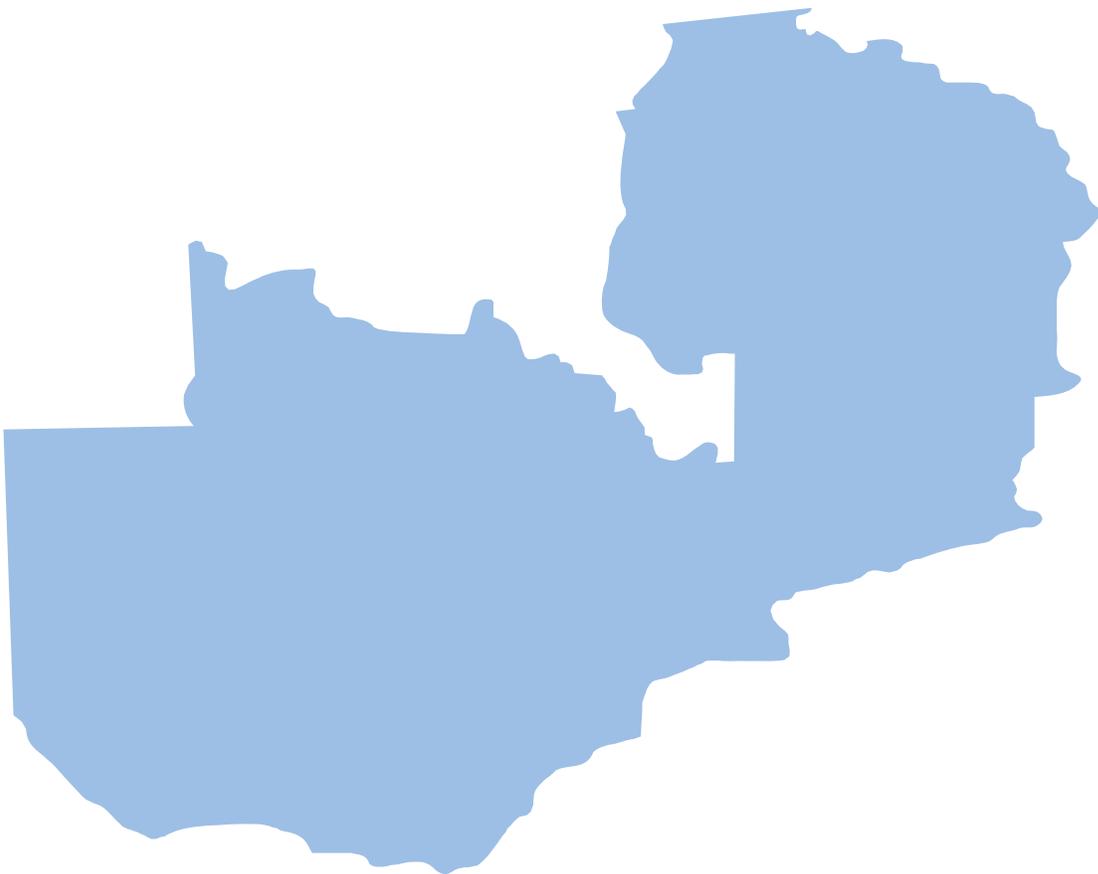




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# Zambia

## Economic Performance Assessment



**March 2006**

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# Zambia

## Economic Performance Assessment

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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, 2004–2006, has developed a standard methodology for producing analytical reports to provide a clear and concise evaluation of economic growth performance in designated host countries. These reports are tailored to meet the needs of USAID missions and regional bureaus for country specific analysis. Each report contains

- A synthesis of data 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.

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## HIGHLIGHTS OF ZAMBIA'S PERFORMANCE

Economic Growth	Zambia's is one of the poorest countries in sub-Saharan Africa. After decades of contraction and sluggish growth, the economy expanded at a moderate pace in 2001–2005, thanks to rising investment and a revival in the mining sector. Even faster growth is needed, however, to achieve rapid progress in reducing poverty.
Poverty	Poverty remains severe and pervasive. In 2004, 67 percent of the population lived below the national poverty line, and 50 percent could not afford the food to meet the minimum energy requirements.
Economic Structure	Between 2001 and 2005 the share of industry in GDP rose sharply, from already high levels by regional standards. This is due primarily to gains in mining and construction.
Demography and Environment	Zambia is one of the most urbanized countries in Africa. With relatively rapid population growth of 2.1 percent per year, the country has a high child dependency rate and faces a large youth bulge in the labor force.
Gender	Gender equity is better than the regional average, in some respects, but very weak in absolute terms. Unlike in most other countries, women are not expected to live much longer than men.
Fiscal and Monetary Policy	Fiscal and monetary policies were relaxed for many years, which led to sustained high inflation and economic instability. Fiscal policy significantly tightened by 2004, and money supply growth slowed in 2005. Inflation is now falling but remains in double digits.
Business Environment	Zambia's performance in this area is generally better than the regional averages, but by global standards, the country suffers from significant impediments to doing business. The foremost problem is corruption.
Financial Sector	Financial sector indicators are mixed. Interest spreads and real interest rates are high, indicating banking sector inefficiency. Yet domestic credit to the private sector has increased markedly as fiscal crowding out has diminished.
External Sector	Recent external sector developments have been generally favorable, especially the cancellation of most external debt in 2005, and high copper prices. A side effect has been a rapid appreciation of the kwacha, creating serious problems for many producers.
Economic Infrastructure	Zambia's infrastructure is reasonably good by regional standards, but in absolute terms it is still a serious constraint for investors and a drag on competitiveness. The communications sector, particularly Internet usage, is expanding rapidly.
Health	Health indicators are generally poor, and many paint a dire picture, such as very low life expectancy and very high prevalence of HIV/AIDS.
Education	Many of the basic education indicators are better than regional benchmarks but weak compared to those in developed countries. If recent data are accurate, youth literacy is a particularly serious concern.
Employment and Workforce	Only 10 percent of the workforce has a paid job in the formal sector, and urban unemployment is very high. Yet Zambia has become the regional leader in eliminating regulatory barriers to hiring and firing. Severance costs, however, remain extremely high, and may be a major impediment to job creation.
Agriculture	The agricultural sector is characterized by very low productivity, severe poverty, stagnant long-term performance, and high vulnerability to drought.

*Note: The methodology used for comparative benchmarking is explained in the appendix.*



## ZAMBIA: NOTABLE STRENGTHS AND WEAKNESSES— SELECTED INDICATORS

Indicator	Strengths	Weaknesses
<b>Growth Performance</b>		
Gross fixed investment (% of GDP)	✓	
Gross fixed private investment (% of GDP)	✓	
Growth of labor productivity	✓	
Per capita GDP (purchasing power parity dollars)		✓
<b>Poverty and Inequality</b>		
Human poverty index		✓
Population (%) below minimum dietary energy consumption		✓
Poverty headcount (%), by national poverty line		✓
<b>Economic Structure</b>		
Industry, value added (% GDP)	✓	
<b>Demography and Environment</b>		
Adult literacy rate	✓	
Age dependency rate (dependents per worker)		✓
Environmental sustainability index	✓	
<b>Fiscal and Monetary Policy</b>		
Growth in the broad money supply (M2)	✓	
Inflation rate		✓
Overall government budget balance (% of GDP)	✓	
<b>Business Environment</b>		
Corruption perception index		✓
Cost of starting a business (% GNI per capita)	✓	
Ease of doing business ranking (1 to 155)	✓	
<b>Financial Sector</b>		
Interest rate spread, lending rate minus deposit rate		✓
Monetization ratio (M2 as % of GDP)		✓
Real interest rate		✓
<b>External Sector</b>		
Concentration of exports (top 3 exports, 3-digit SITC)		✓
Debt service ratio (% exports)	✓	
Foreign direct investment (% GDP)	✓	
Gross international reserves (months of imports)		✓
Trade, imports plus exports (% GDP)	✓	

Indicator	Strengths	Weaknesses
<b>Economic Infrastructure</b>		
Internet users (per 1000 people)	✓	
Telephone density, fixed line and mobile (per 1000 people)		✓
<b>Health</b>		
Access to improved water source		✓
Births attended by skilled health personnel (%)		✓
Child immunization rate	✓	
HIV/AIDS prevalence		✓
Maternal mortality rate (per 100,000 live births)		✓
Prevalence of child malnutrition (weight for age)		✓
<b>Education</b>		
Net primary enrollment rate	✓	
Persistence in school to grade 5	✓	
Youth literacy rate	✓	
<b>Employment and Workforce</b>		
Labor force participation rate (total and female)		✓
Rigidity of employment index	✓	
<b>Agriculture</b>		
Agriculture value added per worker (1995 U.S. dollars)		✓
Cereal yield (kilograms per hectare)	✓	
Livestock production index (relative to 1999-2001)		✓

*Note: This chart identifies selective indicators for which Zambia's performance is particularly strong or weak relative to the benchmark standards; details are discussed in the text. The separate Data Supplement presents a full tabulation of the data examined for this report, including the international benchmark data, along with technical notes on the data sources and definitions.*

# 1. Introduction

This paper is one of a series of Economic Performance Assessments prepared for the EGAT Bureau to provide USAID missions and regional bureaus with a concise evaluation of a broad range of indicators relating to economic growth performance in designated host countries. The report draws on a variety of international data sources<sup>1</sup> and uses international benchmarking against reference group averages and comparator countries (Uganda and Botswana) 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 may be necessary to have a mechanic probe more deeply to assess the source of the trouble and discern the best course of action.<sup>2</sup> Similarly, the Economic Performance Assessment is based on an examination of key economic and social indicators, to see which ones are signaling problems. In some cases a “blinking” indicator has clear implications, while in other instances a detailed study may be needed to investigate the problems more fully and identify an appropriate course for programmatic action.

The analysis is organized around two mutually supportive goals: 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, measures aimed at reducing poverty and lessening inequality can help to underpin rapid and sustainable growth. These interactions create the potential for stimulating a virtuous cycle of economic transformation and human development.

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

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

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

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

investment in education, health, and workforce skills; infrastructure development; and sustainable use of natural resources.

In turn, the impact of growth on poverty depends on policies and programs that create opportunities and build capabilities for the poor. We call this the *pro-poor growth environment*.<sup>4</sup> Here, too, many elements are involved, including effective education and health systems; policies facilitating job creation; agricultural development (in countries where the poor depend predominantly on farming); dismantling barriers to micro and small enterprise development; and progress toward gender equity.

The present evaluation of these conditions must be interpreted with caution. A concise analysis of this sort cannot provide a definitive diagnosis of economic problems, or simple answers to questions about programmatic priorities. Instead, the aim of the analysis is to spot signs of serious problems for economic growth, based on a review of selected indicators, subject to limits of data availability and quality. The results should provide insight about potential paths for USAID intervention, 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, the benchmarking methodology, and a table showing the full set of indicators examined for this report.

Table 1-1  
*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 because the focus is on 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 Zambia's macroeconomic performance, poverty and inequality, economic structure, demographic and environmental conditions, and indicators of gender equity.<sup>5</sup> Some of the indicators cited here are descriptive rather than analytical and are included to provide context for the performance analysis.

### **GROWTH PERFORMANCE**

Zambia remains one of the poorest countries in sub-Saharan Africa. According to the Purchasing Power Parity (PPP) method to convert local currency to dollars, the country's per capita GDP of \$870 in 2004 stood well below the median of \$1,267 for low-income countries in sub-Saharan African (LI-SSA). It was also far below the level for Uganda (\$1,728) and only a fraction of the income level for well-managed and resource-rich Botswana (\$10,169). A different picture emerges when the exchange rate is used to convert local currency to dollars. By this method, Zambia's per capita GDP was \$478 in 2004, well above the median for LI-SSA (\$407) and much higher than Uganda's \$265. When these two approaches diverge, the PPP method is generally a better basis for comparing living standards. Moreover, the PPP estimate is more consistent with the high poverty rate in Zambia, discussed in the next section.

After a long period of economic contraction or very sluggish growth, Zambia's economy grew by an average of 4.6 percent per year from 2001 through 2005.<sup>6</sup> In 2005, GDP growth dipped to 4.3 percent, largely because of drought, disruptions to mining production, and fuel shortages.<sup>7</sup> As a result, the growth rate fell below the latest available LI-SSA average of 4.8 percent and the growth rates in Botswana (5.2 percent) and Uganda (5.9 percent) (Figure 2-1). Zambia's economic expansion in 2001-2005 was broadly based—spread across many sectors. A strong revival in mining, the main export sector, played an important role, while growth in agriculture was erratic because of the vagaries of the rains

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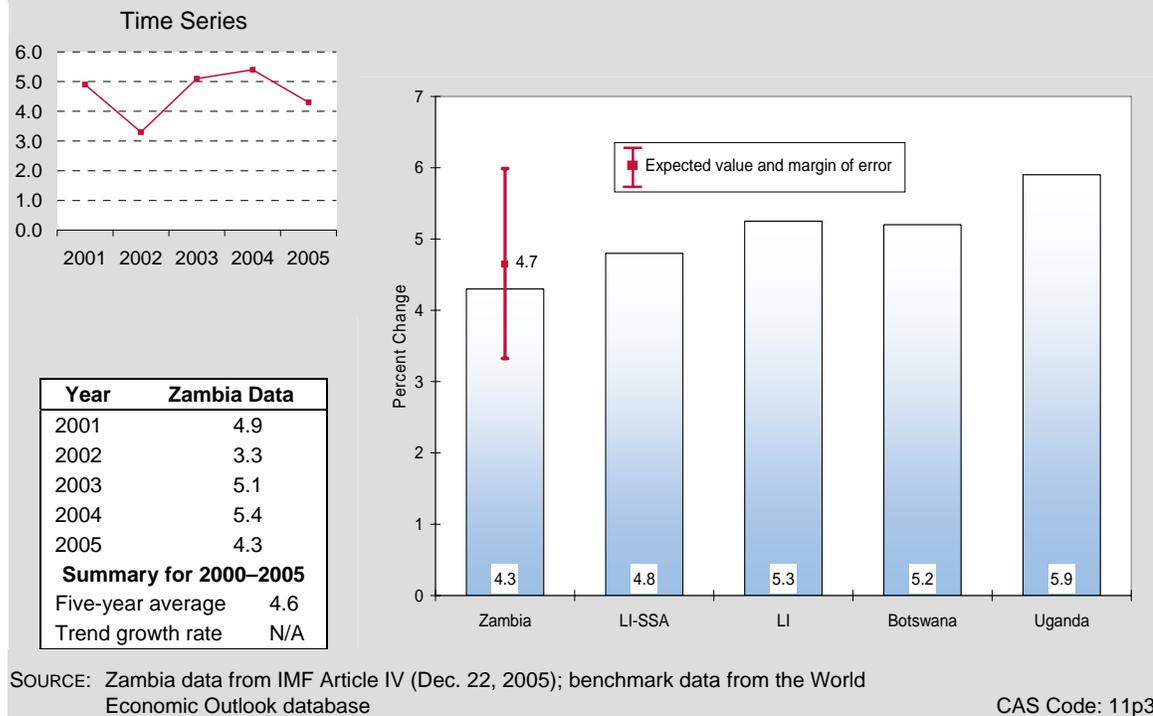
<sup>5</sup> The separate Data Supplement provides a full tabulation of the data for Zambia and the international benchmarks, including indicators not discussed in the text, as well as technical notes for each indicator.

