

More worrying is the sharp decline in agricultural value added in recent years. Between 2000 and 2004, estimated agricultural value added per worker fell by nearly one-fourth, while overall value added in the sector fell by more than one-third. The latter indicator has declined every year since 2000, at an average rate of 8.1 percent per annum. These figures attest to the collapse of a once thriving sector in the wake of a destructive policy environment and implementation of the *Fast Track Land Reform* scheme in 2000.<sup>56</sup> The scheme severely disrupted commercial farming throughout the country and drove up unemployment by causing widespread loss of commercial farm jobs.

The policy mismanagement is highlighted by WEF's Agriculture Policy Costs Index. On a scale of 1 (excessively burdensome) to 7 (well balanced), Zimbabwe scored a 1.9 in 2006. By this assessment, agricultural policies are among the most burdensome in the world. Zimbabwe's score is barely half the LI-SSA average of 3.7, itself very weak, and falls far below the scores in South Africa (4.3) and Zambia (5.3).

The picture of poor performance is reinforced by FAO data showing that cereal yields have declined drastically. In 2005, the average yield was 717 kilograms per hectare, representing a drop of 40 percent in just five years. That yield is also much lower than the expected value of 1,085 kilograms per hectare, as well as yields in South Africa (3,330) and Zambia (1,595). A recent FAO and World Food Program assessment of crop and food security in Zimbabwe estimates a harvest of 799,000 MT of maize and 126,000 MT of small grains in 2006/07. The report estimates that more than 1 million tons of cereal imports will be required to meet food security needs. The FAO's Crop Production Index shows a similar decline, registering a mere 66.1 percent of average production for the 1999–2001 baseline period. The LI-SSA average is 104.9, with figures of 102.6 and 108.2 for South Africa and Zambia, respectively. Livestock production has fared somewhat better, remaining relatively stable over the same period, with an FAO index number of 99.0 in 2004. This is well below the LI-SSA value of 106.6 and South Africa's 108.6, but comparable to the index value of 98.9 for Zambia in the same year.

The decline in agriculture is extremely serious because of its broad impact on growth, employment, poverty, and social unrest. On the positive side, Zimbabwe was once known as the breadbasket of southern Africa, and the agricultural sector has outstanding potential for rebounding to higher levels of productivity and output once the policy regime becomes more conducive to private investment and market-determined pricing. At a minimum this will require a restoration of macroeconomic stability, credible and sustainable improvements in governance, and restoration of property rights. Revitalization of agriculture will also require the rehabilitation of rural infrastructure, a revival of efficient banking services, and market-oriented programs to support the growth of both commercial and family agriculture.

<sup>&</sup>lt;sup>56</sup> It must be noted that the government had a genuine grievance against the appropriation of nearly all the best farmland by minority white farmers during the colonial period. At issue is the manner in which the government sought to redress this historic inequity.

# Appendix. CAS Methodology

# CRITERIA FOR SELECTING INDICATORS

The economic performance evaluation in this report is designed to balance the need for broad coverage and diagnostic value with the need for brevity and clarity. The analysis covers 15 topics related to economic growth and just over 100 variables. For the sake of brevity, the write-up in the text highlights issues for which the "dashboard lights" appear to be signaling problems, which suggest possible priorities for USAID intervention. The table below provides a full list of indicators examined for this report. The separate Data Supplement contains the complete data set for Zimbabwe, including data for the benchmark comparisons, and technical notes for every indicator. <sup>1</sup>

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

When Level I indicators suggest weak performance, we review a limited set of *diagnostic* supporting indicators. These Level II indicators provide additional details, or shed light on why the primary indicators may be weak. For example, if economic growth is poor, one can examine data on investment and productivity as diagnostic indicators. If a country performs poorly on educational achievement, as measured by the youth literacy rate, one can examine determinants such as expenditure on primary education, and the pupil—teacher ratio.<sup>2</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

<sup>&</sup>lt;sup>1</sup> The Data Supplement is merged with the main report on our website, and available at <a href="http://www.nathaninc.com/casreports">http://www.nathaninc.com/casreports</a>.

<sup>&</sup>lt;sup>2</sup> Deeper analysis of the topic using more detailed data (Level III) is beyond the scope of this series.

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Millennium Challenge Corporation. Finally, redundancy is minimized. If two indicators provide similar information, preference is given to one that is simplest to understand, or most widely used. For example, both the Gini coefficient and the share of income accruing to the poorest 20 percent of households can be used to gauge income inequality. We use the income share because it is simpler and more sensitive to changes.

# BENCHMARKING METHODOLOGY

Comparative benchmarking is the main tool used to evaluate each indicator. The analysis draws on several criteria, rather than a single mechanical rule. The starting point is a comparison of performance in Zimbabwe relative to the average for countries in the same income group and region—in this case, lower-middle-income countries in Africa.<sup>3</sup> For added perspective, three other comparisons are examined: (1) the global average for this income group; (2) respective values for two comparator countries approved by the Zimbabwe mission (in this case Zambia and South Africa); and (3) the average for the five best- and five worst-performing countries globally. Most comparisons are framed in terms of values for the latest year of data from available sources. Five-year trends are also taken into account when this information sheds light on the performance assessment.<sup>4</sup>

For selected variables, a second source of benchmark values uses statistical regression analysis to establish an expected value for the indicator, controlling for income and regional effects.<sup>5</sup> This approach has three advantages. First, the benchmark is customized to Zimbabwe's level of income. Second, the comparison does not depend on the exact choice of reference group. Third, the methodology allows the quantification of the margin of error and establishment of a "normal band" for a country with Zimbabwe's characteristics. An observed value falling outside this band on the side of poor performance signals a serious problem.<sup>6</sup>

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

<sup>&</sup>lt;sup>3</sup> Income groups as defined by the World Bank for 2004. For this study, the average is defined in terms of the mean; future studies will use the median instead, because the values are not distorted by outliers.

<sup>&</sup>lt;sup>4</sup> The five-year trends are computed by fitting a log-linear regression line through the data points. The alternative of computing average growth from the end points produces aberrant results when one or both of those points diverges from the underlying trend.

 $<sup>^5</sup>$  This is a cross-sectional OLS regression using data for all developing countries. For any indicator, Y, the regression equation takes the form: Y (or ln Y, as relevant) = a + b \* ln PCI + c \* Region + error - where PCI is per capita income in PPP\$, and Region is a set of 0-1 dummy variables indicating the region in which each country is located. When estimates are obtained for the parameters a, b, and c, the predicted value for Zimbabwe is computed by plugging in Zimbabwe-specific values for PCI and Region. Where applicable, the regression also controls for population size and petroleum exports (as a percentage of GDP).

<sup>&</sup>lt;sup>6</sup> This report uses a margin of error of 0.66 times the standard error of estimate (adjusted for heteroskedasticity, where appropriate). With this value, 25 percent of the observations should fall outside the normal range on the side of poor performance (and 25 percent on the side of good performance). Some regressions produce a very large standard error, giving a "normal band" that is too wide to provide a discerning test of good or bad performance.

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# **STANDARD CAS INDICATORS**

Indicator	Level <sup>a</sup>	MDG, MCA, or EcGov <sup>b</sup>
Statistical Capacity Indicator	I	EcGov
Growth Performance		
Per capita GDP, in purchasing power parity dollars	I	
Per capita GDP, in current US dollars	I	
Real GDP growth	I	
Growth of labor productivity	II	
Investment Productivity, incremental capital-output ratio (ICOR)	II	
Gross fixed investment, % GDP	II	
Gross fixed private investment, % GDP	II	
Poverty and Inequality		
Human poverty index (0 for excellent to 100 for poor)	I	
Income-share, poorest 20%	I	
Population living on less than \$1 PPP per day/ \$2 PPP per day <sup>c</sup>	I	MDG
Poverty Headcount, by national poverty line	I	MDG
PRSP Status	I	EcGov
Population below minimum dietary energy consumption	II	MDG
Economic Structure		
Employment or labor force structure	I	
Output structure	I	
Demography and Environment		
Adult literacy rate	I	
Youth dependency rate/ elderly dependency rate <sup>d</sup>	I	
Environmental performance index (0 for poor to 100 for excellent)	I	
Population size and growth	I	
Urbanization rate	I	
Gender		
Girls primary completion rate	I	MCA
Gross enrollment rate, all levels, male, female	I	MDG
Life expectancy at birth, male, female	I	
Labor force participation rate, male, female	I	
Fiscal and Monetary Policy		
Govt. expenditure, % GDP	I	EcGov
Govt. revenue, excluding grants, % GDP	I	EcGov
Growth in the broad money supply	I	EcGov
Inflation rate	I	MCA
Overall govt. budget balance, including grants, % GDP	I	MCA, EcGov
Composition of govt. expenditure	II	

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APPENDIX

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

CAS METHODOLOGY A-5

Indicator	Level <sup>a</sup>	MDG, MCA, or EcGov <sup>b</sup>
Trade, % GDP	I	
Trade in services, % GDP	I	
Concentration of exports	II	
Inward FDI potential index	II	
Net barter terms of trade	II	
Real effective exchange rate (REER)	II	EcGov
Structure of merchandise exports	II	
Trade policy index	II	MCA, EcGov
Ease of trading across boarders ranking	II	EcGov
Economic Infrastructure	<u>'</u>	
Internet users per 1,000 people	I	MDG
Overall infrastructure quality index (1 for poor to 7 for excellent)	I	EcGov
Telephone density, fixed line and mobile	I	MDG
Quality of infrastructure—railroads, ports, air transport, and electricity	II	
Roads paved, % total roads	II	
Science and Technology		
Expenditure for R&D, % GDP	I	
FDI and technology transfer index (1 for poor to 7 for excellent)	I	
Availability of scientists and engineers index (1 for poor to 7 for excellent)	I	
Science and technology journal articles per million people	I	
IPR protection index (1 for poor to 7 for excellent)	I	
Health		
HIV prevalence	I	
Life expectancy at birth	I	
Maternal mortality rate	I	MDG
Access to improved sanitation	II	MDG
Access to improved water source	II	MDG
Births attended by skilled health personnel	II	MDG
Child immunization rate	II	MCA
Prevalence of child malnutrition (weight for age)	II	
Public health expenditure, % GDP	II	MCA, EcGov
Education		
Net primary enrollment rate – female, male, total	I	MDG
Persistence in school to grade 5	I	MDG
Youth literacy rate, all, male, female	I	
Net secondary enrollment rate	I	
Gross tertiary enrollment rate	I	

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

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

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

<sup>&</sup>lt;sup>b</sup> MDG—Millennium Development Goal indicator MCA—Millennium Challenge Account indicator

<sup>&</sup>lt;sup>c</sup> \$1 PPP for lower income countries and \$2 PPP for lower middle income countries.

