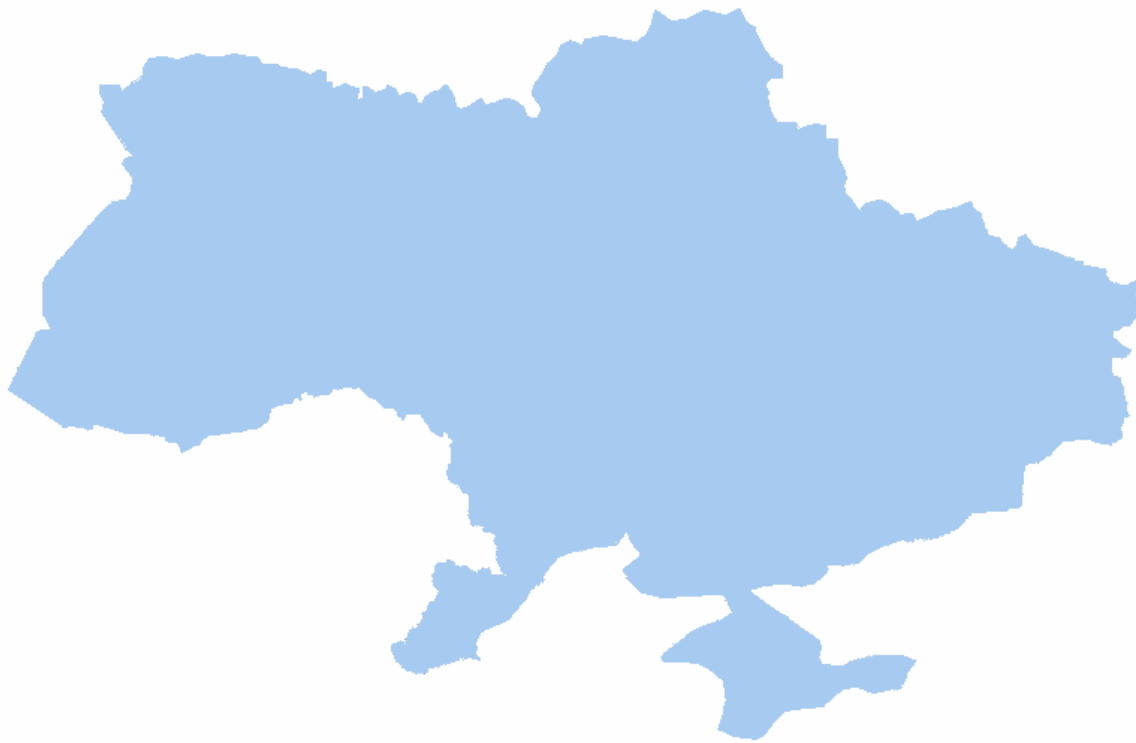




USAID
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Ukraine

Economic Performance Assessment



May 2008

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

Ukraine

Economic Performance Assessment

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

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

Under Contract No. GEG-I-00-04-00002-00, Task Order 004, 2006-2008, Nathan Associates continues to provide support to the EGAT Bureau by producing analytical reports evaluating economic growth performance in designated host countries. Through the same task order, Nathan is also developing a special template for countries emerging from crisis, assessing data issues in countries with large gaps in their data; conducting in-depth sector reviews based on the diagnostic analysis in the country reports; and providing other analytical support to the EGAT Bureau.

The authors of the present report are Bruce Bolnick, Alexander Greenbaum, Peter Miller, and Molly James of Nathan Associates Inc.

The CTO for this project at USAID/EGAT/EG is Yoon Lee. USAID missions and bureaus may seek assistance and funding for country analytical studies or in-depth follow-on studies by contacting Phillip Palmer, USAID/EGAT/EG Activity Manager for the CAS project at phpalmer@usaid.gov until May 19, 2008 and Stuart Callison at ccallison@usaid.gov thereafter.

Subject to EGAT consent, electronic copies of reports and materials relating to the CAS project are available at www.nathaninc.com. For further information or hard copies of CAS publications, please contact:

Rose Mary Garcia
Chief of Party, CAS Project
Nathan Associates Inc.
RGarcia@nathaninc.com

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HIGHLIGHTS OF UKRAINE PERFORMANCE

Economic Growth	Between 2003 and 2007, real GDP grew at an impressive average annual rate of 7.8 percent, driven largely by strong export earnings, high domestic consumption, and efficient use of capital and labor. In the longer term, Ukraine's demographic problems threaten growth prospects.
Poverty	With rapid growth, the incidence of poverty fell from 31.7 percent in 2001 to 7.9 percent in 2005. In 2003, the income share of the bottom 20 percent was among the highest in the world.
Economic Structure	Agriculture's share of GDP has declined while the share in services has risen to almost 57 percent of GDP in 2006.
Demography and Environment	Because of low fertility rates and emigration, Ukraine's population is rapidly declining, and the ratio of elderly to working-age population is rising steeply, straining the public purse.
Gender	Gender parity is excellent in education and nearly as good in labor force participation. An unusual disparity of nearly 12 years in life expectancy in favor of females reflects the high incidence of male alcohol abuse and health problems.
Fiscal and Monetary Policy	The budget deficit is within the EU ceiling, but the levels of taxes and government spending are extremely high. Spending strongly favors transfer payments that spur consumption, not investment. In addition, inflation is far above the EU and benchmark norms.
Business Environment	Red tape is a serious impediment to private sector growth. In 2008, Ukraine ranked 139th of 178 countries in the World Bank's composite Doing Business index. Governance improved in recent years but remains poor in absolute terms. Corruption is also a major problem.
Financial Sector	The banks and the stock market show remarkable growth, and the insurance sector is expanding. But there are problems with credit risks, negative real interest rates on loans, thin trading in the stock market, a weak bond market, poorly developed private pension industry, and deficiencies in the underlying institutional framework.
External Sector	Export volume declined in recent years, and remittance receipts remain low, while import demand has soared. As a result, Ukraine's current account switched from surplus to a deficit of 8.1 percent of GDP in 2007, funded mainly by private capital inflows. The de facto peg of the hryvnia to the U.S. dollar creates stability and competitiveness risks.
Economic Infrastructure	Overall infrastructure quality is in line with benchmarks, particularly ports, roads, and railways. Internet and telecommunications networks are expanding rapidly. But improvements are needed in air transport and electricity supply.
Science and Technology	A clear commitment to science and technology is seen in most science and technology indicators. The main problem is weak protection of intellectual property rights.
Health	Ukrainians enjoy nearly universal access to improved water and sanitation, and low maternal mortality and child malnutrition. Still, life expectancy of 68 years is low by benchmark standards, and Ukraine has the highest HIV rate (1.4 percent) in Europe and Central Asia.
Education	Ukraine has a strong commitment to tertiary education, though net enrollment rates at the primary and secondary school levels lag well behind EU standards.
Employment and Workforce	The workforce contracted by 0.4 percent per year from 2000 to 2007. But labor force participation is high, unemployment is low and falling, and real wages are rising rapidly.
Agriculture	Labor productivity in agriculture is very low compared to labor productivity in industry and services, but it is improving. Nonetheless, sustained efforts are needed to boost productivity and efficiency.

UKRAINE: STRENGTHS AND WEAKNESSES—SELECTED INDICATORS

Selected Indicators, by Topic	Strengths	Weaknesses
Growth Performance		
Real GDP growth	X	
Growth of labor productivity	X	
Investment productivity, Incremental Capital-Output Ratio (ICOR)	X	
Poverty and Inequality		
Income share, poorest 20%	X	
Demography and Environment		
Population growth, annual percent change		X
Elderly dependency rate		X
Gender		
Life expectancy at birth, gender differential		X
Gross enrollment rate, all levels, gender differential	X	
Labor force participation rate, gender differential	X	
Fiscal and Monetary Policy		
Government expenditure, level and composition		X
Money supply growth		X
Composition of money supply growth (credit to the private sector)	X	
Inflation rate		X
Business Environment		
Ease of Doing Business ranking		X
Control of Corruption Index		X
Financial Sector		
Domestic credit to the private sector	X	
Interest rate spread	X	
Real interest rate		X
Legal rights of borrowers and lenders	X	
Stock market capitalization rate	X	
External Sector		
Export growth, goods and services		X
Foreign direct investment, percent GDP	X	
Concentration of exports	X	
Current account deficit, percent of GDP		X
Gross private capital inflows, percent GDP	X	
Debt service ratio, percent exports	X	

Selected Indicators, by Topic	Strengths	Weaknesses
Economic Infrastructure		
Roads, paved, percent of total	X	
Air transport infrastructure index		X
Quality of electricity supply index		X
Science and Technology		
Expenditures on Research and Development, percent GDP	X	
IPR protection		X
Health		
HIV prevalence		X
Access to improved sanitation	X	
Access to improved water source	X	
Maternal mortality rate, per 100,000 live births	X	
Prevalence of child malnutrition, weight for age	X	
Education		
Net secondary school enrollment rate		X
Youth literacy rate	X	
Gross tertiary enrollment rate	X	
Employment and Workforce		
Growth of the labor force, annual percent change		X
Unemployment rate	X	
Agriculture		
Agriculture value added per worker	X	
Agricultural Policy Costs Index		X

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

1. Introduction

This report is one of a series of economic performance assessments prepared for the EGAT Bureau to provide USAID missions and regional bureaus with a concise evaluation of key indicators covering a broad range of issues relating to economic growth performance in designated host countries. The report draws on a variety of international data sources¹ and uses international benchmarking against reference group averages, comparator countries, and statistical norms to identify major constraints, trends, and opportunities for strengthening growth and reducing poverty. The study uses Russia, Bulgaria, and Poland as comparators. All three countries have faced similar development challenges transitioning from socialist systems. Data permitting, comparisons with Bulgaria and Poland refer to the year before their respective EU entry decisions, to benchmark the performance that Ukraine may need for EU membership. When preaccession data are not available, the comparison is based instead on the most recent internationally available data.

METHODOLOGY

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

The analysis is organized around two mutually supportive goals: transformational growth and poverty reduction.³ Broad-based growth is the most powerful instrument for poverty reduction. At the same time, programs to reduce poverty and lessen inequality can help to underpin rapid

¹ Sources include the World Bank, the International Monetary Fund, the Millennium Challenge Corporation, the United Nations (including the Millennium Development Goals database), the World Economic Forum, and host-country documents and data sources. This report reflects data available as of April 2008.

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

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

and sustainable growth. These interactions can create 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; investment in education, health, and workforce skills; infrastructure development; and sustainable use of natural resources.

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

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

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

Table 1-1
Topic Coverage

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

DATA QUALITY AND FORMAT

The breadth and quality of economic data collected for Ukraine are very good. The World Bank gave Ukraine an overall score of 88 percent in its 2007 Statistical Capacity Index, including a score of 93 percent for indicator availability. This score is on par with that of most upper-middle-income countries such as Poland's 84 percent (2007), and higher than the pre-EU accession rating for Bulgaria (77 percent) or the 2007 score for Russia (79 percent). The IMF, however, recently raised the possibility of under-reporting of external sector data on trade and capital flows.⁴

Some social indicator data reflected in the report are somewhat dated. Ukraine conducted a Demographic and Health (DHS) Survey in 2007; however, results were not available at the time this report was drafted.

⁴ IMF, *Ukraine: Selected Issues*, IMF Country Report No. 07/47 (February 2007), pp. 62-63.

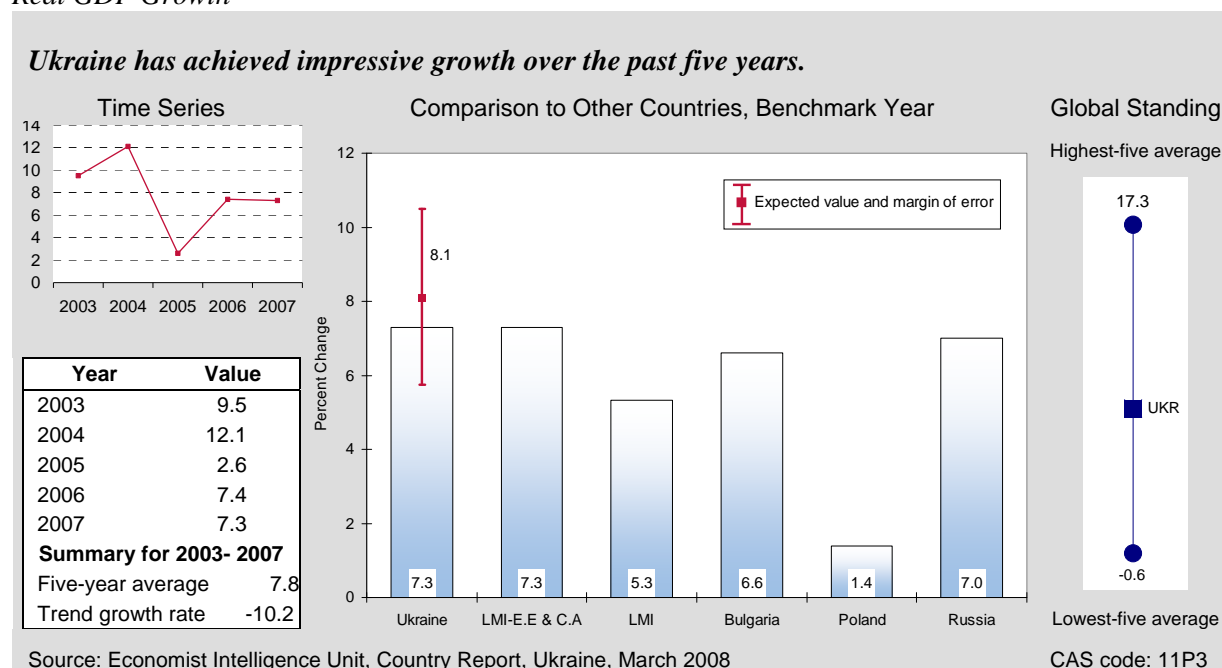
2. Overview of the Economy

This section provides a foundation for understanding Ukraine's macroeconomic performance, poverty and inequality, economic structure, demographic and environmental conditions, and indicators of gender equity. Some of the indicators cited are descriptive rather than analytical and are included to provide context for the performance analysis.

GROWTH PERFORMANCE

Ukraine's growth performance over the past several years has been impressive. Between 2003 and 2007, real GDP grew at an annual average rate of 7.8 percent, higher than the lower-middle-income Eastern Europe and Central Asia (LMI-EE&CA) median of 7.3 percent, Russia's 7.0 percent and the pre-EU accession rates for Bulgaria and Poland of 6.6 percent and 1.4 percent, respectively (see Figure 2-1). Ukraine's growth is particularly notable given its declining population (see Demography and Environment). In fact, real GDP per capita grew at an average annual rate of 8.5 percent between 2002 and 2007.⁵

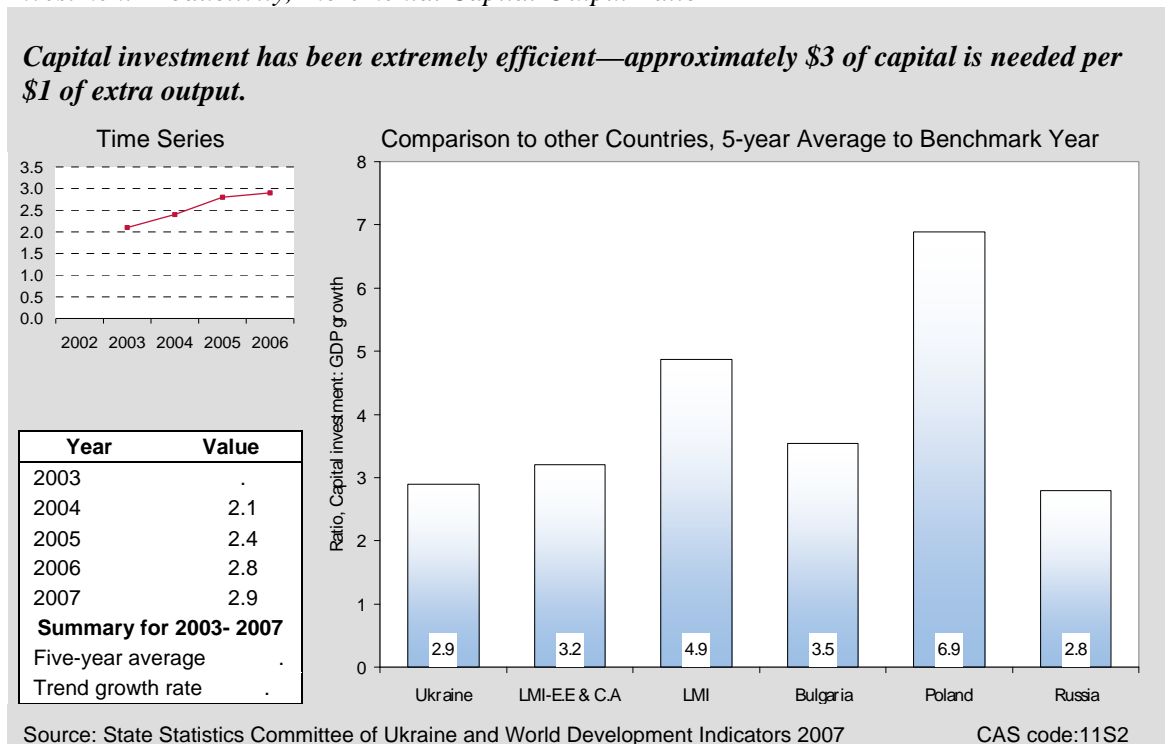
Figure 2-1
Real GDP Growth



⁵ IMF World Economic Outlook Database, April 2008, based on local currency GDP at constant 2005 prices.

The high growth rate has been driven by strong export earnings—due to soaring commodity prices—high levels of domestic consumption, and an efficient use of capital and labor. The efficiency of capital investment can be seen in the incremental capital-output ratio (ICOR), which measures the amount of capital investment per unit of added output. For the period 2003–2007, the ICOR averaged 2.9, meaning that just \$2.90 was needed to produce an extra unit of output. This was on par with the ICOR in Russia of 2.8 and more efficient than the LMI-EE&CA median of 3.2 and Bulgaria and Poland’s preaccession ratios of 3.5 and 6.9, respectively (see Figure 2-2). Labor productivity has also been very strong, growing by an average of 8.3 percent per year from 2001 to 2005. This is well above the LMI-EE&CA median of 5.4 percent, Russia’s 6.3 percent, and Poland’s preaccession rate of 2.5 percent, though significantly below Bulgaria’s unusually high preaccession rate of 12.5 percent.

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



Investment has also been strong. In 2007, gross fixed capital formation amounted to 26.6 percent of GDP,⁶ which is better than the LMI-EE&CA median of 24.4 percent and well above Russia’s 17.8 percent and Bulgaria and Poland’s pre-EU accession rates of 20.5 percent and 18.7 percent, respectively. Private investment accounted for 18.9 percent of GDP in 2007, though nearly two-thirds of the investment went into housing construction rather than capital investments that enhance future labor productivity.

Notwithstanding the impressive growth rates in recent years, real per capita GDP remains lower today than just after the fall of communism in 1991, whether measured at constant-price local

⁶ State Statistics Committee of Ukraine.

currency units or purchasing power parity (PPP) dollars.⁷ Moreover, in the longer term, Ukraine will have to address the problems caused by a shrinking labor force and aging population (see Demography and Environment). These problems include a looming budget crisis owing to soaring state pension costs (see Fiscal and Monetary Policy) and a debilitating brain drain owing to the emigration of educated young adults.

POVERTY AND INEQUALITY

Data on poverty and inequality reflect Ukraine's commitment to poverty reduction and equity. In 2001, after the country's severe economic downturn in the 1990s, 31.7 percent of the population was living under the national poverty line. Rapid growth in recent years, however, has facilitated a sharp improvement in living standards, causing poverty to decline to 7.9 percent in 2005 (again according to the national poverty line).⁸

Extreme poverty, defined as individuals lacking minimum dietary consumption, has also declined significantly, from 4.8 percent of the population in 2003 to 1.9 percent in 2005. This is better than in all comparators: the LMI-EE&CA median of 8.5 percent, Russia's 3.0 percent (2002), and Poland's preaccession rate of 2.5 percent.

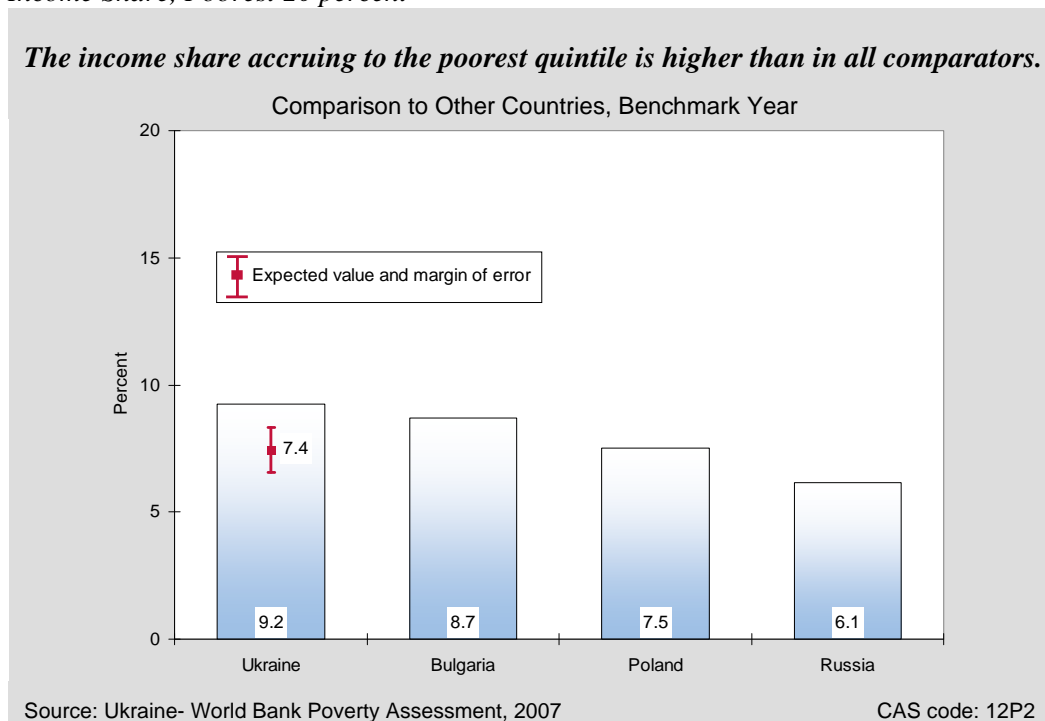
A long-term commitment to policies that support rapid economic growth in Ukraine is the key to continuing the favorable trend in poverty reduction.

Furthermore, as in most former Soviet countries, income is quite equitably distributed. One basic measure of inequality is the share of total income accruing to the poorest 20 percent of the population. In 2003, the most recent data available, the bottom quintile earned 9.2 percent of the country's income. In this respect, Ukraine outperforms Poland's preaccession rate of 7.5 percent, Bulgaria's 2003 rate of 8.7 percent, and Russia's 6.1 percent and is near the global high-five average of 9.5 percent (Figure 2-3). Data for 2006-2008, when it becomes available, however, may show rising inequality, which is often associated with rapid growth.

⁷ World Bank World Development Indicators, 2007 and IMF World Economic Outlook Database, April 2008.

⁸ World Bank, Ukraine Poverty Update, June 2007.

