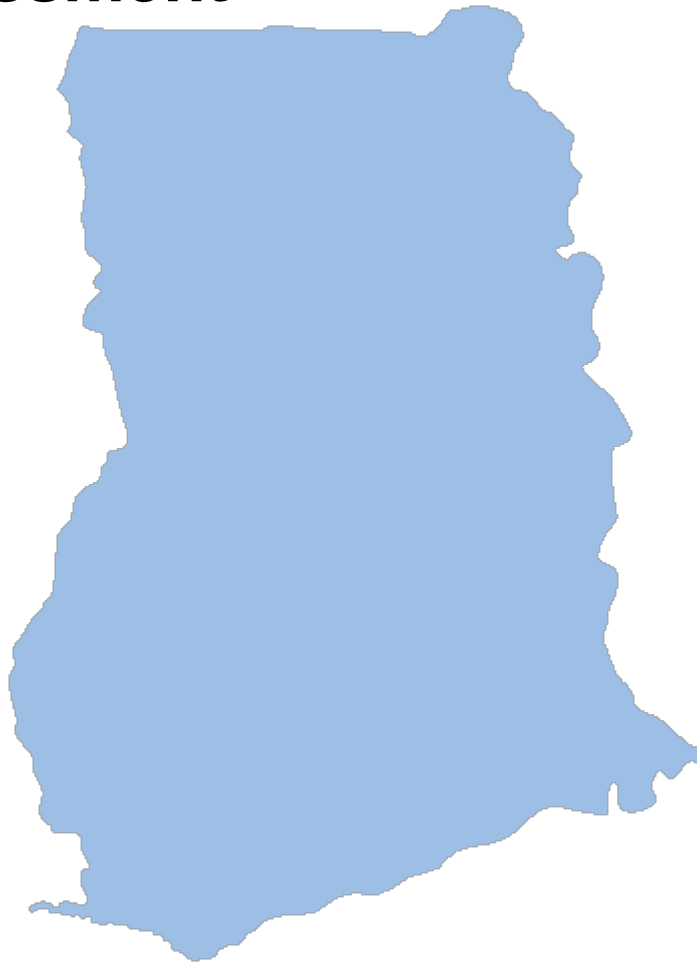




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Ghana

Economic Performance Assessment



July 2009

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Ghana

Economic Performance Assessment

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

The authors of the present report are Roger Manring, Alexander Greenbaum, Matthew Lutkenhouse and Kristen Harkins of Nathan Associates.

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HIGHLIGHTS OF GHANA'S PERFORMANCE

Economic Growth	Ghana, a low-income country, has been one of Sub-Saharan Africa's better growth performers, with real GDP increase averaging 6.2 percent per annum since 2004. High levels of gross fixed investment (33 percent of GDP) underpin growth. But expansionary policies have created imbalances that threaten future performance. Of course, discovery of oil could add materially to Ghana's growth rate from 2011.
Poverty	Ghana has achieved real progress in reducing poverty, already reaching the Millennium Development Goal of halving extreme poverty by 2015. But income inequality is rising, regional poverty differentials are significant, and accelerating inflation will especially hurt the poorest citizens.
Economic Structure	Agriculture accounts for more than half of all jobs and over one-third of output. Labor productivity in agriculture is low relative to industry and services. A structural transformation of the economy is in order to shift labor and expand the higher productivity industrial and services sectors, but there is little evidence of movement.
Demography and Environment	Slowing population growth (now 2 percent annually) has meant a declining youth dependency ratio. These trends will ease resource demands and permit greater investment in education, for example, to raise Ghana's relatively low adult literacy rate (65 percent). Urbanization is fairly high (49 percent). Environmental problems include deforestation and poor air quality. Oil will create new environmental issues.
Gender	In gender equity terms Ghana fares relatively well. Differential rates of primary school enrollment are narrowing and are better than regional and low-income country medians. Labor force participation rates are virtually the same for men and women, Differential rates of life expectancy, however—normally significantly higher for women—are lower than would be expected.
Fiscal and Monetary Policy	A severe and ballooning fiscal deficit is at 14.5 percent of GDP (including grants). Largely because of fiscal expansion, annual inflation has risen to a corrosive 16.5 percent. Such trends threaten Ghana's macroeconomic progress and must be urgently addressed, beginning with immediate fiscal adjustment. Future oil income (estimated \$20 billion in total from 2012 to 2030) would alter government finances.
Business Environment	Based on the Doing Business Index, Ghana has made real improvements in virtually all rankings in the past few years and now scores at 87th out of 181 countries. The cost of starting a business, for example, has fallen by half in 5 years. Overall in Doing Business terms, Ghana places better than all comparators save South Africa.
Financial Sector	Ghana is a "Frontier Market" for the IMF, and indeed has shown signs of financial deepening and development: a rising ratio of broad money to GDP (46.8 percent), increasing domestic credit to the private sector (34.8 percent of GDP), and a growing stock market capitalization (21.1 percent of GDP). But very high interest rate spreads and growing non-performing loan rates suggest serious banking sector inefficiencies.
External Sector	With a ratio of trade/GDP of 121 percent, Ghana is a relatively open economy. Much in the external sector has been positive: export growth, rising terms of trade (due to high gold and cocoa prices), new flows of foreign capital (due to capital account liberalization) and declining external debt (through debt relief). But an alarmingly high current account deficit (-19.3 percent of GDP), dwindling international reserves and real effective exchange rate appreciation complete the picture. These imbalances must be addressed. Oil production would have a major impact on current account.

Economic Infrastructure	With the World Economic Forum's index of infrastructure quality as a benchmark, Ghana's score (3.4 on a 0-7 scale) places it over comparators (except South Africa), but far short of international standards. It fares relatively well in telecoms (phone and internet), air transport, ports, roads and electric power. It stacks up relatively badly in rail transport. Also, poor access roads (rural and farm-to-market) hamper business.
Science and Technology	Science and technology is a comparative disadvantage for Ghana. Roughly on par with comparators for issues like availability of scientists and engineers, and even viewed as somewhat better than others on enforcement of IPR, Ghana fares a bit worse in FDI's effectiveness as a source of new technology in the domestic economy. Promotion of more FDI technology spillovers and applied research is called for.
Health	Health status indicators for Ghana are relatively good and trends are mostly positive. Life expectancy at birth (60 years) has been improving. Maternal mortality is fairly low and child immunization fairly high for a Sub-Saharan economy. HIV/AIDS prevalence (2.6 percent) seems to be decreasing, but may be under-reported. Access to improved facilities is quite good for water while severely lacking for sanitation. But major urban-rural differentials prevail in health outcomes, and public health expenditure as a percent of GDP has dropped – perhaps undermining future progress.
Education	Ghana's commitment to education is evident in the high and rising enrollment rates it records at all school levels – primary, secondary, tertiary – relative to comparators. Youth literacy (77.8 percent) is a bit better than might be expected. Educational quality (captured in pupil/teacher ratios) is better than all comparators, even South Africa, and so is average expenditure per student. But educational expenditure as a percent of GDP is only at regional levels. Oil revenues may provide new funding.
Employment and Workforce	Labor force participation rates are fairly low (73 percent) and stable. But the labor force is expanding at an annual rate of 3 percent, meaning 300,000 new entrants must now be absorbed yearly to prevent rising unemployment/underemployment. Young workers are most vulnerable to unemployment. Child labor seems to be very low. Most workers are in the informal sector. Expansion of formal sector employment may be hindered by rigidities (e.g., firing costs of 178 weeks of wages).
Agriculture	Real agricultural productivity per worker (\$332) – though better than the median for Low Income Sub-Saharan Africa (\$221) – has hardly increased in recent years. Cereal yields and fertilizer use are stagnant and crop and livestock output has only modestly increased. Raising agricultural productivity will be critical for Ghana's development since 46 percent of crop farmers live below the national poverty line.

GHANA: STRENGTHS AND WEAKNESSES—SELECTED INDICATORS

Selected Indicators, by Topic	Strengths	Weaknesses
Growth Performance		
Real GDP growth	X	
Gross fixed private investment, %GDP	X	
Investment productivity—incremental capital-output ratio (ICOR)		X
Poverty and Inequality		
Human Poverty Index	X	
Demography and Environment		
Adult literacy rate		X
Population growth rate	X	
Youth dependency rate	X	
Gender		
Labor force participation rates, female and female	X	
Fiscal and Monetary Policy		
Inflation rate, annual percent change		X
Government budget balance, %GDP		X
Government expenditure, %GDP		X
Money supply growth, annual percent change		X
Business Environment		
Ease of doing business index	X	
Cost of starting a business, %GNI	X	
Financial Sector		
Money supply (M2), % GDP		X
External Sector		
Trade in goods and services, % GDP	X	
Terms of trade trends	X	
Debt service ratio, % exports	X	
Current account balance		X
Foreign direct investment, % GDP	X	
Real effective exchange rate		X
International reserves, months of import cover		X
Economic Infrastructure		
Overall infrastructure quality		X
Quality of infrastructure—ports	X	
Quality of infrastructure—rail		X
Telephone density, fixed line and mobile	X	

Selected Indicators, by Topic	Strengths	Weaknesses
Internet users per 100 people	X	
Science and Technology		
FDI technology transfer index		X
Availability of scientists and engineers		X
Health		
HIV prevalence	X	
Life expectancy at birth	X	
Access to improved sanitation		X
Access to improved water source	X	
Education		
Net primary enrollment rate	X	
Net secondary enrollment rate	X	
Educational expenditure per student, primary, secondary and tertiary	X	
Employment and Workforce		
Labor force participation rate	X	
Growth of labor force		X
Agriculture		
Agriculture value added per worker		X
Fertilizer consumption		X

Note: The chart identifies selective indicators for which performance is particularly strong or weak relative to benchmark standards, as explained in Appendix A. The data supplement presented in Appendix B provides full tabulation of the data and international benchmarks examined for this report, along with technical notes on data sources and definitions.

1. Introduction

This report is one of a series of economic performance assessments prepared for the EGAT Bureau to provide USAID missions and regional bureaus with a concise evaluation of key indicators covering a broad range of issues relating to economic growth performance in designated host countries. The report draws on a variety of international data sources¹ and uses international benchmarking against reference group averages, comparator countries, and statistical norms to identify major constraints, trends, and opportunities for strengthening growth and reducing poverty. The two comparator countries used in this report are South Africa (an aspirational comparator) and Tanzania (a country with similar characteristics and constraints to Ghana).

METHODOLOGY

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

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

¹ Sources include the World Bank, the International Monetary Fund, the Millennium Challenge Corporation, the United Nations (including the Millennium Development Goals database), the World Economic Forum, and host-country documents and data sources. This report reflects data available as of May 2009.

² Sometimes, too, the problem is faulty wiring to the indicator—analogous here to faulty data.

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

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

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

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

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

Table 1-1
Topic Coverage

Overview of the Economy	Private Sector Enabling Environment	Pro-Poor Growth Environment
<ul style="list-style-type: none"> • Growth performance • Poverty and inequality • Economic structure • Demographic and environmental conditions • Gender 	<ul style="list-style-type: none"> • Fiscal and monetary policy • Business environment • Financial sector • External sector • Economic infrastructure • Science and technology 	<ul style="list-style-type: none"> • Health • Education • Employment and Workforce • Agriculture

DATA QUALITY AND FORMAT

The breadth of economic data collected for Ghana is relatively good, though statistical and data collection practices are poor. The World Bank gave Ghana a score of 57 percent on its 2008 Statistical Capacity Index. The index measures indicator availability, data collection, and

statistical practice for a range of economic and social data for most developing countries. Though Ghana's score is on par with the low-income Sub-Saharan (hereafter, LI-SSA) median and Tanzania's 61 percent, it is significantly below the expected value of 67 percent for a country with Ghana's characteristics and South Africa's 77 percent. On the positive side, Ghana's score of 82 percent for availability is higher than the developing country average of 77 percent, which reflects Ghana's timely tracking of most indicators. However, Ghana did not score as well on data collection or statistical practice, earning respective scores of only 50 percent and 40 percent, which are well below the all country averages of 62 percent for data collection and 56 percent for statistical practice. Of particular concern are the very outdated national accounts base year of 1975, outdated consumer price index base year of 1992, lack of industrial production, import or export indices, infrequent agriculture censuses, and incomplete vital registration system. Although agricultural data are lacking, Ghana recognizes this deficiency and is working with the Food and Agriculture Organization of the United Nations (FAO) through the CountrySTAT project to improve its agriculture and food statistics. Notwithstanding these issues, we believe that our data set is adequate to evaluate and highlight a broad range of key trends and issues in Ghana's economy.

2. Overview of the Economy

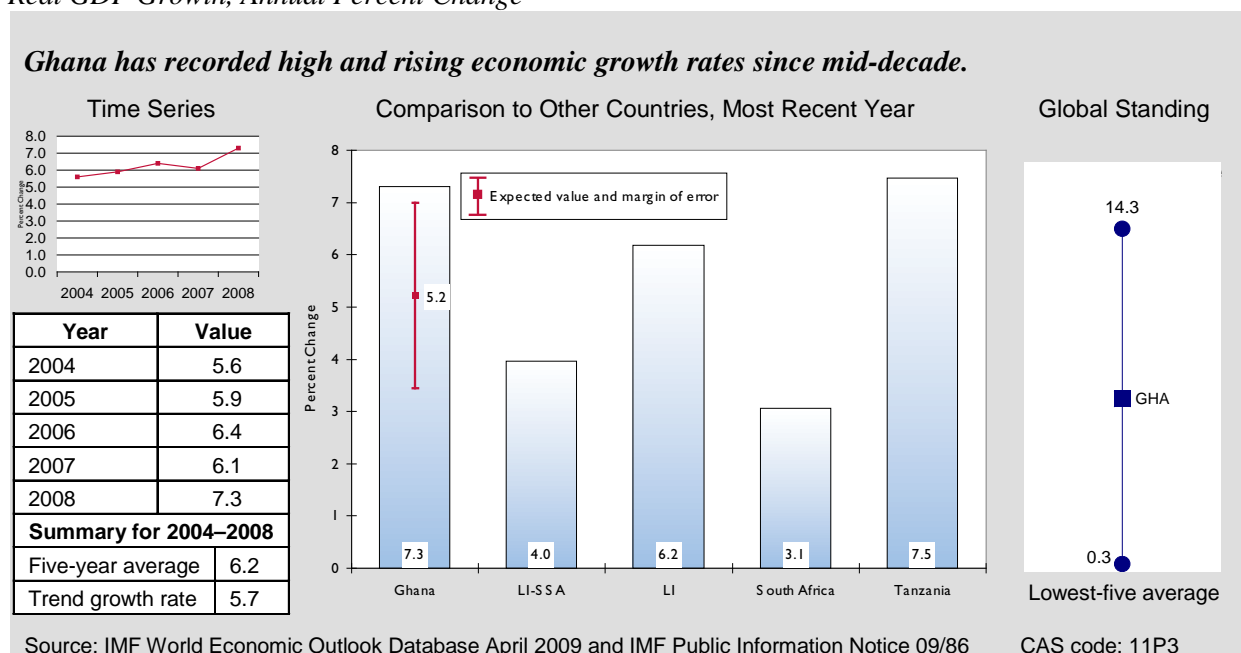
This section reviews basic information on Ghana's macroeconomic performance, poverty and inequality, economic structure, demographic and environmental conditions, and indicators of gender equity. Some of the indicators cited here are descriptive rather than analytical and are included to provide context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

GROWTH PERFORMANCE

Ghana is one of the better performing countries in Sub-Saharan Africa. In 2008, in current U.S. dollars, per capita GDP stood at \$716 per annum, well above the median of \$258 for LI-SSA countries. This strong growth performance is confirmed in terms of relative Purchasing Power Parity (PPP): per capita GDP (PPP) rose from just \$1,176 in 2004 to \$1,520 in 2008, close to double the LI-SSA median of \$784 and significantly higher than the per capita income of \$1,208 in Tanzania the same year. Ghana's impressive per capita income gains reflect the high levels of overall economic growth the nation has experienced in recent years. In the last five years alone, overall real GDP has increased at an annual average of 6.3 percent. In 2008, the growth rate exceeded 7 percent (Figure 2-1). This is well above the expected rate of 5.2 percent for a country with Ghana's characteristics, the LI-SSA median rate of 4 percent, and South Africa's 3.1 percent growth in 2008. Tanzania has achieved very high growth rates in recent years, besting Ghana by 0.3 percentage points in 2008.

Ghana's growth successes have been underpinned by macroeconomic restructuring in the early years of this decade, followed by high and rising levels of both public and private sector investment. The restructuring included public expenditure and financial management reforms, the restructuring of public utilities and state-owned enterprises, and the adoption of new pricing mechanisms for petroleum products. In 2007 (the latest year available) overall gross fixed investment accounted for 33 percent of GDP, more than 10 percentage points higher than the expected value of 22 percent for a country with Ghana's economic characteristics, and close to double the 19 percent and 17 percent of South Africa (2007) and Tanzania (2006) respectively. Within this latest figure for total gross fixed investment, the private sector-to-government ratio is about 60:40—that is, gross fixed private investment reached almost 20 percent of GDP, and gross fixed government investment accounted for more than 13 percent of GDP. The share of the government in total gross fixed investment appears to have risen slightly in the past three years.

Figure 2-1
Real GDP Growth, Annual Percent Change



Though high levels of investment are needed to maintain strong growth, investment must be productive. Ghana's performance is mixed. The incremental capital-output ratio (ICOR), which is the amount of capital investment needed per unit of extra output, averaged 5.0 for the period 2003–2007. A sustained value below 4.0 is a hallmark of efficient investment. Bearing in mind that lower values represent higher efficiency, the ICOR for Ghana is marginally weaker than the LI-SSA average (4.3) and significantly weaker than the efficient ratios in South Africa and Tanzania (Figure 2-2). Some of this can be attributed to recent government investment in energy infrastructure and transport, which should boost productivity in the longer term but may negatively affect the ICOR in the short to medium term. Nonetheless, Ghana probably could have enjoyed even higher growth rates in recent years if public sector investment had been more efficient.

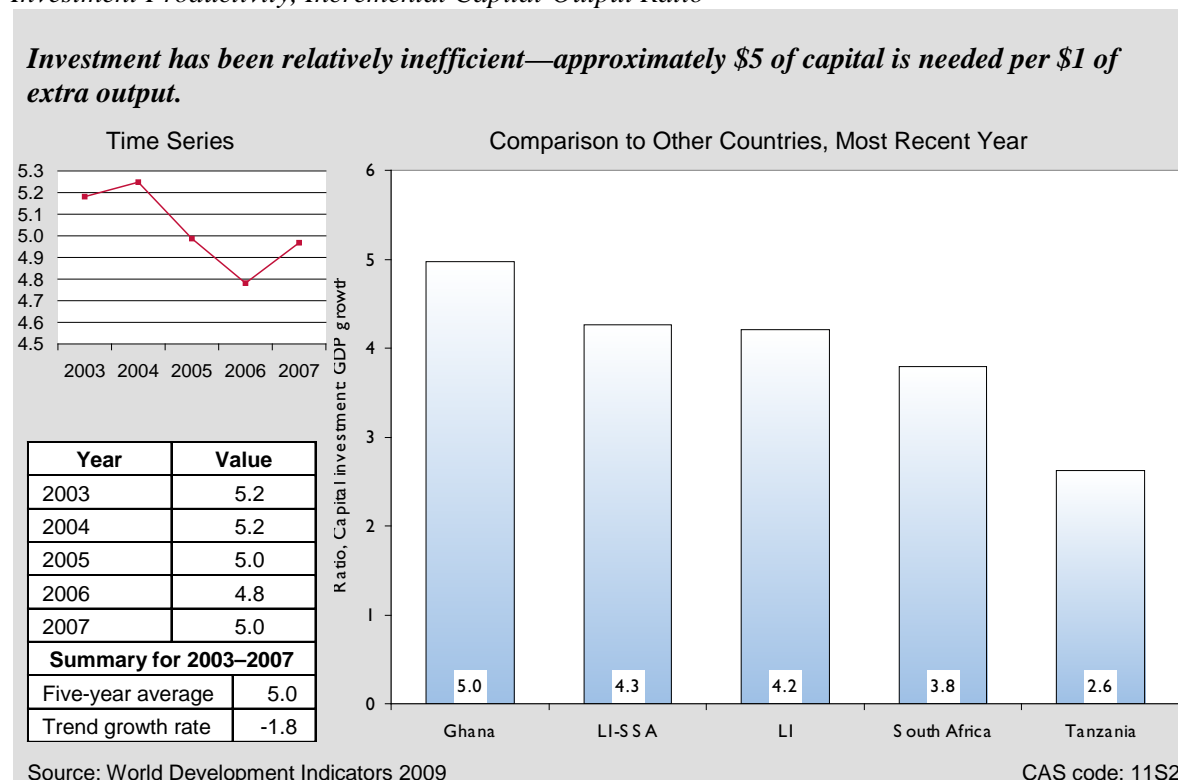
Enhanced labor productivity is essential for strong growth and in the five years to 2006, Ghanaian labor productivity increased by an average of 2.5 percent. Though well below South Africa's and Tanzania's 4 percent growth in 2006, Ghana has made real progress in recent years outpacing the average LI-SSA growth rate by more than 2 to 1.

At this point, Ghana faces both significant upside and downside risks to future growth. On the positive side, in the medium term, Ghana's growth potential is reinforced by the recent discovery of sizable offshore oil reserves (as much as 600 million barrels).⁴ If this discovery proves commercially viable, these reserves could come on line in the next three years. Over a projected production period of roughly 20 years until depletion (2011–2030), they could be expected to

⁴ IMF, Ghana: 2008, Article IV Consultation (IMF Country Report No. 08/344, October 2008), *Joint IMF and World Bank Debt Sustainability Analysis, Appendix I*, pp. 19-21

generate substantial resources for growth-enhancing investment in infrastructure and human capital. On the negative side, in the near term, Ghana’s continued growth is threatened by sharply expansionary fiscal policies that have caused large macroeconomic imbalances. After a period of effective macroeconomic restructuring in the early years of the present decade, recent government spending policies have fueled rising inflation and created ballooning and unsustainable fiscal and current account deficits (see Fiscal and Monetary Policy and External Sector).

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



If Ghana is to maintain its strong growth and experience further declines in poverty, it will need to rapidly adjust its macroeconomic policies to reduce inflationary and nonproductive government spending and raise the efficiency of investments. Ghana will also need to continue to reform its business environment to encourage even more private sector investment. Such adjustments and reforms are essential in any event but will become more critical for capturing the benefits of future oil revenue as the petroleum sector begins to play a significant role in Ghana’s economy.

POVERTY AND INEQUALITY

Poverty in Ghana is a major problem, although tremendous progress has been made in reducing poverty in recent years. In fact, the percentage of the population below the national poverty line fell from 50 percent in 1991/1992 to 39.5 percent in 1998/1999 and to 28.5 percent in 2005/2006

(the latest year available).⁵ Ghana's overall poverty rate of 28.5 percent is considerably lower than the expected rate of 39.7 percent for a country with Ghana's characteristics and shows Ghana's commitment to reducing poverty. In more recent years, the poverty rate is expected to have fallen further, particularly in rural areas, because of the country's strong growth performance and expanding access to health services, education, and land ownership in rural areas.⁶ Poverty in rural areas fell from 50 percent in 1999 to 39 percent in 2006 (and from 19 percent to 11 percent in urban areas).

The government's poverty-reducing expenditures equaled 9.4 percent of GDP in 2007 and 9.2 percent in 2008,⁷ showing that poverty reduction is a high priority. In fact, Ghana was the first Sub-Saharan African country to achieve Millennium Development Goal 1 Target 1 (to halve extreme poverty between 1990 and 2015)—and did so nearly 10 years before the deadline.⁸ Other indicators support this story: the size of the population living on less than \$1.25 PPP per day fell from 39 percent in 1999 to 30 percent in 2006,⁹ and Ghana's ranking on the UNDP Human Poverty Index (HPI) fell to 28 in 2008 from 32.3 in 2007 and 33.1 in 2004.

The HPI, which ranges from 0 (zero deprivation incidence) to 100 (high deprivation incidence), measures deprivation in terms of the gap between target levels for specified economic and quality-of-life indicators.¹⁰ Ghana's HPI rating compares particularly well to the country's expected rating of 43.3, the LI-SSA median rating of 40.3 and Tanzania's rating of 32.9, but falls short of South Africa's rating of 22.6 (Figure 2-3).

Although poverty rates have fallen, income inequality is increasing. This is corroborated through the Gini index, in which a value of 0 represents absolute income equality and a value of 100 represents absolute income inequality. Ghana's Gini coefficient moved from 38.1 in 1992 to 40.8 in 1998 to 42.8 in 2006, showing that income inequality has been rising. According to the 2007/2008 UN Human Development Report, at its present level, Ghana's income is more equally distributed than South Africa's income (Gini coefficient 57.8) but less equally than that of Tanzania (Gini coefficient 34.6).

This pattern of rising income inequality is not unusual in conditions of rapid economic growth, but it implies that in such periods the government must develop social safety nets and other programs to protect the very poor. In Ghana, the very poor—the poorest 20 percent of the population—had only a 5.2 percent share of income in 2006, higher than South Africa's 3.5 percent (in 2000) for this population segment, but below both Ghana's expected share of 5.9 percent and Tanzania's 7.3 percent (in 2000). For Ghana, the income share of the poorest

⁵ World Bank World Development Indicators Online, April 2009.

⁶ World Bank Ghana Country Brief, last updated March 2009.

⁷ Ibid.