<sup>&</sup>lt;sup>d</sup> Under Demography and Environment, the elderly dependency rate is applied to Eastern Europe and Former Soviet Union countries only.

# Data Supplement

Full Dataset: Zimbabwe and Benchmark Comparisons	1
Technical Notes	20

## **Growth Performance**

	Statistical Capacity Indicator (0 for poor to 100 for good)	Per capita GDP, in Purchasing Power Parity Dollars	Per capita GDP, in current U.S. Dollars	Real GDP Growth	Growth of Labor Productivity	Investment Productivity, Incremental Capital- Output Ratio (ICOR)	Gross Fixed Investment, % of GDP	Gross Fixed Private Investment, % of GDP
Indicator Number	01P1	11P1	11P2	11P3	11S1	11S2	11S3	11S4
Zimbabwe Data								
Latest Year (T)	2006	2006	2006	2006	2005	2005	2006	2006
Value Year T	53	2,437	472	-5.1		-2.1	16.1	3.1
Value Year T-1	68	2,494	388	-5.2		-1.9	17.3	4.5
Value Year T-2	68	2,590	401	-3.7		-2.0	12.9	5.1
Value Year T-3		2,612	894	-10.4		-4.3	10.2	2.0
Value Year T-4		2,884	2,652	-4.5		-9.0	12.1	1.5
Average Value, time series		2,603	961	-5.8		-3.8	13.7	3.2
Growth Trend		-3.8	-42.9	4.7		37.4	11.0	23.0
Benchmark Data								
Regression Benchmark				4.8				
Lower Bound				2.4				
Upper Bound				7.2				
Latest Year South Africa	2006	2006 est.	2006 est.	2006	2005	2005	2006 est.	2001
South Africa Value Latest Year	87	12,796	5,384	5.0	0.4	3.8	17.1	-117.9
Latest Year Zambia	2006	2006 est.	2006 est.	2006	2005	2006	2006 est.	
Zambia Value Latest Year	58	1,083	922	6.0	-0.3	5.1	26.5	
LI-SSA Average		1,172	363	5.1	1.3	4.6	18.8	-546.0
LI Average		1,446	425	5.5	1.3	4.6	19.6	-222.8
High Five Avg.	0	43,504	53,335	15.9	11.5	54.5	44.7	-25.7
Low Five Avg.	0	709	153	-5.4	-8.7	-86.2	8.2	-1,274.9

# Poverty and Inequality

	Human Poverty Index (0, excellent; 100, poor)	Income Share, Poorest 20%	Percentage of Population Living on Less Than \$1 PPP per Day	Percentage of Population Living on Less Than \$2 PPP per Day	Poverty Headcount, National Poverty Line	PRSP Status	Population % Below Minimum Dietary Energy Consumption
Indicator Number	12P1	12P2	12P3a	12P3b	12P4	12P5	12S1
Zimbabwe Data							
Latest Year (T)	2006	1995	1995	1995	2003	2007	2002/04
Value Year T	46.0	4.6	56.1	83.0	72.0	NO	47.0**
Value Year T-1	45.9						45.0
Value Year T-2	52.0		36.0	64.2			
Value Year T-3	52.0		36.0	64.2			
Value Year T-4							
Average Value, time series							
Growth Trend							
Benchmark Data							
Regression Benchmark	39.5	5.6	27.2	57.2	47.2		
Lower Bound	34.0	4.7	19.3	48.8	39.0		
Upper Bound	45.1	6.5	35.1	65.6	55.4		
Latest Year South Africa	2006	2000	2000	2000	2000		
South Africa Value Latest Year	30.9	3.5	10.7	34.1	50.0*		n/a
Latest Year Zambia	2006	2004	2004	2004	2004		2002
Zambia Value Latest Year	45.6	3.6	63.8	87.2	68.0		47.0
LI-SSA Average	43.0	6.1	46.0	79.4	42.1		33.0
LI Average	40.6	7.4	25.5	72.7	37.7		29.0
High Five Avg.	57.6	8.7	33.7	69.8	51.2	-	67.0
Low Five Avg.	4.0	3.1	2.0	4.7	22.3	-	2.5

<sup>\*</sup> Estimate

<sup>\*\*</sup> Annual average between 2002 to 2004

# **Economic Structure**

	Labor Force Stru	ucture, Employme	nt (% of total)	Output struc	Output structure, Value Added (% GDP)			
	Agriculture	Industry	Services	Agriculture	Industry	Services, etc.		
Indicator Number	13P1a	13P1b	13P1c	13P2a	13P2b	13P2c		
Zimbabwe Data								
Latest Year (T)	2005/06			2006	2006	2006		
Value Year T	34.2			15.0	27.5	57.2		
Value Year T-1				16.0	28.0	55.9		
Value Year T-2				18.8	25.6	55.6		
Value Year T-3				19.2	25.0	55.8		
Value Year T-4				18.6	22.5	58.9		
Average Value, time series				17.5	25.7	56.7		
Growth Trend				-6.2	5.2	-0.6		
Benchmark Data								
Regression Benchmark	49.4	12.8	35.7	24.0	28.5	46.3		
Lower Bound	42.8	9.6	30.6	18.1	22.9	40.2		
Upper Bound	56.0	16.1	40.8	29.9	34.1	52.5		
Latest Year South Africa	2003	2003	2003	2005	2005	2005		
South Africa Value Latest Year	10.3	24.5	65.1	3.1	30.8	66.1		
Latest Year Zambia	2006 est.	2006 est.	2006 est.	2004	2004	2004		
Zambia Value Latest Year	85.0	6.0	9.0	20.9	37.1	42.0		
LI-SSA Average	78.0	6.7	15.3	36.0	19.6	46.3		
LI Average	65.5	11.5	23.1	31.4	21.4	45.0		
High Five Avg.	54.7	38.6	79.7	63.6	67.6	80.6		
Low Five Avg.	0.4	11.1	30.5	2.2	11.6	19.7		

<sup>\*</sup> Data source (CIA World Factbook) does not list date for this figure

# **Demography and Environment**

	Adult Literacy Rate	Youth Dependency Rate	Elderly Dependency Rate	Environmental Performance Index (1 to 100)	Population Size (Millions)	Population Growth, Annual %	Urbanization Rate
Indicator Number	14P1	14P2a	14P2b	14P3	14P4a	14P4b	14P5
Zimbabwe Data							
Latest Year (T)	2004	2005	2005	2006	2005	2005	2005/06
Value Year T	89.4	0.71	0.06	63.0	13.0	0.6	31.6
Value Year T-1	90.0	0.72	0.06		12.9	0.6	
Value Year T-2	90.0	0.74	0.06		12.9	0.6	
Value Year T-3	89.3	0.76	0.06		12.8	0.7	
Value Year T-4		0.77	0.06		12.7	0.8	34.5
Average Value, time series		0.74	0.06		12.9	0.6	
Growth Trend		-2.10	0.88		0.6	-9.3	
Benchmark Data							
Regression Benchmark	61.4	0.77	0.06	52.5			42.7
Lower Bound	52.1	0.70	0.04	47.3			32.8
Upper Bound	70.6	0.84	0.08	57.6			52.7
Latest Year South Africa	2004.0	2005	2005	2006	2007	2007	2004
South Africa Value Latest Year	82.4	0.52	0.07	62.0	44.0*	-0.5*	57.4
Latest Year Zambia	2004	2005	2005	2006	2005	2007	2004
Zambia Value Latest Year	68.0	0.90	0.06	54.4	11.7	1.7*	36.2
LI-SSA Average	53.2	0.84	0.06	51.3	11.2	2.4	35.0
LI Average	58.6	0.80	0.06	50.4	11.2	2.2	34.0
High Five Avg.	99.7	0.99	0.28	86.9	611.1	5.5	100.0
Low Five Avg.	24.7	0.17	0.02	31.8	0.0	-0.7	10.4