Figure 2-3
Income Share, Poorest 20 percent



ECONOMIC STRUCTURE

Looking at the broad structure of output in Ukraine, the share of GDP originating in agriculture declined from 14.6 percent in 2002 to 10.1 percent in 2006; this is low compared to the LMI-EE&CA median of 16.6 percent and Bulgaria's preaccession rate of 11.0 percent but higher than Russia's 5.6 percent in 2005 and Poland's 4.5 percent in 2002. The contribution of the industrial sector to GDP has hovered around the 34 percent mark, which is consistent with the LMI-EE&CA median of 32.6 percent, somewhat below Russia's 38.0 percent in 2005, and higher than Bulgaria's and Poland's preaccession rates of 30.3 percent and 28.7 percent, respectively. The share of services has risen to 56.7 percent of GDP, in line with all benchmarks except Poland's much higher preaccession figure of 66.8 percent.

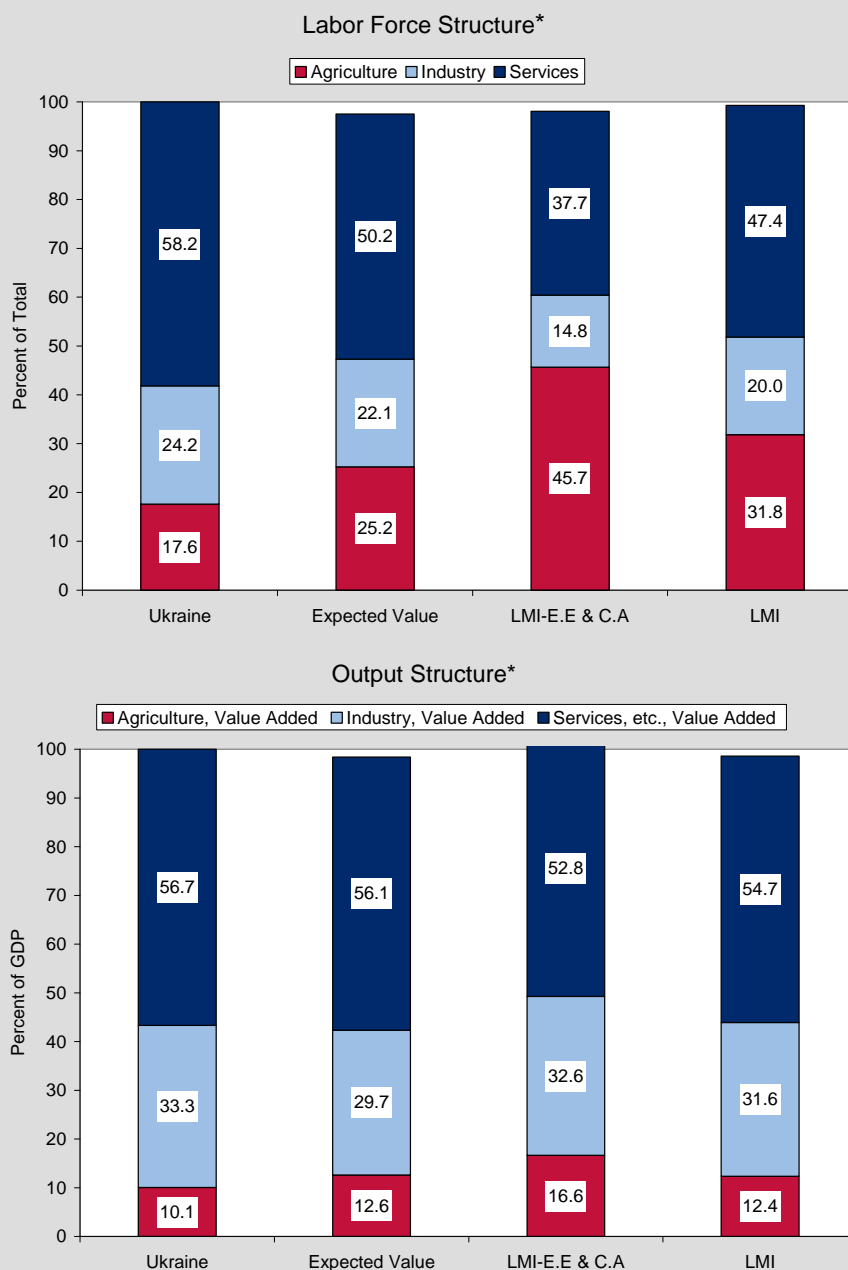
Agriculture also accounts for a relatively low share of the labor force, at 17.6 percent in 2006, a drop from 20.6 percent in 2002. The 2006 figure is less than half the LMI-EE&CA median of 45.7 percent and a bit below Poland's preaccession rate of 19.3 percent, but well above Russia's 10.2 percent and Bulgaria's preaccession rate of 9.7 percent. This is mirrored by a labor force share in industry, at 24.2 percent, that is well above the LMI-EE&CA median of 14.8 percent but lower than the shares in Russia and preaccession Bulgaria and Poland (29.8 percent, 33.1 percent, and 28.6 percent, respectively). The reallocation of workers from agriculture, however, has gone largely into services, where the labor force share rose from 54.2 percent in 2002 to 58.2 percent in 2006.⁹

⁹ International Labour Organization, *LABORSTAT*, Retrieved April 2008.

A comparison of the output and labor force structures shows that labor productivity is lowest in agriculture, where nearly one-fifth of the workers produce just one-tenth of GDP. Nonetheless, the productivity differential in Ukraine is smaller than the median for LMI-EE&CA, which has 46 percent of the workforce in agriculture producing just 17 percent of GDP. Also, the shift of workers out of agriculture suggests that market forces are gradually reallocating labor to more productive uses.

Figure 2-4
Economic Structure

The labor force share in agriculture is well above the value added share, indicating low labor productivity relative to other sectors.



Source: International Labour Office, March 2008; World Development Indicators, 2007

*Data for Ukraine are for 2006

CAS code: 13P1a-c, 13P2 a-c

This process of structural change helps to augment growth. Specifically, agriculture accounted for 0.35 percentage points of overall growth for the five years ending in 2006, while industry and services accounted for 2.75 and 3.81 percentage points, respectively. Yet actual growth averaged 7.3 percent. The residual of 0.38 percentage points per year is the effect of *reallocating* resources out of agriculture.¹⁰ It is remarkable to see that the structural reallocation of labor contributed more to growth than the expansion of agricultural output per se. This reallocation is mainly an individual response to market signals, but government can facilitate the process through education, training, and job information programs. At the same time, programs to accelerate the growth of productivity in agriculture can enhance that sector's relatively low contribution to economic growth (see Agriculture).

DEMOGRAPHY AND ENVIRONMENT

Ukraine's population of 46.6 million declined at an annual average rate of more than 0.7 percent in the five years to 2007. According to a recent World Bank projection, the population will have dropped by almost 12 million between 2000 and 2025.¹¹ The rate of decline is steeper than LMI-EE&CA median of 0.2 percent, Russia's 0.5 percent, and Bulgaria and Poland's pre-EU accession rates of 0.5 and 0 percent, respectively, and will likely have serious consequences for economic growth (see below). The demographic shift is due in part to a low and declining total fertility rate, which dropped from 1.8 births per woman in 1991 to just 1.2 births per woman in 2006.¹² Another cause is the large-scale emigration of young adults from Ukraine to neighboring countries.¹³

One consequence of this trend is an increasing ratio of elderly to working-age population. The elderly dependency rate rose from 21.6 percent in 2002 to 23.6 percent in 2006. This means that in 2006, there were approximately 24 elderly people for every 100 working-age adults. This is much higher than the LMI-EE&CA median rate of 16.9 percent, Russia's 19.2 percent and Poland's pre-EU accession rate of 18.0 percent, though on par with Bulgaria's preaccession rate of 24.2 percent. Such a large demographic transformation increases the household consumption burden for income earners and the demand for public health care. The biggest problem, however, is that the aging population is creating an unsustainable burden on the government budget in terms of increased pension payments (see Fiscal and Monetary Policy).

¹⁰ This decomposition uses real growth rates by sector and sector shares in GDP at the beginning of the period to obtain the reallocation effect as a residual. See Barry Bosworth and Susan Collins, "Accounting for Growth: Comparing China and India", *Journal of Economic Perspectives*, Winter 2008 pp.45-66.

¹¹ Chawla, M. et al. 2007. *From Red to Grey, The "Third Transition" of Aging Populations in Eastern Europe and the Former Soviet Union*. World Bank. Page 5.

¹² World Bank World Development Indicators 2007.

¹³ According to the World Bank's World Development Indicators data set, net out-migration (emigrants less immigrants) totaled 700,000 in 2005, implying that 1.5 percent of the population left the country. This figure appears too high to be consistent with the overall population growth rate and data on growth of the labor force.

Figure 2-5
Population Growth, Annual Percent Change

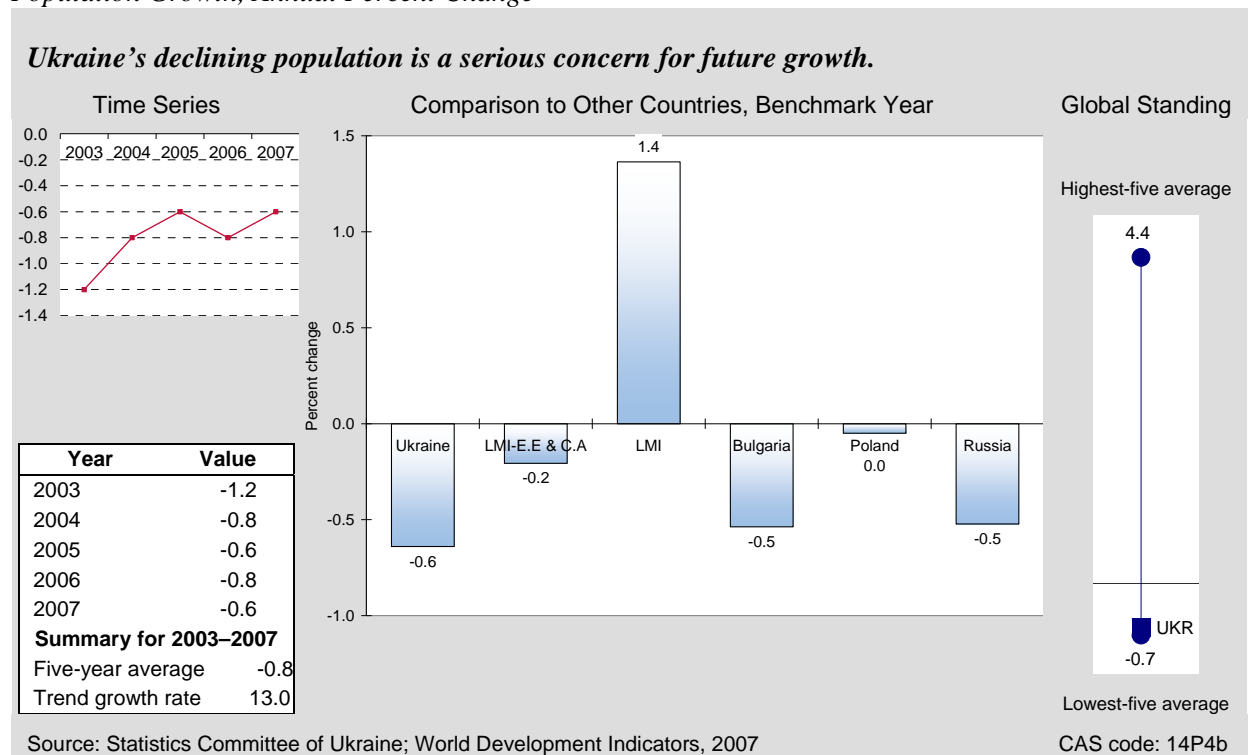
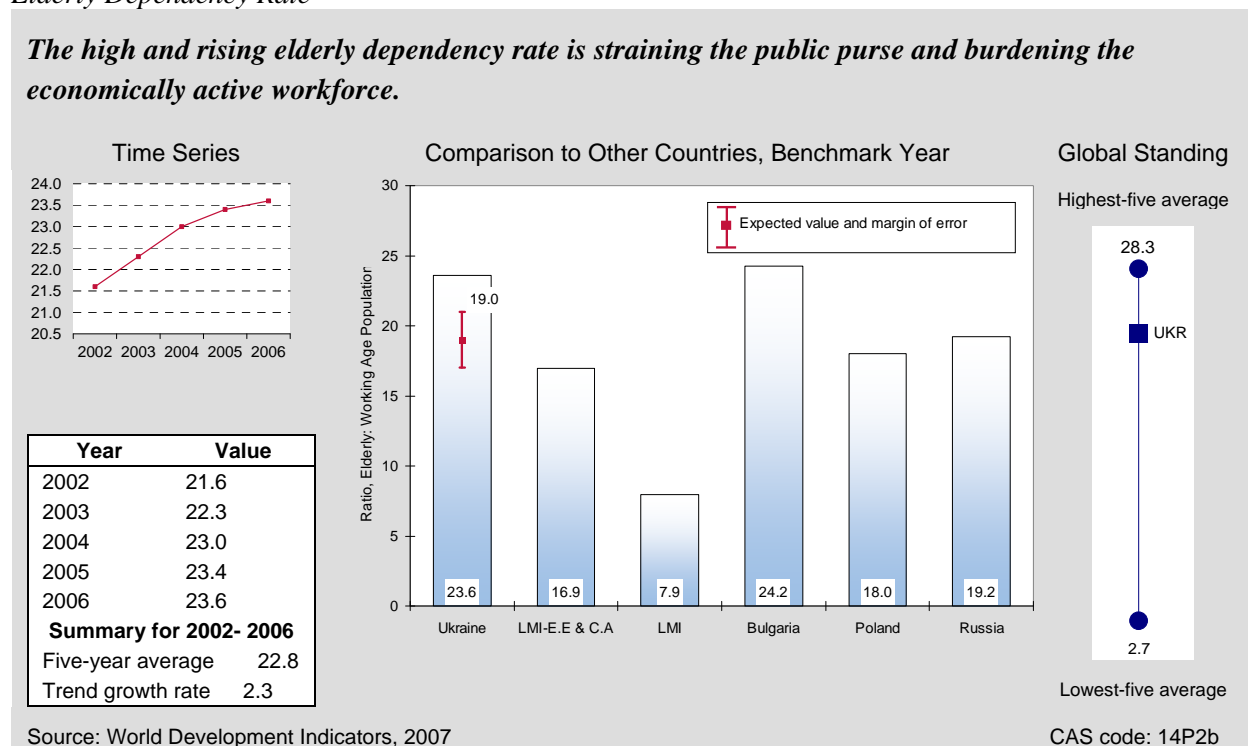


Figure 2-6
Elderly Dependency Rate



In the same period, the youth dependency rate fell from 24 per 100 working-age adults in 2002 to just 21 youths in 2006. This eases pressure on government spending for education services, as well as the need for new job creation, but it also portends fewer workers in the future to bear the cost of government spending for the elderly.

As a result, the government needs to design and implement policies to offset the economic effects of these tectonic shifts in demography. These may include measures to enhance labor productivity, facilitate more rapid labor reallocation out of agriculture, increase the retirement age, and facilitate the creation of jobs to reverse emigration trends, as well as possible incentives to increase the birth rate.

With rapid economic growth, especially in heavy industry, Ukraine also has to pay careful attention to environmental policy. Ukraine, however, received a score of 74.1 (out of 100) on the Environmental Performance Index (EPI) compiled by Yale and Columbia Universities in 2007.¹⁴ This is above the estimated normal range of scores for a country with Ukraine's characteristics and slightly better than the LMI-EE&CA median of 72.7. Even so, Ukraine's EPI score is below the standards of Bulgaria (78.5), Poland (80.5), and Russia (83.9) in 2007. The EPI subindices suggest that the most serious problems in Ukraine relate to overuse of cropland and poor conservation of aquatic habitats.

GENDER

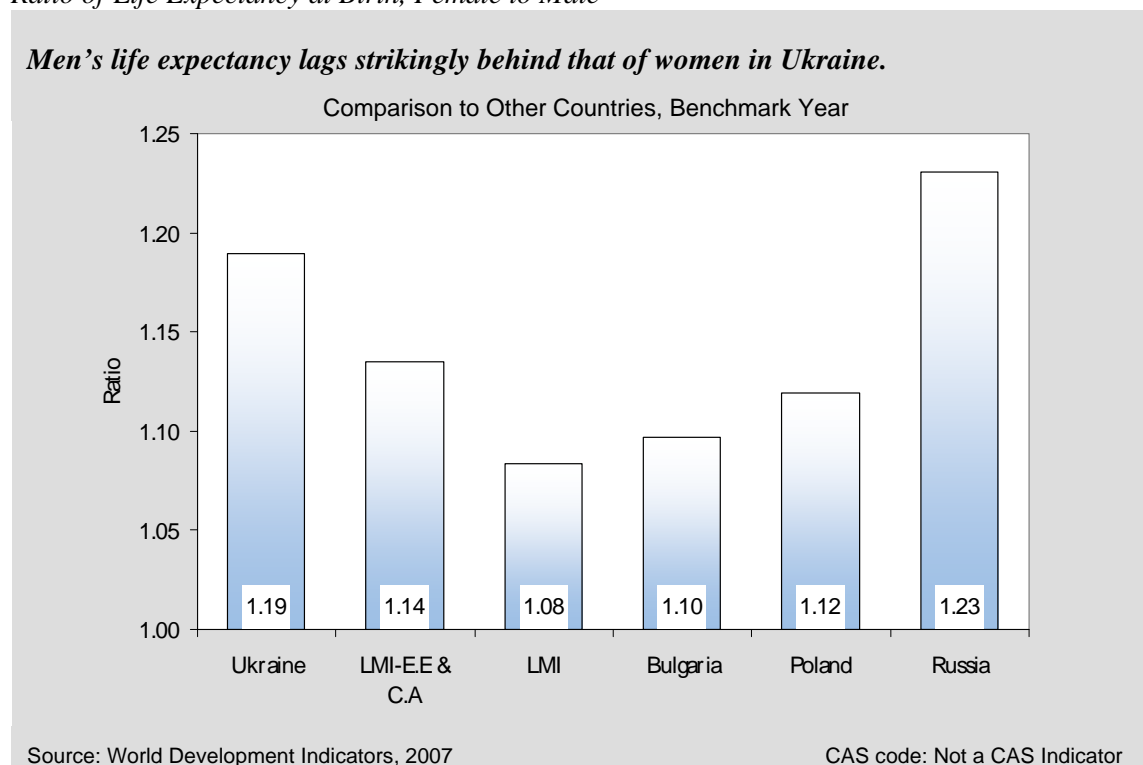
Gender equity promotes economic growth by ensuring that the productive capacities of all citizens are developed and used to the fullest extent. Ukraine performs very well on the basic indicators in this area.

Life expectancy is a fundamental indicator of health outcomes. In 2005, the average life expectancy for women in Ukraine was 74.0 years, compared to 62.2 years for men—a differential of 11.8 years. Life expectancy among both women and men in Ukraine is lower than the pre-EU accession levels of Bulgaria (females, 75.8 years; males, 69.1 years) and Poland (females, 78.8 years; males, 70.4 years). Studies consistently show that as countries achieve higher levels of human and economic development, women tend to live longer than men by five years or more on average. The differential of nearly 12 years in Ukraine is one of the highest in the world, however, signaling major health problems that afflict males in particular (see Health).

The gross enrollment rate at all levels of education is high for both females (87.0 percent) and males (83.0 percent). The female-to-male enrollment rate differential of 4 percentage points is in line with the LMI EE&CE median differential of 4.5 points but slightly higher than the global LMI differential median of 2.0 points and Bulgaria's preaccession differential of zero.

¹⁴ The EPI looks at national-level environmental protection efforts; a score of 0 indicates very poor performance and 100 signals very good performance.

Figure 2-7
Ratio of Life Expectancy at Birth, Female to Male



A high degree of gender equity is also apparent in the data on labor force participation. In 2007, the labor force participation rate was 69.8 percent for males and 63.6 percent for females.¹⁵ Ukraine's female labor force participation rate is higher than the pre-EU accession rates for Bulgaria (52.5 percent) and Poland (57.8 percent) but falls short of Russia's 65.9 percent and the LMI EE&CA median of 64.9 percent.

Apart from male health problems, gender imbalances do not appear to be a significant constraint to economic growth in Ukraine.

¹⁵ State Statistics Committee of Ukraine.

3. Private Sector Enabling Environment

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

FISCAL AND MONETARY POLICY

The management of fiscal and monetary policy in Ukraine presents a mixed picture. On the positive side, the budget deficit is sustainable, public debt is moderate, and core inflation (which excludes volatile food and energy prices) is low. Yet there are serious problems with the level of taxes and spending, the allocation and control of expenditure, the overall inflation rate, and the management of monetary policy. These issues require serious attention for Ukraine to sustain high growth, reduce the risk of macroeconomic instability, and improve its prospects for EU accession.

After deterioration of the budget deficit to 4.4 percent of GDP in 2004, the government adjusted fiscal policies and narrowed the deficit to 2.4 percent of GDP in 2005 and 2006. This is well within the 3 percent target for EU Convergence Criteria and slightly better than Poland's preaccession deficit of 2.7 percent. Bulgaria, however, had a budget *surplus* of 1.6 percent of GDP before its EU invitation. In economic terms, the deficit is not a major problem, because it has been financed in a manner that is not contributing to inflation, debt problems, or crowding out of credit for the private sector.

Although the size of the deficit may not be a problem, the level of government spending is troubling. Between 2003 and 2006, government expenditures soared from 36.8 percent of GDP to 45.4 percent. This is extremely high compared to the expected value of 31.1 percent for a country

with Ukraine's characteristics, as well as the preaccession figure of 36.7 percent for Bulgaria and Russia's ratio of 31.3 percent for 2006. It even exceeds the very high budget share in Poland in 2002, before the EU entry decision, of 44.5 percent of GDP.