<sup>6</sup> All 2005 macroeconomic figures are preliminary estimates. Unless otherwise noted, macroeconomic estimates for 2005 are from the IMF, 2005 Article IV Consultation with Zambia, Country Report No. 06/39, made publicly available on February 3, 2006.

<sup>7</sup> The latest official GDP growth estimate for 2005, released by the Central Statistical Office in January 2006, is 5.1 percent, exceeding the IMF estimate.

Figure 2-1  
*Real GDP Growth, percent*

***After decades of poor growth, the economy expanded at an average rate of 4.6 percent in the past five years.***

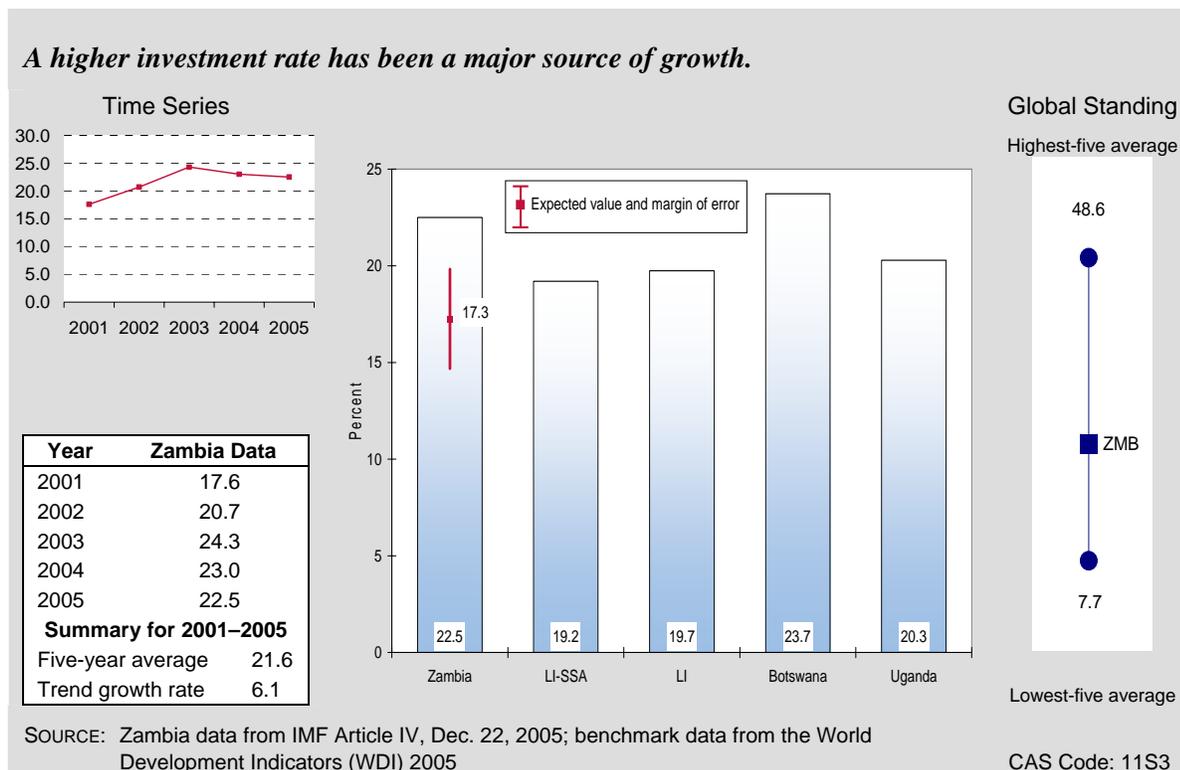


Zambia's recent growth has been driven mainly by rising investment. The ratio of gross domestic investment to GDP climbed from 17.6 percent in 2001 to a peak of 24.3 percent in 2003, and then contracted to an estimated 22.5 percent in 2005. The investment rate is now well above the LI-SSA average of 19.2 percent and Uganda's 20.3 percent and is comparable to the investment rate in Botswana (23.7 percent) (Figure 2-2). Because government investment has declined from 11.9 percent in 2001 to an estimated 7.4 percent in 2005, the investment boom reflects a higher rate of private investment, which jumped from 5.7 percent of GDP in 2001 to an estimated 15.1 percent in 2005. This is good news for economic growth prospects.

Investment efficiency in this period was moderate. This can be seen in the incremental capital-output ratio (ICOR), which averaged 4.7 over the past five years. That means that \$4.7 of capital investment has been needed per extra dollar of output—and a higher ICOR value means lower productivity. Thus, investment efficiency in Zambia was slightly better than the average for LI-SSA (4.9) but not quite as good as in Botswana (4.5) and far off the mark set by Uganda (3.1).

The growth of labor productivity has been fairly good. From 2001 to 2003, output per working-age adult grew by an average of 2.5 percent, a substantial acceleration from earlier years. In 2003 (latest data point), this broad measure of productivity grew by 3.2 percent, markedly higher than the rates for LI-SSA and Uganda (both 1.9 percent), though less than in Botswana (4.3 percent).

Figure 2-2  
Gross Fixed Investment, percent of GDP



The recent growth starts from a very low base. In 2005, per capita GDP in constant prices was a mere 65 percent of the level in 1981.<sup>8</sup> If the GDP growth rate for the past five years does not improve, per capita income will not return to the 1981 level until about 2022, and severe poverty will persist for decades. On the bright side, the improved external environment and fiscal stabilization in recent years (see the External Sector and Fiscal and Monetary Policy sections) create opportunities for Zambia to accelerate growth and drastically reduce poverty. Given these enormous challenges and opportunities, donor support is required in virtually all areas of activity.

## POVERTY AND INEQUALITY

The result of decades of poor performance in growth has been severe and pervasive poverty. Even the expansion in recent years has been too slow to change the situation. In 2004, 67 percent of the population still lived below the national poverty line, compared to 73 percent in 1998.<sup>9</sup> The poverty rate for 2004 is well above the regression benchmark for a country with Zambia's characteristics (57.2 percent) and far worse than the rate in Uganda (37.7 percent in 2002/03).<sup>10</sup>

<sup>8</sup> According to IMF World Economic Outlook Database, September 2005.

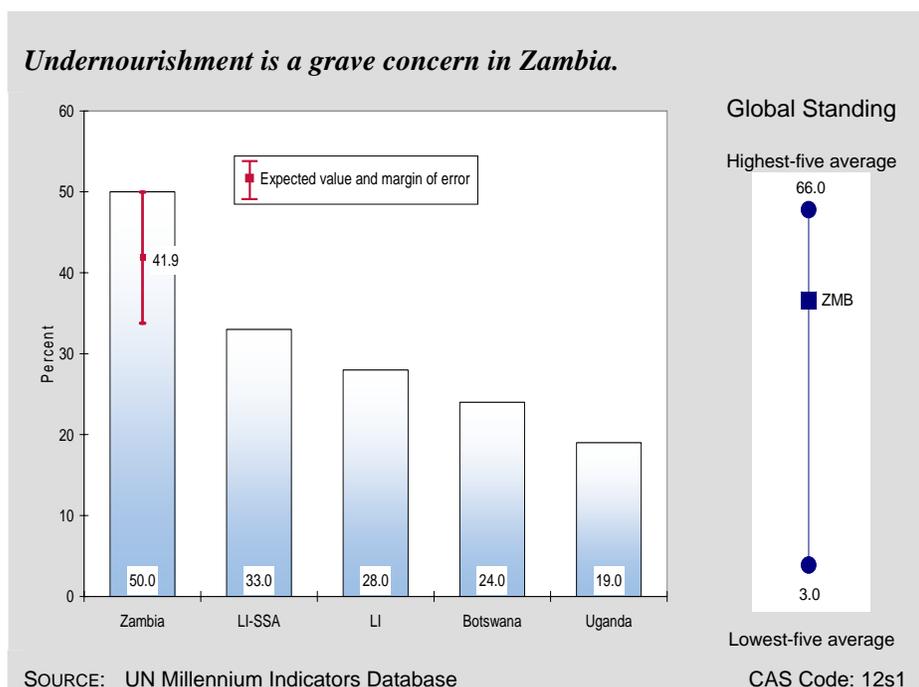
<sup>9</sup> IMF, Zambia: 2005 Article IV Consultation, Country Report No. 06/39, January 2006. These figures are not fully comparable because of changes in household survey methodology.

<sup>10</sup> IMF, Uganda: Poverty Reduction Strategy Paper, Country Report No. 05/307, August 2005. National poverty lines differ across countries; therefore, cross-country comparisons should be interpreted with caution.

Poverty is especially widespread in rural areas, where 78 percent of the people live below the poverty line.

Deep poverty is also reflected in the 50 percent of the population living on a diet that does not meet minimum energy requirements (Figure 2-3). This is at the upper bound of the estimated range for Zambia from the benchmark regression and far higher than the average for LI-SSA (33 percent) and the rates of Botswana (24 percent) and Uganda (19 percent). Undernourishment is a grave problem because it impairs labor's productivity and earning capacity and children's learning capabilities.

Figure 2-3  
*Population below Minimum Dietary Energy Consumption, percent*



A broader measure of poverty is the UNDP's Human Poverty Index (HPI), which takes into account life expectancy, access to safe water, access to health services, literacy, and nutrition. Zambia's HPI score of 46.4 in the 2005 Human Development Report ranked the country 90th in deprivation of 103 developing countries. This was above the LI-SSA average of 45.0 but far worse than the deprivation index for Uganda (36.0); notably, Botswana scored even worse than Zambia, at 48.4, reflecting extremely low life expectancy due to HIV/AIDS.

Zambia completed its first Poverty Reduction Strategy Paper (PRSP) in March 2002. The strategy focuses on promoting growth in key sectors, particularly in rural areas where poverty is most severe, while diversifying both output and exports. The strategy also emphasizes improving economic and political governance, including macroeconomic stabilization and the delivery of social services, and strengthening private investment as a foundation for poverty reduction. A new PRSP will be issued this year in the form of the National Development Plan for 2006–2010. According to the IMF, the National Development Plan is expected to emphasize labor-intensive

growth, supported by macroeconomic stability, infrastructure investment, and improved social services for the poor.<sup>11</sup>

## ECONOMIC STRUCTURE

One of the most significant changes in Zambia's output structure in the past five years has been the rising share of industry in GDP, from 30.7 percent in 2001 to 34.7 percent in 2005, in constant price terms (Figure 2-4).<sup>12</sup> This has strengthened Zambia's position as an industrial leader in sub-Saharan Africa, mainly on the strength of copper and cobalt mining and construction. By comparison, industry generates only 21.2 percent of GDP for LI-SSA, on average, and for Uganda; in mineral-rich Botswana, the share of industry is even higher than in Zambia (45.2 percent).

At independence in 1964, about half of Zambia's GDP originated in mining. The importance of this sector dramatically declined by the end of the 1990s due to mismanagement under state ownership, inadequate investment, and low world prices.<sup>13</sup> Following privatization of Zambia Consolidated Copper Mines (ZCCM) in 2000, a combination of new investment and rising world prices for copper and cobalt stimulated a growth rate of nearly 10 percent per year over the past five years. As a result, the mining share of GDP rose from 8.3 percent in 2001 to 9.3 percent in 2005. Real value added in construction grew even more quickly, rising from 6.3 percent of GDP to 10.3 percent. The Bank of Zambia notes that the construction boom included a strong expansion of residential housing (though the numerical breakdown is not available).<sup>14</sup>

The share of services in total added value declined from 50.3 percent in 2001 to 48.5 percent in 2005 (again at constant prices), in large part due to the relatively slower growth in value added for the public sector services. Nevertheless, the service sector accounts for the largest share of GDP. The service share in Zambia is higher than the average for LI-SSA (41.9 percent) and the share in Uganda (46.5 percent), though a little less than in Botswana (52.5 percent).

Between 2001 and 2005, agriculture's share of GDP declined from 19.0 percent to 16.7 percent, mirroring resurgence of the industrial sector.<sup>15</sup> The share for agriculture is much smaller than the average for LI-SSA (31.7 percent) or the figure for Uganda (32.4 percent). In arid Botswana, however, agriculture generates a mere 2.4 percent of GDP. Notably, an estimated 60 percent of Zambia's population lived in rural areas in 2003. Nearly all of these people earn their livelihood from agriculture. Hence, agriculture uses nearly three-fifths of the labor force to produce just one-sixth of GDP. This comparison shows that labor is far less productive in agriculture than in other sectors (see also the Agriculture section of this report).