<sup>\*</sup> Estimate

## Gender

	Girls' Primary	Gross Enrollme	nt Rate All Levels	Life Expe	ctancy	Labor Force Par	ticipation Rate
	Completion Rate	Male	Female	Male	Female	Male	Female
	15P1	15P2a	15P2b	15P3a	15P3b	15P4a	15P4b
Indicator Number	1371	15F2a	13F20	Torsa	15730	1574a	13740
Zimbabwe Data							
Latest Year (T)	2003	2004	2004	2005	2005	2005	2005
Value Year T	78.6	54.0	51.0	43.0	42.0	85.0	65.0
Value Year T-1	79.8	54.0	51.0	37.0	34.0	85.0	65.0
Value Year T-2	84.9	60.0	57.0			85.0	63.0
Value Year T-3		62.0	58.0			85.0	64.0
Value Year T-4	86.3					86.0	65.0
Average Value, time series						85.2	64.4
Growth Trend						-0.2	0.2
Benchmark Data							
Regression Benchmark	61.3	53.9	48.9	49.9	51.7	86.0	59.5
Lower Bound	51.9	47.8	41.9	46.1	47.5	82.4	51.2
Upper Bound	70.7	60.1	55.9	53.6	55.9	89.6	67.9
Latest Year South Africa	2004	2004	2004	2005	2005	2005	2005
South Africa Value Latest Year	98.7	76.0	77.0	46.7	48.7	81.9	49.3
Latest Year Zambia	2005	2004	2004	2005	2005	2005	2005
Zambia Value Latest Year	65.7	56.0	52.0	38.9	37.9	91.5	68.3
LI-SSA Average	41.5	49.5	43.0	47.0	47.7	91.9	69.2
LI Average	54.9	53.0	46.0	53.1	56.2	88.7	61.9
High Five Avg.	117.0	101.2	106.8	78.5	84.1	98.6	92.2
Low Five Avg.	22.2	28.2	21.8	35.1	35.1	67.6	19.2

# Fiscal and Monetary Policy

						Composition of Government Expenditure						
	Government Expenditure, % of GDP	Government Revenue, % of GDP	Growth in Money Supply	Inflation Rate	Budget Balance, Including Grants, % of GDP	Wages & salaries	Goods & services	Interest payments	Subsidies & other current transfers	Cap. Exp.		
Indicator Number	21P1	21P2	21P3	21P4	21P5	21S1a	21S1b	21S1c	21S1d	21S1e		
Zimbabwe Data												
Latest Year (T)	2006	2006	2006	2006	2006	2006	2006	2006	2006	2006		
Value Year T	53.5	43.3	1,416.6	1,033.5	-10.0	29.9	16.6	13.4	15.5	24.3		
Value Year T-1	49.6	43.7	520.0	266.8	-6.0	38.1	20.3	14.2	17.1	9.4		
Value Year T-2	41.5	33.8	222.6	350.0	-7.6	37.7	19.2	7.6	17.9	12.6		
Value Year T-3	25.3	24.9	413.5	365.0	-0.2	37.9	28.4	5.0	17.2	7.7		
Value Year T-4	20.7	17.9	164.8	133.2	-2.7	35.3	26.2	14.1	15.7	7.2		
Average Value, time series	38.1	32.7	547.5	429.7	-5.3	35.8	22.2	10.9	16.7	12.2		
Growth Trend	25.7	23.3	45.3	37.8	-60.2	-3.2	-12.4	9.6	-0.4	26.4		
Benchmark Data												
Regression Benchmark	24.7	25.8	15.0	5.6	-1.5							
Lower Bound	17.5	20.8	8.6	2.9	-3.8							
Upper Bound	31.8	30.8	21.5	8.3	0.8							
Latest Year South Africa	2006	2006	2006	2006	2006	2001	2001	2001	2001	2001		
South Africa Value Latest Year	26.4	26.5	23.1	4.6	0.1	50.3	12.7	16.8	28.2	4.6		
Latest Year Zambia	2006	2006	2006	2006	2006							
Zambia Value Latest Year	22.8	16.9	14.6	9.2	20.0*							
LI-SSA Average				8.3		11.6	26.1	9.0	50.6			
LI Average	17.9	13.6	19.0	7.9	-3.5	17.8	18.9	5.4	40.9			
High Five Avg.	48.8	50.6	107.2	89.7	6.8	69.2	48.8	35.6	71.2	0.0		
Low Five Avg.	10.6	8.9	5.2	-1.2	-11.4	3.2	4.6	0.6	16.2	0.0		

<sup>\*</sup> This figure is an anomaly. See Fiscal and Monetary Policy Section of the report.

# Fiscal and Monetary Policy (cont'd)

	Composition of	Con	nposition of Gov	vernment Revenu	ıe	Composition of Money Supply Growth				
	Government Expenditure (Other expenditure)	Taxes on goods and services	Taxes on internationa	Social contributions	Other taxes	Domestic credit to public sector	Domestic credit to private sector	Net credit to nonfinancial public enterprises	Net foreign assets, reserves	Other items, net
Indicator Number	21S1f	21S2b	21S2c	21S2d	21S2e	21S3a	21S3b	21S3c	21S3d	21S3e
Zimbabwe Data										
Latest Year (T)	2006	2006	2006	2006	2006	2005	2005	2005	2005	2005
Value Year T	0.2	29.7	10.2	1.4	3.1	79.1	28.9	3	2.5	3.49
Value Year T-1	0.8	35.0	11.6	2.2	2.0	75.6	45.0	3	-20.4	-3.37
Value Year T-2	1.4	32.5	11.4	2.3	3.8	20.7	80.3	8	-6.4	-2.60
Value Year T-3	3.9	34.7	6.8	1.5	3.6	15.5	55.4	8	-0.1	21.08
Value Year T-4	1.5	31.2	8.9	1.3	6.4	43.5	38.6	11	-3.3	10.09
Average Value, time series	1.6	32.6	9.8	1.7	3.8	46.9	49.7	7	-5.5	5.74
Growth Trend	-52.8	-0.9	8.1	4.3	-20.2	27.8	-7.9	-39		
Benchmark Data										
Regression Benchmark										
Lower Bound										
Upper Bound										
Latest Year South Africa	2004	2005	2004	2005	2004	2006	2006	2006	2006	2006
South Africa Value Latest Year	50.8	3.1	2.4	2.1	4.8	-24.6	138.0	40	1.7	-54.61
Latest Year Zambia						2006	2006	2006	2006	2006
Zambia Value Latest Year						-76.7	49.3	149	-0.3	-20.96
LI-SSA Average	21.2	20.5	27.4	4.8	1.1					
LI Average	19.5	23.7	22.2	2.7	1.2					
High Five Avg.	0.0	64.6	44.9	45.3	19.8	-	-	-	-	0.00
Low Five Avg.	0.0	3.1	-1.7	0.4	-	-	-	-	-	0.00

## **Business Environment**

	Control of Corruption Index (-2.5, poor; 2.5, excellent)	Ease of Doing Business Ranking (1 to 155)	Rule of Law Index (-2.5, poor; 2.5, excellent)	Regulatory Quality Index (-2.5, poor; 2.5, excellent)	Government Effectiveness Index (-2.5, poor; 2.5, excellent)	Cost of Starting a Business % GNI per Capita	Procedures to Enforce a Contract	Procedures to Register Property	Procedures to Start a Business
Indicator Number	22P1	22P2	22P3	22P4	22P5	22\$1	22\$2	22S3	22\$4
Zimbabwe Data									
Latest Year (T)	2006	2006	2006	2006	2006	2006	2006	2006	2006
Value Year T	-1.4	153.0	-1.7	-2.2	-1.5	35.6	33	4	10
Value Year T-1	-1.3	145.0	-1.5	-2.4	-1.5	20.2	33	4	10
Value Year T-2	-1.3		-1.7	-2.2	-1.1	304.7	33	4	10
Value Year T-3	-1.2		-1.5	-2.2	-1.1	500.5	33		10
Value Year T-4	-1.2		-1.4	-2.0	-1.1				
Average Value, time series	-1.3	149.0	-1.6	-2.2	-1.3		33	4	10
Growth Trend	-3.1		-2.0	-0.6	-12.0				
Benchmark Data									
Regression Benchmark		129.0	-0.8	-0.6	-0.7				
Lower Bound		107.7	-1.1	-0.9	-1.0				
Upper Bound		150.3	-0.5	-0.4	-0.5				
Latest Year South Africa	2006	2006	2006	2006	2006	2006	2006	2006	2006
S.A Value Latest Year	0.6	29.0	0.2	0.7	0.8	6.9	26	6	9
Latest Year Zambia	2006	2006	2006	2006	2006	2006	2006	2006	2006
Zambia Value Latest Year	-0.8	102.0	-0.6	-0.6	-0.7	29.9	21	6	6
LI-SSA Average	-0.8	148.8	-0.9	-0.7	-0.9	143.9	36	6	11
LI Average	-0.9	142.5	-0.9	-0.8	-0.9	120.6	37	6	11
High Five Avg.	2.4	-	2.0	1.8	2.2	1,033.2	66	15	18
Low Five Avg.	-1.6	-	-1.8	-2.2	-1.7	0.5	15	2	2

# **Business Environment (cont'd)**

	Time to Enforce a Contract	Time to Register Property	Time to Start a Business	Total Tax Payable by Business, % operating profit	Business Costs of Crime, Violence and Terrorism (1 for poor to 7 for excellent)	Senior Manager Time Spent Dealing with Government Regulations (%)
Indicator Number	22\$5	22\$6	22\$7	22\$8	22\$9	22S10
Zimbabwe Data						
Latest Year (T)	2006	2006	2006	2006	2006	
Value Year T	410	30	96	37.0	3.3	n/a
Value Year T-1	410	30	96	37.0	3.7	
Value Year T-2	410	30	96		3.3	
Value Year T-3	410		96		3.2	
Value Year T-4					3.0	
Average Value, time series	410	30	96	37.0	3.3	
Growth Trend						
Benchmark Data						
Regression Benchmark						
Lower Bound						
Upper Bound						
Latest Year South Africa	2006	2006	2006	2006	2006	2003
South Africa Value Latest Year	600	23	35	38.3	2.6	9.2
Latest Year Zambia	2006	2006	2006	2006	2006	2002
Zambia Value Latest Year	404	70	35	22.2	3.0	13.0
LI-SSA Average	520	98	43	49.2	3.4	6.3
LI Average	470	72	46	45.9	3.4	5.8
High Five Avg.	1,476	595	299	255.3	6.6	17.4
Low Five Avg.	143	2	4	14.6	1.9	1.5