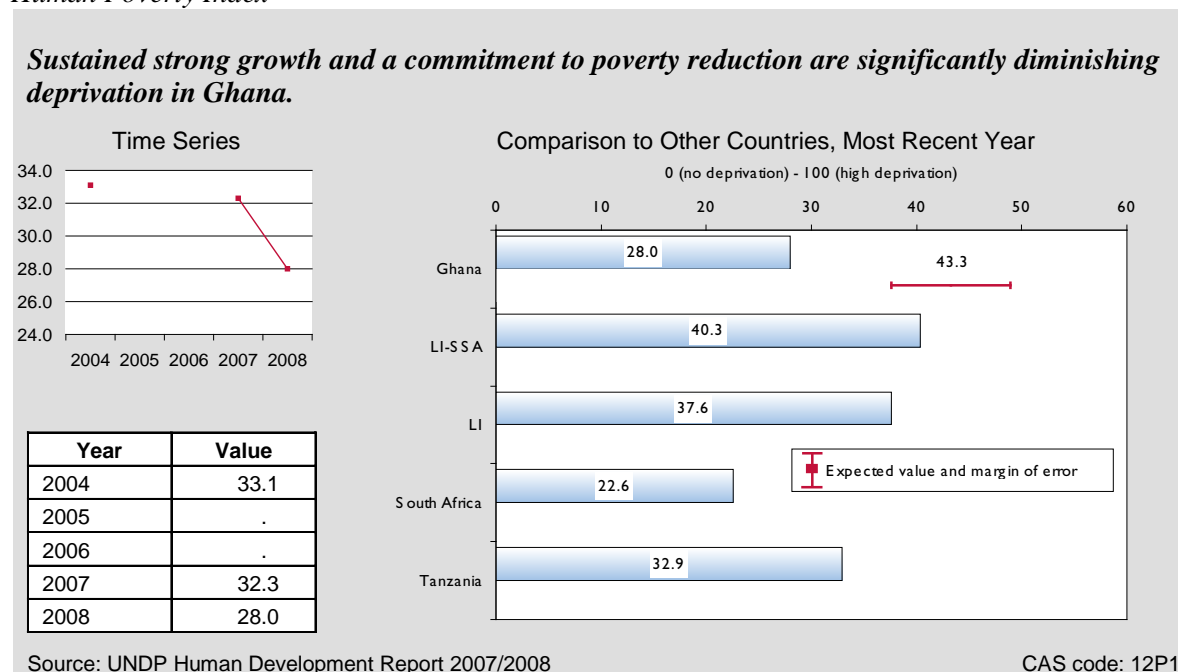
⁸ Ghana Millennium Development Goals Report, 2006, page 4.

⁹ World Bank World Development Indicators Online, April 2009.

¹⁰ Indicators included are the percentage of people not expected to survive to age 40, the percentage of adults who are illiterate, the percentage of people without access to safe water, the percentage of people without access to health services, and the percentage of underweight children.

20 percent has also fallen slightly from 1998's 5.6 percent,¹¹ which indicates that although poverty is falling in general, income growth has evolved more slowly for the poorest 20 percent of the population.

Figure 2-3
Human Poverty Index



Income inequality is regionally focused, with poverty concentrated in the three northern regions of Ghana: Northern, Upper East and Upper West. Poverty in these regions remains at between 52 percent and 88 percent, compared to 12 percent in Greater Accra, 20 percent in the Ashanti, Central, Eastern, and Western regions, and 30 percent in Brong Ahafo and Volta. Although the northern regions make up just 22 percent of the population, they account for 45 percent of the poor, 57 percent of the extreme poor, and 80 percent of extreme poverty severity (poverty measure using the lower [extreme poverty] line).¹² The northern regions are dependent on semisubsistence agriculture and have benefitted less from many of the economic forces that have led to the tremendous fall in poverty in the southern regions, such as urban growth, expanded minerals extraction, the cocoa sector boom, domestic market reforms, and production support.¹³

Remarkable steps have been made toward eradicating poverty in Ghana. But these gains are being threatened by unfavorable macroeconomic trends, particularly high and rising inflation, which

¹¹ World Bank World Development Indicators Online, April 2009.

¹² Ramatu Al-Hassan and Colin Poulton. *Growth and Social Protection Working Paper 04: Agriculture and Social Protection in Ghana*, Future Agricultures and Centre for Social Protection (for the FAO), January 2009.

¹³ Ibid.

affect the poorest segments of the population most heavily. Attention must also be paid to responding to rising income inequality, especially regional disparity in poverty reduction.

ECONOMIC STRUCTURE

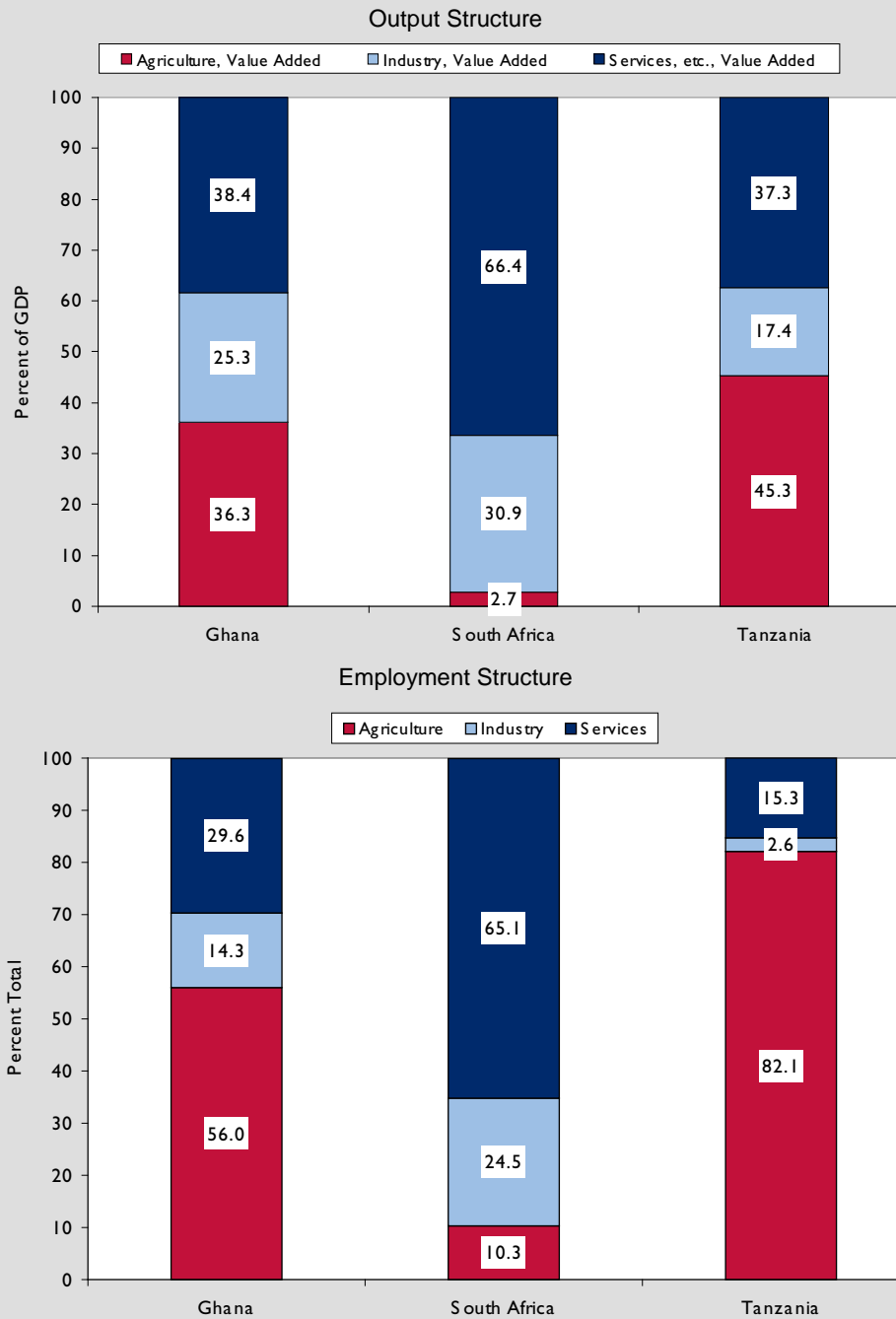
As in many developing countries, agriculture in Ghana generates a substantial proportion of total employment, engaging 56 percent of the labor force in 2006. This value is well above the 10.3 percent share that agriculture represents in South Africa's total labor force but far below Tanzania's share of 82.1 percent. Ghana has a small industrial sector, with 14.3 percent of the workforce employed in industry in 2006, while the services sector accounted for 29.6 percent of employment. Although this pattern of labor structure by sector is typical for the region, it has important implications for Ghana's economic productivity (Figure 2-4).

The output structure reveals that although agriculture employs one-half of Ghanaians, it accounts for just a third of total value-added measured as a percent of GDP (36.3 percent). Industry represents 25.3 percent of total value-added and services 38.4 percent. Agriculture gives rise to a much higher proportion of output in Ghana than in South Africa, where agriculture accounts for just 2.7 percent of GDP, but less so than for Tanzania, where agriculture generates 45.3 percent of GDP. Ghana's share also falls just about even with the LI-SSA median of 36.4 percent. Ghana's agricultural sector has much lower productivity than industry and services, and finding ways to boost efficiency in agriculture is particularly important for long-term economic development. In Ghana, one unit of labor in the agriculture sector produces roughly 0.6 units of output while one unit of labor in industry produces 1.8 and one unit of labor services produces 1.3 units of output. These relationships reflect widespread subsistence agriculture.

Ghana needs to find ways to move labor from agriculture to other sectors through greater structural transformation in the economy. However, despite Ghana's relatively high growth rates, it appears that this is not happening to any major extent: sector shares of output have not changed significantly in five years. This is worrisome, because Ghana needs to take advantage of its economic successes to modernize its economy, build up a larger and more productive industrial sector, and move away from the vicious cycle associated with relying on primary product exports as the main engine of economic growth. Improving the enabling environment (see Business Environment) and correcting deficiencies in infrastructure (see Economic Infrastructure) are key to encouraging investment in Ghanaian processing and manufacturing. Likewise, improving the competitiveness of the services sector, not only in retail, wholesale, and distribution, but also in ICT, logistics/transport, applied sciences, engineering, and tourism, could boost growth and add value to its primary exports (gold, oil, cocoa, and wood).

Figure 2-4
Economic Structure: Output and Employment

Agriculture generates over half Ghana's employment and over a third of its output, but labor productivity in agriculture lags behind industry and services.



Source: UNDP Ghana Human Development Report 2007 and World Development Indicators 2009

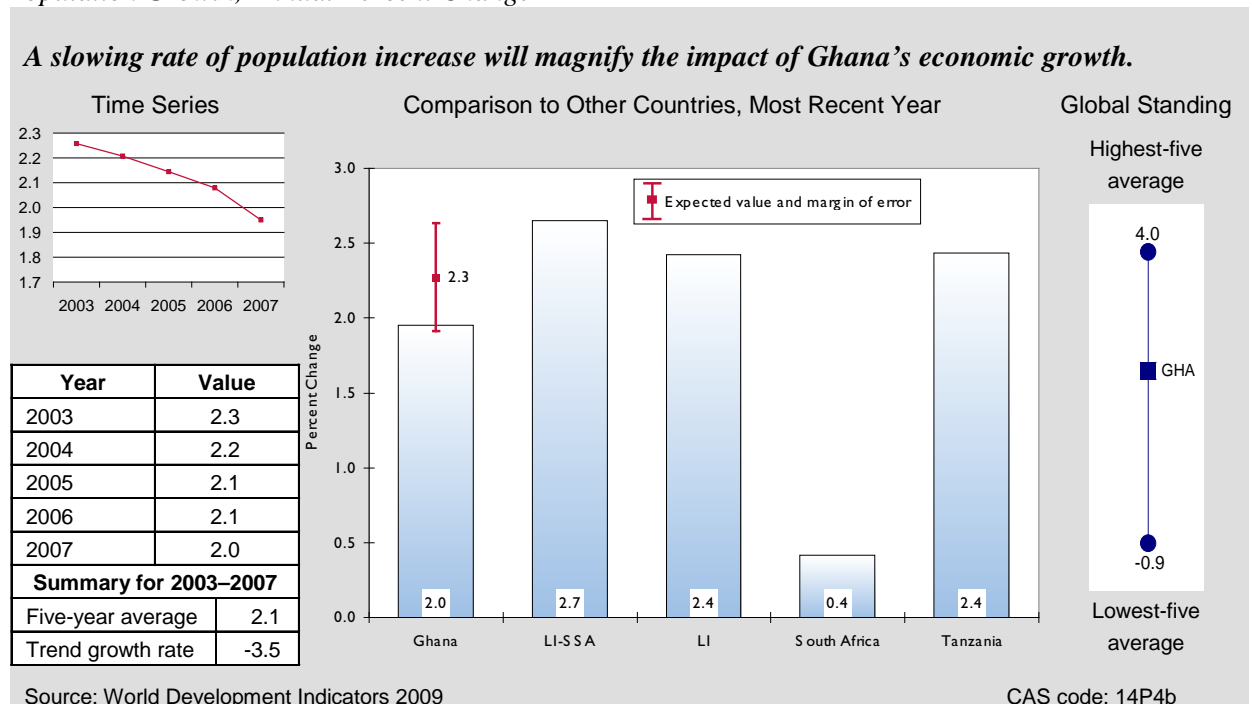
CAS Code: 13P2a-c, 13P1a-c

DEMOGRAPHY AND ENVIRONMENT

Ghana has an estimated population of 23.5 million people, now growing at a rate of 2 percent per year. This population growth rate is lower than the median for LI-SSA (2.7 percent), the expected value for a country with Ghana's characteristics (2.3 percent), and Tanzania's rate (2.4 percent), but still is much higher than South Africa's exceedingly low growth rate of 0.4 percent (Figure 2-5). The youth-dependency ratio (65.7 dependents per 100 workers) for Ghana is significantly lower than the benchmark expected value (77.2 dependents) and the regional LI-SSA median (82.4 dependents), but considerably higher than for South Africa (49.8 dependents). Ghana's youth-dependency ratio has declined over the past five years, reflecting a slowing overall population growth rate. If this trend continues, it will ease resource demands in the country and support greater wealth creation at the per capita level. Ghana's decreasing rate of population growth provides an opportunity for government and the private sector to target investments in human resources to raise the productivity of human capital.

Figure 2-5

Population Growth, Annual Percent Change



According to the most recent data (2002), 65 percent of Ghana's adult population is literate, significantly below South Africa's 88 percent and Tanzania's 72 percent. Ghana's literacy rate underscores the need for investment in education and training (see Education).

In 2007, an estimated 49 percent of the population lived in urban areas, a rate much lower than in South Africa (60 percent) but much higher than in Tanzania (25 percent). The somewhat low number for Ghana reflects the small size of Ghana's cities outside the capital and the fact that the majority of the population lives in small towns and villages in the southern half of the country.

Environmental indicators for Ghana are positive in comparison to other countries in its income group according to Yale University's Environmental Performance Index. Ghana scores 70.8 out of 100 on the index—better than the regional median (51.6), South Africa (69.0), and Tanzania (63.9). Among components of the Environmental Performance Index, Ghana's lowest scores come on the Biodiversity and Habitat Protection Policy category (63.8) and the Water and Air Pollution subcategories (30.8). These results reflect poor air quality in Ghana's urban areas (mainly Accra) mainly because of the growing use of automobiles in the cities, and the lack of functioning sewage systems in most of the country. Also, very little of Ghana's original forest cover remains—the few stands of uncut rainforest remaining are found in Kakum National Park in the south of the country. Deforestation has made Ghana vulnerable to the desertification process affecting much of the nation's northern region that abuts the slowly expanding arid zone of the Sahel. In line with this trend, Ghana scores poorly (9.3 percent) on resource depletion as a percent of gross national income (GNI). This compares to 1.1 percent for the LI-SSA median and 6.7 percent and 5 percent for South Africa and Tanzania respectively. This poor score reinforces the fact that Ghana's exports come disproportionately from extractive industries (gold and timber) and that the country needs to diversify production and raise value added.

Ghana, therefore, could benefit greatly from reforestation programs, improved agricultural practices that preserve habitat and prevent deforestation (particularly in the coffee and cocoa industries), improved infrastructure in the cities, and adoption of new technologies and cleaner-burning fuels in the cities to reduce automobile emissions. Of course, as Ghana stands on the threshold of a petroleum era, it can learn from neighboring Nigeria, whose experience shows that oil production poses special environmental risks that call for long-range planning and careful treatment. Donors could assist Ghana's policymakers and technicians in all these areas of environmental protection.

GENDER

Gender equity enables faster economic growth by ensuring that the productive capacities of all citizens can be developed and used to the fullest extent. A fundamental gauge of gender equity in health conditions and living standards is life expectancy at birth. In Ghana, average life expectancy is low by absolute standards yet higher than all regional benchmarks: for males, 59.6 years and for females, 60.4 years (2007). The 0.8-year longevity differential in favor of women is below the median of 1.3 years for LI-SSA countries, South Africa's 3 years and Tanzania's 2.2 years. (Life expectancy figures for South Africa and LMI-SSA countries reflect early deaths from particularly high incidence of HIV/AIDS in those countries.) Furthermore, in countries with more advanced human development, women typically outlive men by 5 years or more.

Other indicators of gender equity reveal a more level playing field for women in Ghana. Unlike in many developing countries, the labor force participation rate for women virtually equals that of men: 72 percent versus 73 percent. Both rates are significantly lower than Tanzania's rates (90 percent for men and 87 percent for women) though well above those in South Africa (60 percent for men and 47 percent for women).

Primary school completion rates in Ghana have improved significantly in recent years for both boys and girls—from 66.5 percent for boys in 2001 to 73.4 percent in 2005, and from 59.6 percent for girls in 2001 to 67.8 percent in 2005). The gender differential of 5.6 percentage

points is considerably better than the LI-SSA and LI medians of 7.5 and 12.3 percentage points respectively, but remains above the primary completion gender differential of 3.8 percentage points for Tanzania (2007) and South Africa's virtual equity in primary completion (2005). Continued improvement in access to health care and education for both men and women is an essential step toward enhancing Ghana's future productive capacities.

3. Private Sector Enabling Environment

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

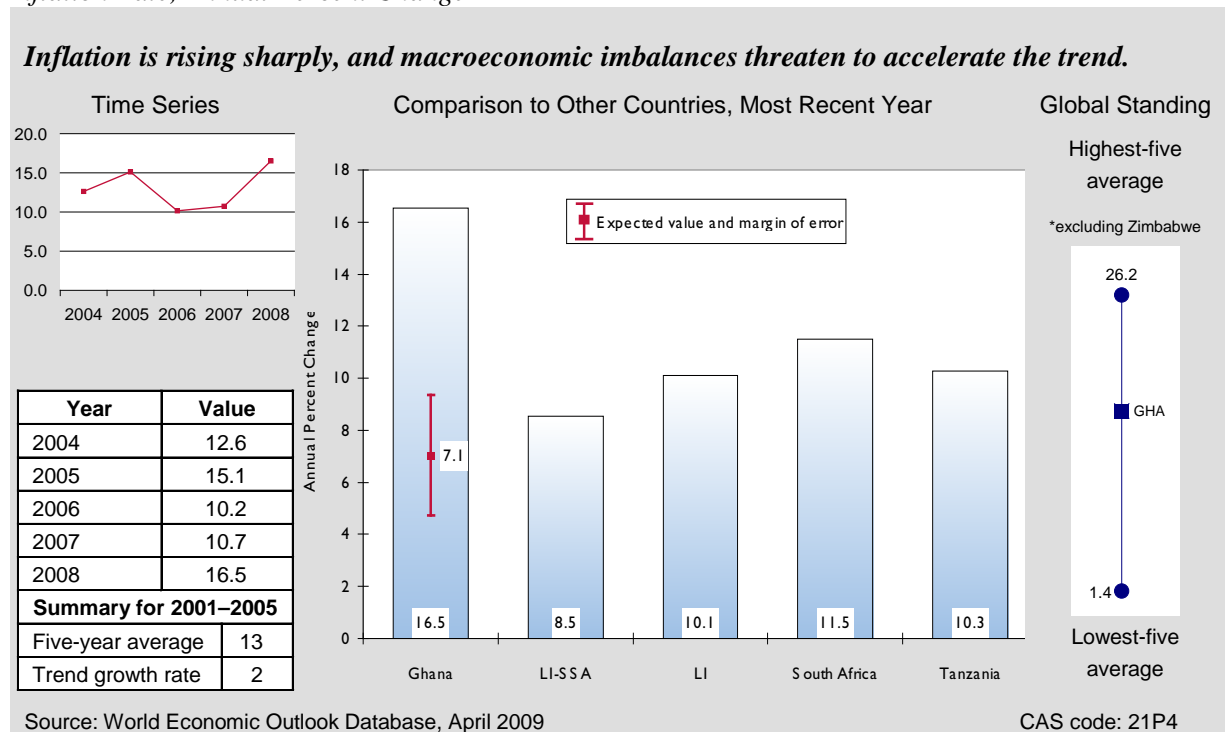
FISCAL AND MONETARY POLICY

Poor fiscal and monetary policies are jeopardizing the sustainability of economic growth in Ghana. The clearest sign of a macroeconomic problem is inflation, which climbed to 16.5 percent in 2008 (Figure 3-1). This is more than double the expected value for a country with Ghana's characteristics (7.1 percent) and significantly higher than the already high inflation rates in South Africa and Tanzania the same year (11.5 percent and 10.3 percent, respectively). Moreover, by June 2009, year-over-year inflation had risen to 23 percent.¹⁴ Unless this trend is reversed quickly, high inflation threatens to drive nominal interest rates even higher (by the end of June 2009, Ghana's prime lending rate had risen to 18.5 percent),¹⁵ destabilize the cedi, undermine competitiveness, augment investment risks, reverse the gains in poverty reduction, and put strains on the political system. This list of possible consequences illustrates the seriousness of the problem.

¹⁴http://www.statsghana.gov.gh/docfiles/CPI%20Release_pdf/national_cpi_&_inflation_rates.pdf. (accessed July 12, 2009)

¹⁵ Bank of Ghana. <http://www.bog.gov.gh/index1.php?linkid=254> (accessed July 21, 2009)

Figure 3-1
Inflation Rate, Annual Percent Change



Rising inflation was widely blamed on increasing oil and food prices as well as excessive government spending. Although prices for oil and food have fallen since 2008 peaks, consumer price inflation has continued to skyrocket. It is thus clear that highly expansionary macroeconomic policies that have fueled demand in the past few years are primarily to blame for the worsening inflation.

The government's poor fiscal position is a major source of macroeconomic imbalance. In 2008, the budget deficit, including grants, was 14.5 percent of GDP.¹⁶ This is more than three times the expected value of 4 percent of GDP and much worse than recent budget outcomes in South Africa and Tanzania (Figure 3-2). The present position also represents a rapid deterioration since 2004, when the fiscal deficit, including grants, stood at 4.9 percent of GDP. On a positive note, the recent government budget has projected an improvement in the fiscal deficit to 9.4 percent of GDP in 2009, leading to a targeted 3 percent deficit in the medium term.¹⁷

Elevated and rising levels of government expenditure are the primary cause of the budget deficit. In 2008, government expenditure absorbed 41 percent of GDP, an increase of more than 10 percentage points in four years and close to double the expenditure rates in South Africa and Tanzania (27.1 percent and 21 percent in 2008, respectively).¹⁸ The increases in government spending have been driven by higher wages and salaries for civil servants, increased government

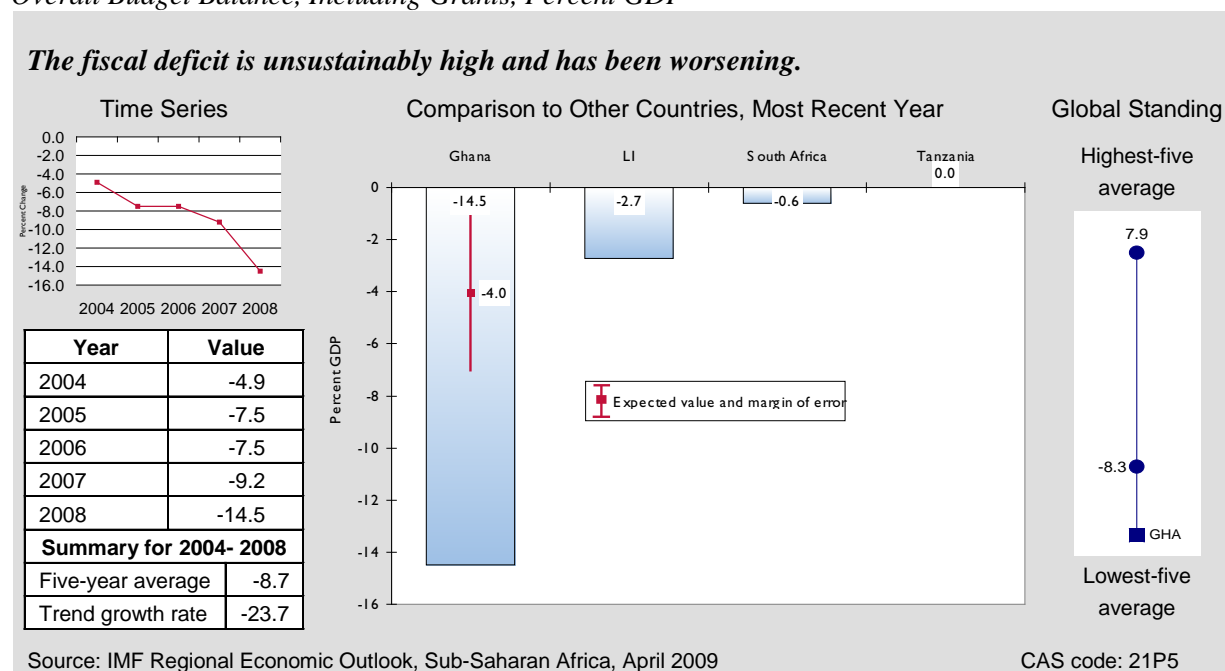
¹⁶ IMF Public Information Notice No. 09/86, July 2009.