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<sup>11</sup> IMF Zambia 2005 Article IV Consultation, p. 14.

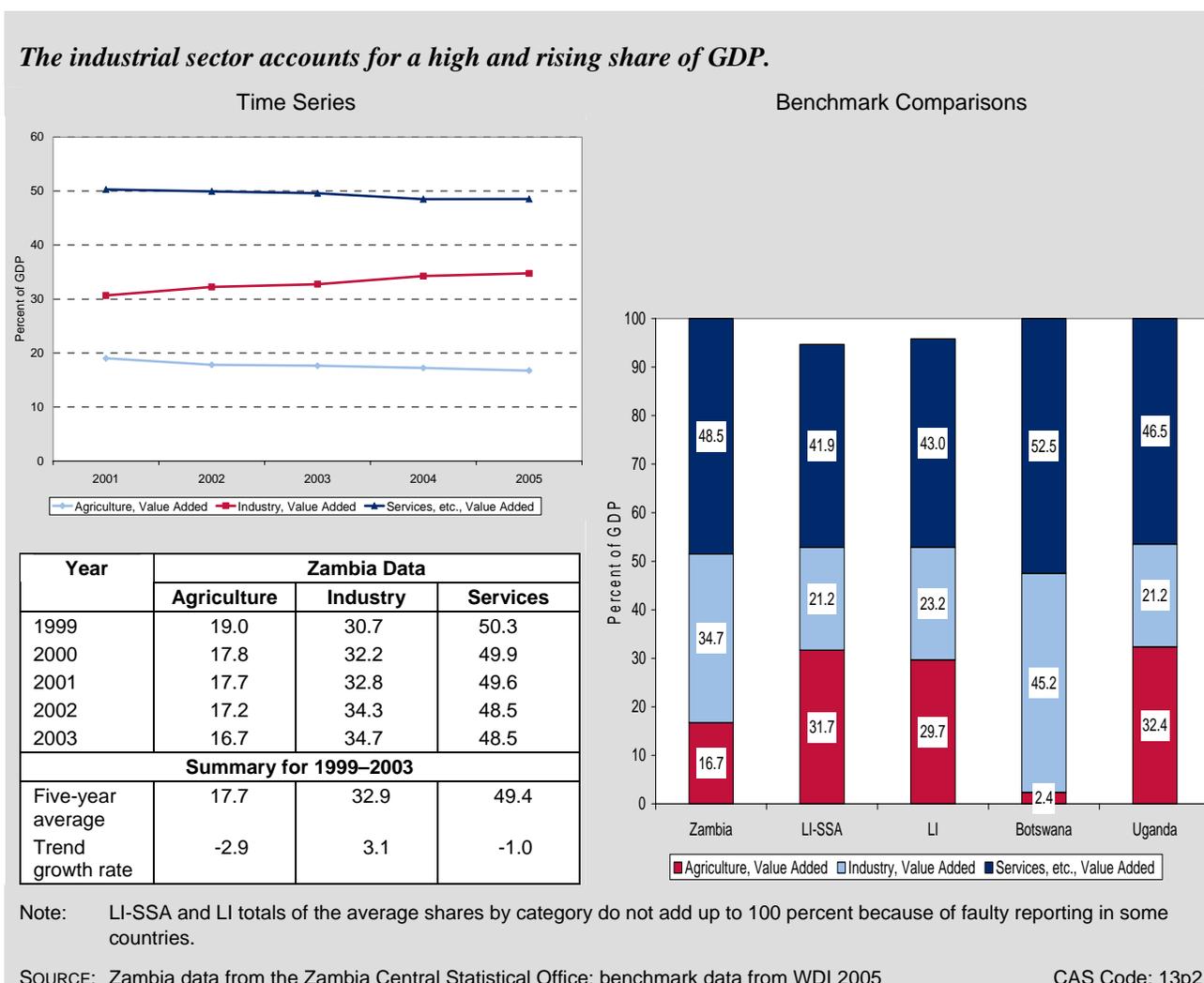
<sup>12</sup> Data reported here are from the Central Statistical Office Monthly, January 2006. The Central Statistical Office presents the output structure in constant 1994 prices.

<sup>13</sup> IMF, Zambia: Selected Issues and Statistical Appendix, Country Report No. 04/160, July 2004.

<sup>14</sup> Bank of Zambia, Overview of the Economy in 2005, December 2005.

<sup>15</sup> In this report, agriculture includes forestry and fishing. In 2001–2005, the share of value added jointly produced by forestry and fishery in Zambia slightly exceeded value added produced by agriculture proper (see Central Statistical Office, The Monthly, January 2006).

Figure 2-4  
Output Structure, percent of GDP



The large, impoverished rural population, with very low productivity, presents one of the main challenges to reducing poverty and achieving transformational growth. In line with the PRSP emphasis on rural development, it is appropriate for donors to prioritize programs to improve agricultural productivity and facilitate the creation of jobs in other sectors. At the same time, Zambia needs to capitalize on high copper prices<sup>16</sup> and develop industrial and services activities that add further value to the wealth created through resource-based production.

## DEMOGRAPHY AND ENVIRONMENT

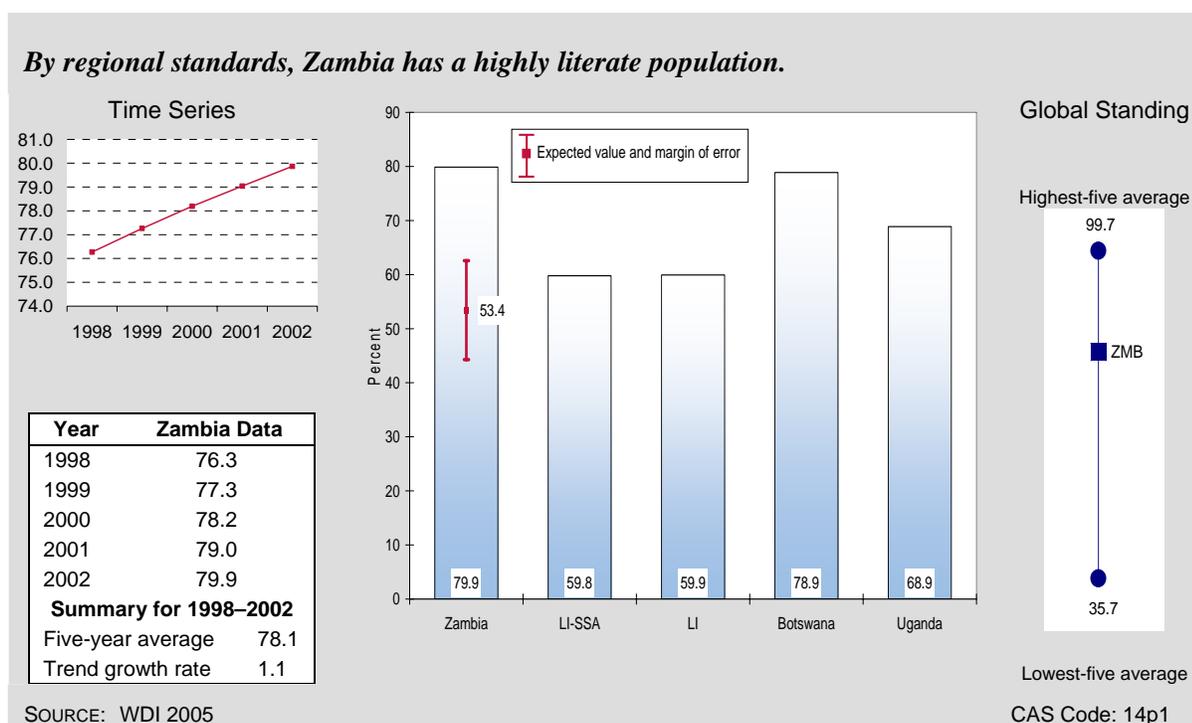
Zambia's population has been growing at an estimated 2.2 percent per year, on par with the average for LI-SSA (2.3 percent) and lower than in Uganda (2.7 percent), though much faster than in Botswana (0.6 percent). As in most low-income countries, population growth is driven by

<sup>16</sup> According to the IMF (Zambia: Selected Issues and Statistical Appendix), Zambian copper production may approach 600,000 tons per year in the medium term, a sharp increase from 350,000 tons in 2003.

high fertility rates, which also yield a high dependency rate, particularly for child dependency. In Zambia, the dependency rate in 2003 was 0.89, meaning that there were 89 dependents for 100 people of working age. This equals the average for LI-SSA and is on the low side of the range predicted by the benchmark regression but still very high by absolute standards. The United Nations projects that the dependency rate will decline significantly in the next several decades,<sup>17</sup> but for the immediate future the country faces a large youth bulge that strains the education system and accentuates the need for rapid job growth.

By regional standards, Zambia has had a highly literate adult population since colonial times (Figure 2-5). In 2002, the literacy rate was 79.9 percent, far above the regression benchmark range, the average for LI-SSA (59.8 percent), and the rate for Uganda (68.9 percent). It was even slightly better than in Botswana (78.9 percent). Hand in hand with relatively high literacy and industrialization, Zambia is one of the most urbanized countries in the region, with 40.3 percent of the population living in urban areas. By comparison, the LI-SSA average is 35.5 percent; for Uganda the figure is only 15.3 percent. Here again, Botswana is an exception, with an urbanization rate of 50.3 percent.

Figure 2-5  
*Adult Literacy Rate*



Although demographic pressures are strong in some areas, and especially in urban centers, Zambia scores well by regional standards on the recently created environmental sustainability index. Zambia's score of 51.1 on a scale of 0 (poor) to 100 (excellent) is above the range

<sup>17</sup> United Nations World Population Prospects: The 2004 Revision Population Database.

predicted by the benchmark regression, higher than the LI-SSA average of 44.9, and on par with Uganda's score of 51.9; Botswana, however, does much better, with a score of 55.9. An analysis of the components of the index indicates that the most troubled areas for environmental sustainability in Zambia are basic human sustenance, science and technology, and ambient health conditions.

## GENDER

Zambia's performance on basic indicators of gender equity is poor in absolute terms, even though in some respects it is above the regional benchmarks. In education, for example, the ratio of male-to-female adult literacy was 1.17 in 2002—much better than the average for LI-SSA (1.44) and the figure for Uganda (1.33), but far from full gender equity.<sup>18</sup> Similarly, the ratio of male-to-female gross enrollment was 1.09, better than in LI-SSA (1.20), though marginally worse than in Uganda (1.07) and substantially worse than in Botswana (0.99).

Gender disparities are also evident in health. In most of the world, women live significantly longer than men, often by five years or more. In Zambia, life expectancy was nearly identical for both women and men; according to World Development Indicators data, the ratio of male to female life expectancy was 1.01 in 2002, one of the highest ratios in the world. This is worse than the average ratio of 0.95 for LI-SSA and the values of 0.96 in Botswana and 0.97 in Uganda.

Many indicators that are outside our basic set of indicators confirm the prevalent gender imbalances. For example, the unemployment rate for urban females was 8 percentage points higher than the rate for urban males in 2004.<sup>19</sup> Also, women in decision-making positions made up just 18 percent of the total in 2004; although this is a big improvement over the 10 percent in 1997, Zambia has a long way to go to achieve gender equity.<sup>20</sup>

Gender considerations should influence the design of all donor programs. Reducing gender inequality is essential for poverty elimination because women bear a disproportionate burden of lack of opportunities and access to education. Educating women should be a priority, as well, in part because better-educated women are more productive and less prone to fall victim to HIV/AIDS and can pass along better health and education to their children. Assistance aimed at facilitating the allocation of land to women,<sup>21</sup> promoting off-farm opportunities for women, and developing gender-sensitive microfinance programs are possibilities for donor consideration.

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<sup>18</sup> The corresponding figure for Botswana is a remarkable 0.93, indicating that literacy rates are much higher for females than for males. The standard benchmark, in absolute terms, is 1.00.

<sup>19</sup> Zambia Central Statistical Office Monthly, November 2005.

<sup>20</sup> IMF, Zambia: Poverty Reduction Strategy Paper Progress Report, Country Report No. 05/112, March 2005.

<sup>21</sup> According to the PRSP Progress Report, the government's target is at least 30 percent.

# 3. Private Sector Enabling Environment

This section reviews indicators relating to the enabling environment for rapid and efficient growth of the private sector. Sound fiscal and monetary policies are essential for macroeconomic stability, which is necessary (though not sufficient) for sustained growth. A dynamic market economy also depends on institutional foundations such as secure property rights, an effective system for enforcing contracts, and a 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 requisite for a good enabling environment, as a source of potential markets, modern inputs, technology, and finance, as well as competitive pressure for efficiency and rising productivity. Equally important is the development of physical infrastructure to support production and trade. Finally, developing countries need to adapt and apply science and technology to attract investment, improve competitiveness, and stimulate productivity growth.

## FISCAL AND MONETARY POLICY

After many years of lax macroeconomic policies and high inflation, significant tightening of both fiscal and monetary policy over the past two years bodes well for economic stability and a more attractive investment climate.

