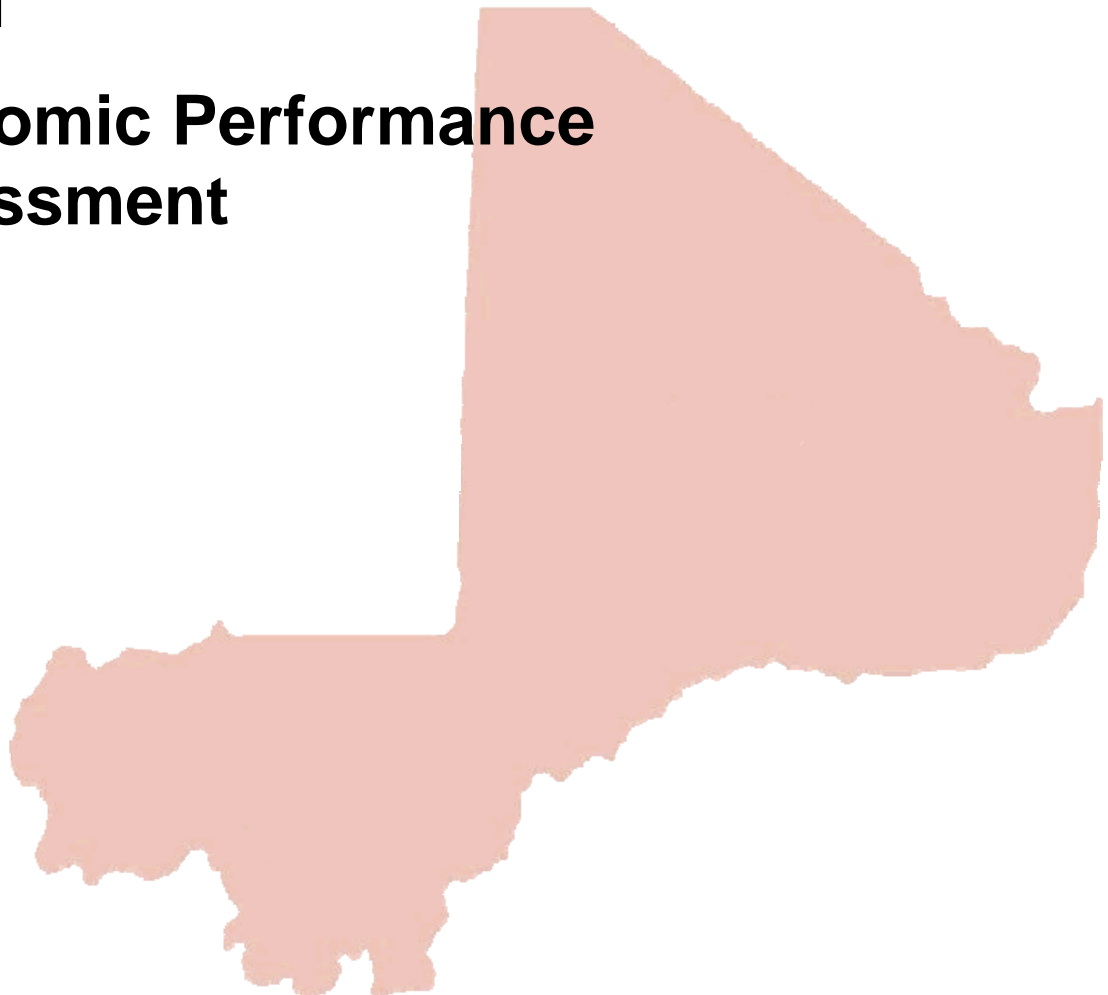




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# Mali

## Economic Performance Assessment



**August 2005**

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# Mali

## Economic Performance Assessment

Sponsored by the Economic Growth office of USAID's Bureau of Economic Growth, Agriculture and Trade (EGAT), and implemented by Nathan Associates Inc. under Contract No. PCE-I-00-00-00013-00, Task Order 004, the Country Analytical Support (CAS) Project, 2005-2006, has developed a standard methodology for producing analytical reports that provide a clear and concise evaluation of economic growth performance in designated host countries. These reports are tailored to meet the needs of USAID missions and regional bureaus for country-specific analysis. Each report contains

- A synthesis of data from numerous sources, including World Bank publications and other international data sets used by USAID for economic growth analysis, as well as host-country data sources;
- International benchmarking to assess country performance in comparison to similar countries and groups of countries;
- A clear narrative that highlights where a country's performance is particularly strong or weak, thereby assisting in the identification of future programming priorities.

Under the CAS Project, Nathan Associates will also respond to mission requests for in-depth sector studies that examine issues identified in these country reports.

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## HIGHLIGHTS OF MALI'S PERFORMANCE, RELATIVE TO BENCHMARK STANDARDS

Economic Growth	GDP growth has been good, on average, but very erratic, signaling structural problems. Investment and productivity growth are good by regional standards, but insufficient for rapid poverty reduction.
Poverty	Poverty in Mali remains severe and pervasive, with 68 percent of the population living below the national poverty line in 2001 (latest data).
Gender	Gender disparities are very high in Mali, especially in literacy and school enrollment rates.
Fiscal and Monetary Policy	Macroeconomic management is in good shape: inflation is under control, government revenues are rising, and the budget deficit is sustainable.
Business Environment	Institutional indicators for Mali are comparable to benchmark values; nonetheless, there is ample scope for reducing institutional impediments to doing business.
Financial Sector	The banking system is expanding, credit to the private sector is growing, and real interest rates are relatively low, but institutional constraints continue to impair development of the financial system.
External Sector	Mali is a relatively open economy. Export growth has been fairly strong, though very erratic. The current account deficit compares favorably to the benchmarks, and foreign exchange reserves are at a healthy level. However, foreign direct investment remains low, and exports are highly concentrated in cotton and gold.
Economic Infrastructure	Basic infrastructure indicators are worse than the regional benchmarks, and very poor in absolute terms.
Health	Despite low levels of HIV/AIDS, life expectancy and maternal mortality rates are far worse than the regional average, a reflection of serious health-care problems.
Education	Primary school enrollment rates are among the lowest in the region, reflecting inadequate educational opportunities (and a high incidence of child labor).
Employment and Workforce	The labor force is growing rapidly, creating a pressing need for new jobs and income opportunities. Legal/ regulatory constraints impair job creation, and employment growth.
Agriculture	Mali's economy depends heavily on agriculture, rendering the economy very vulnerable to weather conditions and fluctuations in the world price of cotton. Agricultural growth has been weak, and productivity levels very low.

Note: The standards used for the benchmarking analysis are explained in the appendix.

## MALI PERFORMANCE SCORECARD

### Performance Relative to Low-Income Sub-Saharan Africa (except as noted)

	Mali Value	Benchmark Value
<b>A. MAJOR INDICATORS SIGNIFICANTLY WORSE THAN BENCHMARK VALUES</b>		
<b>Growth Performance</b>		
Real GDP growth, % (2004)	2.2	4.7 <sup>b</sup>
<b>Poverty and Inequality</b>		
Human Poverty Index (2002) <sup>a</sup>	58.9	45.3 <sup>b</sup>
Poverty headcount (%), by national poverty line (2001)	68.0	55.1 <sup>b</sup>
<b>Demography and Environment</b>		
Adult literacy rate (2000)	19.0 <sup>c</sup>	59.8
<b>Gender</b>		
Ratio of male to female adult literacy rate (2002) <sup>a</sup>	2.24	1.44
Ratio of male to female gross enrollment rates (2002) <sup>a</sup>	1.48	1.20
Ratio of male to female life expectancy at birth (2002)	0.98	0.95
<b>Business Environment</b>		
Doing Business composite index (0=very poor, 100=excellent) (2004)	50.8	56.4
Cost of starting a business, %GNI per capita (2004)	187.4	184.7
<b>Financial Sector</b>		
Cost to create collateral (2004)	58.5	27.0
Legal rights of borrowers and lenders index (0=very poor, 100=excellent) (2004)	3.0	4.0
<b>External Sector</b>		
Foreign direct investment, %GDP (2004)	1.0	3.69 <sup>b</sup>
<b>Economic Infrastructure</b>		
Internet users per 1,000 people (2003)	2.4	4.3
Telephone density, fixed line and mobile, per 1,000 people (2002)	10.3	18.2 <sup>b</sup>
<b>Health</b>		
Maternal mortality rate, deaths per 100,000 (2000/2001)	1200	980 <sup>b</sup>
<b>Education</b>		
Net primary enrollment rate (2000)	44.5	57.3 <sup>b</sup>
Youth literacy rate (2002)	24.2	73.7 <sup>b</sup>
<b>B. MAJOR INDICATORS SIGNIFICANTLY BETTER THAN BENCHMARK VALUES</b>		
<b>Growth Performance</b>		
Growth of labor productivity (5-year average) (2003)	3.2	1.9



	Mali Value	Benchmark Value
<b>Demography and Environment</b>		
Environmental Sustainability Index (0=very poor, 100=excellent) (2005)	53.7	47.0 <sup>b</sup>
<b>Fiscal and Monetary Policy</b>		
Government revenue, % GDP (2004)	17.2	14.8 <sup>b</sup>
Inflation rate (5-year average) (2004) <sup>a</sup>	0.5	7.6 <sup>b</sup>
<b>Financial Sector</b>		
Domestic credit to private sector, %GDP (2003)	19.2	10.6 <sup>b</sup>
Money Supply (M2), %GDP (2004)	31.3	23.4 <sup>b</sup>
<b>External Sector</b>		
Debt service ratio, % exports (2004) <sup>a</sup>	6.3	10.9 <sup>b</sup>
Export growth, good and services (5- year average) (2003)	12.5	6.0 <sup>b</sup>
Gross international reserves, months of imports	6.7	4.02 <sup>b</sup>

Notes: This scorecard shows indicators for which Mali's performance is significantly worse or better than benchmark values. A separate Data Supplement provides a full tabulation of data for Mali and the international benchmarks, as well as technical notes on data sources and definitions. The standard benchmark is the median value for low-income countries of sub-Saharan Africa.

<sup>a</sup> Lower value indicates better performance.

<sup>b</sup> Benchmark estimated from regression analysis, controlling for region and per capita income.

<sup>c</sup> The adult literacy rate shown here is from World Development Indicators 2005, and UNESCO Institute for Statistics, May 2005. Mali's PRSP (2002) uses a figure of 31% for 1999, and the PRSP update (2004) gives a figure of 35% for 2002. Even these higher figures indicate very poor performance in comparison with benchmark standards.



# 1. Introduction

This paper 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 a broad range of indicators relating to economic growth performance in designated host countries. The report draws on a variety of international data sources<sup>1</sup> and uses international benchmarking to identify constraints, trends, and opportunities for strengthening growth and reducing poverty.

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 discern 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. In some cases a “blinking” indicator has clear implications, while in other instances a detailed study may be needed to investigate the problems more fully and identify an appropriate course for programmatic action.

The analysis is organized around the mutually supportive goals of transformational growth and poverty reduction.<sup>3</sup> Rapid and broad-based growth is the most powerful instrument for poverty reduction. At the same time, many measures aimed at reducing poverty and lessening inequality can help to underpin rapid and sustainable growth. These interactions create the potential for stimulating a virtuous cycle of economic transformation and human development.

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;

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<sup>1</sup> Sources include the latest data from USAID’s internal Economic and Social Database (ESDB), and from readily accessible public information sources. The ESDB is compiled and maintained by the Development Information Service (DIS), under PPC/CDIE. It is accessible to staff through the USAID intranet.

<sup>2</sup> Sometimes, too, the problem is faulty wiring to the indicator—analogue here to faulty data.

<sup>3</sup> In USAID’s White Paper on *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.

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*.<sup>4</sup> Here, too, many elements are involved, including effective education and health systems, policies facilitating job creation, agricultural development (in countries where the poor depend largely on farming), dismantling barriers to micro and small enterprise development, and progress toward gender equity.

The evaluation in this paper must be interpreted with caution because a concise analysis of this sort cannot provide a definitive diagnosis of economic problems or simple answers to questions about programmatic priorities. Instead, the aim of the analysis is to spot signs of economic growth problems based on a review of selected indicators, subject to limits of data availability and quality. The results should provide insight about potential paths for USAID intervention that complement on-the-ground knowledge and in-depth studies.

The remainder of the report discusses the most important results of the diagnostic analysis, in three sections: Overview of the Economy; Private Sector Enabling Environment; and Pro-Poor Growth Environment. Table 1-1 summarizes the topic coverage. The appendix provides a brief explanation of the criteria used for selecting indicators, the benchmarking methodology, and a lists all indicators examined for this report.

Table 1  
*Topic Coverage*

Overview of the Economy	Private Sector Enabling Environment	Pro-Poor Growth Environment
<ul style="list-style-type: none"> <li>• Growth Performance</li> <li>• Poverty and Inequality</li> <li>• Economic Structure</li> <li>• Demographic and Environmental Conditions</li> <li>• Gender</li> </ul>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>• Health</li> <li>• Education</li> <li>• Employment and Workforce</li> <li>• Agriculture</li> </ul>

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<sup>4</sup> A comprehensive poverty reduction strategy also requires programs to reduce the *vulnerability* of the poor to natural and economic shocks. This aspect is not covered in the template since the focus is economic growth programs. In addition, it is difficult to find meaningful and readily available indicators of vulnerability.

## 2. Overview of the Economy

This section reviews basic information on Mali's macroeconomic performance, poverty and inequality, economic structure, demographic and environmental conditions, and indicators of gender equity.<sup>5</sup> Some of the indicators cited here are descriptive rather than analytical, and are included to provide context for the performance analysis.

### **GROWTH PERFORMANCE**

With an estimated per capita GDP of \$404 (in PPP dollars terms) in 2004, Mali is the 26th poorest country in the world. Thus, the need for rapid and sustained growth is acute. Over the last five years (to 2004), GDP growth averaged around 4.6 percent per year—slightly below the average for low-income sub-Saharan Africa (hereafter, LIC-Africa), as well as recent growth rates in neighboring Senegal and Ghana (see Figure 2-1).<sup>6</sup> This growth, however, has been very erratic. Indeed, for 2004 the economy grew by just 2.2 percent, reflecting Mali's structural dependence on agricultural exports. With population growth of 2.4 percent per year, tangible progress in reducing poverty will require sustained and broad-based growth above 5 percent per annum.

Investment and productivity indicators in Mali are relatively good by regional standards, though relatively poor in absolute terms. Gross fixed investment averaged 22.5 percent of GDP over the five years to 2003, comparing favorably to LIC-Africa average, as well as the levels achieved by Senegal and Ghana (Figure 2-2. Investment rate). Non-government investment, however, averaged just 14.6 percent. This rate is a relatively low for sustaining private sector growth. Labor force productivity has grown on average by nearly 4 percent per year, compared to 1.9 percent for LIC-Africa, 3.3 percent for Senegal, and 1.7 percent for Ghana. Investment productivity has likewise been strong: the incremental capital-output ratio (ICOR) of 3.6 shows that each dollar of extra output has required \$3.6 of investment; this is higher efficiency than the ICOR values of 4.9 for LIC-Africa, 9.9 for Senegal, and 5.1 for Ghana.

Taken together, the growth indicators suggest that the central challenges facing the government and the donor community in Mali are structural vulnerability and insufficient investment. Major factors contributing to these problems are examined in Section 3.

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<sup>5</sup> A separate Data Supplement provides a full tabulation of the data for Mali and the international benchmarks, including indicators not discussed in the text, as well as technical notes for each indicator.

<sup>6</sup> At the suggestion of USAID/Mali, this report uses Ghana and Senegal as comparators. Note that country-group averages used here are medians rather than means, to minimize the effect of outliers.

Figure 2-1. Real GDP Growth

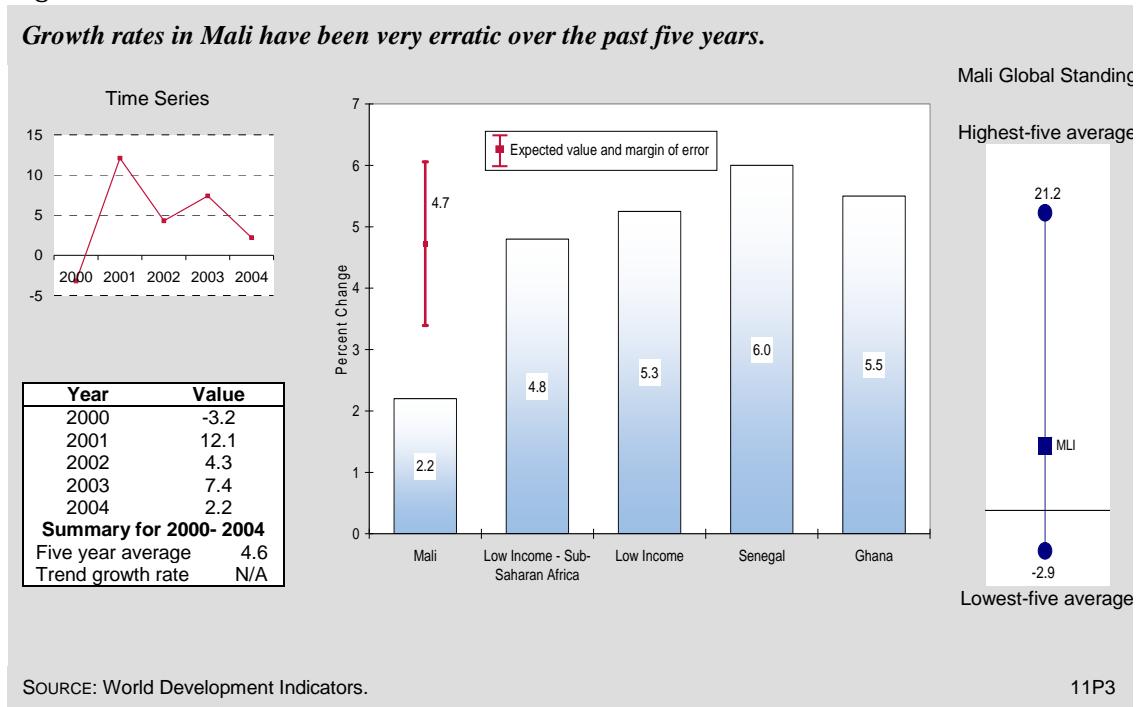
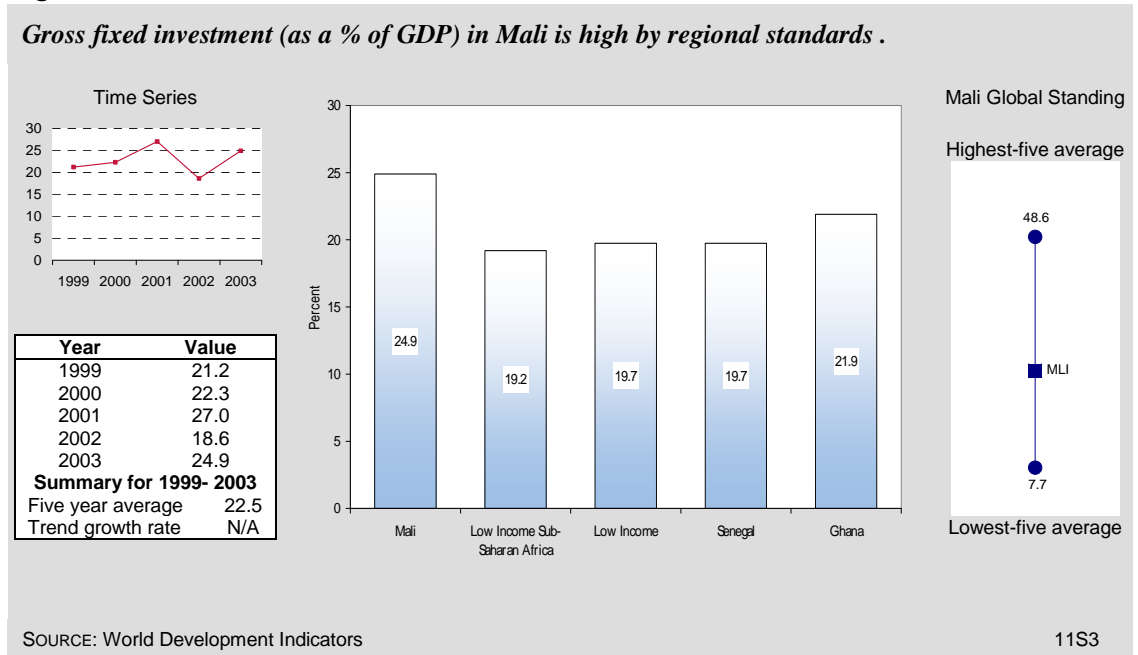


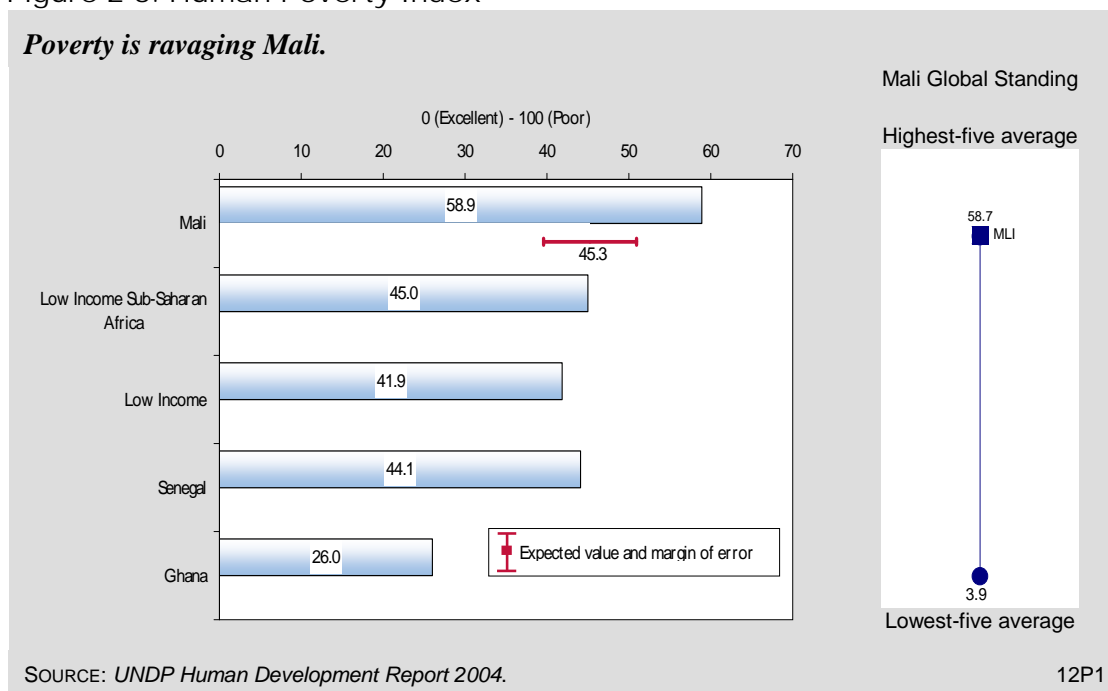
Figure 2-2. Share of Gross Fixed Investment in GDP, Current Prices



## POVERTY AND INEQUALITY

Poverty in Mali is severe and pervasive. The latest household survey (2001) shows that 68 percent of the people live below the national poverty line. This is far higher than the regression benchmark of 55 percent for an African country at Mali’s income level and Ghana’s level of 40 percent. Survey data for 1998 showed a poverty rate of 63.8 percent. Hence, the latest survey suggests that the pattern of moderate but erratic growth has not led to a measurable reduction in poverty. The UNDP’s Human Poverty Index (HPI), which takes into account deprivation in health and education, as well as income, rated Mali at 58.9 in 2004, nearly the highest deprivation rate in the world. By comparison, the average HPI for LIC-Africa is 45.0; for Senegal and Ghana the HPI values are 44.1 and 26.0, respectively (Figure 2-3).