¹⁷ IMF Press Release No. 09/263, July 2009.

¹⁸ Bank of Ghana. Monetary Report, Fiscal Development February 2009.

capital expenditures in the energy and transportation sectors, and subsidies for basic consumption commodities, particularly utilities. While government spending has increased sharply, government revenue has also risen, but only marginally, and has failed to keep pace with spending. In 2008, revenue excluding grants amounted to 24 percent of GDP, in line with South Africa's 26.6 percent (in 2007) but far higher than Tanzania's 14.6 percent.¹⁹ The improved domestic revenue mobilization is largely a result of reform policies that have increased revenues from taxes on goods and services while reducing them from taxes on trade and to a lesser extent on income, profits, and capital gains.

Figure 3-2
Overall Budget Balance, Including Grants, Percent GDP



Without significant fiscal adjustment, the need to support higher government spending implies increases in overall public sector debt, and thus rising interest payments that could feed inflation (if interest costs are financed by printing money), and/or crowd out private sector investment or useful public sector investment in infrastructure, poverty reduction, health care, and education. Indeed, this fiscal adjustment may now be underway.

In 2008, the government made headway implementing programs to reduce spending and increase revenue. First, it announced a freeze on government hiring in an effort to keep its wage bill within its budget and control spending. The initiative has had little impact, however, and other rapid reforms are needed. Second, the government announced that it would double the royalty tax rate on gold and reduce tax loopholes. This should produce favorable results but the government will have to do much more if it is serious about shrinking the deficit. On the expenditure side this might include politically unpopular policies such as cutting government subsidies on

¹⁹ Ibid.

consumption commodities. On the revenue side, the government should consider reducing tax exemptions.

Another source of inflationary pressure besides loose fiscal policies is Ghana's expansionary monetary policy. Although the Bank of Ghana has been leaning against the inflationary wind by raising interest rates, the money supply has increased by nearly 40.2 percent per year for the past three years.²⁰ The rate of growth in broad money supply is approximately double the expected value of 18.7 percent for a country with Ghana's characteristics and well above rates of money supply growth for all comparators. Ghana's money supply growth has been driven largely by expansion in credit to the public sector and especially by large and accelerating increases in credit to the private sector, both far too loose for price stability given the pace of real GDP growth and prevailing economic uncertainty. Recognizing these inflationary trends and risks, Bank of Ghana policymakers have begun to act decisively, both by raising policy rates, and, in May 2007 by introducing inflation targeting as a tool for combating increasing prices.

In summary, Ghana's fiscal and monetary imbalances, if not corrected quickly, will jeopardize the country's prospects for continued growth and possibly reverse some economic and social gains made in recent years. Greater effort at curbing government spending and sticking to the new budget is needed. According to the International Monetary Fund (IMF), in this context, high-priority actions include eliminating utility subsidies and reducing the size of the civil service. Donors might consider providing technical support to the government to help it achieve these goals. Greater effort is also needed to increase revenue streams in the medium term. Moreover, the government needs to pay closer attention to debt sustainability to avert future macroeconomic distress.

Of course, if large-scale commercial oil production begins as foreseen (see Growth Performance), then public sector finances will change dramatically and should provide Ghana with more fiscal space in the medium term. Under a reasonable set of assumptions, the IMF projects that cumulative oil revenue to government—in royalties, taxes, and interest—will amount to about \$20 billion, with peak annual receipts in 2018 of about \$1 billion, or over 10 percent of the government budget (excluding grants).²¹ The fiscal and monetary impact of this new revenue will depend on how

IMF Program Status for Ghana

In July 2009, the IMF approved a new three-year \$602.6 million arrangement for Ghana under the Poverty Reduction and Growth Facility. The facility will focus on reducing Ghana's macroeconomic instability by improving the inflation-targeting regime, strengthening public financial management as oil production comes online, implementing a comprehensive public sector reform program, and reducing the budget deficit by improving revenue mobilization and slashing low-priority spending and expensive subsidies.

²⁰ Bank of Ghana. Statistical Bulletin December 2008.

²¹ IMF, Ghana: 2008, Article IV Consultation (IMF Country Report No. 08/344, October 2008), *Joint IMF and World Bank Debt Sustainability Analysis, Appendix I*, pp. 19-21

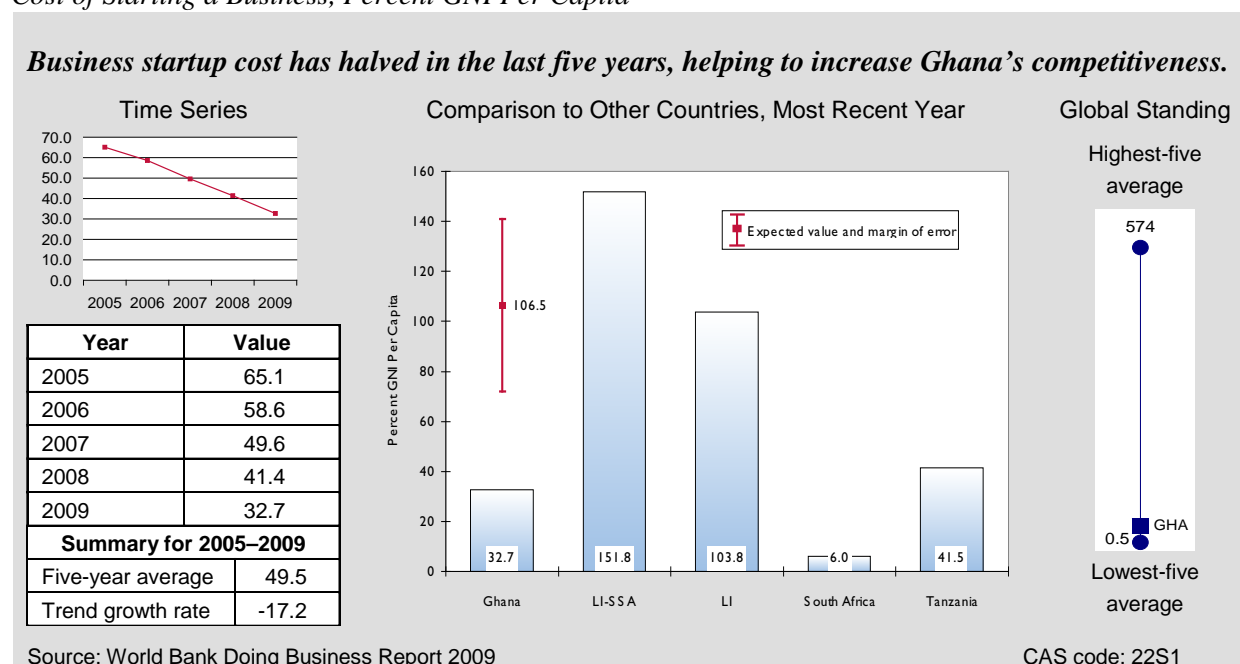
such resources are used: to retire debt, sustain current expenditure, finance capital investment, or distribute or hold in trust for Ghana’s citizens, or some combination thereof.

BUSINESS ENVIRONMENT

Institutional barriers to doing business, including corruption in the government, are critical determinants of private sector development and prospects for sustainable growth. The World Bank’s 2009 composite Ease of Doing Business indicator (reflecting conditions in early 2008) ranked Ghana 87th of 181 countries, significantly worse than South Africa (32) but much better than Tanzania (127). Ghana’s performance is also significantly better than the LI-SSA median.

Ghana has materially improved on several of these indicators in the past several years and has brought its rankings up from below the regional median to on par with or above the average. For instance, the indicators for registering property and starting a business have improved significantly in the past five years: Ghana cut the number of days for time to register property from 169 to 34; and for starting a business, from 85 to 34. On these indicators Ghana does better than the regional median (77 and 39 days respectively) and is near South African levels (24 and 22 days respectively). Similarly, Ghana has made striking progress on the cost of starting a business, which has fallen by half in the past five years and now stands at a relatively low 32.7 percent of GNI per capita. The median cost of starting a business in LI-SSA is 151.8 percent of GNI per capita, but South Africa substantially outperforms Ghana with a low average cost of 6 percent of GNI per capita (Figure 3-3).

Figure 3-3
Cost of Starting a Business, Percent GNI Per Capita



Likewise, progress has been reported in reducing business tax burden, as the World Bank now estimates that the total tax payable for a standardized business case in Ghana adds up to

32.7 percent of operating profit, down from 40.1 percent in 2006. This is less of a burden than a similar business would face in Tanzania (45.1 percent), lower than the global LI median (46 percent), and even slightly better than in South Africa (34.2 percent)

The World Bank Institute's annual ratings on Quality of Governance (which range from -2.5 for very poor to +2.5 for excellent, with 0.0 as the global median) reveal a similar picture for this dimension in the evolution of Ghana's enabling environment: an improving situation rising above the regional median but still significantly behind South Africa. On the Control of Corruption Index, for example, Ghana's score of -0.17 for 2007 is below that of South Africa (+0.32) but higher than that of Tanzania (-0.45) and the global LI median (-0.87). It also scores moderately well on the Rule of Law Index (-0.08), the Government Effectiveness Index (-0.04), and the Regulatory Quality Index (0.00).

All these scores represent marked improvement over a five-year period. But even with these improvements, the numbers, in absolute terms, are still weak. While scoring better than the LI-SSA median, Ghana still falls well short of world-class scores or the record of a regionwide leader like South Africa. Ghana's moderately weak scores on many business environment indicators reveal continuing institutional problems that will impede private sector development and hinder the attraction of investment needed to spur broad-based growth and rapid job creation. These data make clear that although Ghana has made tangible progress in Doing Business terms, it is still seriously lagging behind in key aspects of economic governance, namely government efficiency and the quality of the regulatory environment. Policymakers—perhaps with support from donors and training—would do well to focus on improving capacity, efficiency, transparency, and accountability in government agencies.

FINANCIAL SECTOR

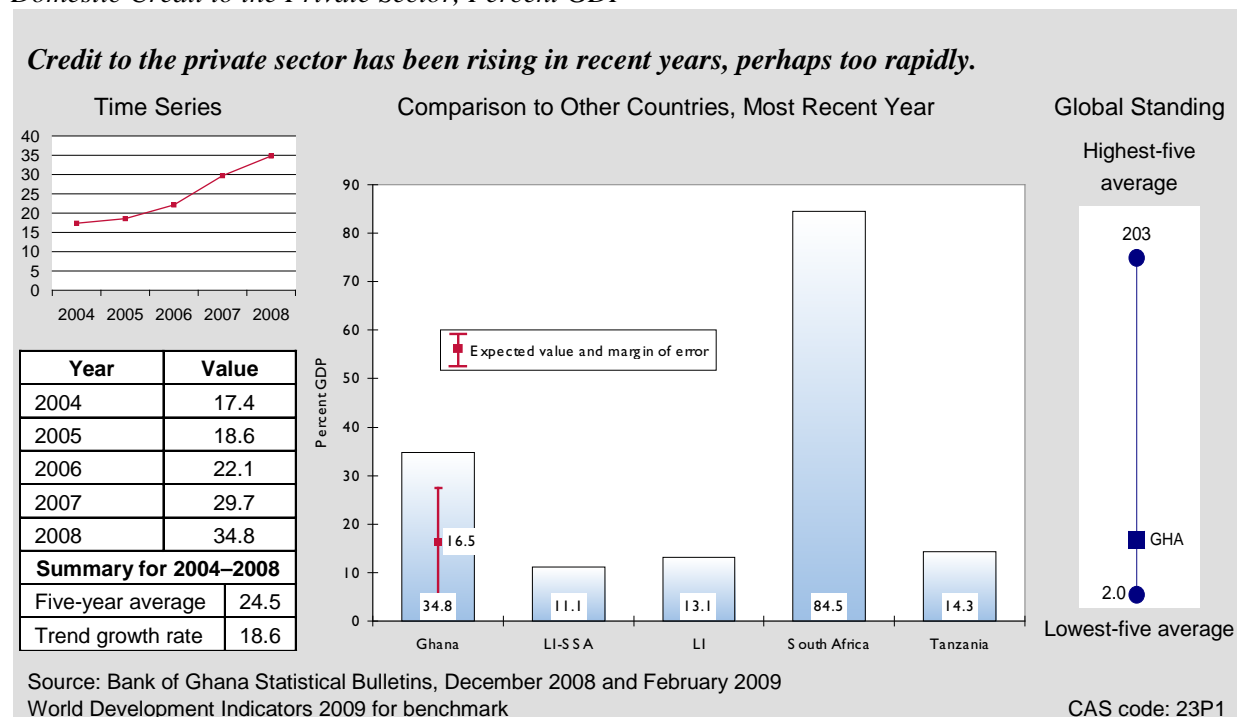
A sound and efficient financial sector is a key to mobilizing savings, fostering productive investment, and improving risk management. One of the primary indicators of financial development is monetary deepening, measured by broad money (money plus quasi-money) as a percentage of GDP. For Ghana, this ratio has increased considerably in the past five years, from 33.4 percent of GDP in 2004 to 46.8 percent in 2008. It is now much higher than the expected value (26 percent) for an economy like Ghana's and than the equivalent ratio for Tanzania (26 percent) or the LI-SSA median (22.9 percent). Ghana's high and ascending M2/GDP ratio suggests that its financial sector and banking system are relatively more developed than those of most of its comparators, which is consistent with the IMF's designation of Ghana as a "Frontier Market" economy.

Rapid expansion of domestic credit to the private sector has been an important factor in Ghana's monetary deepening. Over the past five years, domestic credit to the private sector has doubled from 17.4 percent of GDP in 2004 to 34.8 percent in 2008. At this level, this indicator is now well above Ghana's expected value (27.5 percent including upper-limit standard error) and much higher than the private sector credit/GDP ratio for most comparators (Figure 3-4). Services and commerce (35.5 percent) and finance (19.1 percent) were the two largest recipients of the flow of domestic credit to the private sector in 2008. The balance of the flow of domestic credit to the private sector included shares of 10.3 percent to manufacturing (up from only 3.8% in 2007), 6.7

percent to import trade, 4.7 percent to construction (down from 9.9 percent in 2007), and 4.2 percent to agriculture.²²

Figure 3-4

Domestic Credit to the Private Sector, Percent GDP



Of course, in Ghana's case, the rapid rise in the value of this indicator can have both positive and negative interpretations. On the one hand, the indicator's evolution seems to show that Ghana's banking system is providing the increasing flow of credit to the private sector essential to allow businesses and households to purchase inventory and make investments for the future. The banking system is thus steadily developing, and generally helping to fuel Ghana's economic growth. On the other hand, for Ghana, the ascent of this private sector domestic credit/GDP ratio to a level that is above expected benchmarks and comparator experience also suggests too-rapid growth in private sector credit. As a result, overexpansion of domestic credit to the private sector has contributed to an exploding money supply, and thus to a rate of inflation that has accelerated to dangerous levels (see Fiscal and Monetary Policy).

Additionally, a too-rapid increase in credit to the private sector can also cause a deterioration of asset quality in the banking system. This seems to be occurring in Ghana, as shown by rises in the ratio of nonperforming loans to total loans. In December 2008, the ratio was 7.7 percent, up from 6.9 percent a year earlier. Default rates are concentrated in the manufacturing, commerce and finance, and services sectors.²³ March 2009 saw a further increase in nonperforming loans, to

²² Bank of Ghana Monetary Policy Report, Monetary and Financial Developments, February 2009, p.5.

²³ Bank of Ghana Monetary Policy Report, Financial Stability Report, p. 12.

9.6 percent,²⁴ which may indicate that inefficiency in the banking system is worsening. The global financial and economic crisis may also be undermining asset quality. An indicator of efficiency in the banking system is the interest rate spread—the difference between lending and deposit rates. Large spreads suggest inefficiency arising from high operating costs, lack of competition, poor asset quality, and other factors. Ghana’s interest rate spread, although falling slightly, is still much higher than all benchmarks, suggesting inefficiency in the Ghanaian banking system.²⁵ The spread appears to have been about 15.3 percent in 2007,²⁶ much worse than the expected value of 9.7 percent and far larger than the spreads for South Africa or Tanzania (4 percent and 7.3 percent, respectively) although the basis of the calculation for the latter may not make them fully comparable. Ghana’s inflationary environment also probably is widening the spread: under inflationary conditions, nominal lending rates tend to rise with inflation, but deposit rates often fail to keep up. This seems to be the case for Ghana, where nominal lending rates are high, while deposit rates lag behind inflation somewhat. In the future, with success in controlling inflation and greater competition in the financial sector, Ghana’s interest spreads might be expected to tighten.

Very high real interest rates tend to be another indicator of banking system inefficiency, often denoting lack of competition in the financial sector, poorly developed credit systems, or elevated proportions of nonperforming loans in bank portfolios. For Ghana, efforts to curb inflation have driven regular increases in nominal interest rates, and as a result, real interest rates ranged from 12.7 percent to 15.6 percent in the 2005-to-2007 period, but with inflation accelerating, fell to 8.1 percent in 2008.²⁷ In the first quarter of 2009, the nominal lending rate was over 30 percent and inflation over 20 percent, putting Ghana’s real interest rates at roughly the level of its expected value (9.6 percent). Nevertheless, in May 2009, the Bank of Ghana’s prime rate was 18.5 percent, lower than inflation, and thus negative in real terms.

Although its financial sector is relatively well developed, the majority of Ghana’s population is employed in the informal sector (See *Employment and Workforce*), and has little access to credit.²⁸ Some credit is provided by microfinance institutions in Ghana, which exist in many forms. Ghana was recently ranked 5th in Africa in microfinance borrowing and savings penetration rates, with 315,000 borrowers (1.4 percent of the population) and 902,000 savers (4 percent of the population).²⁹ These institutions have started to provide much-needed credit to

²⁴ Bank of Ghana Monetary Policy Committee Press Release, May 12, 2009, p. 3.

²⁵ The interest rate spread was calculated by subtracting the deposit rate (IMF World Economic Outlook Database, April 2009) from the annual average lending rate (Bank of Ghana Monetary Time Series Data). The annual average lending rate was calculated by taking an average of the monthly lending rates for agriculture, export trade, manufacturing mining and quarrying, construction and other sectors.

²⁶ The spread reported in the IMF Ghana: Selected Issues Report of June 2007 was even higher, ranging from 23.1 percent in 2003 to 18.3 percent in 2006.

²⁷ Real interest rates were calculated by subtracting the inflation rate (from the IMF World Economic Outlook Database, April 2009) from the annual average lending rate (see note 25 for detailed information on how the lending rate was calculated).

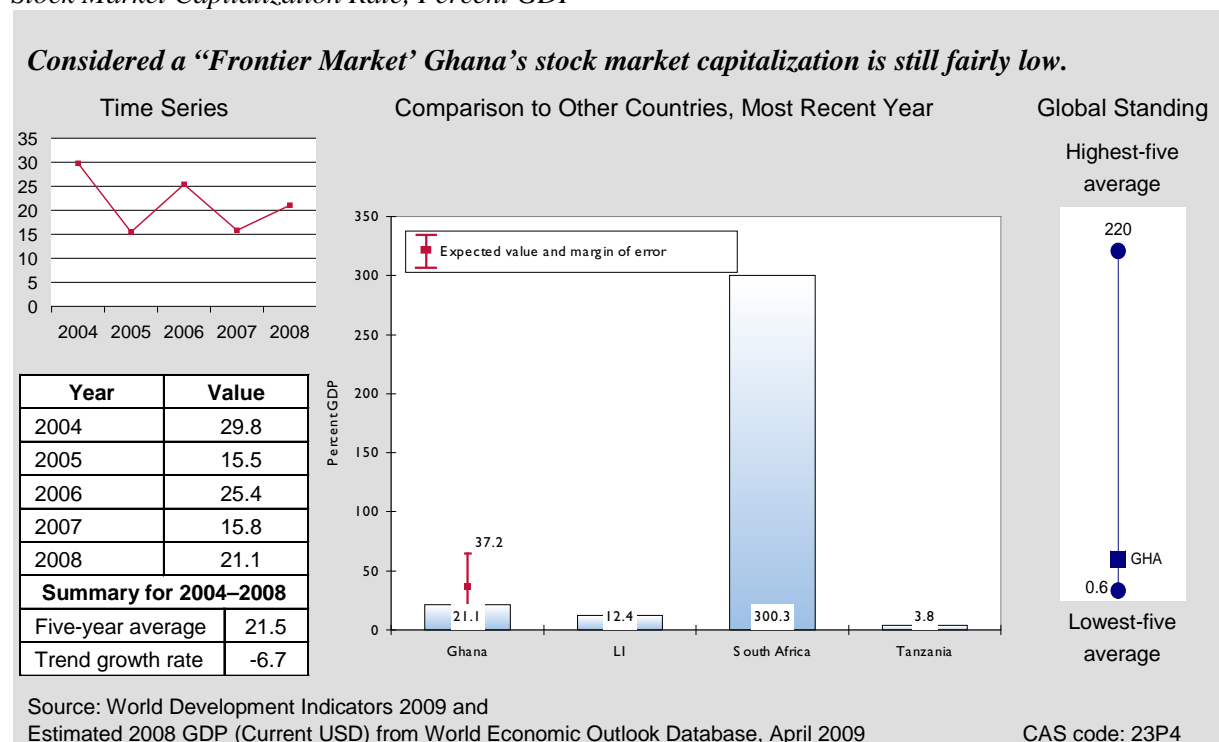
²⁸ *General Background on Global Microfinance Trends*, Ghana Ministry of Finance and Economic Planning.

²⁹ *Africa Microfinance Analysis and Benchmarking Report, 2008*. MIX and CGAP, December 2008.

rural areas. For example, as of December 2005, the Ghana Cooperative Council recorded 110,722 rural area members, and fully 90 percent of 59.3 billion cedis lent in total by Ghana Microfinance Institution Network providers is reported to have gone to borrowers in rural areas.³⁰

Beyond banking and microfinance, stock market capitalization is another useful indicator of financial development for emerging economies. As a Frontier Market economy, Ghana has begun to develop its capital markets, but its 2008 stock market capitalization equivalent to 21.1 percent of GDP was still lower than the expected rate for a country with Ghana's characteristics (37.2 percent) and much lower than the highly developed capital markets in South Africa (300.3 percent), which is Sub-Saharan Africa's only "emerging market" economy in IMF designation. Ghana's stock market capitalization rate, however, exceeds the median for LI countries (12.4 percent) (Figure 3-5). Ghana's stock market is fairly thin, dominated by one company (Asanti Gold) and characterized by low liquidity. And while nearly all other world stock markets were hit hard by the financial crisis, between December 2007 and mid-May 2009 the Ghana Stock Exchange All-share Index rose nearly 32 percent. But then in June 2009 it slumped drastically by 28 percent.

Figure 3-5
Stock Market Capitalization Rate, Percent GDP



Financial sector development requires an effective regulatory environment. The World Bank's Doing Business Report measures the legal rights of borrowers and lenders on a scale of 0 for very

³⁰ *General Background on Global Microfinance Trends*, Ghana Ministry of Finance and Economic Planning.

poor to 10 for excellent. While lower than South Africa's score of 9 and Tanzania's score of 8, Ghana's latest score of 7 is higher than the expected score of 4 for a country with its economic characteristics and the median LI-SSA score of 3. Ghana also ranked very well on the Investor Protection Index with a global ranking of 38 (down from 33 in 2008).³¹ (See Business Environment for additional indicators.)

EXTERNAL SECTOR

Fundamental changes in international commerce and finance, including reduced transport costs, advances in telecommunications technology, and lower policy barriers have fueled a rapid increase in global integration in the past 25 years. Although the current world financial crisis is a reminder that globalization brings risks as well as benefits, over the long term, an expanding international flow of goods and services, capital, technology, ideas and people can help Ghana to enhance productivity and stimulate structural transformation. The result will be accelerated growth and reduction in poverty.

But as a small open economy, Ghana faces the challenge of achieving balance and sustainability in its external sector while taking advantage of international resource flows and managing the impacts of global economic shocks. In this respect, the picture for recent years is mixed: strong export growth, impressive performance in attracting foreign capital, favorable movement in the terms of trade, and improvement in external debt burden, but also an alarmingly high and worsening current account deficit, real effective exchange rate appreciation, and dwindling foreign reserves. Ghana's becoming an oil exporter may be a medium-term antidote to current imbalances but could also pose a new set of "oil-curse" related risks for the domestic economy.