Budget composition has also changed. In the wake of the 2004/05 Orange Revolution, expenditures on subsidies and transfers climbed from 46.1 percent of total spending in 2003 to 51.9 percent in 2006. Pension spending alone jumped to 17 percent of GDP in 2005, a figure that the IMF cites as likely the highest in the world.¹⁶ The increase in transfer payments creates a consumption-led stimulus to the economy in the short run, but Ukraine would be better off with investment-led demand (including investment in human capital) to provide a strong foundation for sustainable growth. In addition, the increase in entitlements has sowed the seeds for a future fiscal crisis, because the social security system is on a path to collapse in the absence of deep reforms to reduce pension costs.¹⁷

The tax burden has moved in tandem with expenditures. Consolidated government revenue climbed from 35.9 percent of GDP in 2003 to 43.0 percent in 2006. This is astonishingly high compared to every international benchmark (Figure 3.1). According to the IMF, the increase in revenue was achieved through a combination of tighter tax administration and the elimination of tax breaks for free economic zones. These are healthy changes, but further reforms are needed, including harmonization of the tax code for companies and individuals, introduction of a property tax, and simplification of reporting requirements. Equally important, the gains from tax reform could have been used to reduce the tax burden on the private sector (see Business Environment), including the 25 percent company tax rate, and the onerous 35 percent payroll tax rate (which includes social security contributions), rather than for higher consumption spending.¹⁸

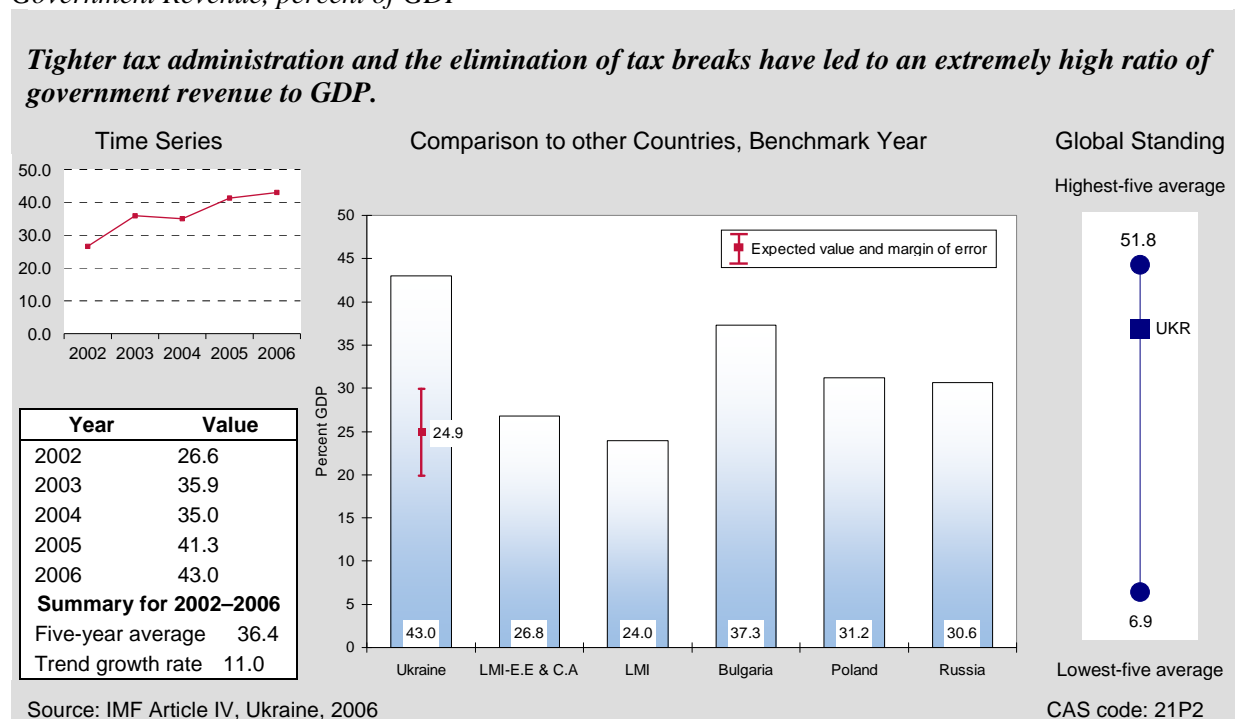
Over the past five years, the government has largely avoided inflationary borrowing to finance the budget deficit. Still, money supply growth has averaged a startling 43.7 percent per annum for the period, with 50.8 percent growth in 2007 alone. The main driver has been extremely rapid growth in credit to the private sector (see Financial Sector), along with a passive response by the central bank to this growth to maintain the hryvnia-dollar peg (see External Sector).

¹⁶ IMF, Ukraine: Article IV Review, February, 2007, p. 14.

¹⁷ Michel Noel, Zeynep Kantur, Angela Prigozhina, Sue Rutledge and Olena Fursova. 2006. The Development of Non-bank Financial Institutions in Ukraine. Working Paper No. 81. World Bank. Washington, pp. 63–66.

¹⁸ The company tax rate is from the World Development Indicators 2007; the payroll tax rate is from the World Bank/IFC Country Partnership Strategy, World Bank Report No. 40716-UA, November 3, 2007, page 4.

Figure 3-1
Government Revenue, percent of GDP

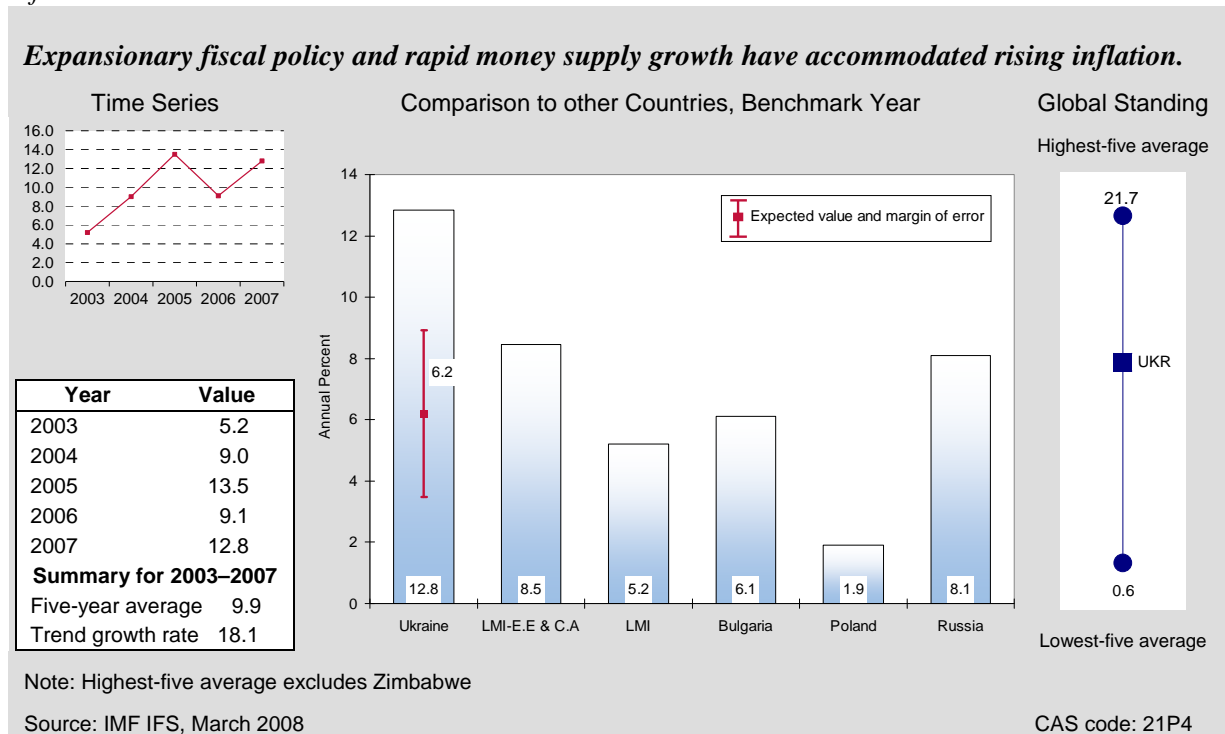


To be sure, there is space for fairly rapid growth in the money supply following a period of political or economic instability, as households and businesses regain confidence in monetary assets and increase their demand for money. Even with this in mind, though, money supply growth in Ukraine has been far too fast for price stability. Over the past five years, inflation has averaged 9.9 percent. Though central bank statistics showed a core inflation rate of only 2.5 percent in 2007 (through October), the overall year-over-year inflation rate was 12.8 percent. By year-end, in fact, prices were 16.6 percent higher than in December 2006. The accelerating rate of inflation has been driven not only by rising fuel and food prices but also by highly expansionary fiscal policy and accommodative monetary policy. As a result, inflation is now far above the EU accession target of under 4 percent¹⁹ and our international benchmarks, including the inflation rates in Bulgaria and Poland at the time of their invitations to join the EU (Figure 3-2).

The National Bank of Ukraine has indicated an intention to move gradually toward inflation targeting and a flexible exchange rate regime that will allow more active monetary policy in fighting inflation (see External Sector). Meanwhile, wage data suggest that the central bank's accommodating stance has entrenched inflationary expectations, which may greatly increase the economic and political cost of later trying to reduce inflation. Inflation also creates problems for financial sector development and the business climate. This is a clear-cut case where prevention is preferable to a cure.

¹⁹ This is a moving target defined as the average euro area inflation rate plus 1.5 percentage points. Source: Peter B. Kenan and Ellen E. Meade, *EU Accession and the Euro: Close Together or Far Apart*, Institute for International Economics Policy Brief Number PB03-9, October 2003, p. 5.

Figure 3-2
Inflation

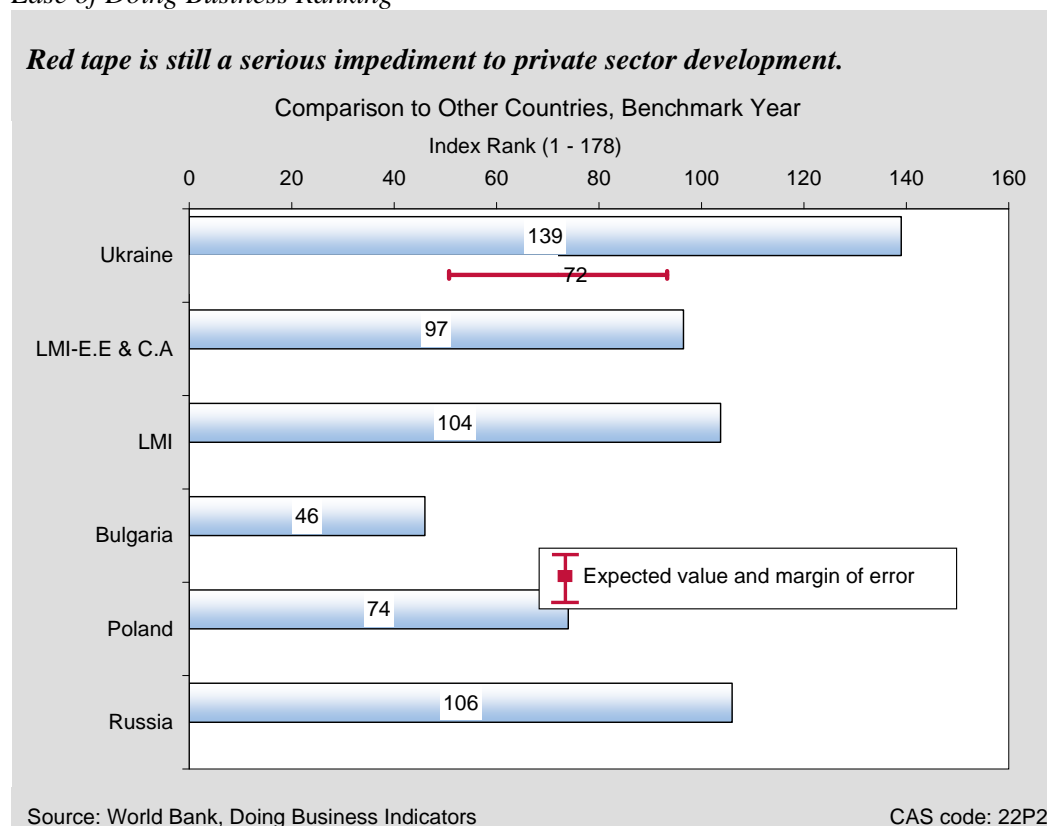


BUSINESS ENVIRONMENT

Institutional barriers to doing business, including perceived corruption in government, are critical determinants of private sector development and prospects for sustainable growth. Creating a business-friendly environment that makes Ukraine a more favorable business and investment destination is imperative, particularly on the eve of the country's entry into the World Trade Organization.

The World Bank's composite Doing Business rankings placed Ukraine at an abysmal 139 of 178 countries in 2007, on par with Syria, Iran, and Mozambique, and well below the LMI-EE&CA median rank of 97 and Russia's unsatisfactory rank of 106. The Doing Business subindices show that major problems lie in overly complex tax procedures and high effective tax rates, cumbersome licensing procedures, and poor protection for foreign investors. According to the EBRD-World Bank Business Environment and Enterprise Survey (BEEPS) for 2005, more than 8 percent of senior managers' time is spent dealing with red tape. Although this figure is an improvement from prior surveys, it is higher than the LMI-EE&CA median of 4.3 percent, Russia's 6.3 percent, and Bulgaria's 2.8 percent in 2005, but comparable to Poland's pre-EU rate of 7.9 percent.

Figure 3-3
Ease of Doing Business Ranking



Ukraine's performance on the World Bank Institute governance indicators (on a scale ranging between -2.5 for very poor and +2.5 for excellent, with 0 the global median) has been improving but remains problematic. For example, the Rule of Law index, which measures the extent to which players have confidence in and abide by the rules of society, rose from -0.85 in 2002 to -0.57 in 2005, but then slipped back to -0.72 in 2006. This is in line with the LMI-EE&CA median score and better than Russia's poor score of -0.91, but far worse than Bulgaria and Poland's preaccession scores of -0.07 and +0.56, respectively.

The World Bank Institute ratings also show that corruption is a major constraint to doing business in Ukraine. Ukraine's score on the Control of Corruption Index—an aggregate measure of the extent to which public power is used for private gain and of the relative “capture” of the state by elites and private sector interests—improved from -0.98 in 2002 to -0.67 in 2002. Although this is slightly better than the LMI-EE&CA median of -0.74 and Russia's score of -0.76, it is far below Bulgaria's and Poland's pre-EU accession scores of +0.07 and +0.34, respectively. Moreover, according to BEEPS, more than 25 percent of firms questioned in 2005 stated that unofficial payments are frequent and bribes account for just over 1.5 percent of annual firm sales. The report also indicates that bribes are most frequently paid for obtaining business licenses and permits; dealing with health, safety and fire inspections; and obtaining government contracts.

These indicators suggest that considerable work remains to be done to create a business- and investment-friendly climate that will build competitiveness and stimulate large-scale private sector capital formation. In particular, policymakers will have to make a concerted effort to cut

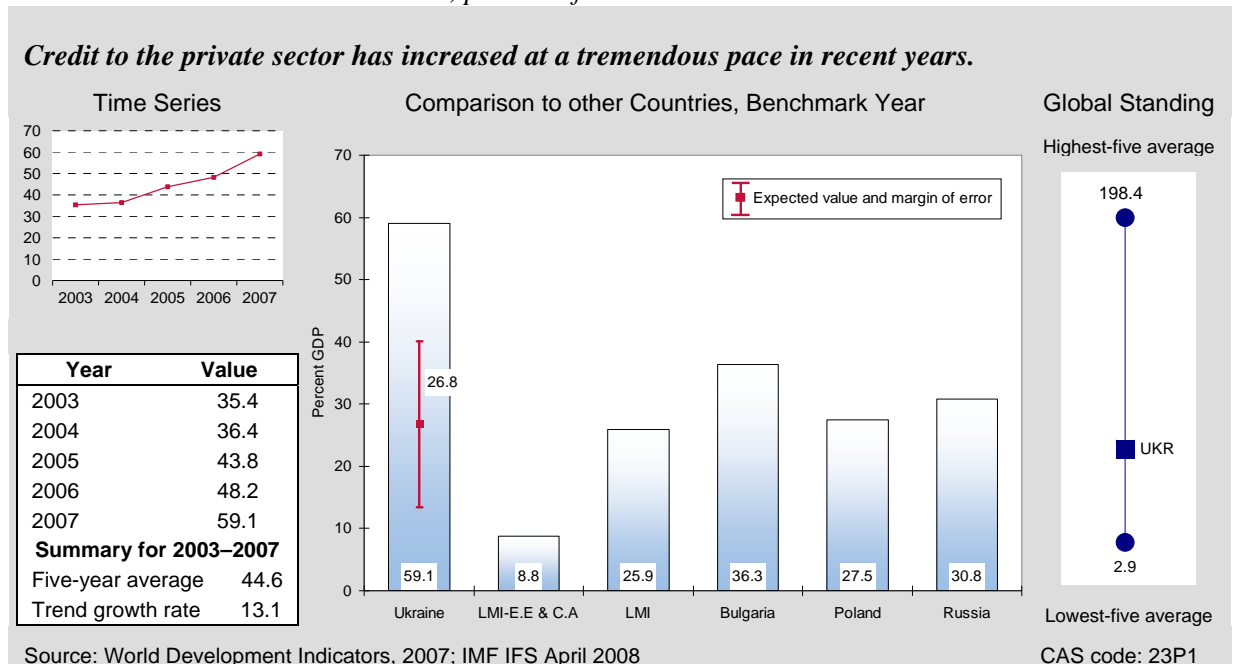
red tape and streamline government bureaucracy. To achieve EU membership, the government will also need to improve legislation and governance, cracking down on corruption and improving rule of law, promoting enterprise reform, and separating public enterprise control from market regulation functions performed by many government institutions.

FINANCIAL SECTOR

A transformation has been underway in Ukraine's financial sector. It is characterized by rapid growth in monetization and credit to the private sector, falling interest rate spreads, and strong growth in stock market capitalization. The financial system is still at an early stage of evolution, however, especially by European standards.

The ratio of broad money (M2) to GDP is a basic gauge of financial development, from the perspective of deposit mobilization. Between 2003 and 2007, this ratio more than doubled from 24.9 percent to 55.2 percent of GDP. This extraordinary jump in such a short time suggests a surge of confidence in banks and a lack of other safe outlets for financial savings. The latest figure far exceeds the pre-EU accession ratios for Bulgaria (48.4 percent) and Poland (41.4 percent), as well as Russia's figure of 32.4 percent in 2006 and the LMI median of 38.3 percent. The increase in deposits was accompanied by a corresponding expansion in domestic credit to the private sector, which climbed 35.4 percent of GDP in 2003 to 59.1 percent in 2007. Here, too, Ukraine's performance far exceeds benchmark standards, including the preaccession figures for Bulgaria and Poland, the ratio for Russia in 2006, and the LMI median (as shown in Figure 3-4).

Figure 3-4
Domestic Credit to the Private Sector, percent of GDP



Another favorable sign is a large drop in the spread between lending and deposit rates, which is a proxy for efficiency and competition in the banking system. In 2003 the spread was a very high 10.9 percentage points; by 2007 it was 5.0 percentage points, a remarkably rapid change. Here, too, Ukraine's recent performance is better than all the benchmarks, including pre-EU spreads of 5.8 percentage points in both Bulgaria and Poland, 6.4 points for Russia in 2006, and an LMI median of 7.3 points.

Alongside these impressive indicators of development are signs of trouble. Extremely rapid growth of credit is often a sign of declining lending standards and potential instability in the banking system. As demonstrated by recent problems in the United States, the risk is especially serious when the credit expansion includes, as in Ukraine, a large share of housing loans and soaring property prices. If credit growth is fueling a housing price bubble, then a slump in home values can trigger a surge in defaults. A further risk arises from loans in foreign currency to clients with local currency incomes. Unhedged borrowers create an indirect currency risk for the banks, because a depreciation of the hryvnia—which is a likely scenario, given the unsustainable present mix of high inflation and a pegged currency—could trigger widespread defaults.

Another adverse effect of high inflation, combined with competition in the expanding credit market, has been negative real interest rates. Central bank statistics show that the interest rate on loans to economic entities averaged 12.8 percent in October 2007, while the inflation rate for producer prices was reaching 19.7 percent.²⁰ Whenever the cost of borrowing is below the inflation rate, interest rates fail to screen out low-productivity investments, to the detriment of efficiency and growth.

These problematic conditions call for tougher macroeconomic policies to fight inflation, as well as stringent banking supervision.

Turning to the institutional foundations for financial sector development, the World Bank accords Ukraine a high score of 8 (out of 10) on its index of Legal Rights of Borrowers and Lenders. This compares very well with Bulgaria's score of 6 at the time of its invitation to join the EU, and the scores of 4 and 3, for Poland and Russia respectively in 2007. Ukraine, however, remains far below benchmark standards on the bank's Credit Information index, with a score of zero (out of 7). This compares with a score of 3 for Bulgaria before its EU invitation and recent scores of 4 for both Poland and Russia. (No preaccession score is available for Poland.) The IMF reports that a group of banks and insurance companies has established the first private credit bureau for Ukraine, but legal reforms are needed before it becomes operational.²¹ The absence of systematic information on credit history makes the rapid expansion in credit look even more troubling. These two indicators cover only a small set of conditions but suffice to show the uneven status of institutional development needed for strong and sound financial markets in Ukraine.

²⁰ National Bank of Ukraine, Bulletin of the National Bank of Ukraine, 01/2008 (109), pp. 4 (for inflation) and 31 (for interest rates).

²¹ IMF, Ukraine: Selected Issues, Country Report No. 05/416, November 2005, p. 83.

Capital markets in Ukraine also present a mixed picture. On the positive side, total capitalization in the stock market soared from 7.4 percent of GDP in 2002 to 40.4 percent in 2006, reflecting confidence in the economy and substantial inflows of financial capital. Ukraine's capitalization rate is remarkably high compared to the LMI median of 19.0 percent and rates of 11.4 percent and 14.5 percent for Bulgaria and Poland, respectively, at the time of invitation to the EU. In Russia, however, the stock market is on a higher plateau, with capitalization of 133.9 percent of GDP in 2006. On the negative side, Ukraine's capital markets are extremely underdeveloped relative to European standards. This is evident in the very low volume of corporate stock and bond issues, extremely low turnover rates, poor liquidity, weak rules for corporate governance, and insufficient trading in government securities to establish benchmarks for market pricing.²² These are common problems in nascent "frontier" markets. The government can facilitate progress through legal and regulatory reforms, particularly in accounting standards, corporate governance rules, information disclosure, and strengthening regulatory agencies.

Among nonbank financial intermediaries, the best performing market segment is the insurance industry. In 2006, the insurance penetration rate, defined as the ratio of premiums to GDP, in Ukraine was 2.8 percent, slightly above the rates in Bulgaria (2.7 percent) and Russia (2.3 percent), though below the rate in Poland (3.4 percent). For comparison, insurance penetration in the original Maastricht Treaty countries ranged from 5.4 percent to 16.5 percent of GDP in 2006.²³

Private pension funds are another critical nonbank intermediary, both to supplement the public Pension Fund of Ukraine (PFU), and also as a major source of long-term savings. Private pensions are an especially important pillar of a multipillar retirement system, considering the acute financial problems faced by the PFU (see Fiscal Policy). Yet private funds are not well developed because of legal and regulatory hurdles, weakness in the capital market (which is a major investment outlet for long-term funds), and perhaps a lack of confidence as a lingering effect of a pension fund crisis in the mid-1990s.²⁴

In conclusion, Ukraine's financial sector is performing unusually well for a lower-middle-income country, and is doing well in most respects, even compared to the financial sectors of Poland and Bulgaria at the time of their invitations to join the European Union. Nonetheless, major problems require serious attention from the authorities and merit consideration for donor support.

²² IMF, Ukraine: Staff Report for the 2006 Article IV Consultation, December 20, 2006, pp. 18-21, and IMF, Regional Economic Outlook Europe: Strengthening Financial Systems, November 2007, especially pp. 50-58.

²³ Source: Swiss Re, Sigma No 4/2007, World Insurance in 2006, available at: www.swissre.com/resources/f04b168047d1993ea149b728409d653c-orldInsurance_Appendix_update.pdf. The insurance penetration rate for Ukraine jumped from 2.1 percent in 2002 to 5.6 percent in 2004, before falling to 2.8 percent in 2006. The peak in 2004 was regarded as reflecting artificial transactions for tax avoidance. The subsequent decline suggests that this problem has largely been brought under control.

²⁴ Michel Noel, Zeynep Kantur, Angela Prigozhina, Sue Rutledge and Olena Fursova, 2006, The Development of Non-bank Financial Institutions in Ukraine, World Bank Working Paper No. 81.

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 Ukraine to boost growth and reduce poverty by stimulating productivity and efficiency, providing access to new markets and ideas, and expanding the range of consumer choice. At the same time, globalization creates new challenges, including the need for reforms to take full advantage of international markets and WTO membership and the corresponding need for cost-effective approaches to cope with the resulting adjustment costs.

The major performance indicators for Ukraine's external sector are mixed. Export volumes have declined in recent years, and the current account balance, which had been firmly in the black, dipped into the red in 2006 and declined further in 2007. Foreign direct investment (FDI), however, is on an increasing trend.

