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# Kazakhstan

## ECONOMIC PERFORMANCE ASSESSMENT



**November 2005**

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



# **Kazakhstan**

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

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

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## HIGHLIGHTS OF KAZAKHSTAN'S PERFORMANCE

Economic Growth	Kazakhstan's growth has been strong in recent years, stimulated in large part by the oil sector. Real GDP growth averaged 10.4 percent from 2000-2004, a major improvement from negative and sluggish growth in the 1990s.
Poverty	Kazakhstan has made substantial progress in reducing poverty as poverty rates, as defined by the national poverty line, have fallen by half in the past five years. Further progress is necessary.
Economic Structure	The extraction and processing of raw materials, especially oil, are the lead sector in the economy in terms of output, while one-third of employment is in agriculture. Developing manufacturing is a key to future development.
Demography and Environment	After a period of decline, the Kazakh population has grown in the past several years. The Kazakh population is relatively young.
Gender	Kazakhstan does well on indicators of gender equity.
Fiscal and Monetary Policy	Fiscal policy is sound, as demonstrated by a budget surplus. Inflation is moderate, but needs to be closely monitored in light of large increases planned in government spending and rapid money supply growth.
Business Environment	Corruption in Kazakhstan is widespread and serves as an impediment to doing business. The pace of structural reforms has slowed, making Kazakhstan less attractive than other transition economies as a place to conduct business.
Financial Sector	Kazakhstan's banking system is relatively well developed, with high monetization rates and low interest rate spreads. Rapid credit expansion needs to be accompanied by improved financial market regulation and supervision.
External Sector	Kazakhstan's performance on the trade and investment components of the external sector is good, primarily because of oil exports and oil-related investments. At the same time, the country's heavy reliance on oil revenues leaves it vulnerable to a downturn in world oil prices; export diversification is desirable.
Economic Infrastructure	Infrastructure appears to be generally better developed in Kazakhstan than in the peer countries. At the same time, despite substantial progress, Kazakhstan lags far behind its peer countries in terms of communications sector development, and it needs to improve transportation, ports, and pipelines.
Health	Performance on life expectancy and other health indicators is poor, especially the life expectancy of men. Current government health expenditures are not sufficient to combat persistent problems.
Education	Kazakhstan's performance on education indicators is good. To sustain this performance, government education expenditures may need to rise.
Employment and Workforce	The high unemployment rate has been declining. The pace of decline is slower than would be expected for a country experiencing double-digit growth rates, however. Diversification into more labor-intensive sectors is needed.
Agriculture	Kazakh agriculture is a troubled sector, suffering from low productivity.

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

## KAZAKHSTAN: NOTABLE STRENGTHS AND WEAKNESSES— SELECTED INDICATORS<sup>a</sup>

Indicator, by Topic	Notable Strength	Notable Weakness
<b>Growth Performance</b>		
Growth of labor productivity (%)	X	
Real GDP growth (%)	X	
<b>Poverty and Inequality</b>		
Poverty headcount (%) by national poverty line	X	
<b>Demography and Environment</b>		
Adult literacy rate (%)	X	
<b>Fiscal and Monetary Policy</b>		
Government budget balance (% of GDP)	X	
Inflation (%)	X	
Money supply growth (%)		X
<b>Business Environment</b>		
Corruption perception index		X
Regulatory quality index		X
Rule of law index		X
<b>Financial Sector</b>		
Domestic credit to private sector (% of GDP)	X	
Interest rate spread (% , deposit minus lending rate)	X	
Monetization (M2 as a % of GDP)	X	
<b>External Sector</b>		
Concentration of exports (top three exports, 3-digit SITC, % exports)		X
Debt service ratio (% exports)		X
Exports growth, goods and services (%)	X	
Foreign direct investment (% GDP)	X	
Gross international reserves (months of imports)	X	
<b>Economic Infrastructure</b>		
Internet users (per 1,000 people)		X
Telephone density (lines per 1,000 people)		X

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

Indicator, by Topic	Notable Strength	Notable Weakness
<b>Health</b>		
Child immunization rate (%)	X	
Life expectancy (years)		X
Maternal mortality rate (deaths per 100,000)		X
Public health expenditure (% of GDP)		X
<b>Education</b>		
Expenditure per student, tertiary (% of per capita GDP )		X
Youth literacy rate ( % )	X	
<b>Employment and Workforce</b>		
Rigidity of employment index	X	
<b>Agriculture</b>		
Agriculture value added per worker (1995 USD)		X
Cereal yield (kilograms per hectare)		X



# 1. Introduction

This paper is one of a series of Economic Performance Assessments prepared for the EGAT Bureau to provide USAID missions and regional bureaus with a concise evaluation of a broad range of indicators relating to economic growth performance in designated host countries. The report draws on a variety of international data sources<sup>1</sup> and uses international benchmarking against reference group averages and comparator countries (Bulgaria, Romania, and Russia) to identify major constraints, trends, and opportunities for strengthening growth and reducing poverty.

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

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

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

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

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

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

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

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

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

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

Table 1-1  
*Topic Coverage*

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

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

## 2. Overview of the Economy

This section reviews basic information on Kazakhstan's macroeconomic performance, poverty and inequality, economic structure, demographic and environmental conditions, and indicators of gender equity.<sup>1</sup> Some of the indicators cited here are descriptive rather than analytical, and are included to provide context for the performance analysis.

### **GROWTH PERFORMANCE**

Kazakh growth performance in the past several years has been impressive. After several years of sharp contraction before and after the country's independence in 1991 and sluggish expansion in the late 1990s, Kazakh economic growth averaged 10.4 percent in the period 2000–2004. Oil exports, with world prices rising and total oil production increasing, have driven growth. Oil production has risen at an average of 15 percent annually between 2000 and 2004, thanks largely to significant foreign investment. As a result, Kazakhstan's oil exports rose from 524,000 barrels per day (bpd) in 2000 to 997,000 bpd in 2004.<sup>2</sup> This exceeded the range predicted by the GDP growth regression (Figure 2-1, Real GDP Growth). At the same time, though, high economic growth rates were not unusual for low middle income former Soviet republics (LMI-FSR). For example, in the 2000–2004 period, the economies of Armenia and Azerbaijan expanded at roughly the same pace, with Azerbaijan also having oil as its number one export.

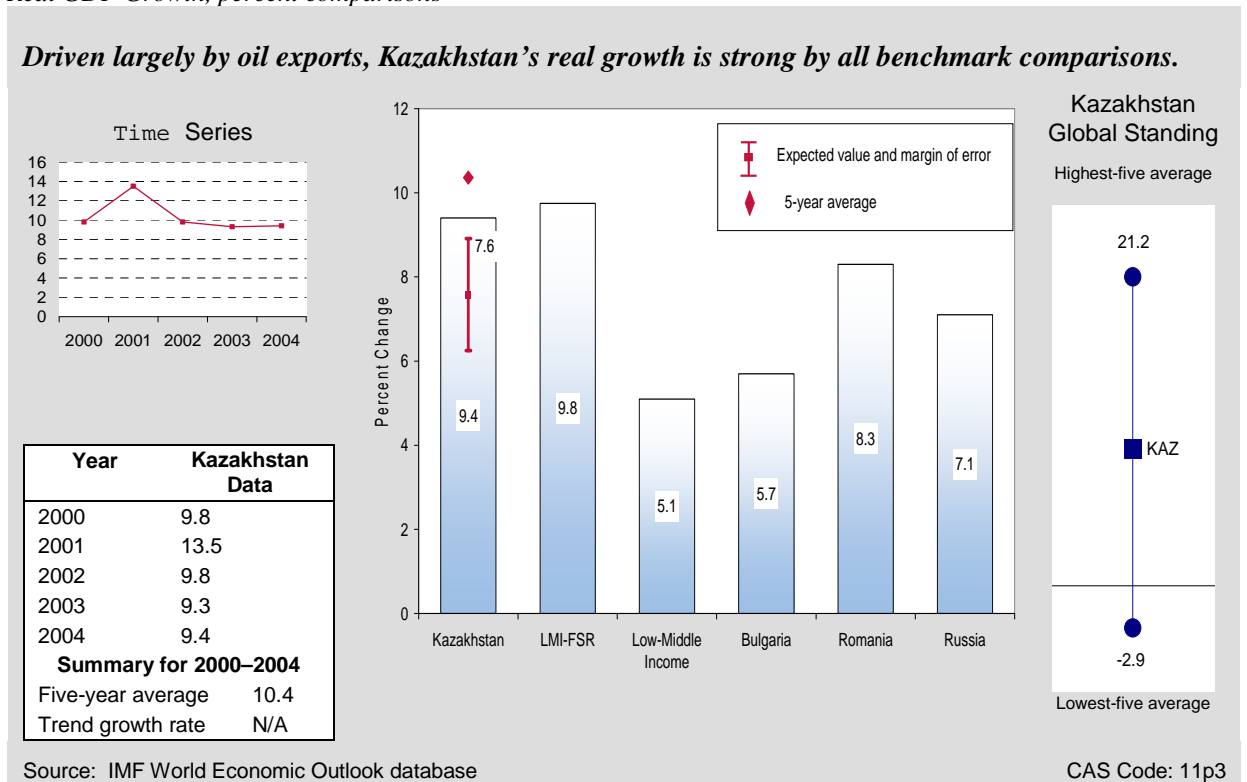
Measured in current U.S. dollars, per capita GDP more than doubled from 2000 through 2004, reaching \$2,715. Kazakhstan exceeds the averages in the low middle-income (LMI) countries (\$1,917), and the LMI-FSR (\$2,130). Kazakhstan also outperforms these comparator groups when GDP per capita is measured in PPP terms. Kazakhstan's per capita GDP in PPP terms stood at \$7,418 in 2004, compared to an average of \$6,910 in the LMI-FSR and \$5,573 in LMI countries. At the same time, Kazakh per capita GDP measured in current dollars remains substantially below the levels found in Bulgaria (\$3,074), Romania (\$3,207), and Russia (\$4,093), and this is true when measured in PPP terms as well.

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<sup>1</sup> The Data Supplement provides a full tabulation of the data for Kazakhstan and the international benchmarks, including indicators not discussed in the text, as well as technical notes for each indicator.

<sup>2</sup> Data are from the U.S. Department of Energy's Energy Information Administration. See <http://www.eia.doe.gov/emeu/cabs/kazak.html#oil>.

Figure 2-1  
Real GDP Growth, percent comparisons

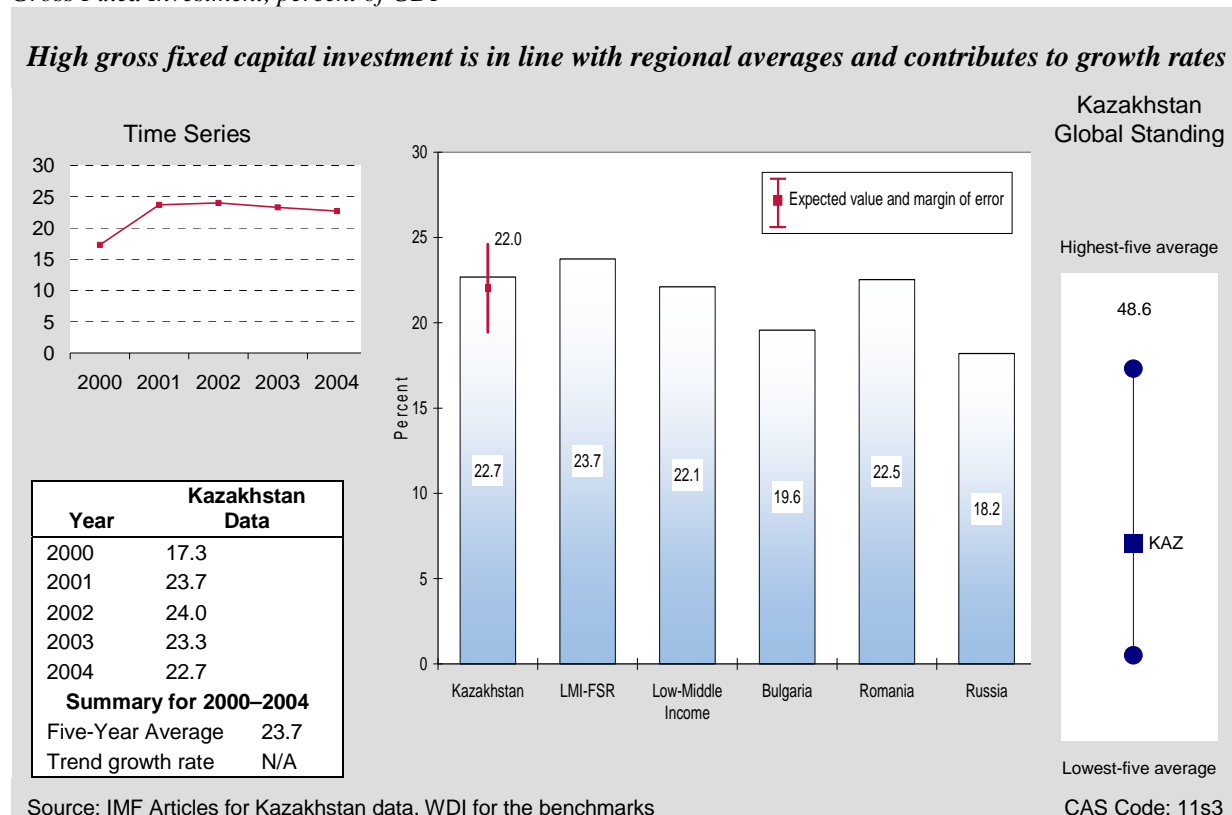


Economic growth in Kazakhstan benefited from a virtuous circle in which rising employment increased domestic demand, which helped lower unemployment further. However, in terms of basic growth, most of the contribution to growth came from increased labor productivity. Labor productivity averaged 8.7 percent in 2000–2004. Although this figure was below the rate of 9.8 percent found in the LMI-FSR countries, it is still high and far exceeded labor productivity growth in the LMI countries (2.1 percent), Bulgaria (4.7 percent), Romania (4.7 percent), and Russia (7.4 percent). In a way consistent with high labor productivity growth, fixed capital investment averaged 22.2 percent of GDP in the 2000–2004 period, though private investment was more volatile (Figure 2-2, Gross Fixed Investment). Although this performance is reasonable, it was not as good as the LMI-FSR average (23.7 percent). Labor productivity growth in Kazakhstan possibly benefited from improved capacity utilization, a trend observed in many transition countries.

The main challenge for Kazakhstan's economy is to maintain strong growth while diversifying and relying less extensively on crude oil exports. Oil production is not generally labor intensive, and in a country with high unemployment and a substantial share of employment in low-productivity agriculture, labor-intensive manufacturing should be promoted, and employment thereby created.



Figure 2-2  
Gross Fixed Investment, percent of GDP



## POVERTY AND INEQUALITY

Kazakhstan’s poverty indicators are mixed. On the positive side, the poverty headcount according to the national poverty line has dropped rapidly in recent years, falling from 31.8 percent in 2000 to just 16.1 percent in 2004.<sup>3</sup> The poverty headcount is well below the regression benchmark of 34.4 percent for a country with Kazakhstan’s characteristics. Although cross-country comparisons must be made with caution because national definitions of poverty vary widely, Kazakhstan’s performance was in line with those of Russia (17.8 percent) and Bulgaria (12.8 percent) and well below those of the LMI-FSR countries and Bulgaria, at 50.0 percent and 29.6 percent, respectively.

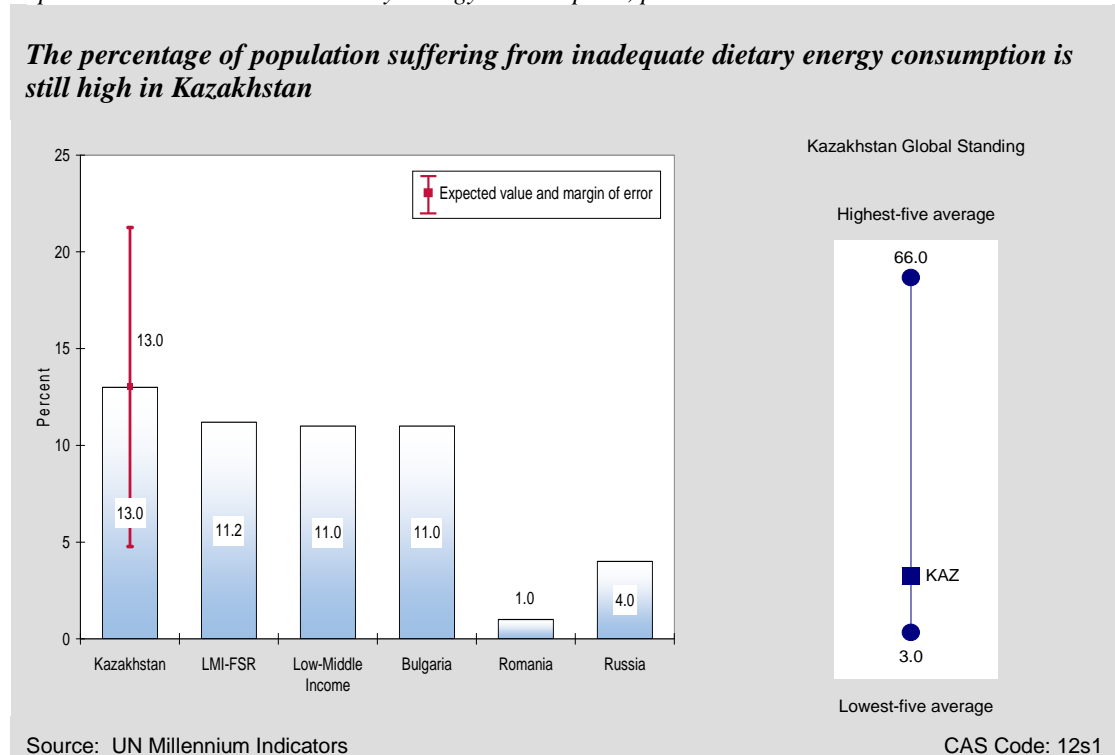
Kazakhstan also performed well in terms of share of the population living on less than \$1 PPP per day in absolute terms, with only 2 percent of the population at this level. This is generally comparable to the level found in other LMI-FSR countries (2.7 percent), Romania (2.0 percent), and Russia (2.0 percent). It was less than half the level found in Bulgaria, at 4.7 percent, or the average for LMI countries, at 4.2 percent.

Despite this good performance, more needs to be done to reduce poverty in Kazakhstan. For example, 13.0 percent of the population does not meet minimum dietary requirements

<sup>3</sup> Figures are based on subsistence-minimum definition.

(Figure 2-3, Population below Minimum Dietary Consumption). Kazakhstan's rate is slightly worse than the average for the LMI-FSR countries and the rate of Bulgaria, but it is much worse than Romania's and Russia's rates. Furthermore, more than a quarter of the population still lives in crowded conditions and rural poverty is nearly double the urban rate. Regional disparities are also significant—in 2002 poverty ranged from 2 percent in some oblasts to 32 percent in others.<sup>4</sup> Donor support and technical assistance in drafting a Poverty Reduction Strategy Paper (PRSP) would be a good first step in reducing poverty throughout Kazakhstan.

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



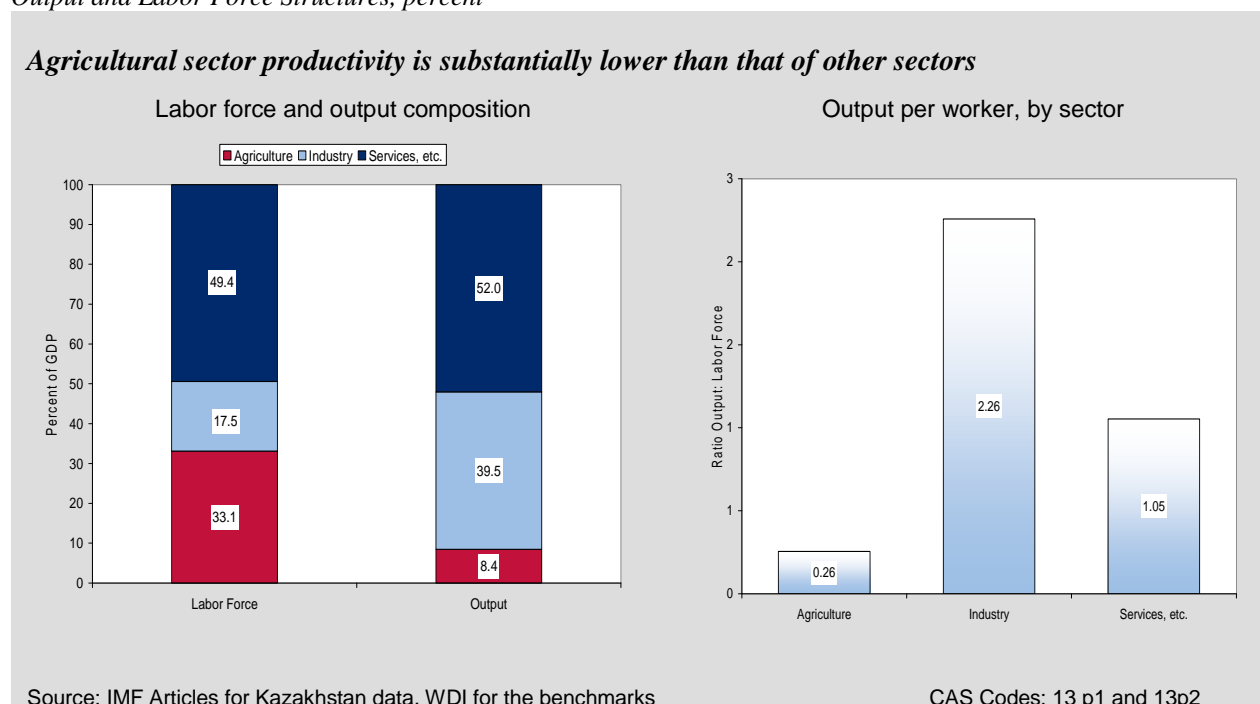
## ECONOMIC STRUCTURE

Kazakhstan's employment structure is broadly similar to that of other countries in the LMI-FSR group, with a large share in agriculture and services and a small share in industry. The average share of employment in industry for 2000–2004, at 16.9 percent, compared favorably with the 10.8 percent for LMI-FSR countries, but it is well below the range of 25–30 percent found in the more industrialized countries of Bulgaria, Romania, and Russia. From 2000 through 2004, 33.1 percent of Kazakhs were employed in agriculture, compared to an average of 40.0 percent in the LMI-FSR region. Kazakhstan fell in the middle of the comparator countries, below the 42.3 percent in Romania, but above the 26.3 percent in Bulgaria and 11.8 percent in Russia.