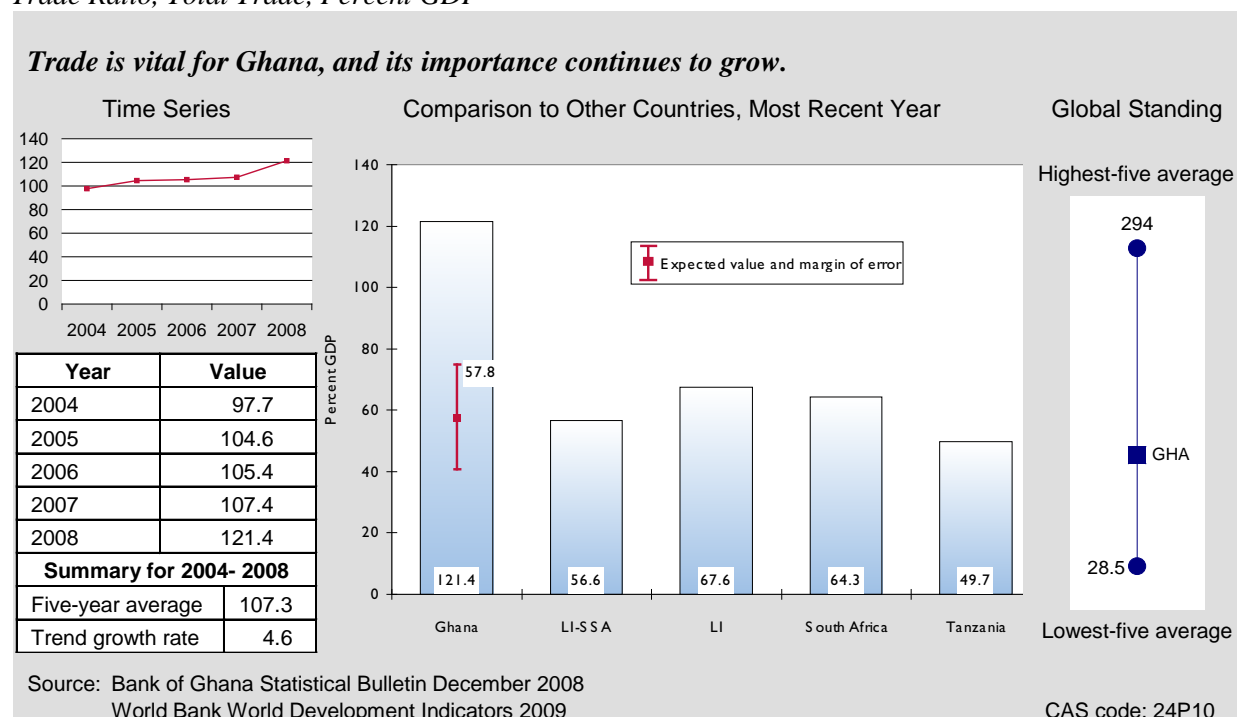
International Trade

Trade is vital to Ghana. In 2008 the total value of Ghana's goods and services exports and imports together was equivalent to more than 121.1 percent of GDP (Figure 3-6). This trade ratio significantly exceeds the medians for LI countries (67.6 percent) and LI-SSA countries (56.6 percent) as well as the figures of comparators (South Africa, 64.3 percent; Tanzania, 49.7 percent), and underscores the relative openness of Ghana's economy. Furthermore, Ghana's trade ratio is increasing: in 2004 the total value of exports and imports stood at 98 percent of GDP. This trend emphasizes that the importance of trade for Ghana continues to rise.

Recognizing the key role that trade plays, in 2005 Ghana's policymakers instituted the National Trade Policy, designed to strengthen the external sector enabling environment to stimulate private initiative. Ghana has supported multilateral trade liberalization, including adoption of the ECOWAS Common External Tariff and the interim Economic Partnership Agreement with the European Union, as a means to expand international and regional market access. In *Doing Business 2009*, Ghana ranks 76th of 181 economies in ease of trading across borders, down slightly from its score of 63rd in 2008, but considerably better than all comparators: the expected value rank of 127, the LI-SSA median (148), LI median (145), South Africa (147), and Tanzania (103).

³¹ World Bank *Doing Business 2009 Country Profile for Ghana*.

Figure 3-6
Trade Ratio, Total Trade, Percent GDP



Trade in services (e.g., combined export and import value of freight, insurance, tourism, etc.) may now represent about 30 percent of Ghana's total trade value. In 2008, this was also equivalent to about 25 percent of Ghana's GDP, a much higher services trade ratio than the median for LI-SSA (16.2 percent of GDP) or LI countries (15.9 percent of GDP), or for South Africa (10.9 percent of GDP) or Tanzania (19.3 percent of GDP). Ghana's service exports and imports flows are nearly balanced, with a modest annual deficit.

Merchandise exports and imports together may now make up about 70 percent of Ghana's total trade value. On the export side, merchandise trade is highly concentrated, with three items—gold, cocoa beans and cocoa products and wood and wood products—accounting for almost three-quarters of all merchandise export value. By comparison, the median shares of the top three products in total merchandise export value for LI countries and LI-SSA countries are about 66 percent and 61 percent respectively, while export concentration amounts to only 15.3 percent for South Africa and 45.5 percent for Tanzania. In fact, gold and cocoa-cocoa products alone represent more than two-thirds of merchandise exports for Ghana—for the period 2005 through 2008, the two generated average shares of total merchandise export value of 39 percent and 30 percent, respectively.

The value of Ghana's merchandise exports has been growing rapidly. In the five years between 2003 and 2008, merchandise exports expanded in current dollar terms from \$2.47 billion to \$5.28 billion, an average growth of about 16.4 percent annually. This number exceeds the standard error upper bound for the expected value of export growth for Ghana (14 percent), the LI and LI-SSA medians for export growth (9.1 percent and 6.1 percent, respectively), and the recent export growth figures for comparators South Africa (7 percent in 2007) and Tanzania (-0.2 percent in 2006). Of course, this period featured a sharp rise in commodity prices, including for

gold and cocoa. These price trends have driven the dramatic increases in Ghana's merchandise export values, especially from 2006 forward. Buoyant gold and cocoa prices have also meant that Ghana's terms of trade have become more favorable since 2006, even with concomitant increases in world oil prices. In 2008, Ghana's net barter terms of trade index (base year 2000) was equal to 123.1, up nearly 23 percent from its 2005 level. During this period as a group the LI-SSA countries posted an increase of only 9.3 percent in terms of trade, South Africa an increase of 9.5 percent, and Tanzania a decrease of 5 percent.

Given the dominance of commodities in Ghana's exports, export diversification is important. Ghana's nontraditional exports—items other than gold, cocoa-cocoa products, and wood—are largely food items: fruits, fish, oilseeds, and meat and seafood preparations. Although such nontraditional exports still account for less than one-quarter of all merchandise exports in 2008, their total value has been increasing rapidly—about 19 percent per annum since 2005.

Ghana imports significantly more goods than it exports. In 2008, the value of merchandise imports amounted to \$10.3 billion (current dollar terms), leading to a merchandise trade deficit of nearly \$5 billion for the year. And despite Ghana's strong export growth, imports have been increasing even faster, at an average annual rate of more than 25 percent in the past five years. As a result, Ghana's merchandise trade deficit swelled to 29.9 percent of GDP in 2008, up from 10.6 percent of GDP in 2003. Several factors underlie Ghana's surging imports. Robust economic growth in this decade has created strong domestic demand, and this has stimulated imports. Nonoil imports—now over three-quarters of total import value—have expanded rapidly, particularly in the past two years as a result of rising demand for capital goods in the mining sector and government infrastructure programs and for consumer durables in the private sector. Economic growth has also heightened the demand for oil, and with the run-up in oil prices in the past few years, the total value of oil imports has risen at an average rate of 33 percent per year since 2003. Oil imports now make up about 23 percent of Ghana's total import value.

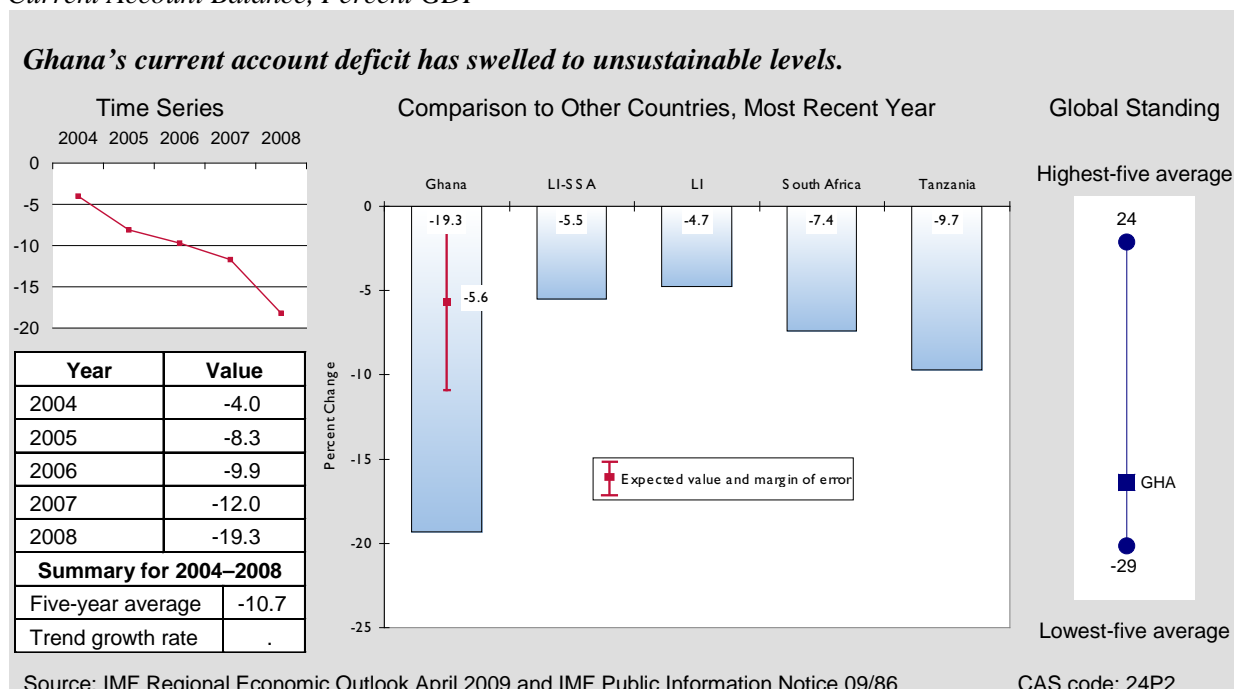
Current Account

With this heavy and growing trade deficit, Ghana's current account balance has deteriorated rapidly. Although Ghana receives significant private transfers—over \$1.9 billion net in 2008, largely in the form of worker remittances—its official transfers are modest, and it incurs net deficits on both trade in services and investment income flows.³² As a result, Ghana's current account deficit in 2008 amounted to 19.3 percent of GDP, up from just 4 percent of GDP five years earlier (Figure 3-7). At this level, Ghana's current account balance stacks up poorly against all comparators: its expected value of -5.6 percent of GDP; the median current accounts for LI-SSA and LI countries (-5.5 percent and -4.7 percent, respectively); and for South Africa (-7.4 percent) and Tanzania (-9.7 percent).

³² Based on Bank of Ghana data on private transfers for 2005 through 2008. See Bank of Ghana, Monetary Policy Report, External Sector Developments, Volume 4, No. 1/2009 (February 2009), page 23 and table, p.26. These figures differ from World Development Indicators data on remittances. For the importance of remittances to Ghana's current account see M. Opoku-Afari, *Capital Flows and Current Account Sustainability: The Ghanaian Experience*, Bank of Ghana Working Paper WP/BOG-2005/16, chart 7.

Ghana’s current account imbalance is unsustainable. Current account deficits have been financed largely by a combination of resource inflows from foreign direct investment (FDI) and official financing. Also, in 2008, Ghana drew down its international reserves to help finance its current account. As a result, after building up reserves earlier in the decade, by the end of the year, Ghana’s reserves covered the equivalent of 1.9 months of imports of goods and services. This is a perilously narrow margin—three months’ cover is the rule of thumb for prudent reserves management—and well below that of comparators: at the same point, international reserves for LI-SSA countries equaled 3.9 months of imports; South Africa, 3.7 months; and Tanzania 5.7 months. The continuing global financial crisis, the world economic slowdown, and Ghana’s dwindling international reserve assets could well amplify the risks and the costs of financing these deficits in the future.

Figure 3-7
 Current Account Balance, Percent GDP



Two forces, however, are in play that should ultimately promote greater external sector stability and reign in current account deficits. First, in the near term, the vigorous program of fiscal consolidation that policymakers will pursue (see Fiscal and Monetary Policy) will reduce domestic demand. This, plus lower oil prices, should dampen the growth of imports. In fact, improvement in the merchandise trade deficit has already been registered in the first quarter of 2009.

Second, and more far-reaching (as noted earlier), in the medium term Ghana is likely to become an oil exporter. If Ghana’s offshore reserves prove commercially viable, production and exports could begin in 2011 and continue until about 2030. Oil revenue will boost growth rates and

strengthen the government's fiscal situation (see Growth Performance and Fiscal and Monetary Policy). Oil will also affect the current account.³³ In the sector investment phase (2010–2012), large-scale capital equipment imports will add an estimated 9 percent to the trade deficit, but this should be fully financed by FDI from oil companies. Then, in the production-exporting phase (2013–2030), oil exports will generate a net improvement in Ghana's current account, averaging about 4 percent of GDP per annum.

Capital Flows and External Debt

In the years between 2003 and 2007, total private capital inflows to Ghana increased dramatically, from \$2 million (2003) to nearly \$1.1 billion (2007).³⁴ In 2008, evidence suggests that capital inflows continued to increase, although more slowly.³⁵ FDI accounted for two-thirds of total capital inflows for the 2003–2007 period, rising from \$50 million in 2003 to \$855 million in 2007, when they were equivalent to 5.7 percent of GDP. This exceeded the rates of all comparators: the expected value of 2.1 percent of GDP; the medians for LI-SSA (1.8 percent of GDP) and LI countries (2.2 percent of GDP); and the rates of South Africa (2 percent of GDP) and Tanzania (3.3 percent of GDP). The mining sector attracts the bulk of Ghana's FDI, and the increased inflows in recent years have been stimulated by rising global prices for gold and other minerals. Privatization of Ghana Telecom has also been a recent factor in attracting FDI.

Portfolio investment—largely nonresident purchases of domestic government securities—accounted for the one-third balance of total private capital flows for the 2003–2007 period. These portfolio inflows were just \$25 million in 2003, but \$200 million to \$400 million per year starting in 2004. Furthermore, at the end of 2007, Ghana successfully entered the international bond market, selling a sovereign 10-year bond that raised \$750 million. With this issue, Ghana became the first West African state to ever tap the international bond market. Ghana's ability to attract private portfolio investment derives from two factors. First, before 2006, Ghana pursued a program of macroeconomic stabilization featuring fiscal consolidation, reinforced by debt reduction to enhance creditworthiness and by institutional reform, including strengthening the Bank of Ghana. Second, with reform in place, in late 2006 Ghana undertook partial liberalization of capital markets, allowing nonresidents to purchase government securities for the first time, albeit with restrictions on maturities (over three years) and holding periods (at least one year). These restrictions are designed to mitigate the risks of sudden reversals in private capital flows. Overall, Ghana's capital liberalization appears to illustrate effective planning and sequencing of policy reform. The global financial turmoil, plus Ghana's macroeconomic imbalances, will test the sustainability of the reforms and highlight any vulnerability they create.

While private capital flows to Ghana have increased, external aid—grants and concessional loans in particular—have declined as a source of financing. External aid to Ghana was equivalent to

³³ IMF, Ghana: 2008, Article IV Consultation (IMF Country Report No. 08/344, October 2008), *Staff Supplement*, p. 22.

³⁴ IMF, *Ghana, Selected Issues, Capital Account Liberalization and Private Capital Flows in Ghana* (June 16, 2008), p.29.

³⁵ Bank of Ghana, Monetary Policy Report, External Sector Developments, Volume 4, No. 1/2009 (February 2009), table p.26.

about 7.7 percent of GNI in 2007, down from about 12.9 percent in 2003. At this level, Ghana's external aid flows are lower than the medians for LI-SSA and LI countries (14.9 percent and 11.6 percent of GNI, respectively) as well as for Tanzania (12.9 percent of GNI in 2006). By contrast, South Africa's external aid flows appear modest: just 0.3 percent of GNI (2006 data). Nevertheless, although these flows are diminishing, as noted earlier, official capital (grants and concessional loans) has been important in financing a portion of Ghana's current account deficits. Such external aid flows are projected to continue at a level of approximately 6 percent to 7.5 percent of GDP to help meet Ghana's financing needs.³⁶ Of course, the objective of Ghana's policy-makers is to be able to phase out official capital in the future financing of current accounts.

A major reduction in Ghana's external debt has been a key factor in establishing the creditworthiness essential for attracting private capital, and reducing the need for external aid. In 2003 the present value of Ghana's external debt amounted to 101.5 percent of GNI. By 2007, this ratio had decreased to about 29.9 percent (Figure 3-8). This decrease took place in 2005–2006 in the context of the Multilateral Debt Relief Initiative, in which multilateral institutions provided \$4.2 billion in debt relief. Although Ghana's present value of external debt is still higher than that of comparators—in LI-SSA countries, 18.8 percent of GNI; in LI countries, 25.6 percent of GNI; in South Africa, 15.5 percent of GNI; and in Tanzania, 16.4 percent of GNI—it is sustainable and within the threshold debt burden for strong policy performers of 50 percent of GDP.³⁷ The combination of debt relief and strong export growth has also reduced Ghana's debt service ratio, from about 6.9 percent of export earnings in 2003 to 3.1 percent in 2007, roughly equal to comparators South Africa and Tanzania (3.4 percent and 3.2 percent of exports, respectively), and below the median debt service/exports ratio for LI-SSA and LI countries (10.2 percent and 7.9 percent, respectively). In 2008, Ghana's debt service ratio rose slightly to 4.2 percent of exports.

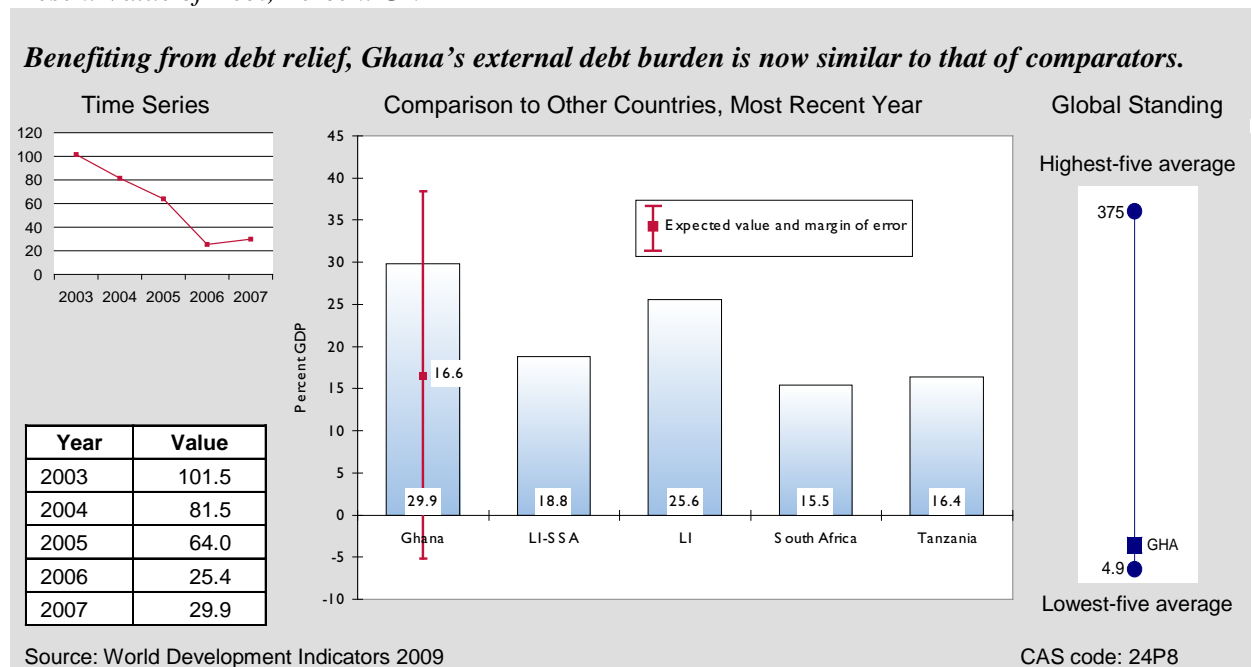
Continuation of Ghana's fiscal and external imbalances will create pressure for additional public sector borrowing. But more borrowing will increase Ghana's external and domestic debt burden—and in fact Ghana's external debt to official creditors rose to 24.7 percent of GDP in 2008 from 17.1 in 2006, just after completion of the MDRI—creating new vulnerabilities.³⁸ (With large-scale oil exporting, however, Ghana's risks of future debt distress fall considerably.)

³⁶ IMF, Ghana: 2008, Article IV Consultation (IMF Country Report No. 08/344, October 2008), Staff Supplement, p. 3.

³⁷ Ibid. p.2.

³⁸ IMF, *Regional Economic Outlook, Sub-Saharan Africa*, Table SA23, April 2009.

Figure 3-8
Present Value of Debt, Percent GNI



Exchange Rate

The new Ghana cedi (GH¢) exchange rate is a summary indicator of the net impact of all Ghana's trade-related and capital-related flows. Ghana's exchange regime is a managed float, in which policymakers seek a measure of exchange rate stability (especially against the dollar) as an intermediate objective in inflation fighting.³⁹ Nevertheless, as might be expected, Ghana's ever-mounting current account deficits—intensified by high inflation—have put pressure on the cedi, resulting in steady depreciation in nominal terms against a basket of trading partner currencies.⁴⁰ Between 2005 and 2008, however, this nominal cedi depreciation was not fast enough to prevent Ghana's real effective exchange rate (REER) from continuously appreciating, and sharply so in the last year of this period (Figure 3-9). This REER reflects similar movement in LI-SSA countries generally (an REER of 99.1 in 2005 and of 116.7 in 2008), but contrasts with both South Africa (REER of 108.6 in 2005 and of 77.3 in 2008) and Tanzania (67.5 in 2005 and 66.9 in 2008). The initial jump in Ghana's REER may derive in part from the rise in private capital inflows that followed capital account liberalization. But REER appreciation through 2008 is chiefly the result of Ghana's high and worsening inflation, including the acceleration of inflation in 2008 (see Fiscal and Monetary Policy). REER appreciation signals potential loss of export competitiveness. Although nontraditional exports were apparently not affected through 2008, an

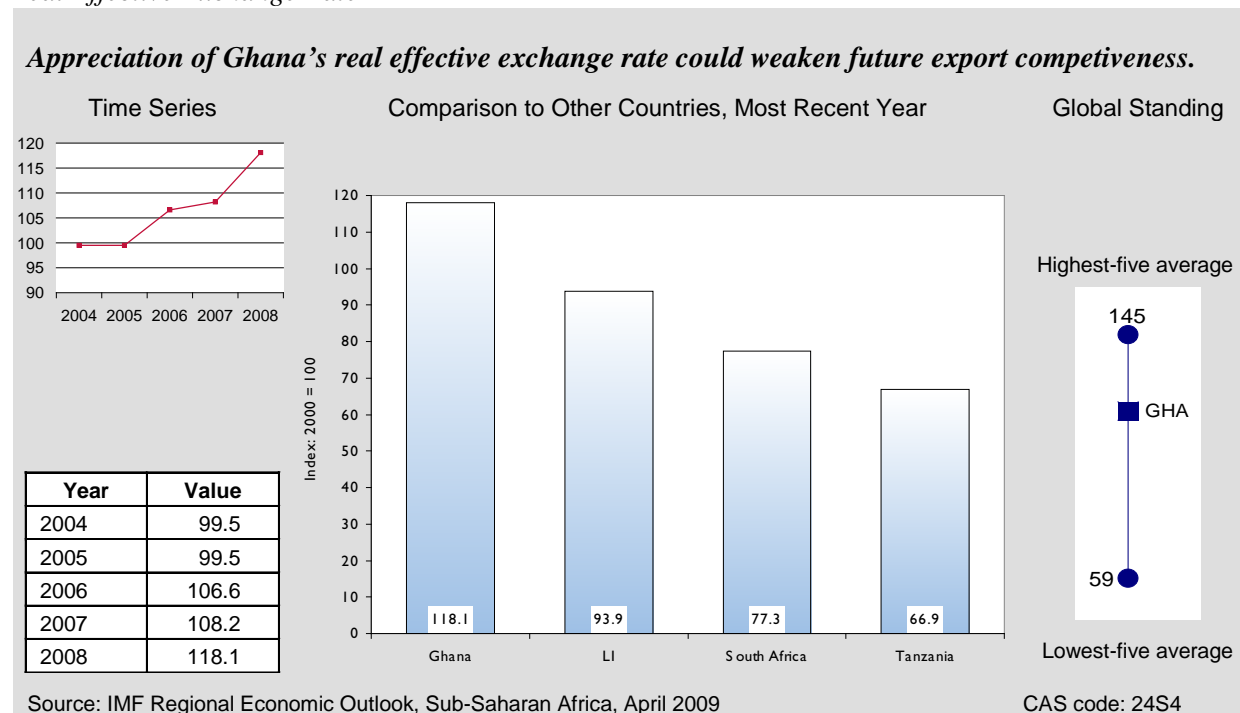
³⁹ While market forces influence the cedi exchange rate, the Bank of Ghana continues to intervene in the foreign exchange market. Also, gold and cocoa exporters face foreign exchange surrender requirements and the Bank of Ghana sells foreign exchange to oil importers.

⁴⁰ Between 2003 and 2008, Ghana's nominal effective exchange rate declined by 26.9 percent. See IMF, Regional Economic Outlook, Sub-Saharan Africa, April 09, Table SA22.

appreciating REER trend and its implications for the future competitiveness of Ghana's manufactured exports would be cause for concern.⁴¹

Figure 3-9

Real Effective Exchange Rate



Ghana's external sector presents at least three important strategic themes for possible future donor assistance. First, given the need to diversify exports – particularly in a future non-oil economy – donor assistance to help Ghana's private sector enhance product quality, technical standards and market access for non-traditional exports could be highly useful. Second, in the near-term, as Ghana needs to borrow as it works toward a more sustainable external position, donors might consider helping Ghana to formulate and execute effective debt management strategies. And third, in light of the significance of oil to Ghana's macroeconomic future and external sector, donors could assist Ghana in the programming and management of oil export revenues for maximum development impact. Such assistance would include analysis and support for macroeconomic policy planning and implementation to maintain export competitiveness and avoid "Dutch disease" problems.