One central issue is Ukraine's present policy of pegging the hryvnia to the dollar, allowing movement only within a narrow band. The short-term benefits of stabilizing the hryvnia must be balanced against the associated macroeconomic and microeconomic risks. There is a pressing need for greater flexibility in light of (1) Ukraine's emergent current account deficit; (2) the risk that gross private capital inflows may not be sustainable; (3) rising inflation, which causes a real appreciation of the effective exchange rate and a drop in competitiveness; and (4) both the sinking value of the U.S. dollar to which the hryvnia is pegged and soaring dollar-denominated global commodity prices.

International Trade and Current Account Balance

Ukraine is well integrated into the global economy, as measured by trade as a percentage of GDP. Between 2003 and 2007, exports plus imports of goods and services averaged 105 percent of GDP,²⁵ just below the LMI-EE&CA median of 110 percent and far higher than Russia's oil-enhanced 54 percent and Poland's preaccession 61 percent, though well below Bulgaria's preaccession 124 percent. After 14 years of negotiations, Ukraine's membership in the WTO was approved in February 2008, for ratification by domestic authorities by July 2008.

The Ukrainian economy remains highly dependent on its major export, steel, and is therefore vulnerable to market changes and external shocks. World prices of steel products, which comprised more than 40 percent of Ukraine's exports in 2005, are now nearly double their 2000 price levels.²⁶ Yet Ukraine's vulnerability was evidenced by a decline in export volumes in 2005 and 2006, caused by global competition in the steel sector and real appreciation of the currency.²⁷ Export volume grew by an average of more than 11 percent per year between 2000 and 2004, before contracting by 11.2 percent in 2005 and a further 1.3 percent in 2006. Moreover, Ukraine's

²⁵ National Bank of Ukraine.

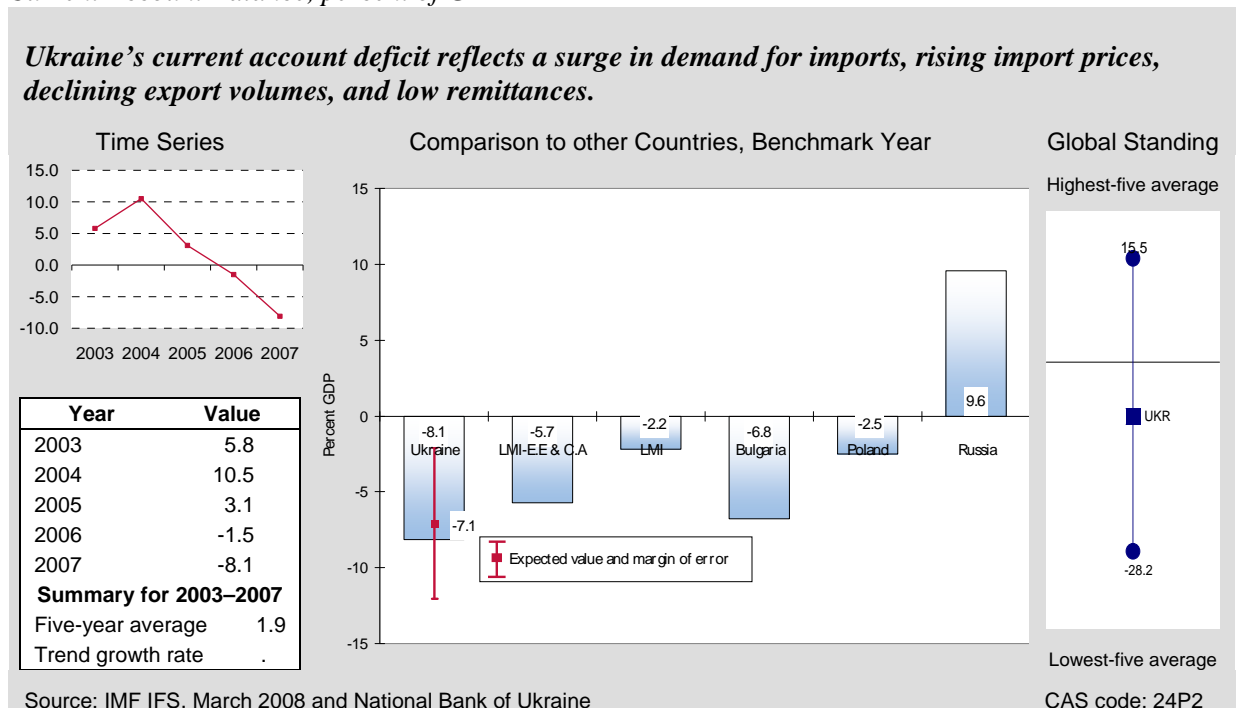
²⁶ World Bank, "Commodity Price Data (Pink Sheet)" (April 2008).

²⁷ IMF, *Ukraine: 2006 Article IV Consultation* (Washington, DC.: IMF, February 2007), p. 8

real effective exchange rate appreciated by more than 16 percent in the past few years, from an index value (where 2000=100) of 96.1 in 2004 to 112.2 in 2007.²⁸ With continued high inflation and pegged to the dollar, the hryvnia will continue appreciating in real terms, eroding the competitiveness of Ukraine's exports and import-competing industries. To avert this erosion, the obvious policy implication is more flexible exchange rate management, combined with tighter fiscal and monetary policy, to minimize the pass-through inflation.²⁹

Along with the appreciating real exchange rate, which makes imports cheaper, and Ukraine's continued dependence on energy imports from Russia, the recent consumption boom caused imports of goods and services to climb at an average annual rate of 29.1 percent (in U.S. dollar terms) between 2003 and 2007.³⁰ This led to an enormous deterioration in the current account balance, from a surplus of 10.5 percent of GDP in 2004 to a deficit of 8.1 percent of GDP in 2007.³¹ The latest figure compares unfavorably with the median LMI-EE&CA deficit of 5.7 percent, Poland's preaccession deficit of 2.5 percent, and even Bulgaria's preaccession deficit of 6.8 percent. The trend is very worrisome because the deficit is being financed to a substantial extent by capital inflows that could easily reverse in the event of any economic instability (see Foreign Investment).

Figure 3-5
Current Account Balance, percent of GDP



²⁸ IMF IFS, April 2008.

²⁹ A more detailed discussion of exchange regime policy options is found in IMF, *Ukraine: Selected Issues*, Country Report No. 07/47 (February 2007).

³⁰ IMF IFS, April 2008.

³¹ National Bank of Ukraine.

The Heritage Foundation produces a Trade Policy indicator as part of its widely known Index of Economic Freedom. For 2007, Ukraine's trade regime had a mark of 72.2. This compares very favorably to regional and global LMI median scores of 67.8 and 62.6, respectively, and also to the preaccession score for Bulgaria of 58.2. Poland, before its invitation to join the European Union, had a score of 73.8.

Remittance inflows have not been strong enough to provide an effective cushion against the declining current account balance. Even with a large Ukrainian diaspora, remittances as a percentage of exports remains very low, hovering around 0.5 percent of exports of goods and services for the past five years. This is marginally higher than Russia's 0.3 percent but far below the LMI-EE&CA median of 5.1 percent and Bulgaria and Poland's preaccession rates of 7.1 percent and 3.0 percent, respectively.

It is therefore very important for the government to pursue policies and programs to facilitate diversification of exports into nontraditional, high value-added goods, and find ways to diversify Ukraine's energy sources. Donors may wish to assist Ukraine in identifying potential for export growth and supporting export promotion strategies.

Foreign Investment and International Reserves

FDI can catalyze productivity growth by transferring technology, developing human capital, and enhancing competition. Foreign direct investment into Ukraine is on an increasing trend and averaged 5.1 percent of GDP between 2004 and 2006. This is roughly in line with the LMI-EE&CA median of 4.7 percent and above Russia's 2.0 percent and Poland's preaccession 2.1 percent but well below Bulgaria's rate of 10.8 percent. In the first three quarters of 2007, however, FDI into Ukraine rose to 8.1 percent of GDP.³²

Boosted by the boom in Ukraine's financial markets (see *Financial Sector*) and by privatizations, gross private capital inflows jumped from 1.0 percent of GDP in 2003 to 12.3 percent in 2005 and to 8.6 percent in 2006.³³ The recent inflows are much stronger than the LMI-EE&CA median of 3.8 percent, Russia's 1.6 percent, and Poland's preaccession rate of 3.6 percent and are on par with Bulgaria's highly favorable preaccession rate of 11.2 percent.

These positive investment trends have allowed Ukraine to accumulate adequate international reserves, equal to four months of imports in 2006, despite the deteriorating current account balance.³⁴ Reserves in 2006 were slightly higher than the LMI-EE&CA median of 3.7 months but well below Russia's 13.8 months and Bulgaria and Poland's preaccession levels of 6.2 months and 5.3 months, respectively. The present level of reserves provides some protection against a temporary decline in capital inflows, but not enough to deal with any large-scale reversal, at least not without a major adjustment in the exchange rate.

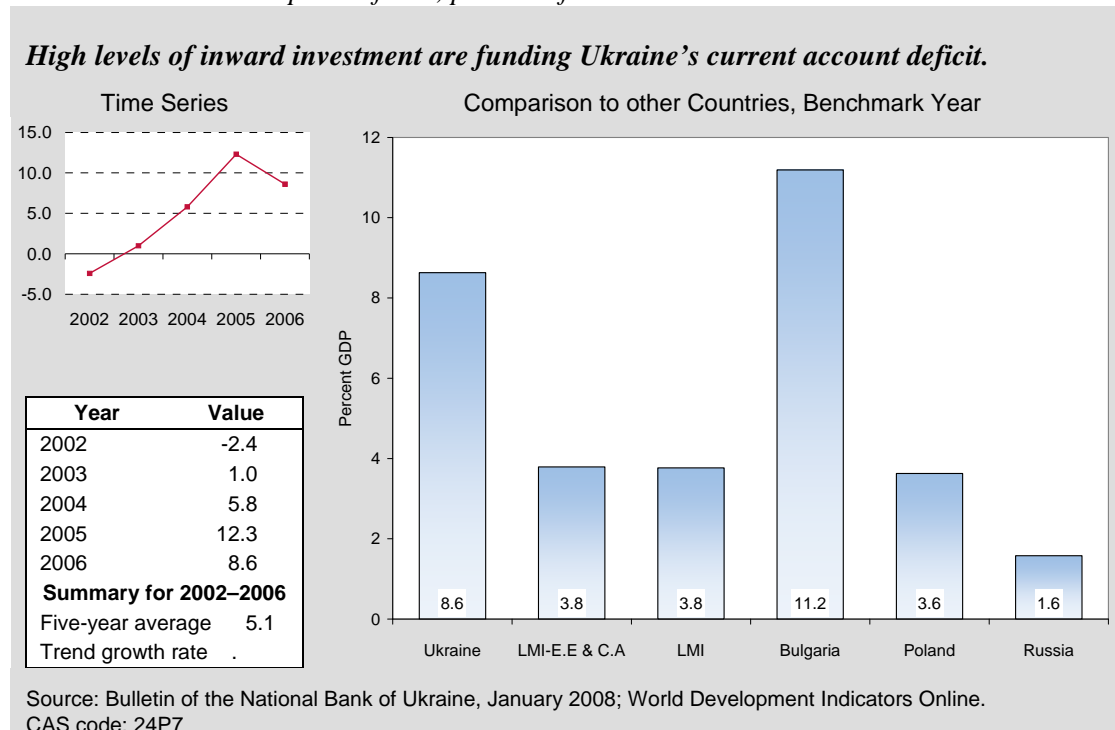
³² IMF IFS, April 2008.

³³ Ibid.

³⁴ IMF, *Ukraine: 2006 Article IV Consultation*, Washington, DC, IMF.

Maintaining investment from abroad will be critical for Ukraine, especially given the decline in foreign aid to just 0.5 percent of GNI in 2005 (the latest year available). The outcome will depend to a large extent on the government's success in improving the enabling environment for investors. In 2005, Ukraine received a score of 0.24 on the Inward FDI Potential index (where 0 is poor and 1 is excellent). Though Ukraine performed significantly better than the LMI-EE&CA median, with a score of 0.17, much must be done to build investor confidence in the country (see Business Environment).

Figure 3-6
Gross Fixed Private Capital Inflows, percent of GDP



Debt

Put simply, international debt is not a major problem in Ukraine. The country's debt service ratio, a measure of debt sustainability that computes debt service as a share of export earnings, increased from 4.9 percent in 2005 to 5.1 percent in 2006. This is a little higher than the median for LMI-EE&CA (4.6 percent), yet lower than the ratios in Russia (10.6 percent) and pre-EU accession ratios in Bulgaria and Poland (9.4 percent and 6.3 percent, respectively). More importantly, the debt load is sustainable in absolute terms.

ECONOMIC INFRASTRUCTURE

Good infrastructure for transportation, power, communications, and information technology is essential to improve competitiveness, facilitate trade, and expand productive capacity. In many respects, Ukraine's infrastructure resembles that of a more developed country. Considerable improvements are needed, however, to approach the standard in most EU member states.

In its annual Global Competitiveness Report (GCR), the World Economic Forum rates the infrastructure in most countries of the world on a scale of 1 (worst possible) to 7 (best possible) on the basis of a survey of business executives' perceptions. For Ukraine, the overall Infrastructure Quality index for 2007 was 3.1. This is slightly better than both regional and global LMI median values of 2.8 and 3.0, respectively, as well as the 2007 scores for Russia (3.0), Bulgaria (2.7), and Poland (2.8). All of these benchmarks, however, are far lower than the median value of 5.1 for EU members.

The GCR transportation indicators mostly confirm the positive conditions, with Ukraine receiving a relatively good score of 3.4 for port quality and 4.0 for rail quality. Both scores are in line with or above the benchmarks for global and regional LMI, and for Bulgaria, Poland, and Russia. For air transportation infrastructure, however, Ukraine's score of 3.2 falls behind the global and regional LMI medians (4.1 and 3.4, respectively), as well as 2007 scores for Bulgaria (3.5), Poland (3.6), and Russia (4.2).

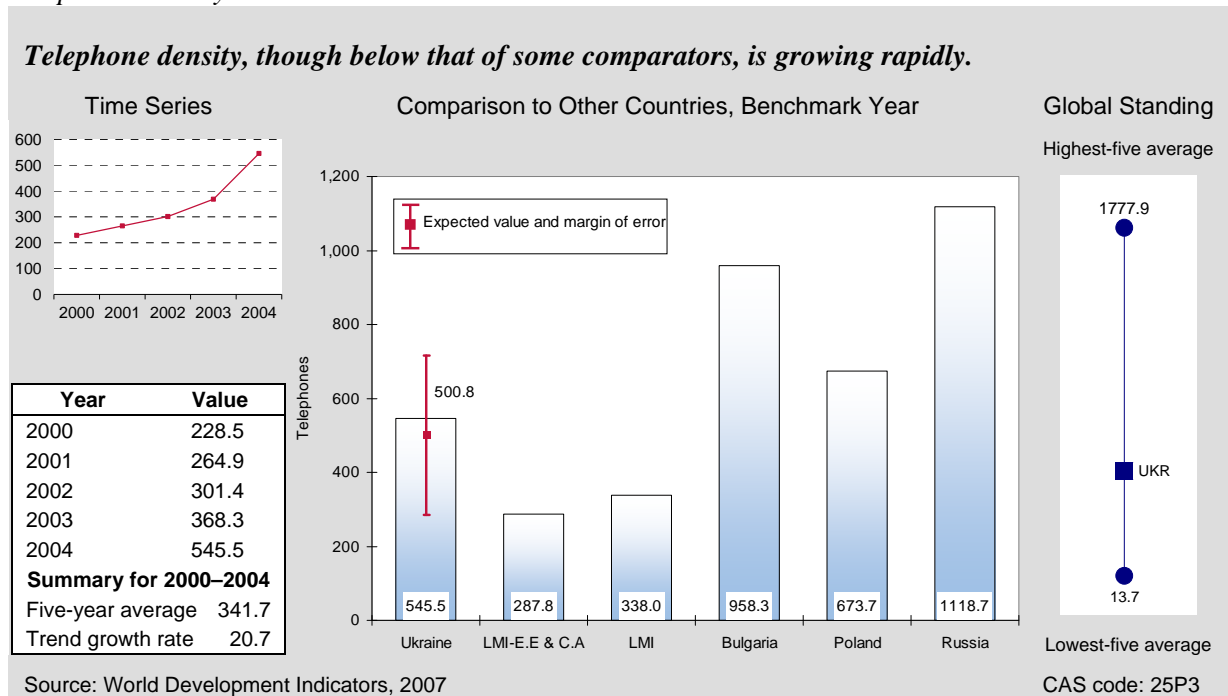
The GCR does not rate the quality of road infrastructure. For developing countries, a widely used proxy for this purpose is the proportion of roads that are paved. In 2004, 97 percent of the roads in Ukraine were paved. This is high in absolute terms and in relation to the global LMI median of 68.0 percent and Poland's 69.7 percent in 2003. In Bulgaria, however, 99 percent of the roads were paved in 2004, before its EU invitation.

The supply of electricity is another essential part of the infrastructure needed for economic growth. Ukraine's GCR score for the Quality of Electricity Supply was 3.9 in 2007. This is on par with the median for LMIs globally and regionally, as well as the 2007 score for Bulgaria, but markedly below Russia's score of 4.3 and Poland's score of 4.8. Other evidence also suggests significant problems with the Ukrainian electricity infrastructure. According to the World Bank's 2005 BEEPS survey, approximately 10 percent of businesses reported that the electricity supply is a hindrance to doing business.

Ukraine has been experiencing rapid advances in information and communications technology (ICT). The number of internet users was estimated at 165 per 1,000 people in February 2008³⁵—more than three times the regional LMI median of 41.6 and global LMI median of 50.8. The figure for Ukraine also compares favorably with the preaccession Internet penetration rates of 159 in Bulgaria and 152 in Russia in 2005; Poland, though, had 232 users per 1,000 people in 2002, before its EU invitation. Telephone density in Ukraine has also grown rapidly, from just over 200 fixed and mobile phone connections per 1,000 people in 2000 to 546 in 2004. Here, too, Ukraine's performance outpaces the regional and global LMI benchmarks by a wide margin. Bulgaria and Poland, however, had achieved much higher phone density on the eve of their EU decisions, as has Russia (Figure 3-7).

³⁵ http://www.kmu.gov.ua/control/en/publish/printable_article?art_id=118322877. Accessed April 2, 2008.

Figure 3-7
Telephone Density



In conclusion, Ukraine's infrastructure is in very good condition relative to the usual benchmarks, with the exception of air transport, and electricity and lagging performance in telephone services despite strong recent gains. Continued maintenance and improvement of the physical backbone for the economy is essential to ensure continued rapid growth. In addition, more in-depth studies may be warranted to diagnose the problems in air transportation and electricity. With the government budget already strained by high social expenditures, attracting private sector capital into infrastructure development through public-private partnerships may be essential for rapid progress in this area.

SCIENCE AND TECHNOLOGY

Science and technology are central elements of a dynamic business environment and a driving force behind increased productivity and competitiveness. Even for low- and lower-middle-income countries, transformational development depends on acquiring and adapting technology from the global economy. Lack of capacity to access and use technology prevents an economy from leveraging the benefits of globalization. Unfortunately, few indicators are available for judging science and technology performance in developing and emerging countries. One must draw inferences from a limited set of proxies. For the most part, Ukraine's performance on these indicators compares well to most benchmarks for similar emerging economies.

The World Economic Forum's FDI Technology Transfer index gauges executives' perceptions of the quality of FDI inflows as a source of new technology. Ukraine scores 4.2 on an ascending scale of 1 to 7. This is in line with the LMI-EE&CA median of 4.3 and Russia's 4.1 but below the 2007 scores of 4.4 and 4.6 for Bulgaria and Poland, respectively.

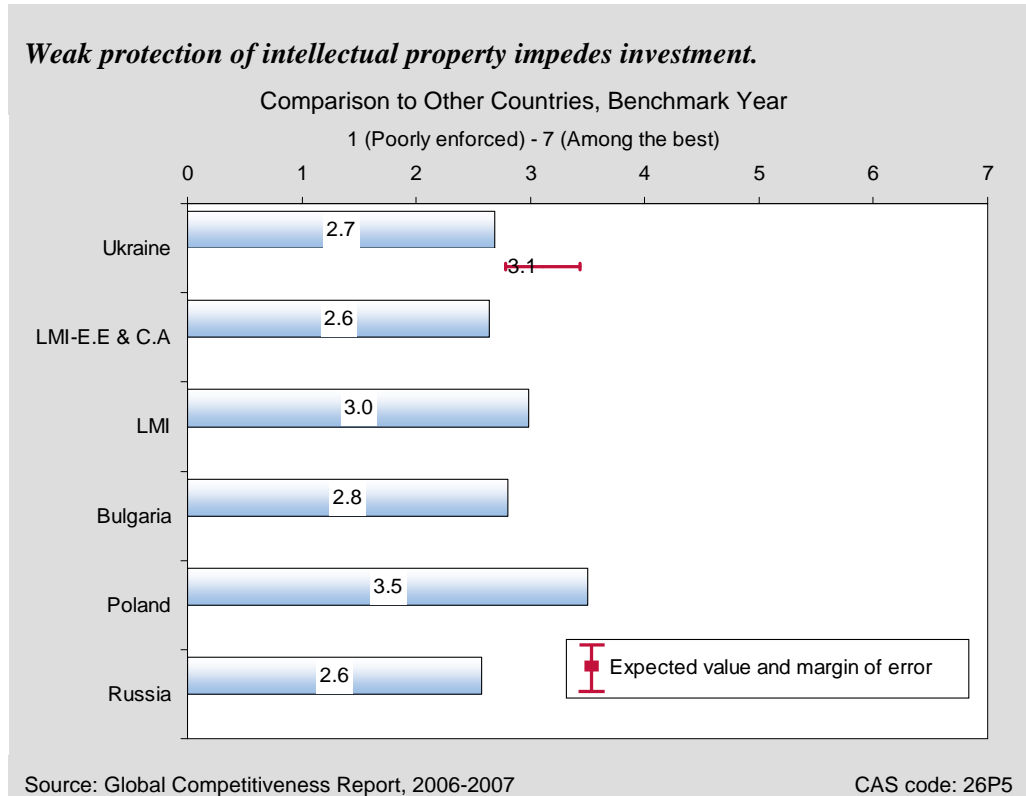
Although FDI is a major source of technology, innovations take root most readily in an environment with strong domestic science and technology capacity as well. For the perceived availability of scientists and engineers, the WEF records a score of 4.3 for Ukraine (on a scale of 1 to 7). This equals the 2007 LMI-EE&CA median and Poland's scores and nearly matches Bulgaria's 4.4 but falls short of Russia's strong score of 4.9.

Ukraine's science and engineering community published more than 2,000 journal articles per million people in 2003 (latest year available), more than 15 times the LMI-EE&CA median of 127 and more than double the figure of 829 for Bulgaria in 2007. Still, Ukraine's performance was far lower than Russia's tally of 15,782 articles per million people in 2003, and Poland's score of 6,023 in 2002. The most troubling observation, however, is that the number of published science and technology journal articles from Ukraine declined in the five years to 2003. This disturbing trend has probably continued because of the emigration of highly skilled workers.

Ukraine's commitment to innovation is also seen in spending on research and development, which amounted to 1.1 percent of GDP in 2005 (latest year available). This is very close to Russia's mark in 2004 (1.2 percent) and substantially exceeds the levels in Bulgaria (0.5 percent) and Poland (0.6 percent) for that year, as well as the LMI-EE&CA median (0.3 percent). Given that the *level* of spending on R&D is relatively high in Ukraine, the essential issue is to ensure that the spending is allocated efficiently to attract and retain talent in the sciences and foster rising productivity.