<sup>4</sup> Measured according to the basic needs definition. World Bank, Dimensions of Poverty in Kazakhstan, report no. 30294-KZ, November 2004.

Although agriculture’s share in employment is in line with the regional average, the agricultural sector suffers from low productivity, so although Kazakh agriculture employs one-third of workers, it accounts for only 8.5 percent of added value (Figure 2-4, Output and Labor Force Structures). The agricultural sector produces less in Kazakhstan relative to the economy as a whole than the average in LMI-FSR countries (14.1 percent), or than Bulgaria (11.7 percent) or Romania (11.9 percent). Also, the share of the services sector in Kazakhstan (52.0 percent) is smaller than the average for the LMI-FSR region (53.9 percent), Bulgaria (57.5 percent), and Russia (60.7 percent).

Figure 2-4  
Output and Labor Force Structures, percent



Industrial added value in Kazakhstan was 39.5 percent of the total in 2004, slightly higher than the rates in the comparator countries and country group. Most of this added value comes from oil and mining. In 2004, the industrial oil sector—including oil extraction and refining and oil-related construction—accounted for 15.9 percent of total added value in 2004, a 2.3 percentage point increase from 2000, and mining accounted for 14.7 percent. The little manufacturing that does exist—the extraction and processing of raw materials—derives from these two sectors. Machine building, for example, made up only 3.3 percent of industrial production (excluding construction) in 2004. By contrast, in Russia, despite its perceived reliance on raw materials, the share of machine-building equaled 22.2 percent of the total in the same year.

Small and medium-sized enterprise (SME) activity has expanded rapidly in Kazakhstan, with most small enterprises in trade, then in construction and real estate.. According to the USAID Enterprise Development Project implemented by the Pragma Corporation, employment at small

enterprises rose 20.9 percent between 2000 and 2003.<sup>5</sup> The share employed by small enterprises in total employment rose by about one percentage point, reaching 17.3 percent, in the same period. The contribution of SMEs to the added value generated by the Kazakh economy rose from 32.0 percent in 2000 to 55.3 percent in the first nine months of 2004.

Given current world commodity prices and the abundance of natural resources in Kazakhstan, the high contribution of mining to the economy and, in particular, the oil sector, is justifiable. However, the country needs to diversify industrial production for several reasons: to reduce its susceptibility to external price shocks, to move into sectors with greater potential for increasing added value, and to help create more employment through the promotion of labor-intensive sectors. Creating business opportunities in rural areas to relocate agricultural workers to more productive occupations would help in this regard.

## DEMOGRAPHY AND ENVIRONMENT

Kazakhstan's population reached a peak of 16.5 million around 1990. The dissolution of the Soviet Union led to significant emigration, which, combined with a sharp fall in the birth rate and an increase in the death rate, resulted in a population drop to 14.9 million in 1999. The rate of net emigration has declined steadily since the late 1990s and reversed in 2004, becoming net immigration. At the same time the birth rate has rebounded slightly, and the death rate, which had been increasing, has stabilized. The net result has been that the population has stabilized at about 15 million.<sup>6</sup> According to the United Nations World Population Prospects, the overall rate of population decline in Kazakhstan in 1990-2004 was less than in Bulgaria, though more than in Romania and Russia. The same sources projects that the Kazakh population will decline slightly in the next 25 years. This contrasts favorably with the rapid population declines projected for Romania, Russia, and, especially, Bulgaria.

The age dependency rate in Kazakhstan was 0.48 dependents per worker in 2003, on par with LMI-FSR average (0.47). Although this ratio represents a decline from 0.53 in 1999, it is substantially higher than in all three comparator countries—Bulgaria (0.44), Romania (0.44), and Russia (0.42) and signals that the Kazakh population is aging. Though the Kazakh population is forecast by the UN to age more slowly than the population of the three comparator countries,<sup>7</sup> it is starting from a higher level. The Kazakh authorities need to prepare themselves for a rising financial burden associated with the increasing costs of pensions and health care for an aging population.

Kazakhstan's adult literacy rate was near perfect at 99.5 percent in 2003. This excellent performance is common in the region; the LMI-FSR average was 99.6 percent and the rates in the three comparator countries were about the same level: Russia (99.6 percent), Bulgaria (98.6 percent) and Romania (97.3 percent).

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<sup>5</sup> The number of employed by medium-sized enterprises is not available.

<sup>6</sup> The Agency of Statistics of the Republic of Kazakhstan. <http://www.stat.kz/>

<sup>7</sup> The median age in Kazakhstan is lower than in the comparator countries, and is likely to remain low in the next 25 years. United Nations, World Population Prospects Database.

The environmental sustainability index for Kazakhstan is 48.6, slightly better than the performance of LMI-FSR region (46.5) and in Romania (46.2).<sup>8</sup> At the same time, higher scores in Bulgaria (50.0) and Russia (56.1) show that there is clear room for improvement. Looking closer at the components at the index, Kazakhstan's performed poorly in the areas of water quality, air pollution, eco-efficiency and environmental governance. Particularly noteworthy in terms of environmental problems are the shrinking of the Aral Sea, the accumulation of industrial waste, and the pollution caused by Soviet nuclear testing.

## GENDER

Kazakhstan performs well in terms of gender indicators point. In Kazakhstan, the ratio of male to female literacy is 1.01, with the underlying rates of 99.8 percent for and 99.3 percent for females. Thus roughly identical to the ratios for comparative country groups and countries, all of which are around 1.00: the ratio for the LMI-FSR region was 1.00, and the ratios for Bulgaria, Romania, and Russia were 1.01, 1.02 and 1.00, respectively.

The good performance on literacy correlates with a good ratio on male-female school enrollment rates. The ratio in Kazakhstan was 1.03 in 2003. The ratio in the comparator country group and countries were all slightly under 1.00, however this is not significant. Specifically, in the LMI-FSR region and Bulgaria, the average was 0.97, in Romania and Russia the ratios were 0.96 and 0.92, respectively.

As in many other countries, women in Kazakhstan are expected to live significantly longer than men (69 years compared to 58 years in 2003), which translates into a life expectancy ratio of males to females in Kazakhstan is 0.84. This ratio is similar to the 0.84 ratio in Russia and but above the average disparity in LMI-FSR (with 0.88 ratio), and 0.90 ratios in both Bulgaria and Romania. Kazakhstan's performance on this ratio is worrisome, not so much because it indicates a wide gender disparity, but because of what it indicates about male health; the 11-year difference in Kazakhstan's male and female mortality rates is greater than even that of Russia and is one of the highest in the world.<sup>9</sup> This is discussed below in the Health section.

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<sup>8</sup> Environmental sustainability index ranges from 0 (for poor performance) to 100 (for excellent performance).

<sup>9</sup> Becker, Charles M., Urzhumova, Dina S. and Seitenova, Ai-Gul S., "Mortality Recovery and Stabilization in Kazakhstan," IBS Working paper POP2003-0006, November 2003.



# 3. Private Sector–Enabling Environment

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

## FISCAL AND MONETARY POLICY

Overall, Kazakhstan’s fiscal and monetary policies are sound.<sup>15</sup> The government has run a budget surplus since 2001, and that is expected to continue in 2005 (Figure 3-1, Government Budget Balance). The performance is as good as or better than the benchmark values considered. When oil proceeds are excluded from government revenues, the government runs a deficit (4.7 percent in 2004). The IMF has calculated that this deficit is sustainable but needs to decline gradually over time.<sup>16</sup>

Government expenditure stood at 23.3 percent of GDP in 2004, on par with the regression benchmark of 20.1 percent and Russia’s expenditure of 22.9 percent, though below the levels seen in Bulgaria (37.5 percent) and Romania (32.3 percent). According to the IMF’s 2005 Article

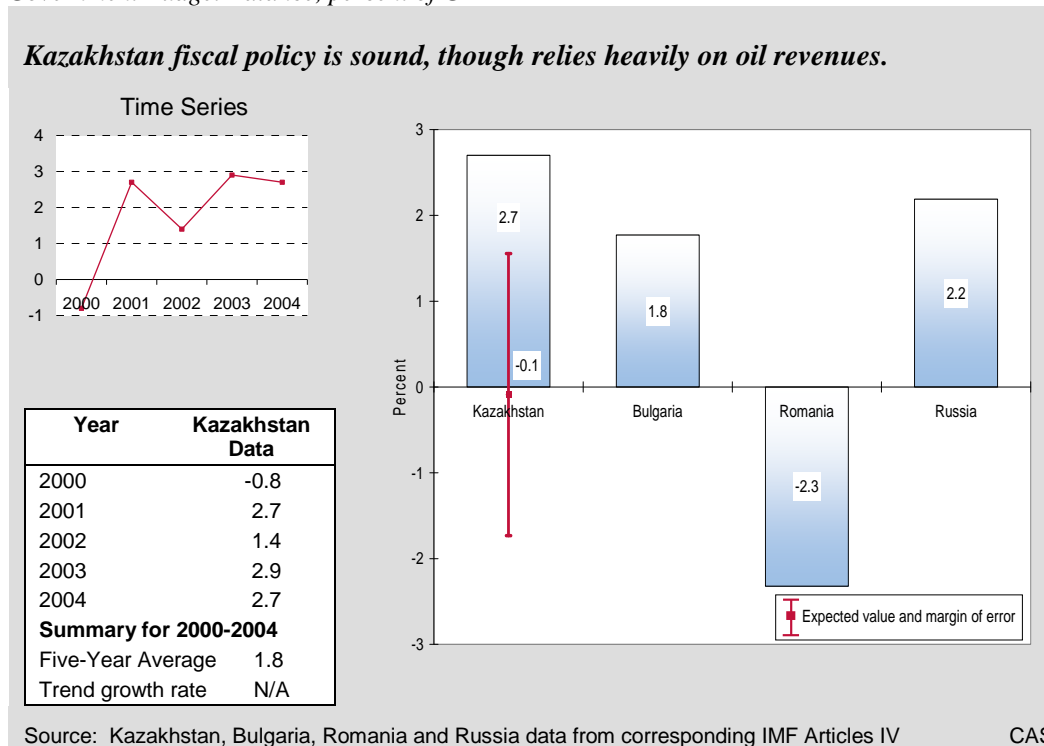
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<sup>15</sup> In 2005 the World Development Indicators (WDI) database adopted a new system for classifying fiscal data, although most developing countries still use the old classification. Subsequently, the WDI database has fiscal data for few developing countries; because of the limited sample size, most group averages derived from WDI are not meaningful. In this section, comparisons are based on absolute standards, or benchmarks derived from 2004 WDI data, as well as figures for Bulgaria, Romania, and Russia.

<sup>16</sup> IMF, Republic of Kazakhstan: Article IV Consultation, Country Report No. 05/244, July 2005, pp.14–15 and Box 5.

IV report, the government has been under political pressure to spend rising oil revenues, to which it has responded in two ways. First, it created the NFRK in 2001 to “reduce the economic impact of volatile oil prices and serve as a vehicle for saving part of Kazakhstan’s oil income for future generations.”<sup>17</sup> Second, the government has initiated substantial increases in social spending to improve living standards equitably, increase the social safety net for the financially vulnerable, and make public sector employment competitive with employment in the private sector. Spending increases include the introduction of a basic pension system, a large increase in wages for education and health workers and the basic civil service, and increases in direct spending on healthy, education, and capital investment. Although greater social spending is welcome, the situation must be monitored closely. First, social spending could generate inflationary pressures, especially in light of the fact that civil service salaries are due to increase by another 30 percent in 2007. Second, authorities need to determine if this is fiscally sustainable.

Figure 3-1  
Government Budget Balance, percent of GDP



Government revenue has risen as a percent of GDP, increasing from 21.6 percent in 2000 to 26.0 percent in 2004. Although still below the revenue in Bulgaria (38.0 percent), Romania (29.9 percent), and Russia (27.4 percent), government revenue is above the regression benchmark (21.5 percent) and demonstrates improved revenue mobilization. Much of the increase can be attributed to increased tax revenue from taxes on goods, services, and income, despite an income tax cut in 2004. The government is considering further sizable tax cuts to stimulate non-oil

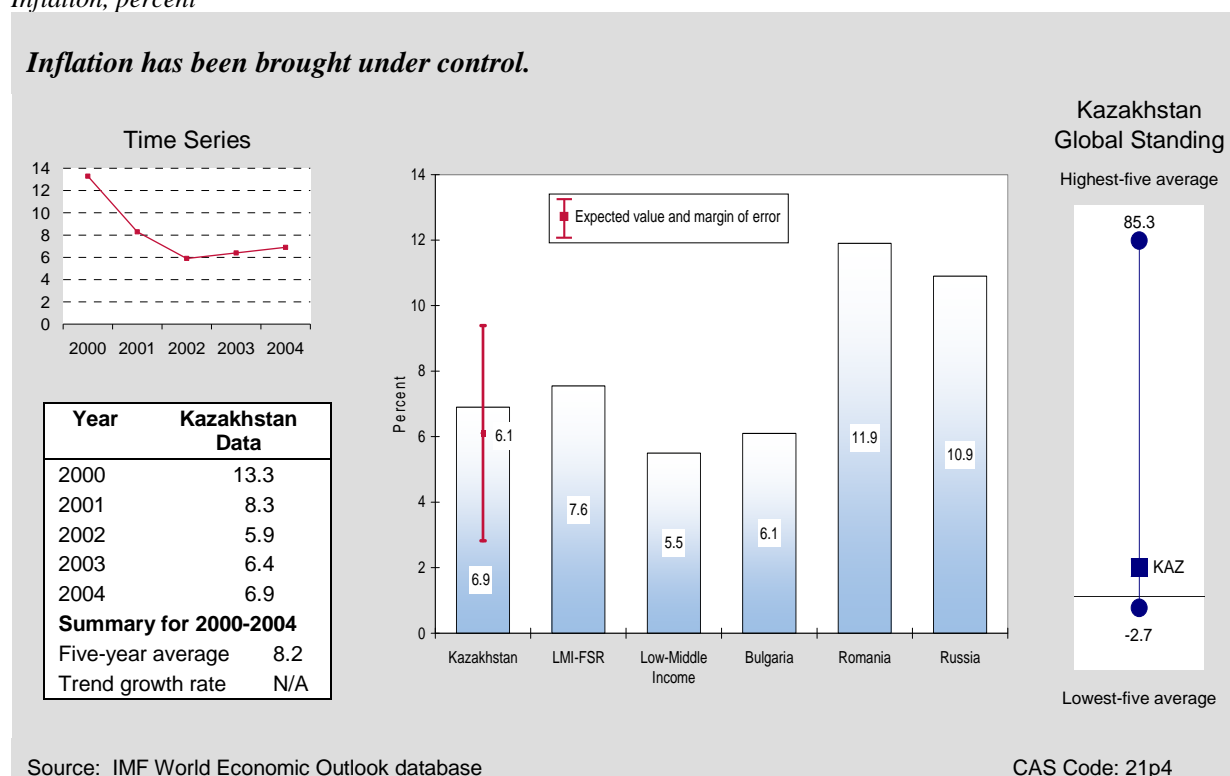
<sup>17</sup> Ibid. Box 5



growth. Such plans must take into consideration the availability of funds and the impact of the 2004 tax cuts. Furthermore, greater attention needs to be paid to how oil revenues, which account for nearly 30 percent of revenue, are handled. Plans are for all central government oil revenues to pass through the NFRK, and to set the non-oil deficit equivalent to developmental spending, to be financed by the NFRK.<sup>18</sup> Although this development is welcome and an opportunity to increase transparency and accountability in oil revenue and spending, as the IMF notes, overall spending plans need to take include a comprehensive look at fiscal sustainability.

Kazakhstan's monetary policy is sound despite rapid growth in the money supply, as the economy is experiencing rapid remonetization. Inflation has been brought largely under control, falling from 13.3 percent in 2000 to 6.9 percent in 2004, below levels found in all comparable countries and country groups except Bulgaria (Figure 3-2, Inflation).

Figure 3-2  
Inflation, percent



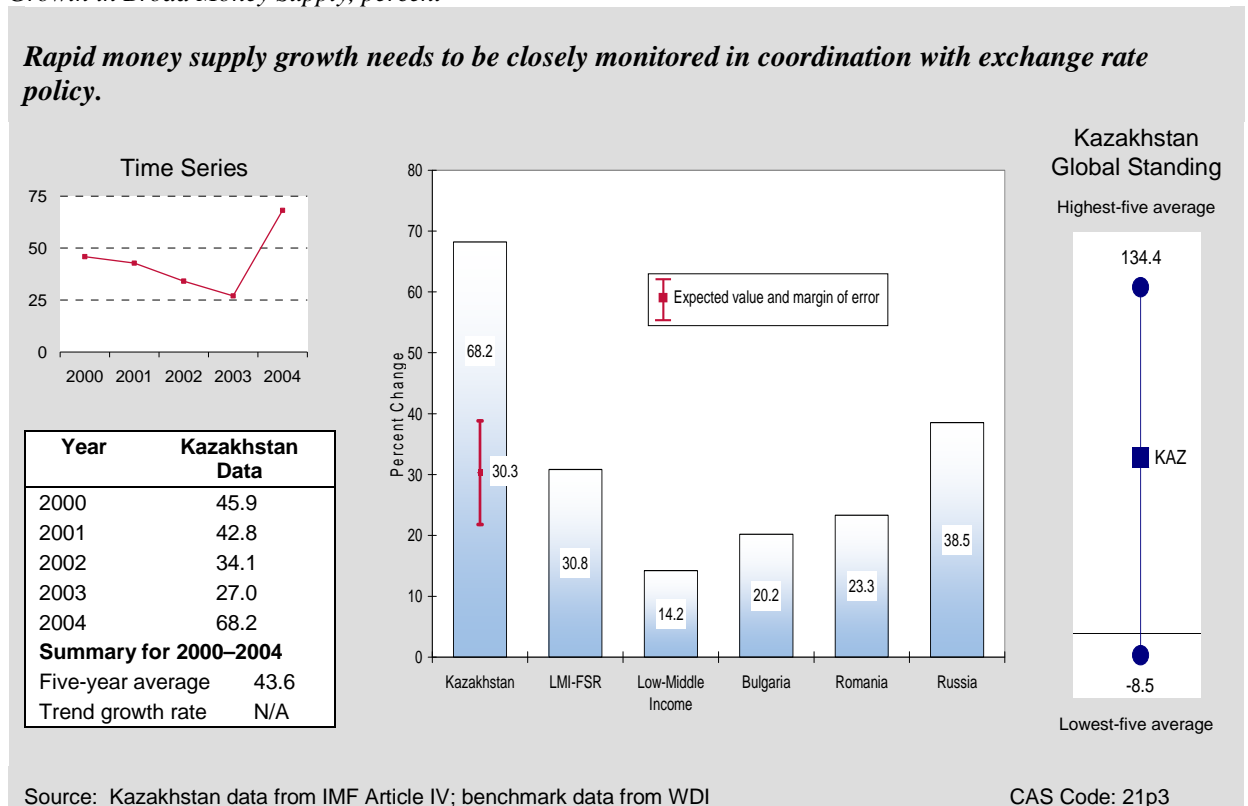
Broad money supply growth soared to 68.2 percent in 2004 and has averaged 43.6 percent in the past five years (Figure 3-3, Growth in Broad Money Supply).<sup>19</sup> This growth rate is well above all benchmarks—the regression estimate for a country with Kazakhstan's characteristics (30 percent), the LMI-FSR average (31 percent), Bulgaria's rate (20 percent), Romania's rate

<sup>18</sup> Ibid.

<sup>19</sup> Figures for the money supply growth composition of Kazakhstan are based on the M3 definition (not M2)—i.e., including all time and enterprise deposits.

(23 percent), and Russia's rate (39 percent). Rapid growth in the money supply is a result of the central bank's exchange rate policy. Monetary authorities have attempted to achieve a balance between containing inflation and preventing real and nominal appreciation of the currency from surging oil export revenues. For example, in early 2004 the authorities let up on foreign exchange purchases and allowed nominal appreciation; however in the fourth quarter, the authorities stepped up interventions to keep the nominal exchange rate in check to maintain competitiveness.<sup>20</sup> Although high economic growth rates and rapid remonetization of the economy have kept inflation in check, money supply growth must be monitored closely to avoid an upsurge in inflation.

Figure 3-3  
Growth in Broad Money Supply, percent



In light of fiscal and monetary developments, Kazakhstan could benefit from donor assistance in fiscal management and developing a medium-term fiscal framework, managing oil revenues responsibly and transparently, and helping the monetary authorities move toward inflation targeting. See Exhibit 3-1 for a summary of the IMF's position on Kazakhstan's money supply.

<sup>20</sup> IMF, "Republic of Kazakhstan: Article IV Consultation," Country Report No. 05/244, July 2005, pp.14-15 and Box 5.