⁴¹ More recently, in 2009, the REER has apparently begun to depreciate, albeit modestly. Throughout 2008 and the first half of 2009, the cedi continued to depreciate sharply in nominal terms—nearly 50 percent against the U.S. dollar—but with strong inflationary pressure, this meant that by April 2009 the REER had depreciated only about 8 percent from its 2007 level (see IMF Public Information Notice No. 09/86, July 17, 2009). Hence, REER movements relative to export competitiveness deserve continuing monitoring and analysis.

ECONOMIC INFRASTRUCTURE

Reliable physical infrastructure—for transportation, communications, power, and information technology—is critical to competitiveness and productive capacity. Although Ghana’s infrastructure is comparable to or better than regional benchmarks, the private sector finds it unsatisfactory by international standards. The 2008 World Economic Forum’s annual index of infrastructure quality scored Ghana 3.4 on a 0 to 7 scale, better than the LI-SSA median of 2.5, and Tanzania (2.4), but worse than South Africa (4.5).⁴²

Ghana scores better on telecommunications than the regional median: 34 of every 100 people have access to a land line or mobile phone (up from 5 in 2002), much higher than the LI-SSA or LI medians (2 and 8 per 100 people, respectively). Likewise, Ghana reports 3 Internet users for every 100 people in the country (up from 1 in 2002)—twice the LI-SSA median (1 user per 100 people). While neither figure is at South Africa levels (8 internet users per 100 people; 99 telephones per 100 people), both reflect a wealthier, more educated Ghanaian population that increasingly relies on such infrastructure for their livelihoods. As Ghana continues to grow, the demand on this infrastructure will rise quickly as well, and with it, needs for greater service and infrastructure quality. To facilitate continued growth in the country, much attention needs to be given to upgrading and maintaining telecommunications infrastructure.

Transportation infrastructure is also crucial for domestic and international trade but is one of the areas where Ghana scores the weakest in terms of the perception of its infrastructure. On an infrastructure quality scale of 1 (poor) to 7 (excellent) Ghana has midscale rankings of 4.1 for air transport and 3.5 for port infrastructure, below South Africa (5.9 and 4.4 respectively), but well above all other comparators. In Ghana, the share of paved roads and highways among all roads, 15 percent, is comparable to the LI median, but a lack of access roads—including rural and farm-to-market roads—is a major constraint on growth. Moreover, the quality of rail lines was judged particularly poor, scoring only 1.3, below the LI-SSA median (1.7), Tanzania’s score (1.9), and South Africa’s score (3.5). Such low scores have a strong impact on the ability of Ghanaian businesses, especially those operating in rural areas, to produce goods at a quantity, price, and quality that are competitive in the export market. This especially affects agricultural markets that rely on efficient working linkages to larger value chains linking growers, producers, distributors, and consumers.

Finally, in terms of electric power, also critical to manufacturing and commerce for the domestic market and for export, Ghana scores 3.2 on the Quality of Infrastructure—Electricity Supply index (a scale of 1 [poor] to 7 [excellent]). This ranks Ghana a bit better than the regional median (2.9) but below South Africa (3.4).

Given the strategic nature of infrastructure for economic growth and development, the donor community could make major contributions to Ghana’s competitiveness by assisting in improving the quality and efficiency of infrastructure facilities and service delivery, including pricing, costing, and maintenance in transportation and power.

⁴² The WEF indices of infrastructure quality are based on responses to surveys of executives in each country. Comparisons between countries should be interpreted with caution because the data are based on respondents’ perceptions.

SCIENCE AND TECHNOLOGY

Science and technology are vital to a dynamic business environment and drive productivity and competitiveness. Even for LI countries like Ghana, transformational development depends on acquiring and adapting technology from the global economy. Lack of capacity to access and use technology hinders an economy in efforts to capture the benefits of globalization. Unfortunately, very few international indicators can be used to judge performance in this area for low- and lower-middle-income countries.

Because FDI is often associated with technology development in LI countries, the FDI Technology Transfer Index nevertheless gives perspective on Ghana's situation in science and technology. According to this index, a value of 1 means FDI brings little new technology to an economy while a value of 7 means FDI is an important source of new technology. Here Ghana's score is 4.2, below the expected value of 4.9 for an economy with Ghana's characteristics, below the LI-SSA and LI medians (4.7 and 4.6 respectively) and below South Africa's and Tanzania's scores (5.2 and 4.6 respectively). Technology is an important element of modern economic growth, and Ghana should intensify efforts to encourage technology transfer in the FDI projects it attracts.

An additional indicator of performance in science and technology is an index of the availability of scientists and engineers, with 1 denoting low availability and 7 high availability. Scoring 3.6 on this index, Ghana performs about as expected, roughly on par with all comparators, including South Africa and Tanzania (3.4 and 3.5, respectively). Still another indicator is enforcement of intellectual property rights (on a scale of 1 [poor] to 7 [among the best]) and here, Ghana's actual and expected score of 3.3 outranks those of all comparators except South Africa (at 5.3).

The World Economic Forum, in the 2008/2009 Global Competitiveness Report, ranks Ghana 115th of 134 countries on "technical readiness" and 114th on "innovation". The former characteristic incorporates judgments about the availability of the latest technology and firm-level technology absorption, and the latter features an evaluation of capacity for innovation, quality of scientific research institutions, corporate spending on research and development, and other issues. By way of comparison, Tanzania received a similar ranking of 117th on technical readiness and 101st on innovation, but South Africa does much better, holding 49th place in technical readiness and 37th in innovation. In any event, given the importance of science and technology for economic growth, a concerted effort by donors to help Ghana promote applied research and technology centers, reinforce linkages between universities and industry, and generally improve science and technology education could have substantial payoffs for Ghana. Similarly, working with industry and government, donors could support programs to stimulate technology spillovers from FDI, including programs to strengthen domestic small enterprise as subcontractors to foreign-owned and -financed firms based in Ghana.

4. Pro-Poor Growth Environment

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

HEALTH

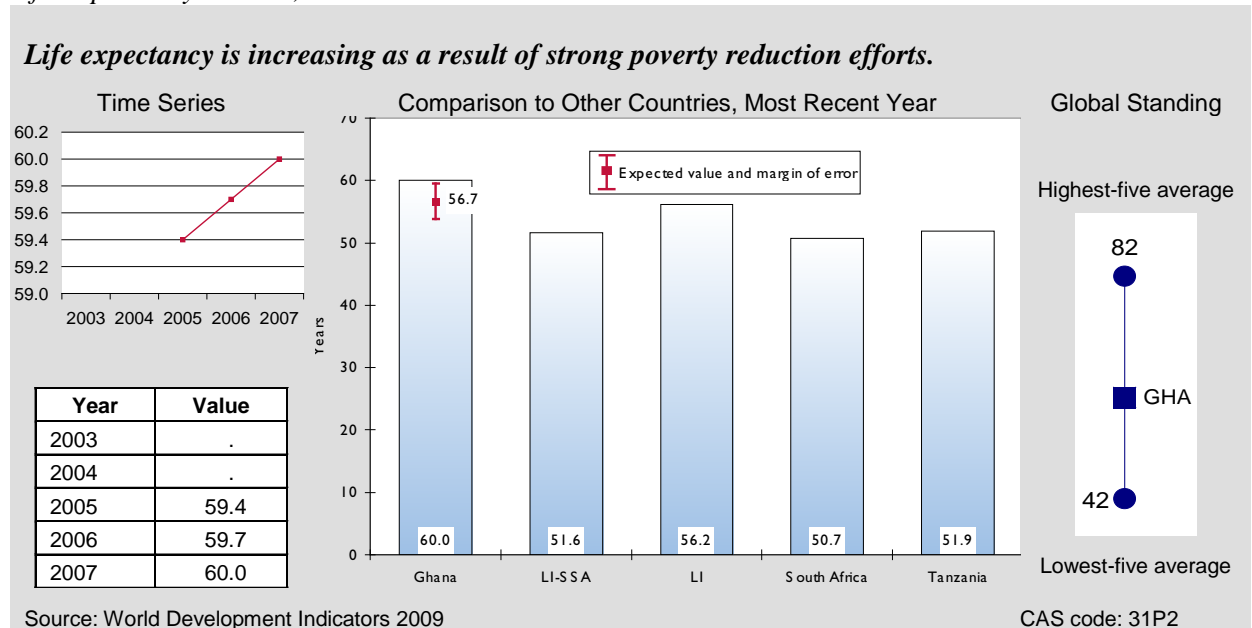
The provision of basic health service is a major form of human capital investment and a significant determinant of growth and poverty reduction. Although health programs do not fall under the EGAT bureau, an understanding of health conditions can influence the design of economic growth interventions.

Most of Ghana's key indicators of health status are good when put side by side with those of comparators and are improving. This is likely a result of Ghana's urbanization, which has brought greater access to services. Life expectancy at birth is commonly regarded as the best overall indicator of health status of a population. In recent years, Ghana's life expectancy has hovered around 60 years, which is significantly higher than for all comparator countries, although still low by absolute standards for industrialized countries (Figure 4-1). Ghana's better-than-expected life expectancy is a result of low incidence of HIV, good child immunization rates, comparatively high access to improved water sources, and relatively low maternal mortality rates.

In 2008, an estimated 2.6 percent of the adult population was HIV-positive in Ghana, down slightly from a rate of 2.9 percent in 2004. Ghana fares very well compared to South Africa (18.1 percent HIV rate) and Tanzania (6.2 percent rate), and is about on par with the expected value for a country with Ghana's characteristics (2.5 percent). UNICEF warns that this relatively low rate might be misleading, however, and that perhaps the majority of AIDS cases in Ghana go

unreported, due to stigma or to inadequate access to health services.⁴³ Nevertheless, Ghana's officially recorded HIV rate is on a declining trend.

Figure 4-1
Life Expectancy at Birth, Years



The maternal mortality rate in Ghana—560 deaths per 100,000 births—is remarkably low considering the low proportion of births attended by skilled health personnel (49.7 percent) and the scarcity of nurses and midwives (0.92 per 1,000 people).⁴⁴ The low proportion of births attended by skilled health personnel is particularly surprising because nearly 50 percent of Ghana's population live in urban areas where such services are more likely to be available. Ghana's relatively good performance in maternal mortality might be attributable to the high percentage of pregnant women receiving prenatal care (92.2 percent in 2006).⁴⁵ Maternal mortality rates were much higher in comparator countries, with the exception of South Africa, which had 400 deaths per 100,000 live births. The LI-SSA media was 895 and Tanzania's rate was 950.

Children in Ghana do not appear to fare as well; Ghana had the 30th-highest under-five mortality rate in the world, at 115 children per 1,000 in 2007, barely changed since 1990 when it was at 120 per 1,000. This compares to an under-five mortality rate of 59 per 1,000 in South Africa and 116 per 1,000 in Tanzania.⁴⁶ It is surprising that Ghana's under-five mortality rate has not fallen more, especially with the country's child immunization and malnutrition rates. Child

⁴³ UNICEF, At a Glance: Ghana, accessed May 14, 2009.

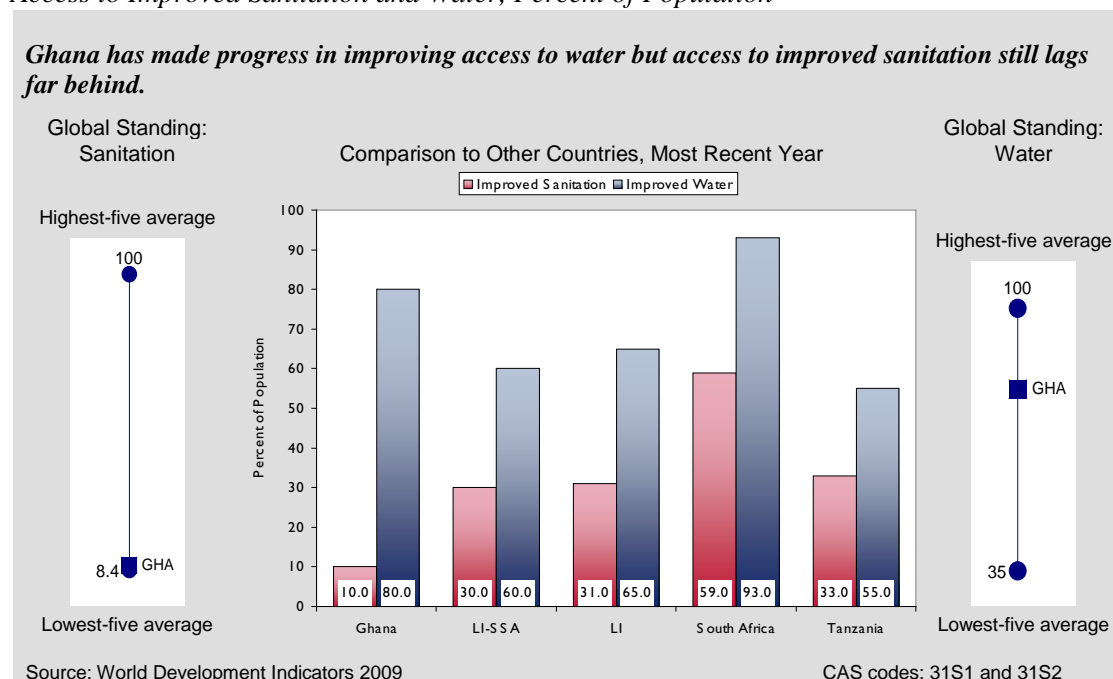
⁴⁴ World Bank WDI Online.

⁴⁵ Id.

⁴⁶ UNICEF, At a Glance: Ghana—Statistics, accessed May 14, 2009.

immunization rates have improved greatly in the past 10 years, from 72.5 percent in 1998 to 94.5 percent in 2007. Child malnutrition figures have also shown improvement (falling from 25 percent in 1998/1999 to 18 percent in 2005/2006) and are better than most comparators. Ghana’s high under-five mortality rate could be due to a lack of access to safe drinking water or inadequate sanitation—only 10 percent of the population has access to improved sanitation. This is far below the levels of all comparators and the expected value for a country with Ghana’s characteristics. A much higher proportion, 80 percent of the population as of 2006, have access to improved water sources, but as recently as 2004, Ghana had the world’s highest reported number of cases of Guinea worm (Figure 4-2).⁴⁷

Figure 4-2
Access to Improved Sanitation and Water, Percent of Population



Other concerns about health in Ghana include shrinking health expenditure and a growing gap between health in rural and urban areas. Public health expenditure as a share of GDP has been trending downward, from 2.4 percent in 2002 to 1.7 percent in 2006, and has fallen even faster when public health expenditure is measured as a share of government expenditure—it has dropped by half, from 9 percent in 2002 to only 4.4 percent in 2006. Private health expenditure has also been falling, resulting in a fall in overall health expenditure as a share of GDP from 6.5 percent in 2002 to 5.1 percent in 2006. This is a worrisome trend that threatens further improvement in health outcomes.

There is also a large disparity between health care and health outcomes in rural and urban areas. While 15 percent of the urban population has access to improved sanitation, only 6 percent living

⁴⁷ Guinea worm is a parasitic infection that is largely attributable to drinking unsafe water. <http://www.unicef.org/infobycountry/ghana.html> (accessed May 14, 2009).

in rural areas do. Additionally, 90 percent of the urban population has access to improved water, compared to only 71 percent of the rural population. On the positive side, rural access to improved water has increased at a much faster rate than in urban areas in recent years, and the urban–rural access gap has narrowed from 29 percent in 2000 to 19 percent in 2006.

Nevertheless, poor access to health facilities for rural households remains a serious concern. For example, only 20.9 percent of households in the Upper East and 30.4 percent of households in the Upper West are within 30 minutes of a health facility, compared to 81.2 percent in Greater Accra and 79.1 percent in the Ashanti region.⁴⁸ These differences in access to improved water sources, sanitation, and health facilities between Northern and Southern Ghana are reflected in differential life expectancies in these regions. As of 2000, the life expectancy at birth in the Northern Regions (Northern, Upper East and Upper West) was between 52 and 55 years, compared to 66 in Greater Accra and 57 to 66 in other regions of the country.

Overall, health status indicators for Ghana are fairly good relative to those of comparator economies, and these indicators have mostly been improving. However, cuts in public expenditure for health may threaten future gains, and regional disparities in health status are still quite large. Donors should consider providing programs to help government improve provision of health care services, particularly to rural areas, including analyzing and planning the efficient targeting of public expenditures for health care programs.

EDUCATION

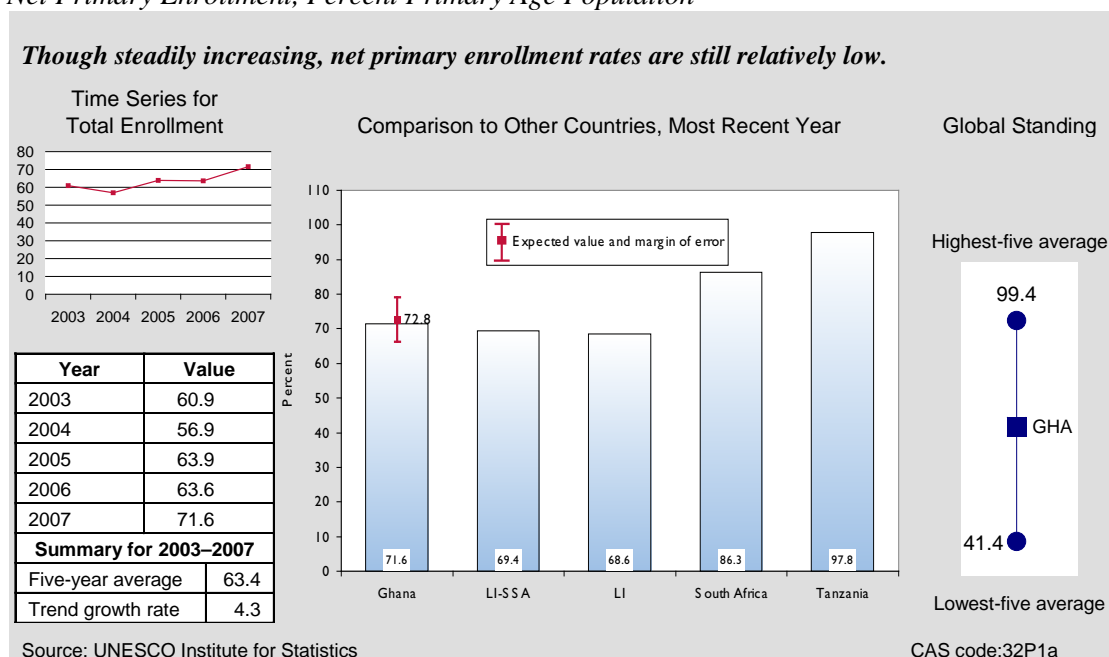
Investment in human capital is a cornerstone for economic growth and development. Ghana's performance on most education indicators is respectable. The net primary enrollment rate stood at 71.6 percent in 2007, which is slightly below the expected value of 72.8 percent, but above the median score of 69.4 for LI-SSA countries as a group (Figure 4-3). Signs of improvement are clear, as net primary enrollment rose by 4.3 percentage points over the latest five-year period. Also, Ghana's primary completion rate is 70.7 percent, which is very high compared to the average for LI-SSA (44.9 percent) but still far below the rates for South Africa (92 percent) and Tanzania (85.4 percent). The youth literacy rate of 77.8 percent is also high compared to the expected value (67.3 percent), on par with that of Tanzania, but again below the South African level (95.4 percent).

Within Ghana, there is an enormous disparity between the relatively wealthy and urban/suburban southern portion of the country and the poorer and more rural northern half of the country. In fact, primary enrollment rates in the North were just 30.8 percent, much lower than the national average as well as the regional average for LI-SSA.⁴⁹ Even though these indicators have been improving, they are still exceedingly low. In order to improve education in the country, the government and donors need to focus on issues of access, ensuring that schools and teachers at the primary (as well as secondary) level are easily available to communities in small towns and rural communities.

⁴⁸ Ghana Human Development Report 2007, p. 33.

⁴⁹ Ghana Millennium Development Goals Report 2006, UN Report, p.12.

Figure 4-3
Net Primary Enrollment, Percent Primary Age Population



The *quality* of education in Ghana scores quite well compared to quality of education in the region (South Africa notwithstanding). The pupil–teacher ratio for primary schools reached 35.3 in 2006, better than the relevant benchmarks and even slightly better than the 35.6 ratio in South Africa. Spending on primary education, at 1.7 percent of GDP, is in line with all points of comparison but still clearly inadequate to finance a sufficient number of teachers.⁵⁰ Educational expenditure per student is also much higher in Ghana than the LI-SSA regional median—it is even higher than that of South Africa. However, this standard may be difficult to maintain in the near term if government revenue drops significantly in the face of the global recession or if the need for fiscal consolidation leads to severe compression of social service expenditure. Sustained economic growth is essential to enable the country to mobilize financing for the education system. Of course, in the medium term, the prospect of additional public sector revenue generated by Ghana’s new oil sector could provide resources and opportunities to make effective new expenditure in education.

EMPLOYMENT AND WORKFORCE

Ghana’s labor force now totals about 10.5 million workers. Under the pressure of population growth, over the past five years labor force numbers have been increasing by 2.3 to 3 percent per annum. At its present pace (3 percent, 2007), Ghana’s rate of labor force growth is higher than that of South Africa (2 percent), Tanzania (2.7 percent), or the expected rate (2.6 percent) for an economy with Ghana’s characteristics. This rate of labor force expansion means that more than 300,000 new jobs must be created annually just to prevent a rise in unemployment. Because of the need to absorb this large number of new entrants to the labor force each year, unemployment

⁵⁰ A Millennium Challenge Account indicator.

is disproportionately skewed towards youth—for example, according to a 1998/1999 labor survey, unemployment for 15–24 year olds was 15.9 percent, compared with 4.3 percent for 25–44 year olds and 4.7 percent for 45–64 year olds.⁵¹ Even though these numbers are dated, the pattern of unemployment is unlikely to have changed much given the continued rapid growth of the labor force. More important, the unemployment rate does not include underemployment, which has been reported to be much higher, at 13.4 percent (2003).⁵²

Rural areas in Ghana tend to have higher underemployment rates than urban areas, because many workers are employed in agriculture only on a part-time or seasonal basis, and few other jobs exist to employ farmers in off-seasons. Rural areas have lower unemployment rates than urban areas, however, in part because of the availability (and necessity) of subsistence family agriculture, but also because of high rural-to-urban migration.⁵³

Ghana's labor force participation rate has been stable and low relative to similar economies, showing that Ghana may have more flexibility in labor force entry and more nonwork alternatives and support systems than many of its comparators. Ghana's labor force participation rate in 2007 was 72.5 percent, compared to an expected rate of 75.1 percent and a median rate of 77.8 percent in LI-SSA countries (Figure 4-4). According to the 2000 census, most of the economically inactive in Ghana were students (33.3 percent) or homemakers (27.7 percent).⁵⁴

According to the World Bank, Ghana also had a very low rate of economically active children, at 6 percent in 2003.⁵⁵ Most children who are employed are engaged in agriculture and are not continuing their studies. If accurate, this rate of economically active children is far lower than the expected value of 33.7 percent for a country with Ghana's characteristics, the LI-SSA median of 39.8 percent, and Tanzania's rate of 40.4 percent.

Not all of Ghana's employment trends are positive. Ghana's score on the Rigidity of Employment Index—based on a scale from 0 (minimum rigidity) to 100 (maximum rigidity)—has worsened, from values of 34 in 2005 to 37 in 2009. Furthermore, firing costs are very high (178 weeks of wages) and have not improved at all in the past five years. Of course, ease of entry and exit is a lot greater in the informal economy, so actual effective firing costs in Ghana are much lower than these figures suggest. Nevertheless, these indicators, which pertain to employment in the formal sector, underline structural labor market issues that must be addressed if the formal sector is to expand.

⁵¹ Ghana Human Development Report 2007, p. 27.