One vital indicator on which Ukraine does not perform so well is intellectual property rights (IPR). For 2007, the WEF recorded a score of 2.7 (out of 7) for Ukraine on the perceived quality of IPR protection. Although this is in line with the median of 2.6 for LMI-EE&CA and the scores of 2.6 and 2.8 for Russia and Bulgaria, respectively, Ukraine's performance falls short of the global LMI median of 3.0 and Poland's relatively strong score of 3.5. It is also below the estimated normal range for a country with Ukraine's characteristics. In absolute terms the score indicates serious weaknesses in IPR protection, which is needed to stimulate scientific innovation and improve productivity.

Figure 3-8
IPR Protection



4. Pro-Poor Growth Environment

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

HEALTH

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

Life expectancy at birth is commonly regarded as the best indicator of overall health status for the population. In 2005, life expectancy at birth in Ukraine stood at 68.0 years. Although slightly above Russia's life expectancy of 65.5 years, Ukraine's life expectancy falls below the LMI-EE&CA median of 71.8 years, the LMI median of 70.7 years, and corresponding figures for Bulgaria (72.4 years in 2004) and Poland (74.5 years in 2002) at the time of their EU invitations. Moreover, life expectancy in Ukraine has been falling, from 70.5 in the late 1980s. The most common explanation is the high incidence of male alcohol abuse, which is associated with high rates for accidents, violence, and cardiovascular disease.³⁶

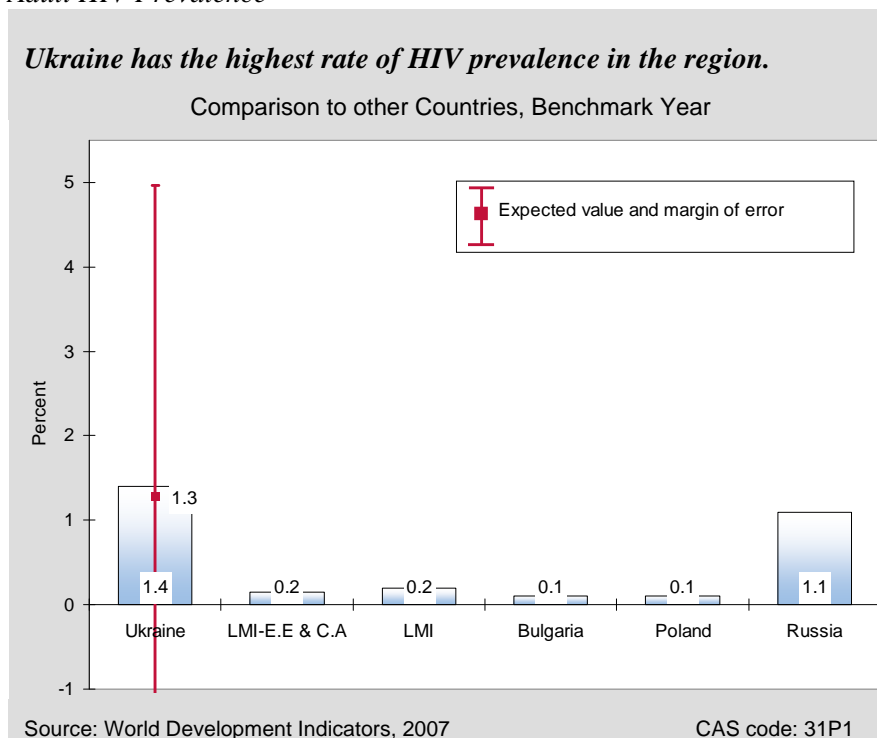
The prevalence of HIV/AIDS also creates obstacles to economic growth by adversely affecting the labor supply and labor productivity and causing a loss of vital human capital, on top of the human trauma involved.³⁷ The adult HIV prevalence rate of 1.4 percent in Ukraine (2005) was

³⁶ World Health Organization, "WHO Issues New Healthy Life Expectancy Rankings," June 2000. <http://www.who.int/inf-pr-2000/en/pr2000-life.html>, accessed April 4, 2008.

³⁷ World Bank, *Socioeconomic Impact of HIV/AIDS in Ukraine*, 2006.

the highest in Europe and Central Asia (Figure 4-1). By comparison, the prevalence rate in Russia is 1.1 percent, the LMI-regional and global LMI medians are 0.2 percent, and Poland's rate is just 0.1 percent in (2005). In response, the government has marginally increased domestic funding to fight HIV/AIDS (\$20 million for 2007, which is roughly equal to \$4 per infected person) and sought a grant of up to \$151 million from the Global Fund.³⁸

Figure 4-1
Adult HIV Prevalence



Tuberculosis infections are also of concern in Ukraine. In 2006, Ukraine reported 106 cases per 100,000 people, roughly equal to the rate in Russia but more than double the EU preaccession rates in Poland and Bulgaria.³⁹

In contrast, the country shows strong performance on other important health sector indicators such as access to improved water and sanitation. In 2004, an estimated 96 percent of the population had access to both clean water and improved sanitation, compared to LMI regional medians of 92.0 percent and 84.0 percent, respectively, and corresponding figures of 97.0 percent and 87.0 percent in Russia. On the eve of its EU invitation, Bulgaria had already achieved 99 percent coverage. (The World Bank provides no data for Poland.) Moreover, the maternal mortality rate is low and has fallen steadily in recent years to 14 (2004); 99.7 percent of births were attended by skilled health professional in 2004. The child malnutrition rate, though

³⁸ UNAIDS, <http://www.unaids.org/en/CountryResponses/Countries/ukraine.asp>, accessed April 1, 2008.

³⁹ World Development Indicators online.

somewhat dated, is also very low, at 1.0 percent (2002), among the lowest five globally. Furthermore, child immunization averaged 98.2 percent over the period 2001 to 2005.

These strong performance indicators are supported by a relatively high level of spending on public health, amounting to 4.0 percent of GDP in 2005 (latest data). This was on par with the figure in Russia of 3.7 percent and well above the LMI EE&CA median of 3.3 percent, as well as the global LMI median of 3.0 percent. Nonetheless, spending on public health as a percentage of GDP is lower than in pre-EU accession Bulgaria (4.6 percent in 2004) or Poland (4.5 percent in 2002), and even more so in absolute terms due to the low level of GDP in Ukraine.⁴⁰

Given this uneven health sector profile, the most significant opportunities for donors and the government to pursue health programs that facilitate growth are in alcoholism, cardiovascular disease, and HIV/AIDS.

EDUCATION

Education is another fundamental form of investment in human capital, which is crucial for economic growth and development. The data for Ukraine show a strong commitment to primary education and widespread access to higher levels of schooling. Significant improvements at both the primary and secondary levels are needed, however, to meet the standards of most EU member countries.

UNESCO data show a net primary enrollment rate of 90.2 percent for Ukraine in 2006. Although this is on par with the LMI-EE&CA median of 89.2 percent and Russia's 92.5 percent, it is markedly lower than the pre-EU accession rates in Bulgaria and Poland (95.0 percent and 98.1 percent, respectively). There is virtually no disparity between enrollment rates for boys and girls, and youth literacy is virtually universal.

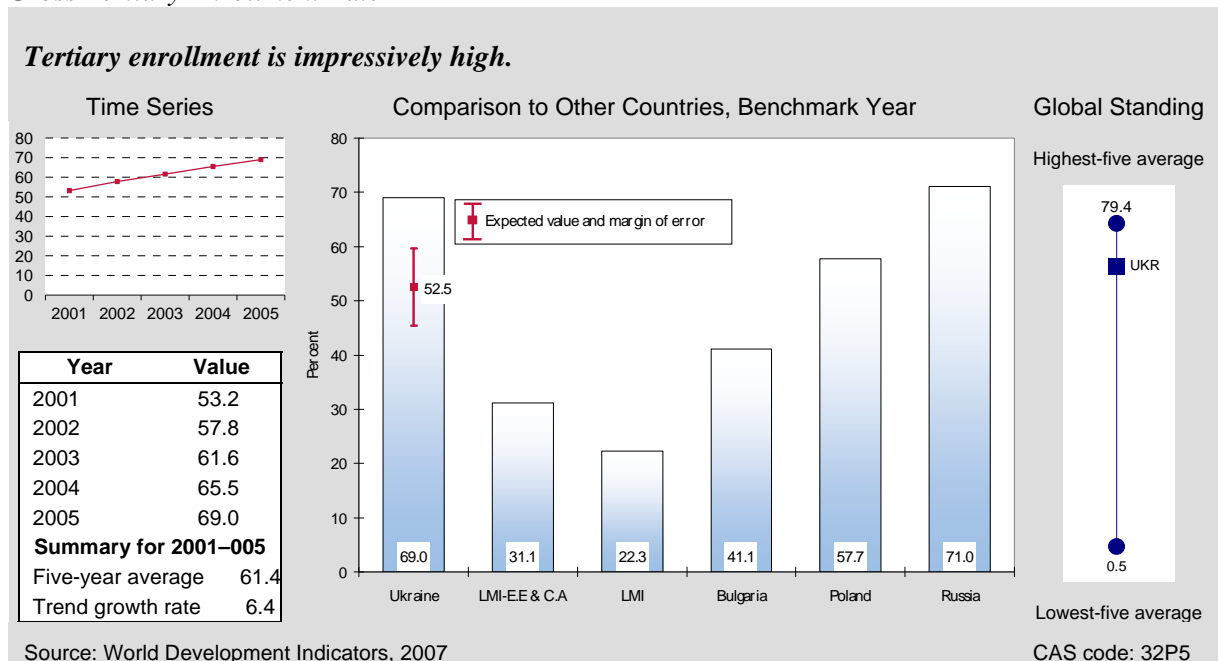
The quality of primary education is difficult to measure. One crude but common proxy is the pupil-teacher ratio. With 19 students per teacher, primary schools in Ukraine match the LMI-EE&CA median, but the average class size is somewhat larger than in Russia (17 students) and pre-accession Bulgaria (17 students), and much larger than in preaccession Poland (11 students). Another rough gauge of quality is the level of expenditure per capita. For Ukraine, educational expenditure per primary school student averaged 11.9 percent of per capita GDP between 2001 and 2005. This is far below Poland's preaccession ratio of 22.5 percent and Bulgaria's 2003 value of 19.0 percent and slightly lower than the global LMI median of 12.9 percent. (Data are lacking for the other benchmarks.)

The net secondary school enrollment rate, 84 percent in 2006, is reasonably good. The figure for Ukraine is higher than the LMI-EE&CA median of 78.9 percent and far better than the global LMI median of 66.7 percent but below the preaccession rates of 88.5 percent and 91.3 percent in Bulgaria and Poland, respectively.

⁴⁰ Ukraine data from IMF Ukraine Statistical Annex, February 2007.

In higher education, gross tertiary enrollment in Ukraine increased from a very respectable 53.2 percent in 2001 to an excellent 69.0 percent in 2005. This outstrips all comparators with the exception of Russia's 71.0 percent in 2005 (Figure 4-2). Sustaining enrollment for tertiary education is essential for maintaining rapid growth by encouraging innovation and rising productivity. But it is equally vital to improve the retention of highly educated youth by creating an environment that creates challenging and well-paying employment opportunities.

Figure 4-2
Gross Tertiary Enrollment Rate



In conclusion, Ukraine performs well at all levels of education, but efforts to improve primary and secondary enrollment are needed to meet EU norms. The funding for primary education is also very low, but this problem can be solved only by reallocating the government budget, not by increased spending overall (see Fiscal and Monetary Policy).

EMPLOYMENT AND WORKFORCE

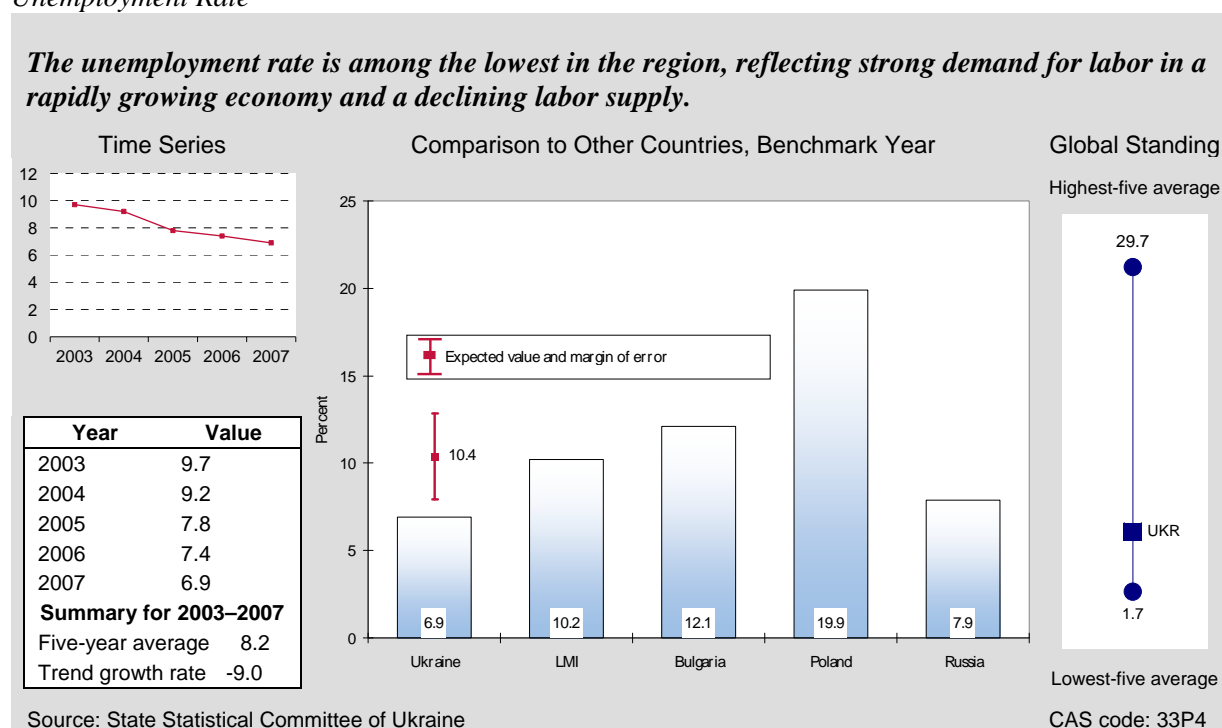
Largely owing to low fertility rates and high levels of emigration, Ukraine's labor force lost approximately 545,000 workers between 2000 and 2007, contracting at an average rate of 0.4 percent per year to reach 20.6 million.⁴¹ The shrinking labor force will be an increasingly serious constraint on economic growth (see Growth Performance), but in many respects it is also helping to reduce unemployment and boost real wages.

⁴¹ The labor force numbers used in this section represent the economically active population of working age (15–55 years) men and women, taken from the Statistical Committee of Ukraine. These numbers differ somewhat from those of the comparators, which are based on the economically active population 15–64 years of age.

At 71.7 percent in 2007, Ukraine’s labor force participation rate has remained stable in recent years and is on par with the regional LMI median (70.8 percent) and Russia’s rate (72.1 percent in 2005) and well above the participation rates of 58.6 percent and 65.1 percent in pre-EU accession Bulgaria and Poland, respectively.

Reflecting the high demand for labor in this rapidly growing economy, the unemployment rate is relatively low and declining—from 9.7 percent in 2003 to 6.9 percent in 2007.⁴² This is far better than the LMI median of 10.2 percent and Bulgaria and Poland’s pre-EU accession rates of 12.1 percent and 19.9 percent, respectively, and marginally better than Russia’s 7.9 percent (2004).

Figure 4-3
Unemployment Rate



The high demand for labor and tightening labor supply have also led to large gains in the real wage. Between 2000 and 2007, real wages increased at an average annual rate of 18 percent.⁴³

Since Ukraine performs well on almost all employment and workforce indicators, job creation as such should not be a focus for donor assistance. Yet there is a need for programs to reduce the flight of skilled workers by generating high-skill, high-productivity jobs that raise domestic demand for the most talented workers. In addition, inflation threatens to undercut improvements in the real wage and accentuate the incentives for emigration.

⁴² Ukraine’s booming economy makes it likely that almost all the unemployment is structural rather than cyclical.

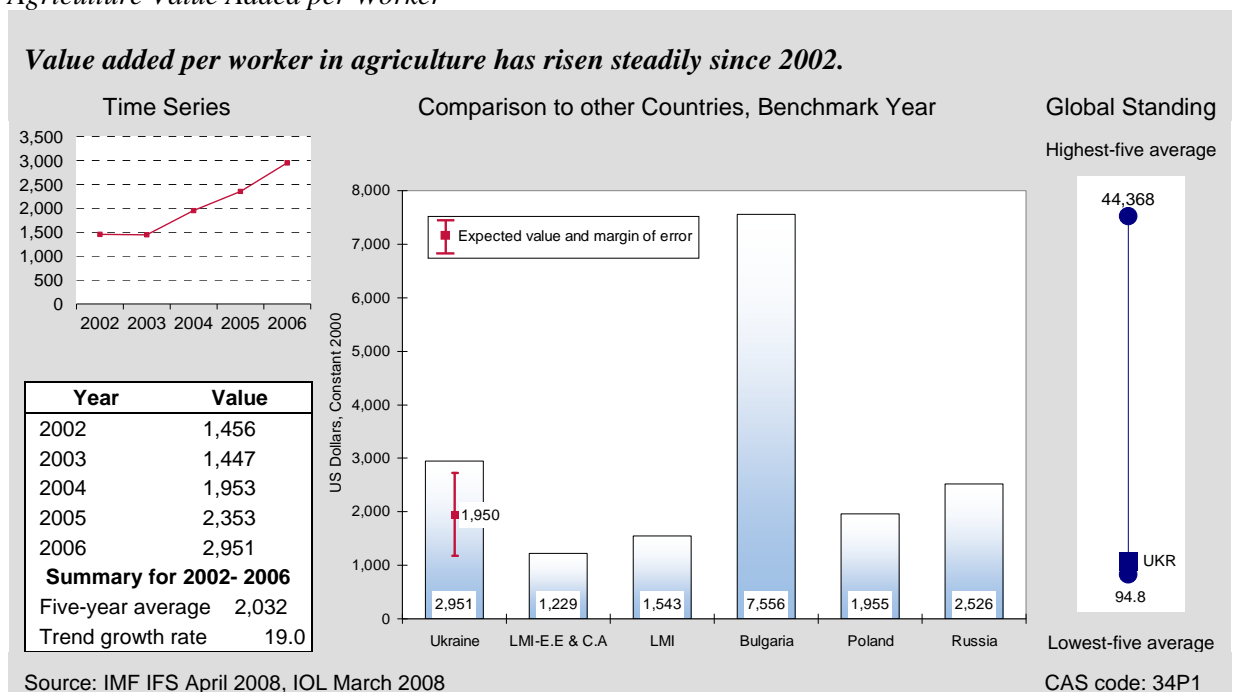
⁴³ <http://www.ukrstat.gov.ua/>. Accessed April 1, 2008.

AGRICULTURE

Historically, Ukraine was one of the breadbaskets of Europe, especially before the environmental catastrophe at Chernobyl. After independence from the Soviet Union in 1991, Ukrainian agriculture suffered a severe decline because of acute macroeconomic instability and a cut-off of farm subsidies. Since 1999, significant progress has been made on land and trade policy reform, including the privatization of large-scale state farms, which enabled the rapid growth of smaller private farms and an increase in efficiency.

This gain in efficiency is seen in the value added per agricultural worker, which nearly doubled in constant-price U.S. dollar terms between 2000 and 2006, to reach \$2,950.⁴⁴ These recent figures place Ukraine well above the regional and global LMI medians and Poland's pre-EU accession value (Figure 4-4). Value added per worker in Ukrainian agriculture is also comparable to that in Russia; however, the preaccession figure for Bulgaria was nearly three times higher. Equally important, though, labor productivity in Ukraine's agriculture sector remains far lower than in manufacturing and services (see Economic Structure).

Figure 4-4
Agriculture Value Added per Worker



The improvement in labor productivity reflects a combination of rising production and a shrinking labor force in agriculture (see Economic Structure). FAO data on livestock and crop production show moderate growth through 2004 (most recent data). Using indices defined to equal 100 for the average in 1999-2001, the livestock index reached 109.9 in 2004, while the crop

⁴⁴ World Development Indicators go only to 2004. We obtained estimates for 2005 and 2006 from national sources on value added and labor force in agriculture, converted to dollars at the average exchange rate each year. For the overlapping years, this method yields results that differ from the WDI figures by less than 10 percent on average.

index climbed to 129.0. The FAO also calculates a combined Agricultural Production index that is available through 2006. This shows an increase from 100.0 for 1999-2001 to 119.6 in 2004, followed by stagnation in 2005 and a decline to 117.1 in 2006, mainly because of weather problems.

Dollar earnings from agricultural and food exports more than doubled between 2001 and 2006, with an average growth rate of 21 percent per year. Preliminary data for 2007 indicates a further jump of 33 percent, to an estimated \$6.3 billion (based on data through November).⁴⁵ Much of this rapid growth in earnings is attributable to soaring commodity prices in world markets. Many observers consider the rise in commodity prices to reflect structural changes in the global supply-and-demand balance for agricultural products.⁴⁶ However, the rapid price surge may also involve a speculative component that could reverse sharply, depending on global economic conditions.

The World Economic Forum compiles an index of Agricultural Policy Cost, on a scale ranging from 1 (excessively burdensome) to 7 (well balanced), based on business executives' perceptions of the cost to agriculture of favorable or unfavorable government policies. Ukraine's score of 2.7 for 2007 falls short of all benchmarks, including the median for LMI EE&CA countries (3.3), the global LMI median (3.6), and 2007 scores for Poland (3.3), Russia (3.1), and Bulgaria (2.9). This result suggests that there is great scope for strengthening the market-supporting policy environment in Ukraine to spur more rapid and sustained growth in agriculture, including reduced intervention in the market and enhanced provision of infrastructure and public goods needed in the rural economy.⁴⁷ One positive sign is that in April 2008, the government lifted restrictions on grain exports. This should help increase farm incomes from the export market, improve marketing relationships for agricultural trade, and encourage private investment in agriculture.

⁴⁵ COMTRADE database.

⁴⁶ For example, see IMF Survey On-Line for April 10, 2008, at <http://www.imf.org/external/pubs/ft/survey/so/2008/NEW041008A.htm>, accessed April 16, 2008.

⁴⁷ See World Bank and the OECD, *Achieving Ukraine's Agricultural Potential*, Chapter 2 (2004), and Stephan v. Cramon and Martin Raiser (2006), *The Quotas on Grain Exports in Ukraine: ineffective, inefficient and non-transparent*, World Bank Country Office Ukraine (November, 2006).

Appendix A. CAS Methodology

CRITERIA FOR SELECTING INDICATORS

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

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

When Level I indicators suggest weak performance, we review a limited set of *diagnostic supporting indicators*. These Level II indicators provide additional details, or shed light on *why* the primary indicators may be weak. For example, if economic growth is poor, one can examine data on investment and productivity as diagnostic indicators. If a country performs poorly on educational achievement, as measured by the youth literacy rate, one can examine determinants such as expenditure on primary education, and the pupil–teacher ratio.⁴⁸

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

⁴⁸ 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 Ukraine with the median for countries in the same income group and region—in this case, lower-middle-income Eastern Europe and Central Asia.⁴⁹ For added perspective, three other comparisons are examined: (1) the global average for this income group; (2) respective values for three comparator countries approved by the Ukraine mission; and (3) the average for the five best- and five worst-performing countries globally. Most comparisons are framed in terms of values for the latest year of data from available sources. Five-year trends are also taken into account when this information sheds light on the performance assessment.⁵⁰

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.⁵¹ This approach has three advantages. First, the benchmark is customized to Ukraine specific level of income. Second, the comparison does not depend on the exact choice of reference group. Third, the methodology allows the quantification of the margin of error and establishment of a “normal band” for a country with Ukraine’s characteristics. An observed value falling outside this band on the side of poor performance signals a serious problem.⁵²

Finally, where relevant, Ukraine’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.