Figure 2-3. Human Poverty Index



The Government of Mali has taken steps to address poverty by completing a Poverty Reduction Strategy Paper in 2003. The PRSP will be the basis for the country’s own development program, and a tool for coordinating donor interventions to promote pro-poor growth. The PRSP is based on three pillars: ensuring institutional development, improved governance, and participation; strengthening access to basic social services; and developing basic infrastructure and productive sectors. For each pillar, according to the PRSP, “the emphasis is placed upon the need for specific and corrective actions in order to involve the poor and to reduce the disparities among regions, among communities, between urban and rural areas and between the sexes.”<sup>7</sup> A fundamental goal

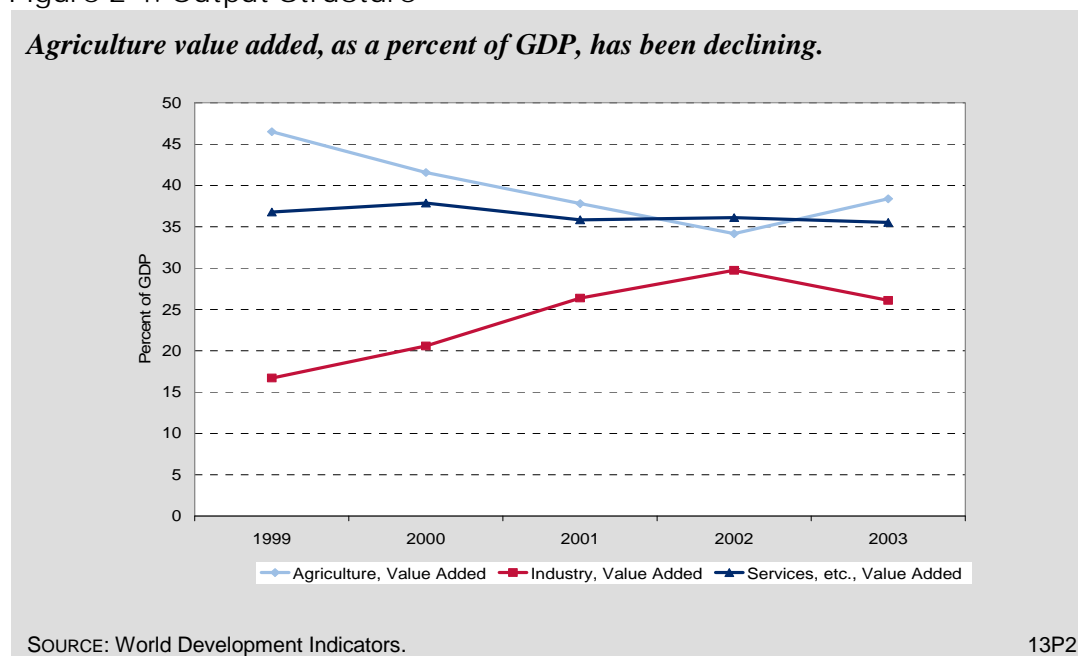
<sup>7</sup> Mali Poverty Reduction Strategy Paper, 2003, p.3: <http://poverty2.forumone.com/prsp/country/108>.

of the PRSP is to reduce the poverty rate to 47 percent by 2006. This target will be missed by a wide margin because of insufficient growth. Consequently, donor agencies need to focus aid on programs that reduce poverty while boosting economic growth.

## ECONOMIC STRUCTURE

The broad structure of output in Mali shows a moderate transition from agriculture to industry over the past five years. The share of GDP originating in the industrial sector rose from 17 percent to 26 percent between 1999 and 2003, while agriculture's share declined from 47 percent to 38 percent, and the service sector has contributed a steady 36 percent of GDP (Figure 2-4). No time series data is available on the composition of the labor force, so it is difficult to gauge the impact of this transformation. Nonetheless, the need for structural change in the allocation of labor is readily evident from the fact that agriculture is the primary source of income for an estimated 80 percent of the workers. If 20 percent of the labor force is engaged outside agriculture, producing more than 60 percent of GDP, then average productivity in agriculture is far lower than in other sectors. Thus, investment and job creation outside agriculture can stimulate large gains in labor productivity for the economy as a whole.

Figure 2-4. Output Structure



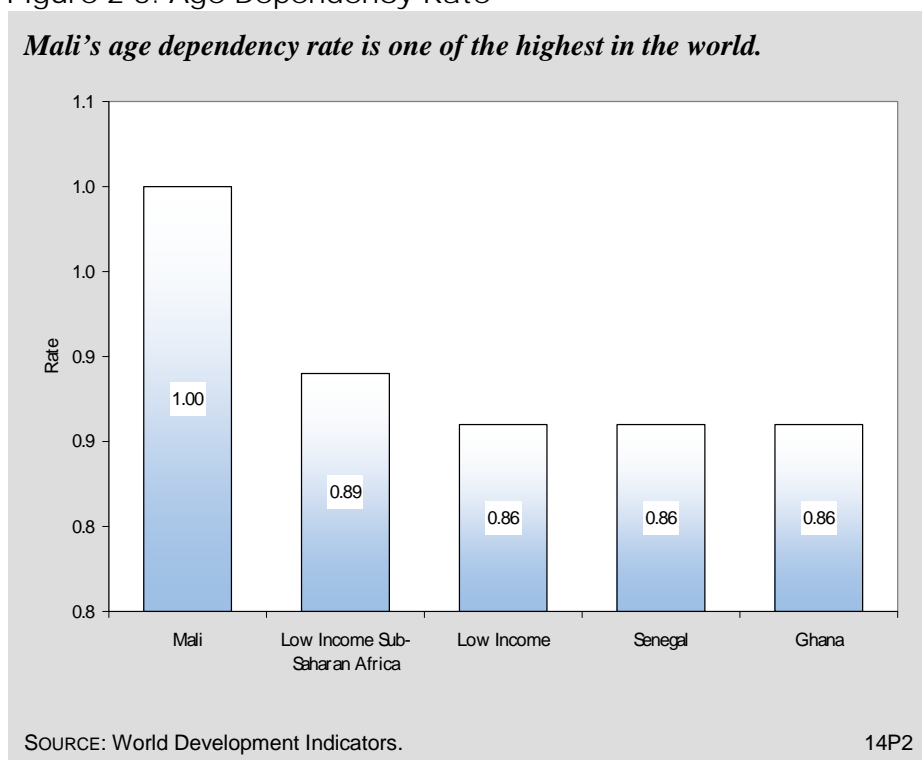
## DEMOGRAPHY AND ENVIRONMENT

Mali is one of the larger countries in the region, but its population is only 12 million. Most of the country lies in or above the Sahel belt, and the amount of arable land is very limited. A population growth rate of 2.4 percent per year is intensifying pressure in the arable zone and accentuating the need for more rapid development of off-farm activities. Rapid population growth also creates ever-rising demand for public services, particularly in education and health, and a very youthful age structure, with 100 dependents per 100 persons of working age (Figure 2-5).



The high dependency rate is a symptom of deep poverty, but also a cause, since there are many mouths to feed per hand available to work. At the same time, the demographic trends offer an important programmatic opportunity to reduce population growth and the dependency rate. As demonstrated in high growth countries in Asia, this demographic transition has been a significant factor in rapid growth of per capita income and improved public services.

Figure 2-5. Age Dependency Rate

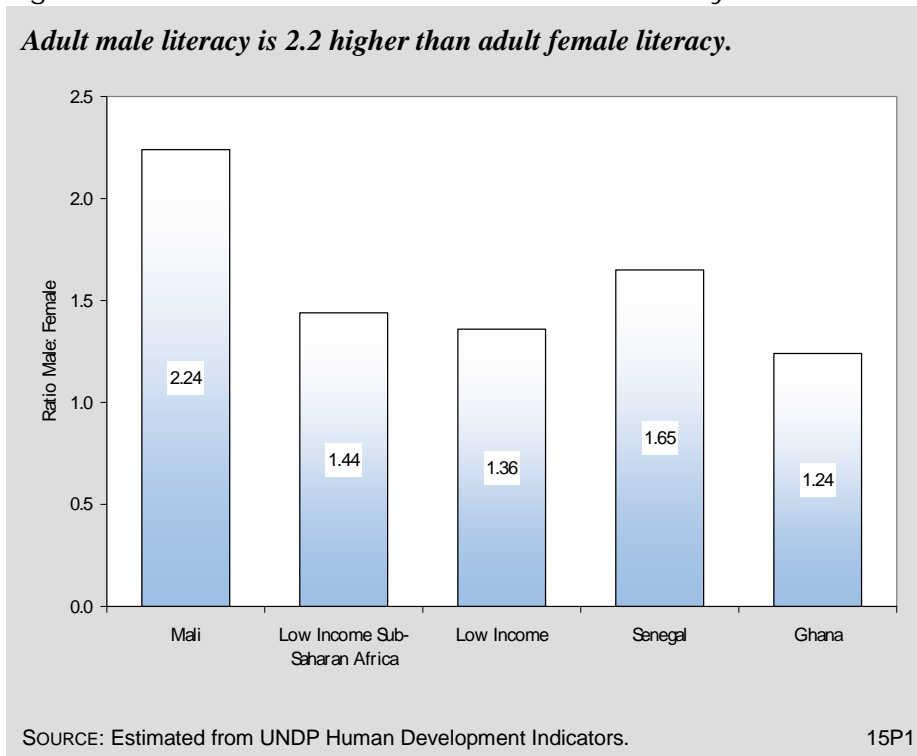


Despite population pressure on soil resources, Mali scores moderately well on a newly created Environmental Sustainability Index, which combines data on 57 variables. Mali's score of 53.7 (on a scale of 0 to 100) is better than the regression benchmark of 47.0 for an African country at Mali's income level, and very similar to the scores for Ghana (50.2) and Senegal (47.6). But detailed figures behind this overall rating reveal serious problems in population stress on the land, basic human sustenance, and environmental health.

## GENDER

Gender equity is central to poverty alleviation in countries like Mali, where women have been disproportionately deprived of access to education, health services, and productive opportunities beyond subsistence agriculture. Differences in adult literacy are stark; the male literacy rate is 2.2 times higher than for females (see Figure 2-6.) In contrast, the ratio is 1.4 for LIC-Africa, 1.7 for Senegal, and 1.2 for Ghana. In absolute terms, literacy rates in Mali are extremely low for both

Figure 2-6. Ratio of Male to Female Adult Literacy



men (26.7 percent) and women (11.9 percent).<sup>8</sup> Pervasive illiteracy among women has major long-term effects on growth, because maternal education is strongly related to children's nutrition, health, and education. Equally troubling is limited progress in literacy among the younger generation. The gross enrollment rate for all levels of schooling is 1.5 times higher for males than females. This is much worse than average ratio of 1.2 for LIC-Africa, and similar to figures for Ghana and Senegal. In terms of life expectancy, the male to female ratio for Mali is 0.98, similar to the average for LIC-Africa. The biggest problem is that actual life expectancy is extraordinarily low for both males and females, at 41 and 39 years, respectively.

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<sup>8</sup> These figures are from World Development Indicators 2005, and UNESCO Institute for Statistics, May 2005. The overall adult literacy rate is 19 percent. In contrast, Mali's PRSP (2002) gives a figure of 31 percent for 1999, and the PRSP update (2004) gives a figure of 35 percent for 2002. Even these figures are very poor in comparison with benchmark standards.

# 3. Private Sector Enabling Environment

This section reviews indicators for components of the enabling environment that encourage rapid and efficient growth of the private sector. Sound fiscal and monetary policies are essential for macroeconomic stability, which is a necessary (though not sufficient) condition for sustained growth. A dynamic market economy also depends on institutional foundations, including secure property rights, an effective system for enforcing contracts, and an efficient regulatory environment that does not impose undue barriers on business activities. Financial institutions play a major role in mobilizing and allocating 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 efficiency and rising productivity. Equally important is development of the physical infrastructure to support production and trade. Finally, developing countries need to adapt and apply science and technology as a basis for attracting efficient investment, improving competitiveness, and stimulating productivity growth.

The IMF's program status for Mali is worthy of note in relation to the country's enabling environment. In June, 2004, the IMF approved a three-year arrangement under the Poverty Reduction and Growth Facility (PRGF) to support Mali's economic program into 2007. The IMF arrangement "aims at ensuring continued macroeconomic stability and promot[ing] the strong, sustainable growth that is needed to make significant inroads on poverty. To meet those challenges, the government's strategy focuses on fiscal consolidation, and on structural policies to develop human resources and improve the climate for private-sector-led growth."<sup>9</sup>

## **FISCAL AND MONETARY POLICY** <sup>10</sup>

In general, fiscal and monetary policies are providing a sound footing for private sector growth. The Government of Mali holds the reins of fiscal policy, but monetary policy is in the hands of

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<sup>9</sup> IMF, Press Release No. 04/125, June 23, 2004.

<sup>10</sup> The World Development Indicators 2005 database adopts new categories for government finance statistics. As a result, the database has fiscal data for very few developing countries, and group medians for these fiscal variables are no longer meaningful because of limited sample size. The international benchmarking analysis for fiscal indicators is therefore based on data from WDI 2004.

the Central Bank of West African States (BCEAO), through Mali's membership in the West African Economic Monetary Union (WAEMU). The aim of BCEAO monetary management is to maintain a pegged exchange rate between the CFA Franc and the Euro. This arrangement has been very successful in controlling inflation,<sup>11</sup> which averaged 0.5 percent over the past five years. In 2003 and 2004, prices actually suffered some deflation; though the IMF expects inflation to return to low single digits in 2005 and 2006 (Figure 3-1). Fiscal policy is also in reasonably good shape. Domestic revenues (excluding grants) have increased steadily to an estimated 17 percent of GDP in 2004, well above the regression benchmark of 15 percent for Mali's level of income.<sup>12</sup> Government expenditure has also been rising, reaching an estimated 25 percent of GDP in 2004, primarily through an increase in current spending.<sup>13</sup> This raises warning flags. In a recent report, the IMF emphasized the need to contain expenditure growth, including the wage bill.<sup>14</sup> Nonetheless, the overall budget deficit (including grant receipts) has averaged a moderate 2.4 percent of GDP in the last three years, including 2.8 percent for 2004. Excluding grants, however, the 2004 deficit is estimated at 7.4 percent of GDP, which would be unsustainable without continued donor support. On the whole, fiscal and monetary policies are providing a good foundation for private sector growth. But the fiscal position needs to be managed carefully to prevent rising deficits that would undermine the credibility of macroeconomic policies.

## BUSINESS ENVIRONMENT

Institutional barriers to doing business, including corruption in government, are critical determinants of private sector development and prospects for sustainable economic growth. Compared to peer benchmarks, Mali's performance is average. The regional standards, however, do not exemplify what is needed to promote a strong private sector. Thus, there is ample scope for reducing impediments to doing business in Mali.

A composite index of "doing business" indicators<sup>15</sup> shows that Mali's institutional environment (scoring 50.8 out of 100) falls short of the average for LIC-Africa (Figure 3-2). Much needs to be done to reduce bureaucracy and simplify regulations. Mali receives poor scores for the cost of starting a business (187 percent of per capita income), the number of procedures for starting a business (13), and time to enforce a contract (340 days). In the latter case, Mali's score is better than the average for LIC-Africa (415 days) and the value for Senegal (485 days), but far inferior

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<sup>11</sup> A Millennium Challenge Account indicator.

<sup>12</sup> 2004 data for fiscal and monetary indicators are IMF estimates based on actual data through September 2004.

<sup>13</sup> Most notable is increased government spending on goods and services. This figure is up from 109 billion CFA francs to an estimated 138 billion CFA francs in 2004.

<sup>14</sup> IMF. Mali: First Review Under the Three-Year Arrangement Under the Poverty Reduction and Growth Facility and Request for Waiver of Nonobservance Performance Criteria. February, 2005.

<sup>15</sup> See the Technical Notes in the Data Supplement for details. The composite index has been constructed for this report based on guidance from USAID/EGAT.

Figure 3-1. Inflation Rate

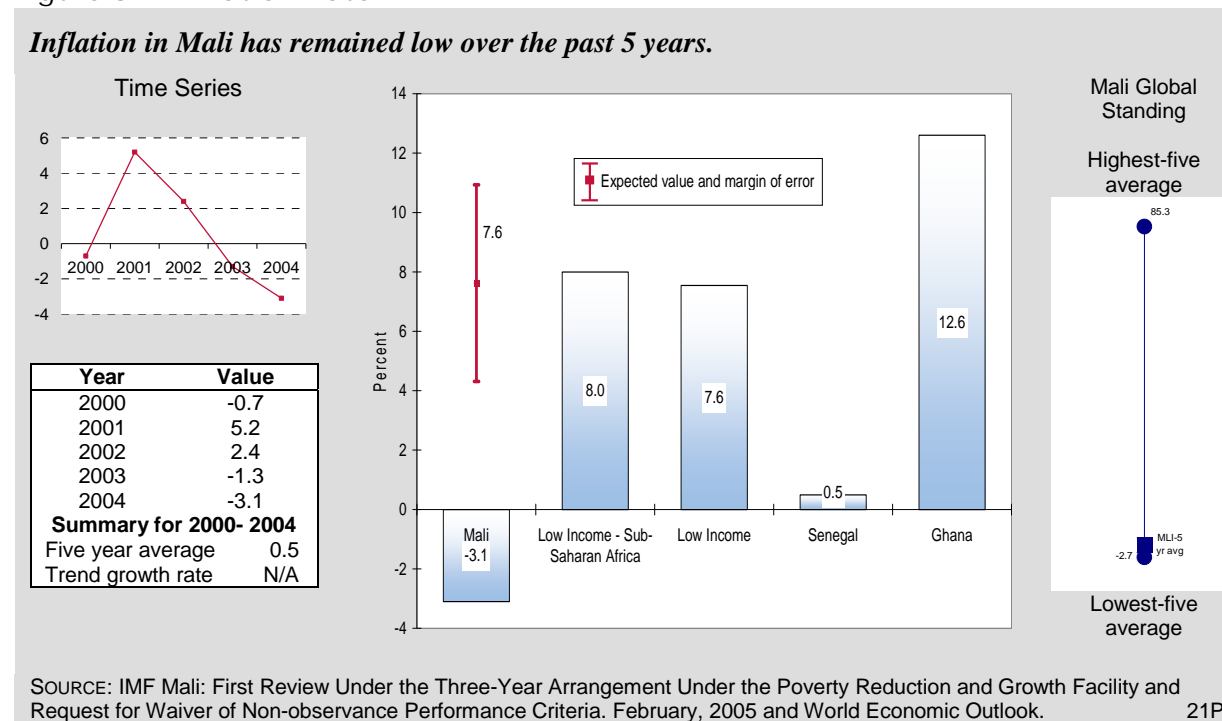
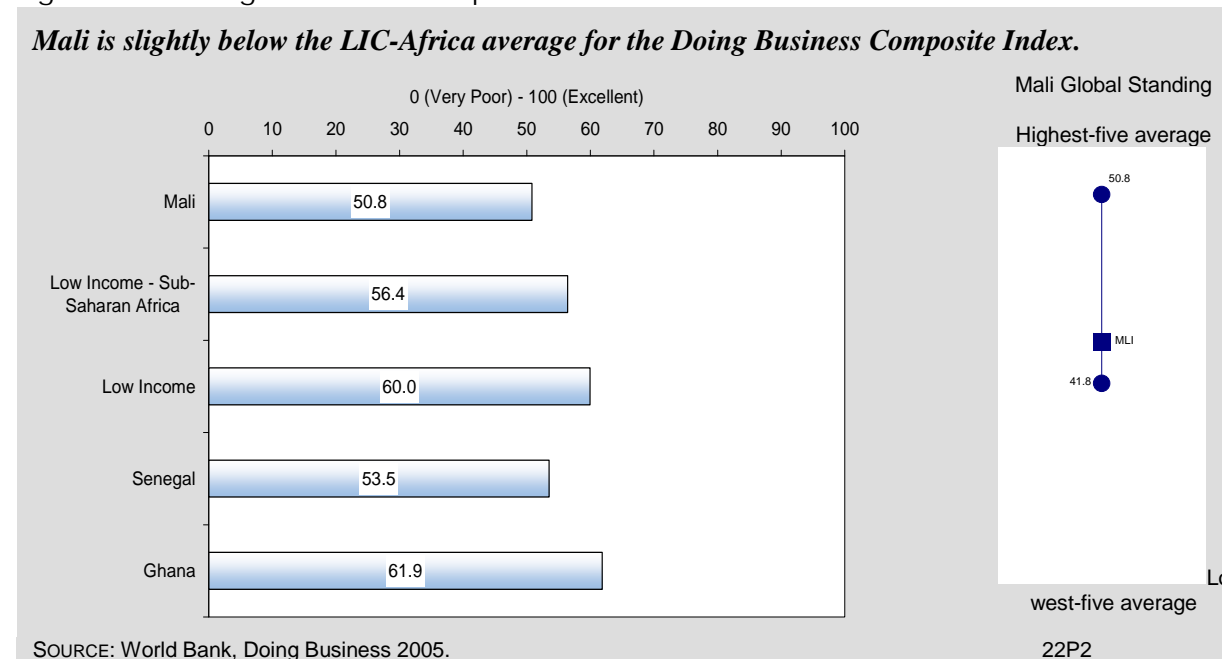


Figure 3-2. Doing Business Composite Index



to the example set by Ghana (200 days). Consequently, programs that promote institutional reform and development may be an important area for USAID intervention.

