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# Malawi

## Economic Performance Assessment



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# Malawi

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

Under the CAS Project, Nathan Associates will also respond to mission requests for in-depth sector studies to examine more thoroughly particular issues identified by the data analysis in these country reports.

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# Highlights

This Economic Performance Assessment for Malawi is one in a series of papers that will provide USAID missions and regional bureaus with a clear and concise evaluation of indicators relating to economic growth performance in designated host countries. The report draws on a variety of international data sources, covers a broad range of topics, and uses international benchmarking to identify major constraints, trends, and opportunities for strengthening growth and reducing poverty.

The analysis for Malawi reveals serious problems in numerous areas, with few signs of healthy performance. Malawi urgently needs to follow through on recent efforts to strengthen macroeconomic management, and to take serious steps toward further improvement of the enabling environment for private sector development. This necessitates deeper reforms, control of corruption, infrastructure investment, and better health and education programs, within the limits imposed by very scarce resources.

Malawi's performance highlights are summarized in the table on the next page, followed by a scorecard listing the main indicators for which major indicators for Malawi are especially weak or strong relative to the benchmark standards.

***IMF Program Status for Malawi.*** Because of problems with macroeconomic management in recent years, Malawi has not qualified for a Poverty Reduction and Growth Facility (PRGF) from the IMF. Instead, the country has been under a Staff Monitored Program. In July, 2004, the new government requested IMF assistance to put their economic fiscal and monetary policies back on a sustainable path. According to a recent IMF press release (March 3, 2005), the Government of Malawi has made good progress in “demonstrating its commitment to sound macroeconomic policies.” Discussions are underway to reestablish a PRGF arrangement.

## Highlights of Malawi's performance relative to benchmark standards

Economic Growth	Overall growth performance has been poor, signaling fundamental problems with the enabling environment for private sector development.
Poverty	Poverty remains severe and pervasive. Though the latest data is from 1998 (showing that 65% of the people were living in poverty), there is no evidence to suggest that this has changed materially.
Gender	The gender differential in adult literacy is extremely high, though great progress has been made in raising female school enrollment.
Fiscal and Monetary Policy	Macroeconomic performance has been fraught with trouble: excessive spending, unsustainable budget deficits, and inflationary growth of the money supply. <i>Thus, a cornerstone for rapid growth has not been in place.</i> Recent steps to improve macroeconomic policy must be sustained.
Business Environment	Institutional indicators for Malawi are comparable to benchmark values; nonetheless, there is a huge need to tackle corruption and ample room to reduce institutional impediments to doing business.
Financial Sector	The financial sector is extremely underdeveloped and inefficient in mobilizing and allocating saving.
External sector	Malawi is a relatively open economy, but not reaping benefits. Exports are highly concentrated in a few primary products, and export growth is very weak. The country attracts very little foreign direct investment. The current account deficit is extremely high, and foreign exchange reserves are dangerously depleted.
Economic infrastructure	Basic infrastructure to support growth is comparable to benchmark countries, but very deficient in absolute terms.
Health	Maternal mortality is extremely high, and life expectancy has declined to one of the world's lowest levels because of HIV/AIDS. The poor health of the population and of the labor force is a result of poverty, and a cause of low growth.
Education	The government scores well in improving primary enrollment rates. The quality of education is difficult to judge from available international indicators, but clearly a major problem.
Employment and Workforce	The labor force is growing rapidly, creating a pressing need for jobs and income opportunities. Legal constraints on employment are relatively low, but job creation will remain stuck in low gear without more investment.
Agriculture	Growth in agriculture has been moderately good. Given the critical importance of this sector to the economy, stronger performance is needed to make visible inroads against poverty. In the medium to long run, transformational growth and poverty reduction depend on thriving non-agricultural activities, as well as improvements in agriculture itself.

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



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

	Malawi Value	Benchmark Standard
<b>INDICATORS SHOWING POOR PERFORMANCE</b>		
<b>Growth Performance</b>		
Per capita GDP, \$PPP (2004)	643	1,698
Per capita GDP, current US\$ (2004)	165	533
Real GDP Growth, % change (five-year average to 2003)	1.4	4.6 <sup>a</sup>
<b>Poverty and Inequality</b>		
Population living on less than \$1 PPP per day, % (1997)	42.0	26.1
Poverty headcount, by national poverty line, % (1997)	65.3	38.0
<b>Gender</b>		
Ratio of male to female adult literacy rate (2002)	1.6	1.0 <sup>b</sup>
<b>Fiscal and Monetary Policy</b>		
Government expenditure, % GDP (2003)	42.4	17.1
Growth in the money supply, % change (2003)	29.3	20.5 <sup>a</sup>
Inflation Rate, % (2004)	19.9	9.4 <sup>a</sup>
Overall govt. budget balance, including grants, %GDP (five-year average to 2004)	-7.5	0.5
<b>Business Environment</b>		
Corruption Perception Index (2004)	2.8	3.0 <sup>c</sup>
<b>Financial Sector</b>		
Domestic credit to private sector, % GDP (2003)	7.8	11.8
Interest rate spread, lending rate minus deposit rate (2003)	23.8	14.1 <sup>a</sup>
Money supply, % GDP (2003)	19.4	25.6
Real interest rate, % (2003)	39.3	12.3
<b>External Sector</b>		
Current account balance, % GDP (2002)	-10.6	-6.9
Foreign direct investment, % GDP (2002)	0.3	4.1
Gross international reserves, months of imports (2002)	2.4	3.0 <sup>b</sup>
Growth in exports of goods and services, (5-year average to 2003)	1.5	3.9
Remittance receipts, % exports (2002)	0.2	11.6
<b>Economic Infrastructure</b>		
Internet users per 1000 people (2003)	3.4	10.3
Telephone density, fixed & mobile subscribers per 1000 (2002)	15.2	32.6
<b>Health</b>		
HIV Prevalence, % (2003)	14.2	6.6
Life expectancy at birth, years (2002)	37.5	47.0
Maternal mortality rate, deaths per 1000 (2002)	18.0	9.3

	Malawi Value	Benchmark Standard
<b>INDICATORS SHOWING GOOD PERFORMANCE</b>		
<b>Fiscal and Monetary Policy</b>		
Government revenue, % GDP (2003)	22.8	15.4
<b>Education</b>		
Net primary enrollment ratio, % (2001)	81.0	46.9
<b>Employment and Workforce</b>		
Rigidity of employment index, maximum rigidity = 100 (2002)	21.0	57.3

The benchmark standard is the average for low-income countries of sub-Saharan Africa, except as follows:

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

<sup>b</sup> Performance assessed on absolute criterion, rather than relative comparison.

<sup>c</sup> Value below 3.0 indicates rampant corruption, according to Transparency International.

# 1. Introduction

This paper is one of a series of Economic Performance Assessments prepared for the EGAT Bureau to provide USAID missions and regional bureaus with a clear and concise evaluation of indicators relating to economic growth performance in designated countries. The report differs from other country studies in that it draws on a variety of international data sources,<sup>1</sup> covers a broad range of indicators, and uses international benchmarking to identify major constraints, trends, and opportunities for strengthening growth and reducing poverty.

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

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

Transformational growth requires a high level of investment and rising productivity. This is achieved by establishing a strong ***enabling environment for private sector development***, involving multiple elements: macroeconomic stability; a sound legal and regulatory system, including secure contract and property rights; effective control of corruption; a sound and

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

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

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

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*.<sup>4</sup> Here, too, many elements are involved, including effective education and health systems; a strong commitment to fighting HIV/AIDS; 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 evaluation of these conditions in this paper must be interpreted with caution because a concise analysis of this sort cannot provide a definitive diagnosis of economic problems, or simple answers to questions about programmatic priorities. Instead, the aim is to spot signs of serious economic growth problems based on a review of selected indicators, subject to limits of data availability and quality. The results do provide insight about potential paths for USAID intervention, to complement on-the-ground knowledge and further in-depth studies.

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

Table 1  
*Topic Coverage*

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

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

## 2. Overview of the Economy

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

### **GROWTH PERFORMANCE**

With an estimated per capita GDP of just \$165 in 2004 (or \$643 in terms of purchasing power parity), Malawi remains one of the poorest countries in the world. Thus, the need for rapid and sustained economic growth is acute. Yet over the five years to 2003 (latest data), growth averaged just 1.4 percent per year, never exceeding 4.0 percent. This is well below average for LIC-Africa and far less than the standard achieved by Uganda and Mozambique (Figure 2-1). In absolute terms, growth is far too low to deliver improved standards of living or adequate income opportunities for a population that is growing by 2.1 percent per year. Visible progress toward prosperity requires sustained and broad-based growth of no less than 5 percent per year.

The proximate cause of low growth is no mystery: investment and productivity growth are both very weak. Gross fixed investment, at 9.5 percent of GDP, is alarmingly low by any standard (Figure 2-2). Looking at just the private sector, gross fixed investment has been nearly zero, according to IMF estimates. In addition, there has been virtually zero growth in productivity of the labor force (Figure 2-3). Capital productivity is likewise poor: the incremental capital-output ratio shows that nearly \$10 of gross investment has been needed per dollar of extra output—twice the average for LIC-Africa, and more than triple the capital requirement for output growth in Uganda. (Figure 2-4).

Poor growth performance is the central economic challenge facing the government and the donor community. Major factors contributing to low investment, low productivity, and low growth are examined in section 3, on the enabling environment, and discussions in section 4 on human capital development. One vital question that must be asked, even though the issue is beyond the scope of this paper, is whether the political foundation exists in Malawi for achieving rapid growth. Is there the political will for sound economic policies and institutions? Is there an effective constituency for pro-growth policies? How can these be strengthened?

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

Figure 2-1. Real GDP Growth (%)

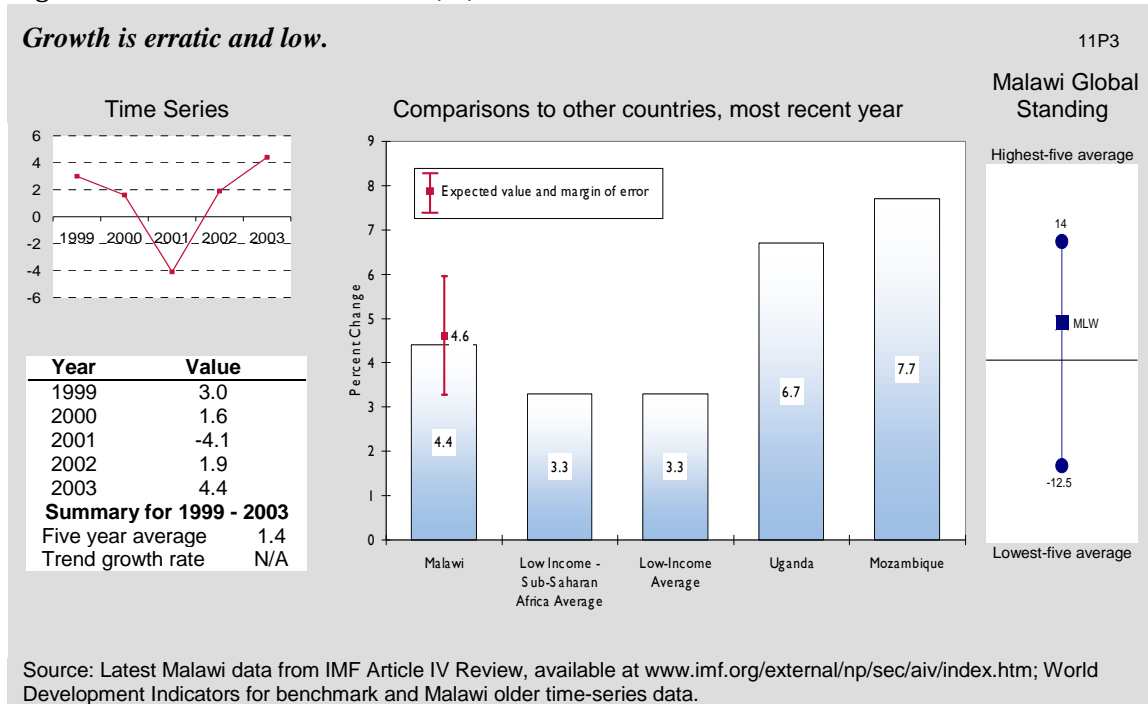


Figure 2-2. Gross Fixed Investment in GDP (%)

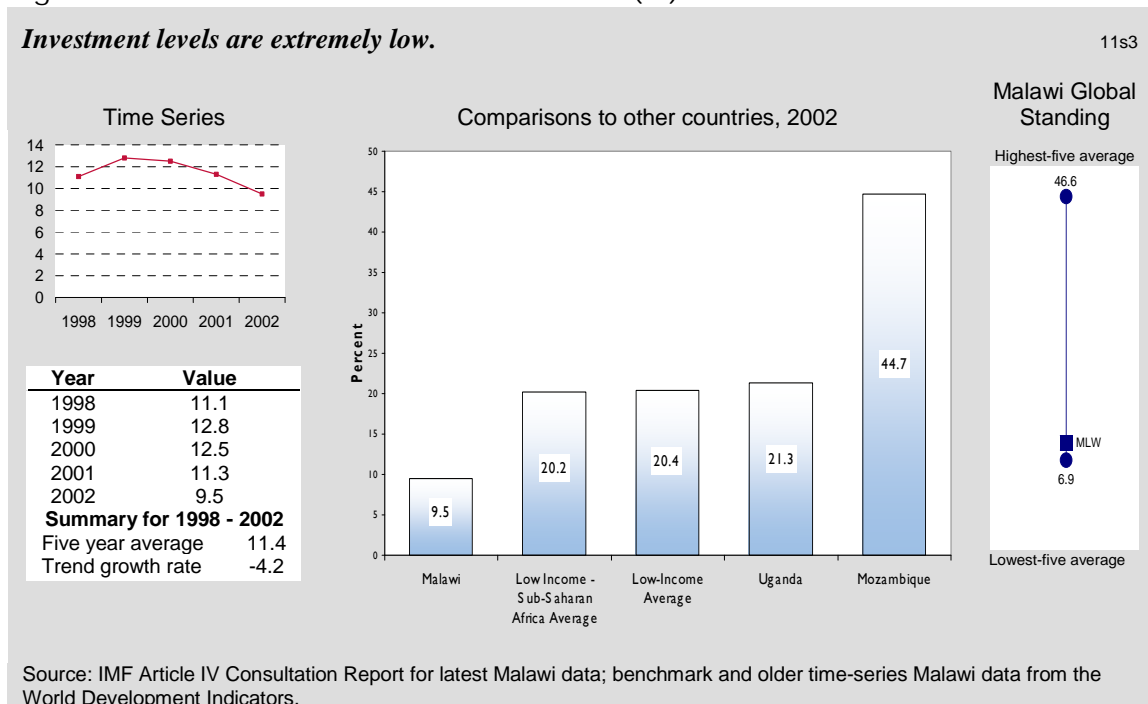


Figure 2-3. Growth of Labor Productivity (% Change)

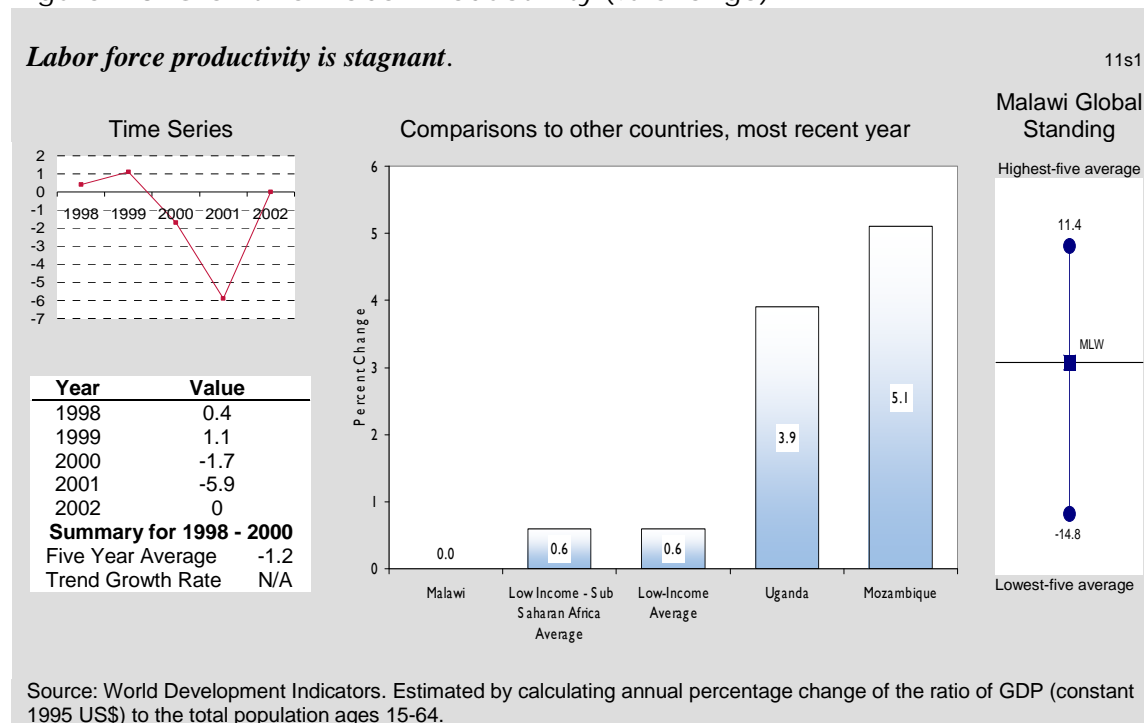
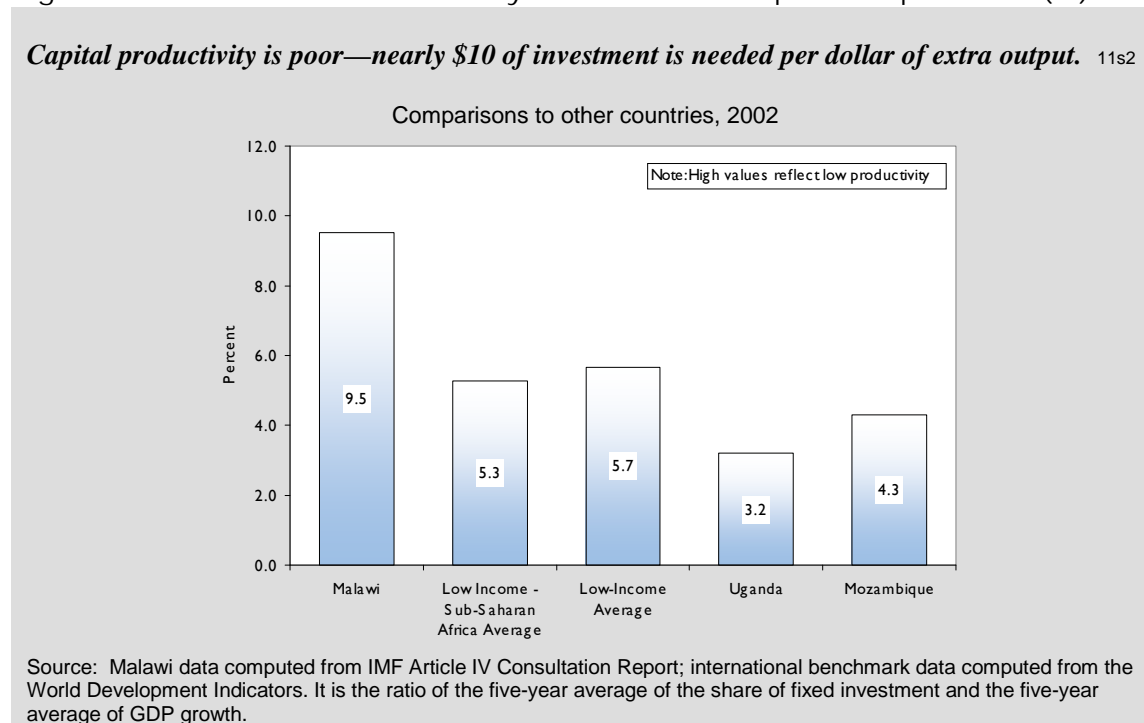


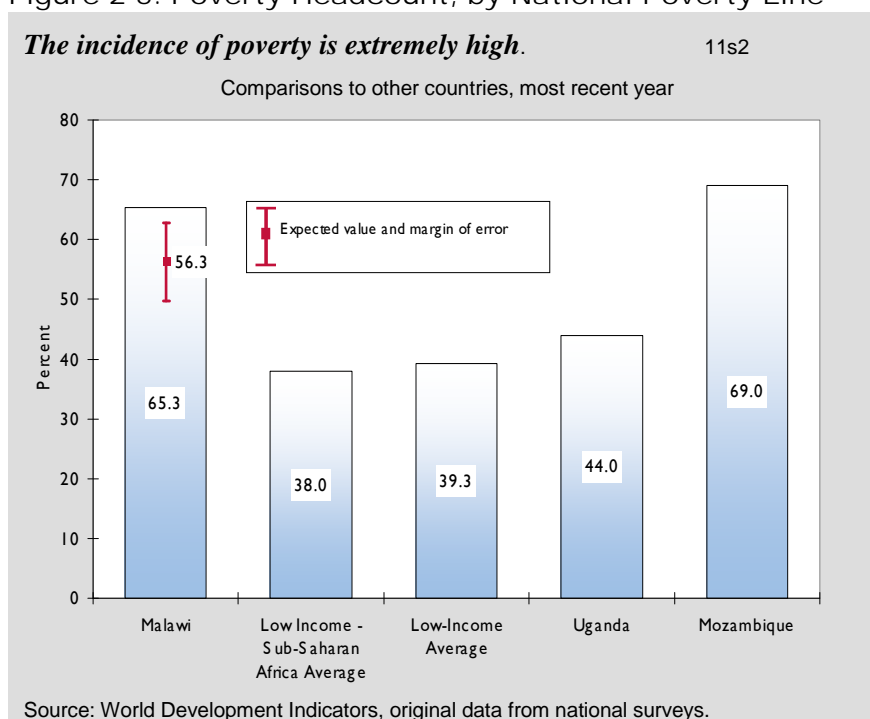
Figure 2-4. Investment Productivity—Incremental Capital-Output Ratio (%)



## POVERTY AND INEQUALITY

As the income data suggest, poverty in Malawi is severe. The latest hard data on poverty are derived from a national household survey in 1997, which showed that 65 percent of the people live below the national poverty line. An estimated 41 percent struggle to survive on less than \$1 per day measured in terms of international purchasing power parity—the international standard for absolute poverty. These poverty rates are much higher than the average for LIC-Africa (Figure 2-5). Given Malawi's poor growth performance in recent years, it is unlikely that the situation has improved materially since 1997. The UNDP's Human Poverty Index (HPI) provides a broader gauge of poverty, taking into account deprivation in access to basic education and safe water, as well as income poverty. The HPI value of 47 in 2004 shows that the scope of deprivation in Malawi is higher than the average for LIC-Africa (Figure 2-6). Another sign of deep poverty is the adult illiteracy rate of 62 percent.

