

Serbia Economic Performance Assessment



September 2005

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A Note on the Serbia Study

Though most international sources treat Serbia and Montenegro as a unit, it is important in designing policies to support economic growth and poverty reduction to recognize the heterogeneity of these two states within a state. The data presented here do not include Kosovo. Because this study focuses on Serbia alone, we have attempted, where possible, to disaggregate data for Serbia and Montenegro and present data for Serbia alone. We use data for Serbia and Montenegro only when data for Serbia alone are not available. The figures for Serbia alone are not derived from the standard sources for each indicator listed in the technical notes. We have relied heavily on data from: the International Monetary Fund (IMF); the Serbian Republic's Statistical Office; the National Bank of Serbia; and Serbia's Poverty Reduction Strategy Paper (PRSP) of May 2004. The authors of this report would like to acknowledge the substantial contribution to the compilation of data for Serbia made by the Belgrade based think tank, Centar Za Visoke Ekonomske Studije (CEVES).

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HIGHLIGHTS OF SERBIA'S PERFORMANCE

Economic Growth	The Serbian economy has been expanding relatively rapidly after a sharp contraction resulting from the conflicts in the former Yugoslavia. GDP growth averaged 5 percent during the period 2000–2004. A major concern is the low share of investment in GDP.	
Poverty	Most indicators of poverty are unavailable for Serbia. The one series available, head count data based on the national poverty line, suggests that Serbia's performance is outstanding. However, rates in rural areas are nearly double those found in urban areas and need to be addressed.	
Gender	Serbia's performance on gender indicators is good and in line with regional averages.	
Fiscal and Monetary Policy	Fiscal and monetary policies appear reasonable. Inflation has declined substantially in the past several years but remains at double-digit levels. Planned fiscal tightening measures may help restrain inflation further and consolidate gains. The central bank will need to keep careful watch on the rate of growth of the money supply, which increased in 2004.	
Business Environment	The regulatory environment has improved substantially in the past few years; Serbia and Montenegro were ranked as most improved by the World Bank's Doing Business in 2006. However, some indicators still remain below average, and corruption and low adherence to the rule of law continue to be impediments to doing business in Serbia and Montenegro.	
Financial Sector	Serbia's financial sector performance is generally poor and helps explain Serbia's inadequate aggregate investment performance. Greater efficiency in the banking sector and an expansion of the stock market are needed.	
External sector	Serbia has integrated rapidly into the world economy since the beginning of a series of economic reforms in 2001 and the lifting of international sanctions in the same year. Although generally greater integration is beneficial, in Serbia integration has been accompanied by surging current account deficits and debt service, which are unsustainable and threaten the country's economic growth and stability.	
Economic infrastructure	Lack of data for most infrastructure indicators prevents any comprehensive analysis. Indicators for telecommunications and IT infrastructure reveal good performance in those areas.	
Health	Serbia and Montenegro have good performance for indicators pertaining to public health, in line with most Central and Eastern European countries.	
Education	Serbia does very well on basic education measures—the youth literacy rate is 99.3 percent. Like many Central and Eastern European countries, there is some question as to whether Serbia has adequately updated the quality of its secondary and tertiary education to maintain a competitive labor force in a globalized world.	
Employment and Workforce	Unemployment in Serbia is 31.7 percent, nearly double the regional average and a serious problem. Supporting job creation is a major policy challenge and merits immediate attention.	
Agriculture	Serbia has a strong agricultural sector.	

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

SERBIA: NOTABLE STRENGTHS AND WEAKNESSES— SELECTED INDICATORS^a

Indicator, by Topic	Notable Strengths	Notable Weaknesses
Growth Performance		
Per capita GDP (purchasing power parity dollars)		X
Share of gross fixed investment in GDP, (Serbia and Montenegro) (%)		X
Poverty and Inequality		
Poverty headcount (%) by national poverty line	X	
Fiscal and Monetary Policy		
Inflation rate (%)		X
Business Environment		
Corruption perception index, Serbia and Montenegro		X
Time to enforce a contract (days), Serbia and Montenegro		X
Time to register property (days), Serbia and Montenegro		X
Time to start a business (days), Serbia and Montenegro	X	
Financial Sector		
Interest rate spread (%)		X
Real interest rate (%)	X	
Stock market capitalization rate, Serbia and Montenegro (% GDP)		X
External Sector		
Current account balance (% GDP)		X
Export growth, goods and services (%)	X	
Gross international reserves (months of imports)		X
Present value of debt, Serbia and Montenegro (% GNI)		X
Economic Infrastructure		
Internet users (per 1,000 people)	X	
Science and Technology		
Patent applications filed by residents	x	
Health	1	1
Child immunization rate (%)		x
Maternal mortality rate (deaths per 100,000 births)	X	
Education	·	·
Net primary enrollment rate (%)	X	
Employment and Workforce	·	·
Rigidity of employment index	x	
Unemployment rate (%)		X