## Exhibit 3-1

*IMF Program Status for Kazakhstan*


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In 2000, Kazakhstan became the first former Soviet republic to repay all its debt to the IMF, seven years ahead of schedule. In June 2005, the IMF completed its annual Article IV consultation with Kazakhstan. Executive directors “commended the Kazakh

authorities’ prudent macroeconomic policies in recent years, which have been critical in achieving economic growth, declining unemployment, and sustained reduction in poverty” and noted that “Kazakhstan’s economic outlooks remains highly favorable.”

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## BUSINESS ENVIRONMENT

Institutional barriers to doing business, including corruption in government, are critical determinants of private sector development and prospects for sustainable growth. Most of the indicators considered, although not all, raise serious concern about Kazakhstan’s unfriendly business environment.

As in many resource-rich countries, corruption is a major problem in Kazakhstan. The Corruption Perception Index score for Kazakhstan is 2.6.<sup>21</sup> Although Kazakhstan’s score is on par with the regression benchmark and better than the LMI-FSR average, any value below 3.0 is considered to indicate rampant corruption, which is an impediment to investment (Figure 3-4, Corruption Perception Index).

Kazakhstan ranks 86th (of 155 countries) in the World Bank’s Ease of Doing Business ranking, on par with the 84 average ranking for the LMI-FSR. Its performance is worse than in all three comparator countries—Bulgaria ranks 62nd, Romania 78th, and Russia 75th. Looking closer at the components of the index, Kazakhstan ranks poorly in the indicators related to contract enforcement.

Performance on the Rule of Law Index is poor.<sup>22</sup> At -1.0, Kazakhstan ranks below the regression benchmark (-0.8), the LMI-FSR average (-0.9), and values for Bulgaria (0.1), Romania (-0.2), and Russia (-0.7). Similarly, the Regulatory Quality Index (-0.9) indicator is also below all benchmarks: the LMI-FSR average is -0.6, Bulgaria’s score is 0.6, Romania’s score is -0.1, and Russia’s score is -0.5.<sup>23</sup>

Although Kazakhstan made considerable progress in structural reform in the early 1990s, the pace of reform has slowed considerably. Kazakhstan’s performance on the transition indicators used by the European Bank for Reconstruction and Development (EBRD) has improved little in recent years, and the gap with more advanced reformers has widened.<sup>24</sup> Kazakhstan ranks relatively low

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<sup>21</sup> Corruption Perception Index ranges from 1 for poor performance to 10 for excellent.

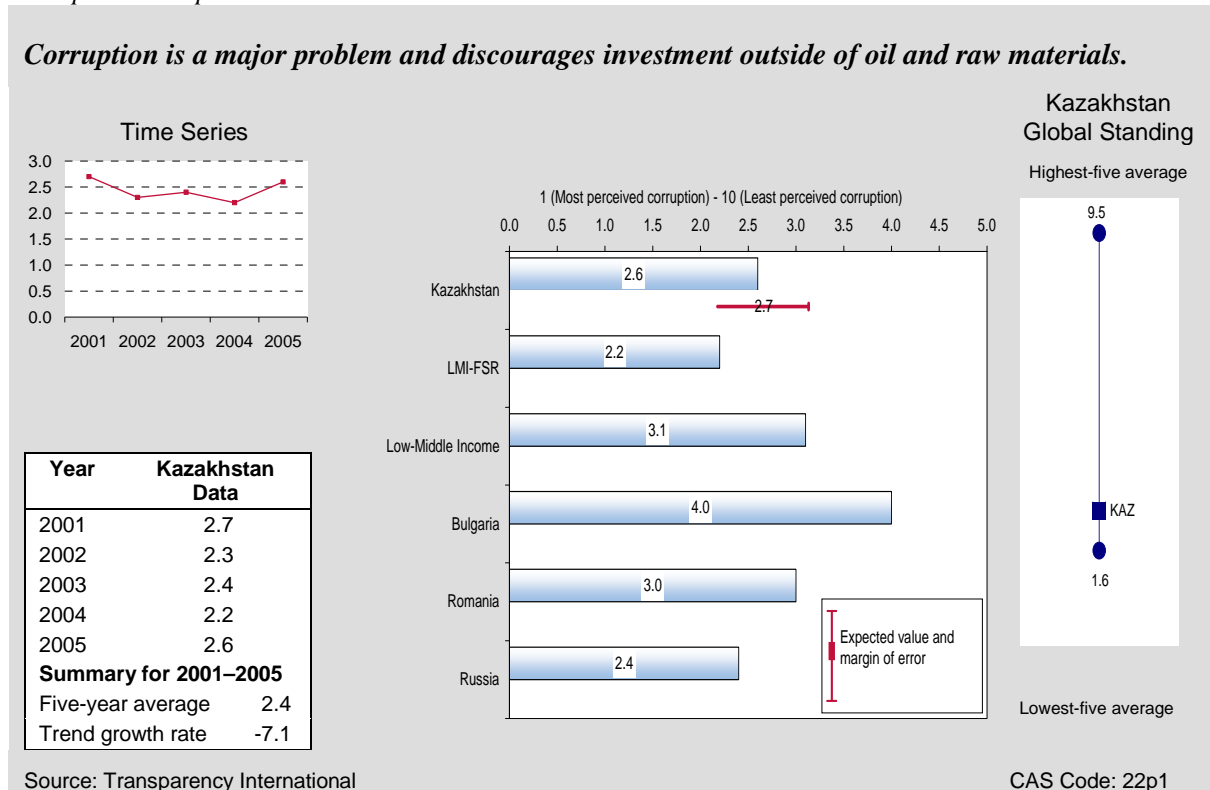
<sup>22</sup> Rule of Law Index ranges from -2.5 for poor performance to 2.5 for excellent.

<sup>23</sup> Regulatory Quality Index ranges from -2.5 for poor performance to 2.5 for excellent.

<sup>24</sup> Although EBRD indicators are not part of the standard CAR database, transitional progress is an important consideration for any post-Soviet economy.

in competition policy and enterprise restructuring, which are necessary for the healthy growth of the private sector. Kazakhstan needs to accelerate reforms to reduce regulation and promote competition.<sup>25</sup>

Figure 3-4  
Corruption Perception Index



The main message for the government and the donor community is that, given the need to develop manufacturing outside the oil and raw materials sector, the business environment needs to encourage investment. Kazakhstan could benefit from assistance in fighting corruption and making oil revenues more transparent and the entire range of issues in transitioning enterprises to operating under capitalism, including enterprise restructuring and improving corporate governance.

## FINANCIAL SECTOR

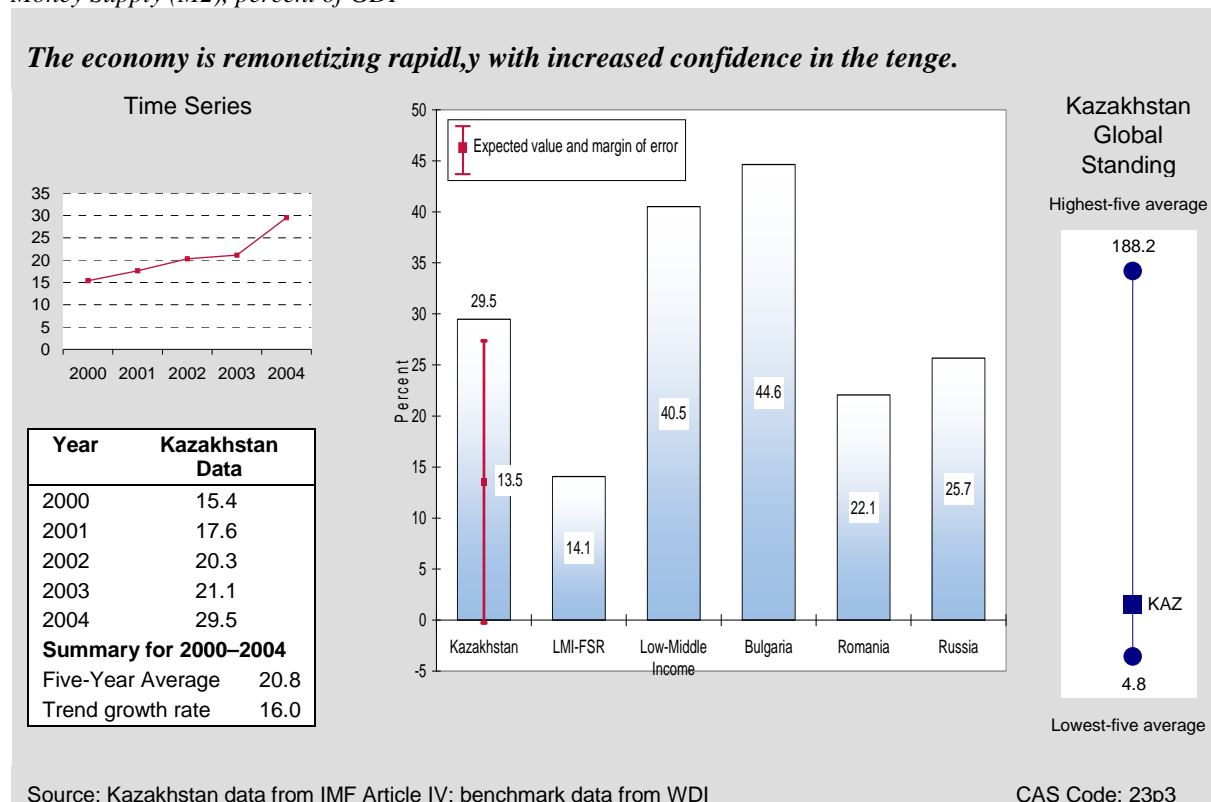
A sound and efficient financial sector is a key to mobilizing savings, fostering productive investment, and improving risk management. The financial sector in Kazakhstan is well developed; nonetheless, regulatory improvements are necessary.

The money supply-to-GDP ratio is a principal indicator of the degree of monetization of the economy and the size and depth of the banking sector. Kazakhstan's economy is well monetized,

<sup>25</sup> IMF, "Republic of Kazakhstan: 2005 Article IV Consultation," Country Report No. 05/244, July 2005.

a with broad money supply (M2) of 29.5 percent of GDP in 2004, nearly double the level of 2000 (Figure 3-5, Money Supply). This ratio is well above the average for the LMI-FSR region (14.1 percent), Romania's rate (22.1 percent), and Russia's rate (25.7), although the higher rate of 44.6 percent in Bulgaria indicates that there is potential for further monetization.

Figure 3-5  
Money Supply (M2), percent of GDP



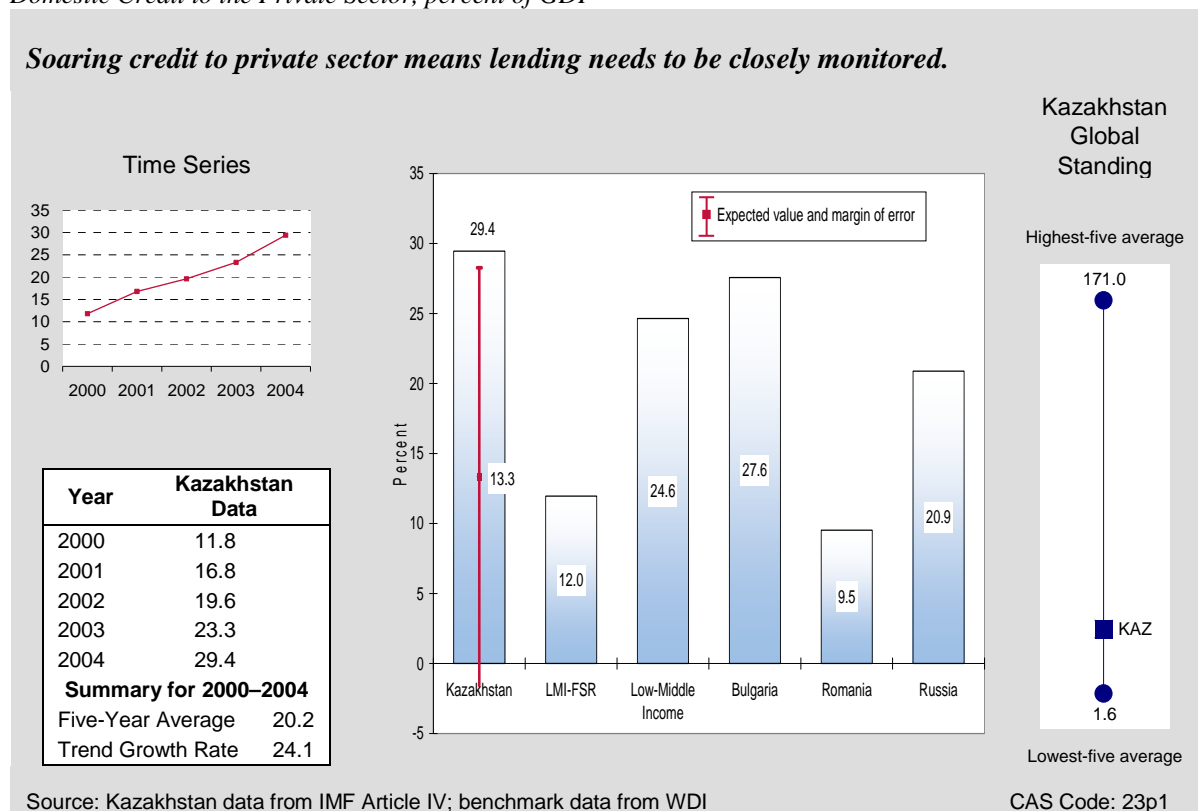
At first glance, the banking sector appears to be efficient and well-developed. Kazakhstan's interest rate spread of 6.0 percent in 2004 was below all the comparator values except that of Bulgaria at 5.9 percent; the regression benchmark value was 7.6 percent; the LMI-FSR average was at 9.7 percent; and the rate in Russia was 8.5 percent. However the interest rate spread has risen steadily in the past five years and appears to be affected by central bank regulations on deposit rates.<sup>26</sup> The real interest rate of 8.5 percent in 2004, down from 10.7 percent in 2000, is also a sign of improving efficiency and competition in the banking sector in comparison to the LMI-FSR region overall (with 10.6 percent). Here, if one considers deposit rates for legal entities, the rate is actually negative—once again, indicating that the government is playing an intrusive role and causing inefficiencies. According to the Legal Rights of Borrowers Index, Kazakhstan's value in 2004 was 5 on a scale of 0 (worst) to 10 (best). Kazakhstan's financial legal framework

<sup>26</sup> On average, in 2000–2004, deposit rates for legal entities were 7.5 percent lower than deposit rates for households (according to monthly interest rate statistics from the IMF, Republic of Kazakhstan: Statistical Appendix, Country report No. 05/239, July 2005). Interest rate spread calculations for this report were based on the deposit rates for households.

is more advanced than that of Romania (4.0) or Russia (3.0), but is worse than the system in Bulgaria (6.0). More important, a score of 5 indicates that there is clearly room for improvement in providing legal protection for both borrowers and lenders.

In line with the increase in the broad money supply, domestic credit to the private sector has been booming, increasing from 11.8 percent of GDP in 2000 to 29.4 percent of GDP in 2004 (Figure 3-6, Domestic Credit to Private Sector). At this level, the credit is above all of the benchmarks—the average for the LMI-FSR region and the values for the three comparator countries.<sup>27</sup> The rapid growth may represent a catch-up seen in other transitional economies, but increased credit accessibility may also lead to lending without proper risk assessment and to the deterioration of banks' loan portfolios.<sup>28</sup> Improving regulations and supervision is a top priority in mitigating the considerable risks involved.

Figure 3-6  
*Domestic Credit to the Private Sector, percent of GDP*



Stock market capitalization is low (8.2 percent of GDP). Although on par with the LMI-FSR average, the value is below the capitalization rate in all three comparator countries (Bulgaria with 8.8 percent, Romania with 9.8 percent, and Russia with 53.3 percent).<sup>29</sup> Improved stock market

<sup>27</sup> Regression estimate is not used for benchmarking here due to high standard errors.

<sup>28</sup> IMF, "Republic of Kazakhstan: 2005 Article IV Consultation," Country Report No. 05/244, July 2005.

<sup>29</sup> Regression benchmark is not considered due to the high standard errors associated with the estimate.

performance could provide additional sources of capital and competition for the banking sector, putting pressure on banks to improve efficiency.

Although financial markets in Kazakhstan are well developed, the government and the donor community need to address certain issues—ensuring that credit expansion does not lead to imprudent risks by financial intermediaries, especially in the midst of an oil price boom and expected exchange rate appreciation, such as substantial currency mismatches on bank balance sheets. Donors could assist in developing an improved institutional framework for bank supervision and regulation.

## 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 Kazakhstan to boost growth and reduce poverty by stimulating productivity and efficiency, providing access to new markets and ideas, and expanding the range of consumer choice. Globalization also creates challenges in the need for institutions, policies, and regulations to take full advantage of international markets, develop cost-effective approaches to cope with adjustment costs, and establish systems for monitoring and mitigating the associated risks.

Kazakh external sector developments are generally favorable on both the trade and the investment sides. At the same time, the country's excessive reliance on oil may threaten its stability if oil prices decline sharply, and foreign debt and debt service levels are high.

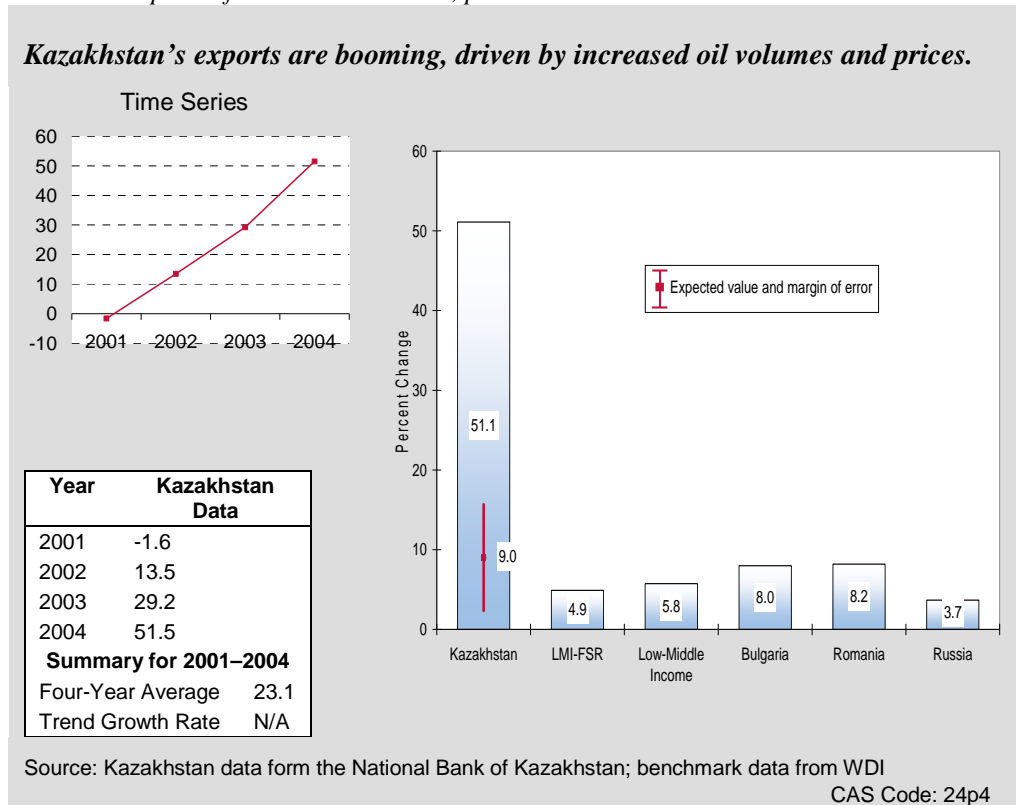
### International Trade and the Current Account

Kazakh foreign trade has been booming. Kazakh exports of goods and services doubled between 2002 and 2004.<sup>30</sup> This was largely a result of the rapid growth in oil exports, which benefited both from increased oil production and from rising world oil prices, although exports of many other commodities also grew significantly (Figure 3-7, Growth of Exports of Goods and Services). Measured in physical units, exports of crude oil and gas condensate rose 89.1 percent from 2000 to 2004; in U.S. dollars, they increased 157.8 percent. The role of oil in exports is high and rising—in 2004, oil and gas condensate accounted for 57.1 percent of total merchandise exports, up almost 7 percentage points from 2000. Kazakh exports are highly concentrated, with the top three export commodities accounting for 64.3 percent of exports, much more than in Bulgaria (17.4 percent) and Romania (24.0 percent), and more even than in Russia (54.3 percent), which also relies heavily on oil and raw material exports. As of 2004, only 18 percent of Kazakh exports were in manufacturing, compared with 21 percent in Russia and 26 percent for the LMI-FSR average. Even comparing the ratio before the oil boom, the ratio of 24 percent is still well below levels found in Bulgaria and Romania of 65.8 and 82.5 percent, respectively.