Figure 2-5. Poverty Headcount, by National Poverty Line



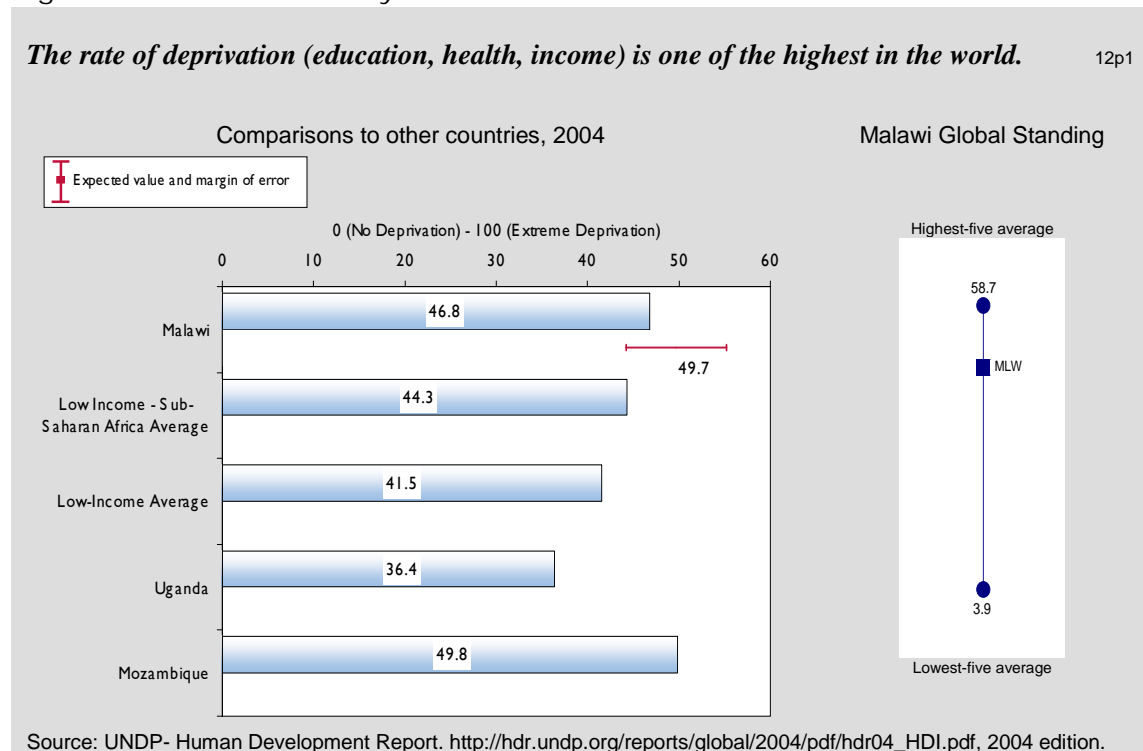
Inequality of income is also a serious problem. With reference again to the 1997 household survey, just 4.9 percent of total household income accrued to the poorest 20 percent. This is only slightly below the main benchmarks, yet Uganda has shown that rapid growth can be combined with a much larger income share for the poor (8.8 percent) through a strategy that boosts earnings for small farmers.

The Malawi government has taken steps to address the poverty problem by completing a Poverty Reduction Strategy Paper in 2002. In line with World Bank and IMF guidelines, the PRSP is meant to serve as a tool for coordinating donor interventions to promote pro-poor growth, as well as forming the basis for the government's own development program. The PRSP is based on four



pillars: sustainable pro-poor growth, emphasizing micro-finance and rural infrastructure; human capital development through education and health; safety nets to improve the quality of life for the most vulnerable; and good governance through more effective, transparent, and accountable public institutions. The strategy also highlights four cross-cutting issues: HIV/AIDS, gender, environment, and science and technology.

Figure 2-6. Human Poverty Index



## ECONOMIC STRUCTURE

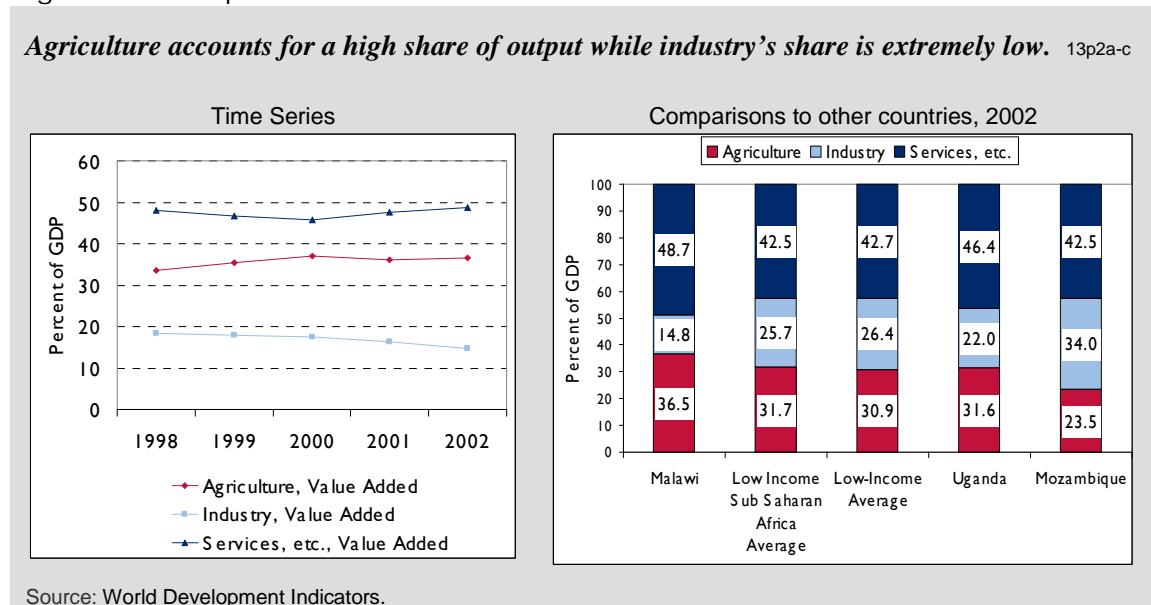
The broad structure of output in Malawi shows no tendency toward transformation over the past five years. Value added in agriculture continues to account for 36 % of GDP. The share in industry actually declined in relative importance, to 15 % of GDP in 2002; this is very low relative to all international benchmarks (Figure 2-7). In the labor force, an estimated 90 percent of the workers depend on agriculture as a major source of income. With 90 percent of the labor force producing just 36 percent of value added, one can see that productivity in agriculture is far lower than the average for the economy overall, which itself is exceedingly low (as shown by GDP per capita). All of these statistics demonstrate that economic development is stalled in a poverty trap. They also suggest that programs to raise productivity in agriculture may have first-order effects on overall growth. At the same time, interventions to accelerate the creation of off-farm earning opportunities are essential for transformational development in the medium to long term.

## DEMOGRAPHY AND ENVIRONMENT

Malawi's population is relatively small, at 11 million people. But the country is also very small geographically, and arable land is very limited, so there is already severe population pressure on the land. This pressure is intensified by population growth of 2.1 percent per year, accentuating

the need for programs to foster rapid development of off-farm employment activities. The growing population also creates ever rising demand for public services, not least in education and

Figure 2-7. Output Structure



health. The demographic problems are compounded by the high prevalence of HIV/AIDS (see health section), which has a devastating impact on the prime-age labor force, including teachers and health professionals. Rapid population growth also produces a very youthful age structure, with 91 dependents per 100 persons of working age. The high dependency rate is a symptom of deep poverty, but also a cause, since there are many mouths to feed per hand to work. It is also a programmatic opportunity, in that declining rates of population growth and dependency have been significant factors supporting a rapid increase in per capita income and improved public services in Asia.

Despite the population pressure on soil resources, Malawi scores moderately well on a recently created index of Environmental Sustainability, compared to international benchmarks. The overall score combines data on 68 variables for Malawi. Looking behind the overall score, however, the detailed figures reveal serious problems in the areas of population stress on the land, and environmental health.

## GENDER

Gender equity is central to poverty alleviation in countries like Malawi where women have been disproportionately deprived of access to education, health services, and productive opportunities outside of subsistence agriculture. Selected gender indicators show a mixed picture for Malawi. There are stark differences in adult literacy, with male literacy (76 percent) being 1.6 times higher than the rate for females (49 percent). This has major long-term effects on growth because women head many households, and maternal education is strongly related to children's health, education, and nutrition. The good news is that impressive progress is being made for the younger

generation. The gross enrollment rate for all levels of schooling is just 1.08 times higher for males than females. This is much better performance (less inequality) in the school system than the average ratio of 1.27 for LIC-Africa.

In terms of life expectancy, the gender difference is minimal. The male to female ratio of 0.98 for Malawi is virtually the same as the differential for other low-income countries and LIC-Africa countries. The big problem is that life expectancy is extremely low for both males and females (37 and 38 years, respectively), and it has dropped sharply because of the AIDS pandemic. High mortality among young adults undoubtedly affects incentives to invest in education, job skills, and productive pursuits.



# 3. Private Sector Enabling Environment

This section reviews indicators for key components 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 (but not sufficient) condition for sustained economic 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, finance, and competitive pressure for efficiency and rising productivity. Equally important is development of the physical infrastructure to support production and trade. Finally, developing countries need to develop the capacity to adapt and apply science and technology as a basis for attracting efficient investment, improving competitiveness, and stimulating rapid productivity growth.

## **FISCAL AND MONETARY POLICY**

Sound macroeconomic management should be evident in low and stable inflation and a sustainable fiscal balance. The indicators for Malawi reveal the opposite. Looking at fiscal policy, government expenditure rose sharply in recent years, reaching 42 percent of GDP in 2003 (Figure 3-1). This is extremely high by every benchmark; the average for LIC-Africa is just 17 percent. Revenue mobilization, at 23 percent of GDP, is also substantially above the benchmark average (15 percent for LIC-Africa), but the differential for expenditure is much larger. Thus, the budget deficit has been unsustainably high, triggering macroeconomic instability. Taking grant receipts into account, the deficit in 2003 was 8.5 percent of GDP, compared to an average of 0.5 percent for LIC-Africa (see Figure 3-2).

Both current and capital expenditures rose sharply during this period. Using data on a fiscal year basis from the IMF's Article IV Review for 2004, current expenditures jumped from 24.6 percent of GDP in 2001/02 to an estimated 32.0 percent in 2003/04. The main source of this enormous jump was interest on domestic debt, which rose from 3.9 to 9.5 percent of GDP. This appears to be a classic example of how borrowing to finance excessive deficits can mutate into a fiscal

Figure 3-1. Government Expenditure (% GDP)

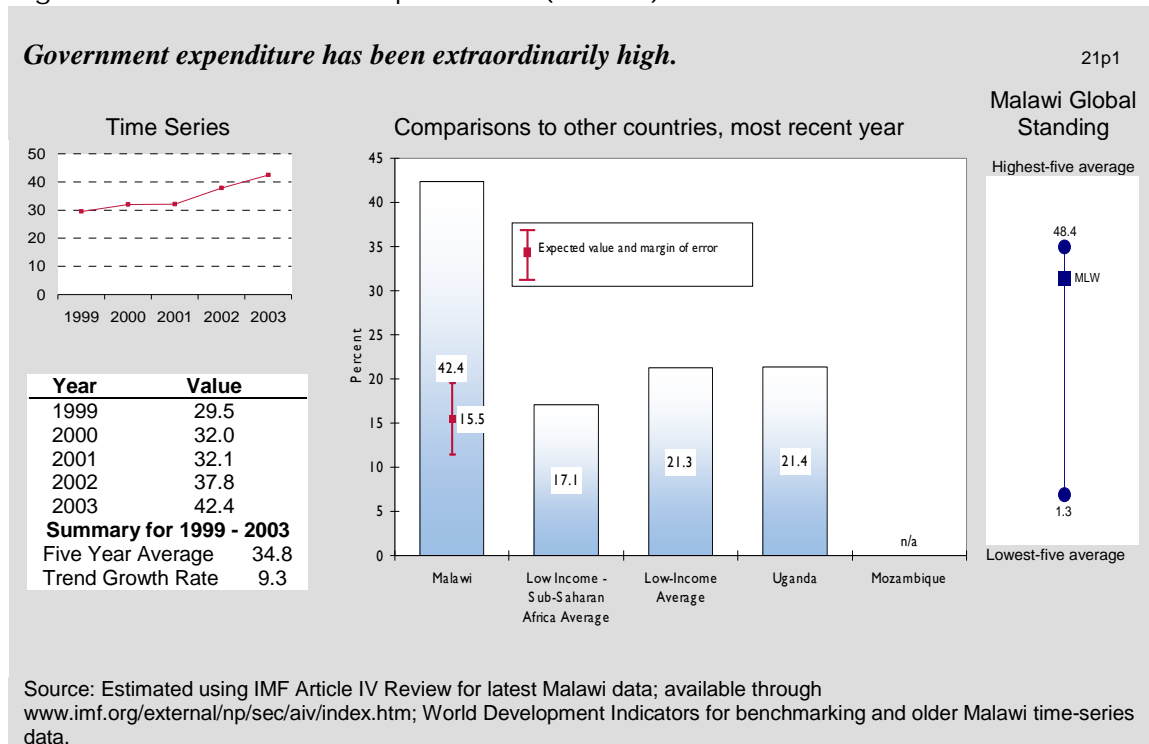
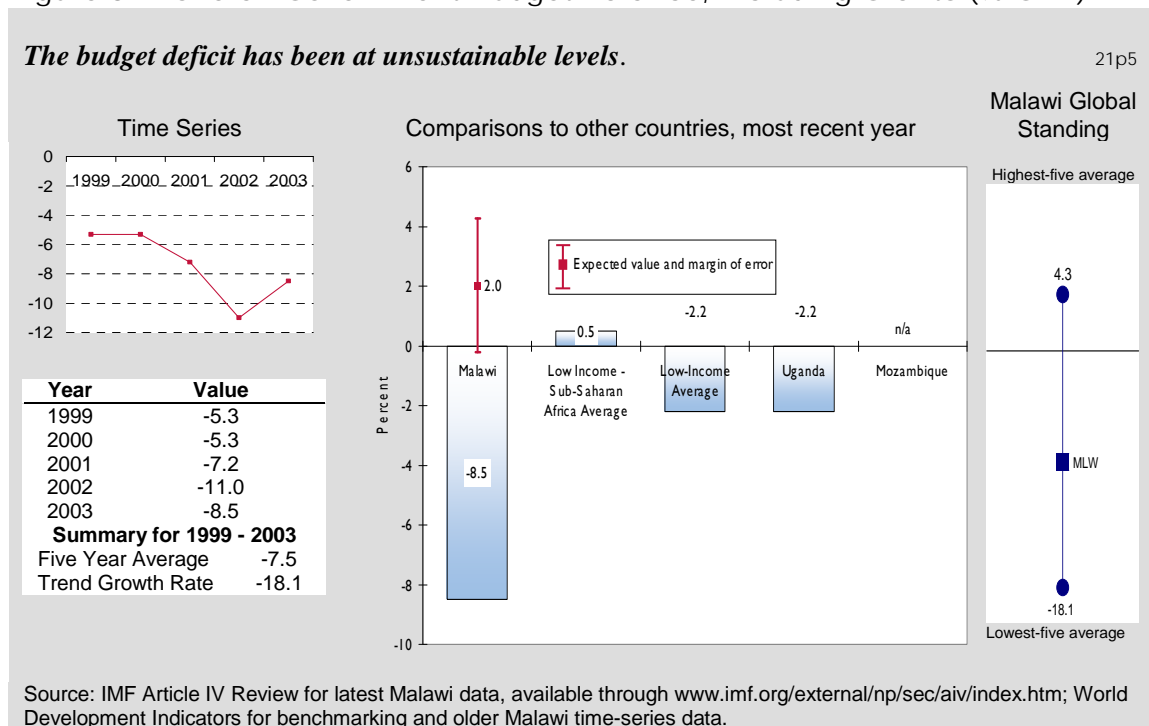


Figure 3-2. Overall Government Budget Balance, including Grants (% GDP)



crisis. Interest on foreign debt, in contrast, has been relatively stable, rising from 1.2 to 1.5 percent of GDP. Government purchases of goods and services increased from 8.4 to 9.3 percent GDP—with a dramatic spike in 2002/03 due to maize purchases equaling 3.9 percent of GDP, which drove up borrowing costs. Even without the spike, government purchases are very high for such a poor country. So are subsidy and transfer costs, which have averaged around 4.5 percent of GDP, and the wage bill, at just under 7 percent of GDP. Development expenditure also soared, from 7.4 to 11.3 percent of GDP, though virtually the entire increase is attributable to inflows of foreign aid.

Government budget deficits have been the driving force behind inflationary growth of the money supply. In 2002 and 2003, broad money growth<sup>6</sup> averaged 27 percent per year; of this, 96 percent was attributable to the financing of government deficits by the banking system—which amounts to printing money to pay the bills.<sup>7</sup> The rate of money growth was not out of line with the benchmark for LIC-Africa, but that is not a strong point of reference, since inflation for this group has been very high (averaging 18 percent). In absolute terms, the combination of rapid growth of the money supply and stagnant output, as in Malawi, leads predictably to high inflation. Indeed, inflation in Malawi has averaged 20 percent over the past five years, and this high rate continued in 2004. See Figure 3-3.

Unsustainable fiscal deficits and high inflation are major sources of uncertainty, inducing economic agents to lose confidence in the viability of doing business in Malawi. This is a potent cause of low saving and investment, capital flight, exchange rate instability, and inefficient diversion of resources into inflation hedges. The result is lower growth, with particularly adverse effects on the poor, who are least capable of coping with rising prices and economic instability.

Since mid-2004, the Government has demonstrated new resolve to rein in excessive expenditure and bring inflation under control. This effort is a first-order requirement for stimulating economic growth. However, even with strong revenue mobilization and improved public expenditure management, Malawi is too poor to afford vital expenditure programs without major support from the international community. In the area of fiscal and monetary management, donor interventions may focus on helping the government build capacity and strengthen the institutional framework for policy formulation and implementation, along with programs to educate the public about the importance of sensible macroeconomic policies.