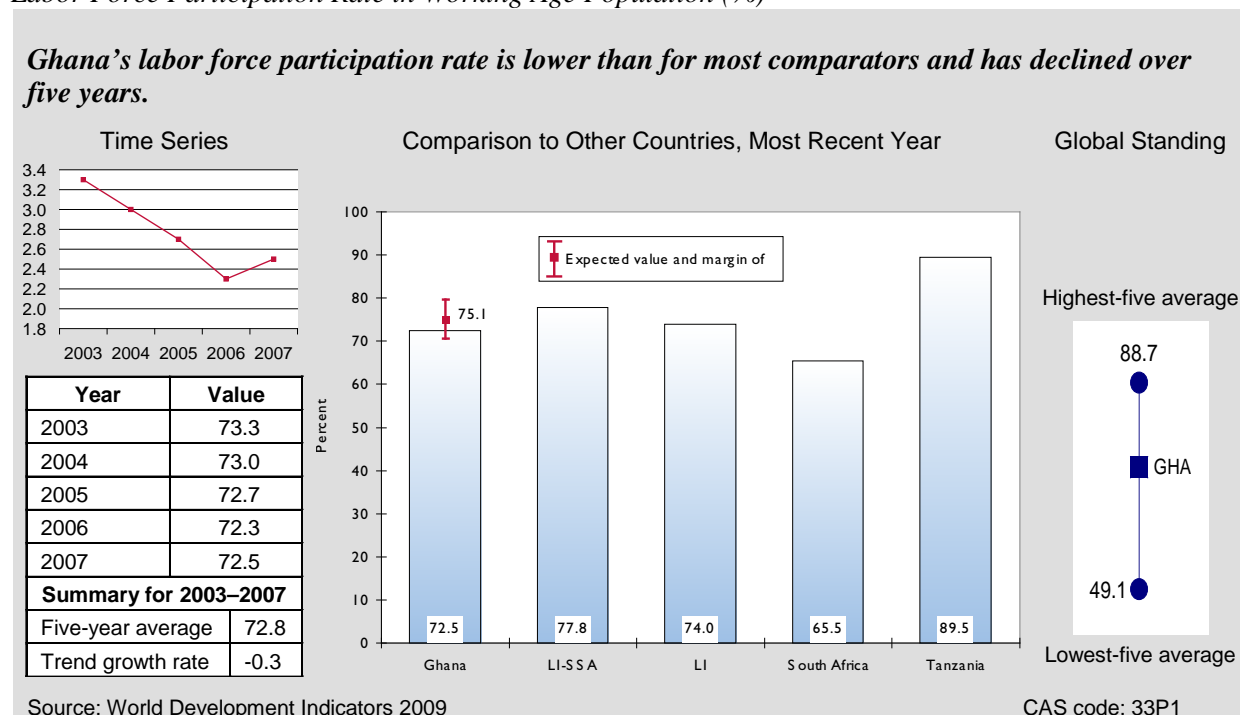
⁵² Ghana Human Development Report 2007, pp. 26-27.

⁵³ Ghana Human Development Report 2007, pp. 27-28.

⁵⁴ *Women and Men in Ghana, A Statistical Compendium 2006*, Ghana Statistical Service, Table 4.10.

⁵⁵ The World Bank WDI shows that 6 percent of children aged 7–14 were economically active in 2003 but other sources show higher figures. UNICEF shows a much higher “child labor” rate of 34 percent of children aged 5–14, but which year this rate refers to (between 1999 and 2007) is unclear. The 2007 Human Development Report for Ghana showed a rate of 9 percent in 2000.

Figure 4-4
 Labor Force Participation Rate in Working Age Population (%)



For the present, the majority of the labor force is employed in the informal sector. In 2003, 92 percent of rural employees and 75 percent of urban employees worked in the informal sector, with the majority self-employed.⁵⁶ Other estimates suggest that as of 2005/2006, only 9 percent of employees received public sector wages and 8.4 percent received private formal sector wages, with the rest either working in the private informal sector or self-employed. Public and private formal sector employment was also much higher in urban areas (16.8 percent and 24.6 percent in Accra and 14.5 percent and 10.4 percent in other urban areas) than in rural areas (4.2 percent and 3.5 percent).⁵⁷ Wages are also considerably lower in the informal sectors. For example, in 2005/2006, the average annual earning for a person self-employed in agriculture was 5.08 million cedis, compared to 16.97 million cedis for a public sector employee or 12.24 million cedis for a private formal sector employee.⁵⁸

In summary, Ghana must continue to create jobs in order to lower the youth unemployment and underemployment rates and to keep pace with the growing labor force. In particular, focus must be on creating higher-productivity, higher-paying formal sector jobs outside agriculture. Structural changes in the labor market and employment regulation must also be made for formal employment to increase. Donors might consider designing programs to boost labor market flexibility and efficiency to help Ghana effect these changes.

⁵⁶ UNDP. The Ghana Human Development Report 2007, p 28.

⁵⁷ UNDP. The Ghana Human Development Report 2007, p 175.

⁵⁸ Ibid.

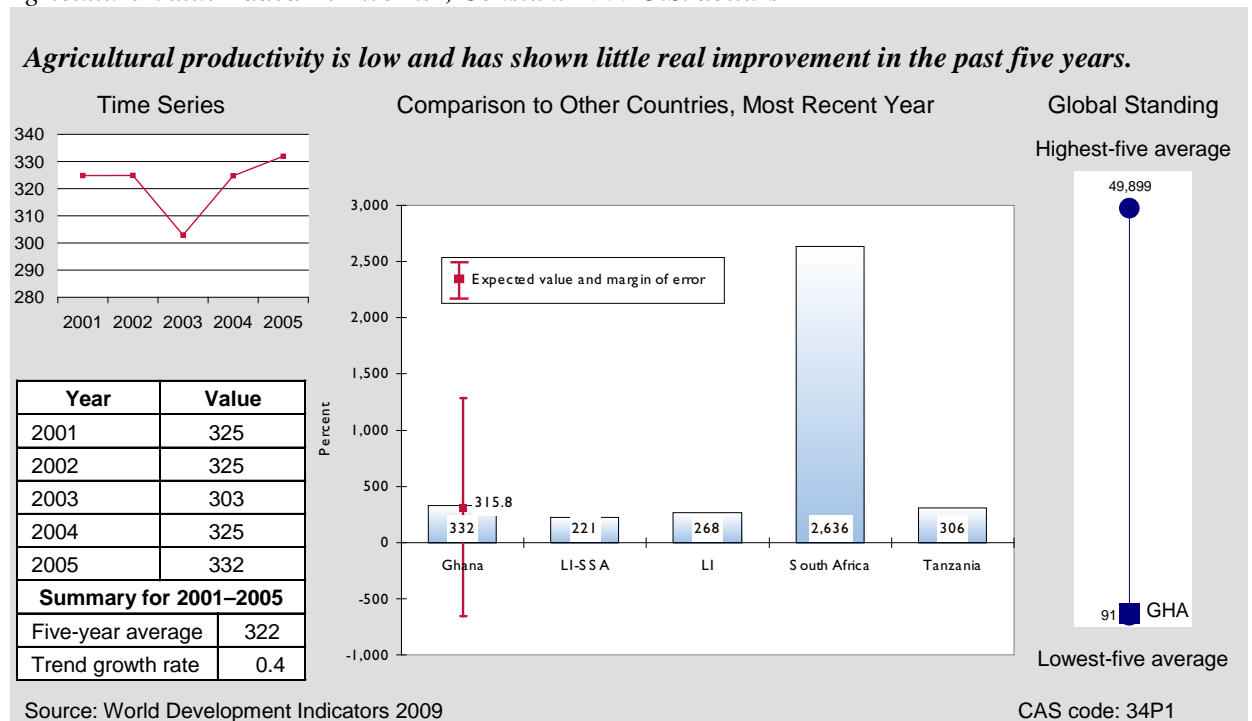
AGRICULTURE

As noted earlier (see Economic Structure), 56 percent of Ghanaians work in the agriculture sector, yet agriculture accounts for just one-third of GDP. Though better than in many other low-income African countries, labor productivity in the sector is extremely low compared to the productivity of the rest of the economy. Addressing this problem will be critical to reducing poverty (46 percent of crop farmers live below the national poverty line), improving food security (the FAO classifies Ghana as a food-deficit country), and boosting GDP.⁵⁹

Between 2003 and 2007 total agriculture value-added increased at an average annual rate of 4 percent. This is in line with the expected agriculture value-added growth rate of 3.8 percent for a country with Ghana's characteristics and with growth rates in South Africa and Tanzania (4.8 percent in 2007 and 3.8 percent in 2006, respectively). But at this pace, growth in agriculture value added barely exceeds the rate of expansion of the agricultural labor force, as figures on productivity per agricultural worker suggest. In 2005 (the latest year available), an agricultural worker in Ghana generated \$332 of value added (in constant 2000 prices). Though far higher than the LI-SSA median of \$221 and on par with the \$306 generated by each agricultural worker in Tanzania, productivity has hardly increased in recent years (Figure 4-5).

Figure 4-5

Agriculture Value Added Per Worker, Constant 2000 U.S. dollars



The stagnant performance in agriculture is evident in both crop and livestock production. FAO agricultural output index data show that crop production grew at an average annual rate of 3.4 percent in the five years to 2005, and livestock production increased by an average of just

⁵⁹ UNDP. Ghana Human Development Report 2007. Ghana.

2.8 percent in the same period. Cereal yields were also stagnant, down marginally from 1,349 kilograms per hectare in 2002 to 1,334 kilograms in 2006. These yields are in line with the expected yield of 1,347 kilograms per hectare for an economy with Ghana's characteristics and with Tanzania's yield of 1,514 per hectare. However, they are less than half the yield of 3,143 per hectare for South Africa.

All these indicators point to severe underdevelopment in agriculture, particularly for the 75 percent of agricultural workers who are smallholders at the subsistence level.⁶⁰ There are a number of underlying causes. First, weather conditions are unpredictable. Second, agricultural techniques are poor. In 2005 (the latest year available) Ghana's fertilizer consumption amounted to just 7,540 grams of fertilizer per hectare of arable land, better than the LI-SSA average of 4,930 grams but far below the consumption levels in South Africa and Tanzania the same year (45,140 grams and 10,370 grams, respectively). This is partially a result of the extreme difficulty experienced by smallholder farmers in obtaining credit to buy fertilizer and other inputs. Third, poor infrastructure links between rural and urban areas and between Ghana and export markets often makes commercial sale of produce uneconomic. This in turn results in food shortages in urban areas even when crops are plentiful in rural ones, or discourages farmers from producing for export. And lack of efficient infrastructure facilities and systems for postharvest handling and storage further limits returns and raises risks of agriculture.

Local business leaders also assert that the agriculture policy regime—which most significantly affects production of cash crops such as cocoa, cotton, coffee, oil palm, tobacco leaves, cola, rubber, and cashews—is constraining agricultural productivity and can be significantly improved. According to the World Economic Forum, on an index of agricultural policy costs using a scale from 1 (excessively burdensome) to 7 (well balanced), Ghana received a score of 3.8 in 2008. By this measure, agricultural policy in Ghana is on par with policy in LI-SSA countries as a group and in Tanzania but is perceived to be much poorer than the policy regime in South Africa (score of 4.8). Recent analysis of commercial, legal, and institutional factors in Ghana's agricultural sector has identified an extensive agenda of specific policy reforms needed.⁶¹ Expanding credit for agriculture, including the legal framework for creating collateral and for enforcing loan contracts, is one reform that should get high priority. Another is creating an efficient institutional and regulatory environment for domestic and international trade in agricultural products.

All indicators show that Ghana's agriculture, dominated by small-scale family farming and highly vulnerable to unpredictable weather patterns, is characterized by very low productivity, poor returns, and stagnant long-term performance. In the short to medium term, donors might emphasize supporting programs that enhance agricultural productivity by improving access to modern farming techniques and credit for smallholders and assisting the government in reforming its agricultural policy regime. The objective should be to help farmers achieve productivity gains that make possible the move from subsistence to commercial operations. In the longer term,

⁶⁰ Ibid.

⁶¹ *AgCLIR: Ghana, Commercial Legal and Institutional Reform, Diagnostic of Ghana's Agricultural Sector, Agenda for Action*, prepared at USAID/Ghana's request by Booz Allen Hamilton in November 2008.

however, along with striving for a significantly more productive and commercially oriented agriculture sector, Ghana should aim to transform the economy further by attracting investment and creating jobs in industry and service activities outside agriculture. Many of these activities in fact may be in industries (e.g., food processing) or services (e.g., transportation) related to Ghana's agricultural output. But overall growth in the nonagricultural economy will in any case be essential to absorb the flow of labor exiting the farm sector that will accompany any sustained, widespread improvement in Ghana's agricultural productivity.

Appendix A. CAS Methodology

CRITERIA FOR SELECTING INDICATORS

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

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

When Level I indicators suggest weak performance, we review a limited set of *diagnostic supporting indicators*. These Level II indicators provide additional details, or shed light on *why* the primary indicators may be weak. For example, if economic growth is poor, one can examine data on investment and productivity as diagnostic indicators. If a country performs poorly on educational achievement, as measured by the youth literacy rate, one can examine determinants such as expenditure on primary education, and the pupil–teacher ratio.¹

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

¹ Deeper analysis of the topic using more detailed data (Level III) is beyond the scope of this series.

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 Ghana relative to the average for countries in the same income group and region—in this case, low income countries in Sub-Saharan Africa.² For added perspective, three other comparisons are examined: (1) the global average for this income group; (2) respective values for two comparator countries approved by the Ghana country desk; and (3) the average for the five best- and five worst-performing countries globally. Most comparisons are framed in terms of values for the latest year of data from available sources. Five-year trends are also taken into account when this information sheds light on the performance assessment.³

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.⁴ This approach has three advantages. First, the benchmark is customized to Ghana's specific level of income. Second, the comparison does not depend on the exact choice of reference group. Third, the methodology allows the quantification of the margin of error and establishment of a "normal band" for a country with Ghana's characteristics. An observed value falling outside this band on the side of poor performance signals a serious problem.⁵

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

² Income groups as defined by the World Bank for 2008. In this report, the average is defined in terms of the median so that values are not distorted by outliers.

³ 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.

⁴ 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. When estimates are obtained for the parameters a , b , and c , the predicted value for the Ghana is computed by plugging in Ghana-specific values for PCI and Region. Where applicable, the regression also controls for population size and petroleum exports (as a percentage of GDP).

⁵ This report uses a margin of error of 0.68 times the standard error of estimate (adjusted for heteroskedasticity, where appropriate). With this value, 25 percent of the observations should fall outside the normal range on the side of poor performance (and 25 percent on the side of good performance). Some regressions produce a very large standard error, giving a "normal band" that is too wide to provide a discerning test of good or bad performance.

STANDARD CAS INDICATORS

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

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

Indicator	Level	MDG, MCA, or EcGov ^a
Structure of merchandise exports	II	
Trade policy index (0 for poor to 100 for excellent)	II	MCA, EcGov
Ease of trading across borders ranking	II	EcGov
Economic Infrastructure		
Internet users per 100 people	I	MDG
Logistics performance index, infrastructure	I	
Telephone density, fixed line and mobile	I	MDG
Overall infrastructure quality index (1 for poor to 7 for excellent)	I	EcGov
Quality of infrastructure—railroads, ports, air transport, and electricity	II	
Roads paved, % total roads	II	
Science and Technology		
FDI and technology transfer index (1 for poor to 7 for excellent)	I	
Availability of scientists and engineers index (1 for poor to 7 for excellent)	I	
Science and technology journal articles per million people	I	
IPR protection index (1 for poor to 7 for excellent)	I	
Health		
HIV prevalence	I	
Life expectancy at birth	I	
Maternal mortality rate	I	MDG
Access to improved sanitation	II	MDG
Access to improved water source	II	MDG
Births attended by skilled health personnel	II	MDG
Child immunization rate	II	MCA
Prevalence of child malnutrition (weight for age)	II	
Public health expenditure, % GDP	II	MCA, EcGov
Education		
Net primary enrollment rate, male, female, total	I	MDG
Primary completion rate, total	I	
Youth literacy rate, male, female, total	I	
Net secondary enrollment rate	I	
Gross tertiary enrollment rate	I	
Education expenditure, primary, % GDP	II	MCA, EcGov
Expenditure per student, % GDP per capita—primary, secondary, tertiary	II	EcGov
Pupil-teacher ratio, primary school	II	
Employment and Workforce		
Labor force participation rate, total	I	
Rigidity of employment index (0 for minimum rigidity to 100 for maximum)	I	EcGov
Size and growth of the labor force	I	
Unemployment rate	I	
Economically active children, % children ages 7-14	I	
Firing costs, weeks of wages	II	EcGov

Indicator	Level	MDG, MCA, or EcGov ^a
Agriculture		
Agriculture value added per worker	I	
Cereal yield	I	
Growth in agricultural value-added	I	
Fertilizer consumption (100 grams per hectare of arable land)	II	
Agricultural policy costs index (1 for poor to 7 for excellent)	II	EcGov
Crop production index	II	
Livestock production index	II	

^a Level I = primary performance indicators, Level II = supporting diagnostic indicators

^b 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.

Appendix B. Data Supplement

This supplement presents a full tabulation of the data and international benchmarks examined for this report, along with technical notes on the data sources and definitions.

	Growth Performance							
	Statistical Capacity Indicator, 0 (Doesn't meet criteria) - 100 (Meets all criteria)	Per capita GDP (PPP), U.S. Dollars (PPP)	Per capita GDP, Current U.S. Dollars	Real GDP Growth, Percent change	Growth of Labor Productivity, Percent change	Investment Productivity, Incremental Capital-Output Ratio (ICOR), Ratio, Capital investment : GDP growth	Gross Fixed Investment, Percent GDP	Gross Fixed Private Investment, Percent GDP
Indicator Number	11P0	11P1	11P2	11P3	11S1	11S2	11S3	11S4
Ghana Data								
<i>Latest Year (T)</i>	2008	2008	2008	2008	2006	2007	2007	2007
Value Year T	57	1,520	716	7.3	3.7	5.0	32.9	19.5
Value Year T-1	53	1,424	684	6.1	3.1	4.8	32.9	18.0
Value Year T-2	49	1,341	594	6.4	2.9	5.0	29.0	17.9
Value Year T-3	56	1,251	513	5.9	2.7	5.2	28.4	
Value Year T-4	48	1,176	436	5.6	0.1	5.2	22.9	
Average Value, 5 year	52.6	1,343	589	6.3	2.5	5.0	29.2	
Growth Trend	2.9	6.4	12.8	5.7	84.8	-1.8	8.7	
Benchmark Data								
Regression Benchmark	66.6			5.2	-23.6		21.7	9.3
Lower Bound	60.2			3.4	-30.3		17.7	6.9
Upper Bound	73.1			7.0	-16.9		25.8	11.6
<i>Latest Year South Africa</i>	2008	2008	2008	2008	2006	2007	2007	2001
South Africa Value Latest Year	77	10,119	5,693	3.1	4.1	3.8	18.8	17.2
<i>Latest Year Tanzania</i>	2008	2007	2007	2008	2006	2006	2006	
Tanzania Value Latest Year	61	1,208	400	7.5	4.2	2.6	16.6	
LI-SSA	57.0	784	258	4.0	1.2	4.3	17.5	
LI	57.3	1,140	393	6.2	2.6	4.2	20.4	
High Five Avg.	91.1	50,231	47,058	14.3	14.1	42.2	51.3	
Low Five Avg.	24.6	472	160	0.3	-3.0	-160.5	9.5	

	Poverty and Inequality					
	Human Poverty Index, 0 (no deprivation) - 100 (high deprivation)	Income Share, Poorest 20%, Percent	Population Living on Less Than \$1.25 PPP per Day, Percent	Poverty Headcount, National Poverty Line, Percent	PRSP Status, N/A	Population Below Minimum Dietary Energy Consumption, Percent
Indicator Number	12P1	12P2	12P3	12P4	12P5	12S1
Ghana Data						
<i>Latest Year (T)</i>	2008	2006	2003	2005/06		2002
Value Year T	28.0	5.2	35.8	28.5		12.0
Value Year T-1	32.3					
Value Year T-2						
Value Year T-3			39.5			
Value Year T-4	33.1					
Average Value, 5 year						
Growth Trend						
Benchmark Data						
Regression Benchmark	43.3	5.9	38.9	39.7		25.9
Lower Bound	37.6	5.1	34.5	33.8		20.0
Upper Bound	49.0	6.6	43.3	45.6		31.9
<i>Latest Year South Africa</i>	2008	2000	2000			
South Africa Value Latest Year	22.6	3.5	10.7			
<i>Latest Year Tanzania</i>	2008	2000	2000	2001		2002
Tanzania Value Latest Year	32.9	7.3	57.8	35.7		44.0
LI-SSA	40.3					33.5
LI	37.6					31.5
High Five Avg.	56.6			55.1		67.0
Low Five Avg.	2.5			15.2		2.5

	Economic Structure					
	Labor Force Structure (Employment in agriculture), Percent	Labor Force Structure (Employment in industry), Percent	Labor Force Structure (Employment in services), Percent	Output structure (Agriculture, value added), Percent GDP	Output structure (Industry, value added), Percent GDP	Output structure (Services, etc., value added), Percent GDP
Indicator Number	13P1a	13P1b	13P1c	13P2a	13P2b	13P2c
Ghana Data						
<i>Latest Year (T)</i>	2005/06	2005/06	2005/06	2007	2007	2007
Value Year T	56.0	14.3	29.6	36.3	25.3	38.4
Value Year T-1				38.0	25.8	36.3
Value Year T-2				37.5	25.1	37.4
Value Year T-3				38.0	24.7	37.3
Value Year T-4				36.5	25.2	38.2
Average Value, 5 year				37.2	25.2	37.5
Growth Trend				-0.2	0.5	-0.2
Benchmark Data						
Regression Benchmark	63.0	8.8	29.5	26.1	22.7	46.4
Lower Bound	56.6	6.5	23.6	21.6	17.7	40.6
Upper Bound	69.4	11.1	35.4	30.5	27.6	52.1
<i>Latest Year South Africa</i>	2003	2003	2003	2007	2007	2007
South Africa Value Latest Year	10.3	24.5	65.1	2.7	30.9	66.4
<i>Latest Year Tanzania</i>	2001	2001	2001	2006	2006	2006
Tanzania Value Latest Year	82.1	2.6	15.3	45.3	17.4	37.3
LI-SSA				36.4	19.1	44.2
LI				32.7	25.0	45.1
High Five Avg.	65.1	38.9	80.4	56.9	70.1	85.3
Low Five Avg.	0.2	9.1	24.2	0.3	9.4	18.0

	Demography and Environment								
	Adult Literacy Rate, Percent	Youth Dependency Rate, Ratio Youth : Working Age Population	Elderly Dependency Rate, Ratio Elderly : Working Age Population	Environmental Performance Index, 0 (Very poor performance) - 100 (Very good performance)	Population Size, Million	Population Growth, Annual percent change	Population Living in Urban Areas, Percent	Resource Depletion, Percent GNI	
Indicator Number	14P1	14P2a	14P2b	14P3	14P4a	14P4b	14P5	14P6	
Ghana Data									
<i>Latest Year (T)</i>	2007	2007	2007	2008	2007	2007	2007	2006	
Value Year T	65.0	65.7	6.4	70.8	23.5	2.0	49.3	9.3	
Value Year T-1	52.9	66.8	6.3		23.0	2.1	48.5	7.7	
Value Year T-2		68.0	6.3	63.1	22.5	2.1	47.8	8.4	
Value Year T-3		69.3	6.2		22.1	2.2	47.0	8.4	
Value Year T-4		70.5	6.2		21.6	2.3	46.3	8.0	
Average Value, 5 year		68.1	6.3		22.5	2.1	47.8	8.3	
Growth Trend		-1.8	0.7		2.1	-3.5	1.6	2.1	
Benchmark Data									
Regression Benchmark	54.8	77.2	6.1		23.1	2.3	32.3	3.4	
Lower Bound	43.6	72.4	4.8		22.9	1.9	24.8	-0.8	
Upper Bound	66.0	81.9	7.3		23.2	2.6	39.7	7.7	
<i>Latest Year South Africa</i>	2007	2007	2007	2008	2007	2007	2007	2006	
South Africa Value Latest Year	88.0	49.8	7.0	69.0	47.6	0.4	60.3	6.7	
<i>Latest Year Tanzania</i>	2007	2007	2007	2008	2007	2007	2007	2006	
Tanzania Value Latest Year	72.3	84.1	5.7	63.9	40.4	2.4	25.1	5.0	
LI-SSA		82.4	5.8	51.6	11.7	2.7	33.5	1.1	
LI		79.1	5.9	54.8	12.0	2.4	30.4	2.8	
High Five Avg.	98.4	97.7	28.7	89.1	626.6	4.0	100.0	89.8	
Low Five Avg.	45.8	19.9	2.8	37.4	0.0	-0.9	12.4		

	Gender							
	Primary Completion Rate, Male, Percent	Primary Completion Rate, Female, Percent	Gross Enrollment Ratio, All Levels of Education, Male, Percent	Gross Enrollment Ratio, All Levels of Education, Female, Percent	Life Expectancy, Male, Years	Life Expectancy, Female, Years	Labor Force Participation Rate, Male, Percent	Labor Force Participation Rate, Female, Percent
Indicator Number	15P1a	15P1b	15P2a	15P2b	15P3a	15P3b	15P4a	15P4b
Ghana Data								
<i>Latest Year (T)</i>	2005	2005	2007	2007	2007	2007	2007	2007
Value Year T	73.4	67.8	58.3	54.5	59.6	60.4	73.3	71.6
Value Year T-1			54.9	50.8	59.3	60.1	72.6	72.0
Value Year T-2	64.4	66.1	52.7	47.8	59.0	59.8	73.3	72.0
Value Year T-3			49.4	44.1			73.9	72.0
Value Year T-4	66.5	59.6	46.3	42.6			74.6	72.0
Average Value, 5 year			52.3	48.0			73.5	71.9
Growth Trend			5.6	6.4			-0.5	-0.1
Benchmark Data								
Regression Benchmark			54.3	46.3	53.6	57.0	89.0	
Lower Bound			49.0	39.8	50.5	54.1	86.1	
Upper Bound			59.5	52.8	56.7	60.0	92.0	
<i>Latest Year South Africa</i>	2005	2005	2005	2005	2007	2007	2007	2007
South Africa Value Latest Year	92.2	92.1	76.3	77.3	49.0	52.0	60.2	47.0
<i>Latest Year Tanzania</i>	2007	2007	2006	2006	2007	2007	2007	2007
Tanzania Value Latest Year	87.3	83.5	55.4	53.1	51.4	53.6	90.3	87.0
LI-SSA	51.7	44.2	46.8	42.2	48.9	50.3	88.6	
LI	59.9	47.6	53.4	47.6	53.6	56.0	86.0	
High Five Avg.			103.0	109.9	78.8	84.8	94.5	
Low Five Avg.			31.6	22.3	39.3	40.0	64.9	