⁴⁹ Income groups as defined by the World Bank for 2004. The average is defined in terms of the median, because the values are not distorted by outliers.

⁵⁰ 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.

⁵¹ This is a cross-sectional OLS regression using data for all developing countries. For any indicator, Y , the regression equation takes the form: Y (or $\ln Y$, as relevant) = $a + b * \ln \text{PCI} + c * \text{Region} + \text{error}$ – where PCI is per capita income in PPP\$, and Region is a set of 0-1 dummy variables indicating the region in which each country is located. When estimates are obtained for the parameters a , b , and c , the predicted value for the Ukraine is computed by plugging in Ukraine-specific values for PCI and Region. Where applicable, the regression also controls for population size and petroleum exports (as a percentage of GDP).

⁵² 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.

STANDARD CAS INDICATORS

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

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

Indicator	Level	MDG, MCA, or EcGov ^a
Remittance receipts, % exports	I	
Trade, % GDP	I	
Trade in services, % GDP	I	
Concentration of exports	II	
Inward FDI potential index	II	
Net barter terms of trade	II	
Real effective exchange rate (REER)	II	EcGov
Structure of merchandise exports	II	
Trade policy index (0 for poor to 100 for excellent)	II	MCA, EcGov
Ease of trading across borders ranking	II	EcGov
Economic Infrastructure		
Internet users per 1,000 people	I	MDG
Overall infrastructure quality index (1 for poor to 7 for excellent)	I	EcGov
Telephone density, fixed line and mobile	I	MDG
Quality of infrastructure—railroads, ports, air transport, and electricity	II	
Roads paved, % total roads	II	
Science and Technology		
Expenditure for R&D, % GDP	I	
FDI and technology transfer index (1 for poor to 7 for excellent)	I	
Availability of scientists and engineers index (1 for poor to 7 for excellent)	I	
Science & technology journal articles per million people	I	
IPR protection index (1 for poor to 7 for excellent)	I	
Health		
HIV prevalence	I	
Life expectancy at birth	I	
Maternal mortality rate	I	MDG
Access to improved sanitation	II	MDG
Access to improved water source	II	MDG
Births attended by skilled health personnel	II	MDG
Child immunization rate	II	MCA
Prevalence of child malnutrition (weight for age)	II	
Public health expenditure, % GDP	II	MCA, EcGov
Education		
Net primary enrollment rate – female, male, total	I	MDG
Persistence in school to grade 5	I	MDG
Youth literacy rate, all, male, female	I	
Net secondary enrollment rate	I	
Gross tertiary enrollment rate	I	

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

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

^b MDG—Millennium Development Goal indicator

MCA—Millennium Challenge Account indicator

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

Appendix B. Data Supplement

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

	Growth Performance							
	Statistical Capacity Indicator	Per capita GDP, in Purchasing Power Parity Dollars	Per capita GDP, in current U.S. Dollars	Real GDP Growth	Growth of Labor Productivity	Investment Productivity, Incremental Capital-Output Ratio (ICOR)	Gross Fixed Investment, % of GDP	Gross Fixed Private Investment, % of GDP
Indicator Number	11P0	11P1	11P2	11P3	11S1	11S2	11S3	11S4
<i>Ukraine Data</i>								
Latest Year (T)	2007	2007	2007	2007	2005	2006	2007	2007
Value Year T	88	6,941	3,046	7.3	3.3	2.9	26.6	18.9
Value Year T-1	87	6,253	2,291	7.4	10.3	2.8	23.3	16.8
Value Year T-2	89	5,626	1,843	2.6	10.2	2.4	21.1	15.9
Value Year T-3	83	5,282	1,378	12.1	6.1	2.1	21.9	.
Value Year T-4	.	4,555	1,057	9.5	11.4	.	19.1	.
Average Value, 5 year	.	5,732	1,923	7.8	8.3	.	22.4	17.8
Growth Trend	.	10.1	26.3			.	7.2	8.4
<i>Benchmark Data</i>								
Regression Benchmark	.	.	.	8.1	.	.	.	.
Lower Bound	.	.	.	5.7	.	.	.	.
Upper Bound	.	.	.	10.5	.	.	.	.
<i>Data Year Bulgaria</i>								
Bulgaria Value	2004	2004	2004	2004	2004	2004	2004	2001
Bulgaria Value	77	8,240	3,166	6.6	12.5	3.5	20.5	14.6
<i>Data Year Poland</i>								
Poland Value	2007	2002	2002	2002	2002	2002	2002	2001
Poland Value	84	11,227	5,185	1.4	2.5	6.9	18.7	19.4
<i>Data Year Russia</i>								
Russia Value	2007	2007	2007	2007	2005	2006	2006	2001
Russia Value	79	13,432	8,612	7.0	6.3	2.8	17.8	16.5
LMI-EE & CA Median	81.5	7,168	2,729	7.3	5.4	3.2	24.4	.
Lower Middle Income Median	67.5	5,487	2,313	5.3	2.4	4.9	23.0	17.9
High Five Avg.	90.7	50,789	67,174	17.3	14.8	30.0	47.2	30.5
Low Five Avg.	25.1	592	162	-0.6	-4.4	-19.9	10.3	4.4

Poverty and Inequality							
Indicator Number	Human Poverty Index (0 for no deprivation to 100 for high deprivation)	Income Share, Poorest 20%	Percentage of Population Living on Less Than \$1 PPP per Day	Percentage of Population Living on Less Than \$2 PPP per Day	Poverty Headcount, National Poverty Line	PRSP Status	Population % Below Minimum Dietary Energy Consumption
	12P1	12P2	12P3a	12P3b	12P4	12P5	12S1
Ukraine Data							
<i>Latest Year (T)</i>	.	2003	2003	2003	2005	N/A	2005
Value Year T	.	9.2	2.0	4.9	7.9	.	1.9
Value Year T-1	.	.	.	.	14.0	.	4.1
Value Year T-2	.	.	.	.	18.8	.	4.8
Value Year T-3	.	.	.	.	19.5	.	3.0
Value Year T-4	.	8.8	2.9	31.4	31.7	.	.
Average Value, 5 year	.	.	.	.	18.4	.	.
Growth Trend	.	.	.	.	-31.1	.	.
Benchmark Data							
Regression Benchmark	10.7	7.4	-0.1	13.1	35.5	.	.
Lower Bound	5.1	6.6	-7.4	4.7	27.3	.	.
Upper Bound	16.3	8.3	7.1	21.4	43.7	.	.
<i>Data Year Bulgaria</i>	.	2003	2003	.	2001	.	2002
Bulgaria Value	.	8.7	2.0	.	12.8	.	9.0
<i>Data Year Poland</i>	.	2002	2002	2002	.	.	2002
Poland Value	.	7.5	2.0	2.0	.	.	2.5
<i>Data Year Russia</i>	.	2002	2002	2002	.	N/A	2002
Russia Value	.	6.1	2.0	12.1	.	.	3.0
LMI-EE & CA Median	.	.	.	.	.	.	8.5
Lower Middle Income Median	17.0	.	.	.	.	.	11.0
High Five Avg.	62.4	9.5	61.8	88.7	67.5	.	67.0
Low Five Avg.	3.7	2.2	2.0	2.0	13.6	.	2.5

Economic Structure						
	Labor Force Structure (Employment in agriculture, % total)	Labor Force Structure (Employment in industry, % total)	Labor Force Structure (Employment in services, % total)	Output structure (Agriculture, value added, % GDP)	Output structure (Industry, value added, % GDP)	Output structure (Services, etc., value added, % GDP)
Indicator Number	13P1a	13P1b	13P1c	13P2a	13P2b	13P2c
<i>Ukraine Data</i>						
<i>Latest Year (T)</i>	2006	2006	2006	2006	2006	2006
Value Year T	17.6	24.2	58.2	10.1	33.3	56.7
Value Year T-1	19.4	24.2	56.4	10.9	33.8	55.3
Value Year T-2	19.7	24.6	55.7	12.1	36.5	51.3
Value Year T-3	20.4	24.6	55.1	12.1	34.6	53.3
Value Year T-4	20.6	25.2	54.2	14.6	34.5	50.8
Average Value, 5 year	19.5	24.6	55.9	12.0	34.5	53.5
Growth Trend	-3.7	-0.9	1.7	-8.6	-1.0	2.6
<i>Benchmark Data</i>						
Regression Benchmark	25.2	22.1	50.2	12.6	29.7	56.1
Lower Bound	18.6	18.8	45.1	6.8	24.3	49.9
Upper Bound	31.8	25.3	55.3	18.4	35.2	62.2
<i>Data Year Bulgaria</i>	2004	2004	2004	2004	2004	2004
Bulgaria Value	9.7	33.1	57.1	11.0	30.3	58.7
<i>Data Year Poland</i>	2002	2002	2002	2002	2002	2002
Poland Value	19.3	28.6	52.0	4.5	28.7	66.8
<i>Data Year Russia</i>	2005	2005	2005	2005	2005	2005
Russia Value	10.2	29.8	60.0	5.6	38.0	56.4
LMI-EE & CA Median	45.7	14.8	37.7	16.6	32.6	52.8
Lower Middle Income Median	31.8	20.0	47.4	12.4	31.6	54.7
High Five Avg.	75.3	38.4	78.7	55.4	61.1	82.4
Low Five Avg.	0.8	5.8	16.6	0.5	11.8	21.8

Demography and Environment							
	Adult Literacy Rate	Youth Dependency Rate	Elderly Dependency Rate	Environmental Performance Index (1 to 100)	Population Size (Millions)	Population Growth, Annual %	Percent of Population Living in Urban Areas
Indicator Number	14P1	14P2a	14P2b	14P3	14P4a	14P4b	14P5
Ukraine Data							
<i>Latest Year (T)</i>	2006	2006	2006	2007	2007	2007	2006
Value Year T	99.4	20.8	23.6	74.1	46.6	-0.6	68.0
Value Year T-1	.	21.5	23.4	71.2	46.9	-0.8	67.8
Value Year T-2	.	22.4	23.0	.	47.3	-0.6	67.7
Value Year T-3	.	23.3	22.3	.	47.6	-0.8	67.5
Value Year T-4	.	24.2	21.6	.	48.0	-1.2	67.4
Average Value, 5 year	.	22.4	22.8	.	47.3	-0.8	67.7
Growth Trend	.	-3.8	2.3	.	-0.7		0.2
Benchmark Data							
Regression Benchmark	101.9	33.0	19.0	65.6	.	.	59.8
Lower Bound	92.8	26.4	17.0	60.5	.	.	49.8
Upper Bound	111.0	39.6	21.0	70.8	.	.	69.7
<i>Data Year Bulgaria</i>	2004	2004	2004	2007	2004	2004	2004
Bulgaria Value	98.6	20.3	24.2	78.5	7.8	-0.5	69.8
<i>Data Year Poland</i>	.	2002	2002	2007	2002	2002	2002
Poland Value	.	25.8	18.0	80.5	38.2	0.0	61.9
<i>Data Year Russia</i>	2006	2006	2006	2007	2005	2006	2006
Russia Value	99.4	21.1	19.2	83.9	143.1	-0.5	72.9
LMI-EE & CA Median	98.8	28.3	16.9	72.7	4.4	-0.2	51.9
Lower Middle Income Median	90.0	51.7	7.9	71.0	5.4	1.4	54.6
High Five Avg.	99.7	99.4	28.3	86.9	620.5	4.4	98.6
Low Five Avg.	24.7	20.1	2.7	31.8	0.1	-0.7	11.9

Gender							
Indicator Number	Girls' Primary Completion Rate	Gross Enrollment Rate, All Levels of Education, Male	Gross Enrollment Rate, All Levels of Education, Female	Life Expectancy, Male	Life Expectancy, Female	Labor Force Participation Rate, Male	Labor Force Participation Rate, Female
	15P1	15P2a	15P2b	15P3a	15P3b	15P4a	15P4b
Ukraine Data							
<i>Latest Year (T)</i>	2003	2004	2004	2005	2005	2007	2007
Value Year T	95.0	83.0	87.0	62.2	74.0	69.8	63.6
Value Year T-1	90.7	.	.	62.6	74.0	.	.
Value Year T-2	.	.	.	62.6	74.1	.	.
Value Year T-3	.	.	.	62.7	74.1	.	.
Value Year T-4	.	.	.	62.8	74.1	.	.
Average Value, 5 year	.	.	.	62.6	74.1	.	.
Growth Trend	.	.	.	-0.2	0.0	.	.
Benchmark Data							
Regression Benchmark	103.5	81.4	86.8	65.6	74.5	77.2	59.2
Lower Bound	94.2	75.3	79.8	61.9	70.5	73.6	50.9
Upper Bound	112.9	87.5	93.7	69.2	78.6	80.8	67.5
<i>Data Year Bulgaria</i>	2004	2004	2004	2004	2004	2004	2004
Bulgaria Value	97.4	81.0	81.0	69.1	75.8	65.1	52.5
<i>Data Year Poland</i>	.	2004	2004	2002	2002	2002	2002
Poland Value	.	82.0	90.0	70.4	78.8	72.7	57.8
<i>Data Year Russia</i>	.	2004	2004	2005	2005	2005	2005
Russia Value	.	84.0	92.0	58.6	72.1	79.3	65.9
LMI-EE & CA Median	95.6	70.0	74.5	65.6	74.5	77.7	64.9
Lower Middle Income Median	93.4	70.0	72.0	67.4	73.1	84.9	53.9
High Five Avg.	122.3	101.2	106.8	78.9	84.4	98.4	91.9
Low Five Avg.	20.3	28.2	21.8	39.5	40.4	66.6	19.6

Fiscal and Monetary Policy											
Indicator Number	Government Expenditure, % of GDP	Government Revenue, % of GDP	Growth in the Money Supply	Inflation Rate	Overall Budget Balance, Including Grants, % of GDP	Composition of Government Expenditure (Wages and salaries)	Composition of Government Expenditure (Goods and services)	Composition of Government Expenditure (Interest payments)	Composition of Government Expenditure (Subsidies and other current transfers)	Composition of Government Expenditure (Capital expenditure)	Composition of Government Expenditure (Other expenditure)
	21P1	21P2	21P3	21P4	21P5	21S1a	21S1b	21S1c	21S1d	21S1e	21S1f
<i>Ukraine Data</i>											
<i>Latest Year (T)</i>	2006	2006	2007	2007	2006	2006	2006	2006	2006	2006	2006
Value Year T	45.4	43.0	50.8	12.8	-2.4	19.1	17.5	1.5	51.9	9.6	0.3
Value Year T-1	43.6	41.3	34.3	9.1	-2.4	18.0	15.4	1.8	55.0	9.8	0.1
Value Year T-2	39.5	35.0	53.9	13.5	-4.4	18.8	14.4	2.4	47.9	15.2	1.3
Value Year T-3	36.8	35.9	32.6	9.0	0.3	.	.	.	.	.	.
Value Year T-4	.	26.6	46.9	5.2	-0.8	.	.	.	.	.	.
Average Value, 5 year	.	36.4	43.7	9.9	-1.9	.	.	.	.	.	.
Growth Trend	.	11.0		18.1	.	.	.	.	.	.	.
<i>Benchmark Data</i>											
Regression Benchmark	31.1	24.9	30.9	6.2	-0.5	.	.	.	.	.	.
Lower Bound	24.0	19.9	24.5	3.5	-2.8	.	.	.	.	.	.
Upper Bound	38.3	29.9	37.4	8.9	1.9	.	.	.	.	.	.
<i>Data Year Bulgaria</i>	2004	2004	2004	2004	2004	2004	2004	2004	2004	2004	2004
Bulgaria Value	36.7	37.3	24.0	6.1	1.6	16.7	22.3	4.9	44.3	10.3	2.0
<i>Data Year Poland</i>	2002	2002	2002	2002	2002	2001	2001	2001	2001	2001	.
Poland Value	44.5	31.2	-2.8	1.9	-2.7	7.9	16.0	8.0	71.6	4.4	.
<i>Data Year Russia</i>	2006	2005	2006	2007	2005	2001	2001	2001	2001	2001	.
Russia Value	31.3	30.6	40.5	8.1	9.9	11.2	37.0	10.5	43.8	8.7	.
LMI-EE & CA Median	.	26.8	34.0	8.5	-0.7	.	.	.	.	.	.
Lower Middle Income Median	.	24.0	14.9	5.2	-2.3	23.8	42.9	8.9	18.5	19.8	.
High Five Avg.	48.1	51.8	196.2	1,179.8	5.2	48.7	77.2	35.6	69.2	43.7	.
Low Five Avg.	9.8	6.9	-1.3	0.6	-11.1	4.6	16.2	0.9	2.1	2.3	.

Fiscal and Monetary Policy (cont'd)

Indicator Number	21S2a	21S2b	21S2c	21S2d	21S2e	21S2f	21S3a	21S3b	21S3c	21S3d	21S3e
<i>Ukraine Data</i>											
<i>Latest Year (T)</i>	2006	2006	2006	2006	2006	2006	2007	2007	2007	2007	2007
Value Year T	22.2	34.1	3.4	21.5	6.9	12.6	2.5	134.9	3.4	-11.9	-28.9
Value Year T-1	23.3	29.9	3.8	22.9	5.9	14.2	-1.4	149.8	3.0	-22.8	-28.6
Value Year T-2	24.3	24.6	4.2	24.0	6.3	16.6	-29.8	81.7	1.2	56.1	-9.2
Value Year T-3	15.9	22.9	5.4	36.3	0.1	19.5	-4.5	68.4	1.9	59.7	-25.5
Value Year T-4	11.8	26.5	4.2	36.2	0.2	21.1	-11.0	84.8	6.6	39.7	-20.1
Average Value, 5 year	19.5	27.6	4.2	28.2	3.9	16.8	-8.8	103.9	3.2	24.1	-22.4
Growth Trend	16.5	7.7	-7.7	-15.0	108.3	-13.4	.	17.1	-8.7	.	-8.4
<i>Benchmark Data</i>											
Regression Benchmark	.	.	.	.	.	.	.	.	.	.	.
Lower Bound	.	.	.	.	.	.	.	.	.	.	.
Upper Bound	.	.	.	.	.	.	.	.	.	.	.
<i>Data Year Bulgaria</i>	2004	2004	2004	2004	2004	2004	2004	2004	.	2004	2004
Bulgaria Value	14.9	38.7	2.0	21.3	2.7	20.4	-27.4	114.5	0.0	28.3	-15.4
<i>Data Year Poland</i>	2002	2002	2002	2002	2002	2002	2002	2002	.	2002	2002
Poland Value	15.6	35.1	1.4	34.3	0.0	13.6	-44.8	-133.5	0.0	27.2	251.1
<i>Data Year Russia</i>	2005	2005	2005	2005	2005	2005	.	.	.	.	.
Russia Value	5.7	23.6	24.2	17.7	0.0	28.7	-37.8	92.0	1.5	65.4	-21.2
LMI-EE & CA Median	6.9	37.4	7.0	27.5	1.5	14.0	.	.	.	.	.
Lower Middle Income Median	16.8	35.8	7.8	11.0	1.5	16.7	.	.	.	.	.
High Five Avg.	56.9	58.4	45.5	47.3	20.8	79.5	.	.	.	.	.
Low Five Avg.	1.7	3.2	-0.2	0.3	0.0	3.7	.	.	.	.	.

Business Environment									
Indicator Number	Control of Corruption Index (-2.5 for poor to 2.5 for excellent)	Ease of Doing Business Ranking (1 to 178)	Rule of Law Index (-2.5 for very poor to 2.5 for excellent)	Regulatory Quality Index (-2.5 for very poor to 2.5 for excellent)	Government Effectiveness Index (-2.5 for very poor to 2.5 for excellent)	Cost of Starting a Business % GNI per Capita	Procedures to Enforce a Contract	Procedures to Register Property	Procedures to Start a Business
	22P1	22P2	22P3	22P4	22P5	22S1	22S2	22S3	22S4
<i>Ukraine Data</i>									
Latest Year (T)	2006	2007	2006	2006	2006	2007	2007	2007	2007
Value Year T	-0.7	139	-0.7	-0.5	-0.6	7.8	30	10	10
Value Year T-1	-0.6	139	-0.6	-0.3	-0.4	9.2	30	10	10
Value Year T-2	-0.9	.	-0.7	-0.5	-0.6	10.6	30	10	15
Value Year T-3	-0.9	.	-0.9	-0.6	-0.6	17.6	30	10	15
Value Year T-4	-1.0	.	-0.9	-0.6	-0.7	25.6	30	.	15
Average Value, 5 year	-0.8	.	-0.7	-0.5	-0.6	14.2	30.0	.	13.0
Growth Trend	11.0	.	7.3	14.1	6.6	-30.3	0.0	.	-12.2
<i>Benchmark Data</i>									
Regression Benchmark	-0.4	72.0	-0.4	0.0	-0.2	.	.	.	.
Lower Bound	-0.6	50.7	-0.6	-0.3	-0.4	.	.	.	.
Upper Bound	-0.1	93.3	-0.1	0.3	0.1	.	.	.	.
<i>Data Year Bulgaria</i>									
Bulgaria Value	0.1	46	-0.1	0.6	0.1	10.3	40	9	11
<i>Data Year Poland</i>									
Poland Value	0.3	74	0.6	0.6	0.6	21.2	38	6	10
<i>Data Year Russia</i>									
Russia Value	-0.8	106	-0.9	-0.4	-0.4	3.7	37	6	8
LMI-EE & CA Median	-0.7	96.5	-0.7	-0.4	-0.5	11.4	38.0	7.0	10.7
Lower Middle Income Median	-0.6	103.8	-0.6	-0.4	-0.5	33.3	39.0	6.2	10.5
High Five Avg.	2.4	.	.	1.8	2.1	574.0	53.7	13.9	18.5
Low Five Avg.	-1.6	.	.	-2.3	-1.8	0.5	23.1	1.6	2.4

Business Environment (cont'd)						
Indicator Number	Time to Enforce a Contract 22S5	Time to Register Property 22S6	Time to Start a Business 22S7	Total Tax Payable by Business, % operating profit 22S8	Business Costs of Crime, Violence and Terrorism (1 for poor to 7 for excellent) 22S9	Senior Manager Time Spent Dealing with Government Regulations (%) 22S10
<i>Ukraine Data</i>						
<i>Latest Year (T)</i>	2007	2007	2007	2007	2007	2005
Value Year T	354	93	27	57.3	4.4	8.1
Value Year T-1	354	93	33	57.7	3.9	.
Value Year T-2	354	93	34	57.7	.	.
Value Year T-3	354	93	34	.	.	10.4
Value Year T-4	354	.	40	.	.	.
Average Value, 5 year	354.0	.	33.6	.	.	.
Growth Trend	0.0	.	-8.2	.	.	.
<i>Benchmark Data</i>						
Regression Benchmark	.	.	.	.	.	.
Lower Bound	.	.	.	.	.	.
Upper Bound	.	.	.	.	.	.
<i>Data Year Bulgaria</i>	2004	2004	2004	2007	2007	2005
Bulgaria Value	564	19	32	36.7	3.7	2.8
<i>Data Year Poland</i>	2007	2007	2007	2007	2007	2002
Poland Value	830	197	31	38.4	4.2	7.9
<i>Data Year Russia</i>	2007	2007	2007	2007	2007	2005
Russia Value	281	52	29	51.4	4.0	6.3
LMI-EE & CA Median	354.0	61.0	31.3	46.5	4.2	4.3
Lower Middle Income Median	562.5	49.5	42.0	41.6	3.9	9.2
High Five Avg.	1,611.6	485.8	287.7	251.2	6.6	21.3
Low Five Avg.	182.6	2.1	4.3	12.2	2.0	1.5

Financial Sector								
Indicator Number	Domestic Credit to Private Sector, % GDP	Interest Rate Spread	Money Supply (M2), % GDP	Stock Market Capitalization Rate, % GDP	Credit Information Index (0 for poor to 6 for excellent)	Legal Rights of Borrowers and Lenders (0 for poor to 10 for excellent)	Real Interest Rate	Number of Microfinance Borrowers
	23P1	23P2	23P3	23P4	23P5	23S1	23S2	23S3
<i>Ukraine Data</i>								
<i>Latest Year (T)</i>	2007	2007	2007	2006	2007	2007	2006	.
Value Year T	59.1	5.0	55.2	40.4	0.0	8.0	1.6	.
Value Year T-1	48.2	7.6	45.7	29.0	.	8.0	-6.8	.
Value Year T-2	43.8	7.6	32.8	18.2	.	8.0	2.0	.
Value Year T-3	36.4	9.6	25.5	8.6	.	6.0	8.9	.
Value Year T-4	35.4	10.9	24.9	7.4	.	.	19.2	.
Average Value, 5 year	44.6	8.1	36.8	20.7	.	.	5.0	.
Growth Trend	13.1	-18.0	21.7	46.2	.	.	.	.
<i>Benchmark Data</i>								
Regression Benchmark	26.8	8.9	30.5	20.9	2.8	.	.	.
Lower Bound	13.4	5.9	16.5	-7.1	1.5	.	.	.
Upper Bound	40.1	11.9	44.6	48.8	4.0	.	.	.
<i>Data Year Bulgaria</i>	2004	2004	2004	2004	2004	2004	2004	.
Bulgaria Value	36.3	5.8	48.4	11.4	3.0	6.0	3.6	.
<i>Data Year Poland</i>	2002	2002	2002	2002	2007	2007	2002	.
Poland Value	27.5	5.8	41.4	14.5	4.0	4.0	9.6	.
<i>Data Year Russia</i>	2006	2006	2006	2006	2007	2007	2006	.
Russia Value	30.8	6.4	32.4	133.9	4.0	3.0	-4.9	.
LMI-EE & CA Median	8.8	6.5	14.8	.	3.0	6.0	8.3	.
Lower Middle Income Median	25.9	7.3	38.3	19.0	2.8	3.7	5.9	.
High Five Avg.	198.4	36.4	194.8	241.5	6.0	9.4	35.7	.
Low Five Avg.	2.9	1.4	9.4	0.3	0.0	0.6	-35.6	.