## **BUSINESS ENVIRONMENT**

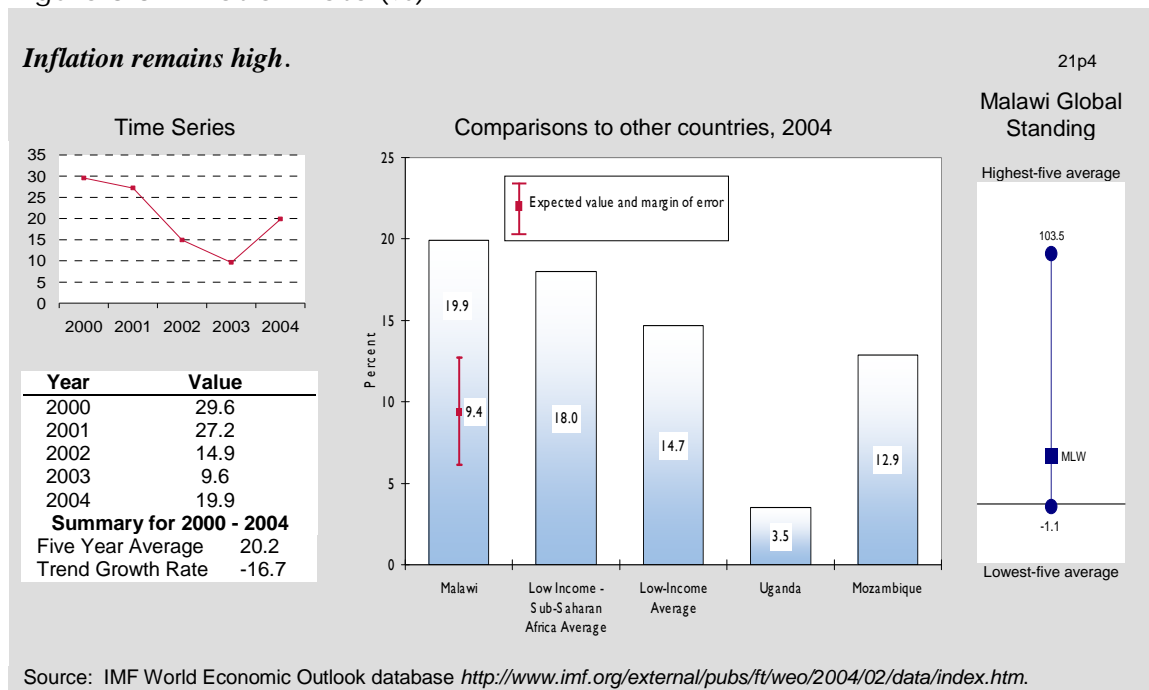
Institutional barriers to doing business, including corruption in government, are critical determinants of private sector development and prospects for sustainable economic growth.

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<sup>6</sup> Narrow money includes the stock of currency in circulation plus current account deposits in the banking system. Broad money includes these elements plus “quasi-money,” in the form of time and saving deposits.

<sup>7</sup> Source: Calculations for this study based on monetary survey data from the IMF Article IV Review, November, 2004.

Figure 3-3. Inflation Rate (%)



Compared to peer benchmarks, Malawi's performance is reasonably good in this area, suggesting that legal and institutional barriers are not a severe constraint on growth. Yet the benchmarks represent conditions in very poor countries. In absolute terms, there is a huge need to tackle corruption, and great room to improve on other impediments to doing business.

Malawi is on par with other LIC-African countries in terms of a composite index of "Doing Business" indicators<sup>8</sup> (Figure 3-4). Looking at the World Bank's Rule of Law index—an eligibility criterion for the Millennium Challenge Account—Malawi's score of -0.3 on a scale of -2.5 to +2.5 is better than the average for LIC-Africa (-0.9), and even better than Uganda and Mozambique (-0.8 and -0.7), the regional stars. Malawi's score on Transparency International's Corruption Perceptions Index (2.8 out of 10) is likewise better than the LIC-Africa average, and comparable to scores for Uganda and Mozambique (Figure 3-5). Nonetheless, any score below 3 indicates rampant corruption that seriously impairs business development. Furthermore, the five-year trend suggests that corruption in Malawi has been getting worse. This is a critical area of concern for donors. According to an IMF report,<sup>9</sup> the Government has recently taken steps to implement a new zero-tolerance policy for corruption. It would be very good news for growth prospects in Malawi if this proves to be a serious commitment.

<sup>8</sup> See the Technical Notes for details. The composite index has been constructed for this report based on guidance from USAID/EGAT.

<sup>9</sup> IMF Press Release No. 05/50, March 3, 2005.



Figure 3-4. Doing Business Composite Index

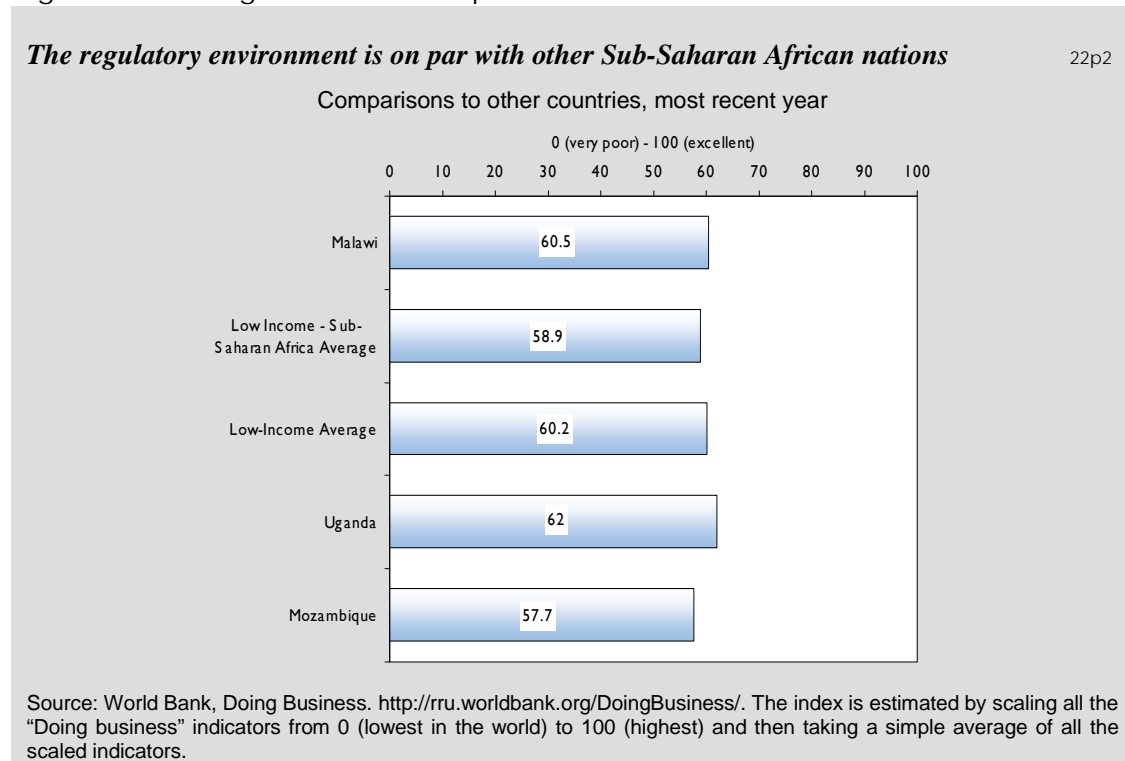
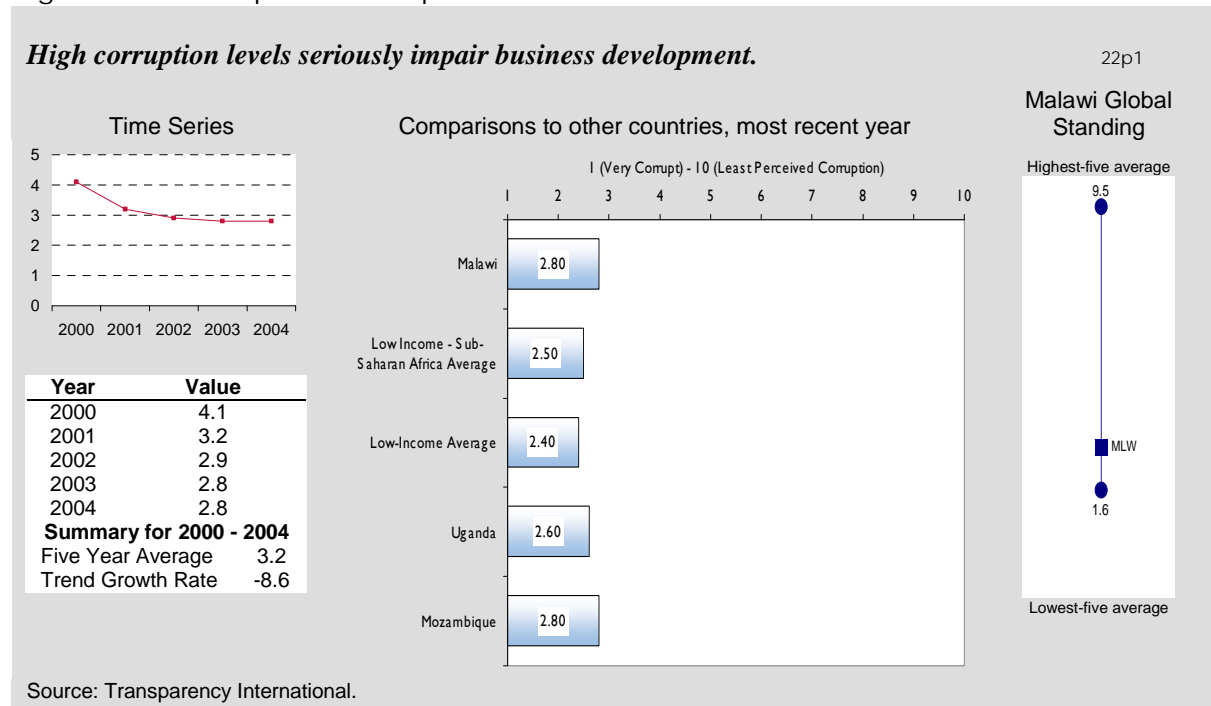


Figure 3-5. Corruption Perception Index



Without going into detail, our supporting indicators for the business environment reinforce these inferences (see the Data Supplement accompanying this report). Relative to peer comparisons,

only one indicator stands out: the time to register property in Malawi (118 days) compares badly to Uganda and Mozambique (48 and 33 days, respectively). Even on this point, however, Malawi's score is better than the average for LIC-Africa (126.8 days).

## **FINANCIAL SECTOR**

A sound, efficient, and competitive financial sector is a fundamental mechanism for mobilizing saving, allocating financial resources, fostering entrepreneurship, and improving risk management. A simple indicator of financial development is the degree of monetization, measured by the ratio of broad money (currency plus bank deposits) to GDP. The monetization ratio averages 26 percent for LIC-Africa, which is very low compared to other regions. In Malawi, the ratio has hovered around 14 percent, indicating that the banking system touches only a very small segment of the economy. The amount of bank credit to the private sector in Malawi is also miniscule: just 5 percent of GDP in 2003, down from 8 percent in 2000. These figures compare to an average of 12 percent for LIC-Africa. To put this in perspective, bank credit to the private sector averages 156 percent of GDP in the top five countries globally. In short, the banking system is severely underdeveloped.

For businesses that do obtain bank credit, the cost is very high. The real interest rate on bank loans has risen in recent years to reach 28 percent in 2002. The spread between lending and deposit rates has persistently been around 20 percent. Both statistics are well above the respective international benchmarks (see Figures 3-6 and 3-7). The punitive cost of borrowing is related to the government's large demand for credit to finance the budget deficit, which crowds out financing for the private sector. Other possible factors include inefficient bank operations, a high rate of non-performing loans, or a highly concentrated financial system that allows banks to charge what the market will bear. The important point, for present purposes, is that the underdeveloped financial system is a choke-point for growth. The system does little to mobilize saving or allocate resources to efficient investment. If anything, the high cost of credit actively discourages investment. Financial sector development could therefore be an important strategic priority for USAID. A more detailed study would be required, however, to determine the best opportunities and appropriate avenues for intervention.

## **EXTERNAL SECTOR**

Fundamental changes in international commerce and finance, such as lower transport costs, advances in telecommunications technology, and the decline in policy barriers have fueled a rapid increase in global integration over the past 25 years. The international flow of goods and services, capital, technology, ideas, and people offers great opportunities for Malawi to boost growth and reduce poverty by stimulating productivity and efficiency, providing access to new markets and ideas, and expanding the range of consumer choice. Globalization also creates new challenges in the need for institutions, policies, and regulations to take full advantage of international markets; cost-effective approaches to cope with the adjustment costs; and systems for monitoring and mitigating associated risks.

Figure 3-6. Real Interest Rate (%)

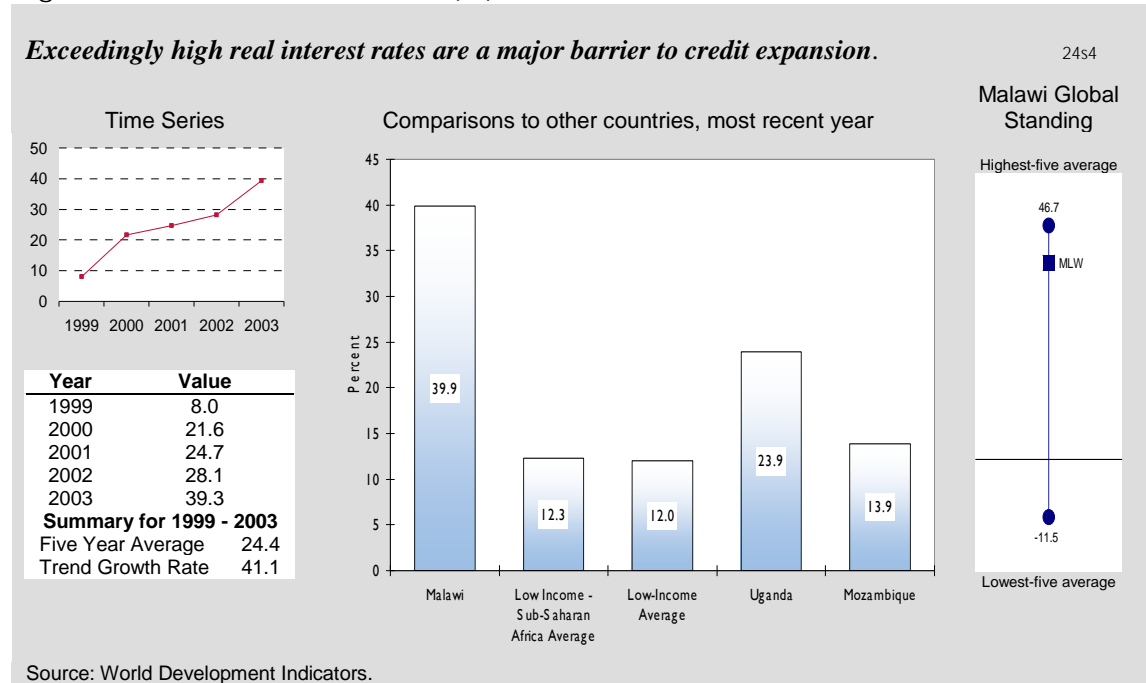
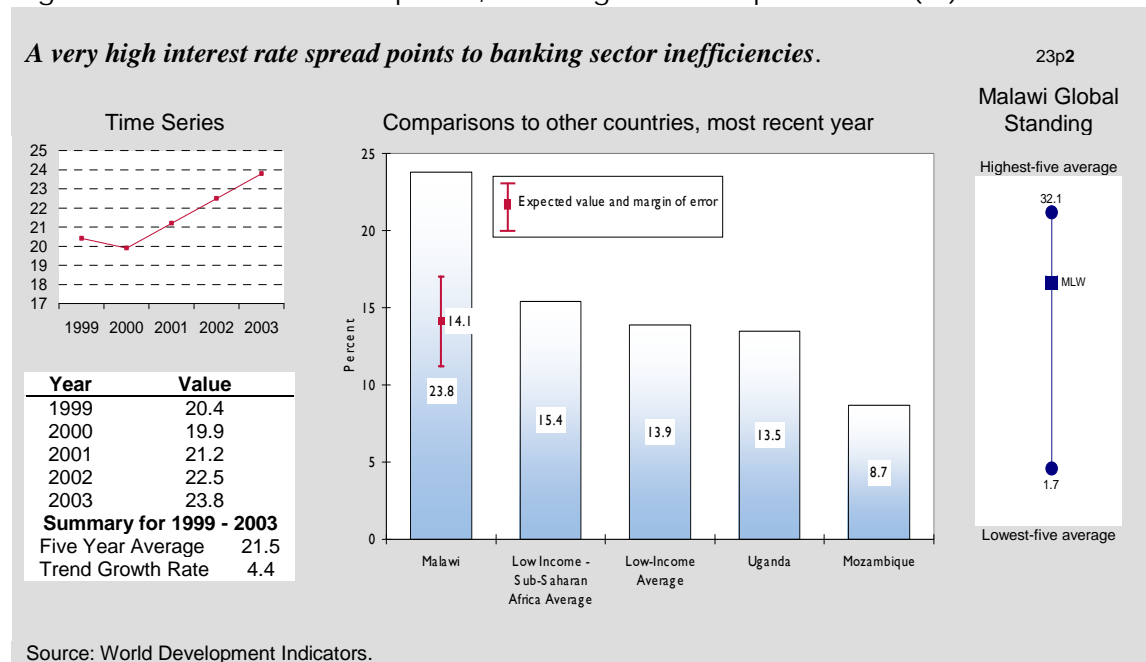


Figure 3-7. Interest Rate Spread, Lending Minus Deposit Rate (%)



Malawi is a relatively open economy, but the data reveal serious problems in the external sector. These include low export growth, highly concentrated export earnings, high dependency on foreign aid, very low recorded remittances from nationals outside the country, a precarious current account balance, extremely low inflows of foreign investment, and dangerously low levels of foreign exchange reserves.

## International Trade and the Current Account

The most common indicator of openness to trade is the ratio of exports plus imports (goods and services) to GDP. The ratio for Malawi, 68 percent, is fully in line with the international benchmarks (Figure 3-8). Yet export earnings have been virtually stagnant, averaging just 1.5 percent growth over the past five years, in US dollar value (Figure 3-9). Moreover, export growth has been extremely erratic from year to year, due to high dependency on a few primary products. Tobacco, sugar, and tea account for 80 percent of total earnings. There is an acute need for export diversification.

Despite the weak export performance, the Heritage Foundation gives Malawi a score of 3 for its composite trade policy index (in a range of 1 for very good and 5 for poor); the average for LIC-Africa is 4.1, suggesting that Malawi is slightly ahead of other countries in the region in liberalizing trade. One major trade disadvantage stems from an appreciation of 15 percent in the real exchange rate from 1995 to 2002; the average for LIC-Africa is a depreciation of 7 percent. The relative change in currency values rendered Malawian goods less competitive. In addition, the terms of trade for Malawi declined by 15 percent in 2002 and 2003.<sup>10</sup> These factors contribute to the lack of dynamic trade performance. Considering other indicators, however, the core problem appears to be the weak enabling environment, in general, for stimulating investment and private sector development.

Imports of goods and services far exceeded export earnings. This gap might be offset partially through worker remittances, but the data give no indication that Malawi is effectively tapping this source of funds. In 2002 recorded remittances were just 0.2 percent of exports, versus an average of 11.6 percent for LIC-Africa. With millions of Malawians working abroad, it should be possible to capture remittances much more effectively with secure and accessible cash transfer systems—not to mention better economic policies to encourage Malawians to invest at home.

The overall current account deficit has been extremely large. Excluding official transfers (grants), the deficit was 24.5 percent of GDP in 2002 and 17.8 percent in 2003. Taking grants into account, the deficit still averaged over 10 percent of GDP for these two years, creating an unsustainable financing requirement (Figure 3-10).

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<sup>10</sup> A decline in the terms of trade means that any given volume of exports buys fewer imports. Terms of trade data are from the IMF Article IV Review for Malawi, Statistical Annex, December 2004, Table 16.