^a The table identifies indicators for which Serbia's performance is particularly strong or weak relative to benchmarks; details are discussed in the text. The Data Supplement presents a full tabulation of the data examined for this report, including the international benchmark data, along with technical notes on data sources and definitions.

1. Introduction

This paper is one of a series of economic performance assessments prepared for the EGAT Bureau to provide USAID missions and regional bureaus with a concise evaluation of a broad range of indicators relating to economic growth performance in designated countries. The report draws on a variety of international data sources¹ and uses international benchmarking against reference group averages and comparator countries (in this case, Bulgaria and Romania) to identify major trends, constraints, and opportunities for strengthening growth and reducing poverty.

The methodology used here is analogous to examining an automobile dashboard to see which gauges are signaling problems. Sometimes a blinking light has obvious implications—such as the need to fill the fuel tank. In other cases, it may be necessary to have a mechanic probe more deeply to assess the source of the trouble and discern the best course of action.² 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 aim, then, is to spot signs of serious problems, 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 analysis is organized around two mutually supportive goals: transformational growth and poverty reduction.³ 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*,

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

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

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

involving multiple elements: macroeconomic stability; a sound legal and regulatory system, including secure contract and property rights; effective control of corruption; a sound and efficient financial system; openness to trade and investment; sustainable debt management; investment in education, health, and workforce skills; infrastructure development; and sustainable use of natural resources.

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

The present evaluation of these conditions must be interpreted with caution, because a concise analysis of this sort does not provide a thorough diagnosis of the problems, or simple answers to questions about programmatic priorities. For Serbia, the standard analytical limitations are compounded by data problems and discontinuities due to the changing political situation in the former Yugoslavia and now the relationship with Montenegro.

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.

Overview of the Economy	Private Sector-Enabling Environment	Pro-Poor Growth Environment
 Growth performance Poverty and inequality Economic structure Demographic and environmental conditions Gender 	 Fiscal and monetary policy Business environment Financial sector External sector Economic infrastructure Science and technology 	 Health Education Employment and workforce Agriculture

Table 1-1

Topic Coverage

⁴ A comprehensive poverty reduction strategy also requires programs to reduce the *vulnerability* of the poor to natural and economic shocks. This aspect is not covered in the template because the focus is on economic growth programs. Furthermore, finding meaningful and readily available indicators of vulnerability to use in the template is difficult.

2. Overview of the Economy

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

GROWTH PERFORMANCE

Serbia's recent economic performance has been impressive. The Serbian economy has grown relatively quickly since a sharp contraction in 1999 brought on by the war. On average, Serbian GDP increased 5 percent per year between 2000 and 2004. (Figure 2-1, Real GDP Growth) Growth reached 7 percent in 2004, compared with an average rate of 5.8 percent for lower-middle-income Central and Eastern European countries (LMI CEECs). Because of the local currency's appreciation, the rise in per capita GDP measured in U.S. dollars was even more striking—from \$1,051 in 2000 to \$2,938 in 2004, approaching the per capita GDP of Bulgaria and Romania. Inflation has cooled dramatically. The annual rate of retail price inflation declined from 91.8 percent in 2001 to 10.1 percent in 2004 (Figure 2-2, Inflation).

The post-war recovery was fueled largely by growing domestic demand stemming from economic reforms that began in 2001 and the stabilization of inflation. At the same time, exports rose considerably as a result of economic stabilization and the lifting of trade sanctions against Yugoslavia.

Although the general improvement in the economic situation in Serbia is undeniable, serious problems persist. Serbia continues to lag behind its peer countries in terms of income. Although the difference in per capita GDP between Serbia and Bulgaria and Romania is small when measured in current U.S. dollars, the disparity increases when GDP is measured in purchasing power parity (PPP) terms. In PPP terms, Serbian per capita GDP in 2004 was \$4,993, which is 58 percent and 65 percent of the Bulgarian and Romanian levels, respectively. It is also substantially less (by 11 percent and 33 percent, respectively) than average per capita PPP GDP in lower-middle-income countries (\$5,573) and LMI CEECs (\$7,370), the two benchmark country groups for Serbia.