	Fiscal and Monetary Policy										
	Government Expenditure, Percent GDP	Government Revenue, excluding grants, Percent GDP	Money Supply Growth, Percent change	Inflation Rate, Annual Percent	Overall Budget Balance, Including Grants, Percent GDP	Composition of Government Expenditure (Wages and salaries), Percent	Composition of Government Expenditure (Goods and services), Percent	Composition of Government Expenditure (Interest payments), Percent	Composition of Government Expenditure (Subsidies and other current transfers), Percent	Composition of Government Expenditure (Capital Expenditure), Percent	Composition of Government Expenditure (Other Expenditure), Percent
Indicator Number	21P1	21P2	21P3	21P4	21P5	21S1a	21S1b	21S1c	21S1d	21S1e	21S1f
Ghana Data											
<i>Latest Year (T)</i>	2008	2008	2008	2008	2008	2008	2008	2008	2008	2008	2008
Value Year T	41.0	24.0	40.2	16.5	-14.5	24.8	8.1	8.5	18.4	30.9	9.3
Value Year T-1	37.3	22.8	35.9	10.7	-9.2	24.9	9.9	7.7	18.7	28.6	10.2
Value Year T-2	34.4	22.7	38.8	10.2	-7.5	28.4	10.7	9.8	15.0	28.6	7.6
Value Year T-3	30.7	21.9	13.7	15.1	-7.5	26.7	11.1	11.7	11.2	32.7	6.6
Value Year T-4	33.3	21.9	26.0	12.6	-4.9	26.5	9.0	13.2	13.2	30.8	7.1
Average Value, 5 year	35.3	22.7	30.9	13.0	-8.7	26.2	9.8	10.2	15.3	30.3	8.1
Growth Trend	6.1	2.2	18.3	2.0	-23.7	-2.0	-3.3	-13.1	11.6	-1.3	9.8
Benchmark Data											
Regression Benchmark		15.9	18.7	7.1	-4.0						
Lower Bound		12.1	10.6	4.7	-7.0						
Upper Bound		19.7	26.7	9.4	-1.1						
<i>Latest Year South Africa</i>	2008	2008	2007	2008	2008	2007/08	2007/08	2007/08	2007/08	2007/08	2007/08
South Africa Value Latest Year	27.1	26.6	23.6	11.5	-0.6	30.9	13.7	9.4	41.4	4.7	0.0
<i>Latest Year Tanzania</i>	2008	2008	2007	2008	2008	2007/08	2007/08	2007/08	2007/08	2007/08	2007/08
Tanzania Value Latest Year	21.0	14.6	25.2	10.3	0.0	21.7	38.3	5.2	.	34.8	0.0
LI-SSA			19.7	8.5							
LI		13.0	19.6	10.1	-2.7						
High Five Avg.		44.4	195.9	26.2	7.9						
Low Five Avg.		8.7	-0.4	1.4	-8.3						

* global high excluding Zimbabwe

Fiscal and Monetary Policy (cont'd)											
	Composition of Government Revenue (Taxes on income, profits and capital gains), Percent	Composition of Government Revenue (Taxes on goods and services), Percent	Composition of Government Revenue (Taxes on international trade), Percent	Composition of Government Revenue (Social contributions), Percent	Composition of Government Revenue (Other taxes), Percent	Composition of Government Revenue (Grants and other revenue), Percent	Composition of Money Supply Growth (Domestic credit to the public sector), Percent	Composition of Money Supply Growth (Domestic credit to the private sector), Percent	Composition of Money Supply Growth (Domestic credit to non-financial public enterprises), Percent	Composition of Money Supply Growth (Net foreign assets, reserves), Percent	Composition of Money Supply Growth (Other items net), Percent
Indicator Number	21S2a	21S2b	21S2c	21S2d	21S2e	21S2f	21S3a	21S3b	21S3c	21S3d	21S3e
Ghana Data											
<i>Latest Year (T)</i>	2008	2008	2008	2008	2008	2008	2008	2008	2008	2008	2008
Value Year T	26.1	41.8	15.0	6.6	1.4	26.1	54.0	79.4		-14.9	-18.6
Value Year T-1	25.8	42.1	15.8	7.1		32.7	45.3	105.9		21.9	-73.1
Value Year T-2	28.1	41.7	21.2	5.4		28.4	99.7	62.1		52.1	-113.8
Value Year T-3	28.6	40.7	17.8	5.0		30.0	18.5	111.1		45.3	-74.8
Value Year T-4	28.1	42.5	21.0	2.4		32.0	93.5	60.2		62.6	-116.3
Average Value, 5 year	27.3	41.8	18.1	5.3		29.9	62.2	83.7		33.4	-79.3
Growth Trend	-2.5	0.0	-7.9	23.7		-3.2	-2.0	5.1			36.9
Benchmark Data											
Regression Benchmark	22.9	24.8	23.4	2.4	2.0	22.9					
Lower Bound	17.2	16.8	16.9	-2.4	0.1	16.2					
Upper Bound	28.7	32.8	29.9	7.2	3.8	29.6					
<i>Latest Year South Africa</i>	2007/08	2007/08	2007/08	2007/08	2007/08	2007/08	2007	2007	2007	2007	2007
South Africa Value Latest Year	59.0	34.1	3.7	0.0	3.3	0.0	-0.9	97.0	2.3	9.5	-5.5
<i>Latest Year Tanzania</i>	2007/08	2007/08	2007/08	2007/08	2007/08	2007/08					
Tanzania Value Latest Year	26.9	46.9	8.1	0.0	10.6	51.3					
LI-SSA											
LI	14.0	30.8	20.4		3.6	30.7					
High Five Avg.	54.5	62.6	41.4	46.3	16.7	77.0					
Low Five Avg.	1.8	4.7	-1.6	0.4	0.0	4.0					

	Business Environment										
	Control of Corruption Index, -2.5 (Very poor performance) to +2.5 (Excellent performance)	Ease of Doing Business Index, Index Rank (1 - 181)	Rule of Law Index, -2.5 (Very poor performance) to +2.5 (Excellent performance)	Regulatory Quality Index, -2.5 (Very poor performance) to +2.5 (Excellent performance)	Government Effectiveness Index, -2.5 (Very poor performance) to +2.5 (Excellent performance)	Cost of Starting a Business % GNI per Capita, Percent GNI per Capita	Procedures to Enforce a Contract, Procedures	Procedures to Register Property, Procedures	Procedures to Start a Business, Procedures	Time to Enforce a Contract, Days	
Indicator Number	22P1	22P2	22P3	22P4	22P5	22S1	22S2	22S3	22S4	22S5	
Ghana Data											
Latest Year (T)	2007	2009	2007	2007	2007	2009	2009	2009	2009	2009	
Value Year T	-0.17	87	-0.08	0.00	-0.04	32.7	36	5	9	487	
Value Year T-1	-0.10	82	-0.08	-0.02	-0.02	41.4	36	5	11	487	
Value Year T-2	-0.36		-0.21	-0.11	-0.10	49.6	37	6	12	552	
Value Year T-3	-0.32		-0.29	-0.32	-0.25	58.6	38	6	12	552	
Value Year T-4	-0.31		-0.19	-0.33	-0.27	65.1	38	6	12	552	
Average Value, 5 year	-0.25		-0.17	-0.16	-0.14	49.5	37	6	11	526	
Growth Trend	24.19		29.99	-17.25	60.78	-17.2	-1.6	-5.5	-6.6	-3.8	
Benchmark Data											
Regression Benchmark	-0.60	130.8	-0.67	7.09	-0.70	106.5	37.7	5.8	10.4	558.6	
Lower Bound	-0.80	110.3	-0.92	7.05	-0.94	72.1	34.5	4.7	8.8	403.0	
Upper Bound	-0.39	151.2	-0.42	7.14	-0.46	141.0	40.9	7.0	11.9	714.2	
Latest Year South Africa	2007	2009	2007	2007	2007	2009	2009	2009	2009	2009	
South Africa Value Latest Year	0.32	32	0.15	0.48	0.72	6.0	30	6	6	600	
Latest Year Tanzania	2007	2009	2007	2007	2007	2009	2009	2009	2009	2009	
Tanzania Value Latest Year	-0.45	127	-0.45	-0.37	-0.42	41.5	38	9	12	462	
LI-SSA	-0.74	158	-0.85	-0.78	-0.81	151.8	39.5	6.0	10.3	540.0	
LI	-0.87	152	-0.93	-0.83	-0.85	103.8	39.5	6.0	10.0	517.5	
High Five Avg.	2.39	179	1.96	1.83	2.17	574.0	53.7	13.9	18.5	1,611.6	
Low Five Avg.	-1.57	3	-1.93	-2.28	-1.85	0.5	22.9	1.6	2.4	182.6	

	Business Environment (cont'd)				
	Time to Register Property, Days	Time to Start a Business, Days	Total Tax Payable by Business, Percent operating profit	Business Costs of Crime and Violence, 1 (Significant costs) - 7 (No significant costs)	Senior Manager Time Spent Dealing with Government Regulations, Percent
Indicator Number	22S6	22S7	22S8	22S9	22S10
Ghana Data					
<i>Latest Year (T)</i>	2009	2009	2009	2008	2007
Value Year T	34	34	32.7	4.9	4.0
Value Year T-1	34	42	32.9		
Value Year T-2	169	81	36.1		
Value Year T-3	169	81	40.1		
Value Year T-4	169	85			
Average Value, 5 year	115	65			
Growth Trend	-48.1	-24.9			
Benchmark Data					
Regression Benchmark	92.7	35.3	42.1	3.8	6.3
Lower Bound	49.9	12.2	30.0	3.3	4.0
Upper Bound	135.5	58.5	54.2	4.3	8.6
<i>Latest Year South Africa</i>	2009	2009	2009	2008	2007
South Africa Value Latest Year	24	22	34.2	1.8	6.0
<i>Latest Year Tanzania</i>	2009	2009	2009	2008	2006
Tanzania Value Latest Year	73	29	45.1	4.4	4.0
LI-SSA	77.0	39.3	47.4	3.7	
LI	74.7	41.5	46.0	3.8	
High Five Avg.	485.8	287.7	243.1	6.6	20.0
Low Five Avg.	2.1	4.3	11.5	2.1	2.5

	Financial Sector							
	Domestic Credit to Private Sector, Percent GDP	Interest Rate Spread, Percent	Money Supply (M2), Percent GDP	Stock Market Capitalization Rate, Percent GDP	Credit Information Index, 0 (Poor) - 6 (Excellent)	Legal Rights of Borrowers and Lenders, 0 (Very poor performance) - 10 (Excellent)	Real Interest Rate, Percent	Number of Microfinance Borrowers, Borrowers
Indicator Number	23P1	23P2	23P3	23P4	23P5	23S1	23S2	23S3
Ghana Data								
<i>Latest Year (T)</i>	2008	2007	2008	2008	2009	2009	2008	2007
Value Year T	34.8	15.3	46.8	21.1	0	7	8.1	315,000
Value Year T-1	29.7	16.8	41.1	15.8	0	7	13.5	
Value Year T-2	22.1	17.7	36.8	25.4	0	6	15.6	
Value Year T-3	18.6		31.3	15.5	0	6	12.7	
Value Year T-4	17.4		33.4	29.8	0	6		
Average Value, 5 year	24.5		37.9	21.5	0	6		
Growth Trend	18.6		9.5	-6.7	0	5		
Benchmark Data								
Regression Benchmark	16.5	9.7	26.0	37.2	1.6	4.3	9.6	
Lower Bound	5.5	7.7	12.9	10.1	-0.3	3.0	5.7	
Upper Bound	27.5	11.8	39.2	64.4	3.6	5.6	13.6	
<i>Latest Year South Africa</i>	2007	2007	2007	2007	2009	2009	2007	2007
South Africa Value Latest Year	84.5	4.0	63.9	300.3	6	9	4.7	632,000
<i>Latest Year Tanzania</i>	2007	2007	2007	2006	2009	2009	2007	
Tanzania Value Latest Year	14.3	7.3	26.0	3.8	0	8	9.5	
LI-SSA	11.1	13.3	22.9		0.8	3.0	11.6	
LI	13.1	11.5	26.0	12.4	0.8	3.0	8.6	
High Five Avg.	203.4	35.8	200.9	219.8	6.0	9.8	35.3	
Low Five Avg.	2.0	1.8	8.4	0.6		0.4	-20.7	

	External Sector										
	External Aid, Percent GNI	Current Account Balance, Percent GDP	Debt Service ratio, Percent Exports	Exports Growth, Goods and Services, Percent change	Foreign Direct Investment, Percent GDP	Gross International Reserves, Months of Imports	Gross Private Capital Inflows, Percent GDP	Present Value of Debt, Percent GNI	Remittance Receipts, Percent Exports	Total Trade, Percent GDP	Trade in Services, Percent GDP
Indicator Number	24P1	24P2	24P3	24P4	24P5	24P6	24P7	24P8	24P9	24P10	24P11
Ghana Data											
<i>Latest Year (T)</i>	2007	2008	2008	2007	2008	2008	2007	2007	2007	2008	2008
Value Year T	7.7	-19.3	4.2	2.6	13.2	2.2	10.9	29.9	2.0	121.4	25.0
Value Year T-1	9.3	-12.0	3.1	10.3	5.7	2.7		25.4	2.1	107.4	25.8
Value Year T-2	10.9	-9.9	4.9	9.3	3.4	2.7	1.4	64.0	2.5	105.4	23.0
Value Year T-3	16.2	-8.3	7.0	11.4	1.4	2.7	1.6	81.5	2.4	104.6	22.2
Value Year T-4	13.0	-4.0	6.9	-6.1	1.6	.	1.8	101.5	2.0	97.7	19.8
Average Value, 5 year		-10.7		5.5	5.0			60.5	2.2	107.3	23.2
Growth Trend		-35.2			56.9			-36.1	-2.5	4.6	6.1
Benchmark Data											
Regression Benchmark	6.1	-5.6	10.2	4.7	2.1	4.3	2.2	16.6	10.1	57.8	12.4
Lower Bound	1.1	-10.9	5.2	-4.6	-0.6	2.9	-0.2	-5.2	-0.7	40.8	6.3
Upper Bound	11.1	-0.3	15.3	14.0	4.7	5.8	4.7	38.4	20.9	74.9	18.4
<i>Latest Year South Africa</i>	2006	2008	2006	2007	2007	2008	2005	2006	2006	2007	2007
South Africa Value Latest Year	0.3	-7.4	3.4	7.0	2.0	3.7	0.2	15.5	25.7	64.3	10.9
<i>Latest Year Tanzania</i>	2006	2008	2006	2006	2006	2008		2006	2007	2006	2006
Tanzania Value Latest Year	12.9	-9.7	3.2	-0.2	3.3	5.7		16.4	0.2	49.7	19.3
LI-SSA	14.9	-5.5	10.2	6.1	1.8	3.9		18.8	4.9	56.6	16.2
LI	11.6	-4.7	7.9	9.1	2.2	3.6	1.1	25.6	5.2	67.6	15.9
High Five Avg.	47.2	23.8	38.2		75.9	15.8	197.8	374.7	185.4	294.4	98.6
Low Five Avg.	0.0	-29.3	0.7		-1.7	0.3	-4.2	4.9	0.1	28.5	4.8

External Sector (Cont'd)											
	Concentration of Exports, Percent	Inward FDI Potential Index, 0 (Very poor performance) to 1 (Excellent performance)	Net Barter Terms of Trade, Index: 2000 = 100	Real Effective Exchange Rate (REER), Index: 2000 = 100	Structure of Merchandise Exports (Agricultural raw materials exports), Percent	Structure of Merchandise Exports (Fuel exports), Percent	Structure of Merchandise Exports (Manufactures exports), Percent	Structure of Merchandise Exports (Ores and metals exports), Percent	Structure of Merchandise Exports (Food exports), Percent	Trade Policy Index, 0 (Very poor) - 100 (Excellent)	Ease of Trading Across Borders Ranking, Index Rank (1 - 181)
Indicator Number	24S1	24S2	24S3	24S4	24S5a	24S5b	24S5c	24S5d	24S5e	24S6	24S7
Ghana Data											
<i>Latest Year (T)</i>	2008	2006	2008	2008	2006	2006	2006	2006	2006	2009	2009
Value Year T	71.5	0.1	123.1	118.1	4.0	0.7	30.9	3.1	61.0	63.0	76
Value Year T-1	69.9	0.1	116.9	108.2	3.1	5.6	23.6	1.2	66.4	63.0	63
Value Year T-2	68.0	0.1	105.2	106.6	5.0	3.3	12.1	2.2	77.1	63.0	
Value Year T-3	36.0	0.1	100.5	99.5	9.9	0.1	14.4	3.9	71.6	55	
Value Year T-4	67.4	0.1	107.9	99.5						66	
Average Value, 5 year	62.6	0.1	110.7	106.4						62.1	
Growth Trend	7.8	-1.8	4.1	4.3						0.4	
Benchmark Data											
Regression Benchmark	58.8	0.1	102.3		55.6	3.3	29.4	1.8	26.2	68.5	127.2
Lower Bound	48.8	0.1	88.0		55.6	-1.8	17.1	-4.0	12.3	63.4	104.1
Upper Bound	68.8	0.1	116.5		55.6	8.4	41.6	7.6	40.1	73.5	150.4
<i>Latest Year South Africa</i>	2006	2006	2008	2008	2006	2006	2006	2006	2006	2009	2009
South Africa Value Latest Year	15.3	0.2	115.1	77.3	1.8	9.4	53.0	28.7	7.1	74.8	147
<i>Latest Year Tanzania</i>	2006	2006	2008	2008	2006	2006	2006	2006	2006	2009	2009
Tanzania Value Latest Year	45.5	0.1	51.2	66.9	10.7	0.2	18.4	17.5	53.2	75.6	103
LI-SSA	65.8	0.1	101.2		4.3	1.1	15.6	2.4	43.2	64.9	148
LI	61.4	0.1	99.0	93.9	4.6	2.1	15.7	1.9	25.9	65.3	144.5
High Five Avg.	97.5	0.5	116.7	144.5						87.9	178.8
Low Five Avg.	7.3	0.1	85.2	59.1						15.3	3.0

	Economic Infrastructure								
	Internet Users, Users per 100 people	Logistics Performance Index - Infrastructure, 1 (Poor) - 5 (Excellent)	Telephone Density, Fixed Line and Mobile, Telephones per 100 people	Overall Infrastructure Quality, 1 (Poor) - 7 (Excellent)	Quality of Infrastructure - Air Transport Infrastructure Index, 1 (Poor) - 7 (Excellent)	Quality of Infrastructure - Port Infrastructure Quality Index, 1 (Poor) - 7 (Excellent)	Quality of Infrastructure - Rail Development Index, 1 (Poor) - 7 (Excellent)	Quality of Infrastructure - Electricity Supply Index, 1 (Poor) - 7 (Excellent)	Roads, Paved, Percent
Indicator Number	25P1	25P2	25P3	25P4	25S1a	25S1b	25S1c	25S1d	25S2
Ghana Data									
<i>Latest Year (T)</i>	2007	2007	2007	2008	2008	2008	2008	2008	2005
Value Year T	2.8	2.3	34.0	3.4	4.1	3.5	1.3	3.2	14.9
Value Year T-1	2.7		24.2						
Value Year T-2	1.8		14.2						17.9
Value Year T-3	1.7		9.1						
Value Year T-4	1.2		5.0						18.4
Average Value, 5 year	2.0		17.3						
Growth Trend	22.1		48.0						
Benchmark Data									
Regression Benchmark	1.7	2.2	16.3		4.1	2.8	1.9	3.0	18.1
Lower Bound	-4.0	2.0	1.6		3.6	2.3	1.6	2.5	3.0
Upper Bound	7.4	2.3	31.0		4.6	3.3	2.3	3.5	33.1
<i>Latest Year South Africa</i>	2007	2007	2007	2008	2008	2008	2008	2008	2001
South Africa Value Latest Year	8.3	3.4	98.6	4.5	5.9	4.4	3.5	3.4	17.3
<i>Latest Year Tanzania</i>	2007	2007	2007	2008	2008	2008	2008	2008	2003
Tanzania Value Latest Year	1.0	2.0	21.0	2.4	3.5	2.8	1.9	2.3	8.6
LI-SSA	1.0	2.1	1.7	2.5	3.5	2.8	1.7	2.9	
LI	1.6	2.1	8.0	2.5	3.5	2.7	1.8	2.7	14.8
High Five Avg.	80.9	4.2	170.5	6.6	6.7	6.6	6.5	6.8	100.0
Low Five Avg.	0.1	1.5	2.1	1.8	2.5	1.6	1.1	1.6	4.8

	Science and Technology			
	FDI Technology Transfer Index, 1 (Poor) - 7 (Excellent)	Availability of Scientists and Engineers, 1 (Non-existent) - 7 (Widely available)	Scientific and Technology Journal Articles, Articles per Million people	IPR Protection, 1 (Poorly enforced) - 7 (Among the best)
Indicator Number	26P1	26P2	26P3	26P4
Ghana Data				
<i>Latest Year (T)</i>	2008	2008	2005	2008
Value Year T	4.2	3.6	81.0	3.3
Value Year T-1			86.0	
Value Year T-2			76.0	
Value Year T-3			79.0	
Value Year T-4			90.0	
Average Value, 5 year			82.4	
Growth Trend			-1.3	
Benchmark Data				
Regression Benchmark	4.9	3.7	94.4	3.3
Lower Bound	4.7	3.4	-1,151.3	2.9
Upper Bound	5.2	4.1	1,340.1	3.6
<i>Latest Year South Africa</i>	2008	2008	2005	2008
South Africa Value Latest Year	5.2	3.4	2,392.0	5.3
<i>Latest Year Tanzania</i>	2008	2008	2005	2008
Tanzania Value Latest Year	4.6	3.5	107.0	2.9
LI-SSA	4.7	3.8		3.0
LI	4.6	3.7		2.9
High Five Avg.	6.1	5.9	75,711.9	6.2
Low Five Avg.	3.6	2.7	55.1	2.0

	Health								
	HIV Prevalence, Percent	Life Expectancy at Birth, Years	Maternal Mortality Rate, Deaths per 100,000 live births	Access to Improved Sanitation, Percent	Access to Improved Water Source, Percent	Births Attended by Skilled Health Personnel, Percent	Child Immunization Rate, Percent	Prevalence of Child Malnutrition, Weight for Age, Percent	Public Health Expenditure, Percent GDP
Indicator Number	31P1	31P2	31P3	31S1	31S2	31S3	31S4	31S5	31S6
Ghana Data									
<i>Latest Year (T)</i>	2008	2007	2005	2006	2006	2006	2007	2006	2006
Value Year T	2.6	60.0	560	10.0	80.0	49.7	94.5	18.0	1.7
Value Year T-1	2.6	59.7					84.5		2.0
Value Year T-2	3.2	59.4					83.5		2.2
Value Year T-3	2.9					47.1	81.5	22.0	2.5
Value Year T-4							80.0		2.4
Average Value, 5 year							84.8		2.2
Growth Trend							3.7		-8.0
Benchmark Data									
Regression Benchmark	2.5	56.7	707.4	30.6	68.0	52.0	80.7	23.2	1.9
Lower Bound	1.0	53.8	580.9	21.4	61.2	43.1	74.5	18.5	1.1
Upper Bound	4.0	59.5	833.9	39.7	74.9	60.9	86.8	27.8	2.6
<i>Latest Year South Africa</i>	2007	2006	2005	2006	2006	2003	2007		2005
South Africa Value Latest Year	18.1	50.7	400	59.0	93.0	92.0	90.0		3.6
<i>Latest Year Tanzania</i>	2007	2006	2005	2006	2006	2005	2007	2005	2005
Tanzania Value Latest Year	6.2	51.9	950	33.0	55.0	43.4	86.5	16.7	2.9
LI-SSA	1.8	51.6	895.0	30.0	60.0	46.2	74.7	25.6	1.9
LI	1.6	56.2	765.0	31.0	65.0	45.2	77.8	26.3	2.0
High Five Avg.	21.6	81.7	1,720.0	100.0	100.0		99.0		11.4
Low Five Avg.	0.1	41.9	2.6	8.4	35.0		35.6		0.6

	Education									
	Net Primary Enrollment Rate, Total, Percent	Net Primary Enrollment Rate, Female, Percent	Net Primary Enrollment Rate, Male, Percent	Primary Completion Rate, Total, Percent	Youth Literacy Rate, Total, Percent	Youth Literacy Rate, Male, Percent	Youth Literacy Rate, Female, Percent	Net Secondary Enrollment Rate, Total, Percent	Gross Tertiary Enrollment Rate, Total, Percent	Expenditure on Primary Education, Percent GDP
Indicator Number	32P1a	32P1b	32P1c	32P2	32P3a	32P3b	32P3c	32P4	32P5	32S1
Ghana Data										
<i>Latest Year (T)</i>	2007	2007	2007	2005	2007	2007	2007	2007	2007	2006
Value Year T	71.6	70.5	72.5	70.7	77.8	79.7	75.8	44.9	5.8	1.7
Value Year T-1	63.6	63.9	63.4	64.5				37.7	4.7	1.7
Value Year T-2	63.9	63.6	64.1	65.2				36.7	5.2	
Value Year T-3	56.9	57.2	56.7					35.8	3.1	
Value Year T-4	60.9	61.0	60.9	63.1				33.0	3.3	
Average Value, 5 year	63.4	63.2	63.5					37.6	4.4	
Growth Trend	4.3	4.0	4.6					6.6	15.7	
Benchmark Data										
Regression Benchmark	72.8	70.0	74.7		67.3	72.0	58.0	27.3	3.0	0.0
Lower Bound	66.3	63.3	68.7		58.0	66.9	46.3	19.0	-3.8	0.0
Upper Bound	79.2	76.8	80.8		76.7	77.2	69.8	35.5	9.8	0.0
<i>Latest Year South Africa</i>	2005	2005	2005	2004	2007	2007	2007	2000	2006	2006
South Africa Value Latest Year	86.3	86.3	86.4	92.0	95.4	94.6	96.3	61.7	15.4	2.3
<i>Latest Year Tanzania</i>	2006	2006	2006	2007	2007	2007	2007		2007	2006
Tanzania Value Latest Year	97.8	97.2	98.5	85.4	77.6	78.9	76.2		1.5	2.8
LI-SSA	69.4	68.0	74.8	44.9				17.8	2.2	1.8
LI	68.6	67.6	69.2	56.5				19.9	2.5	1.7
High Five Avg.	99.4	99.2	99.4		99.6	99.6	99.6	97.1	79.3	6.5
Low Five Avg.	41.4	36.0	46.7		62.2	70.9	52.9	7.7	0.6	0.2