Figure 3-8. Trade (% GDP)

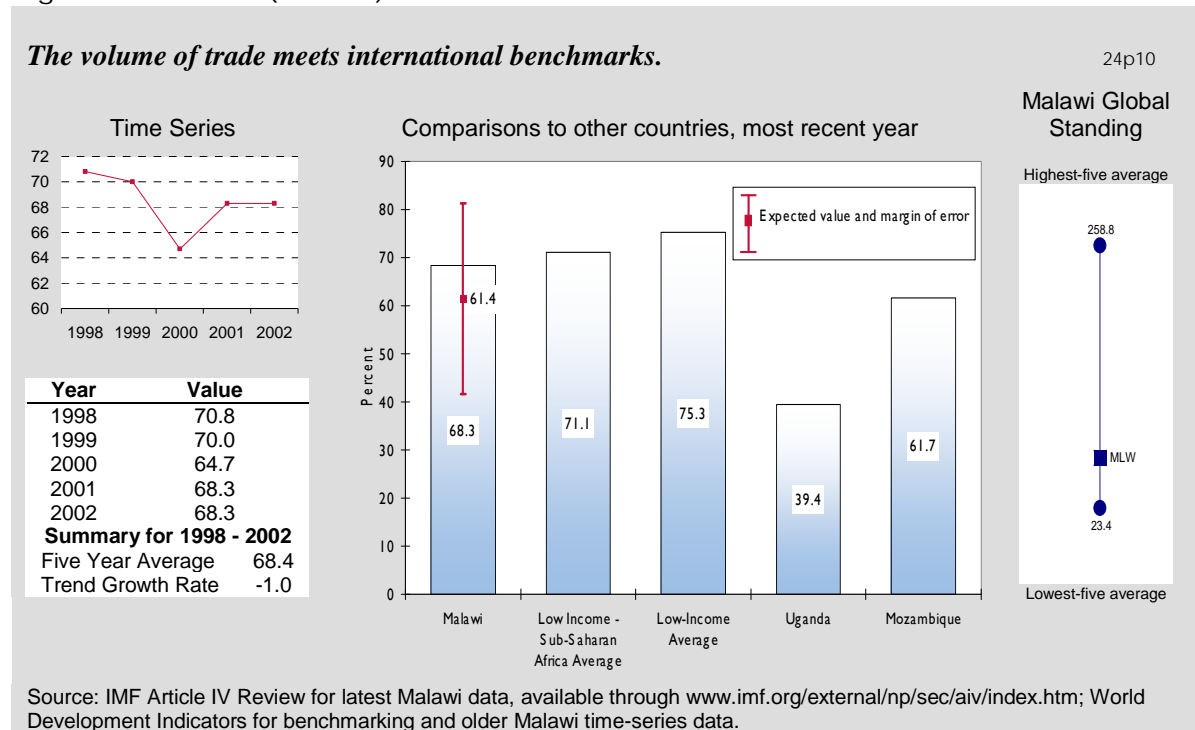


Figure 3-9. Exports Growth of Goods and Services (% Change)

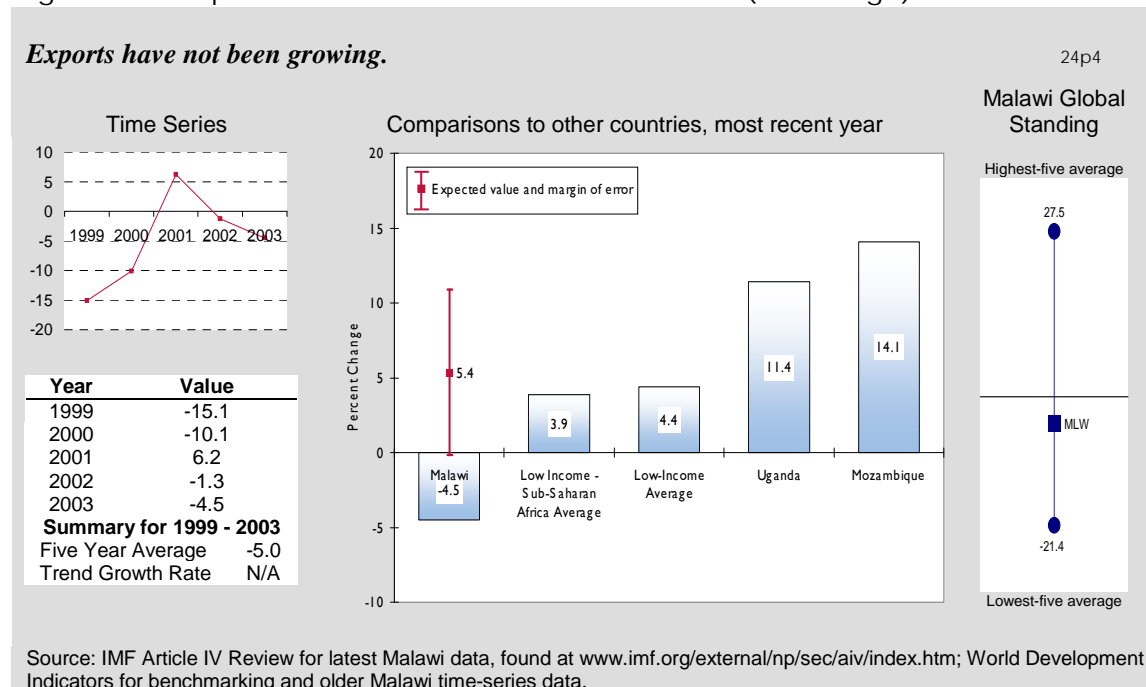
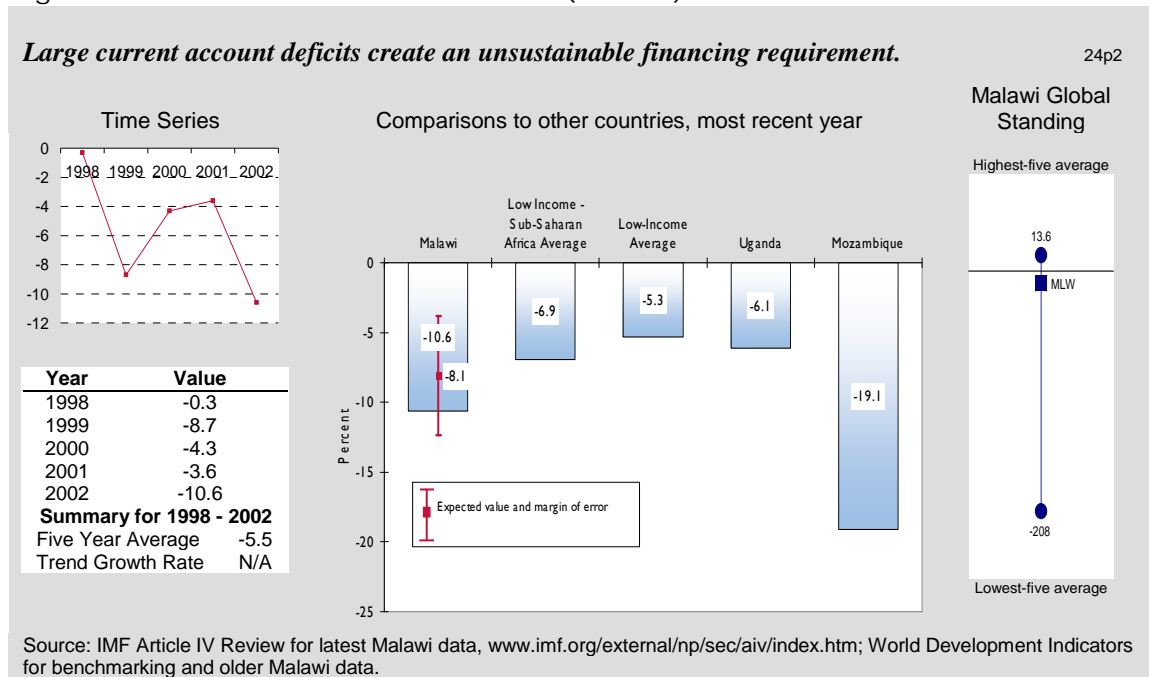


Figure 3-10. Current Account Balance (% GDP)



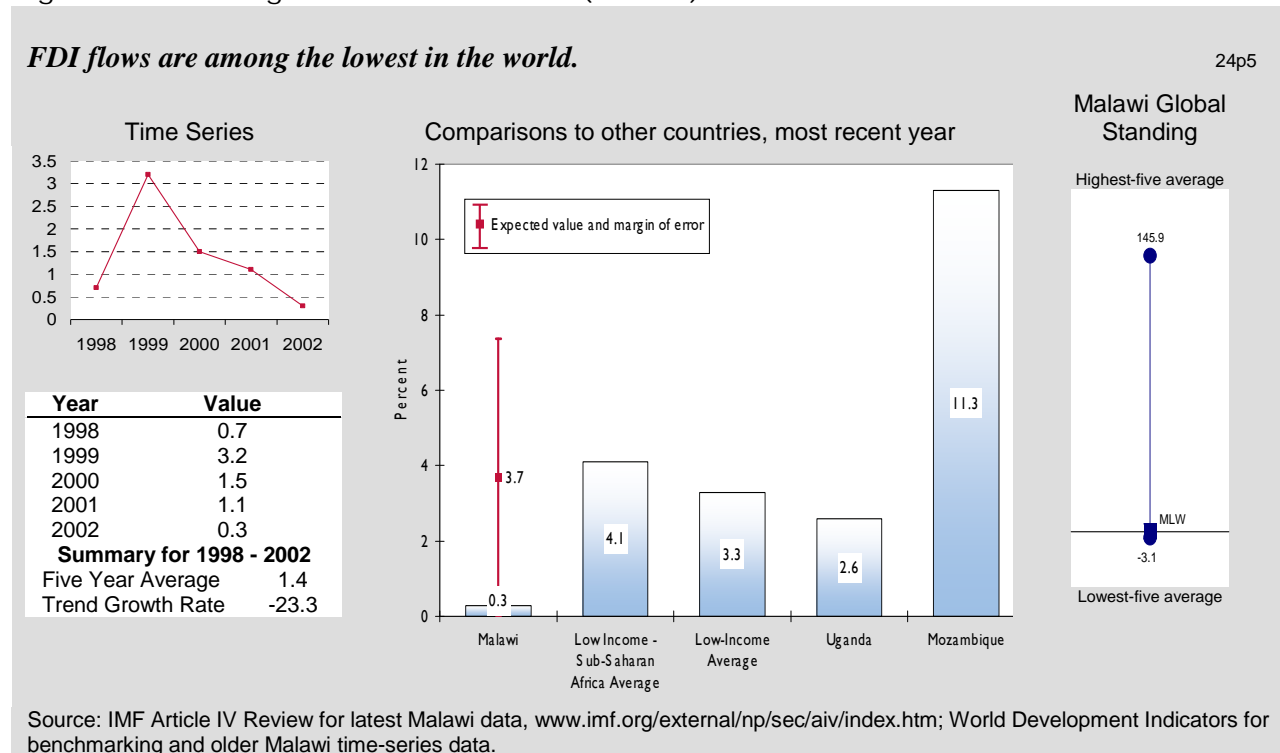
## International Financing

Malawi's current account deficit represents a huge resource gap that must be financed. Foreign aid is by far the main source of financing. The net flow of aid (grants and soft loans) averaged 25 percent of GDP between 1998 and 2001, falling to 20 percent in 2002. This is a very high level of aid dependency. In relative terms, it exceeds the average of 17 percent for LIC-Africa, yet it is slightly below the statistical expected value for Malawi's level of income.

Private capital flows are another major source of external financing in most countries. For Malawi, the amounts are small in absolute terms, and much lower than the benchmark standards. Foreign direct investment (FDI), in particular, averaged just 1.4 percent of GDP from 1998 to 2002, barely a third the average for LIC-Africa (Figure 3-11).

To the extent that aid and private capital flows fall short of the financing requirement, the deficit must be covered by reducing foreign exchange reserves. In 2003, gross international reserves in Malawi declined to a level that covers just 1.8 months of imports, compared to a comfortable 4 months of import cover in 2000. This is the clearest sign that the external sector has verged on a crisis. USAID, of course, is not in the business of solving short-run macroeconomic crises, but the situation reveals a compelling need for better policies to foster export growth, attract remittances, and stimulate private investment flows.

Figure 3-11. Foreign Direct Investment (% GDP)



## Debt

The data suggest that external debt is no longer a major problem for Malawi. World Bank figures show that debt service payments have declined in recent years to less than 8 percent of export earnings. Also, the present value of future debt payments is below 50 percent of GDP. Both figures are well below the threshold to signal a serious debt problem.

## ECONOMIC INFRASTRUCTURE

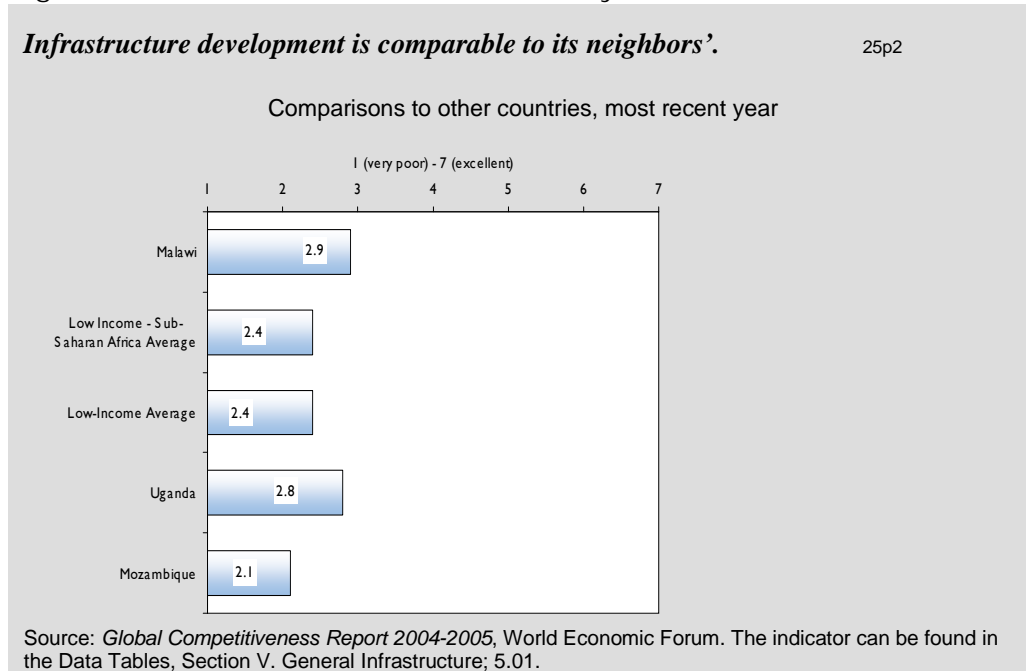
A country's physical infrastructure—for transportation, communications, power, and information technology—is the backbone for improving competitiveness and expanding productive capacity. Key indicators for Malawi show a mixed picture about infrastructure development to support business development.<sup>11</sup>

The broadest indicator of infrastructure *quality* for business development is an index of executive perceptions compiled by the World Economic Forum (WEF). Malawi's score of 2.9 (out of 7) is better than the median for LIC-Africa, better than the score for Mozambique, and comparable to the score for Uganda (Figure 3-12). The perception of adequate infrastructure quality, by regional standards, carries through WEF survey results for rail development (with a score of 2.1), port

<sup>11</sup> This section relies on perception indicators to assess infrastructure quality and adequacy. Objective measures of infrastructure *quantity* often have little diagnostic value. For example, a low value for kilometers of paved roads does not imply that there is a problem to be fixed, since unpaved all-weather roads may be more efficient than paving secondary and tertiary roads in poor countries.

facilities (2.3)—particularly dry ports, for Malawi—and air transportation, all of which are very important given Malawi’s landlocked position. However, Malawi score on the quality of electricity supply (2.1) is well below the benchmark standards. Problems with electricity supply create yet another competitive disadvantage for local businesses.

Figure 3-12. Overall Infrastructure Quality



For communications infrastructure, two indicators tell a story of serious underdevelopment. Telephone density in Malawi is 15 lines per 1000 people (including mobile phones), and the number of internet users per 1000 people is 3.4. Both figures are extremely low compared to the LIC-Africa averages of 32 phone lines and 10.3 internet users per 1000 people, though they are

consistent with the expected value for an African country with Malawi’s low level of income. With communication technology being a vital link for international transactions, the poor state of this infrastructure is a serious barrier to trade and investment. The good news is that both of these indicators are rising rapidly in Malawi, albeit from rock-bottom levels.

Given the critical importance of infrastructure for economic growth, and the weak conditions in Malawi, this may be an important area for USAID intervention, particularly through sustainable approaches such as improvements in capital budgeting, better planning for recurrent costs, and greater involvement of the private sector.

## SCIENCE AND TECHNOLOGY

Science and technology are central elements of a dynamic business environment, and technical knowledge is a driving force for rising productivity and competitiveness. Even for low-income countries, transformational development increasingly depends on acquiring and adapting



technology from the global economy, and applying it in ways that are appropriate to their level of development. A lack of capacity to access and utilize technology prevents an economy from leveraging the benefits of globalization. Unfortunately, few international indicators of science and technology are available for judging performance in low-income developing countries. Hence, one must draw inferences from a very limited data set, as proxies for other missing information.<sup>12</sup>

The primary indicator of indigenous science and technology capability is the number of patents filed each year by residents of the country. Malawi has averaged just 3 such patents per year over the past five years. This is comparable to the average of 2 for LIC-Africa, but performance is extremely poor for the entire group. Another useful technology indicator is the number of internet users per 1000 people; as discussed in the previous section, Malawi remains far behind other low-income countries in Africa by this measure, though internet use is growing quickly. No data are available for Malawi on R&D expenditure. The absence of data, in itself, is a sign of poor science and technology development.

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<sup>12</sup> For many low-income countries, one cannot even find timely data on enrollments in science and technology programs.



## 4. Pro-Poor Growth Environment

Rapid growth is the most powerful and dependable instrument for poverty reduction. Yet the link between growth and poverty reduction is not mechanical. In some countries, the structure of development fosters income growth for poor households that exceeds overall per capita income growth; in other settings growth benefits accrue disproportionately to the non-poor. A pro-poor growth environment stems from policies and institutions that improve opportunities and capabilities for the poor, while reducing their vulnerabilities. These characteristics are associated with improvements in primary health and education, the creation of jobs and income opportunities, the development of skills, micro-finance, agricultural development (for countries like Malawi with large population of rural poor), and gender equality.<sup>13</sup> This section focuses on four of these issues that contribute to pro-poor growth: health; education; employment and the workforce; and agricultural development.

### HEALTH

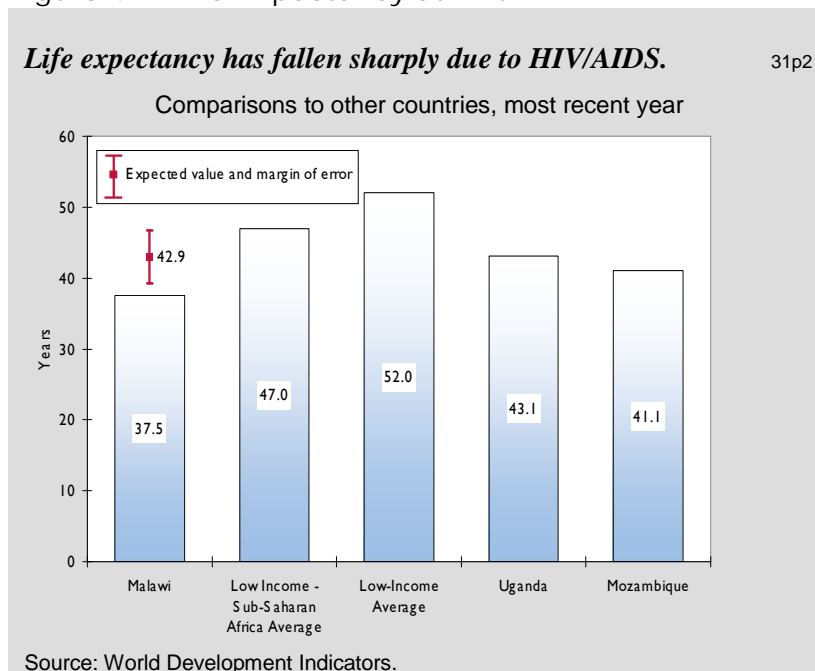
The provision of basic health service is a major form of human capital investment, and a significant determinant of economic growth and poverty reduction. Although health programs do not fall under the EGAT bureau, an understanding of the health status of the population can influence the design of EG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

The broadest indicator of health status is life expectancy. In Malawi life expectancy has dropped precipitously in recent years to 37.5 years, one of the lowest levels in the world. This is due primarily to the impact of the HIV/AIDS epidemic, on top of already high rates of infant and child mortality (Figure 4-1). Reversing this trend is crucial since the prevalence of poor health and premature death affects all aspects of the economy, including labor productivity, saving rates, the delivery of public services, the education of future generations, overall growth, and poverty. Data show that HIV prevalence among adults has decreased slightly from 16 percent in 1999 to 14.2 in 2003, but this change may reflect more accurate measurement, or the impact of deaths from AIDS, rather than an actual improvement in the situation. In any case, the HIV/AIDS epidemic in Malawi is one of the most severe in the world. This dire situation needs to be addressed in any economic growth strategy.

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<sup>13</sup> Since the report concentrates on economic growth issues, the analysis does not cover emergency relief.

Figure 4-1. Life Expectancy at Birth



Malawi's maternal mortality rate (MMR), at 18 deaths per 1000 live births, is also among the highest in the world, confirming the severity of the national health crisis and the human cost of deep poverty (Figure 4-2). More than half of all births are attended by trained health personnel, which is a higher rate than in most low-income African countries. Nonetheless, inadequate access to, quality of, or knowledge about health care is causing the death of many women in childbirth.

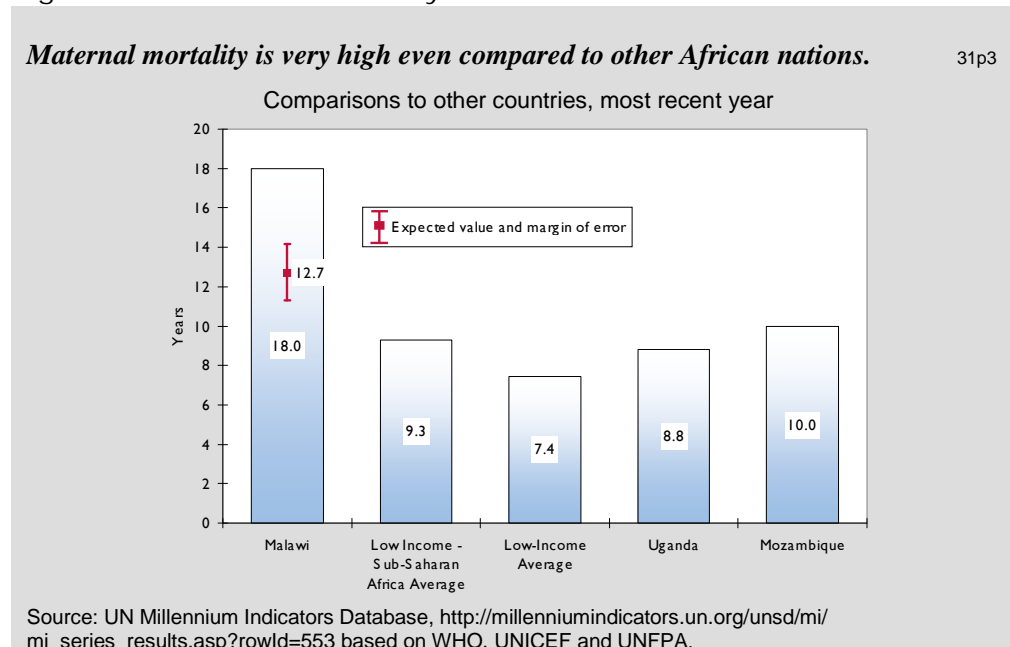
The Malawi government has been taking steps to improve conditions in the health sector. In line with the PRSP guidelines, public expenditure on health care has risen from 2.7 percent of GDP in 2001 to an estimated 4.7 percent in 2004. In addition, Malawi is at or above the LIC-Africa norm on important health indicators such as access to improved water and sanitation, and child immunization.