The fiscal tightening is evident in the government budget deficit (including grants), which declined to 1.7 percent in 2004, after ranging from 6.3 to 8.1 percent of GDP in 2001–2003. The estimate for 2005, at 2.7 percent of GDP,<sup>22</sup> is still much better than the LI-SSA average of 4.6 percent.<sup>23</sup> The deficit narrowed primarily because of a sharp reduction in spending, from 30.9 percent of GDP in 2003 to an estimated 26.5 percent in 2005. This reduction occurred despite significant outlays for poverty-reducing programs because of better control of the wage bill, limits on housing allowances, a sharp drop in both domestic and external interest costs, and

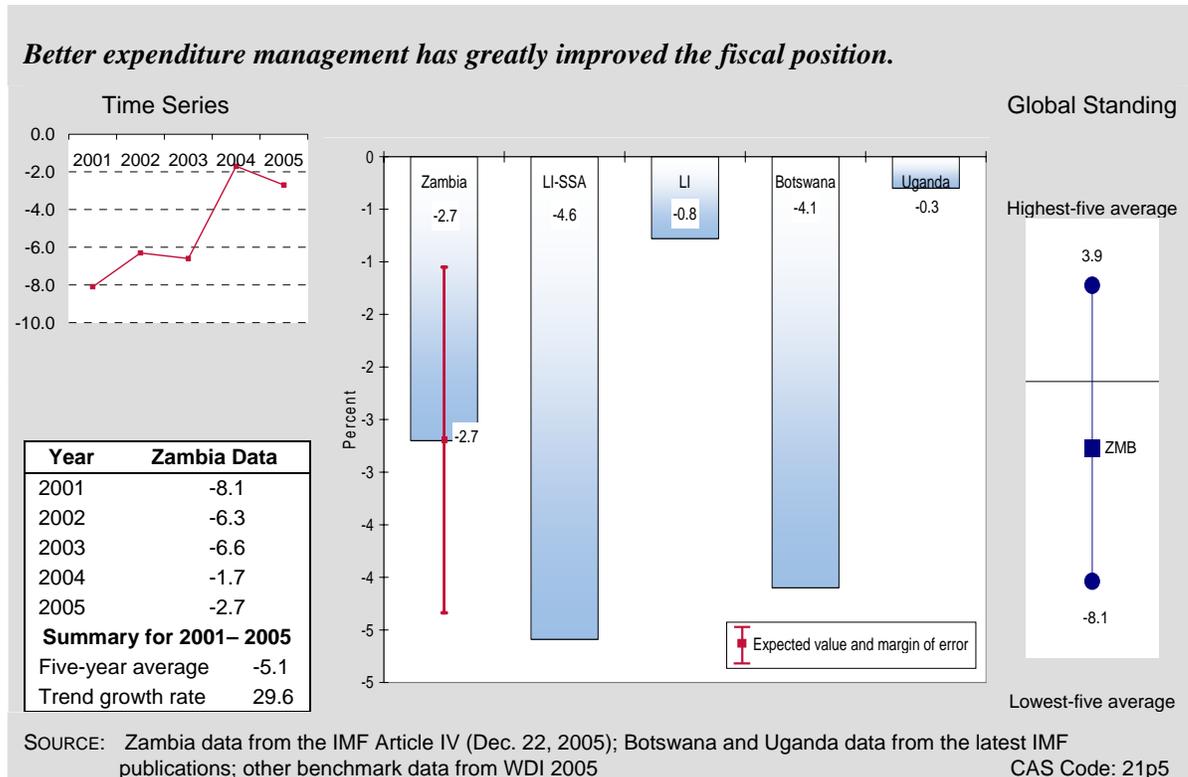
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<sup>22</sup> The widening of the budget deficit in 2005 is a statistical issue, not a result of fiscal policy relaxation. In 2004, the budget item Change in Balances and Statistical Discrepancy was a positive 1.2 percent of GDP, but in the estimates for 2005, this item was balanced. IMF, Public Information Notice No. 06/08, February 1, 2006.

<sup>23</sup> In 2005 the WDI adopted a new system for classifying fiscal data, although most developing countries still use the old classification. Subsequently, the WDI database has fiscal data for few developing countries. Because of the limited sample size, most of the group averages derived from WDI are not meaningful.

cutbacks on non-priority capital projects (Figure 3-1).<sup>24</sup> Consolidation of these improvements in public expenditure management is a high priority.

Figure 3-1  
*Overall Government Budget Balance, percent of GDP*



Government revenue (excluding grants) has averaged 18.2 percent of GDP over the past five years. The revenue yield is far above the LI-SSA average of 12.2 percent, though not as strong as in Uganda (21.3 percent) or Botswana (41.6 percent).<sup>25</sup> Revenues in 2005 fell to 17.8 percent of GDP, partly because of a temporary cut in duties on petroleum products to compensate for operating problems at the local refinery.<sup>26</sup> This contraction was offset, however, by an increase in grants from 5.5 percent of GDP to 6.0 percent. Although grants continue to play a critical role in Zambia's public finances, a medium-term trend shows that their importance is waning (relative to GDP), after reaching 8.3 percent in 2002. Technical support may be needed to further boost tax collection and reduce dependence on grants.

<sup>24</sup> IMF, Zambia: Second Review under the Three-Year Arrangement under the Poverty Reduction and Growth Facility, Country Report No. 05/138, April 2005

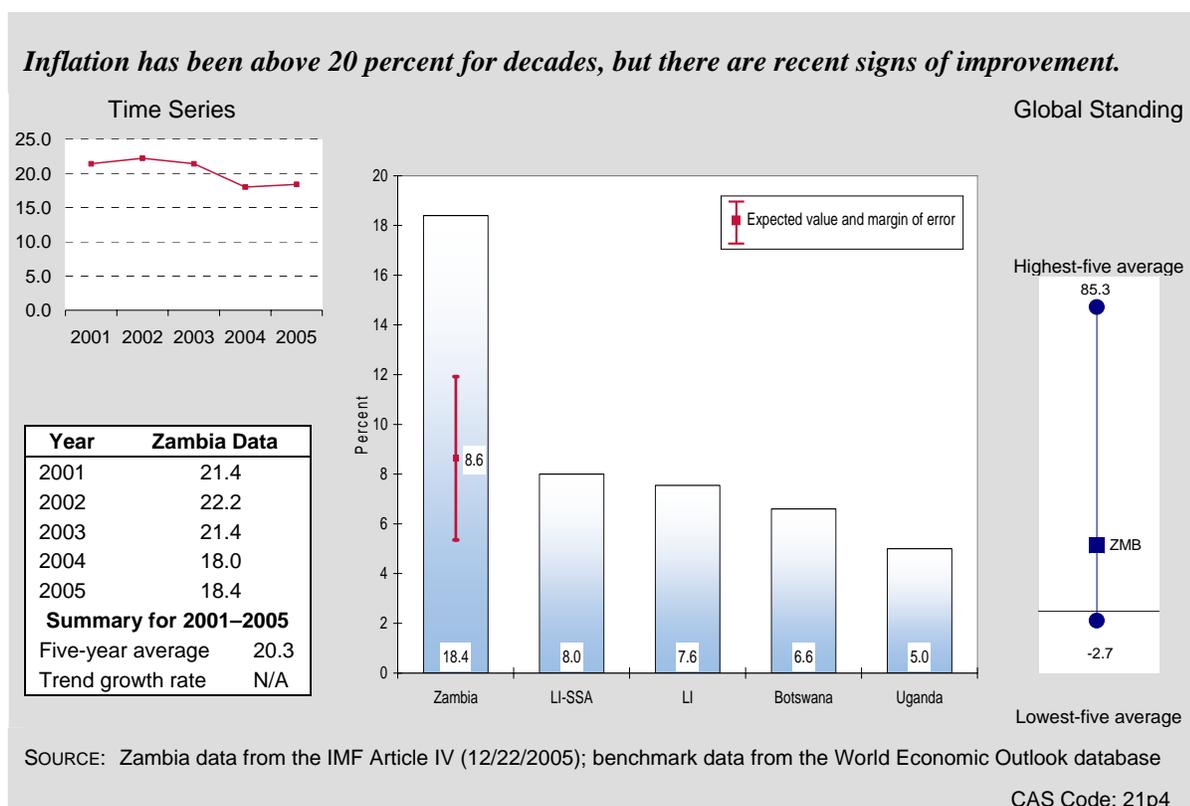
<sup>25</sup> The figure for Botswana is consistently one of the highest in the world because of effective mechanisms for revenue sharing from diamond production.

<sup>26</sup> IMF, "IMF Executive Board Concludes 2005 Article IV Consultation with Zambia," Public Information Notice No. 06/08, February 1, 2006

Tighter fiscal policy has reduced the government’s appetite for inflationary financing and facilitated tighter monetary policy. In 2005, the growth of money supply slowed to 8.6 percent, from an average of 28.4 percent from 2002 to 2004. By comparison, the average rate for LI-SSA is 15.4 percent and the figures for Botswana and Uganda are 15.5 percent and 17.9 percent, respectively. This sharp slowdown in 2005 is only partly due to monetary policy. According to the Bank of Zambia, a major influence on the slowdown was a reduction in the kwacha value of foreign exchange deposits due to a sharp appreciation of the Zambian currency (see the External Sector section).<sup>27</sup>

Better control of macroeconomic policies helped reduce consumer price inflation from a high of 22.2 percent in 2002 to 18.0 percent in 2004. In 2005, the inflation rate rose to 18.4 percent, in large part due to drought and high world oil prices (Figure 3-2).<sup>28</sup> This is still very high inflation by absolute and regional standards, but with restrained fiscal and monetary policies, inflation should decline steadily to single digits.

Figure 3-2  
Inflation Rate



<sup>27</sup> Bank of Zambia, Overview of the Economy in 2005.

<sup>28</sup> IMF 2005 Article IV Consultation.

The Zambian authorities seem to be committed to winning the fight against inflation.<sup>29</sup> The goal may be attainable this time around with steady policy management. One problem is that food prices are highly vulnerable to recurrent drought. Donor assistance to reduce dependence on rain-fed agriculture could help curb inflation in the long run. Also, rising oil prices may prevent inflation from falling to targeted levels in the near term. Measures to improve energy efficiency would be highly beneficial. In any case, the policy levers are moving in the right direction to achieve low inflation, which will be a landmark for improving the business environment and accelerating poverty reduction.

#### **IMF Program Status for Zambia**

In June 2004, the IMF approved a three-year Poverty Reduction and Growth Facility (PRGF). In December 2005, Zambia completed its third PRGF review. Fund authorities commended the Zambian government for pursuing appropriate policies, on fiscal restraint in particular. Also in December 2005, the IMF approved 100 percent debt relief for Zambia under the Multilateral Debt Relief Initiative.

## **BUSINESS ENVIRONMENT**

Institutional barriers to doing business, including corruption in government, are critical determinants of private sector development and prospects for sustainable growth. For the most part, Zambia's performance in this area is better than the regional benchmarks, but by absolute standards, the impediments to doing business are still serious.

Corruption is the foremost problem, and it does not seem to be improving. Indeed, Zambia's score on the Corruption Perception Index from Transparency International deteriorated from 3.4 in 2000 to 2.6 in 2005. (The Corruption Perception Index ranges from 1 for widespread perceived corruption to 10 for no perceived corruption.) Zambia's performance was slightly better than that of Uganda (2.5) and the LI-SSA average (2.3), but much worse than the exemplary performance of Botswana (5.9). More important, Transparency International considers any score below 3.0 as evidence of rampant corruption.

Zambia also gets scores that are weak in absolute terms, though high for the region, on two institutional quality indices compiled by the World Bank Institute. Zambia's score of -0.5 on the Rule of Law Index<sup>30</sup> was above the normal range estimated by the benchmark regression and clearly above the average value for LI-SSA (-1.0) and the score for Uganda (-0.8). Botswana, though, is exemplary again, with a much higher value of 0.7. For the Regulatory Quality Index, Zambia's score was also -0.5, exceeding the LI-SSA average (-0.8) but lagging behind Botswana (1.0) and Uganda (0.1).

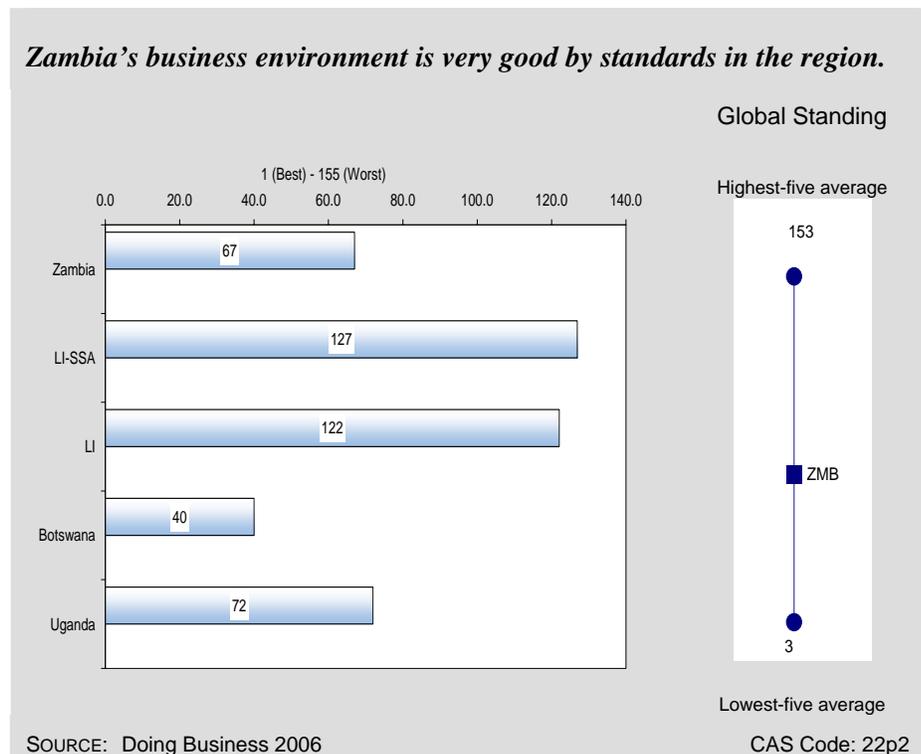
On the World Bank's overall Ease of Doing Business indicator, Zambia ranked 67th of 155 countries in 2005 (Figure 3-3). This is far better than the average rank for LI-SSA (127th) and a little better than Uganda (72nd) but well behind Botswana (40th). Zambia performed especially well in the category of enforcing a contract (ranked 42nd), requiring 16 procedures and 274 days.

<sup>29</sup> Bank of Zambia Overview of the Economy in 2005. According to the Central Statistical Office Monthly, January 2006, year-over-year inflation declined to 12.2 percent in January 2006. This is due, in part, to the kwacha's rapid appreciation in the past year, which may be a destabilizing factor here.