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<sup>30</sup> The National Bank of Kazakhstan. <http://www.nationalbank.kz/>

Figure 3-7  
*Growth in Exports of Goods and Services, percent*

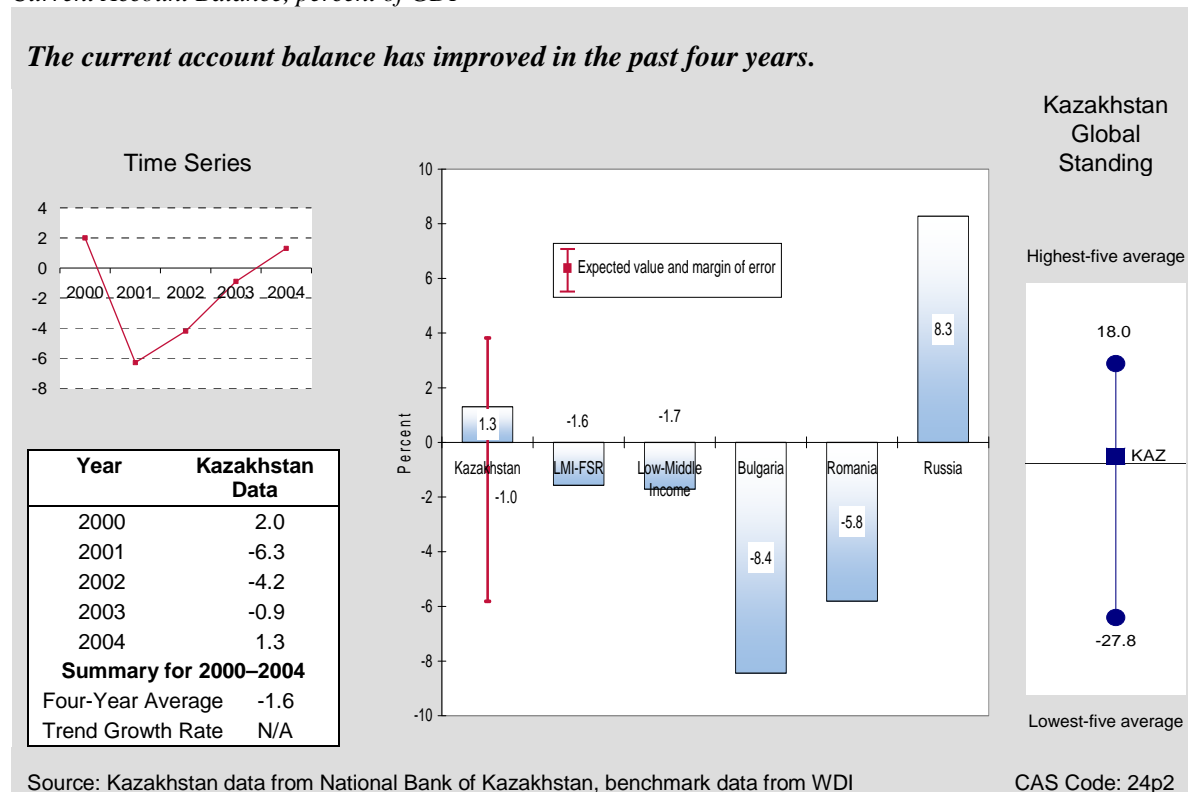


The share of foreign trade in GDP in Kazakhstan in 2004 stood at 101.4 percent of GDP. This high ratio is a function of the small size of the Kazakh economy and its large oil exports, and in fact is essentially the same (102.8 percent) as the regression benchmark for a country with Kazakhstan's characteristics. It is higher than in the LMI-FSR region as a whole (94.5 percent), Romania (71.6 percent), and Russia (52.6 percent), but lower than in Bulgaria (116.2 percent).

The Kazakh merchandise trade surplus more than tripled in the 2000–2004 period, as rapid export growth outpaced rising in imports. This helped improve the current account balance from a deficit of 6.3 percent of GDP in 2001 to a surplus of 1.3 percent of GDP in 2004 (Figure 3-8, Current Account Deficit). By contrast, the LMI-FSR countries, on average, ran a 1.3 percent deficit and Bulgaria and Romania ran large deficits. At the same time, the current account surplus in Kazakhstan is much smaller than in Russia (8.3 percent). A more substantial current account surplus was prevented by rises in the deficits in services and income and the deterioration of the balance on current transfers from a surplus to deficit. The Kazakh current account has been negatively affected by rising profit repatriation by foreign companies and current private transfers by foreigners from Kazakhstan. Because Kazakhstan is a prosperous country by regional standards, labor income and private current transfers are negative on a net basis.



Figure 3-8  
*Current Account Balance, percent of GDP*



## International Financing and External Debt

Foreign direct investment (FDI) in Kazakhstan has averaged nearly 10 percent of GDP in 2000–2004, and reached a five-year high of 13.5 percent of GDP in 2004 (Figure 3-9, Foreign Direct Investment). This level far exceeds the range predicted by the regression benchmark, as well as FDI inflows in Bulgaria (7.2 percent), Romania (3.2 percent), and Russia (1.8 percent) and average inflows in the LMI-FSR (3.6 percent). An overwhelming portion of FDI—59.8 percent, on average, in 2000–2004—went into oil and natural gas extraction.<sup>31</sup>

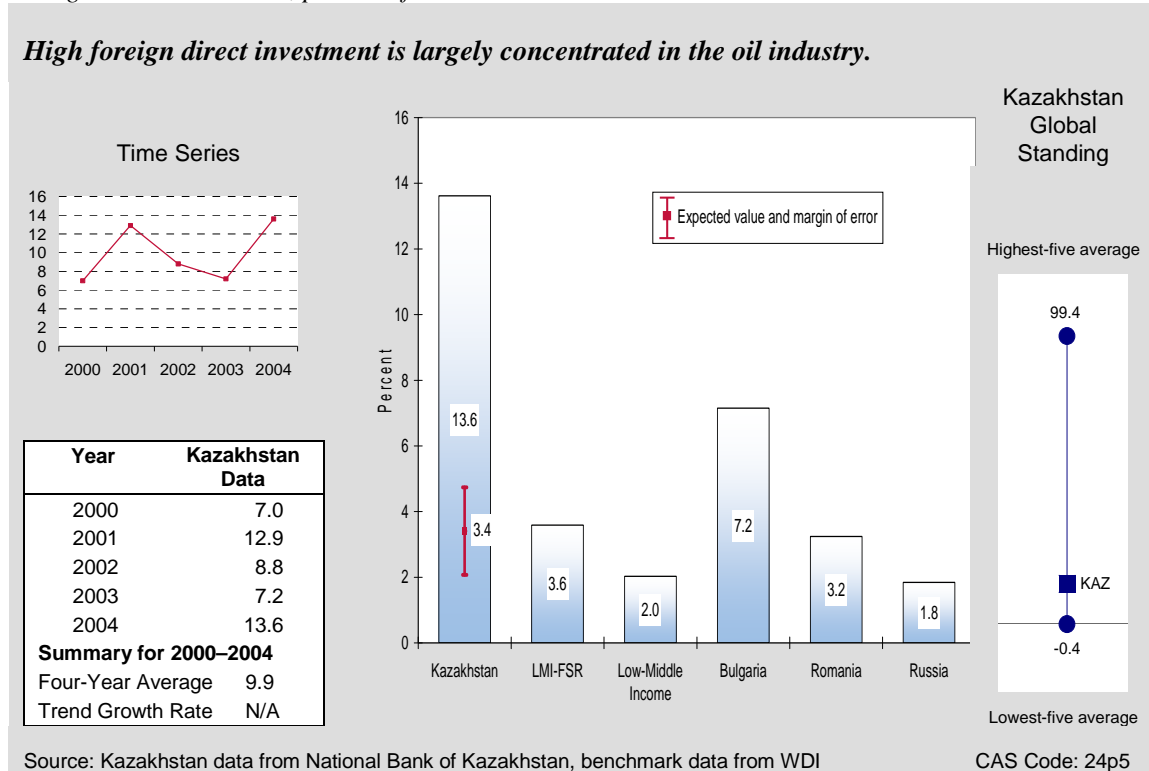
Kazakhstan's external debt appears high at 95.3 percent of GNI in 2003. The present value of the external debt was much higher than the range predicted by the benchmark regression and than the LMI-FSR average (43.7 percent) and the levels of debt in Bulgaria (85.5 percent), Romania (46.0 percent), and Russia (52.1 percent). Not surprisingly, the debt service ratio was also substantially higher than the benchmark indicators. Closer examination reveals, however, that these indicators do not give an accurate picture of the external debt situation. The reason for this is that much of the debt is made up of intracompany loans; 52.0 percent of the external debt in 2004 was made up of loans provided by foreign companies to their subsidiaries in Kazakhstan.<sup>32</sup> According to the 2004 IMF Article IV consultation, these intracompany loans have no fixed

<sup>31</sup> IMF, "Republic of Kazakhstan: Statistical Appendix," Country Report No. 05/239, July 2005.

<sup>32</sup> The National Bank of Kazakhstan. <http://www.nationalbank.kz/>

repayment schedule and therefore repayment can vary with company profitability and ability to pay.<sup>33</sup> Most of the remainder of the private debt is medium- and long-term. Kazakh official debt is relatively low and falling in absolute terms. In 2004, it stood at only 10.5 percent of total external debt.

Figure 3-9  
Foreign Direct Investment, percent of GDP



The Kazakh central bank's foreign exchange reserves have risen in the past several years, both absolutely and relative to imports, and appear sufficient to protect the stability of the country's currency. Central bank reserves rose from 2.8 months of imports in 2000 to 5.9 months in 2004. The level of reserves exceeds the range predicted by the respective benchmark regression, average reserves in the LMI-FSR region (2.9 months), and levels in Romania (4.3 months), although they fall short of reserves in Bulgaria (7.2 months) and Russia (7.4 months). In addition to central bank reserves, Kazakhstan has been accumulating assets in the National Fund. In 2004, National Fund assets reached 55.3 percent of the level of central bank reserves.<sup>34</sup>

Given Kazakhstan's oil wealth, foreign aid plays a relatively small role in external financing, averaging 0.9 percent of GNI from 1999 to 2003. This is about the same level as in the LMI-FSR (0.8 percent), but below the levels in Bulgaria (2.1 percent) and Romania (1.1).

<sup>33</sup> pp. 19–20

<sup>34</sup> IMF, "Republic of Kazakhstan: Statistical Appendix," Country Report No. 05/239, July 2005.

The indicators for the external sector paint a positive picture, but all of this—from trade to investment to debt—predicated on the oil sector. Thus the diversification of exports and FDI inflows into non-oil sectors is where Kazakhstan might benefit most from foreign donor assistance and is in line with the government's own policies.

## ECONOMIC INFRASTRUCTURE

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

The general level of infrastructure development in Kazakhstan is slightly better than in the comparator country groups and individual countries. The Overall Infrastructure Quality Index was 3.5 on a scale of 1 (poor) to 7 (excellent) for 2005, while the LMI-FSR average was 3.3. Bulgaria, Romania, and Russia, scored 2.8, 2.7, and 3.3, respectively. Judging by the index components, electricity infrastructure in Kazakhstan is in especially good shape relative to other infrastructure sectors. By contrast, port infrastructure development leaves much to be desired—the Kazakh port infrastructure quality index of 2.9 is below the LMI-FSR average (3.9), as well as the indexes of Bulgaria (3.7), Romania (4.0), and Russia (4.3). While Kazakhstan possesses an extensive system of automobile roads, railroads, and pipelines, many elements of this system need extension and/or upgrading. For example, insufficient capacity in oil pipelines limits oil exports. Similarly, the natural gas network is underdeveloped, constraining the delivery of natural gas to consumers in many regions. According to the Kazakh government, high transportation costs slow productivity growth in the economy.<sup>35</sup>

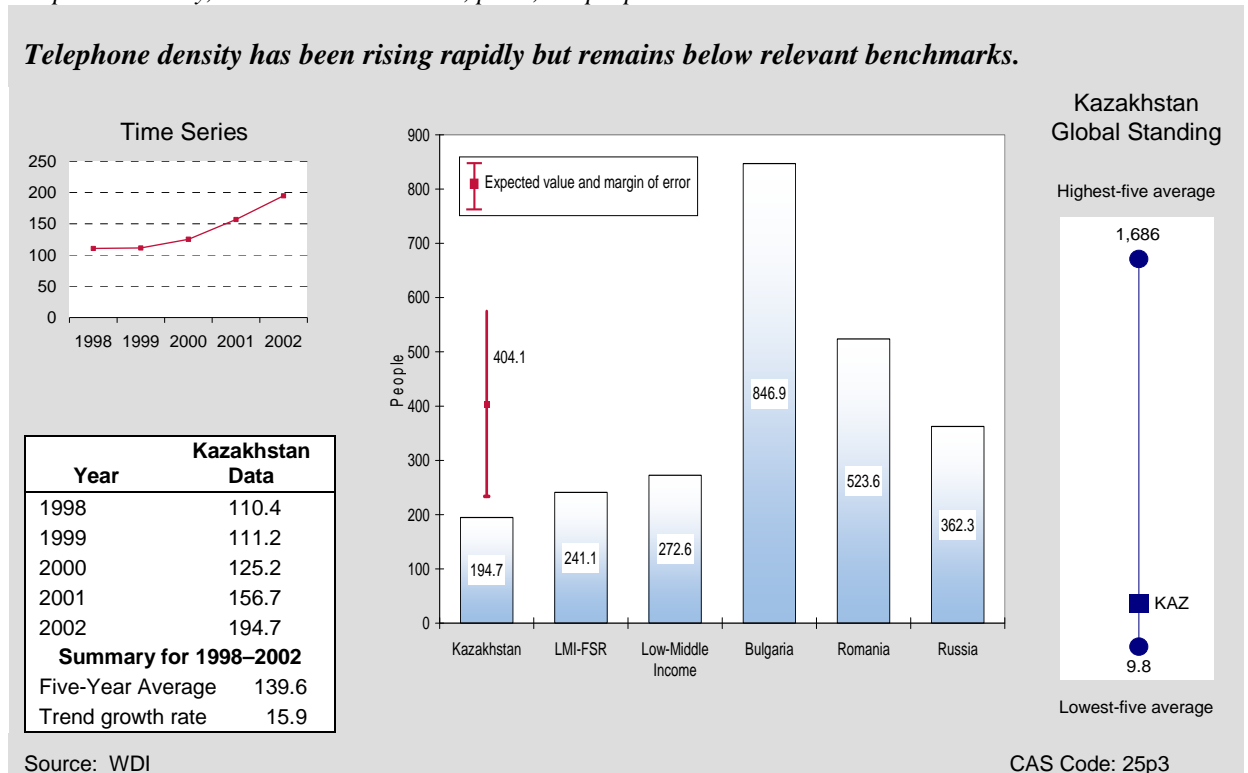
Kazakhstan lags far behind its peer countries in terms of communications development despite substantial progress in this area in the past few years (Figure 3-10, Telephone Density). In 2002, telephone density, measured as the number of fixed line and mobile subscribers per 1,000 inhabitants, was 194.7, well below the range estimated by the benchmark regression, the LMI-FSR average (241.1 lines), and the telephone density in individual comparator countries, especially Bulgaria (846.9 lines). A similar situation is found with the number of Internet users per 1,000 people.

Kazakhstan may benefit from a comprehensive assessment of its transportation and communication systems, from support in the upgrading and extension of transportation routes, and from help in accelerating the growth of communications.

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<sup>35</sup> See for example, Statement by K.I. Nagmanov, Minister of Transport and Communications of the Republic of Kazakhstan at the International Ministerial Conference of Land-Locked and Transit Developing Countries, Donor Countries and International development Institutions on Transit Transport Cooperation, 28 August 2003, Almaty

Figure 3-10  
Telephone Density, Fixed Line and Mobile, per 1,000 people



## SCIENCE AND TECHNOLOGY

Science and technology are central elements of a dynamic growth process, because technical knowledge is a driving force for rising productivity and competitiveness. Even for lower-middle-income countries such as Kazakhstan, transformational development increasingly depends on acquiring and adapting technology from the global economy and applying it in ways that are appropriate to the country's level of development. A lack of capacity to access and use technology prevents an economy from taking advantage of the benefits of globalization.

Unfortunately, reliable international indicators related to science and technology are not readily available for Kazakhstan. According to the data that are available, the average number of patent applications filed in 1998–2002—1,123—was substantial by regional standards (the LMI-FSR regional average is 119) or compared with Bulgaria at 306 per year. Yet it was less than in Romania (1,486) and only a fraction of the number of applications filed in Russia (20,049). The Kazakh FDI Technology Transfer Index equals 4.3<sup>36</sup> for 2005. This is slightly above the LMI-FSR average and the Russian index (both equaling 4.0), but below the indices in Bulgaria (4.4) and Romania (5.1).

<sup>36</sup> The FDI Technology Transfer Index ranges from 1 (FDI brings little new technology) to 7 (FDI brings a lot of new technology).

# 4. Pro-Poor Growth Environment

Rapid growth is the most powerful and dependable instrument for poverty reduction, yet the link from growth to poverty reduction is not mechanical. In some cases, income growth for poor households exceeds the overall rise in per capita income, while in other conditions growth benefits the non-poor far more than the poor. A pro-poor growth environment stems from policies and institutions that improve opportunities and capabilities for the poor, while reducing their vulnerabilities. Pro-poor growth is associated with improvements in primary health and education, the creation of jobs and income opportunities, the development of skills, micro-finance, agricultural development (for countries such as Kazakhstan with large populations of rural poor), and gender equality.<sup>37</sup> This section focuses on four of these issues: health, education, employment and the workforce, and agricultural development.

## HEALTH

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

Health indicators in Kazakhstan paint a dismal picture. Life expectancy, the broadest indicator of health status, is low (Figure 4-1, Life Expectancy at Birth). In 2003, average life expectancy was just 61.3 years. This rate is below all benchmarks—the regression benchmark for a country with Kazakhstan’s characteristics is 69.7 years and the LMI-FSR average is 68.2 years. Kazakhs’ life expectancy is also well below the rates for all three comparator countries, with Bulgaria, Romania, and Russia at 72.1, 70, and 66 years, respectively. After the collapse of the Soviet Union, Kazakhstan’s life expectancy fell sharply, declining by more than four years from 1990 to 1996.<sup>38</sup> Although Kazakhstan seemed to have turned the tide as its economy stabilized, with life expectancy steadily rising in the late 1990s, most recent developments are extremely troublesome—life expectancy has fallen by approximately four years since 1999, dipping below the low of 1996. Much of the problem is due to the poor state of men’s health, as male life expectancy is substantially lower —11 years—than the life expectancy for women. This is a

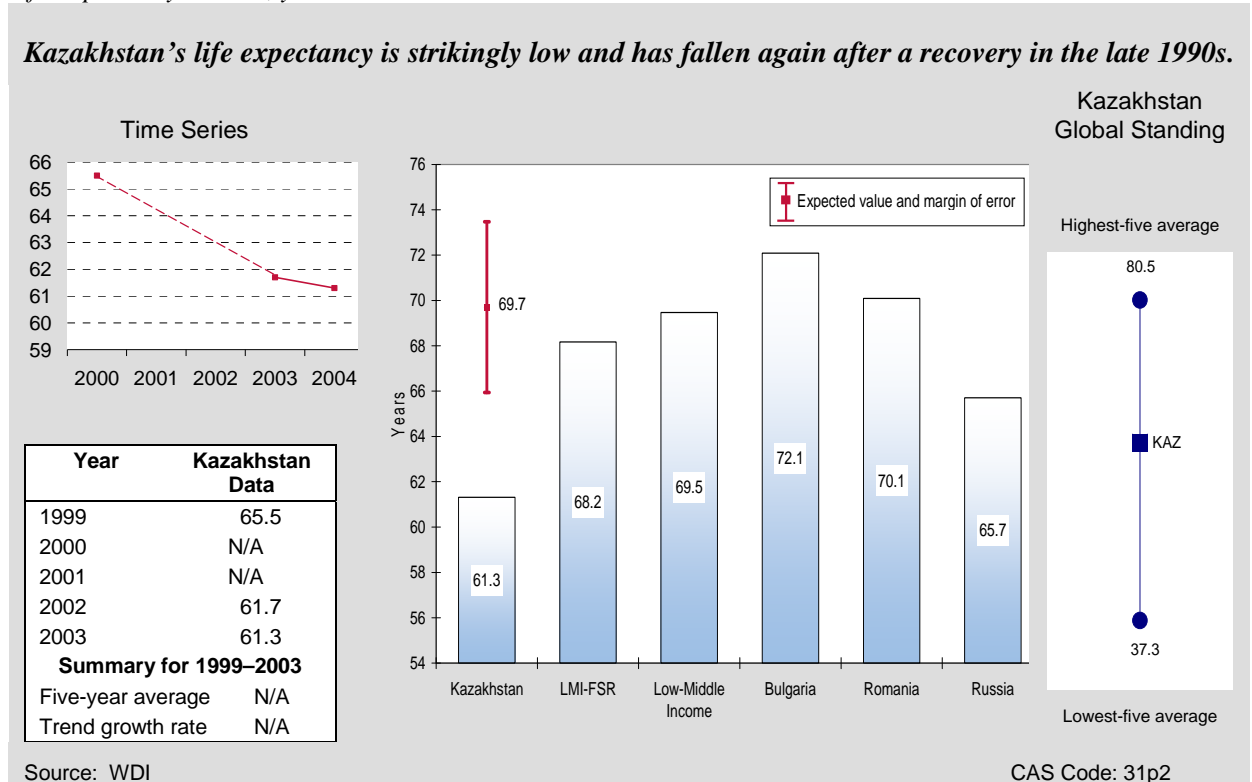
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<sup>37</sup> Because this report focuses on economic growth performance, this report does not cover emergency relief.

<sup>38</sup> World Development Indicators 2005.

serious social challenge for Kazakhstan. In addition to the important moral considerations, early death represents a waste of valuable human capital. Reducing male mortality rates should be a top priority for Kazakh authorities.