On the World Bank's rule of law index,<sup>16</sup> Mali's score of -0.3 (on a scale of -2.5 to +2.5) is substantially better than the average for LIC-Africa (-1.0), and comparable to Senegal and Ghana (both -0.2), two regional leaders. Similarly, on Transparency International's Corruption Perceptions Index, Mali's score of 3.2 out of 10 (with a high score indicating low corruption) is better than the LIC-Africa average, and comparable to scores for Senegal and Ghana. Nevertheless, levels of corruption need to be monitored carefully, and where necessary, preventive action taken.

## FINANCIAL SECTOR

A sound, efficient, and competitive financial sector is a fundamental mechanism for mobilizing saving, allocating financial resources, fostering entrepreneurship, and improving risk management. Mali appears to be taking steps to develop its banking system. A simple indicator of financial development is the degree of monetization, measured by the ratio of broad money (currency plus bank deposits) to GDP. In recent years, the monetization ratio has risen steadily to 31.3 percent of GDP, well above the LIC-Africa average of 21.6 percent, and the benchmarks for Ghana (26.5) and Senegal (27.6). This indicates that the banking system is expanding to provide better services to the economy. Domestic credit to the private sector is also relatively high by regional standards, at 19.2 percent of GDP, more than double the LIC-Africa benchmark of 8.3; the corresponding figures for Ghana and Senegal are 11.8 percent and 20.8 percent, respectively. Another indication of emerging financial development is the Institutional Investor credit rating<sup>17</sup> of 23.7, which is above the average rating of 18.9 for LIC-Africa, though well behind Ghana (29.3) and Senegal (33.1).

Unfortunately, data on lending rates or interest spreads that could shed light on the efficiency of the banking system are not available. Mali does, however, score a 3 out of 10 on the World Bank's index of legal rights of borrowers and lenders, versus an average of 4 for LIC-Africa. Another troubling indicator is the cost to create collateral, as a percentage of per capita income. The value for Mali, 58.5 percent, is more than double the average for LIC-Africa (Figure 3-3). These indicators suggest that institutional constraints are impeding development of the financial sector. Determining the source of these impediments and the best course of action for financial development would require an in-depth study.

## EXTERNAL SECTOR

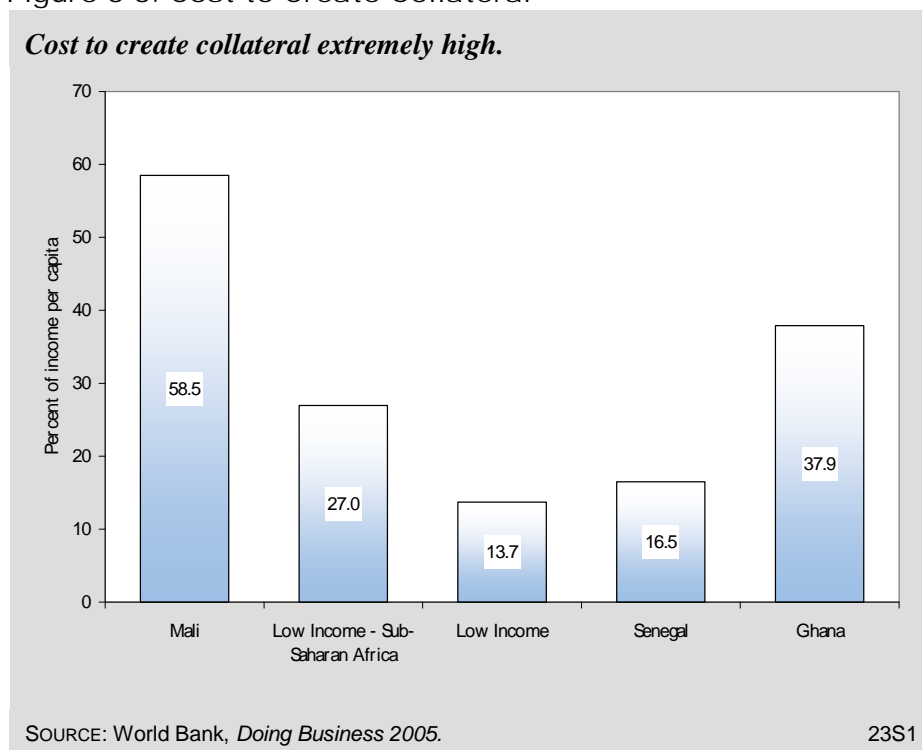
Fundamental changes in international commerce and finance, including reduced transport costs, advances in telecommunications technology, and lower policy barriers, have fueled a rapid increase in global integration over the past 25 years. In stimulating productivity and efficiency,

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<sup>16</sup> A Millennium Challenge Account indicator.

<sup>17</sup> Ibid.

Figure 3-3. Cost to Create Collateral



providing access to new markets and ideas, and expanding the range of consumer choice, the international flow of goods and services, capital, technology, ideas, and people offers great opportunities for Mali to boost growth and reduce poverty. Globalization also creates challenges by requiring that institutions take full advantage of international markets by developing sound policies and regulations, cost-effective approaches to adjustment, and systems for monitoring and mitigating risks.

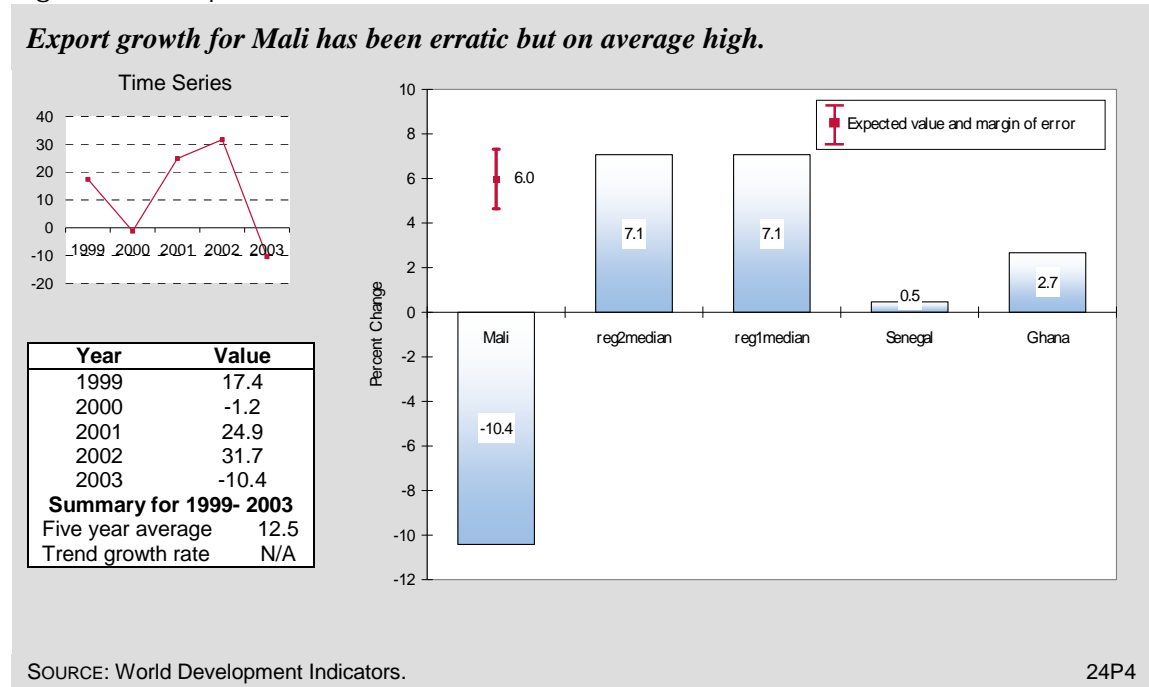
As the following analysis shows, Mali is a relatively open economy with strong (though erratic) export growth, a high degree of export concentration, moderate inflows of foreign direct investment, substantial dependence on foreign aid, and healthy foreign exchange reserves. On the whole, Mali's external sector is under control.

## International Trade and the Current Account

The most common indicator of trade openness is the ratio of exports plus imports (of goods and services) to GDP. The ratio for Mali has varied from 59 to 77 percent over the past five years, revealing serious volatility; the average of 65 percent, however, is in line with the regression benchmark for a country at Mali's stage of development. The growth of export earnings has averaged 12.5 percent, well above the regression benchmark and average for LIC-Africa, but exports are also highly erratic (see Figure 3-4). The volatility is rooted in dependence on two primary products with unstable world market prices, cotton and gold. These two commodities

accounted for 83 percent of Mali's export earnings in 2004.<sup>18</sup> Increased volatility is also due to conflict in neighboring Cote D'Ivoire.

Figure 3-4. Export Growth, Goods and Services



Mali's relatively open trade regime is reflected in its score of 3 on the Heritage Foundation's trade policy index, which ranges from 1 (very good) to 5 (poor).<sup>19</sup> The index is based on the weighted average tariff rate, adjusted for non-tariff barriers and corruption in the customs service. The average for LIC-Africa is 4, while scores for Ghana and Senegal are 4 and 3, respectively. Mali is therefore ahead of, or comparable to, other countries in the region in liberalizing trade.

Excluding official transfers (grants), the current account deficit was close to 7 percent of GDP in 2004. Taking grants into account, the figure was 4.6 percent of GDP; over the past five years, the current account deficit averaged 6.7 percent—here, too, with high volatility.<sup>20</sup> This is somewhat above the regression benchmark of 6.2 percent for an African country at Mali's income level. The sustainability of this deficit hinges on the country's access to international capital flows, as discussed below. The primary lesson, however, is that export diversification needs to be fostered so that export earnings and the current account balance are less vulnerable to external shocks.

<sup>18</sup> IMF. Mali: First Review Under the Three-Year Arrangement Under the Poverty Reduction and Growth Facility and Request for Waiver of Nonobservance Performance Criteria. February 2005.

<sup>19</sup> A Millennium Challenge Account indicator.

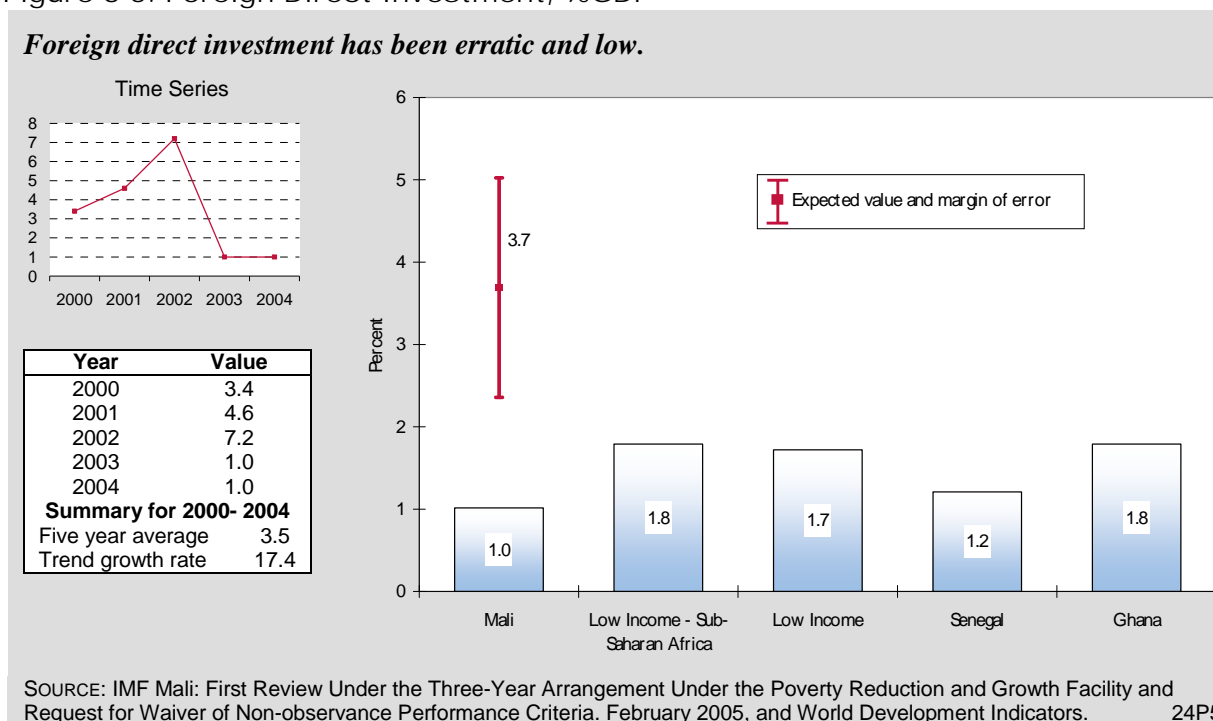
<sup>20</sup> Ibid.



## International Financing

The main sources of financing for Mali’s current account deficit are soft loans from multilateral financial institutions, and inflows of private capital. Net aid inflows accounted for 12.7 percent of GNI in 2003, well below the regression benchmark of 16.8 percent, though fully in line with the LIC-Africa average of 12.4 percent. The corresponding value for Senegal is 7.0 percent, and for Ghana, 12.2 percent. The volume of aid has been as high as 15 percent of GDP in recent years, and continued inflows appear to be reasonably dependable. Mali, like most of LIC-Africa, has been less successful in attracting foreign direct investment (FDI). Between 2000 and 2004, FDI averaged 3.5 percent of GDP, but the figure for 2004 was just 1.0 percent (Figure 3-5). This compares to a regression benchmark of 3.7 percent, and recent FDI inflows of 1.8 percent of GDP for Ghana and 1.2 percent for Senegal. More to the point, FDI flows are very low in absolute terms. This fact reinforces the importance of programs that improve the investment climate.

Figure 3-5. Foreign Direct Investment, %GDP



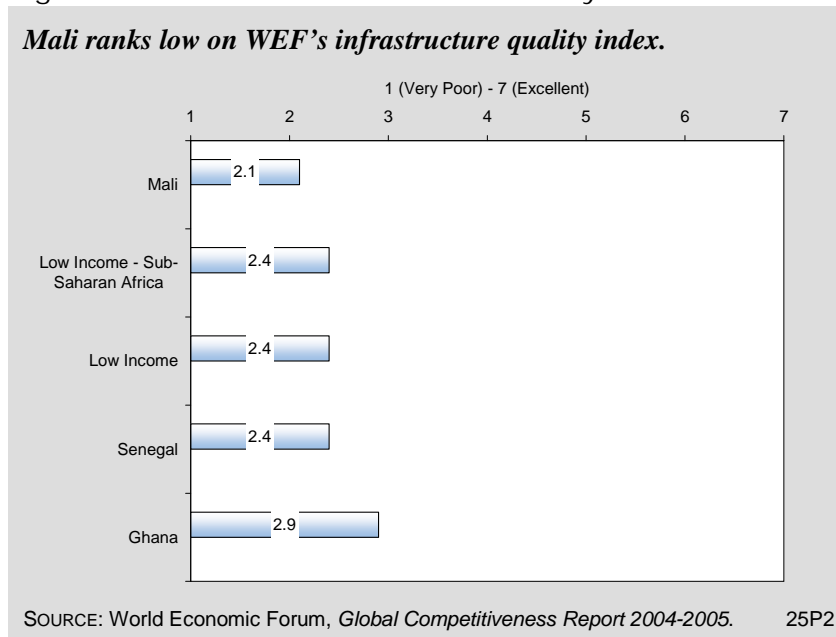
To the extent that net capital inflows differ from the amount of financing needed to cover the current account deficit, the balance is seen as a change in foreign exchange reserves. Over the past five years, gross international reserves have risen from 4.5 months of import cover to 6.7 months’ worth, despite rising levels of imports. This is a very healthy level of reserves, well above the average of 4.1 months for LIC-Africa, as well as the reserve levels for Ghana (4.1 months) and Senegal (3.3 months).

## Debt

Because of its progress in implementing economic reforms, Mali qualified for HIPC debt relief of approximately \$870 million in 2000. Consequently, debt service payments have declined to 6.3

percent of export earnings, compared to a post-HIPC average of 10.4 percent for LIC-Africa. The present value of debt payments (PVD) has also greatly diminished, to 42.4 percent of GDP in 2003, well below the average of 65.6 percent for LIC-Africa. Both indicators show that Mali's debt is not a significant problem. Moreover, the IMF and World Bank are continually monitoring its sustainability.

Figure 3-6. Overall Infrastructure Quality Index



## ECONOMIC INFRASTRUCTURE

A country's physical infrastructure—for transportation, communications, power, and information technology—is the backbone for strengthening competitiveness and expanding productive capacity. Key indicators for Mali present a mixed picture of infrastructure development.<sup>21</sup> The broadest indicator of infrastructure *quality* for business development is an index of executive perceptions compiled by the World Economic Forum (WEF). Mali's score of 2.1 (out of 7) is lower than the median for LIC-Africa, and worse than the scores for Senegal and Ghana (Figure 3-6). The perception of poor infrastructure quality, relative to regional standards, carries through WEF results for rail development (with a score of 1.3), port facilities (1.2)—particularly ports on the Niger River and dry ports—and air transportation (2.8), all of which are vital given Mali's landlocked position. Mali's score on the quality of electricity supply (2.6) is slightly above the regional benchmark, but still quite low.

<sup>21</sup> This section relies on perception indicators to assess infrastructure quality and adequacy. Objective measures of infrastructure *quantity* often have little diagnostic value. For example, a low value for kilometers of paved roads does not imply a problem because unpaved all-weather roads may be more efficient than paved secondary and tertiary roads in poor countries.

For communications infrastructure, two indicators tell a story of serious underdevelopment. Mali has 10.3 telephone lines (including mobile phones) and 2.4 Internet users per 1,000 people. Both figures are very low compared to the LIC-Africa averages of 37.9 phone lines and 4.3 Internet users per 1,000 people, and far behind developments in Ghana (with 49 phone lines and 8 Internet users per 1,000 people) and Senegal (with 78 phone lines and 22 Internet users per 1,000 people). Communication technology is vital for international transactions, so the poor state of this infrastructure is a serious barrier to trade and investment. The good news is that both indicators have been rising rapidly in Mali, albeit from extremely low levels.

All of these infrastructure deficiencies impair investment, put local businesses at a competitive disadvantage, and undermine prospects for more rapid economic growth. Programs that promote infrastructure development may be an important area for USAID intervention, particularly those that take sustainable approaches such as improvements in capital budgeting, better planning for recurrent costs, and innovative involvement of the private sector in infrastructure investment.

## SCIENCE AND TECHNOLOGY

Science and technology are central elements of dynamic growth because technical knowledge is a driving force for rising of productivity and competitiveness. Even for low-income countries like Mali, transformational development increasingly depends on acquiring and adapting technology from the global economy, and applying it in ways appropriate to their level of development. A lack of capacity to acquire and use technology prevents an economy from benefiting fully from globalization. Unfortunately, few international indicators are available for judging science and technology performance in low-income developing countries. Hence, one must infer performance from a very limited data set, as proxies for other missing information.<sup>22</sup>

One useful indicator is the WEF's FDI technology transfer index, which gauges executive perceptions of the extent to which FDI is bringing new technology (on a scale of 1 to 7). Mali's score of 3.8 is well below the average of 4.5 for LIC-Africa, and far less than Ghana's score of 5.1. (No figure is available for Senegal.) Thus, Mali is not attracting FDI that delivers a high rate of technology transfer. The larger problem, of course, is that Mali is not attracting much FDI at all; even if the available investment had a stronger technology component, the impact would not be adequate to drive substantial technology growth. Another basic indicator of technology status is the number of Internet users per 1,000 people; as discussed in the previous section, Mali remains far behind other low-income countries in Africa on this measure, though Internet use is growing. No data are available for Mali on R&D expenditure or patent applications. The absence of data, in itself, is a sign of poor science and technology development. The general conclusion is that Mali is not ready for a technology take-off because of problems with the investment climate, as discussed above, and even more so a severe lack of well educated and well trained people.

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<sup>22</sup> For many low-income countries one cannot even find timely data on enrollments in science and technology programs.



# 4. Pro-Poor Growth Environment

While rapid growth is the most powerful and dependable instrument for poverty reduction, the link from growth to poverty reduction is not mechanical. Under some conditions, income growth for poor households exceeds the overall rise in per capita income, while under other conditions growth benefits the non-poor far more than the poor. A pro-poor growth environment stems from policies and institutions that improve opportunities and capabilities for the poor, while reducing their vulnerabilities. Pro-poor growth is associated with improvements in primary health and education, the creation of jobs and income opportunities, the development of skills, micro-finance, agricultural development (for countries like Mali with large populations of rural poor), and gender equality.<sup>23</sup> This section focuses on four of these areas: health, education, employment and the workforce, and agricultural development.

## HEALTH

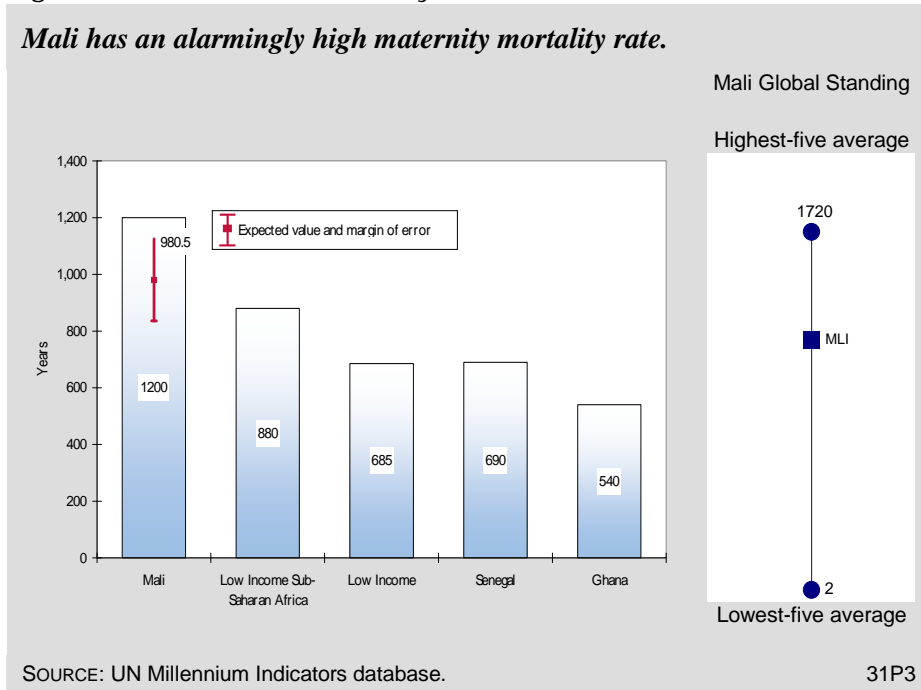
The provision of basic health service is a major form of human capital investment, and a significant determinant of growth and poverty reduction. Although health programs do not fall under the EGAT bureau, an understanding of health conditions can influence the design of EG interventions.