## EDUCATION

The government of Malawi has taken the goal of eliminating poverty through education seriously by introducing free primary education in the last decade. As a result, 81 percent of primary school age children are now enrolled in school, well above the average for LIC-Africa, and youth literacy has risen slowly but steadily to reach 73 percent in 2002, virtually matching the corresponding peer-group average.

Although great gains have been made in access to primary education for poorer-socio-economic groups, this does not automatically translate into a higher percentage of students completing primary school. According to the latest data, for 2000, 54 percent of the students persist to grade five, a very low performance indicator. Dropout rates remain especially high for girls in rural areas. The increase in primary enrolment may also be compromising the all-important quality

Figure 4-2. Maternal Mortality Rate



dimension. This is most evident in the primary school pupil-teacher ratio, which reached 63:1 in 1999 (latest data point), virtually the highest ratio in the world.

The data therefore suggest that the key problem in the education sector is quality. Appropriate measures may include teacher training to improve the teacher- pupil ratio, better financing of teaching and learning materials, improved curriculum, and innovative incentives to keep children in school, particularly girls.

## EMPLOYMENT AND WORKFORCE

Malawi faces an acute need to create productive jobs and income generating opportunities for the growing population. Reflecting Malawi's very youthful demographic structure, the labor force is estimated to be growing by 2 percent per year. Although this is below the average of 2.6 percent per year for LIC-Africa—most likely due to the ravages of HIV/AIDS—the economy needs to absorb roughly 100,000 new workers each year.

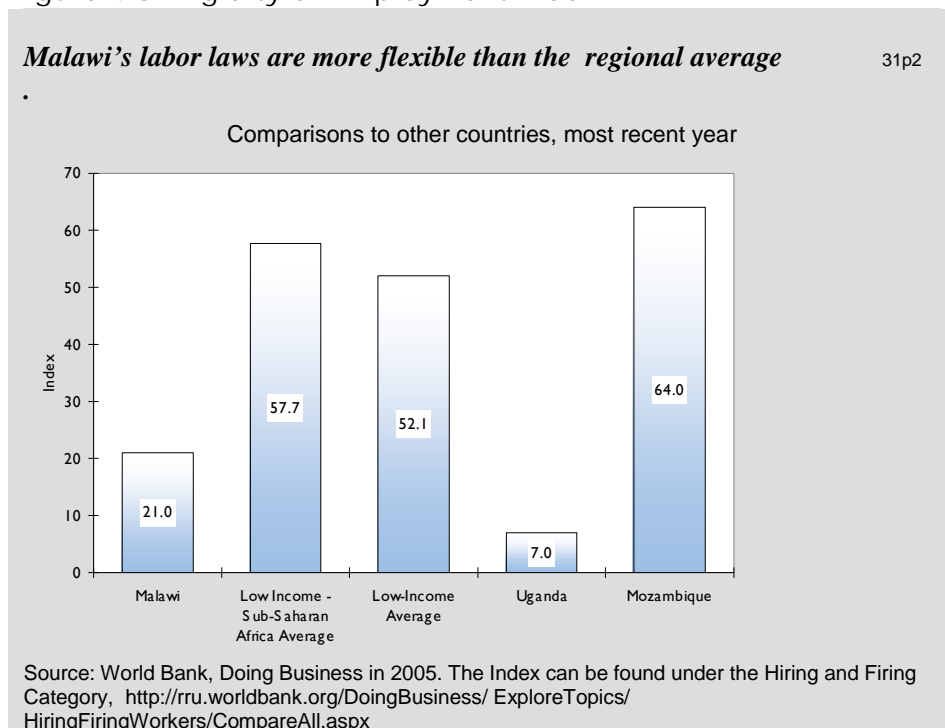
The labor force participation rate in Malawi is extremely high, with an estimated 93 workers per 100 people of working age (15-64). The average of 88 for LIC-Africa is also very high, compared to 77 for low-income countries globally. In part, the high values are a consequence of deep and severe poverty, because very poor people can ill afford the luxury of remaining outside the labor force. But the figure also hints at a serious labor market problem in Malawi and other low-income countries in Africa: the use of children as workers. The International Labour Organization estimates that 31.5 percent of children from ages 10 to 14 were working as child laborers in 2000.<sup>14</sup> Moreover, the ILO categorizes child labor conditions in Malawi as the “worst form,” due

<sup>14</sup> Global March against Child Labour (2004), 2002 Global Report on the Worst Forms of Child Labour.

to potential hazards to health and safety. The tobacco industry is a major offender, with other small-scale farm activities close behind. This problem may be a high priority for attention by USAID and other funding agencies, when planning education programs or strategies to stimulate agricultural production.

On the bright side, Malawi's labor laws and regulations are relatively favorable for job creation. The World Bank's index of Rigidity of Employment measures the difficulty in hiring and firing workers on a scale of 0 to 100 (with higher values indicating greater rigidity). The score of 21 for Malawi in 2004 is far better than the average of 58 for LIC-Africa (Figure 4-3). Uganda's score of 7 shows that there is still considerable scope for improvement in Malawi. Even so, the regulatory environment is not a central constraint on job creation. The main issue is the inability of the country to attract investment of any sort, due to problems in other areas discussed above.

Figure 4-3. Rigidity of Employment Index



## AGRICULTURE

The basic picture in agriculture is one of moderately good performance, but with large year to year fluctuations, and low labor productivity due to severe population pressure on the land and an extreme absence of off-farm jobs. Agriculture accounts for more than one-third of GDP, and 80% of export earnings. An estimated 90% of the population lives in rural areas; nearly all of these people depend on agriculture for their livelihood, primarily through very small-scale subsistence production. Hence, conditions in agriculture have a large bearing on overall growth and poverty.

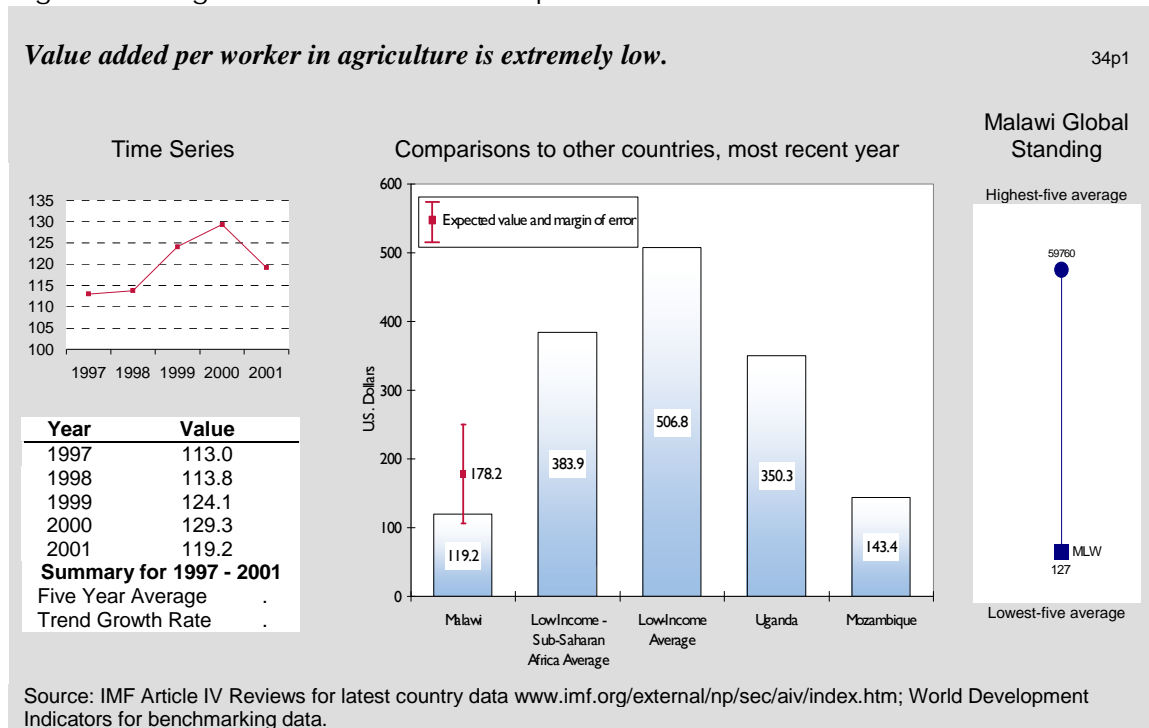
Agricultural output has been highly erratic from year to year, showing the impact of rainfall variations, as well as changes in the availability of inputs such as fertilizer (through the Starter

Pack program, for example). Even so, the underlying trend has been reasonably favorable. The sector has grown by nearly 4 percent per year over the past five years. This is far better than the LIC-Africa average of 0.7 percent, though below recent growth rates in Uganda (5 percent) and Mozambique (7 percent). Another positive factor is that growth has been somewhat faster among smallholders than in the estate sector. Overall crop production has risen by 50 percent since 1990, compared to an average of only 38 percent for other low-income African countries. Cereal yield has been rising by 3.3 percent per year, and the average of 1,045 kilograms per hectare is very similar to the benchmark standard of 1,087 for LIC-Africa.

Value added per worker in agriculture, at \$119.2 (in constant 1995 prices) is less than one-third the average of \$384 for low-income countries in sub-Saharan Africa the region (Figure 4-4). This factor alone goes a long way to explaining the high rate of poverty in Malawi. Since output yields are comparable to the regional norms, the productivity indicator shows that agricultural production in Malawi is exceedingly labor-intensive—resulting from very high population pressure on limited arable land,. Other factors such as lack of access to agricultural equipment, fertilizer, and quality seeds may also be driving low productivity, but suitable indicators are not available for this study. In any case, poor subsistence farmers in Malawi lack funds to obtain modern inputs, and the financial system is not filling the gap (as indicated by the financial sector data reviewed earlier). Policy constraints do not appear to be the main problem. According to the World Economic Forum, Malawi receives a score of 3.8 (out of 7, with 7 being best) on a survey question regarding the burden of policy costs in agriculture. This is comparable to the benchmark standard for LIC-Africa, and also for low-income countries globally. Still, in absolute terms the score is fairly low, indicating considerable room for policy reform.

On balance, agricultural development is a critical determinant of economic growth and poverty reduction in Malawi. In the medium to long run, however, the major problem is to transform the economy by stimulating investment and creating jobs outside of agriculture.

Figure 4-4. Agriculture Value Added per Worker





# Appendix

## CRITERIA FOR SELECTING INDICATORS

The scope of the paper is constrained by the availability of suitable indicators. Indicators have been chosen to balance the need for broad coverage and diagnostic value, on the one hand, and the need of brevity and clarity, on the other. The analysis covers 15 EG-related topics, and just 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 the indicators examined for this report. A separate Data Supplement contains the complete Malawi data set, including data for the benchmark comparisons, and technical notes for every indicator.

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

In areas of weak performance, the analysis proceeds to review a limited set of *diagnostic supporting indicators*. These “level II” indicators provide more details about the problem or shed light on *why* the primary indicators may be weak. For example, if economic growth is poor, one can examine data on investment and productivity as diagnostic indicators. If a country performs poorly on educational achievement, as measured by the youth literacy rate, one can examine determinants such as expenditure on primary education, and the pupil-teacher ratio.<sup>15</sup>

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

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<sup>15</sup> Deeper analysis of the topic using more detailed data (level III) is beyond the scope of papers in this series.

preference is given to one that is simplest to understand. For example, both the Gini coefficient and the share of income accruing to the poorest 20 percent of households can be used to gauge income inequality. We use the income share because it is simpler, and more sensitive to changes.

## BENCHMARKING METHODOLOGY

Comparative benchmarking is the main tool used to evaluate each indicator. The analysis draws on several criteria, rather than a single mechanical rule. The starting point is a comparison of performance in Malawi relative to the average for countries in the same income group and region—in this case, low-income countries in sub-Saharan Africa (hereafter “LIC-Africa”).<sup>16</sup> For added perspective, three other comparisons are examined: (1) the global average for this income group; (2) respective values for two comparator countries selected by the Malawi mission (Uganda and Mozambique); and (3) the average for the five best and five worst performing countries globally. Most comparisons are framed in terms of values for the latest year of data from available sources. Five-year trends are also taken into account if they shed light on the performance assessment.<sup>17</sup>

For selected variables, a second source of benchmark values uses statistical regression analysis to establish an expected value for the indicator, controlling for income and regional effects.<sup>18</sup> This approach has three advantages. First, the benchmark is customized to Malawi’s specific level of income. Second, the comparison does not depend on the exact choice of reference group. Third, the methodology allows one to quantify the margin of error and establish a “normal band” for a country with Malawi’s characteristics. An observed value falling outside this band on the side of poor performance signals a serious problem.<sup>19</sup>

Finally, where relevant, Malawi’s performance is weighed against absolute standards. For example, Malawi’s inflation rate averaged 20 percent over the past five years. Regardless of the regional comparisons or regression results, this is a sign of serious economic mismanagement.

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<sup>16</sup> Income groups as defined by the World Bank for 2004. For this study, the average is defined in terms of the mean; future studies will use the median instead, because the values are not distorted by outliers.

<sup>17</sup> The five-year trends are computed by fitting a log-linear regression line through the data points. The alternative of computing average growth from the end points produces aberrant results when one or both of those points diverges from the underlying trend.

<sup>18</sup> This is a cross-sectional OLS regression using data for all developing countries. For any indicator,  $Y$ , the regression equation takes the form:  $Y$  (or  $\ln Y$ , as relevant) =  $a + b * \ln \text{PCI} + c * \text{Region} + \text{error}$  – where PCI is per capita income in PPP\$, and Region is a set of 0-1 dummy variables indicating the region in which each country is located. Once estimates are obtained for the parameters  $a$ ,  $b$  and  $c$ , the predicted value for Malawi is computed by plugging in Malawi-specific values for PCI and Region. Where applicable, the regression also controls for population size and petroleum exports (as a percentage of GDP).

<sup>19</sup> This report uses a margin of error of 0.66 times the standard error of estimate (adjusted for heteroskedasticity, where appropriate). With this value, 25% of the observations should fall outside the normal range on the side of poor performance (and 25% on the side of good performance). Some regressions produce a very large standard error, giving a “normal band” that is too wide to provide a discerning test of good or bad performance.

## LIST OF INDICATORS

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

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

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

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

MDG = Millennium Development Goal indicator

MCA = Millennium Challenge Account indicator

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





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# **Data Supplement—Economic Performance Assessment: Malawi**

April 2005

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# **Data Supplement—Economic Performance Assessment: Malawi**

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Sponsored by the Economic Growth office of USAID's Bureau of Economic Growth, Agriculture and Trade (EGAT), and implemented by Nathan Associates Inc. under Contract No. PCE-I-00-00-00013-00, Task Order 004, the Country Analytical Support (CAS) Project, 2005-2006, is developing a standard methodology for producing analytical reports that will provide USAID missions and regional bureaus with a clear and concise analysis of economic growth performance for particular host countries. The aim is to help USAID officials gain a clear picture of the host economy, as an input into the identification of possible strategic priorities for Economic Growth program interventions. Under the CAS Project, Nathan Associates will also respond to mission requests for in-depth sector studies to examine more thoroughly particular issues identified by the data analysis in the country reports. The CTO for this project is Yoon Lee. USAID missions and bureaus may seek assistance and funding for these activities by contacting Rita Aggarwal, USAID/EGAT/EG Activity Manager for the CAS project, at [raggarwal@usaid.gov](mailto:raggarwal@usaid.gov).

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# List of Indicators

## OVERVIEW OF THE ECONOMY

GROWTH PERFORMANCE	Level	MDG/MCA/EcGov	CAS Indicator Code
Per capita GDP, \$PPP	I		11P1
Per capita GDP, current US\$	I		11P2
Real GDP growth	I		11P3
Growth of labor productivity	II		11S1
Investment Productivity - Incremental Capital-Output Ratio (ICOR)	II		11S2
Gross fixed investment, % GDP	II		11S3
Gross fixed private investment, % GDP	II		11S4
<b>POVERTY AND INEQUALITY</b>			
Human poverty index	I		12P1
Income-share, poorest 20%	I		12P2
Population living on less than \$1 PPP per day	I	MDG	12P3
Poverty headcount, by national poverty line	I	MDG	12P4
PRSP Status	I	EcGov	12P5
Population below minimum dietary energy consumption	II	MDG	12S1
Poverty gap at \$1 PPP a day	II		12S2
<b>ECONOMIC STRUCTURE</b>			
Labor force structure	I		13P1
Output structure	I		13P2
<b>DEMOGRAPHY AND ENVIRONMENT</b>			
Adult literacy rate	I		14P1
Age dependency rate	I		14P2
Environmental sustainable index	I		14P3
Population size and growth	I		14P4
Urbanization rate	I		14P5
<b>GENDER</b>			
Adult literacy rate, ratio of male to female	I	MDG	15P1
Gross enrollment rate, all levels, ratio of male to female,	I	MDG	15P2
Life expectancy at birth, ratio of male to female	I		15P3

Notes: Level I = primary performance indicators, Level II = supporting diagnostic indicators

MDG = Millennium Development Goal indicator

MCA = Millennium Challenge Account indicator

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

## PRIVATE SECTOR ENABLING ENVIRONMENT

FISCAL AND MONETARY POLICY	Level	MDG/MCC /EcGov	CAS Indicator Code
Govt. expenditure, % GDP	I	EcGov	21P1
Govt. revenue, % GDP	I	EcGov	21P2
Growth in the money supply	I	EcGov	21P3
Inflation rate	I		21P4
Overall govt. budget balance, including grants, % GDP	I	EcGov	21P5
Composition of govt. expenditure	II		21S1
Composition of govt. revenue	II		21S2
Composition of money supply growth	II		21S3
<b>BUSINESS ENVIRONMENT</b>			
Corruption perception index	I	EcGov	22P1
Doing business composite index	I	EcGov	22P2
Rule of law index	I	MCA / EcGov	22P3
Cost of starting a business, % GNI per capita	II	EcGov	22S1
Procedures to enforce contract	II	EcGov	22S2
Procedures to register property	II	EcGov	22S3
Procedures to start a business	II	EcGov	22S4
Time to enforce a contract	II	EcGov	22S5
Time to register property	II	EcGov	22S6
Time to start a business	II	EcGov	22S7
<b>FINANCIAL SECTOR</b>			
Domestic credit to private sector, % GDP	I		23P1
Interest rate spread	I		23P2
Money supply, % GDP	I		23P3
Stock market capitalization rate, % of GDP	I		23P4
Cost to create collateral	II		23S1
Country credit rating	II	MCA	23S2
Legal rights of borrowers and lenders index	II		23S3
Real Interest rate	I		23S4
<b>EXTERNAL SECTOR</b>			
Aid , % GNI	I		24P1
Current account balance, % GDP	I		24P2
Debt service ratio, % exports	I	MDG	24P3
Export growth of goods and services	I		24P4
Foreign direct investment, % GDP	I		24P5
Gross international reserves, months of imports	I	EcGov	24P6
Gross Private capital inflows, % GDP	I		24P7
Present value of debt, % GNI	I		24P8
Remittance receipts, % exports	I		24P9
Trade, % GDP	I		24P10
Concentration of Exports	II		24S1
Inward FDI Potential Index	II		24S2
Net barter terms of trade	II		24S3
Real effective exchange rate (REER)	II	EcGov	24S4
Structure of merchandise exports	II		24S5
Trade policy index	II	MCA / EcGov	24S6
<b>ECONOMIC INFRASTRUCTURE</b>			
Internet users per 1000 people	I	MDG	25P1
Overall infrastructure quality	I	EcGov	25P2
Telephone density, fixed line and mobile	I	MDG	25P3
Quality of infrastructure – railroads, ports, air Transport, and electricity	II		25S1
Telephone cost, average local call	II		25S2
<b>SCIENCE AND TECHNOLOGY</b>			
Expenditure for R&D, % GNI	I		26P1
FDI and technology transfer index	I		26P2
Patent applications filed by residents	I		26P3

## PRO-POOR GROWTH ENVIRONMENT

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





Growth Performance							
	Per capita GDP, purchasing power parity Dollars	Per capita GDP, current U.S. Dollars	Real GDP growth	Growth of labor productivity	Investment productivity - incremental capital output ratio (ICOR)	Share of gross fixed investment in GDP, current prices	Share of gross fixed private investment in GDP, current prices
Indicator Number	11P1	11P2	11P3	11S1	11S2	11S3	11S4
<i>Malawi Data</i>							
<i>Latest Year (T)</i>	2004	2004	2003	2002	Average	2002	.
Value Year T	643.0	165.0	4.4	0.0	9.5	9.5	.
Value Year T-1	616.2	156.9	1.9	-5.9	.	11.3	.
Value Year T-2	581.5	175.0	-4.1	-1.7	.	12.5	.
Value Year T-3	576.3	160.4	1.6	1.1	.	12.8	.
Value Year T-4	600.0	165.5	3.0	0.4	.	11.1	.
Average Value, 5 year	603.4	164.6	1.4	-1.2	.	11.4	.
Growth Trend	2.1	-0.3	.	.	.	-4.2	.
<i>Benchmark Data</i>							
Regression Benchmark	.	.	4.6	.	.	.	.
Lower Bound	.	.	3.3	.	.	.	.
Upper Bound	.	.	6.0	.	.	.	.
<i>Latest Year Uganda</i>	2004	2004	2002	2002	Average	2002	2001
Uganda Value Latest Year	1,442.3	287.2	6.7	3.9	3.2	21.3	9.7
<i>Latest Year Mozambique</i>	2004	2004	2002	2002	Average	2002	.
Mozambique Value Latest Year	1,279.7	277.8	7.7	5.1	4.3	44.7	.
Low Income Sub-Saharan Africa Avg.	1,698.6	532.6	3.3	0.6	5.3	20.2	10.2
Low Income Avg.	1,763.8	513.1	3.3	0.6	5.7	20.4	15.3
High Five Avg.	41,479.6	50,878.2	14.0	11.4	.	46.6	7.4
Low Five Avg.	633.2	121.1	-12.5	-14.8	.	6.9	.