Figure 4-1  
Life Expectancy at Birth, years



The HIV/AIDS rate of 0.2 percent is low. HIV prevalence in Kazakhstan is about the same as in other LMI-FSR countries, Bulgaria, and Romania—0.1—and lower than the 1.1 percent in Russia, though this may be due to differences in reporting. Nonetheless there is cause for concern: according to the World Bank, Central Asia has some of the highest growth rates in HIV infections in the world. Without a concerted action, rapid spread and the development of an epidemic is likely, as has occurred in Russia, Ukraine, and Moldova. In addition to the human costs, economic costs of such an epidemic could be devastating. Without intervention, it is estimated that the spread of HIV/AIDS will reduce Kazakhstan's GDP by 1.8–2.1 percent by 2010 and 3.2–9.5 percent by 2020.<sup>39</sup>

Kazakhstan's maternal mortality rate (at 210 per 100,000 births) is higher than the LMI-FSR average of 45, Bulgaria's rate of 32, Romania's rate of 49, and Russia's rate of 67. This high rate is surprising in light of the fact that 99.1 percent of births are attended by skilled health personnel, and suggests that there is a great need for improving the quality of health care. Although the

<sup>39</sup> Godinho, Joana et al., "Reversing the Tide: Priorities for HIV/AIDS Prevention in Central Asia," World Bank study ECSHD/ECCU8, March 2005.

government has increased health spending to 2.4 percent of GDP, up from 2.1 percent of GDP in 2000, which represents a substantial absolute increase given the rapid rise in GDP in that period, the increase may not be sufficient. The 2.4 percent level is still below levels found in all three comparator countries (4.5 percent in Bulgaria, 4.1 percent in Romania, and 3.5 percent in Russia), although nearly identical to the average for the LMI-FSR region of 2.5 percent.

Poor health conditions are both a primary cause and a result of persistent poverty. Improving life expectancy, preventing an AIDS epidemic, and assisting the government in efficient health spending are just some of the possible areas for donor intervention.

## EDUCATION

Performance on nearly all education indicators is good, as is common in post-communist countries. Net primary enrollment rates in Kazakhstan are high at 91.5 percent in 2002, above that predicted by the regression benchmark (88.1 percent) and the LMI-FSR average (89.7 percent). The rates are slightly higher than those in all three of the comparator countries (Bulgaria's net primary enrollment rate is 90.4 percent, Romania's is 88.9 percent, and Russia's is 89.7 percent). Net secondary enrollment rates have been on the rise, increasing from 83.4 percent in 1999 to 86.8 percent in 2002. The rate is on par with that of Bulgaria (86.7 percent), and above the enrollment in Romania (80.0 percent). Youth literacy is also high. In fact, it is almost universal, with a rate of 99.8 percent, identical to the levels found in Russia and the LMI-FSR countries. Romania and Bulgaria lagged marginally behind at 97.8 and 99.7 percent, respectively, on this indicator.

Like many transition countries, Kazakhstan has been coasting on the educational system put in place in the communist period. To sustain these educational achievements, however, the government needs to increase its education spending. Currently government spending per student (on primary, secondary, and tertiary education) is below the averages for the LMI-FSR region and all LMI countries. Particularly low is the spending on tertiary education; at 10.2 percent of per capita GDP in 2002, it is less than half of the LMI-FSR average and less than a third of the average for all LMI countries; the gaps with expenditure per student in tertiary education relative to Bulgaria and Romania are similar (Figure 4-2, Tertiary Education Expenditure per Student).<sup>40</sup> For Kazakhstan to achieve transformational growth and reduce its dependence on oil, more emphasis should be given to higher education. Such efforts are necessary to stay competitive in the region with a highly educated labor force.

The quality of education is also questionable. The proxy-indicator of quality—pupil–teacher ratio in primary schools, is higher in Kazakhstan (18.5) than in the LMI-FSR region as a whole (15.6), Bulgaria (16.8), Romania (17.4), and Russia (16.9). According to the World Bank, far more flexibility and lifelong learning opportunities are needed soon to keep skill shortages from becoming a serious impediment to growth.<sup>41</sup>

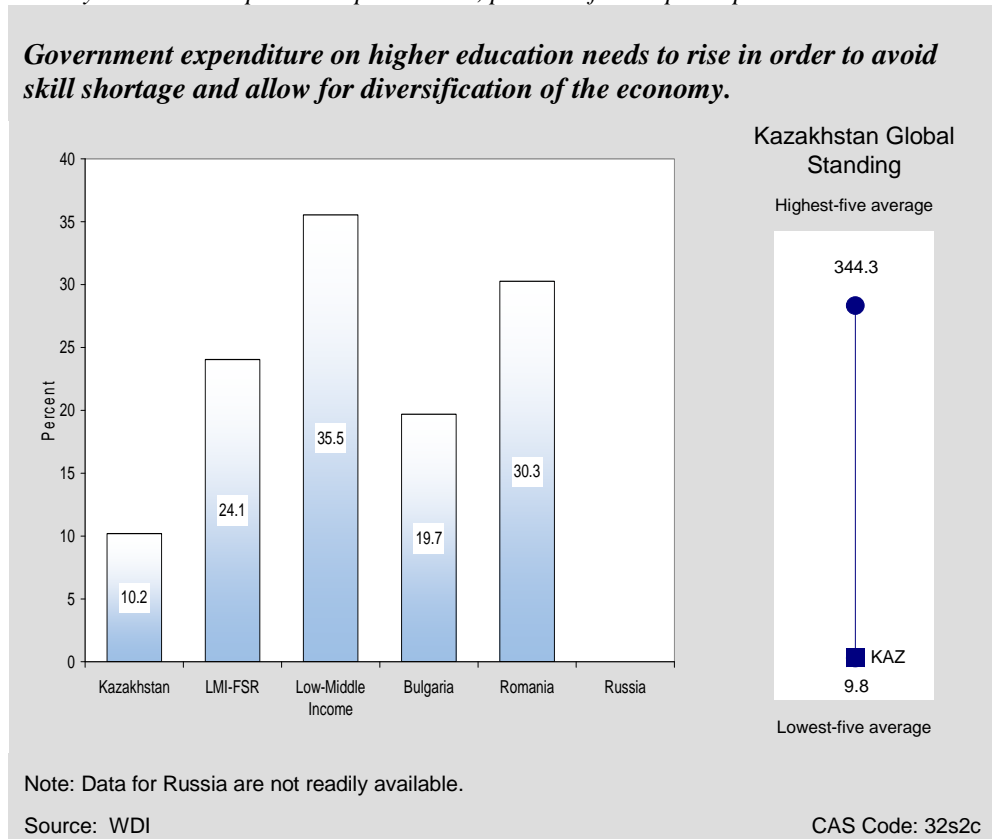
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<sup>40</sup> Data for Russia are not readily available.

<sup>41</sup> Ibid.

Figure 4-2

*Tertiary Education Expenditure per Student, percent of GDP per capita*



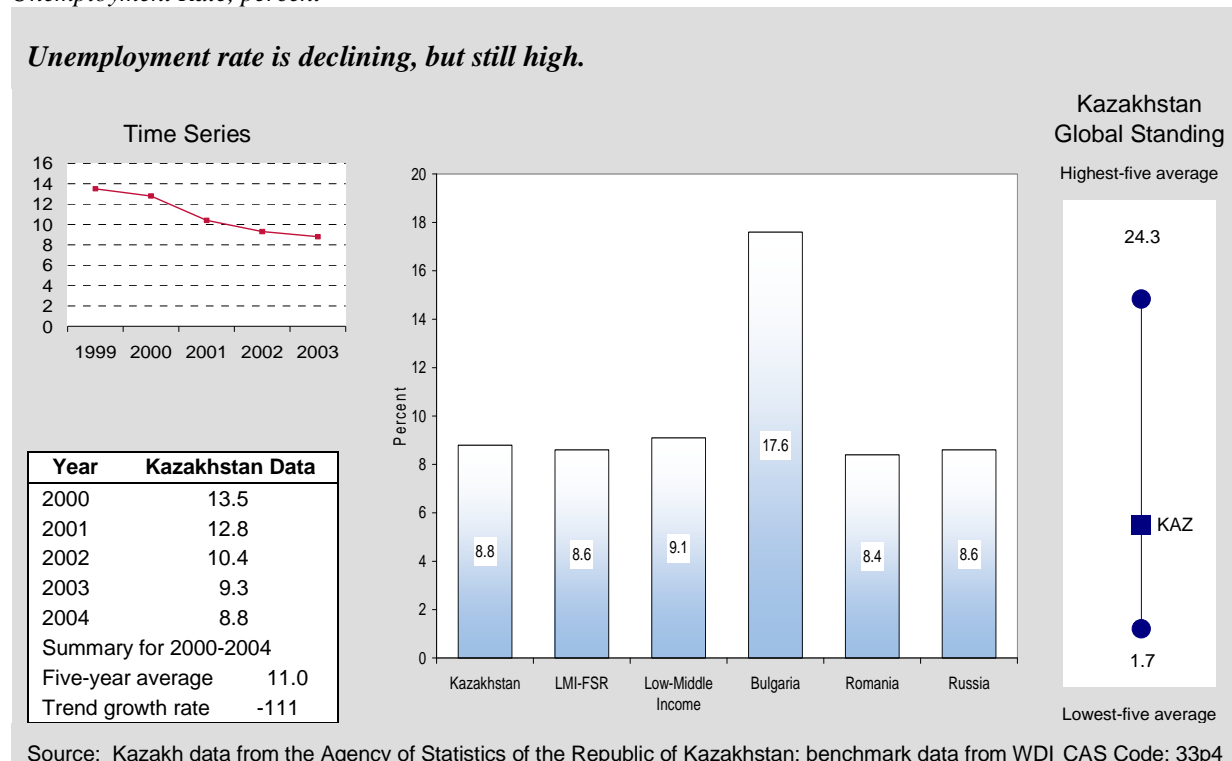
## EMPLOYMENT AND WORKFORCE

Productive employment serves a society by providing livelihoods and reinforcing social cohesion. Kazakhstan has made substantial progress in reducing unemployment. The jobless rate declined from over 13 percent in the late 1990s to 8.4 percent in 2004 (Figure 4-3, Unemployment Rate). The unemployment rate is essentially the same as, on average, in the LMI-FSR region, Russia and Romania. On the negative side, the decline in the unemployment rate has slowed, and unemployment remains high for a country whose output grows at such a strong pace. Moreover, there may be substantial hidden unemployment because more enterprise restructuring must be carried out.

The Kazakh labor force participation rate declined from 75.4 percent in 1999 to 73.9 percent in 2004, falling slightly below the average labor force participation rate in the LMI-FSR (75.8 percent) and Russia (77.5 percent), but in line with the benchmark regression predicted level of 73.2 and of Bulgaria at 73.6 percent. At the same time, it is markedly higher than in Romania at 67.9 percent. Despite the decline, this level is sufficient to sustain economic activity, and it appears that Kazakhstan has largely averted the practice of early retirement widely used in other transition countries, including Romania, though this may be because much of the enterprise restructuring necessary has yet to occur.



Figure 4-3  
Unemployment Rate, percent



The Kazakh Rigidity of Employment Index, which gauges the liquidity of the labor market by determining the ease of hiring, firing, and requesting hours worked beyond the standard work week, is 27, the same as in Russia, marginally better than in Bulgaria (28), and substantially better than in the LMI-FSR region overall (38) and in Romania (63).<sup>42</sup> It is also lower (better) than the range predicted by the regression.

## AGRICULTURE

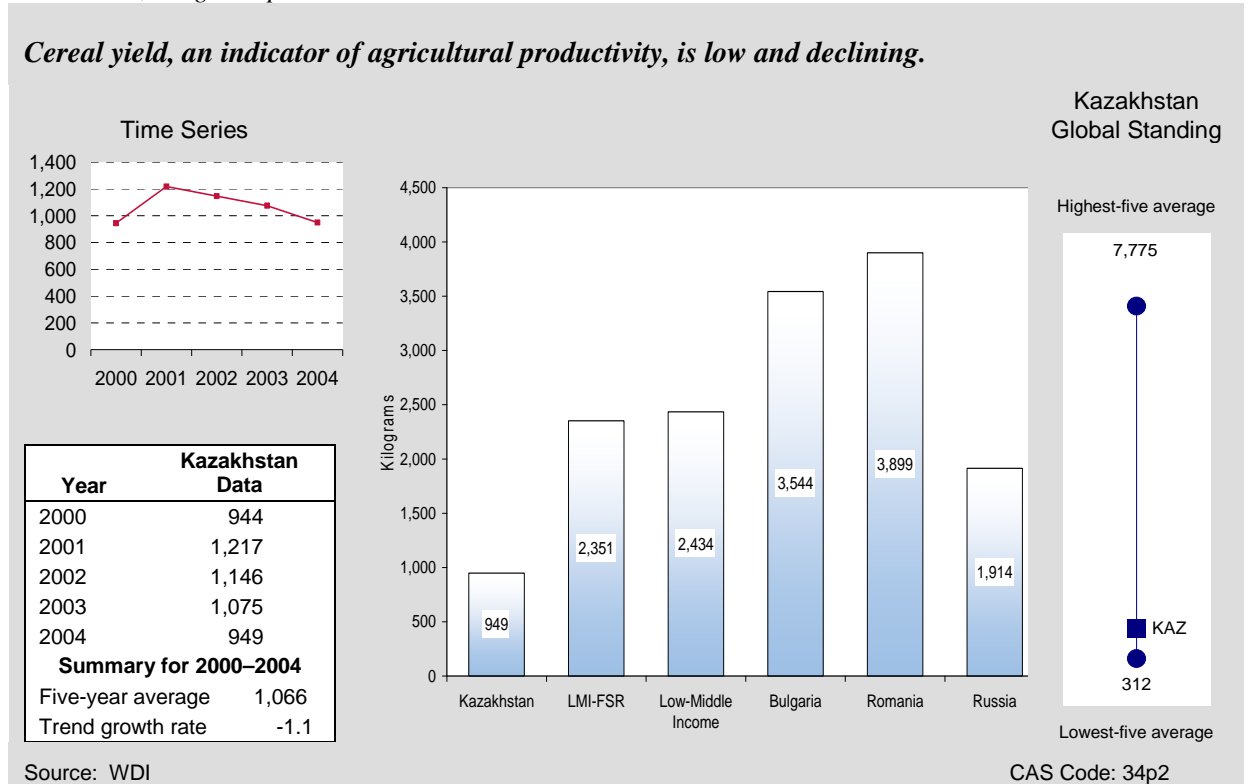
Kazakh agriculture suffers from low productivity. In 2004, it accounted for 33.1 percent of total employment and only 8.4 percent of total added value. Among the problems is low cereal yield—at 949 kilograms per hectare in 2003, it was well below the yield in the LMI-FSR region (2,351) and comparator countries (Bulgaria with 3,543, Romania with 3,899, and Russia with 1,913). Wheat yield was also less in 2003 than in 1992, immediately after independence (Figure 4-4, Cereal Yield). Low productivity in agriculture is to a great extent a result of the lack of capital investment in this sector, which in 2000–2004 stood at 1.3–1.4 percent of total investment. Kazakhstan’s score on the Agricultural Policy Costs Index, which measures executives’ perceptions of how burdensome the cost of agricultural policy is, was 3.5<sup>43</sup> for 2005, not

<sup>42</sup> Rigidity of employment index ranges from 0 (for minimum rigidity) to 100 (for high rigidity).

<sup>43</sup> The Agricultural Policy Costs Index ranges from 1 (policy is excessively burdensome) to 7 (policy balances all economic agents’ interests).

favorable by absolute standards. At the same time it is a little higher than the LMI-FSR average (3.0) and than the indices in Bulgaria (2.7), Romania (3.0), and Russia (3.1).

Figure 4-4  
Cereal Yield, kilograms per hectares



The country may benefit from policies aimed at the shifting of agricultural workers to more productive sectors, supporting nonfarm employment, and even shifting production and employment to crops and agricultural subsectors with higher productivity.

# Appendix

## CRITERIA FOR SELECTING INDICATORS

The economic performance evaluation is designed to balance the need for broad coverage and diagnostic value, on the one hand, and the requirement of brevity and clarity, on the other. The analysis covers 15 economic growth–related topics and just over 100 variables. For the sake of brevity, the write-up in the text 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 contains the complete data set for Kazakhstan, including data for the benchmark comparisons and technical notes for every indicator.

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

In the areas where level I indicators suggest weak performance, the analysis proceeds to 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.<sup>44</sup>

The indicators were selected on the basis of the following criteria. Each one 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

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<sup>44</sup> Deeper analysis of the topic using more detailed data (level III) is beyond the scope of papers in 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 Kazakhstan relative to the average for countries in the same income group and region—in this case, former Soviet republics with low-middle income.<sup>45</sup> For added perspective, three other comparisons are examined: (1) the global average for this income group; (2) respective values for two comparator countries selected by the Kazakhstan mission (in this case, the mission selected three countries, Bulgaria, Romania, and Russia); 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.<sup>46</sup>

For selected variables, a second source of benchmark values uses statistical regression analysis to establish an expected value for the indicator, controlling for income and regional effects.<sup>47</sup> This approach has three advantages. First, the benchmark is customized to Kazakhstan’s specific level of income. Second, the comparison does not depend on the exact choice of reference group. Third, the methodology allows one to quantify the margin of error and establish a “normal band” for a country with Kazakhstan’s characteristics. An observed value falling outside this band on the side of poor performance signals a serious problem.<sup>48</sup>

Finally, where relevant, Kazakhstan’s performance is weighed against absolute standards. For example, if the Corruption Perception Index for a given country is below 3.0, this is a sign of serious economic governance problems, regardless of the regional comparisons or regression result.

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<sup>45</sup> Income groups as defined by the World Bank for 2004. For this study, the average is defined in terms of the mean; future studies will use the median instead, because the values are not distorted by outliers.

<sup>46</sup> The five-year trends are computed by fitting a log-linear regression line through the data points. The alternative of computing average growth from the end points produces aberrant results when one or both of those points diverges from the underlying trend.

<sup>47</sup> This is a cross-sectional OLS regression using data for all developing countries. For any indicator,  $Y$ , the regression equation takes the form:  $Y$  (or  $\ln Y$ , as relevant) =  $a + b * \ln \text{PCI} + c * \text{Region} + \text{error}$  – where PCI is per capita income in PPP\$, and Region is a set of 0-1 dummy variables indicating the region in which each country is located. Once estimates are obtained for the parameters  $a$ ,  $b$  and  $c$ , the predicted value for Kazakhstan is computed by plugging in Kazakhstan-specific values for PCI and Region. Where applicable, the regression also controls for population size and petroleum exports (as a percentage of GDP).

<sup>48</sup> This report uses a margin of error of 0.66 times the standard error of estimate (adjusted for heteroskedasticity, where appropriate). With this value, 25% of the observations should fall outside the normal range on the side of poor performance (and 25% on the side of good performance). Some regressions produce a very large standard error, giving a “normal band” that is too wide to provide a discerning test of good or bad performance.

## List of Indicators

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

	Level <sup>a</sup>	MDG, MCA, or EcGov <sup>b</sup>	CAS Indicator Code
<b>Business Environment</b>			
Corruption perception index	I	EcGov	22P1
Doing business composite index	I	EcGov	22P2
Rule of law index	I	MCA / EcGov	22P3
Cost of starting a business, % GNI per capita	II	EcGov	22S1
Procedures to enforce contract	II	EcGov	22S2
Procedures to register property	II	EcGov	22S3
Procedures to start a business	II	EcGov	22S4
Time to enforce a contract	II	EcGov	22S5
Time to register property	II	EcGov	22S6
Time to start a business	II	EcGov	22S7
<b>Financial Sector</b>			
Domestic credit to private sector, % GDP	I		23P1
Interest rate spread	I		23P2
Money supply, % GDP	I		23P3
Stock market capitalization rate, % of GDP	I		23P4
Cost to create collateral	II		23S1
Country credit rating	II	MCA	23S2
Legal rights of borrowers and lenders index	II		23S3
Real Interest rate	I		23S4
<b>External Sector</b>			
Aid, % GNI	I		24P1
Current account balance, % GDP	I		24P2
Debt service ratio, % exports	I	MDG	24P3
Export growth of goods and services	I		24P4
Foreign direct investment, % GDP	I		24P5
Gross international reserves, months of imports	I	EcGov	24P6
Gross Private capital inflows, % GDP	I		24P7
Present value of debt, % GNI	I		24P8
Remittance receipts, % exports	I		24P9
Trade, % GDP	I		24P10
Concentration of Exports	II		24S1
Inward FDI Potential Index	II		24S2
Net barter terms of trade	II		24S3
Real effective exchange rate (REER)	II	EcGov	24S4
Structure of merchandise exports	II		24S5
Trade policy index	II	MCA / EcGov	24S6
<b>Economic Infrastructure</b>			
Internet users per 1,000 people	I	MDG	25P1
Overall infrastructure quality	I	EcGov	25P2
Telephone density, fixed line and mobile	I	MDG	25P3
Quality of infrastructure—railroads, ports, air transport, and electricity	II		25S1

	Level <sup>a</sup>	MDG, MCA, or EcGov <sup>b</sup>	CAS Indicator Code
Telephone cost, average local call	II		25S2
<b>Science and Technology</b>			
Expenditure for R&D, % GNI	I		26P1
FDI and technology transfer index	I		26P2
Patent applications filed by residents	I		26P3
<b>PRO-POOR GROWTH ENVIRONMENT</b>			
<b>Health</b>			
HIV prevalence	I		31P1
Life expectancy at birth	I		31P2
Maternal mortality rate	I	MDG	31P3
Access to improved sanitation	II	MDG	31S1
Access to improved water source	II	MDG	31S2
Births attended by skilled health personnel	II	MDG	31S3
Child immunization rate	II		31S4
Prevalence of child malnutrition (weight for age)	II		31S5
Public health expenditure, % GDP	II	EcGov	31S6
<b>Education</b>			
Net primary enrollment rate	I	MDG	32P1
Persistence in school to grade 5	I	MDG	32P2
Youth literacy rate	I		32P3
Education expenditure, primary, % GDP	II	MCA/ EcGov	32S1
Expenditure per student, % GDP per capita—primary, secondary, and tertiary	II	EcGov	32S2
Pupil-teacher ratio, primary school	II		32S3
<b>Employment and Workforce</b>			
Labor force participation rate, females, males, total	I		33P1
Rigidity of employment index	I	EcGov	33P2
Size and growth of the labor force	I		33P3
Unemployment rate	I		33P4
<b>Agriculture</b>			
Agriculture value added per worker	I		34P1
Cereal yield	I		34P2
Growth in agricultural value-added	I		34P3
Agricultural policy costs index	II	EcGov	34S1
Crop production index	II		34S2
Livestock production index	II		34S3

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

<sup>b</sup> MDG—Millennium Development Goal indicator

MCA—Millennium Challenge Account indicator

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



**USAID**  
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# KAZAKHSTAN

## ECONOMIC PERFORMANCE ASSESSMENT

### DATA SUPPLEMENT

November 2005

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





# KAZAKHSTAN

## ECONOMIC PERFORMANCE ASSESSMENT

### DATA SUPPLEMENT

#### **DISCLAIMER**

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

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	Per capita GDP, purchasing power parity Dollars	Per capita GDP, current U.S. Dollars	Real GDP growth	Growth of labor productivity	Investment productivity - incremental capital-output ratio (ICOR)	Share of gross fixed investment in GDP, current prices	Share of gross fixed private investment in GDP, current prices
Indicator Number	11P1	11P2	11P3	11S1	11S2	11S3	11S4
<i>Kazakhstan Data</i>							
<i>Latest Year (T)</i>	2004	2004	2004	2003	2003	2004	2004
Value Year T	7,418	2,715	9.4	8.3	2.3	22.7	17.0
Value Year T-1	6,715	2,075	9.3	8.9	2.9	23.3	18.5
Value Year T-2	6,039	1,655	9.8	12.6	3.5	24.0	20.7
Value Year T-3	5,416	1,491	13.5	10.4	6.5	23.7	20.9
Value Year T-4	4,675	1,236	9.8	3.3	.	17.3	15.7
Average Value, 5 year	6,053	1,834	10.4	8.7	3.8	22.2	18.6
Growth Trend	12.1	21.0	.	.	.	5.3	.
<i>Benchmark Data</i>							
Regression Benchmark	.	.	7.6	.	.	22.0	.
Lower Bound	.	.	6.2	.	.	19.5	.
Upper Bound	.	.	8.9	.	.	24.6	.
<i>Latest Year Bulgaria</i>	2004	2004	2004	2003	2003	2003	.
Bulgaria Value Latest Year	8,500	3,074	5.7	4.7	4.1	19.6	.
<i>Latest Year Romania</i>	2004	2004	2004	2003	2003	2003	.
Romania Value Latest Year	7,641	3,207	8.3	4.7	7.3	22.5	.
<i>Latest Year Russia</i>	2004	2004	2004	2003	2003	2003	.
Russia Value Latest Year	10,179	4,093	7.1	7.4	2.6	18.2	.
LMI-FSR Avg.	6,910	1,917	9.8	9.8	2.9	23.7	.
Low-Middle Income Avg.	5,573	2,130	5.1	2.1	5.6	22.1	.
High Five Avg.	42,809	52,715	21.2	14.1	70.2	48.6	.
Low Five Avg.	664	121	-2.9	-13.3	-302.9	7.7	.