	Education (cont'd)			
	Educational Expenditure per Student, Primary, Percent, GDP per capita	Educational Expenditure per Student, Secondary, Percent, GDP per capita	Educational Expenditure per Student, Tertiary, Percent, GDP per capita	Pupil-teacher Ratio, Primary School, Pupils per Teacher
Indicator Number	32S2a	32S2b	32S2c	32S3
Ghana Data				
<i>Latest Year (T)</i>	2006	2006	2005	2007
Value Year T	17.8	28.0	209.4	35.3
Value Year T-1	12.8	34.4		35.4
Value Year T-2				32.8
Value Year T-3				32.3
Value Year T-4				31.3
Average Value, 5 year				33.4
Growth Trend				3.3
Benchmark Data				
Regression Benchmark	12.4	24.4	196.2	41.6
Lower Bound	9.2	18.3	144.8	37.2
Upper Bound	15.6	30.5	247.6	45.9
<i>Latest Year South Africa</i>	2005	2005	2006	2004
South Africa Value Latest Year	14.3	17.6	50.3	35.6
<i>Latest Year Tanzania</i>				2007
Tanzania Value Latest Year				53.1
LI-SSA				45.1
LI	10.4			41.9
High Five Avg.	28.9	50.1	501.8	63.3
Low Five Avg.	6.0	6.6	7.9	9.9

	Employment and Workforce						
	Labor Force Participation Rate, Total, Percent	Rigidity of Employment Index, 0 (Minimum rigidity) - 100 (Maximum rigidity)	Size of the Labor Force, People	Growth of the Labor Force, Annual percent change	Unemployment Rate, Percent	Economically Active Children, (Ages 7-14), Percent	Firing Costs, Weeks of wages
Indicator Number	33P1	33P2	33P3a	33P3b	33P4	33P5	33S1
Ghana Data							
<i>Latest Year (T)</i>	2007	2009	2007	2007	2005/06	2003	2009
Value Year T	72.5	37	10,517,429	3.0	5.0	6.0	178
Value Year T-1	72.3	37	10,213,987	2.3			178
Value Year T-2	72.7	34	9,988,489	2.5			178
Value Year T-3	73.0	34	9,747,922	2.5			178
Value Year T-4	73.3	34	9,506,839	2.5			178
Average Value, 5 year	72.8	35.2	9,994,933	2.5			178
Growth Trend	-0.3	2.5	2.5	2.7			0
Benchmark Data							
Regression Benchmark	75.1	44.2	9,627,273	2.6	10.4	33.7	
Lower Bound	70.5	35.4	8,070,795	2.1	7.4	25.6	
Upper Bound	79.6	53.0	11,183,751	3.1	13.3	41.7	
<i>Latest Year South Africa</i>	2006	2009	2006	2007	2005		2009
South Africa Value Latest Year	65.5	42.0	19,996,481	2.0	26.7		24
<i>Latest Year Tanzania</i>	2006	2009	2006	2007	2001	2001	2009
Tanzania Value Latest Year	89.5	63.0	19,317,017	2.7	5.1	40.4	18
LI-SSA	77.8	40.8	4,660,441	2.9		39.8	37
LI	74.0	38.0	4,687,990	2.8		38.4	37
High Five Avg.	88.7	72.4	311,642,398	7	28.0		226
Low Five Avg.	49.1		50,909	-2	1.8		

	Agriculture							
	Agriculture Value Added per Worker, US Dollars, Constant 2000	Cereal Yield, Kilograms per hectare	Growth in Agricultural Value-Added, Percent change	Fertilizer Consumption, 100 grams per hectare of arable land	Agricultural Policy Costs Index, 1 (Excessively burdensome) - 7 (Balances all interests)	Crop Production Index, Index: 1999-2001 = 100	Livestock Production Index, Index: 1999-2001 = 100	Agricultural Export Growth, Percent change
Indicator Number	34P1	34P2	34P3	34P4	34S1	34S2	34S3	34S4
Ghana Data								
<i>Latest Year (T)</i>	2005	2006	2007	2005	2008	2005	2005	2006
Value Year T	332	1,334	4.6	75.4	3.8	117.4	112.9	72.6
Value Year T-1	325	1,432	6.0	69.8		121.2	113.2	-28.9
Value Year T-2	303	1,373	4.5	44.2		116.4	107.0	-47.1
Value Year T-3	325	1,396	9.7	48.8		113.4	104.1	
Value Year T-4	325	1,349	-4.6	76.4		102.3	102.5	
Average Value, 5 year	322	1,377	4.0	62.9		114.1	107.9	
Growth Trend	0.4	0.0		3.3		3.4	2.8	
Benchmark Data								
Regression Benchmark	315.8	1,347	3.8	43.4	3.8	109.6	108.0	36.9
Lower Bound	-656	807	0.0	-607.9	3.5	102.5	102.4	-14.7
Upper Bound	1,288	1,887	7.6	694.7	4.1	116.7	113.6	88.4
<i>Latest Year South Africa</i>	2005	2006	2007	2005	2008	2005	2005	2006
South Africa Value Latest Year	2,636	3,143	4.8	451.4	4.8	110.7	110.0	0.7
<i>Latest Year Tanzania</i>	2005	2006	2006	2005	2008	2005	2005	2006
Tanzania Value Latest Year	306	1,514	3.8	103.7	3.8	110.6	109.6	-30.3
LI-SSA	221	1,150	2.9	49.3	3.8	104.6	106.7	24.1
LI	268	1,420	3.9	71.1	3.8	105.3	107.3	22.3
High Five Avg.	49,899	27,558	14.5	17,297.0	5.2	131.0	141.9	362,165.2
Low Five Avg.	91	372	-9.4	3.0	2.6	65.3	86.8	-27.6

Technical Notes

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

STATISTICAL CAPACITY

Statistical Capacity Indicator

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

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

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

CAS Code # 01P1

GROWTH PERFORMANCE

Per capita GDP, in Purchasing Power Parity Dollars

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

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

Coverage: Data are available for about 65 USAID countries.

CAS Code #11P1

Per capita GDP, in current US Dollars

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

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

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

Coverage: Data are available for about 85 USAID countries.

CAS Code #11P2

Real GDP Growth

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

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

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

Coverage: Data are available for about 85 USAID countries.

CAS Code #11P3

Growth of Labor Force Productivity

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

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

Coverage: Data are available for about 85 USAID countries.

CAS Code # 11S1

Investment Productivity, Incremental Capital-Output Ratio (ICOR)

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

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

Coverage: Data are available for about 81 USAID countries.

CAS Code #11S2

Gross Fixed Investment, Percentage of GDP

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

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

Coverage: Data are available for about 84 USAID countries.

CAS Code # 11S3

Gross Fixed Private Investment, Percentage of GDP

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

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

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

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

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

CAS Code #11S4

POVERTY AND INEQUALITY

Human Poverty Index

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

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

Coverage: Data are available for about 60 USAID countries.

CAS Code #12P1

Income Share, Poorest 20 Percent

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

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

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

CAS Code # 12P2

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

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

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

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

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

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

CAS Code #12P3

Poverty Headcount, National Poverty Line

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

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

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

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

CAS Code #12P4

PRSP Status

Source: World Bank/IMF. A list of countries with a Poverty Reduction Strategy Paper can be found at <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 World Bank and IMF to ensure host-country ownership of poverty reduction programs).

Coverage: All countries having PRSPs are so indicated.

CAS Code #12P5

Percent of Population below Minimum Dietary Energy Consumption

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

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

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

ECONOMIC STRUCTURE

Employment or Labor Force Structure

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

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

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

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

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

CAS Code #13P1

Output Structure

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

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

Coverage: Data are available for about 86 USAID countries.

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

CAS Code #13P2

DEMOGRAPHY AND ENVIRONMENT

Adult Literacy Rate

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

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

Coverage: Data are available for about 66 USAID countries.

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

CAS Code # 14P1

Youth Dependency Rate

Source: World Development Indicators, most recent publication series.

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

Coverage: Data are available for about 89 USAID countries.

CAS Code #14P2a

Elderly Dependency Rate

Source: World Development Indicators, most recent publication series.

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

Coverage: Data are available for about 89 USAID countries.

CAS Code #14P2b

Environmental Performance Index

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

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

Coverage: Data are available for about 80 USAID countries.

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

CAS Code #14P3

Population Size and Growth

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

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

Coverage: Data are available for about 88 USAID countries.

CAS Code # 14P4

Percent of Population Living In Urban Areas

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

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

Coverage: Data are available for about 86 USAID countries.

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

CAS Code #14P5

Resource Depletion, Percent GNI

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

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

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

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

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

Coverage: Data are available for about 80 USAID countries.

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

CAS Code #14P6

GENDER

Primary Completion Rate, Male and Female

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

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

Coverage: Data are available for about 128 USAID countries.

Data Quality: Completion rates are based on data collected during annual school surveys, typically conducted at the

beginning of the school year. The indicator does not measure the quality of the education.

CAS Code #15P1

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

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

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

Coverage: Data are available for about 80 USAID countries.

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

CAS Code #15P2

Life Expectancy, Male and Female

Source: Estimated from UNDP Human Development Indicators:

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

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

Coverage: Data are available for about 85 USAID countries.

CAS Code #15P3

Labor Force Participation Rate, Male and Female

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

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

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

Coverage: Data are available for about 88 USAID countries.

CAS Code #15P4

FISCAL AND MONETARY POLICY

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

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

Government Expenditure, Percentage of GDP

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

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

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

CAS Code # 21P1

Government Revenue, excluding grants, Percentage of GDP

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

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

Gaps: Data missing for about 24 USAID countries.

CAS Code # 21P2

Growth in Broad Money Supply

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

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

Coverage: Data are available for about 81 USAID countries.

CAS Code #21P3

Inflation Rate

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

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

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

Coverage: Data are available for about 85 USAID countries.

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

CAS Code # 21P4

Overall Budget Balance, Including Grants, Percentage of GDP

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

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

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

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

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

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

CAS Code # 21P5

Composition of Government Expenditure

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

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

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

Coverage: Data are available for the majority of USAID countries

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

CAS Code # 21S1

Composition of Government Revenue

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

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

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

Coverage: Data are available for about 46 USAID countries.

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

CAS Code # 21S2

Composition of Money Supply Growth

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

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

Coverage: Data are available for about 86 USAID countries.

CAS Code # 21S3

BUSINESS ENVIRONMENT

Control of Corruption Index

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

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

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

Coverage: Data are available for nearly all USAID countries.

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

CAS Code # 22P1

Ease of Doing Business Index

Source: World Bank, Doing Business Indicators <http://www.doingbusiness.org/>

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

Coverage: Data are available for nearly all USAID countries.

CAS Code # 22P2

Rule of Law Index

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

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

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

Coverage: Data are available for nearly all USAID countries.

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

CAS Code #22P3

Regulatory Quality Index

Source: World Bank Institute;

<http://www.govindicators.org>

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

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

Gaps: Data are available for nearly all USAID countries.

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

CAS Code #22P4

Government Effectiveness Index

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

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

Coverage: Data are available for nearly all USAID countries.

CAS Code #22P5

Cost of Starting a Business

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

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

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

Coverage: Data are available for nearly all USAID countries.

CAS Code #22S1

Procedures to Enforce a Contract

Source: World Bank, Doing Business; Enforcing Contracts category:

<http://www.doingbusiness.org/ExploreTopics/EnforcingContracts/>

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

Coverage: Data are available for nearly all USAID countries.

CAS Code # 22S2

Procedures to Register Property

Source: World Bank, Doing Business; Registering Property category:

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

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

Coverage: Data are available for nearly all USAID countries.

CAS Code #22S3

Procedures to Start a Business

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

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

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

Coverage: Data are available for nearly all USAID countries.

CAS Code # 22S4

Time to Enforce a Contract

Source: World Bank, Doing Business; Enforcing Contracts category:

<http://www.doingbusiness.org/ExploreTopics/EnforcingContracts/>

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

Coverage: Data are available for nearly all USAID countries.

CAS Code # 22S5

Time to Register Property

Source: World Bank, Doing Business; Registering Property category:

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

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

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

Coverage: Data are available for nearly all USAID countries.

CAS Code #22S6

Time to Start a Business

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

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

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

Coverage: Data are available for nearly all USAID countries.

CAS Code #22S7

Total Tax Payable by Business

Source: World Bank, Doing Business, Paying Taxes Category:

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

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

Coverage: Data are available for nearly all USAID countries

CAS Code #22S8

Business Costs of Crime, Violence and Terrorism Index

Source: Global Competitiveness Report, World Economic Forum.

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

Coverage: Data are available for about 52 USAID countries.

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

CAS Code #22S9

Senior Manager Time Spent Dealing with Government Regulations

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

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

Coverage: Data available for about 80 USAID countries.

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

CAS Code #22S10

FINANCIAL SECTOR

Domestic Credit to Private Sector, Percentage of GDP

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

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

Coverage: Data are available for about 82 USAID countries.

CAS Code # 23P1

Interest Rate Spread

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

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

Coverage: Data are available for about 66 USAID countries.

CAS Code # 23P2

Money Supply, Percentage of GDP

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

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

Coverage: Data are available for about 81 USAID countries.

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

CAS Code # 23P3

Stock Market Capitalization Rate, Percentage of GDP

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

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

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

Coverage: Data are available for about 54 USAID countries.

CAS Code # 23P4

Credit Information Index

Source: World Bank, Doing Business; Getting Credit Category:

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

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

Coverage: Data are available for nearly all USAID countries.

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

CAS Code # 23P5

Legal Rights of Borrowers and Lenders Index

Source: World Bank Doing Business; Getting Credit category:

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

The index is based on data collected through research of collateral and insolvency laws supported by survey data on secured transactions laws.

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

Coverage: Data are available for nearly all USAID countries.

CAS Code # 23S1

Real Interest Rate

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

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

Coverage: Data are available for about 68 USAID countries.

CAS Code # 23S2

Number of Active Microfinance Borrowers

Source: The Mix Market.

<http://www.mixmarket.org/en/demand/demand.quick.search.asp>.

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

Coverage: Data are available for about 68 USAID countries.

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

CAS Code # 23S3

EXTERNAL SECTOR

Aid, Percentage of GNI

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

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

Coverage: Data are available for about 84 USAID countries.

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

CAS Code #24P1

Current Account Balance, Percentage of GDP

Source: Latest country data from national data sources or IMF Article IV consultation reports: www.imf.org/external/np/sec/aiv/index.htm. Benchmarking data from World Development Indicators, most recent publication series BN.CAB.XOKA.GD.ZS, based on IMF, Balance of Payments Statistics Yearbook and data files, World Bank staff estimates, and World Bank and OECD GDP estimates.

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

Coverage: Data are available for about 79 USAID countries.

CAS Code # 24P2

Debt Service ratio

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

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

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

Coverage: Data are available for about 77 USAID countries.

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

CAS Code # 24P3

Exports Growth, Goods and Services

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

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

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

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

Coverage: Data are available for about 81 USAID countries.

CAS Code # 24P4

Foreign Direct Investment, Percentage of GDP

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

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

Coverage: Data are available for about 82 USAID countries.

CAS Code #24P5

Gross International Reserves, Months of Imports

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

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

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

Coverage: Data are available for about 77 USAID countries.

CAS Code # 24P6

Gross Private Capital Inflows, Percentage of GDP

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

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

Coverage: Information on coverage is not easily accessible.

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

CAS Code #24P7

Present Value of Debt, Percentage of GNI

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

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

non-guaranteed long-term external debt over the life of existing loans. The indicator measures the value of debt relative to the GNI.

Coverage: Data are available for about 80 USAID countries.

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

CAS Code # 24P8

Remittances Receipts, Percentage of Exports

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

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

Coverage: Data are available for all USAID countries.

CAS Code # 24P9

Trade, Percentage of GDP

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

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

Coverage: Data available for about 84 USAID countries.

CAS Code # 24P10

Trade in Services, Percentage of GDP

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

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

Coverage: Data available for about 80 USAID countries.

CAS Code # 24P11

Concentration of Exports

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

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

Coverage: Available for about 74 USAID countries.

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

CAS Code # 24S1

Inward FDI Potential Index

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

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

Coverage: Data are available for about 77 USAID countries.

CAS Code # 24S2

Net Barter Terms of Trade

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

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

Coverage: Data are available for about 51 USAID countries.

CAS Code # 24S3

Real Effective Exchange Rate (REER)

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

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

Coverage: Information on coverage is not easily accessible.

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

CAS Code # 24S4

Structure of Merchandise Exports

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

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

Coverage: Data are available for about 78 USAID countries.

Data Quality: The classification of commodity groups follows the Standard International Trade Classification (SITC) revision 1, but most countries report using later revisions of the SITC. Tables are used to convert data reported in one system to another and this may introduce errors of classification. Shares may not sum to 100 percent because of unclassified trade.

CAS Code # 24S5

Trade Policy Index

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

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

Coverage: Data are available for about 83 USAID countries.

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

CAS Code # 24S6

Ease of Trading Across Borders Ranking

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

<http://www.doingbusiness.org/ExploreTopics/TradingAcrossBorders/>

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

Coverage: Data are available for nearly all USAID countries.

CAS Code # 24S7

ECONOMIC INFRASTRUCTURE

Internet Users per 100 people

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

Definition: Indicator quantifies the number of Internet users, defined as those with access to the worldwide network, per 1,000 people.

Coverage: Data are available for about 88 USAID countries.

CAS Code # 25P1

Logistics Performance Index, Infrastructure

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

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

Coverage: Data are available for about 80 USAID countries.

CAS Code # 25P2

Telephone Density, Fixed Line and Mobile

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

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

Coverage: Data are available for about 88 USAID countries.

CAS Code #25P3

Overall Infrastructure Quality Index

Source: Global Competitiveness Report, World Economic Forum

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

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

Coverage: Data are available for about 52 USAID countries.

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

CAS Code # 25P4

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

Source: Global Competitiveness Report, World Economic Forum

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

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

Coverage: Data are available for about 52 USAID countries.

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

CAS Code #25S1

Roads, paved (% total)

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

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

Coverage: Data are available for nearly all USAID countries.

CAS Code #25S2

SCIENCE AND TECHNOLOGY

FDI Technology Transfer Index

Source: Global Competitiveness Report, World Economic Forum

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

Definition: The index measures executives' perceptions of FDI as a source of new technology for the country.

Executives grade, on a scale from 1 to 7, whether foreign direct investment in their country brings little new technology (1), or is an important source of new technology (7).

Coverage: Data are available for about 52 USAID countries.

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

CAS Code # 26P1

Availability of Scientists and Engineers Index

Source: Global Competitiveness Report, World Economic Forum

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

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

Coverage: Data are available for about 52 USAID countries.

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

CAS Code #26P2

Science and Technology Journal Articles, per Million People

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

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

Coverage: Data are available for about 82 USAID countries.

CAS Code #26P3

IPR Protection Index

Source: Global Competitiveness Report, World Economic Forum

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

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

Coverage: Data are available for about 52 USAID countries.

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

CAS Code #26P4

HEALTH

HIV Prevalence

Source: UNAIDS for most recent country data:

http://data.unaids.org/pub/GlobalReport/2008/20080813_gr08_prev1549_1990_2007_en.xls. World Development Indicators, most recent publication for benchmark data, series SH.DYN.AIDS.ZS.

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

Coverage: Data are available for about 79 USAID countries.

Data Quality: UNAIDS/WHO estimates are based on all available data, including surveys of pregnant women, population-based surveys, household surveys conducted by

Kenya, Mali, Zambia, and Zimbabwe, and other surveillance information.

CAS Code # 31P1

Life Expectancy at Birth

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

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

Coverage: Data are available for about 88 USAID countries.

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

CAS Code # 31P2

Maternal Mortality Rate

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

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

Coverage: Data are available for about 87 USAID countries.

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

CAS Code # 31P3

Access to Improved Sanitation

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

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

Coverage: Data are available for about 82 USAID countries.

CAS Code #31S1

Access to Improved Water Source

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

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

Coverage: Data are available for about 83 USAID countries.

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

CAS Code # 31S2

Births Attended by Skilled Health Personnel

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

Definition: The indicator is the percentage of deliveries attended by personnel trained to give the necessary supervision, care, and advice to women during pregnancy,

labor, and the postpartum period, to conduct interviews on their own, and to care for newborns.

Coverage: Data are available for about 62 USAID countries.

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

CAS Code # 31S3

Child Immunization Rate

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

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

Coverage: Data are available for about 88 USAID countries.

CAS Code #31S4

Prevalence of Child Malnutrition—Weight for Age

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

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

Coverage: Data are available for about 55 USAID countries.

CAS Code # 31S5

Public Health Expenditure, Percentage of GDP

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

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

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

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

Coverage: Data are available for about 88 USAID countries.

CAS Code #31S6

EDUCATION

Net Primary Enrollment Rate—Female, Male and Total

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

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

Coverage: Data are available for about 80 USAID countries.

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

CAS Code # 32P1

Primary Completion Rate—Total

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

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

Coverage: Data are available for about 128 USAID countries

CAS Code # 32P2

Youth Literacy Rate—Female, Male, and Total

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

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

Coverage: Data are available for about 67 USAID countries.

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

CAS Code #32P3

Net Secondary Enrollment Rate, Total

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

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

Coverage: Not available for draft.

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

CAS Code #32P4

Gross Tertiary Enrollment Rate, Total

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

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

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

Coverage: Not available for draft.

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

CAS Code #32P5

Expenditure on Primary Education, Percentage of GDP

Source: Millennium Challenge Corporation:

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

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

Coverage: Data are available for about 58 USAID countries.

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

CAS Code #32S1

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

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

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

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

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

CAS Code # 32S2

Pupil-teacher Ratio, Primary School

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

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

Coverage: Data are available for about 76 USAID countries.

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

CAS Code # 32S3

EMPLOYMENT AND WORKFORCE

Labor Force Participation Rate

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

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

Coverage: Data are available for about 88 USAID countries.

CAS Code #33P1

Rigidity of Employment Index

Source: World Bank, Doing Business, Employing workers category:

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

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

Coverage: Data are available for nearly all USAID countries.

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

CAS Code # 33P2

Size and Growth of the Labor Force

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

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

Coverage: Data are available for about 88 USAID countries.

CAS Code #33P3

Unemployment Rate

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

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

Coverage: Data are available for about 50 USAID countries.

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

CAS Code # 33P4

Economically Active Children, Percentage Children Ages 7-14

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

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

CAS Code # 33P5

Firing Costs, Weeks of Wages

Source: World Bank, Doing Business, Employing Workers Category:
<http://www.doingbusiness.org/ExploreTopics/EmployingWorkers/>.

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

Coverage: Data available for nearly all USAID countries.

CAS Code # 33S1

AGRICULTURE

Agriculture Value Added per Worker

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

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

Coverage: Data are available for about 80 USAID countries.

CAS Code # 34P1

Cereal Yield

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

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

Coverage: Data are available for about 84 USAID countries.

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

CAS Code # 34P2

Growth in Agricultural Value-Added

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

Definition: The indicator measures the annual growth rate for agricultural value added, in constant local currency. Regional

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

Coverage: Data are available for about 84 USAID countries.

CAS Code # 34P3

Fertilizer Consumption (100 grams per hectare of arable land)

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

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

Coverage: Data available for

CAS Code #34P4

Agricultural Policy Costs Index

Source: Global Competitiveness Report, World Economic Forum
<http://www.weforum.org/documents/gcr0809/index.html>.

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

Coverage: Data are available for about 52 USAID countries.

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

CAS Code # 34S1

Crop Production Index

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

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

Coverage: Data are available for about 85 USAID countries.

Data Quality: Regional and income group aggregates for the FAO's production indices are calculated from the underlying values in international dollars, normalized to the base period 1999–2001. The FAO obtains data from official and semi-official reports of crop yields, area under production, and livestock numbers. If data are not available, the FAO makes estimates. To ease cross-country comparisons, the FAO uses international commodity prices to value production

expressed in international dollars (equivalent in purchasing power to the U.S. dollar). This method assigns a single price to each commodity so that, for example, one metric ton of wheat has the same price regardless of where it was produced. The use of international prices eliminates fluctuations in the value of output due to transitory movements of nominal exchange rates unrelated to the purchasing power of the domestic currency.

Coverage: Data are available for about 85 USAID countries.

CAS Code # 34S2

Livestock Production Index

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

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

Coverage: Data are available for about 85 USAID countries.

Data Quality: See comments on the Crop Production Index.

CAS Code # 34S3

Agriculture Export Growth

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

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

Coverage: Not available for draft.

CAS Code # 34S4