Poverty and Inequality							
	Human poverty index	Income share accruing to poorest 20%	Population (%) living on less than \$1 PPP per day	Poverty incidence (%), by national poverty line	PRSP Status	Population (%) below minimum dietary energy consumption	Poverty gap at \$1 PPP a day
Indicator Number	12P1	12P2	12P3	12P4	12P5	12S1	12S2
<i>Malawi Data</i>							
<i>Latest Year (T)</i>	2004	1997	1997	1997	.	2001	1997
Value Year T	46.8	4.9	41.7	65.3	Yes	33.0	14.8
Value Year T-1	.	.	.	.	.	.	.
Value Year T-2	.	.	.	.	.	.	.
Value Year T-3	.	.	.	.	.	.	.
Value Year T-4	.	.	.	.	.	.	.
Average Value, 5 year	.	.	.	.	.	.	.
Growth Trend	.	.	.	.	.	.	.
<i>Benchmark Data</i>							
Regression Benchmark	49.7	5.8	45.0	56.3	.	.	.
Lower Bound	44.0	5.0	36.8	46.3	.	.	.
Upper Bound	55.3	6.7	53.1	66.2	.	.	.
<i>Latest Year Uganda</i>	2004	1999	1997	.	.	2001	.
Uganda Value Latest Year	36.4	8.8	86.0	44.0	Yes	19.0	44.8
<i>Latest Year Mozambique</i>	2004	.	.	.	.	2001	.
Mozambique Value Latest Year	49.8	.	37.9	69.0	Yes	53.0	12.0
Low Income Sub-Saharan Africa Avg.	44.3	5.4	26.1	38.0	.	32.5	6.6
Low Income Avg.	41.5	6.6	21.6	39.3	.	31.7	6.8
High Five Avg.	58.7	.	21.8	47.7	.	66.0	6.5
Low Five Avg.	3.9	.	2.7	26.7	.	0.8	0.7

Economic Structure						
Indicator Number	Labor force in agriculture, % total employment	Labor force in industry, % total employment	Labor force in services, % total employment	Output structure (agriculture, value added, % GDP)	Output structure (industry, value added, % GDP)	Output structure (services, etc., value added, % GDP)
	13P1a	13P1b	13P1c	13P2a	13P2b	13P2c
<i>Malawi Data</i>						
<i>Latest Year (T)</i>	2003	.	.	2002	2002	2002
Value Year T	90.0	.	.	36.5	14.8	48.7
Value Year T-1	.	.	.	36.2	16.3	47.5
Value Year T-2	.	.	.	36.9	17.4	45.7
Value Year T-3	.	.	.	35.4	17.9	46.7
Value Year T-4	.	.	.	33.5	18.4	48.1
Average Value, 5 year	.	.	.	35.7	17.0	47.3
Growth Trend	.	.	.	2.0	-5.1	0.4
<i>Benchmark Data</i>						
Regression Benchmark	.	.	.	.	.	.
Lower Bound	.	.	.	.	.	.
Upper Bound	.	.	.	.	.	.
<i>Latest Year Uganda</i>	.	.	.	2002	2002	2002
Uganda Value Latest Year	.	.	.	31.6	22.0	46.4
<i>Latest Year Mozambique</i>	.	.	.	2002	2002	2002
Mozambique Value Latest Year	.	.	.	23.5	34.0	42.5
Low Income Sub-Saharan Africa Avg.	.	19.6	62.0	31.7	25.7	42.5
Low Income Avg.	.	14.5	38.7	30.9	26.4	42.7
High Five Avg.	52.9	37.1	76.9	56.0	64.5	80.5
Low Five Avg.	0.3	11.8	31.5	0.6	11.9	18.0

Demography and Environment						
	Adult literacy rate	Age dependency rate	Environmental sustainability index	Population size (millions)	Population growth rate	Urbanization rate
Indicator Number	14P1	14P2	14P3	14P4a	14P4b	14P5
<i>Malawi Data</i>						
<i>Latest Year (T)</i>	2002	2002	2005	2002	2002	2002
Value Year T	61.8	0.91	49.3	10.7	2.0	15.5
Value Year T-1	61.0	0.93	.	10.5	2.1	15.1
Value Year T-2	60.1	0.94	.	10.3	2.1	14.7
Value Year T-3	59.3	0.95	.	10.1	2.1	14.4
Value Year T-4	58.5	0.95	.	9.9	2.2	14.0
Average Value, 5 year	60.1	0.94	.	10.3	2.1	14.7
Growth Trend	1.4	-1.00	.	2.1	.	2.4
<i>Benchmark Data</i>						
Regression Benchmark	.	.	45.5	.	.	23.2
Lower Bound	.	.	41.8	.	.	14.0
Upper Bound	.	.	49.2	.	.	32.5
<i>Latest Year Uganda</i>	2002	2002	2005	2002	2002	2002
Uganda Value Latest Year	68.9	1.02	51.3	24.6	2.8	14.9
<i>Latest Year Mozambique</i>	2002	2002	2005	2002	2002	2002
Mozambique Value Latest Year	46.5	0.84	44.8	18.4	2.0	34.3
Low Income Sub-Saharan Africa Avg.	56.8	0.87	47.0	16.3	.	34.3
Low Income Avg.	59.3	0.69	46.1	37.2	.	32.5
High Five Avg.	99.6	1.05	72.6	600.7	.	100.0
Low Five Avg.	35.7	0.39	32.6	0.3	.	8.8

	<b>Gender</b>		
	Ratio of male to female - adult literacy rate	Ratio of male to female - gross enrollment rate, all levels	Ratio of male to female - life expectancy at birth
Indicator Number	15P1	15P2	15P3
<b>Malawi Data</b>			
<i>Latest Year (T)</i>	2002	.	2002
Value Year T	1.60	.	0.98
Value Year T-1	.	.	.
Value Year T-2	.	.	.
Value Year T-3	.	.	.
Value Year T-4	.	.	.
Average Value, 5 year	.	.	.
Growth Trend	.	.	.
<b>Benchmark Data</b>			
Regression Benchmark	.	.	.
Lower Bound	.	.	.
Upper Bound	.	.	.
<i>Latest Year Uganda</i>	2002	.	2002
Uganda Value Latest Year	1.30	.	0.97
<i>Latest Year Mozambique</i>	2002	.	2002
Mozambique Value Latest Year	2.00	.	0.92
Low Income Sub-Saharan Africa Avg.	1.50	.	0.95
Low Income Avg.	1.50	.	0.95
High Five Avg.	2.40	.	1.01
Low Five Avg.	0.90	.	0.85

**Fiscal and Monetary Policy**

	Government expenditure, % GDP	Government revenue, % GDP	Growth in the broad money supply	Inflation rate	Overall government budget balance, incl. grants, % GDP	Composition of government expenditure (wages and salaries)	Composition of government expenditure (interest payments)	Composition of government expenditure (goods and services)
Indicator Number	21P1	21P2	21P3	21P4	21P5	21S1a	21S1b	21S1c
<i>Malawi Data</i>								
<i>Latest Year (T)</i>	2003	2003	2003	2004	2003	2003	2003	2003
Value Year T	42.4	22.8	29.3	19.9	-8.5	6.9	10.0	10.2
Value Year T-1	37.8	19.8	25.2	9.6	-11.0	7.1	6.6	11.8
Value Year T-2	32.1	17.5	21.2	14.9	-7.2	6.5	5.0	7.8
Value Year T-3	32.0	18.1	41.6	27.2	-5.4	5.1	4.4	7.0
Value Year T-4	29.5	17.4	26.6	29.6	-5.3	4.7	3.7	7.8
Average Value, 5 year	34.8	19.1	32.8	20.2	-7.5	6.0	5.9	8.9
Growth Trend	9.3	6.5	-23.8	-16.7	-18.1	.	.	.
<i>Benchmark Data</i>								
Regression Benchmark	15.5	12.8	20.5	9.4	2.0	.	.	.
Lower Bound	11.4	8.9	13.4	6.1	-0.2	.	.	.
Upper Bound	19.5	16.8	27.5	12.7	4.3	.	.	.
<i>Latest Year Uganda</i>	2001	2001	2002	2004	2001	.	.	.
Uganda Value Latest Year	21.4	10.9	25.0	3.5	-2.2	.	.	.
<i>Latest Year Mozambique</i>	.	.	2002	2004	.	.	.	.
Mozambique Value Latest Year	.	.	21.6	12.9	.	.	.	.
Low Income Sub-Saharan Africa Avg.	17.1	15.4	27.2	18.0	0.5	.	.	.
Low Income Avg.	21.3	16.9	25.8	14.7	-2.2	.	.	.
High Five Avg.	47.4	38.3	114.7	103.5	4.3	.	.	.
Low Five Avg.	4.5	6.9	-6.7	-1.1	-10.5	.	.	.

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

	Composition of government expenditure (subsidies and other current transfers)	Composition of government expenditure (development expenditure)	Composition of government revenue (Taxes on goods and services)	Composition of government revenue (Taxes of income, profits and capital gains)	Composition of government revenue (Social security taxes)	Composition of government revenue (Taxes on international trade)	Composition of government revenue (Grants)	Composition of government revenue (Non-tax revenue as a percentage of total revenue)	Composition of money supply growth (Net credit to government)
Indicator Number	21S1d	21S1e	21S2a	21S2b	21S2c	21S2d	21S2e	21S2f	21S3a
<i>Malawi Data</i>									
<i>Latest Year (T)</i>	2003	2003	2004	2004	2004	2004	2004	2004	2003
Value Year T	4.3	10.4	16.6	15.8	.	5.1	22.6	13.7	38.5
Value Year T-1	4.7	7.6	.	.	.	.	.	.	178.6
Value Year T-2	4.5	8.1	.	.	.	.	.	.	
Value Year T-3	4.9	10.3	.	.	.	.	.	.	
Value Year T-4	3.1	9.9	.	.	.	.	.	.	
Average Value, 5 year	4.3	9.2	.	.	.	.	.	.	
Growth Trend	.	.	.	.	.	.	.	.	
<i>Benchmark Data</i>									
Regression Benchmark	.	.	.	.	.	.	.	.	
Lower Bound	.	.	.	.	.	.	.	.	
Upper Bound	.	.	.	.	.	.	.	.	
<i>Latest Year Uganda</i>	.	.	.	.	.	.	.	.	
Uganda Value Latest Year	.	.	.	.	.	.	.	.	
<i>Latest Year Mozambique</i>	.	.	.	.	.	.	.	.	
Mozambique Value Latest Year	.	.	.	.	.	.	.	.	
Low Income Sub-Saharan Africa Avg.	.	.	.	.	.	.	.	.	
Low Income Avg.	.	.	.	.	.	.	.	.	
High Five Avg.	.	.	.	.	.	.	.	.	
Low Five Avg.	.	.	.	.	.	.	.	.	

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

	Composition of money supply growth (Credit to the private sector)	Composition of money supply growth (Net credit to non-financial public enterprises)	Composition of money supply growth (Net Foreign Assets)	Composition of money supply growth (Other items, net)
Indicator Number	21S3b	21S3c	21S3d	21S3e
<i>Malawi Data</i>				
<i>Latest Year (T)</i>	2003	2003	2003	2003
Value Year T	30.7	-2.9	73.3	-39.6
Value Year T-1	16.6	-0.2	-219.4	124.4
Value Year T-2	.	.	.	.
Value Year T-3	.	.	.	.
Value Year T-4	.	.	.	.
Average Value, 5 year	.	.	.	.
Growth Trend	.	.	.	.
<i>Benchmark Data</i>				
Regression Benchmark	.	.	.	.
Lower Bound	.	.	.	.
Upper Bound	.	.	.	.
<i>Latest Year Uganda</i>	.	.	.	.
Uganda Value Latest Year	.	.	.	.
<i>Latest Year Mozambique</i>	.	.	.	.
Mozambique Value Latest Year	.	.	.	.
Low Income Sub-Saharan Africa Avg.	.	.	.	.
Low Income Avg.	.	.	.	.
High Five Avg.	.	.	.	.
Low Five Avg.	.	.	.	.



<b>Business Environment</b>					
	Corruption perception index	Doing business composite index	Rule of law index	Cost of starting a business, % GNI per capita	Procedures to enforce a contract
Indicator Number	22P1	22P2	22P3	22S1	22S2
<i>Malawi Data</i>					
Latest Year (T)	2004	2004	2002	2004	2003
Value Year T	2.8	60.5	-0.3	140.8	16
Value Year T-1	2.8	.	.	.	12
Value Year T-2	2.9	.	-0.5	.	.
Value Year T-3	3.2	.	.	.	.
Value Year T-4	4.1	.	-0.5	.	.
Average Value, 5 year	3.2	.	.	.	.
Growth Trend	-8.6	.	.	.	.
<i>Benchmark Data</i>					
Regression Benchmark	.	.	.	.	.
Lower Bound	.	.	.	.	.
Upper Bound	.	.	.	.	.
Latest Year Uganda	2004	2004	2002	2004	2003
Uganda Value Latest Year	2.5	62.0	-0.9	131.3	16
Latest Year Mozambique	2004	2004	2002	2004	2003
Mozambique Value Latest Year	2.4	57.7	-0.8	95.8	18
Low Income Sub-Saharan Africa Avg.	2.6	58.9	-0.8	228.4	30
Low Income Avg.	2.8	60.2	-0.7	184.7	29
High Five Avg.	9.5	.	2.0	726.5	54
Low Five Avg.	1.6	.	-1.8	0.5	7

<b>Business Environment</b>					
	Procedures to register property	Procedures to start a business	Time to enforce a contract	Time to register property	Time to start a business
Indicator Number	22S3	22S4	22S5	22S6	22S7
<i>Malawi Data</i>					
Latest Year (T)	2004	2004	2004	2004	2004
Value Year T	6	10	277.0	118.0	35.0
Value Year T-1	.	.	.	.	.
Value Year T-2	.	.	.	.	.
Value Year T-3	.	.	.	.	.
Value Year T-4	.	.	.	.	.
Average Value, 5 year	.	.	.	.	.
Growth Trend	.	.	.	.	.
<i>Benchmark Data</i>					
Regression Benchmark	.	.	.	.	.
Lower Bound	.	.	.	.	.
Upper Bound	.	.	.	.	.
Latest Year Uganda	2004	2004	2004	2004	2004
Uganda Value Latest Year	8	17	209.0	48.0	36.0
Latest Year Mozambique	2004	2004	2004	2004	2004
Mozambique Value Latest Year	7	14	580.0	33.0	153.0
Low Income Sub-Saharan Africa Avg.	7	11	437.4	126.8	56.9
Low Income Avg.	7	11	409.6	113.0	57.0
High Five Avg.	16	17	1,178.2	484.6	172.2
Low Five Avg.	2	2	50.8	2.0	4.2

Financial Sector								
	Domestic credit to private sector, % GDP	Interest rate spread, lending rate minus deposit rate	Money supply (M2), % GDP	Stock market capitalization, % GDP	Cost to create collateral	Country credit rating	Legal rights of borrowers and lenders index	Real interest rate
Indicator Number	23P1	23P2	23P3	23P4	23S1	23S2	23S3	23S4
<b>Malawi Data</b>								
<i>Latest Year (T)</i>	2003	2003	2003	2001	2004	2005	2004	2003
Value Year T	7.8	23.8	19.4	9.2	140.8	19.7	.	39.3
Value Year T-1	8.1	22.5	17.5	7.4	.	.	.	28.1
Value Year T-2	8.6	21.2	17.0	9.9	.	.	.	24.7
Value Year T-3	9.3	19.9	15.4	8.5	.	.	.	21.6
Value Year T-4	7.8	20.4	14.2	4.3	.	.	.	8.0
Average Value, 5 year	8.3	21.5	16.7	7.9	.	.	.	24.4
Growth Trend	-1.3	4.4	7.8	14.6	.	.	.	41.1
<b>Benchmark Data</b>								
Regression Benchmark	5.9	14.1	20.5	.	.	.	.	.
Lower Bound	-9.1	11.3	5.6	.	.	.	.	.
Upper Bound	20.9	17.0	35.4	.	.	.	.	.
<i>Latest Year Uganda</i>	2002	2002	2002	2001	2004	2005	2004	2002
Uganda Value Latest Year	6.7	13.5	18.2	0.6	131.3	21.2	5.0	23.9
<i>Latest Year Mozambique</i>	2002	2002	2002	.	2004	2005	2004	2002
Mozambique Value Latest Year	2.1	8.7	29.8	.	95.8	25.8	4.0	13.9
Low Income Sub-Saharan Africa Avg.	11.8	15.4	25.6	47.2	228.4	.	4.3	12.3
Low Income Avg.	13.8	13.9	27.7	35.2	184.7	.	4.3	12.0
High Five Avg.	156.0	32.1	192.0	197.9	121.6	51.5	9.6	46.7
Low Five Avg.	2.4	1.7	6.0	4.9	0.0	12.1	1.2	-11.5

External Sector									
	Aid, % GNI	Current account balance, % GDP	Debt service ratio, % exports	Export growth, goods and services	Foreign direct investment, % GDP	Gross international reserves, months of imports	Gross private capital inflows, %GDP	Present value of debt, % GNI	Remittance receipts, % exports
Indicator Number	24P1	24P2	24P3	24P4	24P5	24P6	24P7	24P8	24P9
<i>Malawi Data</i>									
<i>Latest Year (T)</i>	2002	2002	2002	2003	2002	2002	2002	2002	2002
Value Year T	20.2	-10.6	7.6	-4.5	0.3	2.4	3.2	47.0	0.2
Value Year T-1	24.4	-3.6	8.0	-1.3	1.1	3.7	4.4	.	0.2
Value Year T-2	26.8	-4.3	12.5	6.2	1.5	4.4	4.7	.	0.2
Value Year T-3	25.3	-8.7	13.1	-10.1	3.2	3.8	6.3	.	0.2
Value Year T-4	25.6	-0.3	14.4	-15.1	0.7	4.6	3.9	.	0.1
Average Value, 5 year	24.5	-5.5	11.1	-5.0	1.4	3.8	4.5	.	0.2
Growth Trend	-5.0	.	-16.2	.	-23.3	-12.3	-7.4	.	7.0
<i>Benchmark Data</i>									
Regression Benchmark	22.9	-8.1	10.5	5.4	3.7	4.2	.	.	.
Lower Bound	18.3	-10.5	3.2	-0.2	0.0	2.9	.	.	.
Upper Bound	27.5	-5.6	17.9	10.9	7.4	5.5	.	.	.
<i>Latest Year Uganda</i>	2002	2002	2002	2002	2002	2002	2002	2002	2002
Uganda Value Latest Year	11.2	-6.1	7.1	11.4	2.6	6.2	4.5	22.2	50.7
<i>Latest Year Mozambique</i>	2002	2001	2002	2002	2002	2002	2001	2002	2001
Mozambique Value Latest Year	60.4	-19.1	6.1	14.1	11.3	5.1	10.0	26.2	4.2
Low Income Sub-Saharan Africa Avg.	17.3	-6.9	12.2	3.9	4.1	4.1	7.0	89.0	11.6
Low Income Avg.	15.1	-5.3	12.0	4.4	3.3	4.6	7.5	77.8	13.5
High Five Avg.	53.1	13.6	53.2	27.5	145.9	15.6	752.1	273.8	57.0
Low Five Avg.	0.0	-208.0	1.0	-21.4	-3.1	0.3	2.0	9.0	0.0