Poverty and Inequality							
	Human poverty index (0 for excellent to 100 for poor)	Income share accruing to poorest 20%	Population (%) living on less than \$1 PPP per day	Poverty headcount (%), by national poverty line	PRSP Status	Population (%) below minimum dietary energy consumption	Poverty gap at \$1 PPP a day
Indicator Number	12P1	12P2	12P3	12P4	12P5	12S1	12S2
<i>Kazakhstan Data</i>							
<i>Latest Year (T)</i>	.	2003	2003	2004	2004	2000-2002	2003
Value Year T	.	7.8	2.0	16.1	no	13.0	0.5
Value Year T-1	.	.	.	19.8	.	.	.
Value Year T-2	.	.	2.0	24.2	.	.	0.5
Value Year T-3	.	.	.	28.4	.	.	.
Value Year T-4	.	.	.	31.8	.	.	.
Average Value, 5 year	.	.	.	24.1	.	.	.
Growth Trend	.	.	.	-15.8	.	.	.
<i>Benchmark Data</i>							
Regression Benchmark	12.8	7.4	0.6	34.4	.	13.0	.
Lower Bound	7.2	6.5	-6.5	26.2	.	4.8	.
Upper Bound	18.5	8.3	7.7	42.6	.	21.3	.
<i>Latest Year Bulgaria</i>	.	2001	2001	2001	2004	2000-2002	2001
Bulgaria Value Latest Year	.	6.7	4.7	12.8	no	11.0	1.4
<i>Latest Year Romania</i>	.	2002	2002	2001	2004	2000-2002	2002
Romania Value Latest Year	.	7.9	2.0	29.6	no	1.0	0.5
<i>Latest Year Russia</i>	.	2002	2002	2002	2004	2000-2002	2002
Russia Value Latest Year	.	8.2	2.0	17.8	no	4.0	0.5
LMI-FSR Avg.	.	7.8	2.7	50.0	N/A	11.2	0.6
Low-Middle Income Avg.	14.7	8.2	4.2	49.0	N/A	11.0	1.2
High Five Avg.	58.7	8.7	33.5	.	N/A	66.0	11.8
Low Five Avg.	3.9	5.9	2.0	.	N/A	3.0	0.5

<b>Economic Structure</b>						
	Labor force in agriculture, % total employment	Labor force in industry, % total employment	Labor force in services, % total employment	Output structure (agriculture, value added, % GDP)	Output structure (industry, value added, % GDP)	Output structure (services, etc., value added, % GDP)
Indicator Number	13P1a	13P1b	13P1c	13P2a	13P2b	13P2c
<i>Kazakhstan Data</i>						
<i>Latest Year (T)</i>	2004	2004	2004	2004	2004	2004
Value Year T	33.1	17.5	49.4	8.4	39.5	52.0
Value Year T-1	35.8	17.1	47.1	8.4	37.6	53.9
Value Year T-2	35.3	16.3	48.4	8.6	38.6	52.8
Value Year T-3	35.3	16.3	48.4	9.4	38.8	51.8
Value Year T-4	31.3	17.4	51.3	8.7	40.5	50.8
Average Value, 5 year	34.2	16.9	48.9	8.7	39.0	52.3
Growth Trend	1.3	0.6	-1.0	-1.6	-0.8	0.9
<i>Benchmark Data</i>						
Regression Benchmark	.	.	.	12.1	44.7	.
Lower Bound	.	.	.	6.0	38.7	.
Upper Bound	.	.	.	18.1	50.6	.
<i>Latest Year Bulgaria</i>	2004	2004	2004	2004	2004	2004
Bulgaria Value Latest Year	26.3	27.6	46.0	11.7	30.7	57.5
<i>Latest Year Romania</i>	2001	2001	2001	2003	2003	2003
Romania Value Latest Year	42.3	26.2	31.5	11.9	36.1	52.1
<i>Latest Year Russia</i>	1999	1999	1999	2003	2003	2003
Russia Value Latest Year	11.8	29.4	58.8	5.2	34.2	60.7
LMI-FSR Avg.	40.0	10.8	43.9	14.1	38.3	53.9
Low-Middle Income Avg.	25.3	22.0	50.3	12.2	30.4	55.8
High Five Avg.	41.5	37.1	72.8	56.0	66.2	77.7
Low Five Avg.	0.3	12.9	36.0	0.8	12.3	15.4



Indicator Number	Demography and Environment						Gender		
	Adult literacy rate	Age dependency rate	Environmental sustainability index (0 for poor to 100 for excellent)	Population size (millions)	Population growth rate	Urbanization rate	Ratio of male to female - adult literacy rate	Ratio of male to female - gross enrollment rate, all levels	Ratio of male to female - life expectancy at birth
	14P1	14P2	14P3	14P4a	14P4b	14P5	15P1	15P2	15P3
<i>Kazakhstan Data</i>									
<i>Latest Year (T)</i>	2003	2003	2005	2003	2003	2003	2003	2003	2003
Value Year T	99.5	0.48	48.6	15.1	0.6	55.9	1.01	1.03	0.84
Value Year T-1	99.4	0.49	.	15.0	0.1	55.9	1.01	0.98	0.85
Value Year T-2	99.4	0.51	.	14.9	-0.1	55.9	.	.	.
Value Year T-3	99.4	0.52	.	14.9	-0.2	55.8	.	.	.
Value Year T-4	99.3	0.53	.	14.9	-0.4	56.0	.	.	.
Average Value, 5 year	99.4	0.51	.	14.9	0.0	55.9	.	.	.
Growth Trend	0.0	-2.47	.	0.1	.	0.0	.	.	.
<i>Benchmark Data</i>									
Regression Benchmark	.	0.5	49.3	.	0.1	65.8	.	.	.
Lower Bound	.	0.4	45.6	.	-0.3	56.6	.	.	.
Upper Bound	.	0.6	53.0	.	0.5	75.0	.	.	.
<i>Latest Year Bulgaria</i>	2002	2003	2005	2003	2003	2003	2002	2002	2002
Bulgaria Value Latest Year	98.6	0.44	50.0	7.8	-0.6	67.5	1.01	0.97	0.90
<i>Latest Year Romania</i>	2002	2003	2005	2003	2003	2003	2002	2002	2002
Romania Value Latest Year	97.3	0.44	46.2	21.7	-0.3	55.7	1.02	0.96	0.90
<i>Latest Year Russia</i>	2002	2003	2005	2003	2003	2003	2002	2002	2002
Russia Value Latest Year	99.6	0.42	56.1	143.4	-0.5	72.9	1.00	0.92	0.83
LMI-FSR Avg.	99.6	0.47	46.5	9.1	-0.4	62.2	1.00	0.97	0.88
Low-Middle Income Avg.	87.8	0.58	49.5	8.2	1.4	57.8	1.03	1.00	0.93
High Five Avg.	99.7	1.03	71.3	607.0	4.6	100.0	2.40	1.69	1.01
Low Five Avg.	35.7	0.38	29.9	0.0	-0.8	9.0	0.92	0.84	0.85

Fiscal and Monetary Policy										
Indicator Number	Government expenditure, % GDP	Government revenue, % GDP	Growth in the broad money supply	Inflation rate	Overall government budget balance, including grants, % GDP	Composition of government expenditure (wages and salaries)	Composition of government expenditure (interest payments)	Composition of government expenditure (goods and services)	Composition of government expenditure (subsidies and other current transfers)	Composition of government expenditure (capital expenditure)
	21P1	21P2	21P3	21P4	21P5	21S1a	21S1b	21S1c	21S1d	21S1e
<i>Kazakhstan Data</i>										
<i>Latest Year (T)</i>	2004	2004	2004	2004	2004	2004	2004	2004	2004	2004
Value Year T	23.3	26.0	68.2	6.9	2.7	18.8	2.8	30.9	23.0	24.6
Value Year T-1	22.5	25.4	27.0	6.4	2.9	17.3	3.5	31.2	25.5	22.5
Value Year T-2	21.0	22.5	34.1	5.9	1.4	19.6	5.0	32.2	26.8	16.2
Value Year T-3	23.0	25.6	42.8	8.3	2.7	16.8	5.2	38.5	26.8	12.6
Value Year T-4	22.5	21.6	45.9	13.3	-0.8	.	.	.	.	.
Average Value, 5 year	22.5	24.2	43.6	8.2	1.8	18.1	4.1	33.2	25.5	19.0
Growth Trend	0.5	3.7	.	.	.	.	.	.	.	.
<i>Benchmark Data</i>										
Regression Benchmark	20.1	21.5	30.3	6.1	-0.1	.	.	.	.	.
Lower Bound	16.0	17.2	21.8	2.8	-1.7	.	.	.	.	.
Upper Bound	24.2	25.7	38.8	9.4	1.6	.	.	.	.	.
<i>Latest Year Bulgaria</i>	2004	2004	2003	2004	2004	2003	2003	2003	2003	.
Bulgaria Value Latest Year	37.5	38.0	20.2	6.1	1.8	11.6	6.2	23.4	56.5	.
<i>Latest Year Romania</i>	2003	2003	2003	2004	2003	2001	2001	2001	2001	.
Romania Value Latest Year	32.3	29.9	23.3	11.9	-2.3	15.4	10.8	19.8	48.5	.
<i>Latest Year Russia</i>	2003	2003	2003	2004	2003	2003	2003	2003	2003	.
Russia Value Latest Year	22.9	27.4	38.5	10.9	2.2	18.0	7.2	19.1	55.0	.
LMI-FSR Avg.	.	.	30.8	7.6	.	.	.	.	.	.
Low-Middle Income Avg.	.	.	14.2	5.5	.	.	.	.	.	.
High Five Avg.	43.7	44.1	134.4	85.3	3.9	.	.	.	.	.
Low Five Avg.	12.1	8.6	-8.5	-2.7	-8.1	.	.	.	.	.

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

	Composition of government revenue (Taxes on goods and services)	Composition of government revenue (Taxes on income, profits and capital gains)	Composition of government revenue (Social security taxes)	Composition of government revenue (Taxes on international trade)	Composition of government revenue (Other tax revenue)	Composition of government revenue (Other revenue net)	Composition of government revenue (Grants)	Composition of money supply growth (Net credit to government)	Composition of money supply growth (Credit to the economy)	Composition of money supply growth (Net foreign assets)	Composition of money supply growth (Other items, net)
Indicator Number	21S2a	21S2b	21S2c	21S2d	21S2e	21S2f	21S2g	21S3a	21S3b	21S3c	21S3d
<i>Kazakhstan Data</i>											
<i>Latest Year (T)</i>	<i>2004</i>	<i>2004</i>	<i>2004</i>	<i>2004</i>	<i>2004</i>	<i>2004</i>	<i>2004</i>	<i>2004</i>	<i>2004</i>	<i>2004</i>	<i>2004</i>
Value Year T	31.3	40.7	11.7	3.5	3.6	9.4	0.0	-0.2	75.0	38.5	-13.3
Value Year T-1	32.5	38.1	13.5	3.6	3.9	8.5	0.0	5.6	118.9	8.4	-32.8
Value Year T-2	30.4	38.0	15.8	4.6	4.7	6.5	0.0	13.5	86.6	40.3	-40.4
Value Year T-3	28.1	36.6	14.9	3.1	4.1	13.1	0.1	-16.1	138.9	4.5	-27.3
Value Year T-4	28.7	38.1	17.5	3.2	5.0	7.3	0.5	2.1	102.4	40.8	-45.4
Average Value, 5 year	30.2	38.3	14.7	3.6	4.3	.	.	1.0	104.3	26.5	-31.8
Growth Trend	.	.	.	.	.	.	.	.	.	.	.
<i>Benchmark Data</i>											
Regression Benchmark	.	.	.	.	.	.	.	.	.	.	.
Lower Bound	.	.	.	.	.	.	.	.	.	.	.
Upper Bound	.	.	.	.	.	.	.	.	.	.	.
<i>Latest Year Bulgaria</i>	<i>2003</i>	<i>2003</i>	.	<i>2003</i>	.	.	.	.	.	.	.
Bulgaria Value Latest Year	38.6	11.8	.	1.9	.	.	.	.	.	.	.
<i>Latest Year Romania</i>	<i>2001</i>	<i>2001</i>	.	<i>2001</i>	.	.	.	.	.	.	.
Romania Value Latest Year	30.0	10.3	.	3.1	.	.	.	.	.	.	.
<i>Latest Year Russia</i>	<i>2003</i>	<i>2003</i>	.	<i>2003</i>	.	.	.	.	.	.	.
Russia Value Latest Year	31.2	4.6	.	12.4	.	.	.	.	.	.	.
LMI-FSR Avg.	.	.	.	.	.	.	.	.	.	.	.
Low-Middle Income Avg.	.	.	.	.	.	.	.	.	.	.	.
High Five Avg.	.	.	.	.	.	.	.	.	.	.	.
Low Five Avg.	.	.	.	.	.	.	.	.	.	.	.

Business Environment											
	Corruption Perception Index (1 for poor to 10 for excellent)	Ease of doing business ranking (from 1 to 155)	Rule of law index (-2.5 for poor to 2.5 for excellent)	Regulatory quality index (-2.5 for 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	Time to enforce a contract	Time to register property	Time to start a business
Indicator Number	22P1	22P2	22P3	22P4	22S1	22S2	22S3	22S4	22S5	22S6	22S7
<i>Kazakhstan Data</i>											
<i>Latest Year (T)</i>	2005	2005	2004	2004	2005	2005	2005	2005	2005	2005	2005
Value Year T	2.6	86.0	-0.98	-0.89	9	47.0	8.0	7.0	380	52	24
Value Year T-1	2.2	.	.	.	11	41.0	8.0	9.0	400	52	25
Value Year T-2	2.4	.	-0.92	-0.71	.	.	.	.	.	.	.
Value Year T-3	2.3	.	.	.	.	.	.	.	.	.	.
Value Year T-4	2.7	.	-0.77	-0.47	.	.	.	.	.	.	.
Average Value, 5 year	2.4	.	.	.	.	.	.	.	.	.	.
Growth Trend	-1.2	.	.	.	.	.	.	.	.	.	.
<i>Benchmark Data</i>											
Regression Benchmark	2.7	.	-0.7	.	.	.	.	.	.	.	.
Lower Bound	2.2	.	-1.0	.	.	.	.	.	.	.	.
Upper Bound	3.1	.	-0.5	.	.	.	.	.	.	.	.
<i>Latest Year Bulgaria</i>	2005	2005	2004	2004	2005	2005	2005	2005	2005	2005	2005
Bulgaria Value Latest Year	4.0	62.0	0.05	0.60	10	34.0	9.0	11.0	440	19	32
<i>Latest Year Romania</i>	2005	2005	2004	2004	2005	2005	2005	2005	2005	2005	2005
Romania Value Latest Year	3.0	78.0	-0.18	-0.06	5	43.0	8.0	5.0	335	170	11
<i>Latest Year Russia</i>	2005	2005	2004	2004	2005	2005	2005	2005	2005	2005	2005
Russia Value Latest Year	2.4	79.0	-0.70	-0.51	5	29.0	6.0	8.0	330	52	33
LMI-FSR Avg.	2.2	84.0	-0.86	-0.60	14	28.0	7.0	10.0	269	52	34
Low-Middle Income Avg.	3.1	85.5	-0.54	-0.33	20	29.0	7.0	10.0	339	45	43
High Five Avg.	9.5	153.0	1.98	1.88	726	55.4	15.6	17.2	1,178	485	172
Low Five Avg.	1.6	3.0	-1.92	-2.29	0	13.4	1.6	2.4	51	2	4

Financial Sector								
	Domestic credit to private sector, % GDP	Interest rate spread, lending rate minus deposit rate	Money supply (M2), % GDP	Stock market capitalization rate, % GDP	Cost to create collateral	Country credit rating	Legal rights of borrowers and lenders index (0 for poor to 10 for excellent)	Real interest rate
Indicator Number	23P1	23P2	23P3	23P4	23S1	23S2	23S3	23S4
<i>Kazakhstan Data</i>								
<i>Latest Year (T)</i>	2004	2004	2004	2003	2004	.	2005	2004
Value Year T	29.4	6.0	29.5	8.2	4.1	.	5.0	8.5
Value Year T-1	23.3	5.5	21.1	.	.	.	5.0	9.8
Value Year T-2	19.6	4.9	20.3	5.4	.	.	.	10.2
Value Year T-3	16.8	4.1	17.6	7.3	.	.	.	10.0
Value Year T-4	11.8	4.0	15.4	13.4	.	.	.	10.7
Average Value, 5 year	20.2	4.9	20.8	8.6	.	.	.	9.8
Growth Trend	24.1	12.1	16.0	.	.	.	.	-4.7
<i>Benchmark Data</i>								
Regression Benchmark	13.3	7.6	13.5	22.2	.	.	.	.
Lower Bound	-1.6	4.9	-0.3	-1.0	.	.	.	.
Upper Bound	28.3	10.4	27.4	45.4	.	.	.	.
<i>Latest Year Bulgaria</i>	2003	2003	2003	2003	2004	.	2005	2003
Bulgaria Value Latest Year	27.6	5.9	44.6	8.8	1.0	.	6.0	6.6
<i>Latest Year Romania</i>	2003	.	2003	2003	2004	.	2005	.
Romania Value Latest Year	9.5	.	22.1	9.8	1.1	.	4.0	.
<i>Latest Year Russia</i>	2003	2003	2003	2003	2004	.	2005	2003
Russia Value Latest Year	20.9	8.5	25.7	53.3	11.6	.	3.0	-1.3
LMI-FSR Avg.	12.0	9.7	14.1	8.2	4.1	24.1	5.0	10.6
Low-Middle Income Avg.	24.6	7.1	40.5	25.1	11.2	29.7	5.0	8.9
High Five Avg.	171.0	46.9	188.2	238.9	121.6	51.5	9.6	36.2
Low Five Avg.	1.6	1.0	4.8	1.0	0.0	9.4	1.2	-4.6