External Sector											
	Aid, % of GNI	Current Account Balance, % GDP	Debt Service ratio, % Exports	Exports Growth, Goods and Services	Foreign Direct Investment, % GDP	Gross International Reserves, Months of Imports	Gross Private Capital Inflows, % GDP	Present Value of Debt, % GNI	Remittance Receipts, % Exports	Trade, % GDP	Trade in Services, % GDP
Indicator Number	24P1	24P2	24P3	24P4	24P5	24P6	24P7	24P8	24P9	24P10	24P11
<i>Ukraine Data</i>											
<i>Latest Year (T)</i>	2005	2007	2006	2006	2006	2006	2006	2005	2005	2007	2007
Value Year T	0.5	-8.1	5.1	-1.3	3.8	4.0	8.6	53.1	0.5	96.7	18.2
Value Year T-1	0.6	-1.5	4.9	-11.2	9.0	4.4	12.3	42.3	0.5	97.3	19.2
Value Year T-2	0.7	3.1	4.6	13.8	2.7	2.6	5.8	.	0.6	102.1	.
Value Year T-3	1.2	10.5	6.2	10.3	2.8	2.3	1.0	.	0.6	115.0	.
Value Year T-4	1.4	5.8	4.9	9.1	1.6	1.9	-2.4	.	0.4	112.9	.
Average Value, 5 year	0.8	1.9	5.1	4.1	4.0	3.0	5.1	.	0.5	104.8	.
Growth Trend	-28.5	.	-1.5	.	29.0	21.4	.	.	3.8	.	.
<i>Benchmark Data</i>											
Regression Benchmark	3.2	-7.1	12.9	13.2	5.8	3.3	.	60.1	5.9	109.5	20.7
Lower Bound	-1.7	-12.0	8.0	7.1	3.5	1.8	.	38.8	-2.8	86.9	10.4
Upper Bound	8.0	-2.1	17.8	19.3	8.1	4.7	.	81.5	14.6	132.0	31.1
<i>Data Year Bulgaria</i>	2004	2004	2004	2004	2004	2004	2004	2004	2004	2004	2004
Bulgaria Value	2.5	-6.8	9.4	13.0	10.8	6.2	11.2	82.9	7.1	124.4	29.5
<i>Data Year Poland</i>	2002	2002	2002	2002	2002	2002	2002	2005	2002	2002	2002
Poland Value	0.4	-2.5	6.3	4.8	2.1	5.3	3.6	38.7	3.0	60.7	9.7
<i>Data Year Russia</i>	2004	2006	2005	2006	2005	2006	2005	2005	2005	2006	2006
Russia Value	0.2	9.6	10.6	4.3	2.0	13.8	1.6	39.7	0.3	53.5	7.7
LMI-EE & CA Median	4.7	-5.7	4.6	14.3	4.7	3.7	3.8	35.8	5.1	110.2	20.4
Lower Middle Income Median	3.3	-2.2	7.0	7.2	3.1	3.7	3.8	42.5	14.6	92.9	20.2
High Five Avg.	49.6	15.5	38.2	43.5	87.5	16.2	197.8	364.0	102.3	307.5	90.4
Low Five Avg.	0.0	-28.2	0.7	-5.8	-5.6	0.4	-3.5	11.1	0.0	28.9	4.1

External Sector (Cont'd)											
Indicator Number	Concentration of Exports 24S1	Inward FDI Potential Index (0 for poor to 1 for excellent) 24S2	Net Barter Terms of Trade (2000 = 100) 24S3	Real Effective Exchange Rate (REER) (2000 = 100) 24S4	Structure of Merchandise Exports (Agricultural raw materials exports) 24S5a	Structure of Merchandise Exports (Fuel exports) 24S5b	Structure of Merchandise Exports (Manufactures exports) 24S5c	Structure of Merchandise Exports (Ores and metals exports) 24S5d	Structure of Merchandise Exports (Food exports) 24S5e	Trade Policy Index (0 for very poor to 100 for excellent) 24S6	Ease of Trading Across Borders Ranking 24S7
<i>Ukraine Data</i>											
Latest Year (T)	2005	2005	2005	2007	2005	2005	2005	2005	2005	2007	2007
Value Year T	30.7	0.24	105.6	112.2	1.5	9.6	69.4	6.4	12.4	72.2	120
Value Year T-1	26.5	0.22	107.1	110.7	1.6	10.3	71.0	5.6	10.4	72.2	116
Value Year T-2	23.9	0.19	102.1	105.9	1.8	11.7	67.8	5.8	11.6	71.2	.
Value Year T-3	24.0	0.16	106.1	96.1	1.8	9.0	67.3	7.7	13.1	69.4	.
Value Year T-4	25.0	0.15	99.3	98.3	1.5	7.0	69.4	9.2	10.9	69.6	.
Average Value, 5 year	26.0	0.19	104.0	104.7	1.6	9.5	69.0	6.9	11.7	70.9	.
Growth Trend	5.1	12.3	1.3	4.1	-1.9	7.6	0.5	-10.5	0.2	1.1	.
<i>Benchmark Data</i>											
Regression Benchmark	.	.	.	.	.	.	.	.	.	.	.
Lower Bound	.	.	.	.	.	.	.	.	.	.	.
Upper Bound	.	.	.	.	.	.	.	.	.	.	.
<i>Data Year Bulgaria</i>											
Bulgaria Value	20.2	0.20	105.4	119.6	2.1	8.0	62.4	12.4	10.4	58.2	89
<i>Data Year Poland</i>											
Poland Value	17.4	0.26	105.5	108.1	1.4	4.9	82.1	4.0	7.5	73.8	40
<i>Data Year Russia</i>											
Russia Value	65.9	0.36	154.6	163.4	2.8	49.0	18.9	6.8	1.6	62.6	155
LMI-EE & CA Median	.	0.17	100.4	.	3.4	8.0	61.9	6.7	8.9	67.8	118.0
Lower Middle Income Median	45.9	0.15	100.8	.	2.2	4.9	40.0	2.1	18.9	62.8	97.8
High Five Avg.	59.4	0.48	119.1	.	50.2	93.7	94.2	55.4	88.8	96.7	175.3
Low Five Avg.	0.2	0.05	77.8	.	0.0	0.0	1.2	0.0	0.2	25.8	3.0

Economic Infrastructure								
Indicator Number	Internet Users per 1,000 people	Overall Infrastructure Quality (1 for poor to 7 for excellent)	Telephone Density, Fixed Line and Mobile per 1,000 people	Quality of Infrastructure - Air Transport Infrastructure Index (1 for poor to 7 for excellent)	Quality of Infrastructure - Port Infrastructure Quality Index (1 for poor to 7 for excellent)	Quality of Infrastructure - Rail Development Index (1 for poor to 7 for excellent)	Quality of Infrastructure - Quality of Electricity Supply Index (1 for poor to 7 for excellent)	Roads, Paved (% total)
	25P1	25P2	25P3	25S1a	25S1b	25S1c	25S1d	25S2
<i>Ukraine Data</i>								
Latest Year (T)	2005	2007	2004	2007	2007	2007	2007	2004
Value Year T	96.9	3.1	545.5	3.2	3.4	4.0	3.9	97.2
Value Year T-1	79.0	3.3	368.3	3.2	3.5	4.1	3.7	96.4
Value Year T-2	52.3	.	301.4	.	.	.	.	96.8
Value Year T-3	18.7	.	264.9	.	.	.	.	96.7
Value Year T-4	12.3	.	228.5	.	.	.	.	96.7
Average Value, 5 year	51.8	.	341.7	.	.	.	.	96.8
Growth Trend	55.7	.	20.7	.	.	.	.	0.1
<i>Benchmark Data</i>								
Regression Benchmark	73.4	3.4	500.8	.	.	.	.	.
Lower Bound	26.2	3.0	285.2	.	.	.	.	.
Upper Bound	120.6	3.8	716.5	.	.	.	.	.
<i>Data Year Bulgaria</i>								
Bulgaria Value	158.6	2.7	958.3	3.5	3.6	3.2	3.9	99.0
<i>Data Year Poland</i>								
Poland Value	232.3	2.8	673.7	3.6	3.2	3.1	4.8	69.7
<i>Data Year Russia</i>								
Russia Value	152.3	3.0	1,118.7	4.2	3.7	4.1	4.3	.
LMI-EE & CA Median	41.6	2.8	287.8	3.4	2.0	2.4	3.8	.
Lower Middle Income Median	50.8	3.0	338.0	4.1	3.1	1.8	4.0	68.0
High Five Avg.	720.0	6.6	1,777.9	6.6	6.6	6.5	6.8	100.0
Low Five Avg.	1.3	1.8	13.7	2.4	1.4	1.1	1.5	2.6

Science and Technology					
	Expenditure in Research and Development, % GDP	FDI Technology Transfer Index (1 for poor to 7 for excellent)	Availability of Scientists and Engineers (1 for poor to 7 for excellent)	Scientific and Technology Journal Articles, per Million People	IPR Protection (1 for poor to 7 for excellent)
Indicator Number	26P1	26P2	26P3	26P4	26P5
<i>Ukraine Data</i>					
<i>Latest Year (T)</i>	2005	2007	2007	2003	2007
Value Year T	1.07	4.2	4.3	2,089	2.7
Value Year T-1	1.08	4.0	4.4	2,183	2.6
Value Year T-2	1.11	.	.	2,256	.
Value Year T-3	1.00	.	.	2,365	.
Value Year T-4	1.02	.	.	2,351	.
Average Value, 5 year	1.06	.	.	2,249	.
Growth Trend	1.7	.	.	-3.2	.
<i>Benchmark Data</i>					
Regression Benchmark	0.53	4.6	4.1	411	3.1
Lower Bound	0.36	4.2	3.7	371	2.8
Upper Bound	0.70	5.0	4.5	451	3.4
<i>Data Year Bulgaria</i>	2004	2007	2007	2007	2007
Bulgaria Value	0.51	4.4	4.4	829	2.8
<i>Data Year Poland</i>	2002	2007	2007	2002	2007
Poland Value	0.58	4.6	4.3	6,023	3.5
<i>Data Year Russia</i>	2004	2007	2007	2003	2007
Russia Value	1.17	4.1	4.9	15,782	2.6
LMI-EE & CA Median	0.33	4.3	4.3	127	2.6
Lower Middle Income Median	0.25	4.7	4.0	203	3.0
High Five Avg.	3.72	6.1	6.1	75,712	6.3
Low Five Avg.	0.04	3.6	2.7	0	2.0

Health									
	HIV Prevalence	Life Expectancy at Birth	Maternal Mortality Rate, per 100,000 Live Births	Access to Improved Sanitation	Access to Improved Water Source	Births Attended by Skilled Health Personnel	Child Immunization Rate	Prevalence of Child Malnutrition, Weight for Age	Public Health Expenditure, % GDP
Indicator Number	31P1	31P2	31P3	31S1	31S2	31S3	31S4	31S5	31S6
<i>Ukraine Data</i>									
Latest Year (T)	2005	2005	2004	2004	2004	2004	2005	2002	2005
Value Year T	1.4	68.0	14	96.0	96.0	99.7	96.0	1.0	4.0
Value Year T-1	.	68.2	17	.	.	99.7	99.0	.	3.8
Value Year T-2	1.3	68.2	22	.	.	99.6	98.0	3.2	3.7
Value Year T-3	.	68.3	24	.	.	.	99.0	.	3.3
Value Year T-4	.	68.3	25	.	.	.	99.0	.	3.0
Average Value, 5 year	.	68.2	20.3	.	.	.	98.2	.	3.6
Growth Trend	.	-0.1	-15.3	.	.	.	-0.6	.	6.8
<i>Benchmark Data</i>									
Regression Benchmark	1.3	70.0	-30.0	.	.	.	.	.	.
Lower Bound	-2.4	66.2	-197.0	.	.	.	.	.	.
Upper Bound	5.0	73.7	137.0	.	.	.	.	.	.
Data Year Bulgaria	2005	2004	2000	2004	2004	.	2004	.	2004
Bulgaria Value	0.1	72.4	32	99.0	99.0	.	95.0	.	4.6
Data Year Poland	2005	2002	2002	.	.	2002	2002	.	2002
Poland Value	0.1	74.5	4	.	.	99.8	98.5	.	4.5
Data Year Russia	2005	2005	2000	2004	2004	2002	2005	2000	2004
Russia Value	1.1	65.5	67	87.0	97.0	99.3	98.5	5.5	3.7
LMI-EE & CA Median	0.2	71.8	35.0	84.0	92.0	.	95.6	7.5	3.3
Lower Middle Income Median	0.2	70.7	120.0	73.0	85.0	89.8	87.5	9.5	3.0
High Five Avg.	.	81.3	1,800.0	100.0	100.0	100.0	99.0	48.2	11.2
Low Five Avg.	.	37.0	2.6	11.4	34.0	11.4	33.2	2.1	0.6

Education						
Indicator Number	Net Primary Enrollment Rate, Total	Net Primary Enrollment Rate, Female	Net Primary Enrollment Rate, Male	Persistence to Grade 5, Total	Persistence to Grade 5, Female	Persistence to Grade 5, Male
	32P1a	32P1b	32P1c	32P2a	32P2b	32P2c
<i>Ukraine Data</i>						
<i>Latest Year (T)</i>	2006	2006	2006	.	.	.
Value Year T	90.2	90.0	90.3	.	.	.
Value Year T-1	83.2	83.1	83.3	.	.	.
Value Year T-2	82.0	81.8	82.2	.	.	.
Value Year T-3	91.5	91.5	91.6	.	.	.
Value Year T-4	90.1	90.0	90.3	.	.	.
Average Value, 5 year	87.4	87.3	87.5	.	.	.
Growth Trend	-0.9	-1.0	-0.9	.	.	.
<i>Benchmark Data</i>						
Regression Benchmark	92.9	.	.	85.3	.	.
Lower Bound	85.2	.	.	77.8	.	.
Upper Bound	100.6	.	.	92.9	.	.
<i>Data Year Bulgaria</i>	2004	2004	2004	2004	2005	2004
Bulgaria Value	95.0	94.7	95.3	98.2	98.4	99.0
<i>Data Year Poland</i>	2002	2002	2002	2002	.	.
Poland Value	98.1	98.3	97.9	99.3	.	.
<i>Data Year Russia</i>	2005	2005	2005	.	.	.
Russia Value	92.5	93.0	91.9	.	.	.
LMI-EE & CA Median	89.2	88.8	91.2	.	.	.
Lower Middle Income Median	90.5	90.4	91.4	80.6	81.6	81.8
High Five Avg.	99.4	99.3	99.8	99.7	99.9	99.9
Low Five Avg.	40.6	36.5	43.5	43.2	39.6	43.6

Education (Cont'd)										
Indicator Number	Youth Literacy Rate, Total	Youth Literacy Rate, Male	Youth Literacy Rate, Female	Net Secondary Enrollment Rate, Total	Gross Tertiary Enrollment Rate, Total	Expenditure on Primary Education, % GDP	Educational Expenditure per Student, % GDP per capita, Primary	Educational Expenditure per Student, % GDP per capita, Secondary	Educational Expenditure per Student, % GDP per capita, Tertiary	Pupil-teacher Ratio, Primary School
	32P3a	32P3b	32P3c	32P4	32P5	32S1	32S2a	32S2b	32S2c	32S3
Ukraine Data										
<i>Latest Year (T)</i>	2006	2006	2006	2006	2005	2007	2005	2005	2005	2005
Value Year T	99.8	99.8	99.8	84.0	69.0	0.4	14.8	23.9	34.1	19
Value Year T-1	.	.	.	82.0	65.5	1.9	12.1	18.2	32.4	19
Value Year T-2	.	.	.	86.0	61.6	2.8	12.4	18.1	36.0	19
Value Year T-3	.	.	.	87.0	57.8	.	11.3	16.5	41.7	19
Value Year T-4	.	.	.	86.0	53.2	.	8.8	12.9	37.2	20
Average Value, 5 year	.	.	.	85.0	61.4	.	11.9	17.9	36.3	19
Growth Trend	.	.	.	-1.1	6.4	.	11.1	13.4	-4.3	-1.4
Benchmark Data										
Regression Benchmark	102.4	.	.	85.9	52.5	.	.	.	.	.
Lower Bound	94.1	.	.	77.9	45.4	.	.	.	.	.
Upper Bound	110.8	.	.	94.0	59.7	.	.	.	.	.
<i>Data Year Bulgaria</i>	2006	2006	2006	2004	2004	2007	2003	2003	2003	2004
Bulgaria Value	98.2	98.3	98.1	88.5	41.1	0.8	19.0	20.9	28.3	17
<i>Data Year Poland</i>	.	.	.	2002	2002	.	2002	2002	2002	2002
Poland Value	.	.	.	91.3	57.7	.	22.5	19.9	21.1	11
<i>Data Year Russia</i>	2006	2006	2006	.	2005	.	.	.	2004	2005
Russia Value	99.7	99.7	99.8	.	71.0	.	.	.	10.8	17
LMI-EE & CA Median	99.8	99.8	99.8	78.9	31.1	1.7	.	.	.	18.9
Lower Middle Income Median	97.3	97.8	96.5	66.7	22.3	2.1	12.9	17.2	41.0	26.5
High Five Avg.	99.9	99.9	99.9	97.0	79.4	7.1	31.0	55.0	689.4	71.2
Low Five Avg.	32.8	45.9	21.3	6.8	0.5	0.4	3.4	5.0	5.1	10.4

Employment and Workforce							
Indicator Number	Labor Force Participation Rate, Total	Rigidity of Employment Index (0 for minimum rigidity to 100 for maximum rigidity)	Size of the Labor Force	Growth of the Labor Force, Labor Force, Annual % Change	Unemployment Rate	Economically Active Children, % Children Ages 7-14	Firing Costs, Weeks of Wages
	33P1	33P2	33P3a	33P3b	33P4	33P5	33S1
<i>Ukraine Data</i>							
<i>Latest Year (T)</i>	2007	2007	2007	2007	2007	.	2007
Value Year T	71.7	45.0	20,606,200	0.3	6.9	.	13.0
Value Year T-1	71.2	45.0	20,546,000	0.3	7.4	.	13.0
Value Year T-2	70.9	45.0	20,482,000	-0.5	7.8	.	13.0
Value Year T-3	71.1	41.0	20,583,000	-0.2	9.2	.	13.0
Value Year T-4	71.4	41.0	20,618,000	-0.3	9.7	.	13.0
Average Value, 5 year	71.3	43.4	20,567,040	-0.1	8.2	.	13.0
Growth Trend	0.1	2.8	0.0		-9.0	.	0.0
<i>Benchmark Data</i>							
Regression Benchmark	68.0	37.3	.	0.0	10.4	8.3	.
Lower Bound	63.4	26.3	.	-1.5	7.9	-2.4	.
Upper Bound	72.6	48.2	.	1.5	12.9	18.9	.
<i>Data Year Bulgaria</i>	2004	2004	2004	2004	2004	.	2004
Bulgaria Value	58.6	29.0	3,155,855	-5.5	12.1	.	9.0
<i>Data Year Poland</i>	2002	2007	2002	2002	2002	.	2007
Poland Value	65.1	37.0	17,213,000	-1.1	19.9	.	13.0
<i>Data Year Russia</i>	2005	2007	2006	2006	2004	.	2007
Russia Value	72.1	44.0	73,300,000	0.1	7.9	.	17.0
LMI-EE & CA Median	70.8	38.0	2,146,904	-0.1	.	.	22.0
Lower Middle Income Median	67.7	30.5	2,762,777	2.2	10.2	.	52.0
High Five Avg.	92.4	72.6	313,014,657	6.0	29.7	70.2	226.3
Low Five Avg.	49.8	0.0	7,986	-1.0	1.7	2.8	0.0

Agriculture							
Indicator Number	Agriculture Value Added per Worker 34P1	Cereal Yield 34P2	Growth in Agricultural Value-Added 34P3	Agricultural Policy Costs Index (1 for poor to 7 for excellent) 34S1	Crop Production Index (1999-2001 = 100) 34S2	Livestock Production Index (1999-2001 = 100) 34S3	Agricultural Export Growth 34S4
Ukraine Data							
<i>Latest Year (T)</i>	2006	2005	2006	2007	2004	2004	2007
Value Year T	2,951	2,627	0.2	2.7	129.0	109.9	33.2
Value Year T-1	2,353	2,839	0.4	2.8	94.5	107.3	9.5
Value Year T-2	1,953	1,844	19.4	.	118.4	107.1	24.1
Value Year T-3	1,447	2,750	-9.9	.	116.1	99.8	27.0
Value Year T-4	1,456	2,726	.	.	99.8	98.9	14.4
Average Value, 5 year	2,032	2,557	.	.	111.6	104.6	21.6
Growth Trend	19.0	-0.4	.	.	3.1	2.8	6.3
Benchmark Data							
Regression Benchmark	1,950	2,502	6.6	.	.	.	.
Lower Bound	1,175	1,883	2.4	.	.	.	.
Upper Bound	2,725	3,120	10.9	.	.	.	.
<i>Data Year Bulgaria</i>	2004	2004	2004	2007	2004	2004	2004
Bulgaria Value	7,556	4,075	3.0	2.9	125.4	97.2	19.6
<i>Data Year Poland</i>	2002	2002	2002	2007	2002	2002	2002
Poland Value	1,955	3,241	1.0	3.3	93.7	102.0	14.2
<i>Data Year Russia</i>	2004	2005	2005	2007	2004	2004	2005
Russia Value	2,526	1,852	1.1	3.1	121.2	101.9	22.9
LMI-EE & CA Median	1,229	2,742	0.9	3.3	113.1	108.5	9.2
Lower Middle Income Median	1,543	2,282	3.5	3.6	107.4	105.7	17.7
High Five Avg.	44,368	8,430	14.8	5.1	146.2	148.4	1,079.1
Low Five Avg.	95	319	-13.9	2.6	67.5	86.1	-23.4

Technical Notes

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

STATISTICAL CAPACITY

Statistical Capacity Indicator

Source: World Bank, updated annually, at <http://web.worldbank.org/WBSITE/EXTERNAL/DATASTATISTICS/0,,contentMDK:20541648~pagePK:64133150~piPK:64133175~theSitePK:239419,00.html>

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

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

CAS Code # 01P1

GROWTH PERFORMANCE

Per capita GDP, in Purchasing Power Parity Dollars

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

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

Coverage: Data are available for about 85 USAID countries.