**External Sector (cont'd)**

	Trade, % GDP	Concentration of Exports (top three exports, 3-digit SITC)	Inward FDI potential index	Net barter terms of trade	Real effective exchange rate index (1995 = 100)	Structure of merchandise exports (agricultural raw materials exports)	Structure of merchandise exports (fuel exports)	Structure of merchandise exports (manufactured goods)
Indicator Number	24P10	24S1	24S2	24S3	24S4	24S5a	24S5b	24S5c
<i>Malawi Data</i>								
<i>Latest Year (T)</i>	2002	2003	2002	2001	2002	2001	2001	2001
Value Year T	68.3	79.8	0.11	96.0	115.0	2.5	0.1	10.2
Value Year T-1	68.3	80.6	.	95.0	116.4	3.0	0.2	7.1
Value Year T-2	64.7	82.4	0.12	101.0	112.6	.	0.3	8.7
Value Year T-3	70.0	81.9	0.12	98.0	111.5	.	0.1	6.9
Value Year T-4	70.8	79.9	0.13	111.0	111.1	.	0.7	8.7
Average Value, 5 year	68.4	80.9	.	100.2	113.3	.	0.3	8.3
Growth Trend	-1.0	-0.2	.	-3.2	1.1	.	-23.9	3.6
<i>Benchmark Data</i>								
Regression Benchmark	61.4	.	.	.	.	.	.	.
Lower Bound	41.6	.	.	.	.	.	.	.
Upper Bound	81.3	.	.	.	.	.	.	.
<i>Latest Year Uganda</i>	2002	2003	2002	2001	2002	2002	2002	2002
Uganda Value Latest Year	39.4	50.1	0.14	78.0	76.7	9.6	19.5	20.6
<i>Latest Year Mozambique</i>	2002	2001	2002	2001	.	2001	2001	2001
Mozambique Value Latest Year	61.7	76.3	0.13	79.0	.	9.4	14.0	29.8
Low Income Sub-Saharan Africa Avg.	71.1	.	.	96.8	93.3	10.7	6.5	7.8
Low Income Avg.	75.3	.	.	94.5	94.5	4.2	9.5	7.5
High Five Avg.	258.8	.	.	158.5	146.8	19.4	88.4	96.7
Low Five Avg.	23.4	.	.	57.6	68.0	0.0	0.0	1.7

<b>Economic Infrastructure</b>						
	Structure of merchandise exports (ores and metals)	Structure of merchandise exports (food)	Trade policy index	Internet users per 1000 people	Overall infrastructure quality index	Telephone density, fixed line and mobile, per 1000 people
Indicator Number	24S5d	24S5e	24S6	25P1	25P2	25P3
<i>Malawi Data</i>						
<i>Latest Year (T)</i>	2001	2001	2004	2003	2004	2002
Value Year T	0.2	86.9	3.0	3.4	2.9	15.2
Value Year T-1	0.2	89.4	4.0	2.6	.	10.6
Value Year T-2	0.1	88.9	4.0	1.9	.	9.1
Value Year T-3	0.0	91.5	4.0	1.5	.	6.3
Value Year T-4	0.1	86.9	5.0	.	.	4.8
Average Value, 5 year	0.1	88.7	4.0	.	.	9.2
Growth Trend	38.5	-0.2	-9.7	.	.	32.6
<i>Benchmark Data</i>						
Regression Benchmark	.	.	.	6.5	.	9.7
Lower Bound	.	.	.	-22.5	.	5.7
Upper Bound	.	.	.	35.4	.	13.7
<i>Latest Year Uganda</i>	2002	2002	2004	2003	2004	2002
Uganda Value Latest Year	14.8	22.9	4.1	4.9	2.8	18.1
<i>Latest Year Mozambique</i>	2001	2001	2004	2003	2004	2002
Mozambique Value Latest Year	13.0	73.0	4.1	2.8	2.1	18.6
Low Income Sub-Saharan Africa Avg.	1.9	25.8	3.0	10.3	2.4	32.6
Low Income Avg.	54.9	23.2	4.0	11.4	2.4	38.9
High Five Avg.	42.1	83.2	5.0	585.8	6.7	1,651.0
Low Five Avg.	0.0	0.5	1.4	0.9	1.5	4.5

<b>Economic Infrastructure (cont'd)</b>					
	Quality of Infrastructure Index - air transport	Quality of Infrastructure Index - ports	Quality of Infrastructure Index - railroad	Quality of Infrastructure Index - electricity	Telephone cost, average local call
Indicator Number	25S1a	25S1b	25S1c	25S1d	25S2
<i>Malawi Data</i>					
<i>Latest Year (T)</i>	2004	2004	2004	2004	2002
Value Year T	3.3	2.3	2.1	2.1	0.059
Value Year T-1	.	.	.	.	0.062
Value Year T-2	.	.	.	.	0.076
Value Year T-3	.	.	.	.	0.102
Value Year T-4	.	.	.	.	0.019
Average Value, 5 year	.	.	.	.	0.064
Growth Trend	.	.	.	.	18.9
<i>Benchmark Data</i>					
Regression Benchmark	.	.	.	.	.
Lower Bound	.	.	.	.	.
Upper Bound	.	.	.	.	.
<i>Latest Year Uganda</i>	2004	2004	2004	2004	2002
Uganda Value Latest Year	3.4	1.9	1.7	2.8	0.210
<i>Latest Year Mozambique</i>	2004	2004	2004	2004	2001
Mozambique Value Latest Year	3.5	2.3	1.6	2.8	0.080
Low Income Sub-Saharan Africa Avg.	3.4	2.1	1.7	2.4	0.114
Low Income Avg.	3.4	2.1	1.7	2.6	0.085
High Five Avg.	6.7	6.6	6.5	6.9	0.291
Low Five Avg.	2.4	1.3	1.1	0.7	0.0

<b>Science and Technology</b>			
	Expenditure for R&D, % GDP	FDI and technology transfer Index	Patent applications filed by residents
Indicator Number	26P1	26P2	26P3
<b>Malawi Data</b>			
<i>Latest Year (T)</i>	.	2003	2001
Value Year T	.	4.5	2.0
Value Year T-1	.	.	3.0
Value Year T-2	.	.	1.0
Value Year T-3	.	.	7.0
Value Year T-4	.	.	2.0
Average Value, 5 year	.	.	3.0
Growth Trend	.	.	.
<b>Benchmark Data</b>			
Regression Benchmark	.	.	.
Lower Bound	.	.	.
Upper Bound	.	.	.
<i>Latest Year Uganda</i>	1999	2003	2001
Uganda Value Latest Year	0.8	5.3	2.0
<i>Latest Year Mozambique</i>	.	2003	2001
Mozambique Value Latest Year	.	5.0	1
Low Income Sub-Saharan Africa Avg.	0.1	.	2.1
Low Income Avg.	0.4	.	76.1
High Five Avg.	3.5	5.9	153,604.0
Low Five Avg.	0.2	3.3	0.0



Health									
	HIV prevalence	Life expectancy at birth	Maternal mortality rate	Access to improved sanitation	Access to improved water source	Births attended by skilled health personnel	Child immunization rate	Prevalence of child malnutrition (weight for age)	Public health expenditure, % GDP
Indicator Number	31P1	31P2	31P3	31S1	31S2	31S3	31S4	31S5	31S6
<i>Malawi Data</i>									
<i>Latest Year (T)</i>	2003	2002	2000	2000	2000	2000	2002	2000	2004
Value Year T	14.2	37.5	18.0	76.0	57.0	55.6	66.5	25.4	4.7
Value Year T-1	.	.	.	.	.	.	86.0	.	3.0
Value Year T-2	14.3	38.8	.	.	.	.	74.0	.	.
Value Year T-3	.	.	.	.	.	.	83.5	.	2.7
Value Year T-4	16.0	.	.	.	.	.	91.5	.	3.0
Average Value, 5 year	.	.	.	.	.	.	80.3	.	3.3
Growth Trend	.	.	.	.	.	.	-5.9	.	.
<i>Benchmark Data</i>									
Regression Benchmark	.	42.9	12.7	.	.	.	.	.	.
Lower Bound	.	39.2	11.3	.	.	.	.	.	.
Upper Bound	.	46.7	14.2	.	.	.	.	.	.
<i>Latest Year Uganda</i>	2003	2002	2000	2000	2000	2001	2002	2001	2001
Uganda Value Latest Year	4.1	43.1	8.8	79.0	52.0	39.0	74.5	22.8	3.4
<i>Latest Year Mozambique</i>	2003	2002	2000	2000	2000	.	2002	.	2001
Mozambique Value Latest Year	12.2	41.1	10.0	43.0	57.0	.	59.0	.	4.0
Low Income Sub-Saharan Africa Avg.	6.6	47.0	9.3	51.7	58.1	51.2	61.2	28.7	2.2
Low Income Avg.	4.7	52.0	7.4	53.4	61.8	41.6	65.6	26.2	2.3
High Five Avg.	30.2	80.3	17.2	100.0	100.0	99.6	99.0	45.1	8.0
Low Five Avg.	0.1	37.6	0.0	12.4	26.2	11.5	37.4	3.2	0.7

Education								
	Net primary enrollment rate	Persistence in school to grade 5 (Total)	Youth literacy rate	Education expenditure, primary, %GDP	Expenditure per student, % GDP per capita, primary	Expenditure per student, % GDP per capita, secondary	Expenditure per student, % GDP per capita, tertiary	Pupil-teacher ratio, primary school
Indicator Number	32P1	32P2	32P3	32S1	32S2a	32S2b	32S2c	32S3
<b>Malawi Data</b>								
<i>Latest Year (T)</i>	2001	2000	2002	2004	.	.	.	1999
Value Year T	81.0	53.6	72.5	2.9	.	.	.	63.0
Value Year T-1	.	.	71.8	.	.	.	.	.
Value Year T-2	.	.	71.1	.	.	.	.	.
Value Year T-3	.	.	70.3	.	.	.	.	.
Value Year T-4	.	.	69.6	.	.	.	.	.
Average Value, 5 year	.	.	71.1	.	.	.	.	.
Growth Trend	.	.	1.0	.	.	.	.	.
<b>Benchmark Data</b>								
Regression Benchmark	46.9	55.8	70.4	.	.	.	.	.
Lower Bound	40.0	46.6	62.2	.	.	.	.	.
Upper Bound	53.8	65.0	78.6	.	.	.	.	.
<i>Latest Year Uganda</i>	2001	.	2002	.	.	.	.	2000
Uganda Value Latest Year	.	.	80.2	2.0	40.3	40.3	399.2	59.4
<i>Latest Year Mozambique</i>	2001	2000	2002	.	.	.	.	2001
Mozambique Value Latest Year	.	51.9	62.8	1.1	25.3	25.3	209.6	65.9
Low Income Sub-Saharan Africa Avg.	62.4	62.2	71.0	2.1	.	.	.	46.5
Low Income Avg.	68.4	64.4	72.3	2.0	.	.	.	42.7
High Five Avg.	99.7	100.1	99.8	.	40.8	40.8	285.2	63.5
Low Five Avg.	38.4	42.5	46.4	.	6.3	6.3	13.2	12.2

Employment and Workforce							
	Labor force participation rate (total)	Labor force participation rate (male)	Labor force participation rate (female)	Rigidity of employment index	Size of labor force	Labor force growth rate	Unemployment rate
Indicator Number	33P1a	33P1a	33P1c	33P2	33P3a	33P3b	33P4
<i>Malawi Data</i>							
Latest Year (T)	2002	.	.	2004	2002	2002	.
Value Year T	0.93	.	.	21.0	5,166,309	2.1	.
Value Year T-1	0.93	.	.	.	5,059,848	2.1	.
Value Year T-2	0.92	.	.	.	4,955,467	1.9	.
Value Year T-3	0.93	.	.	.	4,861,177	2.0	.
Value Year T-4	0.94	.	.	.	4,767,053	2.1	.
Average Value, 5 year	0.93	.	.	.	4,961,971	2.0	.
Growth Trend	-0.3	.	.	.	2.0	0.7	.
<i>Benchmark Data</i>							
Regression Benchmark	.	.	.	57.3	.	.	.
Lower Bound	.	.	.	46.0	.	.	.
Upper Bound	.	.	.	68.6	.	.	.
Latest Year Uganda	2002	.	.	2004	2002	2002	.
Uganda Value Latest Year	1.00	.	.	7.0	12,076,140	2.9	.
Latest Year Mozambique	2002	.	.	2004	2002	2002	.
Mozambique Value Latest Year	0.97	.	.	64.0	9,587,760	2.2	.
Low Income Sub-Saharan Africa Avg.	0.88	.	.	57.7	7,464,749	2.6	9.3
Low Income Avg.	0.85	.	.	52.1	17,134,976	2.5	7.0
High Five Avg.	1.03	.	.	84.6	314,737,511	4.6	21.2
Low Five Avg.	0.49	.	.	1.2	119,898	-5.2	2.6

<b>Agriculture</b>						
	Agriculture value added per worker	Cereal yield	Growth in agricultural value-added	Agricultural policy costs index	Crop production index (1989-91 = 100)	Livestock production index (1989-91 = 100)
Indicator Number	34P1	34P2	34P3	34S1	34S2	34S3
<i>Malawi Data</i>						
<i>Latest Year (T)</i>	2001	2002	2003	2003	2002	2002
Value Year T	119.2	1,045.7	7.3	4.0	129.4	124.6
Value Year T-1	129.3	1,097.6	2.7	.	169.7	124.7
Value Year T-2	124.1	1,675.5	-6.0	.	169.0	126.8
Value Year T-3	113.8	1,745.4	5.3	.	148.1	119.4
Value Year T-4	113.0	1,322.1	10.1	.	137.9	117.8
Average Value, 5 year	119.9	1,377.3	3.3	.	150.8	122.7
Growth Trend	2.4	-8.9	.	.	0.1	1.6
<i>Benchmark Data</i>						
Regression Benchmark	178.2	.	.	.	.	.
Lower Bound	106.0	.	.	.	.	.
Upper Bound	250.4	.	.	.	.	.
<i>Latest Year Uganda</i>	2001	2002	2002	2003	2002	2002
Uganda Value Latest Year	350.3	1,657.7	4.9	4.5	142.7	129.0
<i>Latest Year Mozambique</i>	2001	2002	2002	2003	2002	2002
Mozambique Value Latest Year	143.4	856.4	7.1	3.4	143.6	103.7
Low Income Sub-Saharan Africa Avg.	383.9	1,086.5	0.7	.	137.8	126.9
Low Income Avg.	506.8	1,591.1	1.0	.	132.9	129.9
High Five Avg.	59,160.4	7,524.5	14.6	.	290.1	265.6
Low Five Avg.	127.4	260.6	-23.3	.	49.7	33.9

# Technical Notes

The following technical notes are intended to provide a full, concise definition; the source; gaps in USAID countries coverage; any significant data quality problems observed; and the CAS Code number for each indicator. In most cases, this information was taken directly from the original source.

## GROWTH PERFORMANCE

### Per capita GDP, current US dollars

*Source:* IMF World Economic Outlook database

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

*Definition:* GDP per capita is gross domestic product divided by midyear population. GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products.

*Gaps:* Available for most USAID countries.

CAS Code #11P2

### Per capita GDP, purchasing power parity dollars

*Source:* IMF World Economic Outlook database

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

*Definition:* This indicator adjusts per capita GDP measured in current U.S. dollars for differences in purchasing power across countries, by using the Purchasing Power Parity (PPP) exchange rate, an exchange rate derived from the perceived parity of the purchasing power of a currency in relation to another currency.

*Gaps:* Available for most USAID countries.

CAS Code #11P1

### Real GDP growth

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

*Definition:* Annual percentage growth rate of GDP at constant local currency prices. GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources.

*Gaps:* Available for most USAID countries.

CAS Code #11P3

### Growth of labor productivity

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

*Definition:* Labor productivity is defined as the ratio of GDP in constant prices to the size of the working age population (defined as the population between ages 15 and 64 years by the World Bank). *Gaps:* Data available for most USAID countries.

CAS Code # 11S1

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

*Source:* Latest country data computed from IMF article IV Consultation Reports; international benchmark data computed from the World Development Indicators. It is the ratio of the five-year average of the share of fixed investment (NE.GDI.FTOT.ZS) and the five-year average of GDP growth (NY.GDP.MKTP.KD.ZG).

*Definition:* The ICOR is the ratio of the share of fixed investment in GDP to the growth rate of GDP, revealing the quantity of capital needed to increase output by one unit.

*Gaps:* Available for most USAID countries

CAS Code #11S2

### Gross fixed investment, percentage of GDP

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

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

*Gaps:* Available for most USAID countries.

CAS Code # 11S3

### Gross fixed private investment, percentage of GDP

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

*Gaps:* Available for most USAID countries.

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

CAS Code #11S4

## POVERTY AND INEQUALITY

### Human poverty index

*Source:* UNDP- Human Development Report.

[http://hdr.undp.org/reports/global/2004/pdf/hdr04\\_HDI.pdf](http://hdr.undp.org/reports/global/2004/pdf/hdr04_HDI.pdf) for 2004 edition; updates should be found at [http://hdr.undp.org/reports/view\\_reports.cfm?type=1](http://hdr.undp.org/reports/view_reports.cfm?type=1)

*Definition:* The index measures the proportion of people not expected to meet target levels for given economic and quality of life indicators: (1) Percentage of people not expected to

survive to age 40. (2) Percentage of adults who are illiterate. (3) Percentage of people who fail to attain a 'decent living standard' is subdivided into three (equally weighted) separate items: (a) Percentage of people without access to safe water, (b) Percentage of people without access to health services, and (c) Percentage of people with underweight children.

*Gaps:* Available for the majority USAID countries.

CAS Code #12P1

#### **Income share held by lowest 20%**

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

*Definition:* Share of income or consumption that accrues to the poorest quintile of the population.

*Gaps:* Available for most USAID countries, although data is several years old.

CAS Code # 12P2

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

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

*Definition:* Population below \$1 a day is the percentage of the population living on less than \$1.08 a day at 1993 international prices. *Gaps:* Not available for about 21 USAID countries.

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

CAS Code #12P3

#### **Population below minimum dietary energy consumption**

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

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

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

CAS Code # 12S1

#### **Poverty headcount, national poverty line**

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

*Definition:* The percentage of the population living below the national poverty line.

*Gaps:* Data unavailable for 55 USAID countries.

*Data Quality:* Measuring the percentage of people below the "national poverty line" has the major disadvantage of not allowing international comparisons. In some countries, the poverty line may be drawn at levels of income required to have only sufficient food or food plus other necessities and not an official poverty line. There are even problems in comparing poverty measures within the country between

urban and rural areas. The cost of living is typically higher in urban areas, but the differences between the urban and rural poverty lines may not reflect the difference in cost of living.

CAS Code #12P4

#### **PRSP Status**

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

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

*Gaps:* None

CAS Code #12P5

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

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

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

*Gaps:* Data is not available for about 24 USAID countries.

CAS Code #12S2

## **ECONOMIC STRUCTURE**

#### **Labor force structure**

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

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

*Gaps:* Unavailable for 58 USAID countries.

*Data Quality:* Employment data are compiled from many different sources and are therefore normally incomparable across countries. Moreover, national practices vary considerably.

CAS Code #13P1

#### **Output structure**

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

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

*Gaps:* Unavailable for about 12 USAID countries.

*Data Quality:* Among the difficulties faced by compilers of national accounts is the extent of unreported economic activity in the informal or secondary economy. In developing countries a large share of agricultural output is either not exchanged (because it is consumed within the household) or not exchanged for money. Agricultural production often must

be estimated indirectly, using a combination of methods involving estimates of inputs, yields, and area under cultivation. This approach sometimes leads to crude approximations that can differ from the true values over time and across crops for reasons other than climatic conditions or farming techniques. Ideally, industrial output should be measured through regular censuses and surveys of firms. But in most developing countries such surveys are infrequent, so earlier survey results must be extrapolated using an appropriate indicator.

CAS Code #13P2

## DEMOGRAPHY AND ENVIRONMENT

### Adult literacy rate

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

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

*Gaps:* Available for most USAID countries.

*Data Quality:* In practice, illiteracy is difficult to measure. To estimate illiteracy using such a definition requires census or survey measurements under controlled conditions. Many countries estimate the number of illiterate people from self-reported data, or by taking people with no schooling as illiterate.

CAS Code # 14P1

### Age dependency rate

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

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

*Gaps:* Available for most USAID countries.

CAS Code #14P2

### Environmental sustainability index

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

*Definition:* The ESI is a composite index integrating data sets tracking natural resource endowments, past and present pollution levels, environmental management efforts, and the capacity of a society to improve its environmental performance into 21 indicators of environmental sustainability.

*Gaps:* Available for most USAID countries.

CAS Code #13P3

### Population size (in millions) and growth

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

*Definition:* Total population counts all residents regardless of legal status or citizenship—except for refugees not permanently settled in the country of asylum, that are generally considered part of the population of their country of origin. Annual population growth rate is based on the de facto definition of population.

*Gaps:* Available for most USAID countries.

CAS Code # 14P4

### Urbanization rate

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

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

*Gaps:* Available for most USAID countries.

*Data Quality:* The estimates are based on national definitions of what constitutes a city or metropolitan area; thus, cross-country comparisons should be made with caution.

CAS Code #14P5

## GENDER

### Ratio of male to female adult literacy rate

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

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

*Gaps:* Unavailable for about 20 USAID countries

CAS Code #15P1

### Ratio of male to female gross enrollment rate, all levels of education

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

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

*Gaps:* Unavailable for about 20 USAID countries.