Pervasive poverty has led to severe health conditions in Mali. The broadest indicator of health status is life expectancy. The average life expectancy of 41 years in Mali is among the lowest in the world. This is due primarily to high infant and child mortality. Unlike many sub-Saharan countries, HIV/AIDS is not a major cause of early mortality in Mali, since the prevalence rate is a low 1.9 percent (and has remained so for the past 5 years). In contrast, Mali's maternal mortality rate of 1,200 deaths per 100,000 live births is very high relative to every benchmark, confirming the severity of the national health crisis and the human cost of deep poverty (Figure 4-1). Only 41 percent of births are attended by trained health personnel, well below the average of 51 percent for LIC-Africa. Thus, inadequate access to, quality of, and knowledge about health care causes the death of many women in childbirth. Similarly, the rate of child malnutrition, 33 percent, is slightly worse than the average of 31 percent for LIC-Africa, and far higher than the rates in Ghana and Senegal (both around 22 percent).

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<sup>23</sup> For purposes of economic growth programming, the template does not cover emergency relief.

Figure 4-1. Maternal Mortality Rate



The Government of Mali has taken steps to improve conditions in the health sector. First, public expenditure on health care has risen from 1.9 percent of GDP in 2001 to an estimated 2.3 percent in 2004, slightly above the LIC-Africa average of 2.1 percent. Second, the child immunization rate of 69 percent is on par with the regional average and the rate in Senegal, though well below Ghana's rate of 80 percent. Third, Mali is above the regional benchmark in providing access to improved sanitation, with a rate of 45 percent, compared to an average of 34 percent for LIC-Africa. Here, though, Mali is well behind Senegal (52 percent) and Ghana (58 percent), and in absolute terms the health consequences of half the population living with poor sanitation are severe. Even worse is access to clean water, where Mali falls far short of the regional standard, and conditions in both Ghana and Senegal (see Figure 4-2).

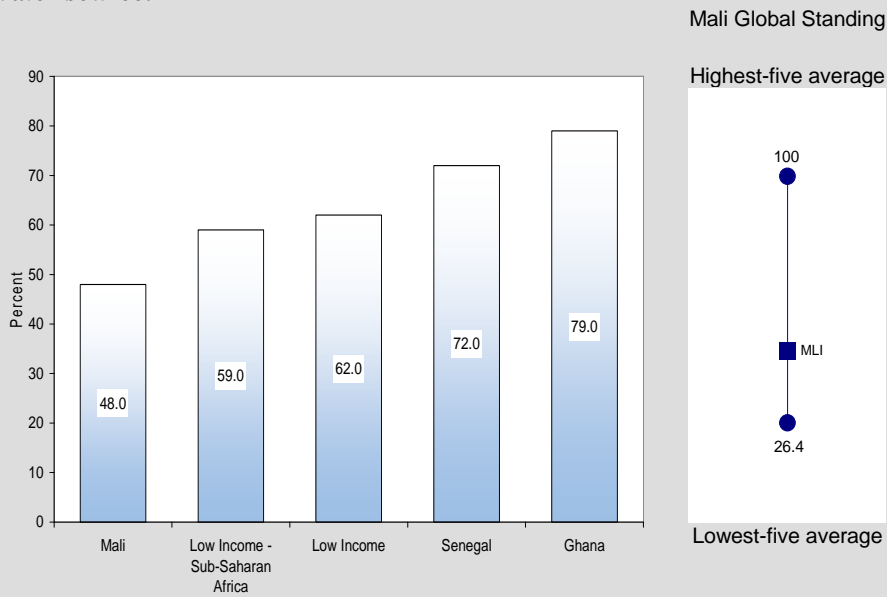
In summary, poor health conditions in Mali are a major impediment to economic growth, and a primary factor in the persistence of severe poverty.

## EDUCATION

Most education indicators for Mali also fall short of regional benchmarks, though signs of progress are evident. One basic indicator is the net enrollment rate (NER), which shows the percentage of primary school age children who are enrolled in school. For Mali, the NER rose from an estimated 38 in 1998 to 44.5 percent in 2002 (latest year); even the latter figure, however, compares poorly with the average of 64.3 percent for LIC-Africa, as well as rates in Ghana and Senegal (see Figure 4-3). Of those who do enroll, approximately 75 percent persist to grade 5, which exceeds the regional benchmarks; nonetheless, with such low enrollment rates, Mali is near the bottom of the region in the proportion of children completing at least grade 5. In addition, the

Figure 4-2. Access to Improved Water Source

**Mali ranks low in terms of % of the population with access to a clean water source.**

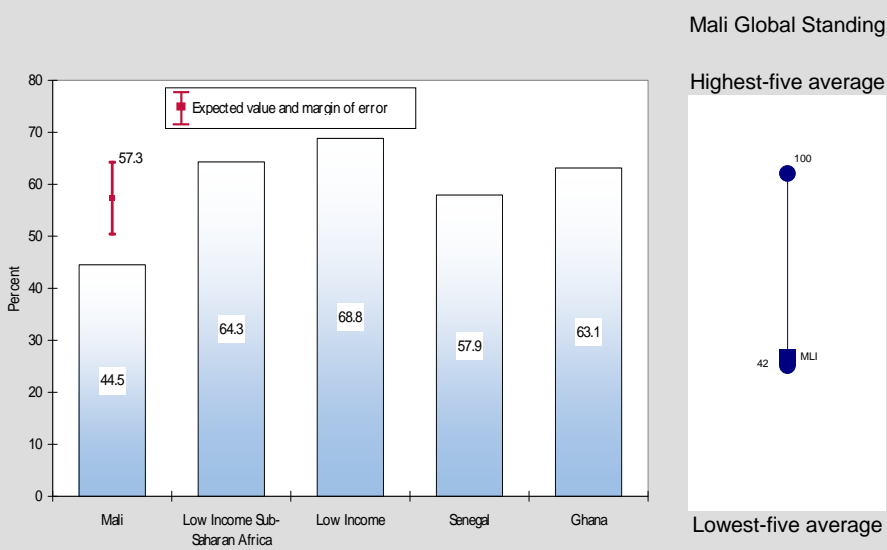


Source: World Development Indicators.

31S2

Figure 4-3. Net Primary Enrollment Rate

**Primary school enrollment rate is among the lowest in the world.**



SOURCE: UNESCO Institute for Statistics.

32P1a

primary level pupil-teacher ratio<sup>24</sup> of 57:1 (in 2002) is one of the highest in the world, suggesting that the quality as well as quantity of education lags behind most other countries.

These severe deficiencies in the education system show up starkly in Mali's youth literacy rate. According to the 2005 World Development Indicators, only 24 percent of the population age 15-24 was literate in 2000 (latest available data). This precise number is questionable, since a figure of 35 percent is given for earlier years. Even the higher number, however, is terribly low compared to the LIC-Africa average of 75 percent, as well as the rates of Senegal (53) and Ghana (92).

Recent budget data show that government expenditure on primary education, at 2.4 percent of GDP, is higher than the regional average of 2.0 percent, but the other indicators show that far more effort is required to improve education outcomes, a cornerstone of broad-based growth. Programs addressing these needs may include innovative incentives to increase enrollment rates, particularly for girls, and measures to improve the supply of education such as teacher training, better financing of teaching and learning materials, and improved curriculum. Technical and higher education is also a critical ingredient for sustainable development, but the database used for this study does not include indicators for analysis at this level.

## **EMPLOYMENT AND WORKFORCE**

Mali's need to create productive jobs and income-generating opportunities for its growing population is acute. Reflecting Mali's youthful demographic structure, the labor force is estimated to be growing by just more than 2 percent per year. While this is slightly below the average labor force growth rate for LIC-Africa (2.2 percent), the economy still needs to absorb roughly 120,000 new workers each year. This can only be accomplished by creating a market environment that fosters private investment, business expansion, and opportunities for productive self-employment.

Labor force participation is extremely high, with an estimated 97 workers per 100 people of working age (15-64), well above the average of 86 for LIC-Africa. In part, the high participation rate is a consequence of deep and severe poverty, because very poor people can ill afford the luxury of not working. But the figure also hints at serious problems with child labor, both in Mali and other low-income countries in Africa. According to the ILO,<sup>25</sup> child labor conditions in Mali are among the worst in the world (based on data from the mid-1990s). The cotton industry is a major offender, with other small-scale farm activities close behind. Trafficking in child labor is also a huge problem, as many children are shipped to Cote d'Ivoire and other nearby countries to work on farms and in factories. The government is cooperating with the ILO to combat this social cancer. These problems may be a priority for attention by USAID and other funding agencies in planning education programs or strategies to stimulate agricultural production.

Mali's labor laws and regulations are not particularly favorable for job creation. The World Bank's Rigidity of Employment index measures the difficulty of hiring and firing workers on a

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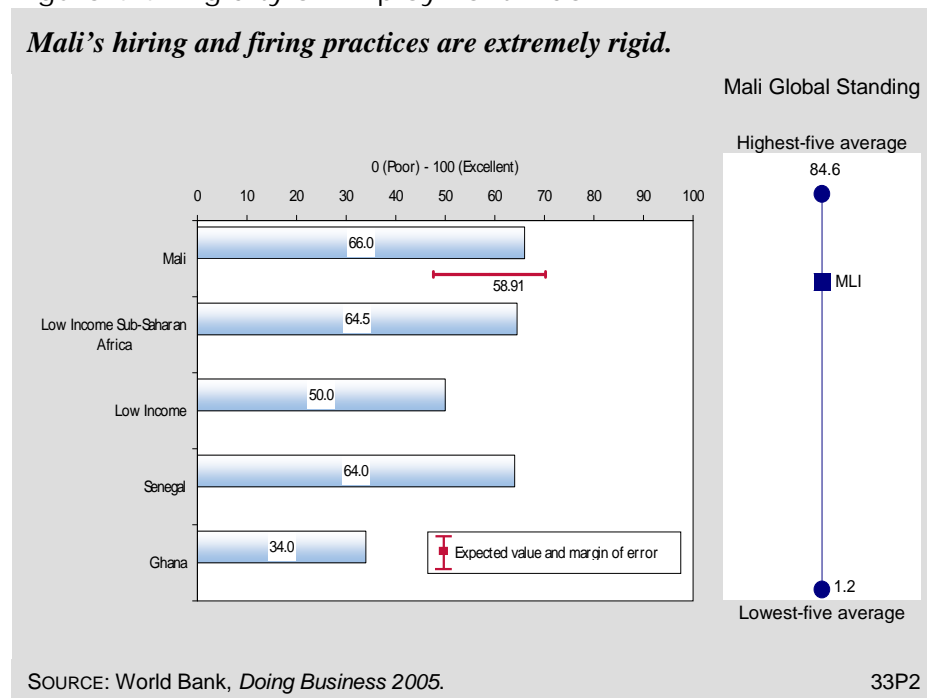
<sup>24</sup> A Millennium Challenge Account indicator.

<sup>25</sup> See [www.ilo.org/public/english/bureau/inf/pr/1998/4.htm](http://www.ilo.org/public/english/bureau/inf/pr/1998/4.htm).



scale of 0 to 100 (with higher values indicating greater rigidity). Mali's score of 66 in 2004 is marginally worse than the average of 64.5 for LIC-Africa, itself a poor standard. In contrast, Ghana's score of 34 indicates far more flexibility in its labor market, which makes it easier for the private sector to create jobs and adjust to market conditions (Figure 4-4).

Figure 4-4. Rigidity of Employment Index



Consequently, programs that foster productive jobs and income-generating opportunities for the growing population may be an important area for USAID intervention.

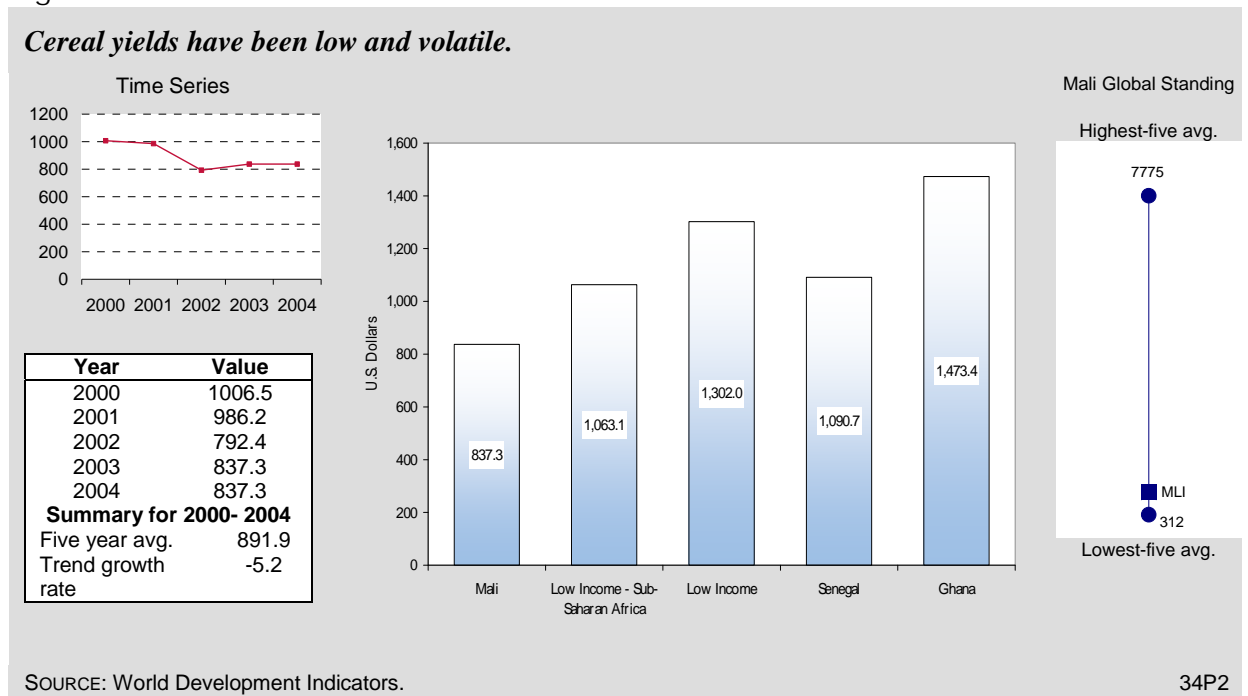
## AGRICULTURE

Agricultural development is a critical determinant of growth and poverty reduction in Mali. An estimated 67 percent of the population lives in rural areas; virtually all of these people depend on agriculture for their livelihood, primarily through small-scale subsistence production. Agriculture also accounts for more than one-third of GDP, and more than half of export earnings.<sup>26</sup> These exports are concentrated in the cotton sector, which is characterized by volatile world market prices, including a price drop of 45 percent in 2001. The economy's sensitivity to price changes for a handful of commodities reflects a vast need to diversify the production sector and reduce reliance on traditional primary products. Likewise, Mali's location at the edge of the Sahel means that rainfall is erratic, droughts common, and desertification a menace to agriculture. Not surprisingly, economic growth rates tend to mirror rainfall patterns.

<sup>26</sup> The latest export figure is from 2001 (from WDI 2005).

Despite the importance of agriculture in Mali, the sector is not performing well. Value added per agricultural worker in Mali averaged \$225 (in constant 1995 dollars) over the five years to 2003, well below the average of \$250 for LIC-Africa and the benchmarks for Senegal (\$265) and Ghana (\$346). Furthermore, the growth of value added in agriculture has averaged just 3.1 percent per year, barely above the rate of population growth. Cereal yields have been low by regional standards and very volatile (Figure 4-5). The FAO's index of crop production, defined to equal 100 for the period 1989–1991, rose to only 108 by 2004, indicating little overall growth for the past 15 years. Over the same period, a similar FAO index of livestock production showed an increase of just 18 percent, representing an average growth rate of just 1.1 percent. Both FAO index values are above the average for LIC-Africa (105 for crops and 107 for livestock), but in absolute terms the data signal a bleak situation.

Figure 4-5. Cereal Yields



According to the World Economic Forum, Mali receives a score of 3.9 out of 7 (with 7 being best) on a survey question about the burden of policy costs for agriculture. While this is marginally better than the average of 3.5 for LIC-Africa, the score is fairly low in absolute terms, indicating considerable room for policy improvement. But the main problems lie clearly in education, health, rural infrastructure, agronomic research and development, and a general lack of investment. In the short to medium run, support for market-driven agricultural development must be a high priority for both the government and donors. In the long run, however, the main challenge will be to transform the economy by stimulating investment and job creation beyond traditional agriculture. Consequently, USAID programs that focus on fostering the development of non-agricultural industry would be useful.

# Appendix. Indicator Criteria and Benchmarking Methodology

## CRITERIA FOR SELECTING INDICATORS

The scope of this paper is constrained by the availability of suitable indicators. Indicators have been chosen to balance the need for broad coverage and diagnostic value, on the one hand, and the need of brevity and clarity, on the other. The analysis covers 15 EG-related topics, and just more than 100 variables. For the sake of brevity, the main text highlights issues for which the “dashboard lights” appear to be signaling problems and which suggest possible priorities for USAID intervention. The accompanying table lists all indicators examined for this report. A separate Data Supplement contains the complete data set for Mali, including data for the benchmark comparisons, and technical notes for every indicator.

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

In areas of weak performance, the analysis proceeds to review a limited set of *diagnostic supporting indicators*. These “level II” indicators provide more details about the problem 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>1</sup>

The indicators have been selected on the basis of several criteria. Each one must be accessible through USAID’s Economic and Social Database or convenient public sources, particularly on the Internet. The indicators must be available for a large number of countries, including most USAID client states. The data must be sufficiently timely to support an assessment of country performance that is suitable for strategic planning. 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.

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<sup>1</sup> Deeper analysis of the topic using more detailed data (level III) is beyond the scope of papers in this series.

Preference is given to measures that are widely used, such as Millennium Development Goal indicators, or evaluation data used by the Millennium Challenge Corporation. Finally, an effort has been made to minimize redundancy. If different indicators provide similar information, preference is given to one that is simplest to understand. 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 Mali relative to the average for countries in the same income group and region—in this case, low-income countries in sub-Saharan Africa (hereafter “LIC-Africa”).<sup>2</sup> For added perspective, three other comparisons are examined: (1) the global average for this income group; (2) respective values for two comparator countries selected by the Mali mission (Ghana and Senegal); 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 if they shed light on the performance assessment.<sup>3</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>4</sup> This approach has three advantages. First, the benchmark is customized to Mali’s level of income. Second, the comparison does not depend on the exact choice of reference group. Third, the methodology allows one to quantify the margin of error and establish a “normal band” for a country with Mali’s characteristics. An observed value falling outside this band on the side of poor performance signals a serious problem.<sup>5</sup>

Finally, where relevant, Mali’s performance is weighed against absolute standards. For example, the corruption perception index for Mali was 3.2 in 2004. Regardless of the regional comparisons or regression results, this is a sign of serious economic governance problems.

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<sup>2</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 because the values are not distorted by outliers.

<sup>3</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>4</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) =  $a + b * \ln \text{PCI} + c * \text{Region} + \text{error}$  – 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. Once estimates are obtained for the parameters  $a$ ,  $b$  and  $c$ , the predicted value for Mali is computed by plugging in Mali-specific values for PCI and Region. Where applicable, the regression also controls for population size and petroleum exports (as a percentage of GDP).

<sup>5</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% of the observations should fall outside the normal range on the side of poor performance (and 25% 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.

# LIST OF INDICATORS

	Level	MDG/MCA/EcGov <sup>a</sup>	CAS Indicator Code
<b>OVERVIEW OF THE ECONOMY</b>			
<b>Growth Performance</b>			
Per capita GDP, \$PPP	I		11P1
Per capita GDP, current US\$	I		11P2
Real GDP growth	I		11P3
Growth of labor productivity	II		11S1
Investment Productivity - Incremental Capital-Output Ratio (ICOR)	II		11S2
Gross fixed investment, % GDP	II		11S3
Gross fixed private investment, % GDP	II		11S4
<b>Poverty and Inequality</b>			
Human poverty index	I		12P1
Income-share, poorest 20%	I		12P2
Population living on less than \$1 PPP per day	I	MDG	12P3
Poverty headcount, by national poverty line	I	MDG	12P4
PRSP Status	I	EcGov	12P5
Population below minimum dietary energy consumption	II	MDG	12S1
Poverty gap at \$1 PPP a day	II		12S2
<b>Economic Structure</b>			
Labor force structure	I		13P1
Output structure	I		13P2
<b>Demography and Environment</b>			
Adult literacy rate	I		14P1
Age dependency rate	I		14P2
Environmental sustainable index	I		14P3
Population size and growth	I		14P4
Urbanization rate	I		14P5
<b>Gender</b>			
Adult literacy rate, ratio of male to female	I	MDG	15P1
Gross enrollment rate, all levels, ratio of male to female,	I	MDG	15P2
Life expectancy at birth, ratio of male to female	I		15P3
<b>PRIVATE SECTOR ENABLING ENVIRONMENT</b>			
<b>Fiscal and Monetary Policy</b>			
Govt. expenditure, % GDP	I	EcGov	21P1
Govt. revenue, % GDP	I	EcGov	21P2
Growth in the money supply	I	EcGov	21P3
Inflation rate	I	MCA	21P4
Overall govt. budget balance, including grants, % GDP	I	EcGov	21P5
Composition of govt. expenditure	II		21S1
Composition of govt. revenue	II		21S2
Composition of money supply growth	II		21S3

	Level	MDG/MCA/EcGov <sup>a</sup>	CAS Indicator Code
<b>Business Environment</b>			
Corruption perception index	I	EcGov	22P1
Doing business composite index	I	EcGov	22P2
Rule of law index	I	MCA / EcGov	22P3
Cost of starting a business, % GNI per capita	II	EcGov	22S1
Procedures to enforce contract	II	EcGov	22S2
Procedures to register property	II	EcGov	22S3
Procedures to start a business	II	EcGov	22S4
Time to enforce a contract	II	EcGov	22S5
Time to register property	II	EcGov	22S6
Time to start a business	II	EcGov	22S7
<b>Financial Sector</b>			
Domestic credit to private sector, % GDP	I		23P1
Interest rate spread	I		23P2
Money supply, % GDP	I		23P3
Stock market capitalization rate, % of GDP	I		23P4
Cost to create collateral	II		23S1
Country credit rating	II	MCA	23S2
Legal rights of borrowers and lenders index	II		23S3
Real Interest rate	I		23S4
<b>External Sector</b>			
Aid , % GNI	I		24P1
Current account balance, % GDP	I		24P2
Debt service ratio, % exports	I	MDG	24P3
Export growth of goods and services	I		24P4
Foreign direct investment, % GDP	I		24P5
Gross international reserves, months of imports	I	EcGov	24P6
Gross Private capital inflows, % GDP	I		24P7
Present value of debt, % GNI	I		24P8
Remittance receipts, % exports	I		24P9
Trade, % GDP	I		24P10
Concentration of Exports	II		24S1
Inward FDI Potential Index	II		24S2
Net barter terms of trade	II		24S3
Real effective exchange rate (REER)	II	EcGov	24S4
Structure of merchandise exports	II		24S5
Trade policy index	II	MCA / EcGov	24S6
<b>Economic Infrastructure</b>			
Internet users per 1000 people	I	MDG	25P1
Overall infrastructure quality	I	EcGov	25P2
Telephone density, fixed line and mobile	I	MDG	25P3
Quality of infrastructure – railroads, ports, air Transport, and electricity	II		25S1
Telephone cost, average local call	II		25S2