# **Financial Sector**

	Domestic Credit to Private Sector, % GDP	Interest Rate Spread	Broad Money Supply, % GDP	Stock Market Capitalization Rate, % GDP	Credit Information Index (0 for poor to 6 for excellent)	Legal Rights of Borrowers and Lenders (0 for poor to 10 for excellent)	Real Interest Rate	Number of Active Microfinance Borrowers
Indicator Number	23P1	23P2	23P3	23P4	23P5	23S1	23S2	23S3
Zimbabwe Data								
Latest Year (T)	2005	2005	2006	2005	2006	2006	2005	2005
Value Year T	27.0	144.6	42.5	71.2		6.0	-0.6	4,462.0
Value Year T-1	22.3	175.7	36.5	41.2		6.0	-15.8	
Value Year T-2	41.3	61.4	28.7	62.9		6.0	-61.4	3,017.0
Value Year T-3	21.3	18.1	31.0	71.4			-38.9	
Value Year T-4	18.2	24.1	23.3	77.7			-21.8	
Average Value, time series	26.0	84.8	32.4	64.9		6.0	-27.7	
Growth Trend	8.4	58.6	13.6	-7.2			80.6	
Benchmark Data								
Regression Benchmark	23.1	11.0	33.5	31.7	1.6			
Lower Bound	9.5	8.0	19.4	1.9	0.3			
Upper Bound	36.7	14.1	47.6	61.4	2.8			
Latest Year South Africa	2005	2005	2006	2005	2006	2006	2005	2007
South Africa Value Latest Year	143.5	4.6	78.1	236.0	5.0	5.0	5.6	124,945,830.0
Latest Year Zambia	2005	2005	2006	2005	2006	2006	2005	2006
Zambia Value Latest Year	7.6	17.0	17.0	13.6		7.0	7.7	18,053.0
LI-SSA Average	10.8	12.7	23.0	14.3	1.0	4.0	10.7	
LI Average	13.0	12.5	25.1	11.5	1.0	4.0	10.5	
High Five Avg.	175.6	56.8	185.7	246.3	6.0	9.4	29.4	0.0
Low Five Avg.	2.3	1.5	8.7	1.1	0.0	0.7	-11.9	0.0

#### **External Sector**

	Aid, % of GNI	Current Account Balance, % GDP	Debt Service ratio, % Exports	Exports Growth, Goods and Services	Foreign Direct Investment, % GDP	Gross International Reserves, Months of Imports	Gross Private Capital Inflows, % GDP	Present Value of Debt, % GNI	Remittance Receipts, % Exports	Trade, % GDP	Trade in Services, % GDP
Indicator Number	24P1	24P2	24P3	24P4	24P5	24P6	24P7	24P8	24P9	24P10	24P11
Zimbabwe Data											
Latest Year (T)	2005	2006 est.	2004	2006	2005	2006		2005		2006	
Value Year T	11.0	-3.9	4.70	7.7	2.3	0.8		48.7		71.5	n/a
Value Year T-1	4.0	-11.2		-4.6	1.3	0.6		33.4		96.4	
Value Year T-2	2.4	-8.3		0.9	0.4	0.5				93.9	
Value Year T-3	0.7	-2.9		-7.3	0.1	0.5		•		38.3	
Value Year T-4	1.3	-0.6		-14.7	0.0	0.5		39.4		13.7	
Average Value, time series	3.9	-5.4		-3.6	0.8	0.6				62.8	
Growth Trend	61.2	-51.0			114.0	11.2				42.3	
Benchmark Data											
Regression Benchmark	7.3	-3.1	7.1	3.9	4.1	3.3		48.5	12.2	83.2	21.3
Lower Bound	2.5	-8.1	2.1	-2.3	1.8	1.8		27.1	3.5	60.7	10.9
Upper Bound	12.2	1.9	12.0	10.0	6.4	4.7		69.8	20.9	105.8	31.7
Latest Year South Africa	2005	2006 est.	2005	2005	2004	2006	2004	2005		2005	2004
S.A. Value Latest Year	0.3	-6.4	6.9	4.9	0.3	3.3	3.8	14.1		55.7	8.3
Latest Year Zambia	2005	2006 est.	2000	2004	2004	2006	2000	2005		2005	2000
Zambia Value Latest Year	13.9	-0.4	20.2	12.6	6.2	3.0	3.7	29.3		41.6	14.0
LI-SSA Average	16.0	-5.2	7.8	5.6	2.4		1.5	35.9	5.3	57.8	14.9
LI Average	12.4	-3.6	7.6	8.0	1.7	4.0	1.5	38.1	10.2	66.1	14.5
High Five Avg.	51.9	21.0	49.1	49.0	90.7	16.4	178.6	352.4	83.1	242.3	92.1
Low Five Avg.	-0.2	-20.5	1.4	-15.5	-0.7	0.4	-2.1	10.9	0.0	26.3	5.0

#### External Sector (cont'd)

					S	tructure	of Merchandise E	xports			Ease of
	Concentration of Exports	Inward FDI Potential Index (0, poor 1, excellent)	Net Barter Terms of Trade (2000 = 100)	Real Effective Exchange Rate (REER) (2000 = 100)	Agricultural raw materials	Fuel	Manufactures	Ores and metals	Food	Trade Freedom Index (1 to 100)	Trading Across Borders Ranking
Indicator Number	24S1	24S2	24S3	24\$4	24S5a	24S5b	24S5c	24S5d	24S5e	24S6	24S7
Zimbabwe Data											
Latest Year (T)	2004	2004	2006	2006	2004	2004	2004	2004	2004	2007	2006
Value Year T	43.3	0.04	78.4	81.2	15.7	1.6	28.5	23.2	30.9	42.6	168
Value Year T-1			79.9	63.3						42.2	168
Value Year T-2	24.6		86.7	69.4	11.7	1.2	38.5	21.0	27.6	56.0	
Value Year T-3	69.8		93.4	198.0	9.8	0.7	14.9	17.9	56.7	48.8	
Value Year T-4			97.5	359.0	12.5	1.1	28.1	11.0	47.2	47.2	
Average Value, time series			87.2		12.4	1.1	27.5	18.3	40.6	47.4	168
Growth Trend			-5.9							-3.5	
Benchmark Data											
Regression Benchmark											
Lower Bound											
Upper Bound											
Latest Year S.A.		2004	2006	2006	2004	2004	2004	2004	2004	2007	2006
S.A. Value Latest Year		0.18	109.6	104.1	2.3	9.1	57.6	22.2	8.8	68.8	67
Latest Year Zambia		2004	2006	2006	2004	2004	2004	2004	2004	2007	2006
Zambia Value Latest Year		0.09	204.3	176.4	10.3	1.7	10.0	62.4	15.5	60.8	170
LI-SSA Average		0.10			6.2	1.4	13.2	3.1	39.5		145
LI Average		0.10	93.9		5.3	1.7	19.0	3.1	23.2		139
High Five Avg.	-	0.48	130.7	-	34.5	92.2	95.2	52.0	87.6	52.0	-
Low Five Avg.	-	0.06	65.7	-	0.0	0.0	3.0	0.0	0.2	40.0	-

#### **Economic Infrastructure**

		Overall		Quality of I	nfrastructur	e (1, poor; 7, exc	ellent)	
	Internet Users per 1,000 people	Infrastructure Quality(1, poor; 7, excellent)	Telephone Density, Fixed Line and Mobile per 1,000 people	Air Transport	Port	Rail Development	Electricity Supply	Roads, Paved (% total)
Indicator Number	25P1	25P2	25P3	25S1a	25S1b	25S1c	25S1d	25S2
Zimbabwe Data								
Latest Year (T)	2005	2006	2004	2006	2006	2006	2006	2006
Value Year T	76.9	2.9	55.2	2.6	3.0	2.7	2.2	17.0
Value Year T-1	63.4	3.4	52.0	3.1	2.4	2.8	3.0	
Value Year T-2	62.2	3.2	49.0	3.1	2.4	2.8	2.6	
Value Year T-3	39.1	3.2	44.7	3.1	1.8	2.7	2.7	
Value Year T-4	7.9	4.0	41.0	3.3	2.0	3.4	3.6	19.0
Average Value, time series	49.9	3.3	48.4	3.0	2.3	2.9	2.8	
Growth Trend	50.4	-5.6	7.5	-4.4	10.8	-4.2	-8.7	
Benchmark Data								
Regression Benchmark	18.3	2.6	123.9					
Lower Bound	7.0	2.1	71.2					
Upper Bound	29.7	3.0	176.6					
Latest Year South Africa	2005	2006	2003	2006	2006	2006	2006	2001
South Africa Value Latest Year	108.8	4.6	473.1	5.8	4.4	3.5	4.1	17.3
Latest Year Zambia	2004	2006	2004	2006	2006	2006	2006	2001
Zambia Value Latest Year	20.1	1.9	33.7	4.6	1.9	1.6	5.5	22.0
LI-SSA Average	5.5	2.2	25.2	3.1	2.4	1.6	2.6	18.6
LI Average	6.3	2.3	33.8	3.2	2.4	1.8	2.6	19.2
High Five Avg.	667.5	6.6	1,729.7	6.7	6.6	6.5	6.9	100.0
Low Five Avg.	1.0	1.7	9.4	2.2	1.3	1.1	1.5	6.0