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

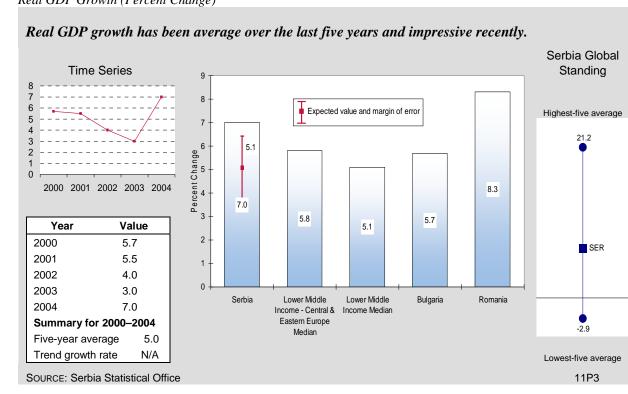
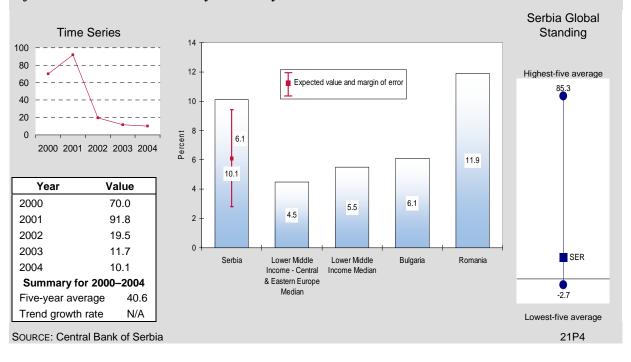


Figure 2-1 Real GDP Growth (Percent Change)

Figure 2-2

Inflation Rate (Percent)

Inflation has cooled dramatically in recent years.



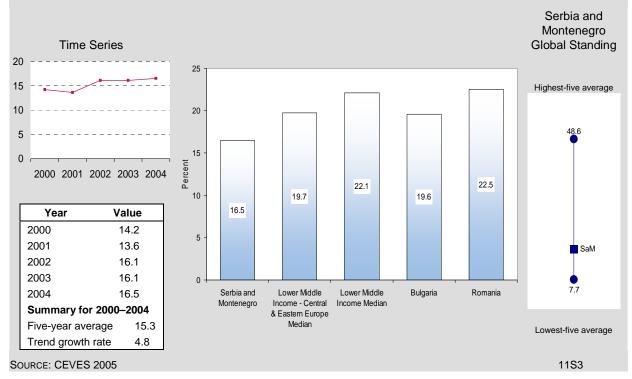
Economic expansion in Serbia has been a result of a rise in labor productivity, but the reasons for this rise are unclear. It is unlikely that labor productivity has gained appreciably from capital investment or technological change. Although the share of gross fixed investment in Serbia and Montenegro's GDP⁶ recovered after the war, at 16.5 percent in 2004 it remained low compared to the 19.7% average of LMI CEECs. It was also well below Bulgaria's and Romanias' investment rates of approximately 20 percent and 23 percent, respectively (Figure 2-3, Gross Fixed Investment in GDP).

It is likely that the experience in Serbia is similar to those of other transition countries, which suggests that labor productivity has benefited from a decline in the share of agriculture in output, improved capacity use due to an increase in domestic demand, and possibly labor shedding by large state-owned firms.

Figure 2-3

Share of Gross Fixed Investment in GDP (Current Prices)





Serbia faces important challenges in achieving full employment. Employment has declined since 1999, and unemployment has risen from already high levels.⁷ In 2003 and 2004, the registered

⁶ Investment data is not available for Serbia alone.

⁷ To some extent, unemployment in Serbia has increased because of the influx of Serbian refugees from other areas of former Yugoslavia.

unemployment rate stood at a staggering 31.7 percent.⁸ Because labor productivity is closely related to employment, exploring the nexus of employment, productivity, and job creation is a potential topic for an in-depth sectoral study.

The main issues confronting the Serbian authorities are to maintain strong growth in output while reducing external imbalances and consolidating gains in inflation. Essential to achieving these goals will be to promote investment and stimulate job creation and structural reforms, especially improving economic governance of enterprises. Improved investment performance will depend on improving financial sector efficiency and access to investment funding. Governance needs to be improved through a judicious mix of privatization, hardening of budget constraints, strengthening of financial institutions' capacity, and improving incentives to monitor enterprises' performance. Meanwhile, Serbia needs to diversify the sources of financing for its external deficits by stimulating exports and foreign direct investment (FDI).