<sup>30</sup> The Rule of Law and Regulatory Quality Indices range from -2.5 (for poor) to 2.5 (for excellent).

In LI-SSA, the corresponding figures are 34.5 procedures and 415 days. In this area, Zambia outperformed Botswana (45th), but lagged behind Uganda (33rd).

Figure 3-3  
*Ease of Doing Business Ranking, 1 to 155*



Also on the bright side, Zambia ranked 44th in the ease of starting a business. Especially remarkable was the low cost of starting a business—18.1 percent of per capita gross national income (GNI), about one-tenth the average for LI-SSA (184.7 percent). On this indicator, Uganda ranked 100th, with a cost ratio of 117.8 percent. Botswana ranked 74th; although the cost of starting a business is just 10.9 percent of per capita GNI, Botswana lagged well behind Zambia in procedures and time to start a business.

By contrast, Zambia was ranked a poor 110th in the ease of registering property, worse than both Botswana (80th) and Uganda (97th). Even in this category, however, the business climate in Zambia compares well with the regional average: in Zambia, registering a property required six procedures and 70 days, compared to an average of six procedures and 93 days for LI-SSA.

Several more Doing Business indicators are examined in other sections, but the basic message from the data discussed here is clear: Although Zambia has already adopted many measures to improve the business environment, a great deal more can and should be done to stimulate more investment, faster job creation, higher productivity, and more rapid growth. Anticorruption measures, in particular, should be embedded in most donor projects. In addition, special attention should be paid to the most serious bottlenecks to growth, such as cumbersome procedures for property registration.

## FINANCIAL SECTOR

A sound and efficient financial sector is a key to mobilizing saving, fostering productive investment, and improving risk management. For Zambia, the financial sector indicators reveal a mixed record of performance.

Two basic indicators—the spread between lending and deposit rates and the real interest rate on loans—demonstrate serious inefficiencies and risks in the financial intermediation process. The latest World Bank data show a spread of 18.6 percent in 2003, which far exceeds the range predicted by the benchmark regression, the average for LI-SSA (12.9 percent), and the spreads in Botswana (6.3 percent) and Uganda (9.1 percent). The latest IMF report shows that the spread has increased in the past two years.<sup>31</sup> The real lending rate has also been very high, averaging 15.7 percent from 1999 to 2003. In November 2005, the figure was 18.2 percent.<sup>32</sup> By comparison, the LI-SSA average is 13.7 percent and the real lending rates for Botswana and Uganda are 12.3 and 8.0 percent, respectively. The very high spreads and real lending rates in Zambia are a major impediment to business development.

The ratio of money supply to GDP is a principal indicator of the degree of monetization and the extent of banking activity. For Zambia, this monetization ratio averaged 21.4 percent from 2001 to 2005, with a decline to 19.7 percent in 2005, reflecting monetary tightening to curb inflation and appreciation of the kwacha (see the Fiscal and Monetary Policy section).<sup>33</sup> The monetization ratio in Zambia is below the LI-SSA average (21.6 percent) and the ratio in Botswana (27.5 percent) but higher than in Uganda (18.9 percent) (Figure 3-4). By global standards, these figures are extremely low, reflecting widespread underdevelopment of banking in the region.

The most positive sign in the financial sector is the growth of credit to the private sector, which rose from 6.3 percent of GDP in 2002 to 8.6 percent in 2005. This places Zambia above the LI-SSA average of 8.3 percent and well ahead of Uganda, at 6.9 percent, though still far behind Botswana, at 18.3 percent. According to the Bank of Zambia, domestic credit has expanded in a broad range of activities, including construction, agriculture, manufacturing, and transportation and communication. Evidently, the improvements in fiscal policy and reductions in government borrowing are having a substantial effect on the freeing up of financial resources for the private sector. Even so, the rapid growth of private credit is remarkable given the high real interest rates and may cause portfolio quality problems if not monitored carefully.

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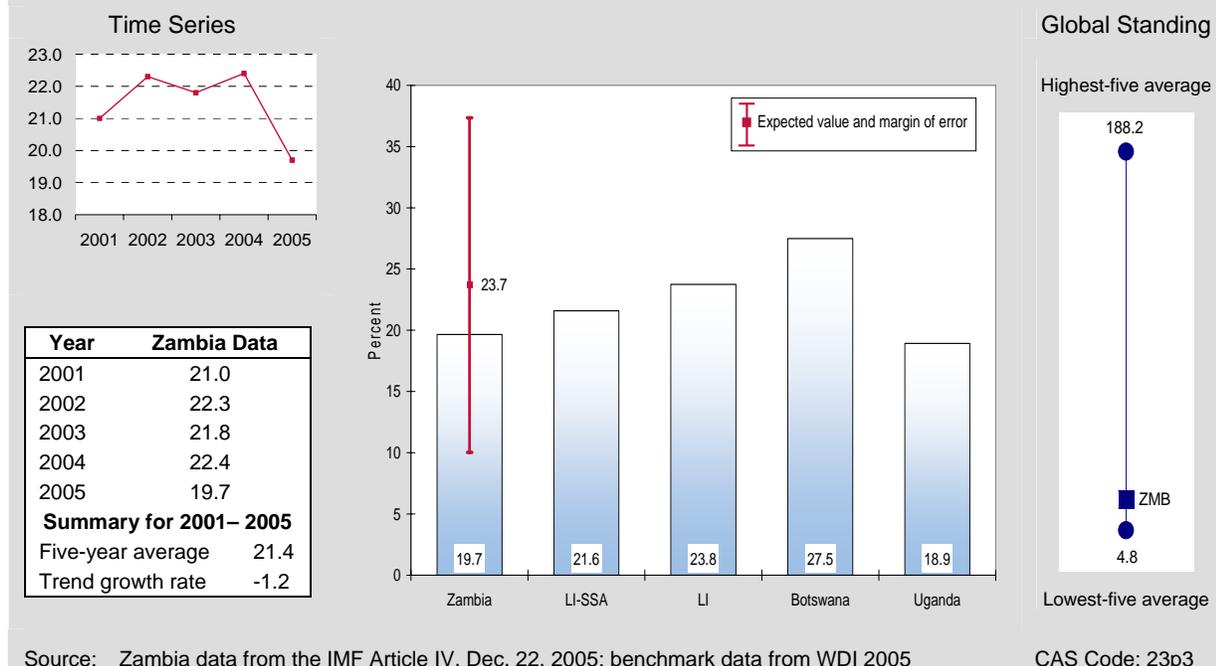
<sup>31</sup> IMF Zambia 2005 Article IV Consultation, Table 7. This report uses a different definition, the Net Interest Margin, which rose from 68.7 percent in 2003 to 85.6 percent in July 2005.

<sup>32</sup> Calculated on the basis of data published by the Bank of Zambia and the Central Statistical Office.

<sup>33</sup> Calculated on the basis of data from “IMF Executive Board Concludes 2005 Article IV Consultation with Zambia,” Public Information Notice.

Figure 3-4  
*Monetization, Broad Money Supply (M2) as a percent of GDP*

**The low monetization ratio indicates an underdeveloped banking system, although the recent drop is a sign of tighter monetary policy to control inflation.**



Looking at institutional support for financial sector development, the World Bank's index of Legal Rights of Borrowers and Lenders equaled 6.0 in 2005 on a scale of 0 (poor) to 10 (excellent). This is much better than the LI-SSA average of 4.0 and Uganda's score of 5.0; Botswana, however, has a score of 9.0, demonstrating how far the other benchmarks are from achievable best practices.

For capital market development, our standard indicator is the ratio of stock market capitalization to GDP, but for Zambia the World Bank data set is too far out of date to be of diagnostic value. Qualitatively, Zambia has a small but active stock exchange, which has been a useful vehicle for privatization, but not very important as a source of equity financing. The market for government securities is fairly well developed for a low-income country. In 2005, domestic debt totaled an estimated 16.5 percent of GDP, down from 22.1 percent in 2001, because of the tightening of fiscal policy. In 2005, the government also introduced three- and five-year bonds to broaden the capital markets and set the stage for development of a market for private sector bonds.<sup>34</sup> The creation of this market is especially important in view of the inefficiencies in the banking system.

Better access to credit and lower financing costs are vital for strong growth of the private sector. The development of more effective institutions for microfinance is especially important for

<sup>34</sup> IMF, Zambia: 2005 Article IV Consultation, pp. 9 and 35.

creating income opportunities and reducing poverty. Thus, programs to strengthen the financial sector warrant serious consideration as a priority for donors.

## **EXTERNAL SECTOR**

Fundamental changes in international commerce and finance, including reduced transport costs, advances in telecommunications technology, and lower policy barriers, have fueled a rapid increase in global integration in the past 25 years. The international flow of goods and services, capital, technology, ideas, and people offers great opportunities for Zambia 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, develop cost-effective approaches to cope with adjustment costs, and establish systems for monitoring and mitigating the associated risks.

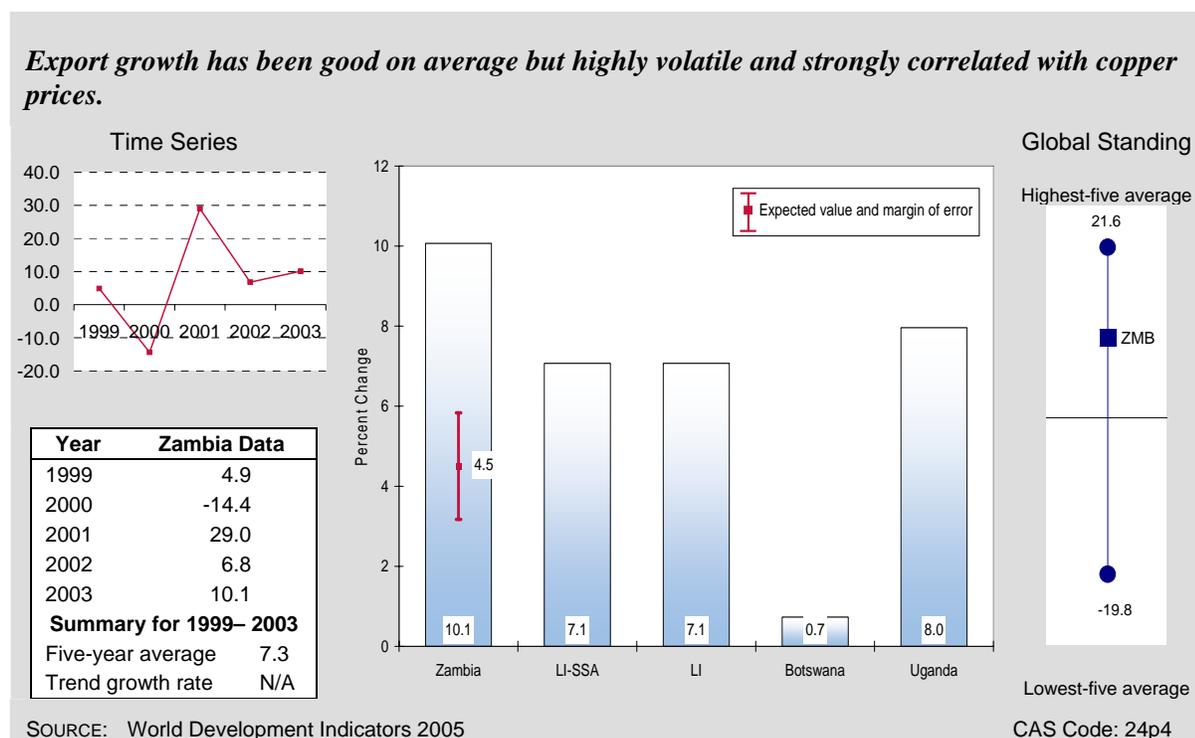
Zambia's recent external sector developments have been generally favorable. Especially notable is the recent cancellation of most external debt, which has freed considerable budget resources and made the country much more attractive to foreign investors. On the negative side, the rapid appreciation of the kwacha in 2005 is likely to have adverse effects on many businesses producing tradable goods and services.

### **International Trade and the Current Account**

Zambia's total trade flows (exports plus imports of goods and services) climbed from 68.6 percent of GDP in 2000 to 77.6 percent in 2004, mainly because of high prices for copper exports; indeed, the share of imports declined over this period despite the rise in petroleum prices. For 2005, the IMF estimates that the trade share fell back to 70.0 percent of GDP, a reflection of the appreciating exchange rate (which reduces the kwacha value of each dollar of trade flows). Even so, the share of trade is relatively high, especially for a landlocked country, indicating that Zambia is a very open economy. By comparison, the average trade share for LI-SSA is 59.7 percent. For Uganda, the figure is just 38.7 percent. Botswana, however, is even more open, with trade totaling 78.4 percent of GDP.

Even controlling for price effects, exports of goods and services have been a leading sector. From 1999 to 2003 (latest data), exports grew by an average rate of 7.3 percent, with large variation from year to year. This performance is slightly better than the recent average for LI-SSA (7.1 percent) and much better than Botswana's performance (Figure 3-5). Although comparable figures are not available for the latest two years, the IMF estimates that the volume of goods exports—which is most of the total for goods and services—grew by 16.6 percent in 2004 and a projected 5.5 percent for 2005. Unless subverted by the strength of the kwacha (discussed below), the recent rise in private investment should sustain this strong performance.

Figure 3-5  
Growth in Exports of Goods and Services, percent



In the 1990s, poor performance of the mining sector combined with strong growth of nontraditional exports to produce a sharp decline in export concentration. In 2000, the top three commodities (at the three-digit level) accounted for 58.5 percent of overall merchandise exports, down from well over 90 percent a decade earlier. With the subsequent recovery of the copper industry, this concentration ratio rose to 67.3 percent in 2004, even with continued strong growth of nonmetal exports. In 2004, copper alone accounted for 43.2 percent of total exports. This high concentration ratio underscores Zambia's vulnerability to fluctuations in world market prices for a few commodities. Export diversification has been and must continue to be a priority for achieving transformational development.