#### Science and Technology

	Expenditure in Research and Development, % GDP	FDI Technology Transfer Index	Availability of Scientists and Engineers (1, poor; 7, excellent)	Scientific and Technology Journal Articles, per Million People	IPR Protection (1, poor; 7, excellent)
Indicator Number	26P1	26P2	26P3	26P4	26P5
Zimbabwe Data					
Latest Year (T)		2006	2006	2003	2006
Value Year T		3.9	3.9	96	2.9
Value Year T-1		3.9	3.8	104	3.4
Value Year T-2		4.1	3.9	113	3.1
Value Year T-3		4.5	3.5	104	3.1
Value Year T-4		4.5	3.9	102	3.0
Average Value, time series		4.2	3.8	104	3.1
Growth Trend		-4.3	0.8	-1.2	0.5
Benchmark Data					
Regression Benchmark	0.2	4.7	3.5	350	3.2
Lower Bound	0.1	4.3	3.1	310	2.8
Upper Bound	0.4	5.1	3.9	390	3.5
Latest Year South Africa	2001	2006	2006	2003	2006
South Africa Value Latest Year	0.8	5.3	3.8	2,364	5.1
Latest Year Zambia		2006	2006	1999	2006
Zambia Value Latest Year		5.7	3.9	26	2.4
LI-SSA Average	0.6	4.9	3.9	14	2.8
LI Average	0.3	4.8	3.9	11	2.7
High Five Avg.	3.7	6.1	6.2	17,149	6.4
Low Five Avg.	0.1	3.7	2.6	6	1.9

#### Health

	HIV Prevalence	Life Expectancy at Birth	Maternal Mortality Rate, per 100,000 Live Births	Access to Improved Sanitation	Access to Improved Water Source	Births Attended by Skilled Health Personnel	Child Immunization Rate	Prevalence of Child Malnutrition, Weight for Age	Public Health Expenditure, % GDP
Indicator Number	31P1	31P2	31P3	31 <b>S</b> 1	31S2	31 <b>S</b> 3	31S4	31 <b>S</b> 5	31 <b>S</b> 6
Zimbabwe Data									
Latest Year (T)	2005/06	2005	2002	2005/06	2005/06	2005/06	2005	2005/06	2006
Value Year T	18.1	42.5	1,068	42.0	75.8	79.7	87.5	16.6	4.3
Value Year T-1		35.5					82.5	13.0	5.0
Value Year T-2	22.1		1,100	53.0	81.0		80.0	13.0	2.9
Value Year T-3							67.5		2.9
Value Year T-4				57.0	83.0		71.5	13.0	2.1
Average Value, time series							77.8		3.4
Growth Trend							6.0		20.4
Benchmark Data									
Regression Benchmark	10.4	50.8	625						
Lower Bound	6.5	50.8	458						
Upper Bound	14.4	50.8	792						
Latest Year South Africa	2005	2005	2000	2004	2004	2003	2005	-	2006
S.A. Value Latest Year	18.8	47.7	230	65.0	88.0	92.0	88.0		3.5
Latest Year Zambia	2005	2005	2000	2004	2002	2002	2005	2003	2006
Zambia Value Latest Year	17.0	38.4	750	55.0	58.0	43.4	82.0	23.0	2.6
LI-SSA Average		46.4	990	34.0	59.5	47.0	71.2	25.6	2.1
LI Average		53.9	715	34.0	62.0	46.0	72.5	28.6	2.1
High Five Avg.	33.4	80.9	1,800	100.0	100.0	99.6	99.0	44.0	10.2
Low Five Avg.	0.1	37.2	3	8.0	26.4	15.0	37.6	5.6	0.7

#### Education

	Net Primary Enrollment Rate			Persi	stence to Grade	e 5	Youth Literacy Rate		
	Total	Female	Male	Total	Female	Male	Total	Male	
Indicator Number	32P1a	32P1b	32P1c	32P2a	32P2b	32P2c	32P3a	32P3b	
Zimbabwe Data									
Latest Year (T)	2005/06	2005/06	2005/06	2002	2002	2002	2005/06	2005/06	
Value Year T	91.4	91.6	91.3	69.7	71.2	68.2	95.8	95.7	
Value Year T-1				59.8	61.4	58.4	97.7	97.5	
Value Year T-2									
Value Year T-3									
Value Year T-4	82.2	85.1	84.4						
Average Value, time series									
Growth Trend									
Benchmark Data									
Regression Benchmark	74.3			73.1			70.7		
Lower Bound	66.4			65.6			62.1		
Upper Bound	82.1			80.7			79.2		
Latest Year South Africa	2004	2004	2004	2003	2003	2003	2006	2006	
South Africa Value Latest Year	87.1	87.2	86.9	82.5	83.4	81.6	93.9	93.5	
Latest Year Zambia	2005	2005	2005	2001			2006	2006	
Zambia Value Latest Year	88.9	89.1	88.7	98.5			69.5	72.6	
LI-SSA Average	66.6	64.4	69.8	65.6	66.3	66.0	69.5	72.6	
LI Average	73.4	70.2	73.4	70.4	66.2	66.0	70.3	76.4	
High Five Avg.	100.0	100.0	100.0	99.9	100.0	98.9	99.9	99.9	
Low Five Avg.	40.0	35.3	44.5	48.1	48.9	46.3	32.8	45.9	

### Education (cont'd)

		Net	Gross Tertiary Enrollment Rate, Total		Ex	penditure		Pupil-teacher Ratio, Primary School
	Youth Literacy Rate, Female			Primary, % GDP	Primary, Per Student, % GDP per capita	Secondary, Per Student, % GDP per capita	Tertiary. Per Student, % GDP per capita	
Indicator Number	32P3c	32P4	32P5	32S1	32\$2a	32S2b	32S2c	32 <b>S</b> 3
Zimbabwe Data								
Latest Year (T)	2005/06	2005/06	2005/06	2006	2001	2001	2000	2003
Value Year T	95.8	44.5	2.8	5.4	11.4	17.0	195.2	38.6
Value Year T-1	97.9			5.4	12.8	19.5		39.4
Value Year T-2				6.2				38.1
Value Year T-3		33.9	3.7	6.2				37.0
Value Year T-4		37.7	4.1					41.0
Average Value, time series								38.8
Growth Trend								-0.6
Benchmark Data								
Regression Benchmark		30.2	4.0					
Lower Bound		22.2	-2.7					
Upper Bound		38.3	10.7					
Latest Year South Africa	2006	2000	2003		2005	2005	2005	2004
South Africa Value Latest Year	94.3	61.7	15.3		14.2	17.6	49.6	35.6
Latest Year Zambia	2006	2004	2000	2006	2005	2005	2000	2005
Zambia Value Latest Year	66.2	23.7	2.3	1.8	5.4	8.2	168.2	51.1
LI-SSA Average	63.1	20.2	2.2		12.2	28.8	345.1	45.8
LI Average	64.8	22.8	2.8		11.4	20.1	184.2	42.7
High Five Avg.	99.9	97.8	83.9	6.2	24.3	47.8	470.0	68.3
Low Five Avg.	21.3	7.8	0.7	0.0	5.9	6.1	11.2	10.0

#### **Employment and Workforce**

	Labor Force Participation Rate, Total	Rigidity of Employment Index (0, minimal rigidity; 100, maximum)	Size of the Labor Force (in millions)	Growth of the Labor Force, Labor Force, Annual % Change	Unemployment Rate	Economically Active Children, % Children Ages 7-14	Firing Costs, Weeks of Wages
Indicator Number	33P1	33P2	33P3a	33P3b	33P4	33P5	33S1
Zimbabwe Data							
Latest Year (T)	2005	2006	2005	2005	2005/06	1999-2005	2006
Value Year T	74.7	34.0	5.8	1.4	44.6	26.0	446
Value Year T-1	74.8	34.0	5.7	2.4			360
Value Year T-2	74.0	33.0	5.5	0.7			273
Value Year T-3	74.6	33.0	5.5	0.9	8.2		199
Value Year T-4	75.1		5.5	2.2			
Average Value, time series	74.6		5.6	1.5			320
Growth Trend	0.1		1.4				27
Benchmark Data							
Regression Benchmark	73.0	44.6		2.5	9.1	29.6	
Lower Bound	68.4	33.9		1.1	6.7	18.9	
Upper Bound	77.6	55.4		4.0	11.6	40.2	
Latest Year South Africa	2005	2006	2005	2005	2006	1999	2006
South Africa Value Latest Year	65.3	41.0	19.6	0.7	25.5	27.7	24
Latest Year Zambia	2005	2006	2005	2005	2005	1999	2006
Zambia Value Latest Year	79.9	23.0	5.0	2.0	16.0	14.5	178
LI-SSA Average	80.0	49.8	4.6	2.7	4.8	25.6	37
LI Average	75.8	44.3	4.6	2.8	7.8	25.6	37
High Five Avg.	92.3	76.2	306.8	8.1	28.7	70.2	229
Low Five Avg.	49.7	0.0	0.1	-1.8	2.5	4.6	0