CAS Code #11P1

Per capita GDP, in current US Dollars

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

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

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

Coverage: Data are available for about 85 USAID countries.

CAS Code #11P2

Real GDP Growth

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

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

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

Coverage: Data are available for about 85 USAID countries.

CAS Code #11P3

Growth of Labor Productivity

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

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

Coverage: Data are available for about 85 USAID countries.

CAS Code # 11S1

Investment Productivity, Incremental Capital-Output Ratio (ICOR)

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

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

Coverage: Data are available for about 81 USAID countries.

CAS Code #11S2

Gross Fixed Investment, Percentage of GDP

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

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

Coverage: Data are available for about 84 USAID countries.

CAS Code # 11S3

Gross Fixed Private Investment, Percentage of GDP

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

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

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

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

CAS Code #11S4

POVERTY AND INEQUALITY

Human Poverty Index

Source: UNDP, Human Development Report.

<http://hdr.undp.org/statistics/data/indicators.cfm?x=18&y=1&z=1> for most recent edition; updates may be found at http://hdr.undp.org/reports/view_reports.cfm?type=1

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

Coverage: Data are available for about 60 USAID countries.

CAS Code #12P1

Income Share, Poorest 20%

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

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

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

CAS Code # 12P2

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

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

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

Definition: The indicator captures the percentage of the population living on less than \$1.08 a day at 1993 international prices.

Coverage: Data are available for about 59 USAID countries going back to 1997; data for 2000 or later are available for about 35 USAID countries.

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

CAS Code #12P3a

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

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

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

Definition: The indicator captures the percentage of the population living on less than \$2.15 a day at 1993 international prices.

Coverage: Data are available for about 59 USAID countries going back to 1997; data for 2000 or later are available for about 35 USAID countries.

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

CAS Code #12P3b

Poverty Headcount, National Poverty Line

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

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

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

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

CAS Code #12P4

PRSP Status

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

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

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

Coverage: All countries having PRSPs are so indicated.

CAS Code #12P5

Percent of Population below Minimum Dietary Energy Consumption

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

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

Coverage: Data are available for about 82 USAID countries.

CAS Code # 12S1

ECONOMIC STRUCTURE

Employment or Labor Force Structure

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

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

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

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

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

CAS Code #13P1

Output Structure

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

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

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

Coverage: Data are available for about 86 USAID countries.

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

CAS Code #13P2

DEMOGRAPHY AND ENVIRONMENT

Adult Literacy Rate

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

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

Coverage: Data are available for about 66 USAID countries.

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

CAS Code # 14P1

Youth Dependency Rate

Source: World Development Indicators, most recent publication series.

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

Coverage: Data are available for about 89 USAID countries.

CAS Code #14P2a

Elderly Dependency Rate

Source: World Development Indicators, most recent publication series.

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

Coverage: Data are available for about 89 USAID countries.

CAS Code #14P2b

Environmental Performance Index

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

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

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

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

Population Size and Growth

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

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

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

Percent of Population Living in Urban Areas

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

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

Coverage: Data are available for about 86 USAID countries.

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

CAS Code #14P5

GENDER

Girls' Primary Completion Rate

Source: World Development Indicators, most recent publication series: SE.PRM.CMPT.FE.ZS

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

Coverage: Data are available for about 80 USAID countries.

Data Quality: Completion rates are based on data collected during annual school surveys, typically conducted at the beginning of the school year. The indicator does not measure the quality of the education.

CAS Code #15P1

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

Source: UNDP Human Development Report <http://hdr.undp.org/hdr2006/statistics/indicators/225.html> and <http://hdr.undp.org/hdr2006/statistics/indicators/224.html>

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

Coverage: Data are available for about 80 USAID countries.

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

CAS Code #15P2

Life Expectancy, Male and Female

Source: Estimated from UNDP Human Development Indicators:

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

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

Coverage: Data are available for about 85 USAID countries.

CAS Code #15P3

Labor Force Participation Rate, Male and Female

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

To calculate the female labor force participation rate using WDI 2007: the numerator is the labor force, female (% of total labor force) (SL.TLF.TOTL.FE.ZS) times labor force, total (SL.TLF.TOTL.IN); the denominator is simply population ages 15–64, female (SP.POP.1564.FE.IN). Using WDI 2006, the denominator (female population, ages 15–64), can only be estimated by multiplying the total population (SP.POP.TOTL) times the percentage of the population ages 15–64 (SP.POP.1564.IN.ZS) times the percentage of females in the total population (SP.POP.TOTL.FE.ZS).

To calculate the male labor force participation rate using WDI 2004: the numerator is calculated by subtracting the female labor force, derived above, from the total labor force (SL.TLF.TOTL.IN). The denominator is population ages 15–64, male (SP.POP.1564.MA.IN). Using WDI 2006 and subsequent years, the denominator is an estimate of the male population, ages 15–64, calculated as the total population (SP.POP.TOTL) times the percentage ages 15–64 (SP.POP.1564.IN.ZS) times the percentage of males in the total population, where the final factor is computed as 100 minus the percentage of females in the total population (SP.POP.TOTL.FE.ZS).

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

Coverage: Data are available for about 88 USAID countries.

CAS Code #15P4

FISCAL AND MONETARY POLICY

In the World Development Indicators for 2005, the World Bank has adopted a new system for government budget statistics, switching from data based on cash outlays and receipts to a system with revenues booked on receipt and expenses booked on accrual, in accordance with the IMF's *Government Financial Statistics Manual, 2001*. On the revenue side, the changes are minor, and comparisons to the old system may still be valid. There is a major change, however, in the reporting of capital outlays, which are now treated as balance sheet entries; only the annual capital consumption allowance (depreciation) is reported as an expense. Hence, the data on total *expense* is not comparable

to the former data on total *expenditure*. In addition, WDI 2005 now provides data on the government's cash surplus/deficit; this differs from the previous concept of the overall budget balance by excluding net lending minus repayments (which are now a financing item under net acquisition of financial assets). Many countries do not use the new GFS system, so country coverage of fiscal data in WDI 2005 is limited. For these reasons, the template will continue to use some data from WDI 2004, along with new data from WDI 2005 and subsequent WDI series, as appropriate.

Government Expenditure, Percentage of GDP

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

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

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

CAS Code # 21P1

Government Revenue, excluding grants, Percentage of GDP

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

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

Gaps: Data missing for about 24 USAID countries.

CAS Code # 21P2

Growth in Broad Money Supply

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

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

Coverage: Data are available for about 81 USAID countries.

CAS Code #21P3

Inflation Rate

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

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

Coverage: Data are available for about 85 USAID countries.

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

CAS Code # 21P4

Overall Budget Balance, Including Grants, Percentage of GDP

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

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

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

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

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

CAS Code # 21P5

Composition of Government Expenditure

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

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

Coverage: Data are available for the majority of USAID countries. As explained at the beginning of this section, WDI stopped reporting government *expenditures* in 2005. The template will include this variable when the required data can be obtained from IMF Article IV consultation report or national data sources for the target country and the comparison countries. *Data Quality:* Many countries report their revenue in noncomparable categories. Budget data are compiled by fiscal year. If the fiscal year differs from the calendar year, ratios to GDP may be calculated by interpolating budget data from two adjacent fiscal years.

CAS Code # 21S1

Composition of Government Revenue

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

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

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

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

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

CAS Code # 21S2

Composition of Money Supply Growth

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

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

Coverage: Data are available for about 86 USAID countries.

CAS Code # 21S3

BUSINESS ENVIRONMENT

Control of Corruption Index

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

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

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

Coverage: Data are available for nearly all USAID countries.

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

CAS Code # 22P1

Ease of Doing Business Index

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

Definition: The Ease of Doing Business index ranks economies from 1 to 178. The index is calculated as the ranking on the simple average of country percentile rankings on each of the 10 topics covered in Doing Business in 2007: starting a business, dealing with licenses, hiring and firing, registering property, getting credit, protecting investors, paying taxes, trading across borders, enforcing contracts, and closing a business.

Coverage: Data are available for nearly all USAID countries.

CAS Code # 22P2

Rule of Law Index

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

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

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

Coverage: Data are available for nearly all USAID countries.

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

CAS Code #22P3

Regulatory Quality Index

Source: World Bank Institute;

<http://www.govindicators.org>

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

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

Gaps: Data are available for nearly all USAID countries.

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

CAS Code #22P4

Government Effectiveness Index

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

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

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

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

Cost of Starting a Business

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

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

Coverage: Data are available for nearly all USAID countries.
CAS Code #22S1

Procedures to Enforce a Contract

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

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

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

Procedures to Register Property

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

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

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

Procedures to Start a Business

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

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

Coverage: Data are available for nearly all USAID countries.
CAS Code # 22S4

Time to Enforce a Contract

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

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

Coverage: Data are available for nearly all USAID countries.
CAS Code # 22S5

Time to Register Property

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

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

Coverage: Data are available for nearly all USAID countries.
CAS Code #22S6

Time to Start a Business

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

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

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

Total Tax Payable by Business

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

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

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

Business Costs of Crime, Violence and Terrorism Index

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

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

Coverage: Data are available for about 52 USAID countries.

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

CAS Code #22S9

Senior Manager Time Spent Dealing with Government Regulations

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

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

Coverage: Data available for about 80 USAID countries.

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

CAS Code #22S10

FINANCIAL SECTOR

Domestic Credit to Private Sector, Percentage of GDP

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

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

Coverage: Data are available for about 82 USAID countries.

CAS Code # 23P1

Interest Rate Spread

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

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

Coverage: Data are available for about 66 USAID countries.

CAS Code # 23P2

Money Supply, Percentage of GDP

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

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

Coverage: Data are available for about 81 USAID countries.

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

CAS Code # 23P3

Stock Market Capitalization Rate, Percentage of GDP

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

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

Coverage: Data are available for about 54 USAID countries.

CAS Code # 23P4

Credit Information Index

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

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

Coverage: Data are available for nearly all USAID countries.

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

CAS Code # 23P5

Legal Rights of Borrowers and Lenders Index

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

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

Coverage: Data are available for nearly all USAID countries.

CAS Code # 23S1

Real Interest Rate

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

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

Coverage: Data are available for about 68 USAID countries.

CAS Code # 23S2

Number of Active Microfinance Borrowers

Source: The Mix Market.

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

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

Coverage: Data are available for about 68 USAID countries.

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

CAS Code # 2353

EXTERNAL SECTOR

Aid, Percentage of GNI

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

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

Coverage: Data are available for about 84 USAID countries.

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

CAS Code #24P1

Current Account Balance, Percentage of GDP

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

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

Coverage: Data are available for about 79 USAID countries.

CAS Code # 24P2

Debt Service ratio

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

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

Definition: Total debt service is the sum of principal repayments and interest actually paid in foreign currency, goods, or services on long-term debt, interest paid on short-term debt and repayments (repurchases and charges) to the IMF. Debt is considered as a percent of exports of goods and services, which includes income and workers' remittances.

Coverage: Data are available for about 77 USAID countries.

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

CAS Code # 24P3

Exports Growth, Goods and Services

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

www.imf.org/external/np/sec/aiv/index.htm. Benchmarking data from World Development Indicators, most recent

publication, series NE.EXP.GNFS.KD.ZG, based on World Bank national accounts data, and OECD National Accounts data files.

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

Coverage: Data are available for about 81 USAID countries.

CAS Code # 24P4

Foreign Direct Investment, Percentage of GDP

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

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

Coverage: Data are available for about 82 USAID countries.

CAS Code #24P5

Gross International Reserves, Months of Imports

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

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

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

Coverage: Data are available for about 77 USAID countries.

CAS Code # 24P6

Gross Private Capital Inflows, Percentage of GDP

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

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

Coverage: Information on coverage is not easily accessible.

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

CAS Code #24P7

Present Value of Debt, Percentage of GNI

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

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

Coverage: Data are available for about 80 USAID countries.

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

CAS Code # 24P8

Remittances Receipts, Percentage of Exports

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

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

Coverage: Data are available for about 74 USAID countries.

CAS Code # 24P9

Trade, Percentage of GDP

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

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

Coverage: Data available for about 84 USAID countries.

CAS Code # 24P10

Trade in Services, Percentage of GDP

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

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

Coverage: Data available for about 80 USAID countries.

CAS Code # 24P11

Concentration of Exports

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

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

Coverage: Available for about 74 USAID countries.

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

CAS Code # 24S1

Inward FDI Potential Index

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

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

Coverage: Data are available for about 77 USAID countries.

CAS Code # 24S2

Net Barter Terms of Trade

Source: World Development Indicators, most recent publication, series TT.PR1.MRCH.XD.WD

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

Coverage: Data are available for about 51 USAID countries.

CAS Code # 24S3

Real Effective Exchange Rate (REER)

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

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

Coverage: Information on coverage is not easily accessible.

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

CAS Code # 24S4

Structure of Merchandise Exports

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

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

Coverage: Data are available for about 78 USAID countries.

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

CAS Code # 24S5

Trade Policy Index

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

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

Coverage: Data are available for about 83 USAID countries.

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

CAS Code # 24S6

Ease of Trading Across Borders Ranking

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

Definitions: The 178 economies covered by the Doing Business report are ranked on the ease with which one may import into and export out of the economy. The ranking is based on a simple average of the economy's ranking on each of the composite indicators for Trading Across Borders: number of documents to import and export, cost to import and export, and time to import and export.

Coverage: Data are available for nearly all USAID countries.

CAS Code # 24S7

ECONOMIC INFRASTRUCTURE

Internet Users per 1,000 people

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

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

Coverage: Data are available for about 88 USAID countries.

CAS Code # 25P1

Overall Infrastructure Quality Index

Source: Global Competitiveness Report 2006–2007, World Economic Forum. The indicator can be found in the Data Tables, Section V. General Infrastructure; 5.01.

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

Coverage: Data are available for about 52 USAID countries.

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

CAS Code # 25P2

Telephone Density, Fixed Line and Mobile

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

Definition: The indicator is the sum of subscribers to telephone mainlines and mobile phones per 1,000 people. Fixed lines represent telephone mainlines connected to the public switched telephone network. Mobile phone subscribers refer to users of cellular-based technology with access to the public switched telephone network.

Coverage: Data are available for about 88 USAID countries.

CAS Code #25P3

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

Source: Global Competitiveness Report 2006-2007, World Economic Forum. The indicators can be found in the Data Tables, Section V. General Infrastructure; 5.02, 5.03, 5.04, and 5.05 for Railroad, Port; Air Transport, and Electricity, respectively.

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

Coverage: Data are available for about 52 USAID countries.

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

CAS Code #25S1

Roads, paved (% total)

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

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

Coverage: Data are available for nearly all USAID countries.

CAS Code #25S2

SCIENCE AND TECHNOLOGY

Expenditure in Research and Development, Percentage of GDP

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

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

Coverage: Data are available for about 26 USAID countries.

CAS Code #26P1

FDI Technology Transfer Index

Source: Global Competitiveness Report 2006-2007, World Economic Forum. The indicator can be found in the Data Tables, Section III. Technology: Innovation and Diffusion; 3.04.

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

Coverage: Data are available for about 52 USAID countries.

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

CAS Code # 26P2

Availability of Scientists and Engineers Index

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

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

Coverage: Data are available for about 52 USAID countries.

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

CAS Code #26P3

Science and Technology Journal Articles, per Million People

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

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

Coverage: Data are available for about 82 USAID countries.

CAS Code #26P4

IPR Protection Index

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

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

Coverage: Data are available for about 52 USAID countries.

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

CAS Code #26P5

HEALTH

HIV Prevalence

Source: UNAIDS for most recent country data:

http://data.unaids.org/pub/GlobalReport/2006/2006_GR_AN

[N2_en.pdf](#). World Development Indicators, most recent publication for benchmark data, series SH.DYN.AIDS.ZS.

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

Coverage: Data are available for about 79 USAID countries.

Data Quality: UNAIDS/WHO estimates are based on all available data, including surveys of pregnant women, population-based surveys, household surveys conducted by Kenya, Mali, Zambia, and Zimbabwe, and other surveillance information.

CAS Code # 31P1

Life Expectancy at Birth

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

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

Coverage: Data are available for about 88 USAID countries.

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

CAS Code # 31P2

Maternal Mortality Rate

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

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

Coverage: Data are available for about 87 USAID countries.

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

CAS Code # 31P3

Access to Improved Sanitation

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

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

Coverage: Data are available for about 82 USAID countries.

CAS Code #31S1

Access to Improved Water Source

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

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

Coverage: Data are available for about 83 USAID countries.

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

CAS Code # 31S2

Births Attended by Skilled Health Personnel

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

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

Coverage: Data are available for about 62 USAID countries.

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

CAS Code # 31S3

Child Immunization Rate

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

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

Coverage: Data are available for about 88 USAID countries.

CAS Code #31S4

Prevalence of Child Malnutrition—Weight for Age

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

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

Coverage: Data are available for about 55 USAID countries.

CAS Code # 31S5

Public Health Expenditure, Percentage of GDP

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

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

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

Coverage: Data are available for about 88 USAID countries.

CAS Code #31S6

EDUCATION

Net Primary Enrollment Rate—Female, Male and Total

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

Definition: The indicator measures the proportion of the population of the official age for primary, secondary, or tertiary education according to national regulations who are

enrolled in primary schools. Primary education provides children with basic reading, writing, and mathematics skills along with an elementary understanding of such subjects as history, geography, natural science, social science, art, and music.

Coverage: Data are available for about 80 USAID countries.

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

CAS Code # 32P1

Persistence to Grade 5—Female, Male, and Total

Source: World Development Indicators, most recent publication series SE.PRM.PRS5.FE.ZS (female); SE.PRM.PRS5.MA.ZS (male); and SE.PRM.PRS5.ZS (total).

Definition: The indicator is an estimate of the proportion of the population entering primary school who reach grade 5, for female, male, and total students.

Coverage: Data are available for about 48 USAID countries.

CAS Code # 32P2

Youth Literacy Rate—Female, Male, and Total

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

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

Coverage: Data are available for about 67 USAID countries.

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

CAS Code #32P3

Net Secondary Enrollment Rate, Total

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

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

Coverage: Not available for draft.

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

CAS Code #32P4

Gross Tertiary Enrollment Rate, Total

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

Definitions: Gross enrollment ratio is the ratio of total enrollment, regardless of age, to the population of the age

group that officially corresponds to the level of education shown. Tertiary education, whether or not to an advanced research qualification, normally requires, as a minimum condition of admission, the successful completion of education at the secondary level.

Coverage: Not available for draft.

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

CAS Code #32P5

Expenditure on Primary Education, Percentage of GDP

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

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

Coverage: Data are available for about 58 USAID countries.

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

CAS Code #32S1

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

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

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

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

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

CAS Code # 32S2

Pupil-teacher Ratio, Primary School

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

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

Coverage: Data are available for about 76 USAID countries.

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

CAS Code # 32S3

EMPLOYMENT AND WORKFORCE

Labor Force Participation Rate

Source: Derived from World Development Indicators, but the precise computation differs depending on whether a particular country study uses the 2004 or 2005 and years subsequent WDI.

To calculate the *total* labor force participation rate using WDI 2004: the numerator is Labor force, total (SL.TLF.TOTL.IN), and the denominator is Population ages 15-64, total (SP.POP.1564.TO). Using WDI 2005 and subsequent years, the denominator is calculated as the total population (SP.POP.TOTL) times the percentage of the population in the age group 15-64 (SP.POP.1564.IN.ZS).

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

Coverage: Data are available for about 88 USAID countries.

CAS Code #33P1

Rigidity of Employment Index

Source: World Bank, Doing Business in 2007, Employing workers category:

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

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

Coverage: Data are available for nearly all USAID countries.

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

CAS Code # 33P2

Size and Growth of the Labor Force

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

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

Coverage: Data are available for about 88 USAID countries.

CAS Code #33P3

Unemployment Rate

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

Definition: The unemployment rate refers to the share of the labor force that is without work but available for and seeking employment. For this purpose, informal sector workers and

own-account workers (including subsistence farmers) are counted as employed.

Coverage: Data are available for about 50 USAID countries.

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

CAS Code # 33P4

Economically Active Children, Percentage Children Ages 7-14

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

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

CAS Code # 33P5

Firing Costs, Weeks of Wages

Source: World Bank, Doing Business, Employing Workers

Category: <http://www.doingbusiness.org/MethodologySurveys/EmployingWorkers.aspx>.

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

Coverage: Data available for nearly all USAID countries.

CAS Code # 33S1

AGRICULTURE

Agriculture Value Added per Worker

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

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

Coverage: Data are available for about 80 USAID countries.

CAS Code # 34P1

Cereal Yield

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

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

Coverage: Data are available for about 84 USAID countries.

Data Quality: Data on cereal yield may be affected by a variety of reporting and timing differences. The FAO allocates production data to the calendar year in which the bulk of the harvest took place. But most of a crop harvested near the end of a year will be used in the following year. Cereal crops harvested for hay or harvested green for food,

feed, or silage, and those used for grazing, are generally excluded. But millet and sorghum, which are grown as feed for livestock and poultry in Europe and North America, are used as food in Africa, Asia, and countries of the former Soviet Union. So some cereal crops are excluded from the data for some countries and included elsewhere, depending on their use.

CAS Code # 34P2

Growth in Agricultural Value-Added

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

www.imf.org/external/np/sec/aiv/index.htm. The benchmarking data are from World Development Indicators, most recent publication series NV.AGR.TOTL.KD.ZG

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

Coverage: Data are available for about 84 USAID countries.

CAS Code # 34P3

Agricultural Policy Costs Index

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

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

Coverage: Data are available for about 52 USAID countries.

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

CAS Code # 34S1

Crop Production Index

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

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

Coverage: Data are available for about 85 USAID countries.

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

produced. The use of international prices eliminates fluctuations in the value of output due to transitory movements of nominal exchange rates unrelated to the purchasing power of the domestic currency.

Coverage: Data are available for about 85 USAID countries.

CAS Code # 34S2

Livestock Production Index

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

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

Coverage: Data are available for about 85 USAID countries.

Data Quality: See comments on the Crop Production Index.

CAS Code # 34S3

Agriculture Export Growth

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

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

Coverage: Not available for draft.

CAS Code # 34S4