Available indicators suggest that the recent expansion of exports has not been stimulated by a favorable policy environment. Looking at the Heritage Foundation's Trade Policy Index, Zambia's score deteriorated between 2000 and 2004, from 3 to 4. This index measures the degree to which government hinders the free flow of foreign commerce, on a scale of 1 to 5 with 1 the best. The 2004 figure for Zambia equals the average for LI-SSA, which is poor in absolute terms. Zambia's score is also now worse than those of Botswana and Uganda, both of which score a 3.

For most poor countries, a current account deficit is simply a reflection of capital inflows, especially soft loans from international agencies. In Zambia, export growth has outpaced import growth, narrowing the current account deficit (including grants) from an unsustainable 13.9 percent of GDP in 2001 to 5.4 percent in 2004. The IMF estimates that the deficit edged up

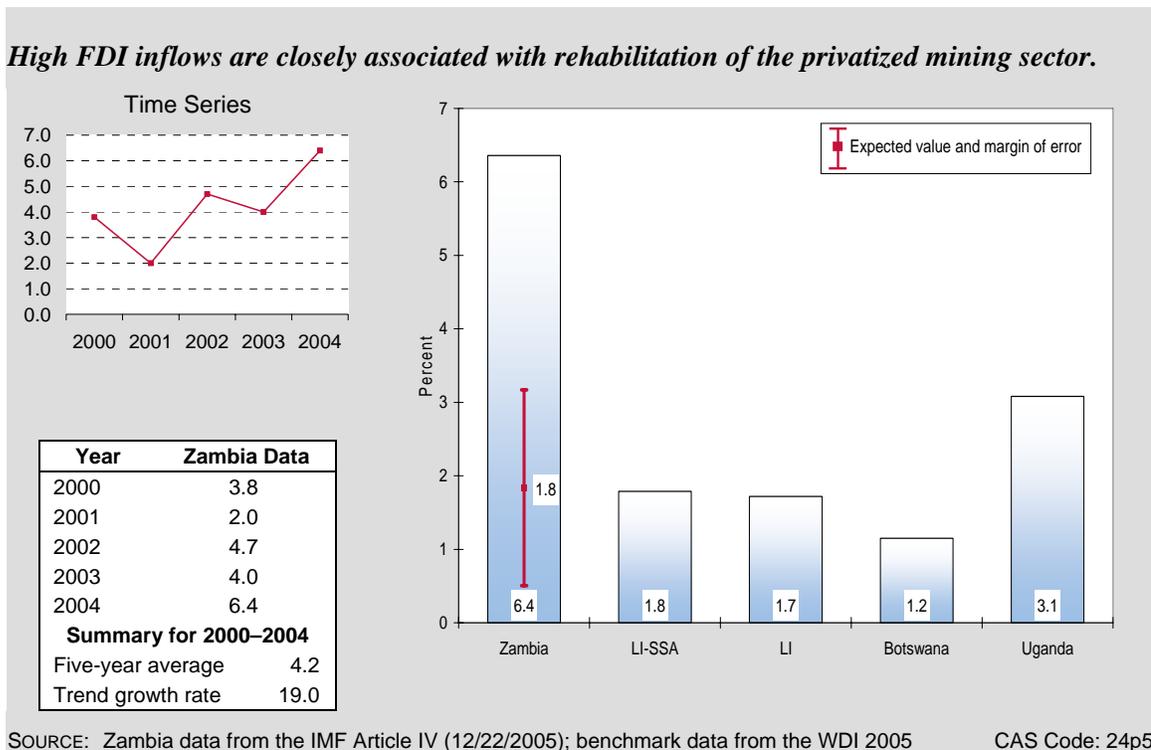
to a projected 6.0 percent for 2005.<sup>35</sup> Although Zambia's current account deficit was moderately above the average for LI-SSA in 2003 of 5.6 percent of GDP and Uganda's deficit of 5.0 percent of GDP, it is essentially sustainable at current levels, given the country's access to foreign aid. Moreover, the rising deficit in 2005 was caused to a great extent by imports for investment projects, which should help boost future exports.<sup>36</sup>

## International Financing, External Debt, and the Exchange Rate

Zambia has reduced its reliance on foreign aid inflows from over 20 percent of GNI in 1999 and 2000 to 13.4 percent in 2003 (latest data for this definition). The latter figure is well below the normal range predicted by the benchmark regression for a country with Zambia's characteristics. It is also lower than the rate for Uganda (15.6 percent). In Botswana aid accounted for less than 1 percent of GNI. Nevertheless, Zambia is more dependent on aid inflows than the average country in the LI-SSA group (12.4 percent).

Zambia has also attracted a remarkable amount of foreign direct investment (FDI). The ratio of FDI to GDP rose from 2.0 percent in 2001 to 6.4 percent in 2004, significantly above the regression benchmark range, the average for LI-SSA (1.8 percent), and the corresponding figures for Botswana (1.2 percent) and Uganda (3.1 percent) (Figure 3-6).

Figure 3-6  
*Foreign Direct Investment, percent of GDP*



<sup>35</sup> "IMF Executive Board Concludes 2005 Article IV Consultation with Zambia," Public Information Notice.

<sup>36</sup> Bank of Zambia, Overview of the Economy in 2005.

The UNDP's Inward FDI Potential index shows the extent to which a country's investment climate is attractive to foreign investors, taking into account factors ranging from country risk to education levels and technology capabilities. On a scale of 0 to 1 (with 1 best), Zambia scored 0.077 for the period 2001–2003, placing it fifth from last of 140 countries. By comparison, Uganda's score was 0.125 (108th place) and Botswana's 0.187 (65th place). This signals that the increase in FDI is due to sector-specific opportunities rather than the quality of the investment climate.

Zambia has depended heavily on borrowing from abroad. In 2000, the present value of external debt obligations stood at 165.3 percent of GNI. Since then, the debt position has improved dramatically. In December 2000, Zambia reached the Decision Point under the Enhanced Heavily Indebted Poor Countries Initiative, which made the country eligible for interim debt relief. This reduced the present value of debt to 121.1 percent of GNI in 2003—still well above the predicted range from the benchmark regression and much higher than the average for LI-SSA of 65.6 percent, and the figures for Uganda (32.6 percent), and especially Botswana (7.7 percent). In April 2005 Zambia reached the HIPC Completion Point, which triggered a 55 percent reduction of the debt stock.<sup>37</sup> Then in December 2005, under the Multilateral Debt Relief Initiative, Zambia received 100 percent relief on all debt incurred to the IMF before 2005, totaling \$572 million.<sup>38</sup> Several countries also canceled Zambia's outstanding debt to them last year. These cancellations reduced the burden of debt service to 7.0 percent of exports in 2005.<sup>39</sup> This figure will fall further in 2006 after the more recent debt cancellations.

The reduction in debt service provides an opportunity for Zambia to increase its foreign exchange reserves, which are minuscule. At the end of 2005, foreign exchange reserves stood at a mere 1.4 months of imports, well below the range predicted by the benchmark regression and significantly less than the average for LI-SSA (4.1 months) and reserve levels for Uganda (6.6 months) and Botswana (18.6 months, one of the highest in the world). Because the foreign exchange regime is a flexible float, there is no question of running out of foreign exchange; external shocks simply feed into the exchange rate. The problem is that the low level of reserves limits the potential for managing the adjustment to such external shocks.

In the past few years, external shocks have increased the supply of foreign exchange, which strengthens the local currency. The rapid rise in copper prices and major debt relief, combined with a possible reversal of capital flight due to improved macroeconomic management, produced a sharp appreciation of the kwacha. From December 2004 through December 2005, the currency strengthened by 24 percent against the U.S. dollar and by 34 percent against the euro in nominal terms.<sup>40</sup> Because of high inflation, the real appreciation has been even more substantial.

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<sup>37</sup> Bank of Zambia, *Overview of the Economy in 2005*.

<sup>38</sup> IMF, "IMF To Extend 100 Percent Debt Relief to Zambia Under the Multilateral Debt Relief Initiative," Press Release No. 05/306, December 23, 2005.

<sup>39</sup> "IMF Executive Board Concludes 2005 Article IV Consultation with Zambia," Public Information Notice.

<sup>40</sup> According to OANDA Corporation data.

This extraordinary appreciation has reduced the kwacha price of imports that compete against local goods in the domestic market. It also reduces the profitability of export production. In both cases, producers with a high local content are affected most (because appreciation lowers the cost of imported inputs along with the market price of outputs). Highly leveraged enterprises are especially jeopardized as debt service costs reduce their margin for adjustment. For the mining sector, the high world price for copper more than offsets the negative impact of the currency movement.

On the positive side, the currency appreciation creates strong competitive pressure to improve productivity across the board. It also reduces the relative cost of imported equipment, which can help to sustain investment. (Of course, investment is not justified if the production activity is rendered unprofitable by the appreciation.) Another favorable factor is that the lower price of imports helps to reduce inflation, which if sustained, improves longer-term growth prospects.

This complex set of effects belies a simple conclusion. Yet on balance, the appreciation is likely to retard growth and increase unemployment during a transitional period that could last several years. In addition, the magnitude and speed of the appreciation raise major concerns. Foreign exchange markets have a strong tendency to overshoot the equilibrium in reaction to structural changes; thus, market forces can easily generate an excessive appreciation, followed by a rebound of depreciation, resulting in disruptive volatility. Second, the high price of copper may be temporary, not structural; history cautions against assuming that today's price will persist. These considerations justify interventions to build up foreign exchange reserves. The problem is the accumulation of reserves not only dampens the appreciation but also injects new money supply into circulation; this works against the goal of controlling inflation, unless the foreign exchange operations are accompanied by measures to sterilize the monetary expansion. This can be done by issuing more domestic government debt to pull liquidity out of circulation, by tightening monetary policy to reduce the expansion of credit to the private sector, or by further tightening fiscal policy. All of these measures are costly. Hence, the optimal response should strike a balance between the different channels for coping with the shock.

In summary, Zambia's export performance has been strong, as has foreign investment and donor support. Debt relief has eliminated any serious problem with the debt burden. But these favorable developments have driven exchange rate movements that may entail substantial adjustment costs. Within this framework, the most pressing needs are to diversify exports, adopt reforms to improve the investment environment, and mitigate the adverse effects of the currency appreciation. The Zambian government may also benefit from support to improve foreign debt management to ensure that the external debt remains sustainable, even in the event of adverse external shocks (such as a sharp drop in copper prices).

## **ECONOMIC INFRASTRUCTURE**

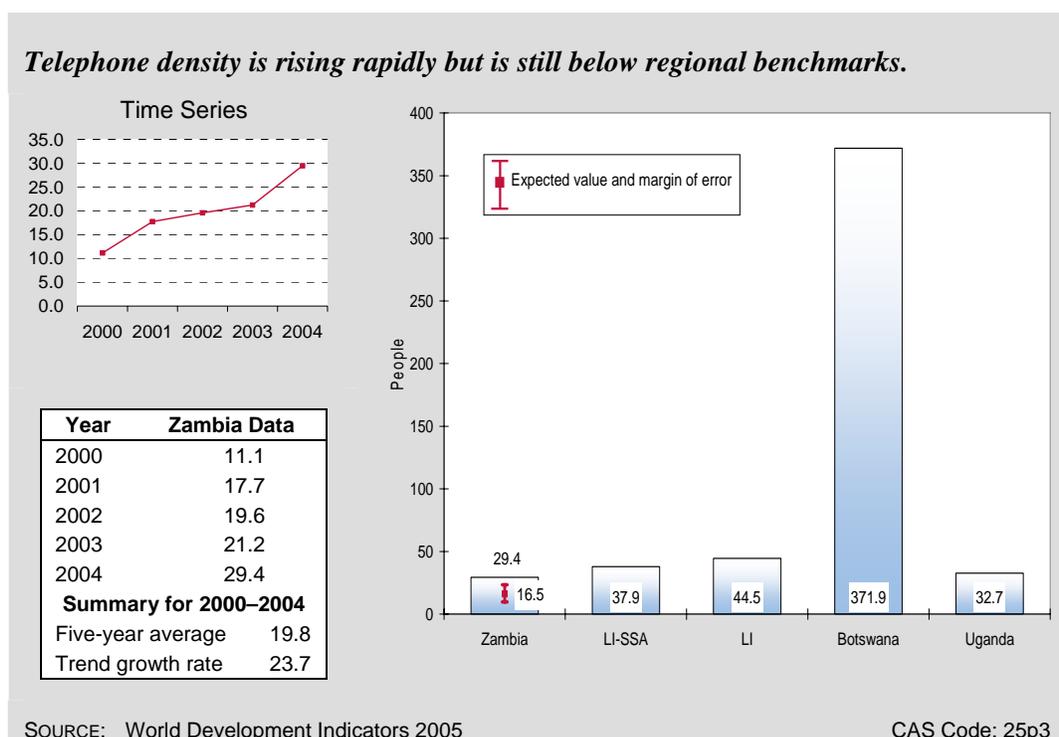
A country's physical infrastructure—for transportation, communications, power, and information technology—is the backbone for strengthening competitiveness and expanding productive capacity.

In Zambia, the quality of the transportation infrastructure is in line with regional norms, though low in global terms. This can be seen in the World Economic Forum's index of Overall

Infrastructure Quality. On a scale of 1 to 7 (with 7 the best) Zambia's score of 2.6 in 2004 was slightly higher than the LI-SSA average (2.4) and the same as Uganda's score but substantially worse than Botswana's score (4.9). Zambian railroads are in especially poor condition (with a score of 1.9),<sup>41</sup> whereas air transport is reasonably good (3.5). The quality of electricity supplies is also very good by regional standards, with a score of 3.8, compared to an average of 2.4 for LI-SSA.

The communications sector is poorly developed but expanding rapidly. Telephone density, measured as the number of fixed line and mobile subscribers per 1,000 people, rose from 11.1 in 1999 to 29.4 in 2003 (Figure 3-7). This is above the range predicted by the benchmark regression for a country with Zambia's characteristics but below the average for LI-SSA (37.9) and the corresponding values for Uganda (32.7) and especially Botswana (371.9).