CAS Code # 15P2

### Ratio of male to female life expectancy

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

*Definition:* Male to female ratio Life expectancy at birth (years), male, divided by the Life expectancy at birth (years), Female.

*Gaps:* Unavailable for about 20 USAID countries.

CAS Code #15P3

## FISCAL AND MONETARY POLICY

### Composition of government expenditure

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

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

*Gaps:* Available for about 30 USAID countries.

*Data Quality:* Many countries report their revenue in non-comparable categories.

CAS Code # 21S1

### Composition of government revenue

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

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

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

*Gaps:* Available for about 34 USAID countries.

*Data Quality:* Many countries report their revenue in non-comparable categories. There is no systematic method for taxing and reporting.

CAS Code # 21S2

### Composition of money supply growth

*Source:* IMF Article IV Reviews [www.imf.org/external/np/sec/aiv/index.htm](http://www.imf.org/external/np/sec/aiv/index.htm). Estimated, using the annual change of (1) domestic credit to central government, (2) domestic credit to the private sector, (3) domestic credit to Non-financial Public Enterprises, (4) domestic credit to other financial institutions, (4) reserves and (5) other domestic credit; each divided by the annual change of the money supply. Money supply is M2.

*Definition:* Change in money supply (M2-growth) disaggregated into five categories domestic credit to central government, domestic credit to the private sector, domestic credit to non-financial public enterprises, domestic credit to other financial institutions, reserves, and other domestic credit.

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

CAS Code # 21S3

### Government expenditure, percentage of GDP

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

World Development Indicators for benchmarking data (GB.XPD.TOTL.GD.ZS). Original data from the International Monetary Fund, Government Finance Statistics Yearbook, and World Bank estimates.

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

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

CAS Code # 21P1

### Government revenue, percentage of GDP

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

Development Indicators for benchmarking data (GB.RVC.TOTL.GD.ZS). Original data from the International Monetary Fund, Government Finance Statistics Yearbook and data file, and World Bank estimates.

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

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

CAS Code # 21P2

### Inflation rate

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

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

*Gaps:* Available for most USAID countries.

*Data Quality:* It should be noted that for many developing countries, figures for recent years are IMF staff estimates. Additionally, data for some countries are for fiscal years.

CAS Code #21P4

### Money supply growth

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

*Definition:* Percent change in money and near-money

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

CAS Code #21P3

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

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

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

*Gaps:* Data missing for 23 USAID countries.

CAS Code # 21P5

## BUSINESS ENVIRONMENT

### Corruption perception index

*Source:* Transparency International

*Definition:* Measure of perception of corruption derived from surveys of business people and country analysts.

<http://www.transparency.org/cpi/2004/cpi2004.en.html>

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

*Data Quality:* This indicator uses perception and opinions gathered from local businessmen as well as third-party



experts and not hard empirical data; thus, the indicator is largely subjective making international comparisons difficult.

CAS Code # 22P1

### Doing business composite index

Source: World Bank, Doing Business.

<http://rru.worldbank.org/DoingBusiness/>.

Doing business composite index is estimated by scaling all the “Doing business” indicators from 0 (lowest in the world) to 100 (highest) and then taking a simple average of all the scaled indicators.

*Definition:* Index measuring the quality of a country’s business environment, composed of performance measures and indicators related to Starting a Business, Registering Property, Getting Credit; Protecting Investors; Enforcing Contracts and Closing a Business in a given country.

*Gaps:* Gaps in coverage of 10 USAID Countries.

CAS Code # 22P2

### Rule of law index

Source: World Bank Institute;

<http://www.worldbank.org/wbi/governance/govdata2002/index.html>

*Definition:* The Rule of Law Index is an aggregation of various indicators which measure the extent to which agents have confidence in and abide by the rules of society. This indicator is based on the measurement of perceptions of the legal system, drawn from 12 separate data sources.

*Gaps:* Available for most USAID countries

*Data Quality:* This index is best used for relative comparisons between countries in a single year. It is difficult to use the index to track a country’s progress over time as the index does not compensate against a change in the world average and, as a result, changing world trends may skew results over time—for instance, if the world average decreases in a given year, a country whose score appears to increase may not actually have tangible improvements in their legal environment. Conditions could stay the same (or even worsen) yet the country would show an improvement in its score as a result of the world average falling.

CAS Code #22P3

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

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

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

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

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

CAS Code #22S1

### Procedures to enforce a contract

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

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

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

*Gaps:* Gaps in coverage of 10 USAID Countries.

CAS Code # 22S2

### Procedures to register property

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

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

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

*Gaps:* Gaps in coverage of 10 USAID countries.

CAS Code #22S3

### Procedures to start a business

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

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

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

*Gaps:* Gaps in coverage of 10 USAID Countries.

CAS Code # 22S4

### Time to enforce a contract

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

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

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

*Gaps:* Gaps in Coverage of 10 USAID Countries.

CAS Code # 22S5

### Time to register property

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

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

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

*Gaps:* Gaps in coverage of 10 USAID countries.

CAS Code #22S6

### Time to start a business

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

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

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

*Gaps:* Gaps in coverage of about 10 USAID Countries.

*CAS Code #22S7*

## FINANCIAL SECTOR

### Cost to Create Collateral

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

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

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

*Gaps:* Data missing for 10 USAID countries.

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

*CAS Code #23S1*

### Country credit rating

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

*Definition:* Bankers’ and fund managers’ perception of the country’s risk of default based on a semi-annual survey.

*Gaps:* Data missing for 35 USAID countries.

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

*CAS Code # 23S2*

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

*Source:* IMF Article IV Reviews for latest country data; World Development Indicators for benchmarking data (FS.AST.PRVT.GD.ZS). Original data comes from International Monetary Fund, International Financial Statistics and data files, and World Bank estimates.

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

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

*CAS Code # 23P1*

### Interest rate spread

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

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

*Gaps:* Data missing for 22 USAID countries.

*CAS Code # 23P2*

### Legal rights of borrowers and lenders

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

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

*Definition:* The index measures the degree to which collateral and bankruptcy laws facilitate lending. It is based on data collected through research of collateral and insolvency laws supported by the responses to a survey on secured transactions laws. It includes three aspects related to legal rights in bankruptcy, and seven aspects found in collateral law.

*Gaps:* About 10 USAID countries are not covered

*CAS Code # 23S3*

### Money supply, percent of GDP

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

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

*Gaps:* Gaps in 8 USAID countries

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

*CAS Code # 23P3*

### Real interest rate

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

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

*Gaps:* Available for most USAID countries

*CAS Code # 24P4*

### Stock Market Capitalization Rate, % of GDP

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

*Definition:* Market capitalization (also known as market value) is the share price times the number of shares outstanding, of all the domestic shares listed on the country’s stock exchange, as a percentage of GDP.

*Gaps:* Available for less than twenty countries.

*CAS Code # 23P4*

## EXTERNAL SECTOR

### Aid as a percentage of GNI

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

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

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

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

*Data Quality:* The data does not include aid given by recipient countries to other recipient countries. Additionally, the data may not always be consistent with individual

country's balance sheets, as the data are collected from donors and not recipients.

CAS Code #24P1

### Concentration of exports

Source: ITC COMTRADE.

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

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

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

*Gaps:* Available for most countries

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

CAS Code # 24S1

### Current Account Balance, percent of GDP

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

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

*Gaps:* Available for most countries.

CAS Code # 24P2

### Debt service ratio

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

*Definition:* Total debt service is the sum of principal repayments and interest actually paid in foreign currency, goods, or services on long-term debt, interest paid on short-term debt, and repayments (repurchases and charges) to the IMF. Exports of goods and services include income and workers' remittances.

*Gaps:* Available for most USAID countries

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

CAS Code # 24P3

### Foreign Direct Investment, percent of GDP

Source: IMF Article IV Reviews for latest country data [www.imf.org/external/np/sec/aiv/index.htm](http://www.imf.org/external/np/sec/aiv/index.htm); World Development Indicators for benchmarking data (BX.KLT.DINV.DT.GD.ZS), based on International Monetary Fund, International Financial Statistics and Balance of Payments databases, World Bank, Global Development Finance, and World Bank and OECD GDP estimates.

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

*Gaps:* Available for a majority of USAID countries

CAS Code #24P5

### Gross international reserves, months of imports

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

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

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

*Gaps:* Available for most USAID countries

CAS Code # 24P6

### Gross Private Capital Flows, percent GDP

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

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

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

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

CAS Code #24P7

### Exports growth, goods and services

Source: IMF Article IV Reviews for latest country data [www.imf.org/external/np/sec/aiv/index.htm](http://www.imf.org/external/np/sec/aiv/index.htm); World Development Indicators for benchmarking data (NE.EXP.GNFS.KD.ZG) based on World Bank national accounts data, and OECD National Accounts data files. Latest country data from IMF

Article IV Review Reports available at [www.imf.org/external/np/sec/aiv/index.htm](http://www.imf.org/external/np/sec/aiv/index.htm)

*Definitions:* Annual growth rate of exports of goods and services based on constant local currency. They include the value of merchandise, freight, insurance, transport, travel, royalties, license fees, and other services, such as communication, construction, financial, information, business, personal, and government services. They exclude labor and property income (formerly called factor services) as well as transfer payments.

*Gaps:* Available for most countries.

*CAS Code # 24P4*

### Inward FDI Potential Index

*Source:* UNCTAD. This indicator can be downloaded online at

<http://www.unctad.org/Templates/WebFlyer.asp?intItemID=2471&lang=1>

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

*Gaps:* Available for most USAID countries

*CAS Code # 24S2*

### Net barter terms of trade

*Source:* World Development Indicators; TT.PRI.MRCH.XD.WD

*Definition:* Net barter terms of trade are calculated as the ratio of the export price index to the corresponding import price index measured relative to the base year 1995.

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

*CAS Code # 24S3*

### Present value of debt, percent of GNI

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

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

*Gaps:* Available for a majority of USAID countries

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

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

*CAS Code # 24P8*

### Real effective exchange rate (REER)

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

*Definition:* Index number with base 1995=100, it is the nominal effective exchange rate (a measure of the value of a currency against a weighted average of several foreign currencies) divided by a price deflator or index of costs.

*Gaps:* Available for about 28 USAID countries only

*Data Quality:* Because of conceptual and data limitations, changes in real effective exchange rates should be interpreted with caution. Real effective exchange rates are derived by deflating a trade-weighted average of the nominal exchange rates that apply between trading partners. For most high-income countries the weights are based on trade in manufactured goods with other high-income countries in 1989-91, and an index of relative, normalized unit labor costs is used as the deflator. (Normalization smoothes a time series by removing short-term fluctuations while retaining changes of a large amplitude over the longer economic cycle.) For other countries the weights before 1990 take into account trade in manufactured and primary products in 1980-82, the weights from January 1990 onward take into account trade in 1988-90, and an index of relative changes in consumer prices is used as the deflator.

*CAS Code # 24S4*

### Remittances receipts, percent of exports

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

*Definition:* Workers' remittances are current transfers by migrants who are employed or intend to remain employed for more than a year in another economy in which they are considered residents.

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

*CAS Code # 24P9*

### Structure of merchandise exports

*Source:* World Development Indicators. Four data series are used: Agricultural raw materials exports (% of merchandise exports) (TX.VAL.AGRI.ZS.UN); Manufactures exports (% of merchandise exports) (TX.VAL.MANF.ZS.UN); Ores and metals exports (% of merchandise exports) (TX.VAL.MMTL.ZS.UN); Fuel exports (% of merchandise exports) (TX.VAL.FUEL.ZS.UN). The indicator is presented at two points time. To smooth out year-to-year fluctuations, two 3 year-averages, i.e. 1995-1997 and 2000-2002 are presented.

*Definition:* Composition of merchandise exports by major commodity group- agricultural raw materials; fuels; ores and metals; and manufactures.

*Gaps:* Available for most countries

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

CAS Code # 24S5

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

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

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

*Gaps:* Data for 8 USAID countries missing.

CAS Code # 24P10

### Trade Policy Index

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

*Definition:* The trade policy score is given by the index authors based on a country's weighted average tariff rate (weighted by imports from the country's trading partners), non-tariff barriers, and corruption in the custom service. It measures the degree to which government hinders the free flow of foreign commerce.

*Gaps:* Available for most countries

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

CAS Code # 24S6

## ECONOMIC INFRASTRUCTURE

### Internet users per 1000 people

*Source:* International Telecommunication Union-ITU report and database.

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

*Gaps:* Available for most USAID countries.

CAS Code # 25P1

### Overall Infrastructure Quality

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

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

*Gaps:* The GCR includes about 50 USAID countries

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

CAS Code # 25P2

### Telephone density, fixed line and mobile

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

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

*Gaps:* Available for most USAID countries.

CAS Code #25P3

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

*Source:* Global Competitiveness Report 2004-2005, World Economic Forum. The indicators can be found in the Data Tables, Section V. General Infrastructure; 5.02, 5.03, 5.04, and 5.05 for Railroad, Port; Air Transport, and Electricity, respectively.

*Definitions:* Executive's perceptions of whether Executive's perceptions of whether: infrastructure in their country is 1 as underdeveloped or 7 as extensive and efficient as the world's best.

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

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

CAS Code #25S1

### Telephone cost, average local call

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

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

*Gaps:* Data missing for 4 USAID countries.

CAS Code #25S2

## SCIENCE AND TECHNOLOGY

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

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

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

*Gaps:* Available for approximately 50% of USAID countries

CAS Code #26P1

### FDI technology transfer index

*Source:* Global Competitiveness Report 2004-2005, World Economic Forum. The indicator can be found in the Data

Tables, Section III. Technology: Innovation and Diffusion; 3.04.

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

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

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

CAS Code # 26P2

### Patent applications filed, residents

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

*Definition:* Applications filed by residents with a national patent office for exclusive rights for an invention—a product or process that provides a new way of doing something or offers a new technical solution to a problem. A patent provides protection for the invention to the owner of the patent for a limited period, generally 20 years. *Gaps:* About 80% coverage

CAS Code #26P3

## HEALTH

### HIV prevalence rate

*Source:* UNAIDS

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

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

*Gaps:* Available for most USAID countries

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

CAS Code # 31P1

### Life expectancy at birth

*Source:* World Development Indicators, (SP.DYN.LE00.IN)

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

*Gaps:* Available for most USAID countries.

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

CAS Code # 31P2

### Maternal mortality rate

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

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

*Gaps:* Available for most USAID countries.

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

CAS Code # 31P3

### Access to improved sanitation

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

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

*Gaps:* Available for most USAID countries

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

CAS Code #31S1

### Access to improved water source

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

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

*Gaps:* Available for most USAID countries

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

CAS Code # 31S2

### Births attended by skilled health personnel

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

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

*Gaps:* Available for most USAID countries

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

CAS Code # 31S3

### Child immunization rate

*Source:* World Development Indicators, estimated by adding two data series: Immunization, DPT (% of children ages 12-23 months) (SH.IMM.IDPT) and Immunization, measles (% of children ages 12-23 months) (SH.IMM.MEAS)

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

*Gaps:* Available for most USAID countries.

*CAS Code #31S4*

### **Prevalence of child malnutrition, weight for age**

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

*Definition:* Percentage of children under five whose weight for age is less than minus two standard deviations from the median for the international reference population ages 0-59 months.

*Gaps:* Available for most USAID countries

*CAS Code # 31S5*

### **Public health expenditure, percent of GDP**

*Source:* World Development Indicators, (SH.XPD.TOTL.ZS)

*Definition:* Total health expenditure is the sum of public and private health expenditures. It covers the provision of health services (preventive and curative), family planning activities, nutrition activities, and emergency aid designated for health but does not include provision of water and sanitation.

*Gaps:* Available for most USAID countries

*Data Quality:* The absence of consistent national accounting systems makes it difficult for cross country comparisons—records of out of pocket expenditures are often lacking and data on spending is often not aggregated and difficult to compile.

*CAS Code #31S6*

## **EDUCATION**

### **Net primary enrollment rate - female, male and total**

*Source:* UNESCO Institute for Statistics,

<http://stats.uis.unesco.org/ReportFolders/reportfolders.aspx>

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

*Gaps:* None

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

*CAS Code # 32P1*

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

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

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

*Gaps:* Available for most USAID countries

*CAS Code # 32P2*

### **Youth literacy rate**

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

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

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

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

*CAS Code #32P3*

### **Expenditure on primary education, percent GDP**

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

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

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

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

*CAS Code #32S1*

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

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

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

*Gaps:* Available for most USAID countries

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

*CAS Code # 32S2*

### **Pupil-teacher ratio, primary school**

*Source:* World Development Indicators; SE.PRM.ENRL.TC.ZS)

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

*Gaps:* Available for most USAID countries

*Data Quality:* The comparability of pupil-teacher ratios across countries is affected by the definition of teachers, by whether teachers are assigned non-teaching duties, and by differences in class size by grade and in the number of hours taught. The indicator does not take into account differences in teachers' academic qualifications, pedagogical training, professional experience and status, teaching methods, teaching materials and variations in classroom conditions -- all factors that could also affect the quality of teaching/learning and pupil performance.

*CAS Code # 32S3*

## EMPLOYMENT AND WORKFORCE

### Labor force participation rate – total, male, female

*Source:* Derived from World Development Indicators. For the female labor force participation rate: Population ages 15-64, female (SP.POP.1564.FE.IN) as a percentage of the female labor force -- which is calculated by multiplying Labor force, female (% of total labor force) (SL.TLF.TOTL.FE.ZS), in ratio terms, by labor force, total (SL.TLF.TOTL.IN). For the male labor force participation rate: Population ages 15-64, male (SP.POP.1564.MA.IN) as a percentage of the male labor force -- which is labor force, total (SL.TLF.TOTL.IN) minus female labor force, as derived above. For the total labor force participation rate: Population ages 15-64, total (SP.POP.1564.TO) as a percentage of Labor force, total (SL.TLF.TOTL.IN).

*Definition:* The percentage of the working age population that is in the labor force. The labor force comprises people who meet the International Labour Organization definition of the economically active population: all people who supply labor for the production of goods and services during a specified period. It includes both the employed and the unemployed.

*Gaps:* Available for most USAID countries

*CAS Code #33P1*

### Rigidity of employment index

*Source:* World Bank, Doing Business in 2005. The Index can be found under the Hiring and Firing Category,

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

*Definition:* A measure of labor market rigidity index constructed as the average of the Difficulty of Hiring Index, Rigidity of Hours Index and a Difficulty of firing Index.

*Gaps:* Unavailable for about 10 USAID countries

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

*CAS Code # 33P2*

### Size and growth of the labor force

*Source:* World Bank Development Indicators; (SL.TLF.TOTL.IN); and annual percentage change.

*Definition:* Magnitude of the labor supply, and annual percent change. Labor force comprises people who meet the International Labour Organization definition of the economically active population: all people who supply labor for the production of goods and services during a specified period. It includes both the employed and the unemployed. While national practices vary in the treatment of such groups as the armed forces and seasonal or part-time workers, in general the labor force includes the armed forces, the unemployed, and first-time job-seekers, but excludes

homemakers and other unpaid caregivers and workers in the informal sector.

*Gaps:* Available for most USAID countries.

*CAS Code #33P3*

### Unemployment rate

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

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

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

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

*CAS Code # 33P4*

## AGRICULTURE

### Agriculture value added per worker

*Source:* World Development Indicators (EA.PRD.AGRI.KD) derived from World Bank national accounts files and Food and Agriculture Organization, Production Yearbook and data files.

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

*Gaps:* Measure available for most USAID countries

*CAS Code # 34P1*

### Cereal yield

*Source:* World Development Indicators (EA.PRD.AGRI.KD) based on Food and Agriculture Organization (FAO), Production Yearbook and data files.

*Definition:* Cereal yield, measured as kilograms per hectare of harvested land, includes wheat, rice, maize, barley, oats, rye, millet, sorghum, buckwheat, and mixed grains. Production data on cereals relate to crops harvested for dry grain only. Cereal crops harvested for hay or harvested green for food, feed, or silage and those used for grazing are excluded.

*Gaps:* Most USAID countries covered

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

*CAS Code # 34P2*

### Growth in agricultural value added

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



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

*Gaps:* None

CAS Code # 34P3

#### **Agricultural policy costs index**

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

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

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

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

CAS Code # 34S1

#### **Crop production index**

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

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

*Gaps:* Most USAID countries covered

*Data Quality:* Regional and income group aggregates for the FAO's production indexes are calculated from the underlying values in international dollars, normalized to the base period 1989-91. The FAO obtains data from official and semi-official reports of crop yields, area under production, and livestock numbers. If data are not available, the FAO makes estimates. The FAO's indexes may differ from other sources because of differences in coverage, weights, concepts, time periods, calculation methods, and use of international prices. To ease cross-country comparisons, the FAO uses international commodity prices to value production. These prices, expressed in international dollars (equivalent in purchasing power to the U.S. dollar), are derived using a Geary-Khamis formula applied to agricultural outputs. This method assigns a single price to each commodity so that, for example, one metric ton of wheat has the same price regardless of where it was produced. The use of international prices eliminates fluctuations in the value of output due to transitory movements of nominal exchange rates unrelated to the purchasing power of the domestic currency.

*Gaps:* None

CAS Code # 34S2

#### **Livestock Production index**

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

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

*Gaps:* Most USAID countries covered.

*Data Quality:* See comments on Crop Production Index

CAS Code # 34S3