#### Agriculture

	Value Added per Worker	Cereal Yield	Growth in Value- Added	Agricultural Policy Costs Index (1, poor ; 7, excellent)	Crop Production Index (1999-2001 = 100)	Livestock Production Index (1999-2001 = 100)	Export Growth
Indicator Number	34P1	34P2	34P3	34S1	34S2	34\$3	34\$4
Zimbabwe Data							
Latest Year (T)	2004	2005	2006	2006	2004	2004	2002
Value Year T	236	717	-10.5	1.9	66.1	99.0	29.8
Value Year T-1	241	558	-22.0	2.0	69.6	99.7	36.4
Value Year T-2	243	753	-11.3	2.2	72.3	101.7	38.1
Value Year T-3	313	459	-11.5	1.5	98.2	103.5	-51.0
Value Year T-4	326	1,187	-14.3	n/a	108.6	102.3	31.0
Average Value, time series	272	735	-13.9		83.0	101.2	16.9
Growth Trend	-9.1	-8.1	-0.3		-13.4	-1.0	
Benchmark Data							
Regression Benchmark	458	1,085	4.0				
Lower Bound	279	482	-0.3				
Upper Bound	638	1,689	8.2				
Latest Year South Africa	2004	2005	2005	2006	2004	2004	2004
South Africa Value Latest Year	2,499	3,330	5.4	4.3	102.6	108.6	2.8
Latest Year Zambia	2004	2005	2005	2006	2004	2004	2004
Zambia Value Latest Year	219	1,595	-0.6	5.3	108.2	98.9	229.9
LI-SSA Average	226	1,147	3.1	3.7	104.9	106.6	21.3
LI Average	285	1,266	3.1	3.7	105.8	107.3	21.7
High Five Avg.	39,551	7,896	17.9	5.2	135.9	148.4	8
Low Five Avg.	110	369	-17.1	2.5	68.1	86.5	-0.6

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

#### STATISTICAL CAPACITY

#### **Statistical Capacity Indicator**

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

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

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

CAS Code # 01P1

#### **GROWTH PERFORMANCE**

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

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

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 85 USAID countries. CAS Code #11P1

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

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

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

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

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

#### **Real GDP Growth**

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

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

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

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

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

Source: Best labor market data available for target country, or World Development Indicators. If using WDI, estimated by calculating the annual percentage change of the ratio of GDP (constant 1995 US\$) (NY.GDP.MKTP.KD) to the population age 15–64, which in turn is the product of the total population (SP.POP.TOTL) times the percentage of total population in this age group (SP.POP.1564.IN.ZS).

Definition: Labor productivity is defined here as the ratio of GDP (in constant prices) to the size of the working age population (age 15–64). The more familiar calculation, based on employment, labor force, or work hours, is used where available.

Coverage: Data are available for about 85 USAID countries. CAS Code # 11S1

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

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

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

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

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

Source: IMF Article IV consultation report for latest country data; international benchmark from the World Development Indicators, most recent publication series NE.GDI.FTOT.ZS.

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

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

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

Source: IMF Article IV consultation report, for latest country data; World Development Indicators 2004, for international comparison data (explanation below). The estimation of this indicator involves taking the difference between gross fixed capital formation (percent of GDP) (NE.GDI.FTOT.ZS) and government capital expenditure (percent of GDP). The latter

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

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

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

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

CAS Code #11S4

#### **POVERTY AND INEQUALITY**

#### **Human Poverty Index**

Source: UNDP, Human Development Report.

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/reports/view\_reports.cfm?type=1

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

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

#### Income Share, Poorest 20%

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

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

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

CAS Code # 12P2

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

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

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

*Definition:* The indicator captures the percentage of the population living on less than \$1.08 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 difference in quality.

CAS Code #12P3a

## Percentage of Population Living on Less than \$2 PPP per Day

Source: World Development Indicators, most recent publication series SI.POV.2DAY, original data from national surveys. Alternative source for target countries: the country's Poverty Reduction Strategy Paper:

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

*Definition:* The indicator captures the percentage of the population living on less than \$2.15 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 difference in quality.

CAS Code #12P3b

#### Poverty Headcount, National Poverty Line

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

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

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

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

CAS Code #12P4

#### PRSP Status

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

Definition: Yes or no variable showing whether a country has (or not) completed a PRSP (introduced by the World Bank

and IMF to ensure host-country ownership of poverty reduction programs).

Coverage: All countries having PRSPs are so indicated.

CAS Code #12P5

### **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>, hased 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 # 12S1

#### **ECONOMIC STRUCTURE**

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

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

World Fact Book:

https://www.cia.gov/library/publications/the-world-factbook/index.html

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

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

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

CAS Code #13P1

#### **Output Structure**

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

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

hotels and restaurants), transport, and government, financial, professional, and personal services such as education, health care, and real estate services.

Coverage: Data are available for about 86 USAID countries.

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

CAS Code #13P2

#### **DEMOGRAPHY AND ENVIRONMENT**

#### **Adult Literacy Rate**

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

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

Coverage: Data are available for about 66 USAID countries.

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

CAS Code # 14P1

#### **Youth Dependency Rate**

Source: World Development Indicators, most recent publication series.

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

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

#### **Elderly Dependency Rate**

Source: World Development Indicators, most recent publication series.

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

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

#### **Environmental Performance Index**

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

Definition: The Environmental Performance Index (EPI) is a composite index of national environmental protection, which tracks (1) environmental health, (2) air quality, (3) water resources, (4) biodiversity and habitat, (5) productive natural

resources, and (6) sustainable energy. The index is a weighted average of these six policy categories, with more weight given environmental health, (i.e., EPI =  $0.5 \times 1.000$  environmental health +  $0.1 \times 1.000$  (air quality + water resources + productive natural resources + biodiversity and habitat + sustainable energy)). The index values range from 0 (very poor performance) to 100 (very good performance). The 2006 edition is considered a work in progress.

Coverage: Data are available for about 80 USAID countries. CAS Code #14P3

#### Population Size and Growth

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

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

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

#### **Urbanization Rate**

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

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

Coverage: Data are available for about 86 USAID countries.

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

CAS Code #14P5

#### **GENDER**

#### 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 calculated by taking the total number of students in the last grade of primary school, minus the number of repeaters in that grade, divided by the total number of children of official graduation age.

Coverage: Data are available for about 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 #15P1

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

Source: UNDP Human Development Report <a href="http://hdr.undp.org/hdr2006/statistics/indicators/225.html">http://hdr.undp.org/hdr2006/statistics/indicators/225.html</a> and <a href="http://hdr.undp.org/hdr2006/statistics/indicators/224.html">http://hdr.undp.org/hdr2006/statistics/indicators/224.html</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 #15P2

#### Life Expectancy, Male and Female

Source: Estimated from UNDP Human Development Indicators:

http://hdr.undp.org/hdr2006/statistics/indicators/221.html.

*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.

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

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

Source: Derived from World Development Indicators, but the precise computation differs depending on the edition of WDI used for the data.

To calculate the female labor force participation rate using WDI 2007: the numerator is the labor force, female (% 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 only be estimated by multiplying the total population (SP.POP.TOTL) times the percentage of the population ages 15–64 (SP.POP.1564.IN.ZS) times 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) times the percentage ages 15–64 (SP.POP.1564.IN.ZS) times 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 #15P4

#### FISCAL AND MONETARY POLICY

In the World Development Indicators for 2005, the World Bank has 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 Manual, 2001. On the revenue side, the changes are minor, and comparisons to the old system may still be valid. There is a major change, however, in the reporting of capital outlays, which are now treated as balance sheet entries; only the annual capital consumption allowance (depreciation) is reported as an expense. Hence, the data on total expense is not comparable

to the former data on total *expenditure*. In addition, WDI 2005 now provides data on the government's cash surplus/deficit; this differs from the previous concept of the overall budget balance by excluding net lending minus repayments (which are now a financing item under net acquisition of financial assets). Many countries do not use the new 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 Expenditure, Percentage of GDP**

Source: IMF Article IV consultation report for latest country data <a href="www.imf.org/external/np/sec/aiv/index.htm">www.imf.org/external/np/sec/aiv/index.htm</a>; International Financial Statistics database for benchmarking (line item 82 divided by GDP).

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

Gaps: Data available for about 70% of USAID countries.

CAS Code # 21P1

### Government Revenue, excluding grants, Percentage of GDP

Source: IMF Article IV consultation report for latest country data <a href="www.imf.org/external/np/sec/aiv/index.htm">www.imf.org/external/np/sec/aiv/index.htm</a>; 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 non-repayable receipts (other than grants), measured as a share of GDP. Grants represent monetary aid going to the central government that has no repayment requirement.

Gaps: Data missing for about 24 USAID countries.

CAS Code # 21P2

#### **Growth in Broad Money Supply**

Source: Latest country data are from national data sources or from IMF Article IV consultation report: <a href="https://www.imf.org/external/np/sec/">www.imf.org/external/np/sec/</a> 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 quasi-money) measured as the change in end-of-year totals relative to the preceding year. M2 comprises the sum of currency outside banks, checking account deposits other than those of the central government, and the time, savings, and foreign currency deposits of resident sectors other than the central government. M2 corresponds to the sum of lines 34 and 35 in the IMF's International Financial Statistics.

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

#### **Inflation Rate**

Source: IMF World Economic Outlook database, updated every six months, at <a href="http://www.imf.org/external/ns/cs.aspx?id=28">http://www.imf.org/external/ns/cs.aspx?id=28</a>

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

Coverage: Data are available for about 85 USAID countries.

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

CAS Code # 21P4

### Overall Budget Balance, Including Grants, Percentage of GDP

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

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

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

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

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

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

CAS Code # 21P5

#### **Composition of Government Expenditure**

Source: The latest country and benchmark data are taken from national data sources or from IMF Article IV consultation reports: www.imf.org/external/np/sec/aiv/index.htm.

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

Coverage: Data are available for the majority of USAID countries. As explained at the beginning of this section, 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 report 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 # 21S1* 

#### Composition of Government Revenue

Source: The latest country and comparison country data are taken from national data sources or from IMF Article IV consultation reports: www.imf.org/external/np/sec/aiv/index.htm. Benchmarking

data are taken directly from WDI 2005 database: (1) taxes on goods and services (% of revenue), series GC.TAX.GSRV.RV.ZS; (2) taxes on income, profits and capital gains (% of revenue), series GC.TAX.YPKG.RV.ZS; (3) taxes on international trade (% of revenue), series GC.TAX.INTT.RV.ZS; (4) other taxes (% of revenue), series GC.TAX.OTHR.RV.ZS; (5) social security contributions (% of revenue), series GC.REV.SOCL.ZS; and (6) grants and other revenue (% of revenue), series GC.REV.GOTR.ZS.