External Sector										
	Aid, % GNI	Current account balance, % GDP	Debt service ratio, % exports	Exports growth, goods and services	Foreign direct investment, % GDP	Gross international reserves, months of imports	Private capital inflows, %GDP	Present value of debt, % GNI	Remittance receipts, % exports	Trade, % GDP
Indicator Number	24P1	24P2	24P3	24P4	24P5	24P6	24P7	24P8	24P9	24P10
<i>Kazakhstan Data</i>										
<i>Latest Year (T)</i>	2003	2004	2004	2004	2004	2004	2003	2003	2003	2004
Value Year T	1.0	1.3	38.3	51.1	13.6	5.9	7.6	95.3	0.3	101.4
Value Year T-1	0.8	-0.9	35.2	29.2	7.2	4.5	9.8	80.1	0.9	91.2
Value Year T-2	0.7	-4.2	35.4	13.5	8.8	3.3	12.9	78.5	0.8	93.1
Value Year T-3	1.1	-6.3	37.6	-1.6	12.9	2.9	7.2	36.3	0.6	92.9
Value Year T-4	1.1	2.0	31.7	.	7.0	2.8	9.2	.	.	105.1
Average Value, 5 year	0.9	-1.6	35.6	23.1	9.9	3.9	9.3	72.5	0.6	96.7
Growth Trend	-5.3	.	3.1	.	7.7	21.3	-0.6	33.9	-22.40	-0.9
<i>Benchmark Data</i>										
Regression Benchmark	-1.4	-1.0	15.1	9.0	3.4	3.3	.	44.4	.	102.8
Lower Bound	-7.9	-5.8	10.0	2.4	1.5	1.9	.	20.7	.	84.0
Upper Bound	5.1	3.8	20.3	15.7	5.3	4.8	.	68.2	.	121.6
<i>Latest Year Bulgaria</i>	2003	2003	2003	2003	2003	2003	2003	2003	.	2003
Bulgaria Value Latest Year	2.1	-8.4	10.5	8.0	7.2	6.2	6.5	85.5	.	116.2
<i>Latest Year Romania</i>	2003	2003	2003	2003	2003	2003	2003	2003	2003	2003
Romania Value Latest Year	1.1	-5.8	17.3	8.2	3.2	4.3	4.2	46.0	0.07	71.6
<i>Latest Year Russia</i>	2003	2003	2003	2003	2003	2003	2003	2003	2003	2003
Russia Value Latest Year	0.3	8.3	11.8	3.7	1.8	7.4	1.3	52.1	0.20	52.6
LMI-FSR Avg.	0.8	-1.6	11.8	4.9	3.6	2.9	.	33.2	0.8	94.5
Low-Middle Income Avg.	1.3	-1.7	11.6	5.8	2.0	4.0	.	43.7	8.1	78.1
High Five Avg.	66.1	18.0	61.5	21.6	99.4	18.6	875.4	380.0	86.5	228.0
Low Five Avg.	-0.3	-27.8	0.9	-19.8	-0.4	0.3	1.8	9.1	0.0	27.1

External Sector (cont'd)										
	Concentration of exports (top three exports, 3-digit SITC)	Inward FDI potential index (0 for poor to 1 for excellent)	Net barter terms of trade (1995=100)	Real effective exchange rate index (1995=100)	Structure of merchandise exports (agricultural raw materials)	Structure of merchandise exports (fuel)	Structure of merchandise exports (manufactured goods)	Structure of merchandise exports (ores and metals)	Structure of merchandise exports (food)	Trade policy index (1 for excellent to 5 for poor)
Indicator Number	24S1	24S2	24S3	24S4	24S5a	24S5b	24S5c	24S5d	24S5e	24S6
<i>Kazakhstan Data</i>										
<i>Latest Year (T)</i>	2003	2002	.	.	2003	2003	2003	2003	2003	2004
Value Year T	64.3	0.18	.	.	1.3	61.8	18.0	12.8	6.0	4
Value Year T-1	.	0.16	.	.	.	.	.	.	.	4
Value Year T-2	62.1	0.15	.	.	1.4	55.9	19.1	18.3	5.3	4
Value Year T-3	62.3	0.15	.	.	1.5	53.0	20.0	18.5	7.0	4
Value Year T-4	56.4	0.16	.	.	1.6	45.0	24.5	21.5	7.4	3
Average Value, 5 year	61.3	0.16	.	.	1.4	53.9	20.4	17.8	6.4	3.8
Growth Trend	.	2.9	.	.	.	.	.	.	.	5.9
<i>Benchmark Data</i>										
Regression Benchmark	.	0.2	.	.	3.2	.	.	.	.	.
Lower Bound	.	0.2	.	.	-3.2	.	.	.	.	.
Upper Bound	.	0.2	.	.	9.6	.	.	.	.	.
<i>Latest Year Bulgaria</i>	2003	2002	.	.	2003	2003	2003	2003	2003	2004
Bulgaria Value Latest Year	17.4	0.20	.	.	2.3	5.8	65.8	10.3	10.2	4
<i>Latest Year Romania</i>	2003	2002	.	.	2003	2003	2003	2003	2003	2004
Romania Value Latest Year	24.0	0.16	.	.	3.1	6.5	82.5	4.2	3.2	4
<i>Latest Year Russia</i>	.	2002	.	.	2003	2003	2003	2003	2003	2004
Russia Value Latest Year	54.3	0.29	.	.	3.2	53.0	21.1	6.9	2.0	3
LMI-FSR Avg.	.	0.16	.	.	2.2	37.4	26.0	9.9	7.1	4
Low-Middle Income Avg.	.	0.17	98.0	.	2.3	5.8	48.1	3.2	14.3	4
High Five Avg.	.	0.50	149.8	.	30.8	92.8	94.2	51.5	91.0	5.0
Low Five Avg.	.	0.06	71.8	.	0.0	0.0	2.6	0.0	0.5	1.4

Economic Infrastructure								
	Internet users per 1000 people	Overall infrastructure quality index (1 for poor to 7 for excellent)	Telephone density, fixed line and mobile, per 1000 people	Quality of infrastructure index - air transport (1 for poor to 7 for excellent)	Quality of infrastructure index - ports (1 for poor to 7 for excellent)	Quality of infrastructure index - railroads (1 for poor to 7 for excellent)	Quality of infrastructure index - electricity (1 for poor to 7 for excellent)	Telephone cost, average local call
Indicator Number	25P1	25P2	25P3	25S1a	25S1b	25S1c	25S1d	25S2
<i>Kazakhstan Data</i>								
<i>Latest Year (T)</i>	2003	2005	2002	2005	2005	2005	2005	2002
Value Year T	16	3.5	195	4.1	2.9	4.0	4.60	0.00
Value Year T-1	9	.	157	.	.	.	.	0.00
Value Year T-2	9	.	125	.	.	.	.	0.00
Value Year T-3	6	.	111	.	.	.	.	0.00
Value Year T-4	.	.	110	.	.	.	.	0.00
Average Value, 5 year	10	.	140	.	.	.	.	0.00
Growth Trend	.	.	15.9	.	.	.	.	4.1
<i>Benchmark Data</i>								
Regression Benchmark	103	3.3	404	.	.	.	.	.
Lower Bound	62	2.8	234	.	.	.	.	.
Upper Bound	143	3.7	574	.	.	.	.	.
<i>Latest Year Bulgaria</i>	2003	2004	2003	2004	2004	2004	2004	2003
Bulgaria Value Latest Year	81	2.8	847	2.7	3.7	3.7	4.30	0.03
<i>Latest Year Romania</i>	2003	2004	2003	2004	2004	2004	2004	2003
Romania Value Latest Year	191	2.7	524	4.1	4.0	3.4	3.80	0.12
<i>Latest Year Russia</i>	2003	2004	2002	2004	2004	2004	2004	1999
Russia Value Latest Year	41	3.3	362	4.3	4.3	4.9	3.90	0.02
LMI-FSR Avg.	34	3.3	241	3.8	3.9	4.9	3.50	0.02
Low-Middle Income Avg.	40	3.3	273	4.1	3.7	2.3	4.10	0.03
High Five Avg.	585.8	6.7	1,686	6.7	6.6	6.5	6.90	0.41
Low Five Avg.	0.9	1.5	10	2.4	1.3	1.1	1.40	0.00



Indicator Number	Science and Technology			Health				
	Expenditure for R&D, % GDP	FDI technology transfer index (1 for FDI bringing little new technology to 7 for FDI bringing a lot of new technology)	Patent applications filed by residents	HIV prevalence	Life expectancy at birth	Maternal mortality rate (deaths per 100,000 births)	Access to improved sanitation	Access to improved water source
	26P1	26P2	26P3	31P1	31P2	31P3	31S1	31S2
<b>Kazakhstan Data</b>								
<i>Latest Year (T)</i>	.	2005	2002	2003	2003	2000	2002	2002
Value Year T	.	4.3	2.0	0.2	61	210.0	72.0	86.0
Value Year T-1	.	.	1,610.0	.	62	.	.	.
Value Year T-2	.	.	1,400.0	0.1	.	.	.	.
Value Year T-3	.	.	1,358.0	.	.	.	.	.
Value Year T-4	.	.	1,245.0	.	65.5	.	.	.
Average Value, 5 year	.	.	1,123.0	.	.	.	.	.
Growth Trend	.	.	-71.9	.	.	.	.	.
<b>Benchmark Data</b>								
Regression Benchmark	.	0.0	.	.	70	.	.	.
Lower Bound	.	-0.4	.	.	66	.	.	.
Upper Bound	.	0.4	.	.	73	.	.	.
<i>Latest Year Bulgaria</i>	2002	2004	2002	2003	2003	2000	2002	2002
Bulgaria Value Latest Year	0.5	4.4	306.0	0.1	72.1	32.0	100.0	100.0
<i>Latest Year Romania</i>	2002	2004	2002	2003	2003	2000	2002	2002
Romania Value Latest Year	0.4	5.1	1,486.0	0.1	70	49.0	51.0	57.0
<i>Latest Year Russia</i>	2002	2004	2002	2003	2003	2000	2002	2002
Russia Value Latest Year	1.3	4.0	24,049.0	1.1	66	67.0	87.0	96.0
LMI-FSR Avg.	0.5	4.0	119.5	0.1	68	45.0	83.0	89.0
Low-Middle Income Avg.	0.3	4.6	13.0	0.1	69	110.0	74.0	85.5
High Five Avg.	3.5	5.9	153,540.2	30.2	80	1,720.0	100.0	100.0
Low Five Avg.	0.1	3.3	0.0	0.1	37	1.8	8.0	26.4

Indicator Number	Health (cont'd)				Education						
	Births attended by skilled health personnel	Child immunization rate	Prevalence of child malnutrition (weight for age)	Public health expenditure, % GDP	Net primary enrollment rate (total)	Net primary enrollment rate (female)	Net primary enrollment rate (male)	Persistence in school to grade 5 (total)	Persistence in school to grade 5 (female)	Persistence in school to grade 5 (male)	Youth literacy rate
	31S3	31S4	31S5	31S6	32P1a	32P1b	32P1c	32P2a	32P2b	32P2c	32P3
<i>Kazakhstan Data</i>											
<i>Latest Year (T)</i>	1999	2003	1999	2004	2002	2002	2002	.	.	.	2002
Value Year T	99.1	99.0	4.2	2.4	91.5	91.0	91.9	.	.	.	99.80
Value Year T-1	.	95.0	.	1.9	89.5	89.0	90.0	.	.	.	99.80
Value Year T-2	.	96.0	.	1.9	87.0	86.6	87.5	.	.	.	99.80
Value Year T-3	.	98.0	.	1.9	84.3	84.5	84.1	.	.	.	99.80
Value Year T-4	99.6	98.5	8.3	2.1	83.5	83.5	83.4	.	.	.	99.80
Average Value, 5 year	.	97.3	.	2.0	87.2	86.9	87.4	.	.	.	99.80
Growth Trend	.	-0.2	.	2.7	2.5	2.3	2.6	.	.	.	0.0
<i>Benchmark Data</i>											
Regression Benchmark	.	.	.	.	88.1	.	.	87.9	.	.	.
Lower Bound	.	.	.	.	81.4	.	.	81.0	.	.	.
Upper Bound	.	.	.	.	94.7	.	.	94.9	.	.	.
<i>Latest Year Bulgaria</i>	.	2003	.	2002	2002	2002	2002	.	.	.	2002
Bulgaria Value Latest Year	.	96.0	.	4.5	90.4	89.9	90.9	.	.	.	99.69
<i>Latest Year Romania</i>	1999	2003	2002	2002	2002	2002	2002	.	.	.	2002
Romania Value Latest Year	97.9	97.0	3.2	4.2	88.9	88.5	89.4	.	.	.	97.76
<i>Latest Year Russia</i>	2001	2003	2000	2002	2002	.	2002	.	.	.	2002
Russia Value Latest Year	99.3	97.0	5.5	3.5	89.7	.	88.9	.	.	.	99.80
LMI-FSR Avg.	96.8	97.3	4.7	2.5	89.7	89.5	89.5	.	.	.	99.80
Low-Middle Income Avg.	69.0	92.5	7.0	3.3	92.0	91.5	92.3	81.2	80.4	79.54	96.81
High Five Avg.	.	99.0	36.3	8.7	100.0	100.0	100.0	99.2	99.8	99.30	99.82
Low Five Avg.	20.8	39.0	7.3	0.6	42.3	36.9	47.6	52.3	51.5	51.78	46.44

Indicator Number	Education (cont'd)					Employment and Workforce			
	Education expenditure, primary, %GDP	Expenditure per student, % GDP per capita, primary	Expenditure per student, % GDP per capita, secondary	Expenditure per student, % GDP per capita, tertiary	Pupil-teacher ratio, primary school	Labor force participation rate (total)	Labor force participation rate (male)	Labor force participation rate (female)	Rigidity of employment index (0 for minimum rigidity to 100 for maximum rigidity)
	32S1	32S2a	32S2b	32S2c	32S3	33P1a	33P1b	33P1c	33P2
<i>Kazakhstan Data</i>									
Latest Year (T)	.	2002	2002	2002	2002	2003	2003	2003	2005
Value Year T	.	8.1	12.7	10.2	18.5	73.9	79.6	68.5	23
Value Year T-1	.	.	.	.	18.9	74.0	79.7	68.6	27
Value Year T-2	.	.	.	.	18.7	74.3	80.1	68.8	.
Value Year T-3	.	.	.	.	18.7	75.2	81.0	69.6	.
Value Year T-4	.	.	.	.	.	75.4	81.4	69.6	.
Average Value, 5 year	.	.	.	.	18.7	.	80.4	69.0	.
Growth Trend	.	.	.	.	-0.2	-0.5	-0.6	-0.5	.
<i>Benchmark Data</i>									
Regression Benchmark	.	.	.	.	.	73.2	.	.	40.5
Lower Bound	.	.	.	.	.	68.1	.	.	29.2
Upper Bound	.	.	.	.	.	78.4	.	.	51.9
Latest Year Bulgaria	.	2001	2001	2001	2001	2003	2003	2003	2005
Bulgaria Value Latest Year	.	16.9	19	19.7	16.8	73.6	77.5	69.8	44
Latest Year Romania	.	.	.	2001	2001	2003	2003	2003	2005
Romania Value Latest Year	.	.	.	30.3	17.4	67.9	75.4	60.6	59
Latest Year Russia	.	.	.	.	2001	2003	2003	2003	2005
Russia Value Latest Year	.	.	.	.	16.9	77.5	81.5	73.7	30
LMI-FSR Avg.	1.76	8.8	13	24.1	15.6	75.8	80.9	70.7	38
Low-Middle Income Avg.	2.37	11.5	15	35.5	21.6	69.7	85.0	53.8	40
High Five Avg.	5.54	31.3	47	344.3	65.5	102.4	112.6	97.0	85
Low Five Avg.	0.17	6.2	6	9.8	11.7	50.4	70.9	21.5	1

Indicator Number	Employment and Workforce (cont'd)			Agriculture					
	Size of labor force	Labor force growth rate	Unemployment rate	Agriculture value added per worker	Cereal yield	Growth in agricultural value-added	Agricultural policy costs index (1 for poor to 7 for excellent)	Crop production index (1999-2001=100)	Livestock production index (1999-2001=100)
	33P3a	33P3b	33P4	34P1	34P2	34P3	34S1	34S2	34S3
<i>Kazakhstan Data</i>									
<i>Latest Year (T)</i>	2003	2003	2003	2003	2004	2003	2005	2004	2004
Value Year T	7,508,097	0.7	9	1,436	949	0.1	3.5	98.0	112.0
Value Year T-1	7,456,243	0.5	9	1,393	1,075	2.1	.	110.5	109.7
Value Year T-2	7,423,016	-0.3	10	1,325	1,146	3.3	.	114.2	105.1
Value Year T-3	7,446,760	-0.8	13	1,107	1,217	17.0	.	116.4	100.4
Value Year T-4	7,507,265	-0.8	14	1,110	944	3.2	.	87.7	100.3
Average Value, 5 year	7,468,276	-0.2	11	1,274	1,066	5.2	.	105.4	105.5
Growth Trend	0.0	.	-11.1	7.7	-1.1	.	.	1.7	3.1
<i>Benchmark Data</i>									
Regression Benchmark	.	0.9	.	2,252.7	.	2.8	.	.	.
Lower Bound	.	0.4	.	1,410.7	.	-1.5	.	.	.
Upper Bound	.	1.3	.	3,094.7	.	7.1	.	.	.
<i>Latest Year Bulgaria</i>	2003	2003	2002	2003	2004	2003	2004	2004	2004
Bulgaria Value Latest Year	4,061,858	-0.4	18	6,826	3,544	-1.3	2.7	106.0	95.9
<i>Latest Year Romania</i>	2003	2003	2002	2003	2004	2004	2004	2004	2004
Romania Value Latest Year	10,481,043	0.0	8	3,621	3,899	3.0	3.0	132.6	119.1
<i>Latest Year Russia</i>	2003	2003	2002	2003	2004	2002	2004	2004	2004
Russia Value Latest Year	78,374,600	0.2	9	2,323	1,914	2.9	3.1	116.9	107.7
LMI-FSR Avg.	4,630,947	0.5	9	1,470	2,351	5.0	3.0	120.7	108.1
Low-Middle Income Avg.	4,374,291	2.3	9	1,766	2,434	2.5	3.5	105.3	105.1
High Five Avg.	316,912,650	5.7	24	40,135	7,775	22.0	5.3	134.9	145.5
Low Five Avg.	125,147	-0.3	2	108	312	-13.4	2.4	69.5	78.3

# Technical Notes

The following technical notes (updated as of August, 2005) 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.

## GROWTH PERFORMANCE

### Per capita GDP, 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*

### Per capita GDP, purchasing power parity dollars

*Source:* IMF World Economic Outlook database, updated every 6 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*

### Real GDP growth

*Source:* IMF World Economic Outlook database, updated every 6 months; latest country data from IMF Article IV Review Reports available at:

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

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

*Coverage:* Data are available for about 85 USAID countries.

*CAS Code #11P3*

### Growth of labor productivity

*Source:* World Development Indicators 2005. 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 that is 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 (ages 15 to 64 years). The more familiar calculation, based on employment, labor force, or work hours, is not used here because low participation or employment rates are themselves structural productivity problems; also, many low-income countries do not report

data needed to compute these alternative measures of labor productivity.

*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 2005, 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 (a) the investment share of GDP to (b) 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 Reports for latest country data; international benchmark from the World Development Indicators 2005 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 Reports, for latest country data; World Development Indicators 2004, for international comparison data (explanation below). The estimation of this indicator involves taking the difference between gross fixed capital formation (% of GDP) (NE.GDLFTOT.ZS) and government capital expenditure (% of GDP). The latter term is the product of government capital expenditure (% of total expenditure) (GB.XPK.TOTL.ZS) and total government expenditure (% of GDP) (GB.XPD.TOTL.GD.ZS).

*Definition:* This indicator measures gross fixed capital formation by non-government 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 Reports 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 includes 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 2005 edition; updates may be found at [http://hdr.undp.org/reports/view\\_reports.cfm?type=1](http://hdr.undp.org/reports/view_reports.cfm?type=1)

*Definition:* The index measures 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 (for zero deprivation incidence) to 100 (for high deprivation incidence).

*Coverage:* Data are available for about 60 USAID countries.

*CAS Code #12P1*

### Income share held by lowest 20%

*Source:* World Development Indicators 2005 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. Alternate source for target countries: Country Poverty Reduction Strategy Paper:

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

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

*Coverage:* 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 2005 series SI.POV.DDAY, original data from National Surveys. Alternate 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 which can differ widely; even similar surveys may not be strictly comparable because of difference in quality.

*CAS Code #12P3*

### Population below minimum dietary energy consumption

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

*Definition:* Proportion of the population 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 a light physical activity.

*Coverage:* Data are available for about 82 USAID countries.

*CAS Code # 12S1*

### Poverty headcount, national poverty line

*Source:* World Development Indicators 2005 series SI.POV.NAHC. Alternate source: Country Poverty Reduction Strategy Paper (PRSP):

<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 due to 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 (PRSP) can be found at <http://www.imf.org/external/np/prsp/prsp.asp>

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

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

*CAS Code #12P5*

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

*Source:* World Development Indicators 2005 series SI.POV.GAPS, original data from national surveys. Alternate source: the country’s Poverty Reduction Strategy Paper: <http://www.imf.org/external/np/prsp/prsp.asp>

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

*Coverage:* Data are available for about 58 USAID countries going back to 1997; data for 2000 or later are available for about 32 USAID countries.

*CAS Code #12S2*

## ECONOMIC STRUCTURE

### Labor force or employment structure

*Source:* World Development Indicators 2005 series SL.AGR.EMPL.ZS for agriculture, series SL.IND.EMPL.ZS for industry, and series SL.SRV.EMPL.ZS for services. Alternate source: CIA World Fact Book .  
<http://www.cia.gov/cia/publications/factbook/>.

*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 from International Labor Organization. Some countries report labor force structure instead of employment, thus the data must be checked carefully prior to making comparisons.

*CAS Code #13P1*

### Output structure

*Source:* World Development Indicators 2005 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 comprised of value added by major sectors of the economy (agriculture, industry, and services) as percentages of GDP, where value added is the net output of a sector after adding up all outputs and subtracting intermediate inputs. Value added is calculated without making 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 should be 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 2005 series SE.ADT.LITR.ZS, based on UNESCO calculations.

*Definition:* Percentage of people ages 15 and over 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*

### Age dependency rate

*Source:* World Development Indicators 2005 series SP.POP.DPND.

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

*Coverage:* Data are available for about 89 USAID countries.