Figure 3-7  
*Telephone Density, Fixed Lines and Mobile, per 1,000 People*



Zambia was a pioneer of Internet development in sub-Saharan Africa, and in recent years Internet coverage has increased tremendously, from 1.9 users per 1,000 people in 2000 to 21.1 in 2004. Although Internet usage is still low in absolute terms, it is now far above the average for LI-SSA

<sup>41</sup> The score for ports is also poor, but this is hard to interpret since Zambia is landlocked and has no major inland waterways.

(9.4)<sup>42</sup> and the usage rate in Uganda (7.5). Botswana is even more advanced, with 33.4 Internet users per 1,000 people.

These indicators show that Zambia's infrastructure is reasonably good by regional standards but in absolute terms, infrastructure is still a serious constraint for investors and a drag on competitiveness. Thus, the emphasis on infrastructure development in Zambia's PRSP is appropriate.

## **SCIENCE AND TECHNOLOGY**

Science and technology are central elements of a dynamic growth process because technical knowledge is a driving force for rising productivity and competitiveness. Even for low-income countries such as Zambia, 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 use technology prevents an economy from leveraging the benefits of globalization.

Unfortunately, reliable international indicators of science and technology are not readily available for Zambia or the region. The very limited data available show that science and technology capacity is not developed. For example, the average number of patent applications filed by Zambians from 1998 through 2002 was negligible—just four a year. A more encouraging sign is that Zambia is benefiting from technology through foreign investment. The World Economic Forum's FDI Technology Transfer Index in Zambia was 4.7 on a scale from 1 (FDI brings in little new technology) to 7 (much new technology) in 2004. This was comparable to the average for LI-SSA (4.5) and the score for Botswana (4.9). FDI technology transfer is greater for Uganda, with a score of 5.3.

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<sup>42</sup> The LI-SSA average is based on data that may not be as recent as the latest figure for Zambia.

# 4. Pro-Poor Growth Environment

Rapid growth is the most powerful and dependable instrument for poverty reduction. Yet the link is not mechanical. In some countries, income growth for poor households exceeds the overall rise in per capita income, while in other conditions growth benefits the non-poor far more than the poor. A pro-poor growth environment stems from policies and institutions that improve opportunities and capabilities for the poor, while reducing their vulnerabilities. Pro-poor growth is associated with improvements in primary health and education, the creation of jobs and income opportunities, the development of skills, microfinance, agricultural development (for countries such as Zambia with large populations of rural poor), and gender equality. This section focuses on four of these issues: health, education, employment and the workforce, and agricultural development.

## HEALTH

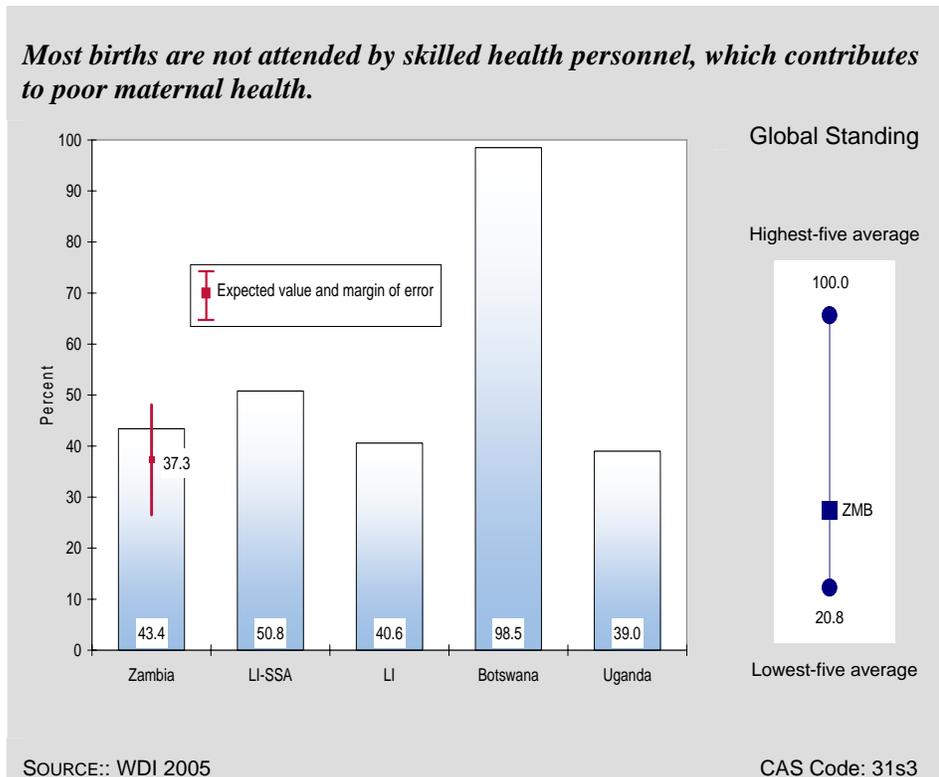
The provision of basic health service is a major form of human capital investment and a significant determinant of economic growth and poverty reduction. Even though health programs do not fall under the EGAT bureau, an understanding of the health status of the population can influence the design of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

The basic health indicators for Zambia show that conditions are generally poor. Many indicators paint a dire picture, though some do show a serious commitment to improvement. On the broadest indicator of health status, life expectancy, various sources give very different figures. The government's PRSP Review in 2005 reports a life expectancy of 52.4 years for 2003, whereas the estimate by WHO and UNAIDS for that year is 36.5 years. The gap is likely a result of different assumptions about future trends in HIV/AIDS incidence, but both figures are extremely low by any absolute standard. The prevalence of poor health and premature death has profound effects on the economy, including labor productivity, saving rates, the delivery of public services, and education.

HIV/AIDS is especially serious in Zambia. The prevalence rate among adults stood at 16.5 percent in 2003, far higher than the LI-SSA average (4.4 percent) and Uganda's rate (4.1 percent—a remarkable turnaround), though significantly below the extreme level in Botswana (37.3 percent). Although the prevalence rate in Zambia seems to have stabilized, the burden of the disease remains enormous—for families, communities, businesses, the government budget, and the economy as a whole.

Another basic indicator of health conditions is the maternal mortality rate (MMR). The latest estimate for Zambia, for 2001, shows 729 maternal deaths per 100,000 births. This is much better than the normal range predicted by the benchmark regression, given Zambia's characteristics. It is also much better than the average of 880 for LI-SSA, which equals the figure for Uganda. In Botswana, however, where resources for health care are deeper and management capacity is better, the MMR is far lower, at 100. Zambia's high MMR, in absolute terms, reflects a combination of deep poverty and widespread undernutrition (see Poverty section) as well as very limited resources for health care. The latter factor is evident in the fact that only 43.4 percent of births were attended by skilled health personnel in 2002 (latest data) (Figure 4-1). This is even less than the average for LI-SSA (50.8 percent) and far below the level in Botswana (98.5 percent). At the same time, skilled health personnel attend only 39.0 percent of births in Uganda.

Figure 4-1  
*Births Attended by Skilled Health Personnel, percent*



Children, too, are plagued by poor health in Zambia. This is evident in the rate of child malnutrition, which was estimated at 28.1 percent in 2000 (latest data), which is comparable to the average for LI-SSA (30.8 percent), but significantly higher than the rates in Botswana and Uganda (12.5 and 22.9 percent, respectively). On the positive side, Zambia has achieved a commendable rate of child immunization (82.0 percent in 2003), compared to the average for LI-SSA of just 69.0 percent. The level of child immunization in Zambia was on par with that of Uganda (81.5 percent), though well below the rate achieved in Botswana (93.0 percent).

One significant factor contributing to poor health in Zambia is the relatively low rate of access to an improved water source—55.0 percent in 2002. This is about the same as in Uganda (56.0 percent) but below the average for LI-SSA (59.0 percent) and far below the standard set by Botswana (95.0 percent). Considering the high rate of urbanization in Zambia, the figure could be expected to be much higher. The same can be said about sanitation. In 2002, 45.0 percent of the population had access to improved sanitation. Although this figure is high by regional standards—the LI-SSA average is 34.0 percent and the rates for Botswana and Uganda are both 41.0—in absolute terms, poor sanitation is a major source of health problems.

Given the critical importance of health for a thriving economy and the national focus on poverty reduction, it is surprising to see that government funding for health care has declined as a percentage of GDP over the past few years, from 3.1 percent in 2002 to 1.7 percent in 2004. This figure is now below the LI-SSA average and the rate in Uganda (both 2.1 percent). By comparison, Botswana's commitment is exemplary, with spending on health care equal to 3.7 percent of GDP (which is already much higher than Zambia's GDP).

In the wake of the enormous debt relief granted in 2005, the government should increase health care spending substantially. Nonetheless, strong donor support is urgently needed to supplement very limited local resources and build capacity at the national and local levels to improve the quality of health care. Particularly important are combating HIV/AIDS, reducing maternal mortality, improving food security, and expanding access to sanitation and clean water.

## EDUCATION

As with some other topics examined in this report, Zambia's education indicators reveal performance that is similar to or better than the regional benchmarks but very weak by global standards. The analysis of education performance is complicated by discrepancies between data sources. According to UNESCO, the net primary enrollment rate in Zambia was 68.4 percent in 2002, virtually unchanged since 1998. The government's report on progress toward reaching the Millennium Development Goals, however, gives enrollment rates of 76 percent for 2002/03 and 78 percent for 2004. Nevertheless, even the UNESCO number is above the range predicted by the benchmark regression and the LI-SSA average (64.3 percent). At the same time, though, it was than achievements in Botswana (80.9 percent).<sup>43</sup>

According to WDI, the rate of persistence in school to grade 5 equaled 76.8 percent in 2000 (the latest available observation), a drop from 80.6 percent in 1999. However, even the 2000 figure exceeded the range predicted by the benchmark regression, the LI-SSA average (66.9 percent), and persistence in school in Uganda (63.6 percent), though it was much less than that in Botswana (87.6 percent). Also on the bright side, the government reported a jump in persistence in school to grade 7 from 73 percent in 2002/03 to 82 percent in 2004 in its 2005 MDG report.

WDI statistics for Zambia show a slight increase in the youth literacy rate between 1998 and 2002, from 87.0 percent to 89.2 percent. This rate was well above the range predicted by the benchmark regression, the LI-SSA average (75.0 percent), and the rate in Uganda (80.2 percent).

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<sup>43</sup> No reliable data are available for Uganda.

The youth literacy rate in Zambia was on par with that in Botswana. At the same time, data from the government's latest MDG report paint a very different picture, showing that the youth literacy rate was just 70 percent in 2004, and declining. If these figures are accurate, then the country faces a serious literacy problem for the new generation of workers.

The primary school pupil-to-teacher ratio fell from a high of 47.3 percent in 1999 to 42.8 percent in 2002, signaling improvement in education quality. This ratio was a little better than the regional average (46.9) and considerably better than the ratio in Uganda (52.7). However, Zambia lagged far behind Botswana, with its pupil-to-teacher ratio of 26.6.

The indicators for primary enrollment, persistence in school, and youth literacy are better for males than females according to both our regular sources and the IMF. The most significant gender disparities were those reported by the IMF in school persistence to grade 7 (20 percentage points in 2004) and youth literacy (9 percentage points). Moreover, the 2004 decline in the total youth literacy rate was caused by a drop in the literacy rate for females. The IMF data also demonstrate a rise in gender disparity in primary, secondary, and especially tertiary education between 2002/03 and 2004.

Zambia's expenditure on education has not been impressive, which may be a cause of the insufficient improvement in some of the education indicators described above. The country spent 1.8 percent of GDP on primary education in 2005, slightly less than the LI-SSA group on average (2.0 percent) and slightly more than Uganda (1.5 percent). Zambia's per student spending on primary, secondary, and tertiary education as a percentage of GDP in 2000 (the latest available data) was substantially less than in LI-SSA. The Zambian Central Statistical Office reports that the ratio of value added by the education sector to GDP was virtually stagnant in 2001–2005, fluctuating between 2.1 percent and 2.3 percent.<sup>44</sup>

The educational system in Zambia needs to improve, especially in light of the country's young and growing population; to achieve this goal, expenditure on education needs to rise. Debt relief may allow Zambia to allocate more budget resources to this sector. In addition to the financial support of education, Zambia may benefit from technical assistance from donor organizations in estimating educational levels and investigating the causes of insufficient improvement. The promotion of education for females warrants special attention.