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

Coverage: Data are available from WDI 2005 for about 46 USAID countries

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

*CAS Code # 21S2* 

#### **Composition of Money Supply Growth**

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

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

 ${\it Coverage:}\ {\it Data}\ {\it are}\ {\it available}\ {\it for}\ {\it about}\ 86\ {\it USAID}\ {\it countries}.$ 

CAS Code # 21S3

#### **BUSINESS ENVIRONMENT**

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

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

*Definition:* The Control of Corruption index is an aggregation of various indicators that measure the extent to which agents believe that their government is corrupt. Index ranges from -2.5 (for very poor performance) to +2.5 (for excellent performance).

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

Coverage: Data are available for nearly all USAID countries.

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

CAS Code # 22P1

#### Ease of Doing Business Index

Source: World Bank, Doing Business Indictors <a href="http://rru.worldbank.org/DoingBusiness/">http://rru.worldbank.org/DoingBusiness/</a>

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 2007: starting a business, dealing with licenses, hiring and firing, registering property, getting credit, protecting investors, paying taxes, trading across borders, enforcing contracts, and closing a business.

Coverage: Data are available for nearly all USAID countries.

CAS Code # 22P2

#### Rule of Law Index

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

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

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

Coverage: Data are available for nearly all USAID countries.

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

CAS Code #22P3

#### Regulatory Quality Index

Source: World Bank Institute;

http://www.govindicators.org

*Definition:* The regulatory quality index measures the incidence of market-unfriendly policies such as price controls and inadequate bank supervision, as well as perceptions of the burdens imposed by excessive regulation in areas such as foreign trade and business development. It is computed from survey data from multiple sources. The index values range from -2.5 (very poor performance) to +2.5 (excellent performance).

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

Gaps: Data are available for nearly all USAID countries.

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

CAS Code #22P4

#### **Government Effectiveness Index**

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

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

-2.5 (very poor performance) to +2.5 (excellent performance).

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

#### Cost of Starting a Business

CAS Code #22S1

Source: World Bank, Doing Business; Starting a Business category: <a href="http://rru.worldbank.org/DoingBusiness/">http://rru.worldbank.org/DoingBusiness/</a> ExploreTopics/StartingBusiness/CompareAll.aspx

Definition: Legally required cost to starting a simple limited liability company, expressed as percentage of GNI per capita. Coverage: Data are available for nearly all USAID countries.

#### Procedures to Enforce a Contract

Source: World Bank, Doing Business; Enforcing Contracts category: <a href="http://rru.worldbank.org/DoingBusiness/">http://rru.worldbank.org/DoingBusiness/</a>
ExploreTopics/EnforcingContracts/CompareAll.aspx

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

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

#### **Procedures to Register Property**

Source: World Bank, Doing Business; Registering Property category: <a href="http://rru.worldbank.org/DoingBusiness/ExploreTopics/RegisteringProperty/CompareAll.aspx">http://rru.worldbank.org/DoingBusiness/ExploreTopics/RegisteringProperty/CompareAll.aspx</a>

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

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

#### Procedures to Start a Business

Source: World Bank, Doing Business; Starting a Business category: <a href="http://rru.worldbank.org/DoingBusiness/ExploreTopics/StartingBusiness/CompareAll.aspx">http://rru.worldbank.org/DoingBusiness/ExploreTopics/StartingBusiness/CompareAll.aspx</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 # 22S4

#### Time to Enforce a Contract

Source: World Bank, Doing Business; Enforcing Contracts category: <a href="http://rru.worldbank.org/DoingBusiness/ExploreTopics/EnforcingContracts/CompareAll.aspx">http://rru.worldbank.org/DoingBusiness/ExploreTopics/EnforcingContracts/CompareAll.aspx</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 # 22S5

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

Source: World Bank, Doing Business; Registering Property category: <a href="http://rru.worldbank.org/DoingBusiness/ExploreTopics/RegisteringProperty/CompareAll.aspx">http://rru.worldbank.org/DoingBusiness/ExploreTopics/RegisteringProperty/CompareAll.aspx</a>

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

Coverage: Data are available for nearly all USAID countries.

CAS Code #22S6

#### Time to Start a Business

Source: World Bank, Doing Business; Starting a Business category: <a href="http://rru.worldbank.org/DoingBusiness/">http://rru.worldbank.org/DoingBusiness/</a> ExploreTopics/StartingBusiness/CompareAll.aspx

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

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

#### **Total Tax Payable by Business**

Source: World Bank, Doing Business, Paying Taxes Category: <a href="http://www.doingbusiness.org/ExploreTopics/PayingTaxes/">http://www.doingbusiness.org/ExploreTopics/PayingTaxes/</a>

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

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

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

Source: Global Competitiveness Report 2006-2007, World Economic Forum. The indicators can be found in the Data Tables, Section VI.

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

Coverage: Data are available for about 52 USAID countries.

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

CAS Code #22S9

### **Senior Manager Time Spent Dealing with Government Regulations**

Source: World Bank Enterprise Surveys, Bureaucracy section, www.enterprisesurveys.org.

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

Coverage: Data available for about 80 USAID countries.

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

CAS Code #22S10

#### **FINANCIAL SECTOR**

#### Domestic Credit to Private Sector, Percentage of GDP

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

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

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

#### **Interest Rate Spread**

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

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

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

#### Money Supply, Percentage of GDP

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

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

Coverage: Data are available for about 81 USAID countries. Data Quality: In some countries M2 includes certificates of deposits, money market instruments, and treasury bills. CAS Code # 23P3

#### Stock Market Capitalization Rate, Percentage of GDP

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

Definition: This variable is defined as the market capitalization, also known as market value (the share price times the number of shares outstanding), of all the domestic shares listed on the country's stock exchange as a percentage of GDP

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

#### **Credit Information Index**

Source: World Bank, Doing Business; Getting Credit Category: http://www.doingbusiness.org/ExploreTopics/GettingCredit/Default.aspx?direction=asc&sort=2

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

Coverage: Data are available for nearly all USAID countries. Data Quality: The indicator is subjective, as it is based on an opinion poll.

*CAS Code # 23P5* 

#### Legal Rights of Borrowers and Lenders Index

Source: World Bank Doing Business; Getting Credit category: <a href="http://rru.worldbank.org/DoingBusiness/">http://rru.worldbank.org/DoingBusiness/</a>
<a href="mailto:ExploreTopics/GettingCredit/CompareAll.aspx">http://rru.worldbank.org/DoingBusiness/</a>
<a href="mailto:ExploreTopics/GettingCredit/CompareAll.aspx">ExploreTopics/GettingCredit/CompareAll.aspx</a>. The index is based on data collected through research of collateral and insolvency laws supported by survey data on secured transactions laws.

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

Coverage: Data are available for nearly all USAID countries. CAS Code # 23SI

#### Real Interest Rate

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

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

Coverage: Data are available for about 68 USAID countries. CAS Code # 23S2

#### Number of Active Microfinance Borrowers

Source: The Mix Market.

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

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

Coverage: Data are available for about 68 USAID countries.

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

CAS Code # 23S3

#### **EXTERNAL SECTOR**

#### Aid, Percentage of GNI

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

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

Coverage: Data are available for about 84 USAID countries.

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

CAS Code #24P1

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

Source: Latest country data from national data sources or IMF Article IV consultation reports: <a href="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 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 gross domestic product.

Coverage: Data are available for about 79 USAID countries. CAS Code # 24P2

#### **Debt Service ratio**

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

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

Definition: 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 to the Present value of debt, percent of GNI regarding quality of debt data reported.

CAS Code # 24P3

#### **Exports Growth, Goods and Services**

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

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

Definitions: Annual growth rate of exports of goods and services based on constant local currency units. Exports include the value of merchandise, freight, insurance,

transport, travel, royalties, license fees, and other services, such as communication, construction, financial, information, business, personal, and government services. They exclude labor and property income (formerly called factor services), as well as transfer payments.

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

#### Foreign Direct Investment, Percentage of GDP

Source: Latest country data obtained from national data sources or IMF Article IV consultation reports: <a href="https://www.imf.org/external/">www.imf.org/external/</a> 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 consultation reports:

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

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

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

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

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

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

Coverage: Information on coverage is not easily accessible.

Data Quality: Capital flows are converted to U.S. dollars at the IMF's average official exchange rate for the year shown. CAS Code #24P7

Present Value of Debt, Percentage of GNI

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

Definition: Present value of debt is the sum of short-term external debt plus the discounted sum of total debt service

payments due on public, publicly guaranteed, and private non-guaranteed long-term external debt over the life of 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 across countries because of the wide spectrum of debt instruments, the unwillingness of governments to provide information, and a lack of capacity in reporting. Discrepancies are significant when exchange rate fluctuations, debt cancellations, and rescheduling occur.

*CAS Code # 24P8* 

#### Remittances Receipts, Percentage of Exports

Source: Latest country data obtained from national data sources or IMF Article IV consultation reports: <a href="https://www.imf.org/external/">www.imf.org/external/</a> 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 # 24P9

#### Trade, Percentage of GDP

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

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

Coverage: Data available for about 84 USAID countries. CAS Code # 24P10

#### Trade in Services, Percentage of GDP

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

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

Coverage: Data available for about 80 USAID countries. CAS Code # 24P11

#### **Concentration of Exports**

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

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

Coverage: Available for about 74 USAID countries.