*CAS Code #14P2*

### Environmental Sustainability Index

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

*Definition:* The index measures the likelihood that a country will be able to preserve valuable environmental resources effectively. It is a composite index integrating 76 data sets tracking natural resource endowments, pollution levels, environmental management efforts, and the capacity of a society to improve its environmental performance. The index values range from a low of 0 (for countries that are positioned poorly to maintain favorable environmental conditions into the future) to a high of 100 (for countries that are positioned very well to maintain favorable environmental conditions into the future); most scores cluster between 40 and 60.

*Coverage:* Data are available for about 83 USAID countries.

*CAS Code #14P3*

### Population size (in millions) and growth

*Source:* World Development Indicators 2005 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*

### Urbanization rate

*Source:* World Development Indicators 2005 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

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

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

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

*Coverage:* Data are available for about 74 USAID countries.

CAS Code #15P1

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

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

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

*Coverage:* Data are available for about 83 USAID countries.

CAS Code # 15P2

### Life expectancy, ratio of male to female

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

*Definition:* The ratio of life expectancy at birth (years) for males, divided by the life expectancy at birth (years) for females. Life expectancy at birth indicates the number of years a newborn infant would live if current age-specific mortality were to stay the same throughout its life. The ratio shows the disparity in life expectancies between males and females.

*Coverage:* Data are available for about 85 USAID countries.

CAS Code #15P3

## 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 quite limited. For these reasons, the template will continue to use some data from WDI 2004, along with new data from WDI 2005 data, as appropriate.

### Overall budget balance (including grants), or Cash surplus/deficit, as percentages 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 2005 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 is obtained from national data sources or from IMF Article IV Reviews: [www.imf.org/external/np/sec/aiv/index.htm](http://www.imf.org/external/np/sec/aiv/index.htm).

*Definition:* The cash surplus/deficit is revenue (including grants) minus expenses, minus net acquisition of non-financial assets. This is close to the previous concept *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 2005 for 41 USAID countries.

CAS Code # 21P5

### Composition of government expenditure (for countries not using GFS 2001 system)

*Source:* Benchmarking data are from World Development Indicators 2004. Country data constructed from national data sources or from IMF Article IV Consultative Reports: [www.imf.org/external/np/sec/aiv/index.htm](http://www.imf.org/external/np/sec/aiv/index.htm).

*Definition:* Central government expenditure, broken down using categories from WDI 2004: (1) subsidies and other current transfers, (2) wages and salaries, (3) interest payments, (4) goods and services expenditure, and (5) capital expenditure, all as a percent of total expenditure.

*Coverage:* Data are available for about 37 USAID countries from World Development Indicators 2004. As explained at the beginning of this section, WDI no longer reports government *expenditures* starting in 2005. The template will include this variable when the required data can be obtained from IMF Article IV Consultation Reports or national data sources for the target country and the comparison countries. Group. The group benchmarks will still be computed from WDI 2004 (since group averages tend to be relatively stable).

*Data Quality:* Many countries report their revenue in non-comparable categories. Budget data are compiled on a fiscal year basis. If the fiscal year differs from the calendar year, then ratios to GDP may be calculated by interpolating budget data from two adjacent fiscal years.

CAS Code # 21S1



### Composition of government expenses (for countries using GFS 2001 system)

*Source:* Group benchmarking data are from the World Development Indicators 2005. Latest country data are constructed from national sources or from IMF Article IV Reports: [www.imf.org/external/np/sec/aiv/index.htm](http://www.imf.org/external/np/sec/aiv/index.htm).

*Definition:* WDI 2005 disaggregates central government expenses into five categories: compensation of employees, goods and services, interest payments, subsidies and other transfers, and other expenses. The expense in each category is expressed as a percentage of total expenses.

*Coverage:* Data are available for about 42 USAID countries from the World Development Indicators 2005.

CAS Code # 21S1

### Composition of government revenue

*Source:* The latest country and comparison country data is taken from national data sources or from IMF Article IV Reviews: [www.imf.org/external/np/sec/aiv/index.htm](http://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 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 non-comparable categories. If the fiscal year differs from the calendar year, then the ratios to GDP may be calculated by interpolating budget data from two adjacent fiscal years.

CAS Code # 21S2

### Composition of money supply growth

*Source:* Constructed using or national data sources or IMF Article IV Reviews from:

[www.imf.org/external/np/sec/aiv/index.htm](http://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 credit to government, (2) credit to the private sector, (3) net credit to public enterprises, (4) net foreign assets (reserves), 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

### Government expense, percentage of GDP (for countries using GFS 2001 system)

*Source:* Benchmarking data obtained from World Development Indicators 2005 series GC.XPN.TOTL.GD.ZS. Original source of WDI data is the International Monetary Fund, International Financial Statistics Yearbook, World Bank and OECD estimates. Latest country data obtained from national sources or from IMF Article IV Reviews: [www.imf.org/external/np/sec/aiv/index.htm](http://www.imf.org/external/np/sec/aiv/index.htm);

*Definition:* Expense is an accrued obligation to pay for operating activities of the government in providing goods and services. It includes compensation of employees (such as

wages and salaries), interest and subsidies, grants, social benefits, and other expenses such as rent and dividends.<sup>1</sup>

*Coverage:* Data are available for about 42 USAID countries.

CAS Code # 21P1

### Government expenditure, percentage of GDP (for countries not using GFS 2001 system)

*Source:* Benchmarking data obtained from World Development Indicators 2004, series GB.XPD.TOTL.GD.ZS.<sup>2</sup> Original source of WDI data is the International Monetary Fund, Government Finance Statistics Yearbook, and World Bank estimates. Latest country data are obtained from national sources or IMF Article IV Reports: [www.imf.org/external/np/sec/aiv/index.htm](http://www.imf.org/external/np/sec/aiv/index.htm).

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

*Coverage:* Data are available for about 41 USAID countries.

CAS Code # 21S2

### Government revenue, excluding grants, percentage of GDP

*Source:* Latest country data obtained from national data sources or IMF Article IV Reviews: [www.imf.org/external/np/sec/aiv/index.htm](http://www.imf.org/external/np/sec/aiv/index.htm). Benchmarking data from World Development Indicators 2005 series GC.REV.XGRT.GD.ZS. Original source of WDI data is the International Monetary Fund, Government Finance Statistics Yearbook and data file, and World Bank estimates.

*Definition:* Revenue consists of cash receipts from taxes, social contributions, and other revenues such as fines, fees, rent, and income from property or sales. Grants are also a form of revenue but are excluded here to focus on domestic revenue mobilization.

*Coverage:* Data are available for about 47 USAID countries.

CAS Code # 21P2

### Inflation rate

*Source:* IMF World Economic Outlook database, updated every 6 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 specified 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

### Money supply growth

*Source:* Latest country data are from national data sources or from IMF Article IV Reviews: [www.imf.org/external/np/sec/aiv/index.htm](http://www.imf.org/external/np/sec/aiv/index.htm). Benchmarking data are from World Development Indicators 2005, series FM.LBL.MQMY.ZG. Original source of WDI data is

<sup>1</sup> In the technical notes to WDI 2005, expense is defined as "cash payments." This is inconsistent with the original source, GFS, which defines expense on an accrual basis as indicated here.

<sup>2</sup> This variable is no longer available in WDI 2005.

International Monetary Fund, 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 International Monetary Fund's (IMF) International Financial Statistics (IFS).

*Coverage:* Data are available for about 81 USAID countries.

*CAS Code #21P3*

## BUSINESS ENVIRONMENT

### Corruption perception index

*Source:* Transparency International:

[http://www1.transparency.org/cpi/2005/dnld/media\\_pack\\_en.pdf](http://www1.transparency.org/cpi/2005/dnld/media_pack_en.pdf).

*Definition:* Corruption Perceptions Index (CPI) is a composite index that ranks countries in terms of the degree to which corruption is perceived to exist among public officials and politicians. The index ranges from 1 (for most corruption) to 10 (for least corruption). Values below 3.0 are considered to indicate rampant corruption. This threshold is used in the template as an absolute benchmark standard.

*Coverage:* Data are available for about 79 USAID countries.

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

*CAS Code # 22P1*

### Ease of doing business ranking

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

*Definition:* The ease of doing business index ranks economies from 1 to 155. 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 2006 – 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 about 74 USAID countries.

*CAS Code # 22P2*

### Rule of law index

*Source:* World Bank Institute,

<http://www.worldbank.org/wbi/governance/govdata2002/index.html>. This indicator is based on the perceptions of the legal system, drawn from 12 separate data sources.

*Definition:* The Rule of Law Index is an aggregation of various indicators which measure the extent to which agents have confidence in and abide by the rules of society. 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. 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 #22P3*

### Regulatory Quality Index

*Source:* World Bank Institute;

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

*Definition:* The regulatory quality index measures the incidence of market-unfriendly policies such as price controls or inadequate bank supervision, as well as perceptions of the burdens imposed by excessive regulation in areas such as foreign trade and business development. It is computed from survey data from multiple sources. The index values range from -2.5 (for very poor performance) to +2.5 (for 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*

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

*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 about 74 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:* Number of procedures required to enforce recovery of a valid debt contract through the court system. Where a procedure is defined as any interactive step the company must undertake with the government agencies, lawyers, notaries, etc. to proceed with the enforcement action.

*Coverage:* Data are available for about 74 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/individual and a third party that is necessary to complete the property registration process.

*Coverage:* Data are available for about 74 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:* Number of procedural steps required to legalize a simple limited liability company. Procedures are interactions of a company with the government agencies, lawyers, auditors, notaries, and the like, including interactions required to obtain necessary permits and licenses and to complete all inscriptions, verifications, and notifications to start operations.

*Coverage:* Data are available for about 74 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 about 74 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 the property title from the seller to the buyer when a business purchases land and a building in a peri-urban area of the country's most populous city. Every required procedure is included whether it is the responsibility of the seller, the buyer, or where it is required to be completed by a third party on their behalf.

*Coverage:* Data are available for about 74 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:* 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 about 74 USAID countries.

*CAS Code #22S7*

## **FINANCIAL SECTOR**

### **Cost to Create Collateral**

*Source:* World Bank Doing Business; Getting Credit category:

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

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

*Coverage:* Data are available for about 74 USAID countries.

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

*CAS Code #23S1*

### **Country credit rating**

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

*Definition:* Bankers' and fund managers' perception of the country's risk of default based on a semi-annual survey. Index ranges in value from 0 (for very poor performance) to 100 (for excellent performance).

*Coverage:* Data are available for about 58 USAID countries.

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

*CAS Code # 23S2*

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

*Source:* IMF Article IV Reviews or national data sources for latest country data; World Development Indicators 2005 series FS.AST.PRVT.GD.ZS for benchmarking data. The WDI data originate from the International Monetary Fund, International Financial Statistics and data files, and World Bank estimates.

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

*Coverage:* Data are available for about 82 USAID countries.

*CAS Code # 23P1*

### **Interest rate spread**

*Source:* World Development Indicators 2005 series FR.INR.LNDP. Original data from International Monetary Fund, 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*

### **Legal rights of borrowers and lenders**

*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. Index ranges in value from 0 (for very poor performance) to 10 (for excellent performance). It includes three aspects related to legal rights in bankruptcy, and seven aspects found in collateral law.

*Coverage:* Data are available for about 74 USAID countries.

CAS Code # 23S3

### Money supply, percent of GDP

*Source:* Latest country data obtained from national data sources or IMF Article IV Reviews:

[www.imf.org/external/np/sec/aiv/index.htm](http://www.imf.org/external/np/sec/aiv/index.htm). Benchmarking data from World Development Indicators 2005 series FM.LBL.MQMY.GD.ZS. WDI data originate from International Monetary Fund, International Financial Statistics and data files, and World Bank and OECD GDP estimates.

*Definition:* Money supply (M2), also called broad money, and is defined as non-bank private sector's holdings of notes, coins and demand deposits plus savings deposits and foreign currency deposits. 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 (CDs), money market instruments, and/or treasury bills.

CAS Code # 23P3

### Real interest rate

*Source:* World Development Indicators 2005 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 # 23S4

### Stock Market Capitalization Rate, % of GDP

*Source:* World Development Indicators 2005, series CM.MKT.LCAP.GD.ZS.

*Definition:* The 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

## EXTERNAL SECTOR

### Aid, % of GNI

*Source:* Latest country data obtained from national data sources or IMF Article IV Reviews:

[www.imf.org/external/np/sec/aiv/index.htm](http://www.imf.org/external/np/sec/aiv/index.htm). Benchmarking data from World Development Indicators 2005 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 does 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

### Concentration of exports

*Source:* Constructed with ITC COMTRADE data by aggregating the value for the top 3 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 represents a serious problem in a number of 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 non-reporting countries; trans-shipments 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

### Current Account Balance, percent of GDP

*Source:* Latest country data from national data sources or IMF Article IV Reviews:

[www.imf.org/external/np/sec/aiv/index.htm](http://www.imf.org/external/np/sec/aiv/index.htm). Benchmarking data from World Development Indicators 2005 series BN.CAB.XOKA.GD.ZS, based on International Monetary Fund, Balance of Payments Statistics Yearbook and data files, and World Bank staff estimates, and World Bank and OECD GDP estimates.

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

*Coverage:* 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 Reviews:

[www.imf.org/external/np/sec/aiv/index.htm](http://www.imf.org/external/np/sec/aiv/index.htm). Benchmarking data from World Development Indicators 2005, 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

### Foreign Direct Investment, percent of GDP

*Source:* Latest country data obtained from national data sources or IMF Article IV Reviews:

[www.imf.org/external/np/sec/aiv/index.htm](http://www.imf.org/external/np/sec/aiv/index.htm). Benchmarking data from World Development Indicators 2005, series

BX.KLT.DINV.DT.GD.ZS, based on International Monetary Fund, International Financial Statistics and Balance of Payments databases, World Bank, Global Development Finance, and World Bank and OECD GDP estimates.

*Definition:* Foreign direct investment is 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 Reviews:

[www.imf.org/external/np/sec/aiv/index.htm](http://www.imf.org/external/np/sec/aiv/index.htm). Benchmarking data from World Development Indicators 2005, 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 International Monetary Fund (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, percent of GDP**

*Source:* Latest country data obtained from national data sources or IMF Article IV Reviews:

[www.imf.org/external/np/sec/aiv/index.htm](http://www.imf.org/external/np/sec/aiv/index.htm). Benchmarking data derived from the International Financial Statistics (sum of lines 78BED and 78BGD).

*Definition:* Gross private capital flows are the sum of the absolute values of 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 International Monetary Fund's average official exchange rate for the year shown.

CAS Code #24P7

#### **Exports growth, goods and services**

*Source:* Latest country data obtained from national data sources or IMF Article IV Reviews:

[www.imf.org/external/np/sec/aiv/index.htm](http://www.imf.org/external/np/sec/aiv/index.htm). Benchmarking data from World Development Indicators 2005, 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

#### **Inward FDI Potential Index**

*Source:* UNCTAD. Indicator is available online at <http://www.unctad.org/Templates/WebFlyer.asp?intItemID=2471&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 un-weighted 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 2005, series TT.PRI.MRCH.XD.WD

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

*Coverage:* Data are available for about 51 USAID countries.  
CAS Code # 24S3

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

*Source:* World Development Indicators 2005 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. 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 due to the wide spectrum of debt instruments, the unwillingness on the part of the government to provide information, and lack of capacity in reporting. Discrepancies are significant when the exchange rate fluctuations, debt cancellations and re-scheduling occur.

CAS Code # 24P8

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

*Source:* IMF Article IV Reviews:

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

*Definition:* The REER is an index number with base 1995=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

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

*Source:* Latest country data obtained from national data sources or IMF Article IV Reviews:

[www.imf.org/external/np/sec/aiv/index.htm](http://www.imf.org/external/np/sec/aiv/index.htm). Benchmarking data is obtained from World Development Indicators 2005. It is constructed by dividing Worker's 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*

### Structure of merchandise exports

*Source:* World Development Indicators 2005. 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 in goods and services, as a percentage of GDP

*Source:* Latest country data obtained from national data sources or IMF Article IV Reviews:

[www.imf.org/external/np/sec/aiv/index.htm](http://www.imf.org/external/np/sec/aiv/index.htm). Benchmarking data from World Development Indicators 2005, 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 Policy Index

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

*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 custom service. The index ranges in value from 1 (for low levels of barriers to trade) to 5 (for high levels of barriers to trade).

*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*

## ECONOMIC INFRASTRUCTURE

### Internet users per 1,000 people

*Source:* World Development Indicators 2005 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 world-wide network, per 1,000 people.

*Coverage:* Data are available for about 88 USAID countries.

*CAS Code # 25P1*

### Overall Infrastructure Quality

*Source:* Global Competitiveness Report 2005-2006, 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 (1) poorly developed, or (7) among the best in the world.

*Coverage:* Data are available for about 52 USAID countries.

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

*CAS Code # 25P2*

### Telephone density, fixed line and mobile

*Source:* World Development Indicators 2005 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 2005-2006, 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 (1) poorly developed, or (7) among the best in the world.

*Coverage:* Data are available for about 52 USAID countries.

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

*CAS Code #25S1*

### Telephone cost, average local call

*Source:* World Development Indicators 2005 series IT.MLT.CLCL.CD, , derived from the International Telecommunication Union database.

*Definition:* Cost of local call is measured by the cost of a three-minute, peak rate, fixed line call within the same

exchange area using the subscriber's equipment (i.e., not from a public phone).

*Coverage:* Data are available for about 82 USAID countries.  
*CAS Code #25S2*

## SCIENCE AND TECHNOLOGY

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

*Source:* World Development Indicators 2005, 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 2005-2006, 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 (1) brings little new technology, or (7) is an important source of new technology.

*Coverage:* Data are available for about 52 USAID countries.

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

*CAS Code #26P2*

### Patent applications filed, by residents

*Source:* World Development Indicators 2005 series IP.PAT.RESD, based on WIPO data.

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

*Coverage:* Data are available for about 63 USAID countries.  
*CAS Code #26P3*

## HEALTH

### HIV prevalence rate

*Source:* UNAIDS for most recent country data:

<http://www.unaids.org/Unaid/EN/Resources/epidemiology.asp>. World Development Indicators 2005 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, as well as other surveillance information.

*CAS Code #31P1*

### Life expectancy at birth

*Source:* World Development Indicators 2005, (SP.DYN.LE00.IN)

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

*Coverage:* Data are available for about 88 USAID countries.

*Data Quality:* Life expectancy at birth is estimated based on 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/mi/mi\\_series\\_results.asp?rowId=553](http://millenniumindicators.un.org/unsd/mi/mi_series_results.asp?rowId=553) based on WHO, UNICEF and UNFPA 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 survivorships 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 2005, 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.

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

*CAS Code #31S1*

### Access to improved water source

*Source:* World Development Indicators 2005 series SH.H2O.SAFE.ZS

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

*Coverage:* 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 2005, series SH.STA.BRTC.ZS.

*Definition:* The indicator is 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 2005, 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 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 2005, series SH.STA.MALN.ZS.

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

*Coverage:* Data are available for about 55 USAID countries.

*CAS Code # 31S5*

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

*Source:* Latest data for host country is obtained from the MCC <http://www.mca.gov/countries/rankings/index.shtml>.

International benchmarking data from World Development Indicators 2005, (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 as often teachers are paid proportional 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 2005 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**

*Source:* World Development Indicators 2005, 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 2-3 years.

*CAS Code #32P3*

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

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

*Definition:* 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 via US embassies.

*CAS Code #32S1*

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

*Source:* World Development Indicators 2005 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 2005 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 – total, male, female**

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

To calculate the *female* labor force participation rate using WDI 2004: 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 2005, 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 2005, the denominator is an estimated 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 comprises people who meet the International Labour Organization definition of the economically active population: all people who supply labor for the production of goods and services during a specified period. It includes both the employed and the unemployed.

*Coverage:* Data are available for about 88 USAID countries.

*CAS Code #33P1*

### **Rigidity of employment index**

*Source:* World Bank, Doing Business in 2005, Hiring and Firing Workers Category:

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

*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 a Difficulty of firing Index. Index ranges in value from 0 (minimum rigidity) to 100 (maximum rigidity).

*Coverage:* Data are available for about 74 USAID countries.

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

*CAS Code # 33P2*

### **Size and growth of the labor force**

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

*Definition:* The indicator measures the size of the labor supply, and its annual percent change. Labor force comprises of people who meet the International Labour 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 employed and the unemployed. While national practices vary in the treatment of such groups as the armed forces and seasonal or part-time workers; in general, the labor force includes the armed forces, the unemployed, and first-time job-seekers, but excludes homemakers and other unpaid caregivers and workers in the informal sector.

*Coverage:* Data are available for about 88 USAID countries.

*CAS Code #33P3*

### **Unemployment rate**

*Source:* World Development Indicators 2005 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 being 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*

## **AGRICULTURE**

### **Agriculture value added per worker**

*Source:* World Development Indicators 2005 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 1995 U.S. dollars.

*Coverage:* Data are available for about 80 USAID countries.

*CAS Code # 34P1*

### **Cereal yield**

*Source:* World Development Indicators 2005 series AG.YLD.CREL.KG based on Food and Agriculture Organization (FAO), Production Yearbook and data files.

*Definition:* Cereal yield is 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 Reviews: [www.imf.org/external/np/sec/aiv/index.htm](http://www.imf.org/external/np/sec/aiv/index.htm). The benchmarking data are from World Development Indicators 2005 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 adding up all outputs and subtracting intermediate inputs. It is calculated without making deductions for depreciation of fabricated assets or depletion and degradation of natural resources.

*Coverage:* Data are available for about 84 USAID countries.

*CAS Code # 34P3*

### **Agricultural policy costs index**

*Source:* Global Competitiveness Report 2005-2006, 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 (1) excessively burdensome, or (7) balances all economic agents' interests.

*Coverage:* Data are available for about 52 USAID countries.

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

*CAS Code # 34S1*

### **Crop production index**

*Source:* World Development Indicators 2005 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 semiofficial 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 2005 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*