## **EMPLOYMENT AND WORKFORCE**

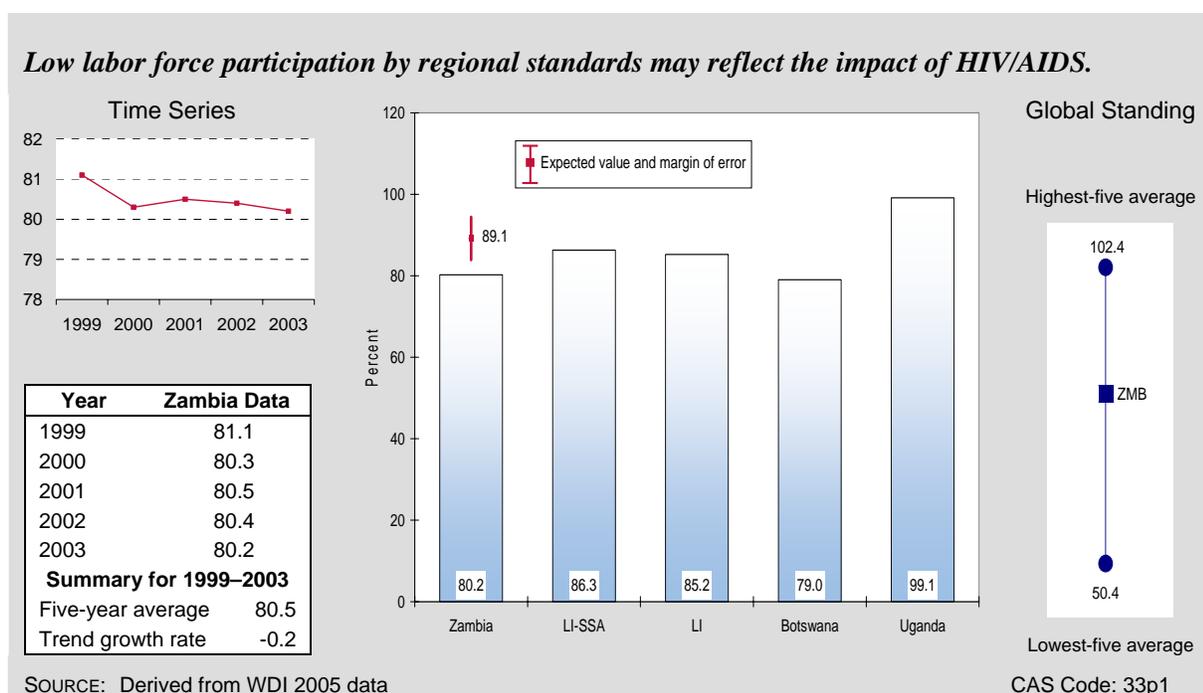
The workforce increased by an estimated 1.8 percent per year between 1999 and 2003. It is surprising to see the labor force growing more slowly than the total population, particularly in a country with a large demographic youth bulge. This apparent anomaly probably reflects high mortality in the working-age population as a result of the AIDS pandemic. In any case, at this rate the labor force is expanding by 75,000 workers per year. This simple observation demonstrates the critical need for improving the business climate to accelerate job creation.

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<sup>44</sup> Central Statistical Office Monthly, January 2006.

The gap between labor force growth and population growth is also due in part to a small decline in the labor force participation rate, from an estimated 81.1 percent in 1999 to 80.2 percent in 2003 (Figure 4-2). This may also be an effect of HIV/AIDS, as victims become too ill to work, or require relatives to stay home and provide care. Clearly, the fight against HIV/AIDS is a top priority for promoting a healthy and productive labor force. In comparative terms, labor force participation in Zambia is below the range predicted by the benchmark regression, and well under the LI-SSA average (86.3 percent) and the rate in Uganda (99.1 percent). It is slightly higher than in Botswana (79.0 percent), where HIV/AIDS is more widespread. Also, labor force participation is much higher for males (92.5 percent) than for females (68.3 percent). As discussed in the gender section, gender equity is an important cross-cutting theme for donor programs in Zambia.

Figure 4-2  
*Labor Force Participation Rate*



The Central Statistical Office estimates that the unemployment rate was 9 percent in 2004.<sup>45</sup> Open unemployment (as distinct from underemployment) is concentrated in urban areas, where the rate was 21 percent, compared to just 3 percent in rural areas. Although high, unemployment in Zambia was below the LI-SSA average (10.0 percent) and the rate in Botswana (15.8 percent). Even so, it is a remarkably high figure considering that an overwhelming portion of Zambians work in the informal sector; in 2002 (latest data), paid employment accounted for only 10 percent of the labor force.<sup>46</sup>

<sup>45</sup> Central Statistical Office Monthly, November 2005.

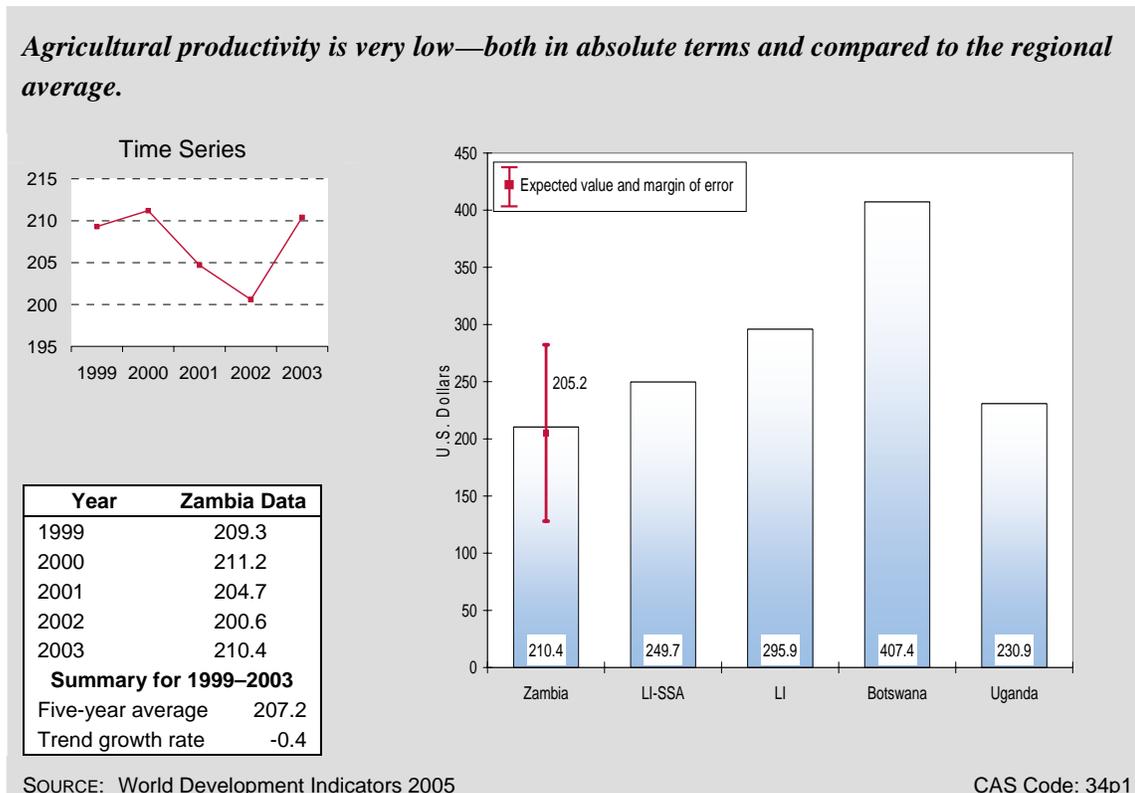
<sup>46</sup> Calculated based on IMF (Zambia: Selected Issues and Statistical Appendix) and WDI data.

The high unemployment rate and large informal sector do not seem to be associated with excessive labor market regulations in general. The World Bank, in its Doing Business survey, compiles a Rigidity of Employment Index based on data relating to the ease of hiring and firing workers. On a scale of 0 to 100 (where 0 is least rigidity), Zambia's score of 10 in 2005 was the best in Africa, and a marked improvement from 27 a year earlier. By comparison, the average for sub-Saharan Africa was 64.5. Even Botswana had more rigid labor market regulations, with a score of 30, and Uganda was close behind Zambia at 13. Despite Zambia's outstanding performance in cutting red tape affecting hiring and firing, the cost of terminating a worker in the formal sector is still among the highest in the world. The IMF contends that a reduction in the statutory severance cost could be a key to expanding formal sector job creation in the future.<sup>47</sup>

## AGRICULTURE

The Economic Structure section showed that 60 percent of the population lives and works in rural areas, yet agriculture accounts for just one-sixth of GDP. Thus, labor productivity in agriculture is extremely low compared to the rest of the economy. In 2003, an agricultural worker in Zambia generated \$210 of value added (in constant 1995 prices). Despite Zambia's ample supply of arable land, this figure is also low by regional standards. Equally serious, productivity has hardly increased in the past five years (Figure 4-3).

Figure 4-3  
*Agricultural Value Added per Worker, 1995 US\$*



<sup>47</sup> IMF, Zambia: 2005 Article IV Consultation and Zambia: Selected Issues and Statistical Appendix.

The stagnant performance in agriculture is evident in both livestock and crop production. FAO data show that livestock production in 2003 stood at just 98.9 percent of the average for 1999–2001, with only a negligible improvement in the past four years. Zambia’s performance on the FAO’s Crop Production Index is a bit better, rising from 97.4 percent of the 1999–2001 baseline in 1999 to 106.5 percent of that level in 2003. Cereal yields have risen moderately in recent years, from 1,462 kilograms per hectare in 1999 to 1,564 kilograms in 2003. These yields are substantially higher than the average for LI-SSA (1,063 kilograms per hectare), though not as good as in Uganda (1,641), with its richer soils. In arid Botswana, cereal yields are extremely low (235).

In addition, agricultural production in Zambia is also highly vulnerable to volatile weather conditions. In 2005, for example, crop production, especially maize, suffered a large decline because of drought.<sup>48</sup>

All of these indicators point to severe underdevelopment in agriculture, particularly for the multitudes of impoverished small-scale farmers. Poor performance in this sector is not a result of an onerous policy regime. According to the World Economic Forum, Zambia received a relatively good score of 4.4 in 2004 on an index of Agricultural Policy Costs, which ranges from 1 (excessively burdensome) to 7 (well balanced). By this measure, agricultural policy in Zambia was significantly less burdensome than the average for LI-SSA (3.5), even better than in Botswana (4.0), and on par with Uganda (4.5). Since this indicator is based on a survey of business leaders, it shows that commercial farmers in Zambia are relatively satisfied with the government’s policy.

In summary, the indicators show that the agricultural sector, which is dominated by small-scale family farming, is characterized by very low productivity, very low income, stagnant long-term performance, and high vulnerability to drought. As the PRSP acknowledges, increasing productivity for small farmers, reducing farmers’ vulnerability to drought, and stimulating the rural economy are leading priorities for poverty reduction and broad-based growth. In the medium to long term, however, the major problem is to transform the economy by attracting investment and creating jobs outside of agriculture, in order to shift a larger share of the labor force to more productive sectors.

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<sup>48</sup> Bank of Zambia, *Overview of the Economy in 2005*.



# Appendix. Indicators

## CRITERIA FOR SELECTING INDICATORS

This economic performance evaluation is designed to balance the need for broad coverage and diagnostic value on the one hand, and the requirement for brevity and clarity on the other. The analysis covers 15 economic growth–related topics and just over 100 variables. For the sake of brevity, the write-up in the text focuses on issues for which the “dashboard lights” appear to be signaling problems that suggest possible priorities for USAID intervention. The accompanying table provides a full list of indicators examined for the report. The separate Data Supplement contains the complete data set for Zambia, including the data for 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? Level I indicators also include descriptive variables such as per capita income, poverty head count, and the age dependency rate.

When Level I indicators suggest weak performance, analysis proceeds to a limited set of *diagnostic supporting indicators*. These Level II indicators provide additional details or shed light on why the primary indicators may be weak. For example, if economic growth is poor, one can examine data on investment and productivity as diagnostic indicators. Or if a country performs poorly on the youth literacy rate, one can examine determinants such as expenditure on primary education and the pupil–teacher ratio.<sup>49</sup>

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

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<sup>49</sup> Deeper analysis of the topic using more detailed data (Level III) is beyond the scope of this series.

accruing to the poorest 20 percent of households can be used to gauge income inequality. We use the income share because it is simpler and more sensitive to changes.

## BENCHMARKING METHODOLOGY

Comparative benchmarking is the main tool used to evaluate each indicator. The analysis draws on several criteria rather than a single mechanical rule. The starting point is a comparison of performance in Zambia relative to the average for countries in the same income group and region—in this case, sub-Saharan African countries with low income.<sup>50</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 Zambia mission (Botswana and Uganda); and (3) the average of the five best- and five worst-performing countries globally. Most comparisons are framed in terms of values for the latest year of data available. Five-year trends are also taken into account where this information sheds light on the performance assessment.<sup>51</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>52</sup> This approach has three advantages. First, the benchmark is customized to Zambia’s specific level of income. Second, the comparison does not depend on the exact choice of reference group. Third, the methodology allows quantifying the margin of error and establishing a “normal band” for a country with Zambia’s characteristics. An observed value falling outside this band on the side of poor performance signals a serious problem.<sup>53</sup>

Finally, when relevant, Zambia’s performance is weighed against absolute standards. For example, a Corruption Perception Index below 3.0 is a sign of serious economic governance problems, regardless of the regional comparisons or regression result.

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<sup>50</sup> Income groups as defined by the World Bank for 2005. The average is defined in terms of the median, which is not distorted by outliers.

<sup>51</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>52</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. After estimates are obtained for the parameters  $a$ ,  $b$ , and  $c$ , the predicted value for Zambia is computed by plugging in specific values for PCI and Region. Where applicable, the regression also controls for population size and petroleum exports (as a percentage of GDP).

<sup>53</sup> This report uses a margin of error of 0.66 times the standard error of estimate (adjusted for heteroskedasticity where appropriate). With this value, 25 percent of the observations should fall outside the normal range on the side of poor performance (and 25 percent on the side of good performance). Some regressions produce a very large standard error, giving a “normal band” that is too wide to provide a discerning test of good or bad performance.

## INDICATORS

	Level <sup>a</sup>	MDG, MCA, or EcGov <sup>b</sup>	CAS Code
Overview of the Economy			
Growth Performance			
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
Poverty and Inequality			
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
Economic Structure			
Labor force structure	I		13P1
Output structure	I		13P2
Demography and Environment			
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
Gender			
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
Private Sector Enabling Environment			
Fiscal and Monetary Policy			
Govt. expenditure, % GDP	I	EcGov	21P1
Govt. revenue, % GDP	I	EcGov	21P2
Growth in the money supply	I	EcGov	21P3
Inflation rate	I	MCA	21P4
Overall govt. budget balance, including grants, % GDP	I	EcGov	21P5
Composition of govt. expenditure	II		21S1
Composition of govt. revenue	II		21S2
Composition of money supply growth	II		21S3

	Level <sup>a</sup>	MDG, MCA, or EcGov <sup>b</sup>	CAS 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	MCA / 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		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 1,000 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

	Level <sup>a</sup>	MDG, MCA, or EcGov <sup>b</sup>	CAS Code
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
<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

<sup>b</sup> 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.