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

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

CAS Code # 24S1

#### Inward FDI Potential Index

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

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

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

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

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

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

Coverage: Data are available for about 51 USAID countries. CAS Code # 24S3

#### Real Effective Exchange Rate (REER)

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

Definition: The REER is an index number with base 1995=100, which measures the value of a currency against a weighted average of foreign currencies. It is calculated as the nominal effective exchange rate divided by a price deflator or index of costs. The IMF defines the REER so that an increase in the value represents a real appreciation of the home currency, and a decrease represents a real depreciation.

Coverage: Information on coverage is not easily accessible.

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

CAS Code # 24S4

#### Structure of Merchandise Exports

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

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

Coverage: Data are available for about 78 USAID countries.

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

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

CAS Code # 24S5

#### **Trade Policy Index**

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

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

Coverage: Data are available for about 83 USAID countries.

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

CAS Code # 24S6

#### Ease of Trading Across Borders Ranking

Source: World Bank, Doing Business, Trading Across Borders category: <a href="http://www.doingbusiness.org/">http://www.doingbusiness.org/</a>
<a href="mailto:ExploreTopics/TradingAcrossBorders/">ExploreTopics/TradingAcrossBorders/</a>

Definitions: The 175 economies covered by the Doing Business report are ranked on the ease with which one may import into and export out of the economy. The ranking is based on a simple average of the economy's ranking on each of the composite indicators for Trading Across Borders: number of documents to import and export, cost to import and export, and time to import and export.

Coverage: Data are available for nearly all USAID countries.

CAS Code # 24S7

#### **ECONOMIC INFRASTRUCTURE**

#### Internet Users per 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 # 25P1

#### **Overall Infrastructure Quality Index**

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 country. Executives grade, on a scale from 1 to 7, whether general infrastructure in their country is poorly developed (1) or among the best in the world (7)

Coverage: Data are available for about 52 USAID countries.

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

*CAS Code # 25P2* 

#### 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 mainlines connected to the public switched telephone network. Mobile phone subscribers refer to users of cellular-based technology with access to the public switched telephone network.

 ${\it Coverage:}\ {\it Data}\ {\it are}\ {\it available}\ {\it for}\ {\it about}\ {\it 88}\ {\it USAID}\ {\it countries}.$ 

CAS Code #25P3

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

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.

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

Coverage: Data are available for about 52 USAID countries.

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

CAS Code #25S1

#### Roads, paved (% total)

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

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

Coverage: Data are available for nearly all USAID countries.

CAS Code #25S2

#### SCIENCE AND TECHNOLOGY

## Expenditure in Research and Development, Percentage of $\ensuremath{\mathsf{GDP}}$

Source: World Development Indicators, most recent publication, series GB.XPD.RSDV.GD.ZS, based on data from the UNESCO Institute of Statistics.

Definition: Expenditures for research and development are current and capital expenditures (both public and private) on creative, systematic activity that increases the stock of knowledge. Included are fundamental and applied research and experimental development work leading to new devices, products, or processes.

Coverage: Data are available for about 26 USAID countries. CAS Code #26P1

#### FDI Technology Transfer Index

Source: Global Competitiveness Report 2006-2007, World Economic Forum. The indicator can be found in the Data

Tables, Section III. Technology: Innovation and Diffusion;

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

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

CAS Code # 26P2

#### Availability of Scientists and Engineers Index

Source: Global Competitiveness Report 2006-2007, World Economic Forum. The indicators can be found in the Data Tables, Section IX. Innovation; 9.05.

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

Coverage: Data are available for about 52 USAID countries.

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

CAS Code #26P3

#### Science and Technology Journal Articles, per Million People

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

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

Coverage: Data are available for about 82 USAID countries. CAS Code #26P4

#### **IPR Protection Index**

Source: Global Competitiveness Report 2006-2007, World Economic Forum. The indicators can be found in the Data Tables, Section IV. Innovation; 9.07.

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

Coverage: Data are available for about 52 USAID countries.

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

CAS Code #26P5

#### **HEALTH**

#### **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 # 31P1

#### Life Expectancy at Birth

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

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

Coverage: Data are available for about 88 USAID countries.

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

*CAS Code # 31P2* 

#### **Maternal Mortality Rate**

UN Millennium Indicators Database.  $\underline{http://millenniumindicators.un.org/unsd/mdg/Data.aspx}$ based on WHO, UNICEF and UNFPA data.

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

Coverage: Data are available for about 87 USAID countries.

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

CAS Code #31P3

#### Access to Improved Sanitation

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

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

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

#### Access to Improved Water Source

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

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

Coverage: Data are available for about 83 USAID countries.

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

CAS Code # 31S2

#### Births Attended by Skilled Health Personnel

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

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

Coverage: Data are available for about 62 USAID countries.

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

CAS Code # 31S3

#### **Child Immunization Rate**

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

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

Coverage: Data are available for about 88 USAID countries.

CAS Code #31S4

#### Prevalence of Child Malnutrition—Weight for Age

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

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

Coverage: Data are available for about 55 USAID countries.

CAS Code # 31S5

#### Public Health Expenditure, Percentage of GDP

Source: Latest data for host country is obtained from the MCC: <a href="http://www.mcc.gov/selection/scorecards/2007/index.php">http://www.mcc.gov/selection/scorecards/2007/index.php</a>.

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

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

Coverage: Data are available for about 88 USAID countries.

CAS Code #31S6

#### **EDUCATION**

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

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

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

history, geography, natural science, social science, art, and music.

Coverage: Data are available for about 80 USAID countries.

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

CAS Code # 32P1

#### Persistence to Grade 5—Female, Male, and Total

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 # 32P2

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

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

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

Coverage: Data are available for about 67 USAID countries.

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

CAS Code #32P3

#### **Net Secondary Enrollment Rate, Total**

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

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

Coverage: Not available for draft.

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

CAS Code #32P4

#### **Gross Tertiary Enrollment Rate, Total**

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

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

condition of admission, the successful completion of education at the secondary level.

Coverage: Not available for draft.

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

CAS Code #32P5

#### **Expenditure on Primary Education, Percentage of GDP**

Source: Millennium Challenge Corporation: http://www.mcc.gov/selection/scorecards/2007/index.php.

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

Coverage: Data are available for about 58 USAID countries.

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

CAS Code #32S1

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

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

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

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

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

*CAS Code # 32S2* 

#### Pupil-teacher Ratio, Primary School

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

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

Coverage: Data are available for about 76 USAID countries.

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

*CAS Code # 32S3* 

#### **EMPLOYMENT AND WORKFORCE**

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

Source: Derived from World Development Indicators, but the precise computation differs depending on whether a

particular country study uses the 2004 or 2005 and years subsequent 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 comprises people who meet the International Labor 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:

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

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

Coverage: Data are available for nearly all USAID countries.

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

CAS Code # 33P2

#### Size and Growth of the Labor Force

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

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

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

#### **Unemployment Rate**

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

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

Coverage: Data are available for about 50 USAID countries.

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

CAS Code # 33P4

### Economically Active Children, Percentage Children Ages 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.

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

*CAS Code # 33P5* 

#### Firing Costs, Weeks of Wages

Source: World Bank, Doing Business, Employing Workers Category: http://www.doingbusiness.org/ MethodologySurveys/EmployingWorkers.aspx.

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

Coverage: Data available for nearly all USAID countries.

CAS Code # 33S1

#### **AGRICULTURE**

#### Agriculture Value Added per Worker

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

Definition: Agriculture value added per worker is a basic measure of labor productivity in agriculture. Value added in agriculture measures the output of the agricultural sector (ISIC divisions 1–5)—forestry, hunting, fishing, cultivation of crops, and livestock production—less the value of intermediate inputs. Data are in constant 1995 U.S. dollars.

Coverage: Data are available for about 80 USAID countries.

CAS Code # 34P1

#### Cereal Yield

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

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

Coverage: Data are available for about 84 USAID countries.

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

CAS Code # 34P2

#### **Growth in Agricultural Value-Added**

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

Definition: The indicator measures the annual growth rate for agricultural value added, in constant local currency. Regional group aggregates are based on constant 2000 U.S. dollars. Agriculture corresponds to ISIC divisions 1–5 and includes forestry, hunting, and fishing, as well as cultivation of crops and livestock production. Value added is the net output of a sector after all outputs are added up and intermediate inputs are subtracted. It is calculated without deductions for depreciation of fabricated assets or depletion and degradation of natural resources.

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

#### **Agricultural Policy Costs Index**

*Source:* Global Competitiveness Report 2006-2007, World Economic Forum. The indicator can be found in the Data Tables, Section II. Macroeconomic Environment; 2.20.

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

Coverage: Data are available for about 52 USAID countries.

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

CAS Code # 34S1

#### **Crop Production Index**

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

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

Coverage: Data are available for about 85 USAID countries.

Data Quality: Regional and income group aggregates for the FAO's production indices are calculated from the underlying values in international dollars, normalized to the base period 1999-2001. The FAO obtains data from official and semiofficial reports of crop yields, area under production, and livestock numbers. If data are not available, the FAO makes estimates. To ease cross-country comparisons, the FAO uses international commodity prices to value production expressed in international dollars (equivalent in purchasing power to the U.S. dollar). This method assigns a single price to each commodity so that, for example, one metric ton of wheat has the same price regardless of where it was produced. The use of international prices eliminates fluctuations in the value of output due to transitory movements of nominal exchange rates unrelated to the purchasing power of the domestic currency.

Coverage: Data are available for about 85 USAID countries.

CAS Code # 34S2

#### **Livestock Production Index**

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

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

Coverage: Data are available for about 85 USAID countries.

Data Quality: See comments on the Crop Production Index.

CAS Code # 34S3

#### **Agriculture Export Growth**

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

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

Coverage: Not available for draft.

*CAS Code # 34S4*