	Level	MDG/MCA/EcGov <sup>a</sup>	CAS Indicator Code
<b>Science and Technology</b>			
Expenditure for R&D, % GNI	I		26P1
FDI and technology transfer index	I		26P2
Patent applications filed by residents	I		26P3
<b>PRO-POOR GROWTH ENVIRONMENT</b>			
<b>Health</b>			
HIV prevalence	I		31P1
Life expectancy at birth	I		31P2
Maternal mortality rate	I	MDG	31P3
Access to improved sanitation	II	MDG	31S1
Access to improved water source	II	MDG	31S2
Births attended by skilled health personnel	II	MDG	31S3
Child immunization rate	II		31S4
Prevalence of child malnutrition (weight for age)	II		31S5
Public health expenditure, % GDP	II	EcGov	31S6
<b>Education</b>			
Net primary enrollment rate	I	MDG	32P1
Persistence in school to grade 5	I	MDG	32P2
Youth literacy rate	I		32P3
Education expenditure, primary, % GDP	II	MCA/ EcGov	32S1
Expenditure per student, % GDP per capita – primary, secondary, and tertiary	II	EcGov	32S2
Pupil-teacher ratio, primary school	II		32S3
<b>Employment &amp; Workforce</b>			
Labor force participation rate, females, males, total	I		33P1
Rigidity of employment index	I	EcGov	33P2
Size and growth of the labor force	I		33P3
Unemployment rate	I		33P4
<b>Agriculture</b>			
Agriculture value added per worker	I		34P1
Cereal yield	I		34P2
Growth in agricultural value-added	I		34P3
Agricultural policy costs index	II	EcGov	34S1
Crop production index	II		34S2
Livestock production index	II		34S3

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

MDG = Millennium Development Goal indicator

MCA = Millennium Challenge Account indicator

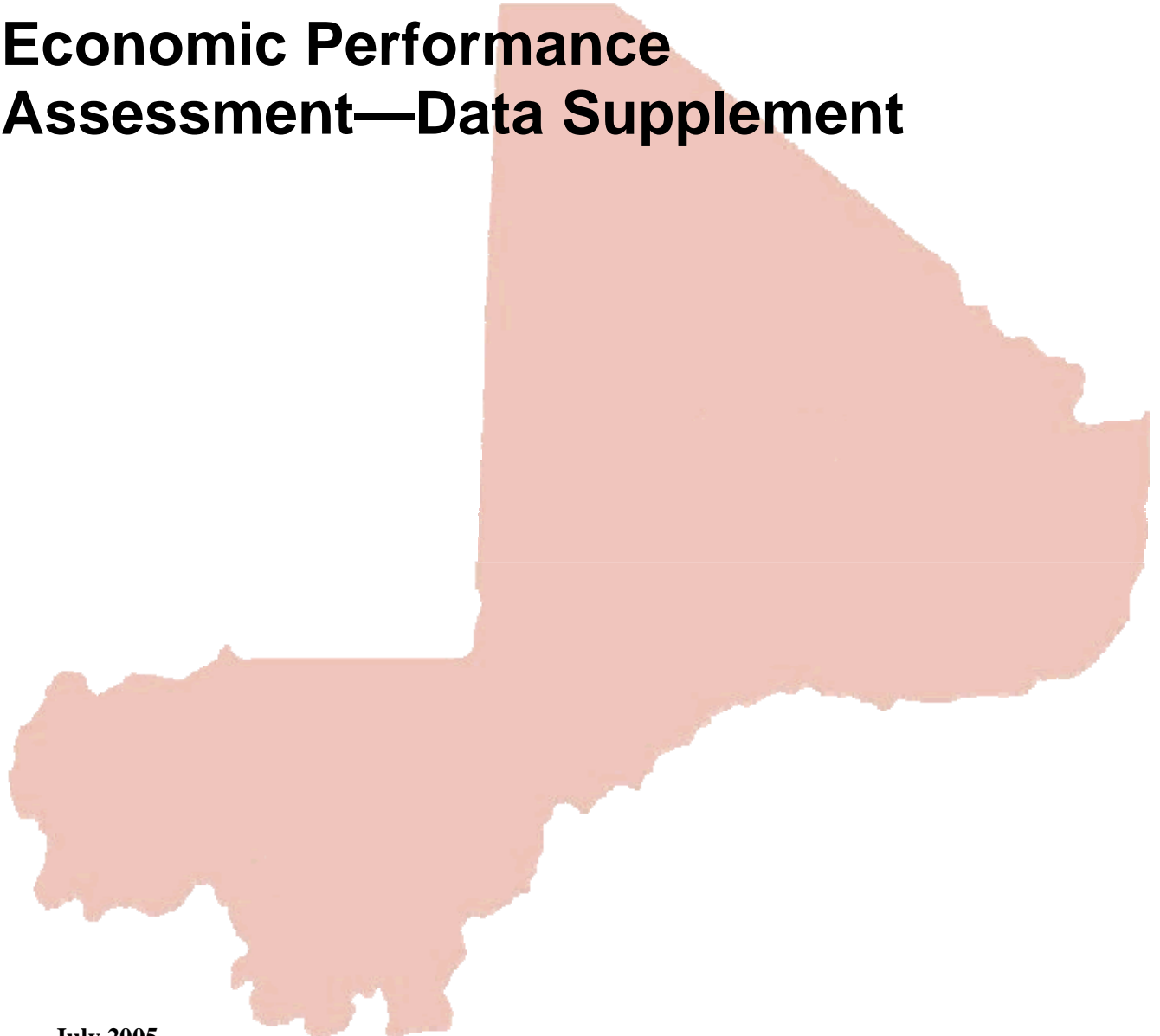
EcGov = Major indicators of *Economic Governance*, which is defined in USAID's *Strategic Management Interim Guidance* to include "microeconomic and macroeconomic policy and institutional frameworks and operations for economic stability, efficiency, and growth." The term therefore encompasses indicators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



**USAID**  
FROM THE AMERICAN PEOPLE

# Mali

## Economic Performance Assessment—Data Supplement



**July 2005**

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





# Mali

## Economic Performance Assessment—Data Supplement

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

Sponsored by the Economic Growth office of USAID's Bureau of Economic Growth, Agriculture and Trade (EGAT), and implemented by Nathan Associates Inc. under Contract No. PCE-I-00-00-00013-00, Task Order 004, the Country Analytical Support (CAS) Project, 2005-2006, has developed a standard methodology for producing analytical reports that provide a clear and concise evaluation of economic growth performance in designated host countries. These reports are tailored to meet the needs of USAID missions and regional bureaus for country-specific analysis. Each report contains

- A synthesis of data from numerous sources, including World Bank publications and other international data sets used by USAID for economic growth analysis, as well as host-country data sources;
- International benchmarking to assess country performance in comparison to similar countries and groups of countries;
- A clear narrative that highlights where a country's performance is particularly strong or weak, thereby assisting in the identification of future programming priorities.

Under the CAS Project, Nathan Associates will also respond to mission requests for in-depth sector studies that examine issues identified in these country reports.

The authors of this report are Bruce Bolnick, Alexander Greenbaum, and Matthew Lutkenhouse, with data support provided by Julia Zislin.

The CTO for this project is Yoon Lee. USAID missions and bureaus may seek assistance and funding for CAS studies by contacting Rita Aggarwal, USAID/EGAT/EG Activity Manager for the CAS project, at [ragnarwal@usaid.gov](mailto:ragnarwal@usaid.gov).

Electronic copies of reports and materials relating to the CAS project are available at [www.nathaninc.com](http://www.nathaninc.com). For further information or hard copies of CAS publications, please contact

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Growth Performance							
	Per capita GDP, purchasing power parity Dollars	Per capita GDP, current U.S. Dollars	Real GDP growth	Growth of labor productivity	Investment productivity - incremental capital-output ratio (ICOR)	Share of gross fixed investment in GDP, current prices	Share of gross non-government investment in GDP, current prices
Indicator Number	11P1	11P2	11P3	11S1	11S2	11S3	11S4
<b>Mali Data</b>							
<i>Latest Year (T)</i>	2004	2004	2004	2003	2003	2003	2003
Value Year T	1,024	404	2.2	3.2	3.5	24.9	18.8
Value Year T-1	979	371	7.4	1.7	3.4	18.6	11.6
Value Year T-2	928	287	4.3	9.2	3.2	27.0	20.8
Value Year T-3	896	265	12.1	1.0	4.2	22.3	14.5
Value Year T-4	798	240	-3.2	4.5	3.8	21.2	7.4
Average Value, 5 year	925	313	4.6	3.9	3.6	22.5	14.6
Growth Trend	6.0	14.8	.	-1.3	-3.5	0.2	.
<b>Benchmark Data</b>							
Regression Benchmark	.	.	4.7	.	.	.	.
Lower Bound	.	.	3.4	.	.	.	.
Upper Bound	.	.	6.1	.	.	.	.
<i>Latest Year Senegal</i>	2004	2004	2004	2003	2003	2003	.
Senegal Value Latest Year	1,813	733	6.0	3.3	3.9	19.7	.
<i>Latest Year Ghana</i>	2004	2004	2004	2003	2003	2003	.
Ghana Value Latest Year	2,475	434	5.5	1.7	5.1	21.9	.
Low Income Africa Avg.	1,267	407	4.8	1.9	4.9	19.2	10.2
Low Income Avg.	1,560	419	5.3	2.0	4.5	19.7	.
High Five Avg.	42,809	52,715	21.2	14.1	70.2	48.6	.
Low Five Avg.	664	121	-2.9	-13.3	-302.9	7.7	.

Poverty and Inequality							
	Human poverty index	Income share accruing to poorest 20%	Population (%) living on less than \$1 PPP per day	Poverty headcount (%), by national poverty line	PRSP Status	Population (%) below minimum dietary energy consumption	Poverty gap at \$1 PPP a day
Indicator Number	12P1	12P2	12P3	12P4	12P5	12S1	12S2
<b>Mali Data</b>							
Latest Year (T)	2002	.	.	2001	2003	2001	.
Value Year T	58.9	.	.	68.0	Yes	21.0	.
Value Year T-1	55.1	.	.	.	.	.	.
Value Year T-2	.	.	.	64.2	.	.	.
Value Year T-3	.	.	.	69.0	.	.	.
Value Year T-4	.	.	.	.	.	.	.
Average Value, 5 year	.	.	.	.	.	.	.
Growth Trend	.	.	.	.	.	.	.
<b>Benchmark Data</b>							
Regression Benchmark	45.3	5.7	41.7	55.1	.	.	.
Lower Bound	39.6	4.9	33.8	45.1	.	.	.
Upper Bound	50.9	6.5	49.7	65.0	.	.	.
Latest Year Senegal	2002	.	.	.	.	2001	.
Senegal Value Latest Year	44.1	.	.	.	.	24.0	.
Latest Year Ghana	2002	1999	.	1999	.	2001	.
Ghana Value Latest Year	26.0	5.6	.	39.5	.	12.0	.
Low Income Africa Avg.	45.0	5.3	25.9	38.0	.	33.0	7.6
Low Income Avg.	41.9	7.2	21.8	40.2	.	28.0	5.7
High Five Avg.	58.7	8.7	33.5	41.2	.	66.0	11.8
Low Five Avg.	3.9	5.9	2.0	37.1	.	3.0	0.5

Economic Structure						
Indicator Number	Labor force in agriculture, % total employment	Labor force in industry, % total employment	Labor force in services, % total employment	Output structure (agriculture, value added, % GDP)	Output structure (industry, value added, % GDP)	Output structure (services, etc., value added, % GDP)
	13P1a	13P1b	13P1c	13P2a	13P2b	13P2c
<b>Mali Data</b>						
<i>Latest Year (T)</i>	2001	.	.	2003	2003	2003
<b>Value Year T</b>	80.0	.	.	38.4	26.1	35.5
<b>Value Year T-1</b>	.	.	.	34.2	29.7	36.1
<b>Value Year T-2</b>	.	.	.	37.8	26.4	35.8
<b>Value Year T-3</b>	.	.	.	41.6	20.6	37.9
<b>Value Year T-4</b>	.	.	.	46.5	16.7	36.8
<b>Average Value, 5 year</b>	.	.	.	39.7	23.9	36.4
<b>Growth Trend</b>	.	.	.	-5.6	13.4	-1.2
<b>Benchmark Data</b>						
<b>Regression Benchmark</b>	.	.	.	.	.	.
Lower Bound	.	.	.	.	.	.
Upper Bound	.	.	.	.	.	.
<i>Latest Year Senegal</i>	.	.	.	2003	2003	2003
<b>Senegal Value Latest Year</b>	.	.	.	16.8	21.2	62.0
<i>Latest Year Ghana</i>	.	.	.	2003	2003	2003
<b>Ghana Value Latest Year</b>	.	.	.	35.8	24.9	39.3
<b>Low Income Africa Avg.</b>	18.6	19.5	61.9	31.7	21.2	41.9
<b>Low Income Avg.</b>	48.7	14.4	33.5	29.7	23.2	43.0
<b>High Five Avg.</b>	41.5	37.1	72.8	56.0	66.2	77.7
<b>Low Five Avg.</b>	0.3	12.9	36.0	0.8	12.3	15.4

Indicator Number	Demography and Environment						Gender		
	Adult literacy rate	Age dependency rate	Environmental sustainability index	Population size (millions)	Population growth rate	Urbanization rate	Ratio of male to female - adult literacy rate	Ratio of male to female - gross enrollment rate, all levels	Ratio of male to female - life expectancy at birth
	14P1	14P2	14P3	14P4a	14P4b	14P5	15P1	15P2	15P3
<b>Mali Data</b>									
Latest Year (T)	2000	2003	2005	2003	2003	2003	2002	2,002.0	2002
Value Year T	19.0	1.00	53.7	11.7	2.4	32.3	2.24	1.48	0.98
Value Year T-1	24.9	1.00	.	11.4	2.4	31.6	.	.	.
Value Year T-2	24.2	1.01	.	11.1	2.4	30.9	.	.	.
Value Year T-3	23.5	1.01	.	10.8	2.4	30.2	.	.	.
Value Year T-4	22.8	1.01	.	10.6	2.4	29.5	.	.	.
Average Value, 5 year	22.9	1.00	.	11.1	2.4	30.9	.	.	.
Growth Trend	-2.9	-0.26	.	2.4	0.2	2.2	.	.	.
<b>Benchmark Data</b>									
Regression Benchmark	.	.	47.0	.	.	30.7	.	.	.
Lower Bound	.	.	43.3	.	.	21.5	.	.	.
Upper Bound	.	.	50.7	.	.	40.0	.	.	.
Latest Year Senegal	2002	2003	2002	2003	2003	2003	2002	2002	2002
Senegal Value Latest Year	39.3	0.86	47.6	10.2	2.3	49.6	1.65	1.17	0.92
Latest Year Ghana	2002	2003	2002	2003	2003	2003	2002	2002	2002
Ghana Value Latest Year	73.8	0.86	50.2	20.7	1.8	37.1	1.24	1.16	0.95
Low Income Africa Avg.	59.8	0.89	44.9	10.2	2.3	35.5	1.44	1.20	0.95
Low Income Avg.	59.9	0.86	45.5	9.9	2.2	34.1	1.36	1.19	0.95
High Five Avg.	99.7	1.03	.	607.0	4.6	100.0	2.40	1.69	1.01
Low Five Avg.	35.7	0.38	.	0.0	-0.8	9.0	0.92	0.84	0.85



Fiscal and Monetary Policy										
Indicator Number	Government expenditure, % GDP	Government revenue, % GDP	Growth in the broad money supply	Inflation rate	Overall government budget balance, including grants, % GDP	Composition of government expenditure (wages and salaries)	Composition of government expenditure (interest payments)	Composition of government expenditure (goods and services)	Composition of government expenditure (subsidies and other current transfers)	Composition of government expenditure (capital expenditure)
	21P1	21P2	21P3	21P4	21P5	21S1a	21S1b	21S1c	21S1d	21S1e
<b>Mali Data</b>										
<i>Latest Year (T)</i>	<i>2004</i>	<i>2004</i>	<i>2004</i>	<i>2004</i>	<i>2004</i>	<i>2004</i>	<i>2004</i>	<i>2004</i>	<i>2004</i>	<i>2004</i>
Value Year T	24.8	17.2	6.6	-3.1	-2.8	18.9	2.9	21.4	19.3	40.3
Value Year T-1	22.1	16.4	21.9	-1.3	-0.8	18.7	3.3	18.9	21.4	38.5
Value Year T-2	23.2	15.9	28.4	2.4	-3.7	17.3	3.4	20.2	25.3	37.5
Value Year T-3	.	.	19.6	5.2	.	.	.	.	.	.
Value Year T-4	.	.	12.2	-0.7	.	.	.	.	.	.
Average Value, 5 year	23.4	16.5	17.7	0.5	-2.4	18.3	3.2	20.2	22.0	38.8
Growth Trend	.	.	-3.6	.	.	.	.	.	.	.
<b>Benchmark Data</b>										
Regression Benchmark	17.2	14.8	18.9	7.6	0.4	.	.	.	.	.
Lower Bound	13.1	10.8	11.9	4.3	-1.8	.	.	.	.	.
Upper Bound	21.2	18.8	25.9	10.9	2.6	.	.	.	.	.
<i>Latest Year Senegal</i>	<i>2007</i>	<i>2007</i>	<i>2003</i>	<i>2004</i>	<i>2007</i>	.	.	.	.	.
Senegal Value Latest Year	15.4	17.8	14.6	0.5	-2.2	.	.	.	.	.
<i>Latest Year Ghana</i>	.	.	<i>2003</i>	<i>2004</i>	.	.	.	.	.	.
Ghana Value Latest Year	.	.	34.2	12.6	.	.	.	.	.	.
Low Income Africa Avg.	20.1	12.2	15.4	8.0	-4.6	.	.	.	.	.
Low Income Avg.	19.2	14.9	15.8	7.6	-0.8	.	.	.	.	.
High Five Avg.	43.7	44.1	134.4	85.3	.	.	.	.	.	.
Low Five Avg.	12.1	8.6	-8.5	-2.7	.	.	.	.	.	.

**Fiscal and Monetary Policy (cont'd)**

	Composition of government revenue (Taxes on goods and services)	Composition of government revenue (Taxes of income, profits and capital gains)	Composition of government revenue (Social security taxes)	Composition of government revenue (Taxes on international trade)	Composition of government revenue (Non-tax revenue as a percentage of total revenue)	Composition of money supply growth (Net credit to government)	Composition of money supply growth (Credit to the private sector)	Composition of money supply growth (Net credit to non-financial public enterprises)	Composition of money supply growth (Net foreign assets)	Composition of money supply growth (Other items, net)
Indicator Number	21S2a	21S2b	21S2c	21S2d	21S2e	21S3a	21S3b	21S3c	21S3d	21S3e
<b>Mali Data</b>										
<i>Latest Year (T)</i>	.	.	.	.	2004	2004	2004	2004	2004	2004
Value Year T	.	.	.	.	3.7	9.6	13.2	0.0	134.9	-57.7
Value Year T-1	.	.	.	.	8.3	-36.0	52.0	0.0	93.9	-1.7
Value Year T-2	.	.	.	.	8.4	.	.	.	.	.
Value Year T-3	.	.	.	.	.	.	.	.	.	.
Value Year T-4	.	.	.	.	.	.	.	.	.	.
Average Value, 5 year	.	.	.	.	6.8	-13.2	.	.	114.4	.
Growth Trend	.	.	.	.	.	.	.	.	.	.
<b>Benchmark Data</b>										
Regression Benchmark	.	.	.	.	.	.	.	.	.	.
Lower Bound	.	.	.	.	.	.	.	.	.	.
Upper Bound	.	.	.	.	.	.	.	.	.	.
<i>Latest Year Senegal</i>	.	.	.	.	.	.	.	.	.	.
Senegal Value Latest Year	.	.	.	.	.	.	.	.	.	.
<i>Latest Year Ghana</i>	.	.	.	.	.	.	.	.	.	.
Ghana Value Latest Year	.	.	.	.	.	.	.	.	.	.
Low Income Africa Avg.	.	.	.	.	.	.	.	.	.	.
Low Income Avg.	.	.	.	.	.	.	.	.	.	.
High Five Avg.	.	.	.	.	.	.	.	.	.	.
Low Five Avg.	.	.	.	.	.	.	.	.	.	.

Business Environment											
	Corruption perception index	Doing Business composite index	Rule of law index	Regulatory quality index	Cost of starting a business, % GNI per capita	Procedures to enforce a contract	Procedures to register property	Procedures to start a business	Time to enforce a contract	Time to register property	Time to start a business
Indicator Number	22P1	22P2	22P3	22P4	22S1	22S2	22S3	22S4	22S5	22S6	22S7
<b>Mali Data</b>											
Latest Year (T)	2004	2004	2004	2004	2004	2004	2004	2004	2004	2004	2004
Value Year T	3.2	50.8	-0.34	-0.26	187	28	5	13.0	340	44	42
Value Year T-1	3.0	.	.	.	.	.	.	.	.	.	.
Value Year T-2	.	.	-0.47	-0.39	.	.	.	.	.	.	.
Value Year T-3	.	.	.	.	.	.	.	.	.	.	.
Value Year T-4	.	.	-0.71	0.24	.	.	.	.	.	.	.
Average Value, 5 year	.	.	.	.	.	.	.	.	.	.	.
Growth Trend	.	.	.	.	.	.	.	.	.	.	.
<b>Benchmark Data</b>											
Regression Benchmark	.	.	.	.	.	.	.	.	.	.	.
Lower Bound	.	.	.	.	.	.	.	.	.	.	.
Upper Bound	.	.	.	.	.	.	.	.	.	.	.
Latest Year Senegal	2004	2004	2004	2004	2004	2004	2004	2004	2004	2004	2004
Senegal Value Latest Year	3.0	53.5	-0.20	-0.31	113	36	6	9.0	485	114	57
Latest Year Ghana	2004	2004	2004	2004	2004	2004	2004	2004	2004	2004	2004
Ghana Value Latest Year	3.6	61.9	-0.16	-0.28	88	23	7	12.0	200	382	85
Low Income Africa Avg.	2.3	56.4	-1.00	-0.77	185	35	6	11.0	415	93	46
Low Income Avg.	2.3	60.0	-0.98	-0.77	134	35	6	11.0	395	70	45
High Five Avg.	9.5	82.5	1.98	1.88	726	55	16	17.2	1,178	485	172
Low Five Avg.	1.6	41.8	-1.92	-2.29	0	13	2	2.4	51	2	4

Financial Sector								
	Domestic credit to private sector, % GDP	Interest rate spread, lending rate minus deposit rate	Money supply (M2), % GDP	Stock market capitalization rate, % GDP	Cost to create collateral	Country credit rating	Legal rights of borrowers and lenders index	Real interest rate
Indicator Number	23P1	23P2	23P3	23P4	23S1	23S2	23S3	23S4
<b>Mali Data</b>								
<i>Latest Year (T)</i>	2003	.	2004	.	2004	2004	2004	.
Value Year T	19.2	.	31.3	.	58.5	23.7	3.0	.
Value Year T-1	17.7	.	29.7	.	.	.	.	.
Value Year T-2	17.8	.	26.9	.	.	.	.	.
Value Year T-3	16.6	.	23.2	.	.	.	.	.
Value Year T-4	18.4	.	22.3	.	.	.	.	.
Average Value, 5 year	18.0	.	26.7	.	.	.	.	.
Growth Trend	1.5	.	9.6	.	.	.	.	.
<b>Benchmark Data</b>								
Regression Benchmark	10.6	13.2	23.4	13.4	.	.	.	.
Lower Bound	-4.3	10.5	8.8	-3.9	.	.	.	.
Upper Bound	25.4	15.9	38.1	30.7	.	.	.	.
<i>Latest Year Senegal</i>	2003	.	2003	.	2004	2005	2004	.
Senegal Value Latest Year	20.8	.	27.6	.	16.5	33.1	3.0	.
<i>Latest Year Ghana</i>	2003	.	2003	2003	2004	2005	2004	.
Ghana Value Latest Year	11.8	.	26.5	18.7	37.9	29.3	5.0	.
Low Income Africa Avg.	8.3	12.9	21.6	17.5	27.0	18.9	4.0	13.7
Low Income Avg.	11.4	12.4	23.8	16.3	13.7	19.7	4.0	10.7
High Five Avg.	171.0	46.9	188.2	238.9	121.6	51.5	9.6	36.2
Low Five Avg.	1.6	1.0	4.8	1.0	0.0	9.4	1.2	-4.6

External Sector												
	Aid, % 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	Concentration of exports (top three exports, 3-digit SITC)	Inward FDI potential index
Indicator Number	24P1	24P2	24P3	24P4	24P5	24P6	24P7	24P8	24P9	24P10	24S1	24S2
<b>Mali Data</b>												
<i>Latest Year (T)</i>	2003	2004	2004	2003	2004	2004	2002	2003	2002	2004	.	.
<b>Value Year T</b>	12.7	-4.6	6.3	-10.4	1.0	6.7	27.9	42.4	12.1	60.31	.	0.13
<b>Value Year T-1</b>	15.0	-4.5	5.7	31.7	1.0	6.9	22.6	46.8	9.4	58.67	.	0.12
<b>Value Year T-2</b>	14.4	-3.0	6.3	24.9	7.2	5.4	20.2	57.2	10.8	63.91	.	0.13
<b>Value Year T-3</b>	15.0	-11.8	8.3	-1.2	4.6	3.1	14.1	53.9	12.2	77.25	.	0.15
<b>Value Year T-4</b>	14.0	-9.8	12.9	17.4	3.4	4.5	9.9	.	12.9	66.17	.	0.15
<b>Average Value, 5 year</b>	14.2	-6.7	7.9	12.5	3.5	5.3	19.0	.	11.1	65.26	.	0.13
<b>Growth Trend</b>	-2.0	21.9	-16.5	.	-32.4	17.4	28.9	.	-1.5	-4.50	.	-4.8
<b>Benchmark Data</b>												
<b>Regression Benchmark</b>	16.8	-6.2	10.9	6.0	3.7	4.0	.	69.7	.	65.7	.	.
Lower Bound	12.2	-10.4	3.6	0.5	0.0	2.7	.	46.3	.	45.8	.	.
Upper Bound	21.4	-2.0	18.3	11.5	7.4	5.3	.	93.2	.	85.5	.	.
<i>Latest Year Senegal</i>	2003	2003	2003	2003	2003	2003	2002	2003	2003	2003	.	2002
<b>Senegal Value Latest Year</b>	7.0	-6.7	10.4	0.5	1.2	3.3	7.9	36.4	19.7	68.89	.	0.12
<i>Latest Year Ghana</i>	2003	2003	2003	2003	2003	2003	2003	2003	2003	2003	.	2002
<b>Ghana Value Latest Year</b>	12.2	3.3	14.7	2.7	1.8	4.1	3.7	38.0	2.0	92.55	.	0.13
<b>Low Income Africa Avg.</b>	12.4	-5.6	10.4	7.1	1.8	4.1	6.2	65.6	12.3	59.67	.	0.11
<b>Low Income Avg.</b>	10.7	-4.3	10.4	7.1	1.7	3.7	6.2	59.1	15.0	66.71	.	0.12
<b>High Five Avg.</b>	66.1	18.0	61.5	21.6	99.4	18.6	875.4	380.0	86.5	228.00	.	0.50
<b>Low Five Avg.</b>	-0.3	-27.8	0.9	-19.8	-0.4	0.3	1.8	9.1	0.0	27.10	.	0.06

**External Sector (cont'd)**

	Net barter terms of trade	Real effective exchange rate index (1995=100)	Structure of merchandise exports (agricultural raw materials)	Structure of merchandise exports (fuel)	Structure of merchandise exports (manufactured goods)	Structure of merchandise exports (ores and metals)	Structure of merchandise exports (food)	Trade policy index
Indicator Number	24S3	24S4	24S5a	24S5b	24S5c	24S5d	24S5e	24S6
<b>Mali Data</b>								
<i>Latest Year (T)</i>	2002	.	2001	2001	2001	2003	2001	2004
Value Year T	100.0	.	41.9	0.1	40.0	0.7	17.2	3.0
Value Year T-1	98.0	.	90.8	0.0	4.7	0.8	4.2	3.0
Value Year T-2	100.0	.	87.2	0.0	9.7	0.3	2.9	3.0
Value Year T-3	101.0	.	91.8	0.0	3.0	0.3	5.1	3.0
Value Year T-4	112.0	.	93.8	0.0	0.7	0.0	5.4	3.0
Average Value, 5 year	102.2	.	81.1	0.0	11.6	0.4	7.0	3.0
Growth Trend	-2.5	.	-15.0	3.0	134.0	89.5	23.5	.
<b>Benchmark Data</b>								
Regression Benchmark	.	.	.	.	.	.	.	.
Lower Bound	.	.	.	.	.	.	.	.
Upper Bound	.	.	.	.	.	.	.	.
<i>Latest Year Senegal</i>	2002	.	2003	2003	2003	2003	2003	2004
Senegal Value Latest Year	96.0	.	3.5	20.1	34.3	3.4	37.2	3.0
<i>Latest Year Ghana</i>	2002	.	2001	2001	2001	2003	2001	2004
Ghana Value Latest Year	112.0	.	11.1	11.2	16.4	13.8	44.9	4.0
Low Income Africa Avg.	100.0	.	9.2	1.6	18.1	3.8	52.3	4.0
Low Income Avg.	100.0	.	7.3	1.8	20.0	3.4	37.2	4.0
High Five Avg.	149.8	.	30.8	92.8	94.2	51.5	91.0	5.0
Low Five Avg.	71.8	.	0.0	0.0	2.6	0.0	0.5	1.4

Indicator Number	Economic Infrastructure								Science and Technology		
	Internet users per 1000 people	Overall infrastructure quality index	Telephone density, fixed line and mobile, per 1000 people	Quality of infrastructure index - air transport	Quality of infrastructure index - ports	Quality of infrastructure index - railroads	Quality of infrastructure index - electricity	Telephone cost, average local call	Expenditure for R&D, % GDP	FDI and technology transfer Index	Patent applications filed by residents
	25P1	25P2	25P3	25S1a	25S1b	25S1c	25S1d	25S2	26P1	26P2	26P3
<b>Mali Data</b>											
Latest Year (T)	2003	2004	2002	2004	2004	2004	2004	2001	.	2004	.
Value Year T	2.4	2.1	10.3	2.8	1.2	1.300	2.6	0.07	.	3.8	.
Value Year T-1	2.9	.	9.3	.	.	.	.	0.07	.	.	.
Value Year T-2	2.9	.	4.9	.	.	.	.	0.08	.	.	.
Value Year T-3	1.8	.	4.0	.	.	.	.	0.14	.	.	.
Value Year T-4	.	.	3.2	.	.	.	.	0.15	.	.	.
Average Value, 5 year	.	.	6.3	.	.	.	.	0.10	.	.	.
Growth Trend	.	.	37.1	.	.	.	.	-19.6	.	.	.
<b>Benchmark Data</b>											
Regression Benchmark	-1.1	.	18.2	.	.	.	.	.	.	.	.
Lower Bound	-30.0	.	10.7	.	.	.	.	.	.	.	.
Upper Bound	27.8	.	25.7	.	.	.	.	.	.	.	.
Latest Year Senegal	2003	2004	2003	2004	2004	2004	2004	2003	.	.	.
Senegal Value Latest Year	21.7	2.4	77.7	4.3	3.5	1.500	2.2	0.20	.	.	.
Latest Year Ghana	2003	2004	2003	2004	2004	2004	2004	2002	.	2004	2002
Ghana Value Latest Year	7.8	2.9	49.1	3.5	3.2	1.600	3.2	0.03	.	5.1	0.0
Low Income Africa Avg.	4.3	2.4	37.9	3.4	2.1	1.700	2.4	0.09	0.4	4.5	0.0
Low Income Avg.	5.2	2.4	44.5	3.4	2.1	1.700	2.6	0.06	0.3	4.4	0.0
High Five Avg.	585.8	6.7	1,686.0	6.7	6.6	6.480	6.9	0.41	3.5	5.9	153,540.2
Low Five Avg.	0.9	1.5	9.8	2.4	1.3	1.1	1.4	0.00	0.1	3.3	0.0

Health									
	HIV prevalence	Life expectancy at birth	Maternal mortality rate	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	31S1	31S2	31S3	31S4	31S5	31S6
<b>Mali Data</b>									
Latest Year (T)	2003	2003	2006	2002	2002	2001	2003	2001	2002
Value Year T	1.9	40.6	1,200	45.0	48.0	40.6	68.5	33.2	2.3
Value Year T-1	.	40.9	.	.	.	.	64.0	.	2.2
Value Year T-2	1.9	.	.	.	.	.	56.0	.	2.3
Value Year T-3	.	.	.	.	.	.	44.5	.	1.8
Value Year T-4	2.0	42.6	.	.	.	.	48.0	.	1.9
Average Value, 5 year	.	.	.	.	.	.	56.2	.	2.1
Growth Trend	.	.	.	.	.	.	11.3	.	5.9
<b>Benchmark Data</b>									
Regression Benchmark	.	45.3	980	.	.	.	.	.	.
Lower Bound	.	41.7	836	.	.	.	.	.	.
Upper Bound	.	48.9	1,125	.	.	.	.	.	.
Latest Year Senegal	2003	2003	2006	2002	2002	2002	2003	2006	2002
Senegal Value Latest Year	0.8	52.3	690.0	52.0	72.0	41.4	66.5	22.7	2.3
Latest Year Ghana	2003	2003	2006	2002	2002	.	2003	2003	2002
Ghana Value Latest Year	3.1	54.4	540	58.0	79.0	.	80.0	22.1	2.3
Low Income Africa Avg.	4.4	46.2	880	34.0	59.0	50.8	69.0	30.8	2.1
Low Income Avg.	3.1	51.8	685	37.0	62.0	40.6	71.5	31.0	2.2
High Five Avg.	30.2	80.5	1,720	100.0	100.0	.	99.0	36.3	8.7
Low Five Avg.	0.1	37.3	2	8.0	26.4	20.8	39.0	7.3	0.6



Education												
Indicator Number	Net primary enrollment rate (total)	Net primary enrollment rate (female)	Net primary enrollment rate (male)	Persistence in school to grade 5 (total)	Persistence in school to grade 5 (female)	Persistence in school to grade 5 (male)	Youth literacy rate	Education expenditure, primary, %GDP	Expenditure per student, % GDP per capita, primary	Expenditure per student, % GDP per capita, secondary	Expenditure per student, % GDP per capita, tertiary	Pupil-teacher ratio, primary school
	32P1a	32P1b	32P1c	32P2a	32P2b	32P2c	32P3	32S1	32S2a	32S2b	32S2c	32S3
<b>Mali Data</b>												
Latest Year (T)	2002	2002	2002	2001	2001	2001	2000	2004	1999	.	.	2002
Value Year T	44.5	38.7	50.2	74.6	70.5	77.9	24.19	2.39	15.20	.	.	57.3
Value Year T-1	44.5	38.7	50.2	84.1	79.1	87.9	35.25	.	15.63	.	.	56.4
Value Year T-2	...	...	...	.	.	.	34.38	.	.	.	.	63.4
Value Year T-3	...	...	...	78.3	77.1	79.2	33.50	.	.	.	.	65.3
Value Year T-4	38.3	32.0	44.5	.	.	.	32.62	.	.	.	.	62.1
Average Value, 5 year	42.4	36.5	48.3	.	.	.	31.99	.	.	.	.	60.9
Growth Trend	.	.	.	.	.	.	-5.3	.	.	.	.	-3.0
<b>Benchmark Data</b>												
Regression Benchmark	57.3	.	.	63.2	.	.	73.7	.	.	.	.	.
Lower Bound	50.4	.	.	54.8	.	.	66.0	.	.	.	.	.
Upper Bound	64.2	.	.	71.5	.	.	81.3	.	.	.	.	.
Latest Year Senegal	2002	2002	2002	2000	2000	2000	2002	2005	1999	.	.	2002
Senegal Value Latest Year	57.9	54.5	61.3	67.5	64.8	70.1	52.92	2.08	13.57	.	.	48.9
Latest Year Ghana	2002	2002	2002	2001	2001	2001	2002	2005	.	.	.	2002
Ghana Value Latest Year	63.1	62.2	64.0	63.3	64.7	61.9	92.20	3.32	.	.	.	31.3
Low Income Africa Avg.	64.3	59.1	67.8	66.9	64.7	65.4	74.96	1.95	11.83	33.0	201	46.9
Low Income Avg.	68.8	67.7	74.9	64.8	65.2	63.7	77.44	1.81	9.72	17.4	62	42.6
High Five Avg.	100.0	100.0	100.0	99.2	99.8	99.3	99.82	5.54	31.33	46.9	344	65.5
Low Five Avg.	42.3	36.9	47.6	52.3	51.5	51.8	46.44	0.17	6.24	6.0	10	11.7

Employment and Workforce							
	Labor force participation rate (total)	Labor force participation rate (male)	Labor force participation rate (female)	Rigidity of employment index	Size of labor force	Labor force growth rate	Unemployment rate
Indicator Number	33P1a	33P1b	33P1c	33P2	33P3a	33P3b	33P4
<b>Mali Data</b>							
Latest Year (T)	2003	2003	2003	2004	2003	2003	.
Value Year T	96.6	107.6	86.3	66.0	5,638,511	2.1	.
Value Year T-1	97.2	108.3	86.9	.	5,525,580	2.0	.
Value Year T-2	97.8	108.9	87.4	.	5,415,185	2.0	.
Value Year T-3	98.5	109.6	88.0	.	5,307,264	2.0	.
Value Year T-4	98.6	109.5	88.3	.	5,201,441	2.0	.
Average Value, 5 year	.	108.8	87.4	.	5,417,596	2.0	.
Growth Trend	-0.5	-0.5	-0.6	.	2.0	0.2	.
<b>Benchmark Data</b>							
Regression Benchmark	.	.	.	58.9	.	.	.
Lower Bound	.	.	.	47.6	.	.	.
Upper Bound	.	.	.	70.2	.	.	.
Latest Year Senegal	2003	2003	2003	2004	2003	2003	.
Senegal Value Latest Year	84.7	97.2	72.5	64.0	4,566,358	2.5	.
Latest Year Ghana	2003	2003	2003	2004	2003	2003	.
Ghana Value Latest Year	93.2	95.3	91.3	34.0	10,346,412	2.4	.
Low Income Africa Avg.	86.3	98.0	75.6	64.5	4,567,207	2.4	10.0
Low Income Avg.	85.2	97.1	73.0	50.0	4,566,358	2.4	6.8
High Five Avg.	102.4	112.6	97.0	84.6	316,912,650	5.7	24.3
Low Five Avg.	50.4	70.9	21.5	1.2	125,147	1.0	1.7

Agriculture						
	Agriculture value added per worker	Cereal yield	Growth in agricultural value-added	Agricultural policy costs index	Crop production index (1989-91=100)	Livestock production index (1989-91=100)
Indicator Number	34P1	34P2	34P3	34S1	34S2	34S3
<b>Mali Data</b>						
<i>Latest Year (T)</i>	2003	2004	2003	2004	2004	2004
<b>Value Year T</b>	247	837	18.7	3.9	108.1	118.4
<b>Value Year T-1</b>	212	837	-3.7	.	110.5	114.4
<b>Value Year T-2</b>	225	792	11.3	.	95.1	107.2
<b>Value Year T-3</b>	206	986	-10.4	.	108.9	103.2
<b>Value Year T-4</b>	233	1,006	9.2	.	79.9	100.1
<b>Average Value, 5 year</b>	225	892	3.1	.	100.5	108.7
<b>Growth Trend</b>	1.5	-5.2	.	.	6.4	4.5
<b>Benchmark Data</b>						
<b>Regression Benchmark</b>	274	.	.	.	.	.
Lower Bound	165	.	.	.	.	.
Upper Bound	382	.	.	.	.	.
<i>Latest Year Senegal</i>	2003	2004	2003	.	2004	2004
<b>Senegal Value Latest Year</b>	265	1,091	19.2	.	81.9	101.1
<i>Latest Year Ghana</i>	2003	2004	2003	2004	2004	2004
<b>Ghana Value Latest Year</b>	346	1,473	5.2	4.5	121.9	111.2
<b>Low Income Africa Avg.</b>	250	1,063	4.2	3.5	104.7	107.0
<b>Low Income Avg.</b>	296	1,302	4.0	3.6	105.0	107.6
<b>High Five Avg.</b>	40,135	7,775	22.0	5.3	134.9	145.5
<b>Low Five Avg.</b>	108	312	-13.4	2.4	69.5	78.3

# Technical Notes

The following technical notes provide a concise definition for each indicator together with information about the source, gaps in USAID countries coverage, and notes on data quality, where pertinent. The CAS Code number for each indicator is also noted. In most cases, information about the indicator is taken directly from the original source as cited.

## GROWTH PERFORMANCE

### Per capita GDP, current US dollars

*Source:* IMF World Economic Outlook database

<http://www.imf.org/external/pubs/ft/weo/2004/02/data/index.htm>

*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.

*Coverage:* Available for most USAID countries.

CAS Code #11P2

### Per capita GDP, purchasing power parity dollars

*Source:* IMF World Economic Outlook database

<http://www.imf.org/external/pubs/ft/weo/2004/02/data/index.htm>

*Definition:* This indicator adjusts per capita GDP measured in current U.S. dollars for differences in purchasing power across countries, by using an estimated exchange rate derived from the perceived purchasing power of the currency.

*Coverage:* Available for most USAID countries.

CAS Code #11P1

### Real GDP growth

*Source:* World Development Indicators (NY.GDP.MKTP.KD.ZG) for benchmark data; latest country data from IMF Article IV Review Reports available at [www.imf.org/external/np/sec/aiv/index.htm](http://www.imf.org/external/np/sec/aiv/index.htm)

*Definition:* Annual percentage growth rate of GDP at constant local currency prices. GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus 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:* Available for most USAID countries.

CAS Code #11P3

### Growth of labor productivity

*Source:* World Development Indicators. Estimated by calculating annual percentage change of the ratio of GDP (constant 1995 US\$) (NY.GDP.MKTP.KD) to the total population ages 15-64, (SP.POP.1564.TO).

*Definition:* Labor productivity is defined here as the ratio of GDP in constant prices to the size of the working age population (defined as the population between ages 15 and 64 years by the World Bank). The more familiar calculation, based on employment, labor force, or work hours, is not used here because low participation or employment rates are themselves a structural productivity problem.

*Coverage:* Data available for most USAID countries.

CAS Code # 11S1

### Investment productivity --incremental capital-output ratio (ICOR)

*Source:* International benchmark data computed from the World Development Indicators, based on the five-year average of the share of fixed investment (NE.GDI.FTOT.ZS) and the five-year average of 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 needed per unit of extra output. A high value represents low investment productivity.

*Coverage:* Available for most USAID countries

CAS Code #11S2

### Gross fixed investment, percentage of GDP

*Source:* IMF article IV Consultation Reports for latest country data; international benchmark from the World Development Indicators. (NE.GDI.FTOT.ZS)

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

*Coverage:* Available for most USAID countries.

CAS Code # 11S3

### Gross fixed private investment, percentage of GDP

*Source:* IMF Article IV Consultation Reports, for latest country data: World Development Indicators, for international comparison data. Estimating this indicator involves two steps: first, the product of Capital expenditure (% of total expenditure) (GB.XPK.TOTL.ZS) and Expenditure, total (% of GDP) (GB.XPD.TOTL.GD.ZS) will estimate the share of government fixed investment in GDP. Next, subtracting this figure from Gross fixed capital formation (% of GDP) (NE.GDI.FTOT.ZS) will estimate the share of private gross fixed investment in GDP.

*Coverage:* Available for most USAID countries.

*Data Quality:* National statistics offices may have different methodologies for breaking down government budget expenditures into current and capital.

CAS Code #11S4

## POVERTY AND INEQUALITY

### Human poverty index

*Source:* UNDP- Human Development Report.

[http://hdr.undp.org/reports/global/2004/pdf/hdr04\\_HDI.pdf](http://hdr.undp.org/reports/global/2004/pdf/hdr04_HDI.pdf) for 2004 edition; updates may be found at

[http://hdr.undp.org/reports/view\\_reports.cfm?type=1](http://hdr.undp.org/reports/view_reports.cfm?type=1)

*Definition:* The index measures the incidence of deprivation in terms of not meeting target levels for specified economic and quality of life indicators: (1) Percentage of people not

expected to survive to age 40. (2) Percentage of adults who are illiterate. (3) Percentage of people who fail to attain a 'decent living standard' 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. Index ranges in value from 0 (for zero deprivation incidence) to 100 (for high deprivation incidence).

*Coverage:* Available for the majority USAID countries.  
CAS Code #12P1

#### Income share held by lowest 20%

*Source:* World Development Indicators (SI.DST.FRST.20), World Bank staff estimates based on primary household survey data obtained from government statistical agencies and World Bank country departments. Alternate source for target countries: Country Poverty Reduction Strategy Paper <http://www.imf.org/external/np/prsp/prsp.asp>

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

*Coverage:* Available for most USAID countries, although much of the data is several years old.

CAS Code # 12P2

#### Percentage of population living on less than \$1 PPP per day

*Source:* World Development Indicators, (SI.POV.DDAY), original data from National Surveys. Alternate source for target countries: Country Poverty Reduction Strategy Paper. <http://www.imf.org/external/np/prsp/prsp.asp>

*Definition:* Population below \$1 a day is the percentage of the population living on less than \$1.08 a day at 1993 international prices.

*Coverage:* Not available for about 21 USAID countries.

*Data Quality:* As a result of revisions in PPP exchange rates, poverty rates cannot be compared with poverty rates reported previously for individual countries. Poverty data originate from household survey questionnaires which can differ widely; even similar surveys may not be strictly comparable because of difference in quality.

CAS Code #12P3

#### Population below minimum dietary energy consumption

*Source:* UN Millennium Indicators Database at [http://millenniumindicators.un.org/unsd/mi/mi\\_series\\_results.asp?rowId=566](http://millenniumindicators.un.org/unsd/mi/mi_series_results.asp?rowId=566), based on FAO estimates.

*Definition:* Proportion of the population unable to obtain a level of dietary energy consumption needed to survive.

*Coverage:* Available for the majority of USAID countries.

CAS Code # 12S1

#### Poverty headcount, national poverty line

*Source:* World Development Indicators, (SI.POV.NAHC), original data from national surveys. Alternate source: Country 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.

*Coverage:* Data unavailable for 55 USAID countries.

*Data Quality:* Measuring the percentage of people below the "national poverty line" has the disadvantage of limiting international comparisons. In some countries, the poverty line may be drawn at levels of income required to have only sufficient food or food plus other necessities.

CAS Code #12P4

#### PRSP Status

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

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

*Coverage:* All countries having PRSPs are so indicated.

CAS Code #12P5

#### Poverty gap at \$1 PPP a day

*Source:* World Development Indicators, (SI.POV.GAPS), original data from national surveys. Alternate source: Country Poverty Reduction Strategy Paper. <http://www.imf.org/external/np/prsp/prsp.asp>

*Definition:* Poverty gap is the mean shortfall from the poverty line (counting the non-poor as having zero shortfall), expressed as a percentage of the poverty line. This measure reflects the depth of poverty as well as its incidence.

*Coverage:* Data not available for about 24 USAID countries.

CAS Code #12S2

## ECONOMIC STRUCTURE

#### Labor force structure

*Source:* World Development Indicators (SL.AGR.EMPL.ZS), (SL.IND.EMPL.ZS), and (SL.SRV.EMPL.ZS). Alternate source: CIA World Fact Book <http://www.cia.gov/cia/publications/factbook/>.

*Definition:* The labor force structure measures recorded employment by major economic activity (agriculture, industry and services), as a percentage of total employment.

*Coverage:* Unavailable for 58 USAID countries.

*Data Quality:* Employment data are compiled from different sources and are therefore not fully comparable across countries. National practices vary considerably.

CAS Code #13P1

#### Output structure

*Source:* World Development Indicators (NV.AGR.TOTL.ZS), (NV.IND.TOTL.ZS), and (NV.SRV.TETC.ZS).

*Definition:* The output structure is comprised of value added by major sectors of the economy (agriculture, industry, and services) as percentages of GDP. Value added is defined as the value of the gross output of producers less the value of intermediate goods and services consumed in production, before taking account of the consumption of fixed capital in the production process.

*Coverage:* Unavailable for about 12 USAID countries.

*Data Quality:* Among the difficulties faced by compilers of national accounts is the extent of unreported economic activity in the informal or secondary 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 a combination of methods involving estimates of inputs, yields, and area under cultivation. This approach sometimes leads to crude approximations that can differ from the true values over time and across crops for reasons other than climatic conditions or farming techniques.

Ideally, industrial output should be measured through regular censuses and surveys of firms. But in most developing countries such surveys are infrequent, so earlier survey results must be extrapolated using an appropriate indicator.

CAS Code #13P2

## DEMOGRAPHY AND ENVIRONMENT

### Adult literacy rate

*Source:* World Development Indicators; (SE.ADT.LITR.ZS) based on UNESCO calculations.

*Definition:* Percentage of people ages 15 and over who cannot, with understanding, read and write a short, simple statement about their daily life.

*Coverage:* Available for most 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

### Age dependency rate

*Source:* World Development Indicators, (SP.POP.DPND).

*Definition:* The ratio of dependents (those younger than 15 and older than 64) to the working-age population, those ages 15-64.

*Coverage:* Available for most USAID countries.

CAS Code #14P2

### Environmental sustainability index

*Source:* Center for International Earth Science Information Network (CIESIN) at Columbia University, and Yale Center for Environmental Law and Policy at Yale University. The 2005 index is at <http://www.yale.edu/esi/ESI2005.pdf>. For updates: <http://www.yale.edu/esi/>

*Definition:* The ESI is a composite index integrating 76 variables tracking natural resource endowments, past and present pollution levels, environmental management efforts, and the capacity of a society to improve its environmental performance, grouped into 21 indicators of environmental sustainability. The index quantifies the likelihood that a country will be able to preserve valuable environmental resources effectively. Values range from a low of 0 to a high of 100, with most scores clustered between 40 and 60.

*Coverage:* Available for most USAID countries.

CAS Code #14P3

### Population size (in millions) and growth

*Source:* World Development Indicators (SP.POP.TOTL), and (SP.POP.GROW).

*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:* Available for most USAID countries.

CAS Code # 14P4

### Urbanization rate

*Source:* World Development Indicators, (SP.URB.TOTL.IN.ZS).

*Definition:* The midyear population of areas defined as urban in each country and reported to the United Nations as a percentage of the total population of a country, including all residents regardless of legal status or citizenship.

*Coverage:* Available for most USAID countries.

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

CAS Code #14P5

## GENDER

### Adult literacy rate, ratio of male to female

*Source:* Estimated from UNDP Human Development Indicators <http://hdr.undp.org/statistics/data/>

*Definition:* The ratio of adult male literacy to adult female literacy.

*Coverage:* Unavailable for about 20 USAID countries

CAS Code #15P1

### Gross enrollment rate, all levels of education, ratio of male to female

*Source:* Estimated from UNDP Human Development Indicators <http://hdr.undp.org/statistics/data/>

*Definition:* The ratio of the gross enrollment rate for males to that of females. The gross enrollment rate is the ratio of total enrollments in primary, secondary and tertiary education, to the total school age population for all three levels, assuming normal age of entry into the system and uninterrupted continuation to completion.

*Coverage:* Unavailable for about 20 USAID countries.

CAS Code # 15P2

### Life expectancy, ratio of male to female

*Source:* Estimated from UNDP Human Development Indicators <http://hdr.undp.org/statistics/data/>

*Definition:* Ratio of Life expectancy at birth (years), male, divided by the Life expectancy at birth (years), Female.

*Coverage:* Unavailable for about 20 USAID countries.

CAS Code #15P3

## FISCAL AND MONETARY POLICY

### Composition of government expenditure

*Source:* Constructed with IMF Article IV Reviews for latest country data [www.imf.org/external/np/sec/aiv/index.htm](http://www.imf.org/external/np/sec/aiv/index.htm); World Development Indicators for benchmarking data, using WDI categories: (1) Subsidies and other current transfers (GB.XPC.TRFT.ZS), (2) Wages and salaries (GB.XPC.WAGE.ZS), (3) Interest payments (GB.XPC.INTP.ZS), (4) Goods and services expenditure (GB.XPC.GSRV.ZS), and (5) Capital expenditure (GB.XPC.TOTL.ZS), all as percentages of GDP. Original source of WDI data from International Monetary Fund, Government Finance Statistics Yearbook and data files.

*Definition:* The central governments' expenditure broken down by categories: subsidies and other current transfers, wages and salaries, interest payments, goods and services expenditure, and capital expenditure.

*Coverage:* Available for about 30 USAID countries.

*Data Quality:* Many countries report their revenue in non-comparable categories. Budget data are compiled on a fiscal

year basis. 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 # 21S1

### Composition of government revenue

*Source:* Constructed with IMF Article IV Reviews for latest country data [www.imf.org/external/np/sec/aiv/index.htm](http://www.imf.org/external/np/sec/aiv/index.htm); World Development Indicators for benchmarking data: categories are (1) Taxes on goods and services, (GB.TAX.GSRV.RV.ZS); (2) Taxes of income, profits and capital gains (GB.TAX.YPKG.RV.ZS); (3) Social security taxes, (GB.TAX.SSEC.RV.ZS); (4) Taxes in international trade, (GB.TAX.INTT.RV.ZS); and (5) Non-tax revenue, (GB.NTX.TOTL.RV.ZS).

[www.imf.org/external/np/sec/aiv/index.htm](http://www.imf.org/external/np/sec/aiv/index.htm) can be used.

*Definition:* Breakdown of central government revenue sources per the following taxes on goods and services; taxes of income, profits and capital gains; social security taxes; taxes in international trade, non-tax revenue as a percentage of total revenue.

*Coverage:* Available for about 34 USAID countries.

*Data Quality:* Many countries report their revenue in non-comparable 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:* IMF Article IV Reviews, obtained from [www.imf.org/external/np/sec/aiv/index.htm](http://www.imf.org/external/np/sec/aiv/index.htm). Estimated, using the annual change of (1) credit to government, net (2) credit to the private sector, (3) credit to public enterprises, net (4) net foreign assets (reserves) and (5) other items, net; each divided by the annual change of the broad money supply (M2).

*Definition:* This calculation identifies the sources of the year to year change in the broad money supply (M2) disaggregated into the five categories indicated above.

*Coverage:* Data missing for about 6 USAID countries.

CAS Code # 21S3

### Government expenditure, percentage of GDP

*Source:* IMF Article IV Reviews for latest country data [www.imf.org/external/np/sec/aiv/index.htm](http://www.imf.org/external/np/sec/aiv/index.htm); benchmarking data obtained from World Development Indicators (GB.XPD.TOTL.GD.ZS). Original source of WDI data is the International Monetary Fund, Government Finance Statistics Yearbook, and World Bank estimates.

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

*Coverage:* Data available for about 70% of USAID countries.

CAS Code # 21P1

### Government revenue, percentage of GDP

*Source:* IMF Article IV Reviews for latest country data [www.imf.org/external/np/sec/aiv/index.htm](http://www.imf.org/external/np/sec/aiv/index.htm); benchmarking data obtained from World Development Indicators (GB.RVC.TOTL.GD.ZS). Original source of WDI data is the International Monetary Fund, 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.

*Coverage:* Data missing for about 24 USAID countries.

CAS Code # 21P2

### Inflation rate

*Source:* IMF World Economic Outlook database <http://www.imf.org/external/pubs/ft/weo/2004/02/data/index.htm>

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

*Coverage:* Available for most 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

### Money supply growth

*Source:* IMF Article IV Reviews for latest country data [www.imf.org/external/np/sec/aiv/index.htm](http://www.imf.org/external/np/sec/aiv/index.htm); World Development Indicators for benchmarking data (FM.LBL.MQMY.ZG). Original source of WDI data is International Monetary Fund, International Financial Statistics, and World Bank estimates.

*Definition:* Percent change in the broad money supply, M2 (money plus near-money).

*Coverage:* Data missing for about 8 USAID countries.

CAS Code #21P3

### Overall budget balance, including grants, percentage of GDP

*Source:* IMF Article IV Reviews for latest country data [www.imf.org/external/np/sec/aiv/index.htm](http://www.imf.org/external/np/sec/aiv/index.htm); World Development Indicators for benchmarking data, (GB.BAL.OVRL.GD.ZS). Original source of WDI data is the International Monetary Fund, Government Finance Statistics Yearbook, and World Bank estimates.

*Definition:* The difference between central government's total revenue including official grants received, and total expenditure.

*Coverage:* Data missing for 23 USAID countries.

CAS Code # 21P5

## BUSINESS ENVIRONMENT

### Corruption perception index

*Source:* Transparency International

*Definition:* Composite measure of perceptions of corruption derived from surveys of business people and country analysts. Index ranges in value from 1 (for most perceived corruption) to 10 (for least perceived corruption). Values below 3.0 are considered to indicate rampant corruption. <http://www.transparency.org/cpi/2004/cpi2004.en.html>

*Coverage:* Data missing for about 11 USAID countries.

*Data Quality:* This indicator uses perception and opinions gathered from local businessmen as well as third-party experts and not hard empirical data; thus, the indicator is largely subjective. Also standard errors are large. For both reasons, international comparisons are difficult.

CAS Code # 22P1



### Doing business composite index

*Source:* World Bank, Doing Business.  
<http://rru.worldbank.org/DoingBusiness/>

*Definition:* Index measuring the quality of a country's business environment, composed of performance measures and indicators related to Starting a Business, Registering Property, Getting Credit; Protecting Investors; Enforcing Contracts and Closing a Business in a given country. The composite index has been estimated by scaling all the "Doing business" indicators from 0 (lowest in the world) to 100 (highest) and then taking a simple average of all the scaled indicators.

*Coverage:* Estimates missing for about 10 USAID Countries.  
*CAS Code # 22P2*

### Rule of law index

*Source:* World Bank Institute;  
<http://www.worldbank.org/wbi/governance/govdata2002/index.html>

*Definition:* The Rule of Law Index is an aggregation of various indicators which measure the extent to which agents have confidence in and abide by the rules of society. This indicator is based on the measurement of perceptions of the legal system, drawn from 12 separate data sources. Index ranges in value from -2.5 (for very poor performance) to +2.5 (for excellent performance).

*Coverage:* Available for most USAID countries

*Data Quality:* This index is best used for relative comparisons between countries in a single year. It is difficult to use the index to track a country's progress over time as the index does not compensate against a change in the world average and, as a result, changing world trends may skew results over time—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. Conditions could stay the same (or even worsen) yet the country would show an improvement in its score as a result of the world average falling. Even for cross-country comparisons, standard errors are large, so only large differences would be statistically significant.

*CAS Code #22P3*

### Cost to start a business; % of GNI per capita

*Source:* World Bank, Doing Business. Indicator is found under the Starting a Business category

<http://rru.worldbank.org/DoingBusiness/ExploreTopics/StartingBusiness/CompareAll.aspx>

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

*Coverage:* Data missing for about 10 USAID countries.

*CAS Code #22S1*

### Procedures to enforce a contract

*Source:* World Bank, Doing Business. The indicator is found under the "Enforcing Contracts" category-

<http://rru.worldbank.org/DoingBusiness/ExploreTopics/EnforcingContracts/CompareAll.aspx>

*Definition:* Number of procedures required to enforce recovery of a valid debt contract through the court system (excluding any possible appeals. A procedure is defined as any interactive step the company must undertake with external parties (government agencies, lawyers, notaries, etc.) to proceed with the enforcement action.

*Coverage:* Data missing for about 10 USAID Countries.

*CAS Code # 22S2*

### Procedures to register property

*Source:* World Bank, Doing Business. The indicator is found under the "Registering Property" category-

<http://rru.worldbank.org/DoingBusiness/ExploreTopics/RegisteringProperty/CompareAll.aspx>

*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/individual and a third party that is necessary to complete the property registration process.

*Coverage:* Data missing for about 10 USAID countries.

*CAS Code #22S3*

### Procedures to start a business

*Source:* World Bank, Doing Business. Indicator is found under the Starting a Business category

<http://rru.worldbank.org/DoingBusiness/ExploreTopics/StartingBusiness/CompareAll.aspx>

*Definition:* Number of procedural steps required to legalize a simple limited liability company. Procedures are interactions of a company with external parties (government agencies, lawyers, auditors, notaries, and the like), including interactions required to obtain necessary permits and licenses and to complete all inscriptions, verifications, and notifications to start operations.

*Coverage:* Data missing for about 10 USAID Countries.

*CAS Code # 22S4*

### Time to enforce a contract

*Source:* World Bank, Doing Business. The indicator is found under the "Enforcing Contracts" category-

<http://rru.worldbank.org/DoingBusiness/ExploreTopics/EnforcingContracts/CompareAll.aspx>

*Definition:* Minimum length of time, measured in days, required to enforce a contract through the court system of a given country.

*Coverage:* Data missing for about 10 USAID Countries.

*CAS Code # 22S5*

### Time to register property

*Source:* World Bank, Doing Business. The indicator is found under the "Registering Property" category-

<http://rru.worldbank.org/DoingBusiness/ExploreTopics/RegisteringProperty/CompareAll.aspx>

*Definition:* The time to register property covers the time required to accomplish the full sequence of procedures necessary to transfer the 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 missing for about 10 USAID countries.

*CAS Code #22S6*

### Time to start a business

*Source:* World Bank, Doing Business. Indicator is found under the Starting a Business category

<http://rru.worldbank.org/DoingBusiness/ExploreTopics/StartingBusiness/CompareAll.aspx>



*Definition:* Time to start a business is the time, measured in 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 missing for about 10 USAID Countries.

*CAS Code #22S7*

## FINANCIAL SECTOR

### Cost to Create Collateral

*Source:* World Bank Doing Business. Indicator can be found under the “Getting Credit” category-

<http://rru.worldbank.org/DoingBusiness/ExploreTopics/GettingCredit/CompareAll.aspx>

*Definition:* The indicator assesses the cost of creating and registering collateral as a percentage of income per capita.

*Coverage:* Data missing for 10 USAID countries.

*Data Quality:* Countries without a collateral registry usually have lower costs, although the secured creditor is disadvantaged elsewhere because they are unable to notify other creditors of their right to the collateral through a registry.

*CAS Code #23S1*

### Country credit rating

*Source:* Millennium Challenge Corporation. Original data comes from the Institutional Investor Magazine. <http://www.mca.gov/countries/rankings/index.shtml>

*Definition:* Bankers’ and fund managers’ perception of the country’s risk of default based on a semi-annual survey. Index ranges in value from 0 (for very poor performance) to 10 (for excellent performance).

*Coverage:* Data missing for 35 USAID countries.

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

*CAS Code # 23S2*

### Domestic credit to private sector, percent of GDP

*Source:* IMF Article IV Reviews for latest country data; World Development Indicators for benchmarking data (FS.AST.PRVT.GD.ZS). Original data comes from International Monetary Fund, 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 missing for about 6 USAID countries.

*CAS Code # 23P1*

### Interest rate spread

*Source:* World Development Indicators (FR.INR.LNDP). Original data from International Monetary Fund, International Financial Statistics and data files.

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

*Coverage:* Data missing for 22 USAID countries.

*CAS Code # 23P2*

### Legal rights of borrowers and lenders

*Source:* World Bank Doing Business. Indicator can be found under the “Getting Credit” category-

<http://rru.worldbank.org/DoingBusiness/ExploreTopics/GettingCredit/CompareAll.aspx>

*Definition:* The index measures the degree to which collateral and bankruptcy laws facilitate lending. It is based on data collected through research of collateral and insolvency laws supported by the responses to a survey on secured transactions laws. It includes three aspects related to legal rights in bankruptcy, and seven aspects found in collateral law. Index ranges in value from 0 (for very poor performance) to 10 (for excellent performance).

*Coverage:* About 10 USAID countries are not covered

*CAS Code # 23S3*

### Money supply, percent of GDP

*Source:* World Development Indicators. FM.LBL.MOMY.GD.ZS Original data from International Monetary Fund, International Financial Statistics and data files, and World Bank and OECD GDP estimates.

*Definition:* Money supply (M2), also called broad money, and is defined as non-bank private sector’s holdings of notes, coins and demand deposits plus savings deposits and foreign currency deposits.

*Coverage:* Data missing for 8 USAID countries

*Data Quality:* In some countries M2 includes Certificates of Deposits (CDs), money market instruments, and/or treasury bills.

*CAS Code # 23P3*

### Real interest rate

*Source:* World Development Indicators (FR.INR.RINR)

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

*Coverage:* Available for most USAID countries

*CAS Code # 23S4*

### Stock Market Capitalization Rate, % of GDP

*Source:* World Development Indicators (CM.MKT.LCAP.GD.ZS)

*Definition:* Market capitalization (also known as market value) is 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:* Available for less than twenty USAID countries.

*CAS Code # 23P4*

## EXTERNAL SECTOR

### Aid as a percentage of GNI

*Source:* IMF Article IV Reviews for latest country data [www.imf.org/external/np/sec/aiv/index.htm](http://www.imf.org/external/np/sec/aiv/index.htm);

World Development Indicators for benchmarking data (DT.ODA.ALLD.GN.ZS)

*Definition:* Official Development Assistance and official aid from non-OECD countries as a percentage of Gross National Income.

*Coverage:* For 2002, the indicator was unavailable for 6 USAID countries.

*Data Quality:* The data does not include aid given by recipient countries to other recipient countries. Additionally,

the data may not always be consistent with individual country's balance sheets, as the data are collected from donors and not recipients.

CAS Code #24P1

### Concentration of exports

Source: ITC COMTRADE.

<http://www.intracen.org/tradstat/sitc3-3d/indexre.htm>

The indicator is constructed by sorting a country's exports at the SITC (Rev. 3) 3-digit level, aggregating the value for the top 3 product groups, and dividing by the country's total exports.

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

*Coverage:* Available for most countries

*Data Quality:* Trade data are never complete. Smuggling and non-reporting represent a serious problem in a number of countries. In addition, trade statistics, like any source of information, are not free of mistakes and omissions. For countries that do not report trade data to the United Nations, ITC uses partner country data, an approach referred to as mirror statistics. Mirror statistics are a second-best solution being better than having no data at all. At the same time, they have a number of shortcomings: they do not cover trade with other non-reporting countries; there is the problem of transshipments, which may hide the actual source of supply. Third, mirror statistics invert the reporting standards by valuing exports in c.i.f. terms (i.e. including transport cost and insurance) and imports in f.o.b. terms (excluding these items).

CAS Code # 24S1

### Current Account Balance, percent of GDP

Source: IMF Article IV Reviews for latest country data [www.imf.org/external/np/sec/aiv/index.htm](http://www.imf.org/external/np/sec/aiv/index.htm); World Development Indicators for benchmarking data (BN.CAB.XOKA.GD.ZS), based on International Monetary Fund, Balance of Payments Statistics Yearbook and data files, and 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:* Available for most countries.

CAS Code # 24P2

### Debt service ratio

Source: IMF Article IV Reviews for latest country data [www.imf.org/external/np/sec/aiv/index.htm](http://www.imf.org/external/np/sec/aiv/index.htm); World Development Indicators for benchmarking data (DT.TDS.DECT.EX.ZS), Global Development Finance.

*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. Exports of goods and services include income and workers' remittances.

*Coverage:* Available for most 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

### Foreign Direct Investment, percent of GDP

Source: IMF Article IV Reviews for latest country data [www.imf.org/external/np/sec/aiv/index.htm](http://www.imf.org/external/np/sec/aiv/index.htm); World Development Indicators for benchmarking data (BX.KLT.DINV.DT.GD.ZS), based on International Monetary Fund, 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 net inflows 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:* Available for a majority of USAID countries

CAS Code #24P5

### Gross international reserves, months of imports

Source: IMF Article IV Reviews for latest country data [www.imf.org/external/np/sec/aiv/index.htm](http://www.imf.org/external/np/sec/aiv/index.htm);

World Development Indicators for benchmarking data, (FI.RES.TOTL.MO).

*Definition:* Gross international reserves comprise holdings of monetary gold, special drawing rights (SDRs), the reserve position of members in the International Monetary Fund (IMF), and holdings of foreign exchange under the control of monetary authorities. The indicator shows reserves expressed in terms of the number of months of imports of goods and services which could be paid for.

*Coverage:* Available for most USAID countries

CAS Code # 24P6

### Gross Private Capital Flows, percent GDP

Source: IMF Article IV Reviews for latest country data [www.imf.org/external/np/sec/aiv/index.htm](http://www.imf.org/external/np/sec/aiv/index.htm); World Development Indicators for benchmarking data, (BG.KAC.FNEI.GD.ZS), based on International Monetary Fund, Balance of Payments database, and World Bank GDP estimates.

*Definition:* Gross private capital flows are the sum of the absolute values of direct, portfolio, and other investment inflows and outflows recorded in the balance of payments financial account, excluding changes in the assets and liabilities of monetary authorities and general government. The indicator is calculated as a ratio to GDP in U.S. dollars.

*Coverage:* Data missing for about 30 USAID countries.

*Data Quality:* The indicators on gross capital flows are calculated from detailed accounts, since higher-level aggregates would result in smaller totals by netting out credits and debits. The comparability of the data between countries and over time is affected by the accuracy and completeness of balance of payments records and by their level of detail. Capital flows are converted to U.S. dollars at the International Monetary Fund's average official exchange rate for the year shown.

CAS Code #24P7

### Exports growth, goods and services

Source: IMF Article IV Reviews for latest country data [www.imf.org/external/np/sec/aiv/index.htm](http://www.imf.org/external/np/sec/aiv/index.htm); World Development Indicators for benchmarking data (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. They 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:* Available for most countries.

*CAS Code # 24P4*

### **Inward FDI Potential Index**

*Source:* UNCTAD. This indicator is available online at <http://www.unctad.org/Templates/WebFlyer.asp?intItemID=2471&lang=1>

*Definition:* The Inward FDI Potential Index captures several factors (apart from market size) expected to affect an economy's attractiveness to foreign investors. It is an average of the values (normalized to yield a score between zero, for the lowest scoring country, to one, for the highest) of 12 variables with no particular weights. Index ranges in value from 0 (for very poor performance) to 1 (for excellent performance).

*Coverage:* Available for most USAID countries

*CAS Code # 24S2*

### **Net barter terms of trade**

*Source:* World Development Indicators; 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 1995.

*Coverage:* Available for more than half of USAID countries

*CAS Code # 24S3*

### **Present value of debt, percent of GNI**

*Source:* World Development Indicators, (DT.DOD.PVLX.GN.ZS), Global Development Finance.

*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.

*Coverage:* Available for a majority of USAID countries

*Data Quality:* The coverage, quality, and timeliness of debt data vary across countries. Coverage varies for both debt instruments and borrowers. With the widening spectrum of debt instruments and investors and the expansion of private non-guaranteed borrowing, comprehensive coverage of long-term external debt becomes more complex. Reporting countries differ in their capacity to monitor debt, especially private non-guaranteed debt. Even data on public and publicly guaranteed debt are affected by coverage and accuracy in reporting--again because of monitoring capacity and sometimes because of unwillingness to provide information. A key part often underreported is military debt. Because flow data are converted at annual average exchange rates and stock data at end-of-period exchange rates, year-to-year changes in debt outstanding and disbursed are sometimes not equal to net flows (disbursements less principal repayments); similarly, changes in debt outstanding, including un-disbursed debt, differ from commitments less repayments. Discrepancies are particularly significant when exchange rates have moved sharply during the year. Cancellations and re-scheduling of other liabilities into long-term public debt also contribute to the differences. Variations

in reporting rescheduled debt also affect cross-country comparability. For example, rescheduling under the auspices of the Paris Club of official creditors may be subject to lags between the completion of the general rescheduling agreement and the completion of the specific, bilateral agreements that define the terms of the rescheduled debt.

*CAS Code # 24P8*

### **Real effective exchange rate (REER)**

*Source:* IMF Article IV Reviews [www.imf.org/external/np/sec/aiv/index.htm](http://www.imf.org/external/np/sec/aiv/index.htm);

*Definition:* Index number with base 1995=100, it is the nominal effective exchange rate (a measure of the value of a currency against a weighted average of several foreign currencies) divided by a price deflator or index of costs. The IMF defines the relative currency values such that an increase in the REER represents a real appreciation of the home currency, and a decrease represents a real depreciation.

*Coverage:* Available for about 28 USAID countries only

*Data Quality:* Because of conceptual and data limitations, changes in real effective exchange rates should be interpreted with caution. Real effective exchange rates are derived by deflating a trade-weighted average of the nominal exchange rates that apply between trading partners. For most high-income countries the weights are based on trade in manufactured goods with other high-income countries in 1989-91, and an index of relative, normalized unit labor costs is used as the deflator. (Normalization smoothes a time series by removing short-term fluctuations while retaining changes of a large amplitude over the longer economic cycle.) For other countries the weights before 1990 take into account trade in manufactured and primary products in 1980-82, the weights from January 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*

### **Remittances receipts, percent of exports**

*Source:* IMF Article IV Reviews for latest country data [www.imf.org/external/np/sec/aiv/index.htm](http://www.imf.org/external/np/sec/aiv/index.htm); World Development Indicators for benchmarking data. This indicator needs to be constructed from two data series, Worker's Remittances (receipts) (BX.TRF.PWKR.CD) divided by Exports of Goods and Services ((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.

*Coverage:* Available for more than half of USAID countries.

*CAS Code # 24P9*

### **Structure of merchandise exports**

*Source:* World Development Indicators. Five data series are used: Food exports (TX.VAL.FOOD.ZS.UN); Agricultural raw materials exports (TX.VAL.AGRI.ZS.UN); Manufactures exports (TX.VAL.MANF.ZS.UN); Ores and metals exports (TX.VAL.MMTL.ZS.UN); and Fuel exports (TX.VAL.FUEL.ZS.UN).

*Definition:* This indicator reflects the composition of merchandise exports by major commodity group: food; agricultural raw materials; fuels; ores and metals; and manufactures.

*Coverage:* Available for most countries

*Data Quality:* The classification of commodity groups is based on the Standard International Trade Classification

(SITC) revision 1. Most countries now report using later revisions of the SITC or the Harmonized System. Concordance tables are used to convert data reported in one system of nomenclature to another. The conversion process may introduce some errors of classification, but conversions from later to early systems are generally reliable. Shares may not sum to 100 percent because of unclassified trade.

CAS Code # 24S5

### Trade in goods and services, as a percentage of GDP

*Source:* IMF Article IV Reviews for latest country data [www.imf.org/external/np/sec/aiv/index.htm](http://www.imf.org/external/np/sec/aiv/index.htm); World Development Indicators for benchmarking data (NE.TRD.GNFS.ZS)

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

*Coverage:* Data for 8 USAID countries missing.

CAS Code # 24P10

### Trade Policy Index

*Source:* Index of Economic Freedom, Heritage Foundation. The Trade Policy Score is one of the components of the Index of Economic Freedom. Both indicators can be found on-line at <http://www.heritage.org/research/features/index/downloads.cfm>

*Definition:* The trade policy score is given by the index authors 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 custom service. It measures the degree to which government hinders the free flow of foreign commerce. Index ranges in value from 1 (excellent) to 5 (very poor).

*Coverage:* Available for most countries

*Data Quality:* The trade policy score is subjective, since Heritage professionals assign scores to each country. Further, they do not always grade trade policy based on consistent, comparable data for each country (for example, when a country's average tariff rate is not available, their authors based their grading on the revenue raised from tariffs and duties as a percentage of total imports of goods). Indeed, countries do not report simple or weighted average tariff rates every year.

CAS Code # 24S6

## ECONOMIC INFRASTRUCTURE

### Internet users per 1000 people

*Source:* World Development Indicators (IT.NET.USER.P3), derived from International Telecommunication Union - ITU report and database.

*Definition:* Internet users are defined as those with access to the world-wide network

*Coverage:* Available for most USAID countries.

CAS Code # 25P1

### Overall Infrastructure Quality

*Source:* Global Competitiveness Report 2004-2005, World Economic Forum. The indicator can be found in the Data Tables, Section V. General Infrastructure; 5.01.

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

*Coverage:* The GCR includes about 50 USAID countries

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

CAS Code # 25P2

### Telephone density, fixed line and mobile

*Source:* World Development Indicators (IT.TEL.TOTL.P3)

*Definition:* Sum of telephone mainlines and mobile phones per 1000 people and mobile phones per 1000 people fixed lines represent telephone mainlines connected to the public switched telephone network. Mobile phone subscribers refer to users of cellular based technology with access to the public switched telephone network.

*Coverage:* Available for most USAID countries.

CAS Code #25P3

### Quality of infrastructure - railroads, ports, air transport and electricity

*Source:* Global Competitiveness Report 2004-2005, 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:* Executive's perceptions of whether Executive's perceptions of whether: infrastructure in their country is 1 as underdeveloped or 7 as extensive and efficient as the world's best.

*Coverage:* Approximately, 40 USAID countries are missing in the GCR Executive Opinion Survey.

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

CAS Code #25S1

### Telephone cost, average local call

*Source:* World Development Indicators (IT.MLT.CLCL.CD)

*Definition:* Cost of local call is the cost of a three-minute, peak rate, fixed line call within the same exchange area using the subscriber's equipment (that is, not from a public phone).

*Coverage:* Data missing for 4 USAID countries.

CAS Code #25S2

## SCIENCE AND TECHNOLOGY

### Expenditure in Research and Development, percent of GNI

*Source:* World Development Indicators; Estimated by multiplying Expenditure in Research and Development as a percent of GDP (GB.XPD.RSDV.GD.ZS) times GDP (current LCU) (NY.GDP.MKTP.CN) and then dividing by GNI (current LCU) (NY.GNP.MKTP.CN).

*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:* Available for approximately 50% of USAID countries

CAS Code #26P1



### FDI technology transfer index

*Source:* Global Competitiveness Report 2004-2005, World Economic Forum. The indicator can be found in the Data Tables, Section III. Technology: Innovation and Diffusion; 3.04.

*Definition:* Executive's 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 (1) brings little new technology, or (7) is an important source of new technology.

*Coverage:* Approximately, 40 USAID countries are missing in the GCR Executive Opinion Survey.

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

*CAS Code # 26P2*

### Patent applications filed, residents

*Source:* World Development Indicators (IP.PAT.RESD) based on WIPO

*Definition:* Applications filed by host-country residents with the national patent office for exclusive rights for an invention--a product or process that provides a new way of doing something or offers a new technical solution to a problem.

*Coverage:* About 80% coverage

*CAS Code #26P3*

## HEALTH

### HIV prevalence rate

*Source:* UNAIDS  
<http://www.unaids.org/Unaid/EN/Resources/epidemiology.asp> for most recent country data, World Development Indicators for group benchmark data.

*Definition:* Percentage of people ages 15-49 who are infected with HIV.

*Coverage:* Available for most USAID countries

*Data Quality:* UNAIDS/WHO estimates are based on all available data, including surveys of pregnant women, population-based surveys such as household surveys conducted by Kenya, Mali, Zambia and Zimbabwe, as well as other surveillance information. UNAIDS views such information as complementary and useful in helping to estimate the number of people living with HIV in a country. HIV estimates - whether they are based on household surveys or surveys of pregnant women - need to be assessed critically as the epidemic evolves. Achieving 100% certainty about the numbers of people living with HIV globally, for example, would require repeatedly testing every person in the world for HIV—which is logistically impossible.

*CAS Code # 31P1*

### Life expectancy at birth

*Source:* World Development Indicators, (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 its birth were to stay the same throughout its life.

*Coverage:* Available for most USAID countries.

*Data Quality:* Life expectancy at birth are general estimates based on vital registration or the most recent census or survey available, extrapolations based on outdated surveys may not be reliable for monitoring changes in health status or for comparative analytical work.

*CAS Code # 31P2*

### Maternal mortality rate

*Source:* UN Millennium Indicators Database, [http://millenniumindicators.un.org/unsd/mi/mi\\_series\\_results.asp?rowId=553](http://millenniumindicators.un.org/unsd/mi/mi_series_results.asp?rowId=553) based on WHO, UNICEF and UNFPA.

*Definition:* The number of women who die during pregnancy and childbirth, per 1,000 live births.

*Coverage:* Available for most USAID countries.

*Data Quality:* Maternal mortality ratios are generally of unknown reliability. Household surveys attempt to measure maternal mortality by asking respondents about survivorships of sisters. The estimates that are produced pertain to 12 years or so before the survey, making them unsuitable for monitoring recent changes or observing the impact of observations. Additionally, measurement of maternal mortality is subject to many types of error.

*CAS Code # 31P3*

### Access to improved sanitation

*Source:* World Development Indicators, (SH.STA.ACSN)

*Definition:* 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:* Available for most USAID countries

*Data Quality:* The coverage rates are based on service users on the facilities their households use, rather than on information service providers who may include nonfunctioning systems—therefore somewhat reliable.

*CAS Code #31S1*

### Access to improved water source

*Source:* World Bank, World Development Indicators, (SH.H2O.SAFE.ZS)

*Definition:* Percentage of 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:* Available for most USAID countries

*Data Quality:* Access to drinking water from an improved source does not ensure that the water is adequate or safe, as these characteristic are not tested at the time of the surveys.

*CAS Code # 31S2*

### Births attended by skilled health personnel

*Source:* World Development Indicators, (SH.STA.BRTC.ZS)

*Definition:* 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:* Available for most USAID countries

*Data Quality:* Data may not reflect improvements in maternal health because information systems are often weak, maternal deaths are underreported and rates of maternal mortality are difficult to measure.

*CAS Code # 31S3*

### Child immunization rate

*Source:* World Development Indicators, estimated by averaging two data 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 receiving vaccination coverage for four diseases—measles and diphtheria, pertussis (whooping cough), and tetanus (DDPT).

*Coverage:* Available for most USAID countries.

CAS Code #31S4

### Prevalence of child malnutrition, weight for age

*Source:* World Development Indicators, (SH.STA.MALN.ZS)

*Definition:* Percentage of children under 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:* Available for most USAID countries

CAS Code #31S5

### Public health expenditure, percent of GDP

*Source:* International benchmarking data from World Development Indicators, (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. Latest data for host country is obtained from the MCC <http://www.mca.gov/countries/rankings/index.shtml>.

*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:* Available for most 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 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:* Full coverage.

*Data Quality:* Enrollment ratios are a useful measure of participation in education, but they may also have significant limitations—being based in date collected during annual school surveys, which are typically conducted at the beginning of the school year, do not reflect actual rates of attendance or dropouts during the school year. And school administrators may report exaggerated enrollments as often the number of teachers paid by the government is related to the number of pupils enrolled. Net enrollment ratios provide a better indicator of a school system's efficiency, but does not measure the quality of the education provided. Net enrolment ratio is more precise than gross enrollment ratio for assessing the level of participation in primary education. If data on enrolment and population by single years of age are available, the concept can be extended to derive age-specific enrolment ratios and school life expectancy.

CAS Code #32P1

### Persistence to grade 5 - female, male, and total

*Source:* World Development Indicators, (SE.PRM.PRS5.FE.ZS); (SE.PRM.PRS5.MA.ZS); and (SE.PRM.PRS5.ZS).

*Definition:* The estimated female, male and total proportion of the population entering primary school who reach grade 5

*Coverage:* Available for most USAID countries

CAS Code #32P2

### Youth literacy rate

*Source:* World Development Indicators, SE.ADT.1524.LT.ZS)

*Definition:* The percent of people ages 15-24 who can, with understanding, read and write a short, simple statement on their everyday life.

*Coverage:* Available for about half of USAID countries.

*Data Quality:* Statistics are out of date 2-3 years.

CAS Code #32P3

### Expenditure on primary education, percent GDP

*Source:* Millennium Challenge Corporation <http://www.mca.gov/countries/rankings/index.shtml>

*Definition:* Total expenditures on education by all levels of government.

*Coverage:* Available for about 70% of USAID countries.

*Data Quality:* The MCC obtains the data from national sources via US embassies, because the figures are not readily available from standard international statistical resources.

CAS Code #32S1

### Educational expenditure per student, percentage GDP per capita -Primary, Secondary and Tertiary

*Source:* World Development Indicators, (SE.XPD.PRIM.PC.ZS); (SE.XPD.SECO.PC.ZS); (SE.XPD.TERT.PC.ZS)

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

*Coverage:* Available for most USAID countries

*Data Quality:* For a variety of reasons, education statistics generally fail to provide a complete and accurate picture of a country's education system and should be interpreted with caution. Statistics are out of date by two or three years. The data on education spending in the table refer solely to public spending—government spending on public spending generally excludes spending by religious schools, and 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; 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:* Available for most USAID countries

*Data Quality:* The comparability of pupil-teacher ratios across countries is affected by the definition of teachers, by whether teachers are assigned non-teaching duties, and by differences in class size by grade and in the number of hours taught. 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 – total, male, female

*Source:* Derived from World Development Indicators. For the female labor force participation rate: Population ages 15-64, female (SP.POP.1564.FE.IN) is the denominator; the numerator is calculated by multiplying Labor force, female (% of total labor force) (SL.TLF.TOTL.FE.ZS), times Labor force, total (SL.TLF.TOTL.IN). For the male labor force participation rate: Population ages 15-64, male (SP.POP.1564.MA.IN) serves as the denominator. The numerator is calculated by subtracting the female labor force, as derived above, from the total labor force (SL.TLF.TOTL.IN). For the total labor force participation rate: The denominator is Population ages 15-64, total (SP.POP.1564.TO). The numerator is Labor force, total (SL.TLF.TOTL.IN).

*Definition:* The percentage of the working age population that is in the labor force. The labor force comprises 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:* Available for most USAID countries

*CAS Code #33P1*

### Rigidity of employment index

*Source:* World Bank, Doing Business in 2005, under the Hiring and Firing Category, <http://rru.worldbank.org/DoingBusiness/ExploreTopics/HiringFiringWorkers/CompareAll.aspx>

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

*Coverage:* Unavailable for about 10 USAID countries

*Data Quality:* Sub-indices are compiled by the World Bank from survey responses by in-country specialists.

*CAS Code # 33P2*

### Size and growth of the labor force

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

*Definition:* Magnitude of the labor supply, and annual percent change. Labor force comprises 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.

While national practices vary in the treatment of such groups 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:* Available for most USAID countries.

*CAS Code #33P3*

### Unemployment rate

*Source:* World Development Indicators, (SL.UEM.TOTL.ZS)

*Definition:* Percentage of labor force that is currently unemployed

*Coverage:* Gaps in data in 26 USAID countries.

*Data Quality:* Technical details are country specific- making international comparisons impossible.

*CAS Code # 33P4*

## AGRICULTURE

### Agriculture value added per worker

*Source:* World Development Indicators (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 measure of agricultural productivity. Value added in agriculture measures the output of the agricultural sector (ISIC divisions 1-5) less the value of intermediate inputs. Agriculture comprises value added from forestry, hunting, and fishing as well as cultivation of crops and livestock production. Data are in constant 1995 U.S. dollars.

*Coverage:* Measure available for most USAID countries

*CAS Code # 34P1*

### Cereal yield

*Source:* World Development Indicators (EA.PRD.AGRI.KD) based on Food and Agriculture Organization (FAO), 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. Cereal crops harvested for hay or harvested green for food, feed, or silage and those used for grazing are excluded.

*Coverage:* Most USAID countries covered

*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:* IMF Article IV Reviews for latest country data [www.imf.org/external/np/sec/aiv/index.htm](http://www.imf.org/external/np/sec/aiv/index.htm); World Development Indicators for benchmarking data (NV.AGR.TOTL.KD.ZG)

*Definition:* Annual growth rate for agricultural value added based on constant local currency. Aggregates are based on constant 1995 U.S. dollars. Value added is the net output of a sector after adding up all outputs and subtracting intermediate inputs. It is calculated without making deductions for depreciation of fabricated assets or depletion and degradation of natural resources.

*Coverage:* Most USAID countries covered.

CAS Code # 34P3

### **Agricultural policy costs index**

*Source:* Global Competitiveness Report 2004-2005, World Economic Forum. The indicator can be found in the Data Tables, Section II. Macroeconomic Environment; 2.20.

*Definition:* Executive's perceptions of whether the cost of agricultural policy in a given country is 1= excessively burdensome or 7= balances all economic agents' interests.

*Coverage:* Approximately, 50 USAID countries are covered in the GCR Executives Opinion Survey.

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

CAS Code # 34S1

### **Crop production index**

*Source:* World Development Indicators (AG.PRD.CROP.XD) based on FAO

*Definition:* Crop production index shows agricultural production for each year relative to the base period 1989-91. It includes all crops except fodder crops.

*Coverage:* Most USAID countries covered

*Data Quality:* Regional and income group aggregates for the FAO's production indexes are calculated from the underlying values in international dollars, normalized to the base period 1989-91. 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. The FAO's indexes may differ from other sources because of differences in coverage, weights, concepts, time periods, calculation methods, and use of international prices. To ease cross-country comparisons, the FAO uses international commodity prices to value production. These prices, expressed in international dollars (equivalent in purchasing power to the U.S. dollar), are derived using a Geary-Khamis formula applied to agricultural outputs. 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:* Most USAID countries covered.

CAS Code # 34S2

### **Livestock Production index**

*Source:* World Development Indicators (AG.PRD.LVSK.XD) based on FAO

*Definition:* Livestock production index shows livestock production for each year relative to the base period 1989-91. It includes meat and milk from all sources, dairy products such as cheese, and eggs, honey, raw silk, wool, and hides and skins.

*Coverage:* Most USAID countries covered.

*Data Quality:* See comments on Crop Production Index

CAS Code # 34S3