POVERTY AND INEQUALITY

According to the limited data available,⁹ poverty does not appear to be a serious problem in Serbia. The only poverty indicator for which data were obtainable is the poverty head count by national poverty line, which is difficult to compare across countries because each country's national poverty line varies. Nonetheless, poverty levels in Serbia, according to these data, were 10.6 percent in 2002, less than half the LMI CEEC average of 22.5 percent. Poverty head count was also well below the 18.3 percent predicted by a benchmark regression for a country with Serbia's characteristics, and below the 12.8 percent found in Romania as well. Headcount poverty levels in Serbia vary greatly between rural and urban communities. Urban poverty rates are relatively low at 7.8 percent, in contrast to rural poverty rates, which are nearly twice as high, at 14.2 percent (PRSP 2004, page iv). This may signal a need for economic growth programs to augment rural livelihoods and connect rural communities to urban markets.

Educational attainment and poverty are clearly linked. Serbia and Montenegro's PRSP reports that the risk of entering the poverty cycle diminishes as educational attainment increases—the risk for individuals who have not completed primary education is twice as high as the rate for the general population. For example, only 2 percent of university graduates in Serbia are poor. Programs that increase educational attainment are needed to combat poverty.¹⁰

⁸ According to the Labor Force Survey, the unemployment rate was 18.5 percent in 2004—lower than the registered unemployment rate, though still very high.

⁹ Because of a lack of data for Serbia and Montenegro, the following poverty indicators were unavailable for this assessment: Human Poverty Index, income share accruing to the poorest 20 percent, percent of population living on less than \$1 PPP per day, percentage of the population below minimum dietary energy consumption, and poverty gap at \$1 PPP a day.

¹⁰ Internal poverty figures provided by the PRSP.

ECONOMIC STRUCTURE

Changes in Serbia's employment and output structures in the past several years have been generally favorable.¹¹ The share of those employed in services increased markedly, which is consistent with trends in countries experiencing market transformation, while the shares of those employed in agriculture and industry declined. The share of the labor force in services reached 54.5 percent in 2004, a 6 percentage point increase from 2001. Data on the distribution of the labor force in Serbia must be treated with caution, however, because the figures substantially underestimate actual employment in agriculture and cannot be compared with employment statistics for the comparator countries.¹²

The share of value added by Serbia and Montenegro's services sector in total value added also increased—from 46.0 percent in 1999 to 49.9 percent in 2002. At the same time, the shares of value added in agriculture and industry shrank, with value added in agricultural declining much more than the share of value added in industry. Nevertheless, agriculture in Serbia and Montenegro still accounted for 17.8 percent of overall value added in 2002, more than the average contribution of agriculture to value added in the benchmark country groups (12.2 percent in the lower-middle-income countries and 12.8 percent in the LMI CEECs), Bulgaria (11.7 percent) and Romania (11.9 percent). Assuming that Serbia follows the classic pattern—declining agricultural share in output as economic development increases—the current economic structure signals that that country is lagging behind some of its neighbors in economic development.

Turning to the industrial sector, of the four major industrial sectors—mining, manufacturing, utilities, and construction—mining contracted most, both in absolute terms and relative to total value added. This has probably been a positive development because in the centrally planned economies of Central and Eastern Europe this sector was usually characterized by overstaffing and low productivity.

Serbia is likely to benefit from assistance aimed at improving the efficiency and productivity of the services sector, such as financial services, discussed below. Serbia's relatively low urbanization rate and what appears to be an excessively large agricultural sector (in terms of its share in the economy) may suggest that special attention be paid to promoting of nonfarm employment in rural areas.

¹¹ In our analysis of output and employment structures, we assume that as economies grow and develop, the share of agriculture in output—and especially in employment—declines as agricultural productivity increases. Productivity also increases as employment shifts to manufacturing, which tends to have higher average productivity. Over time, as incomes rise, services grow in importance, in terms of both output and employment. Despite these assumptions, we recognize that many economies developed successfully with the economic structures' evolving differently.

¹² The Serbian employment breakdown data are based on payroll employment only. The self-employed, such as farmers, are not included in these figures, which explains the low share of employment in agriculture—it refers only to payrolls.

DEMOGRAPHY AND ENVIRONMENT

Serbia's population declined in the late 1990s and early 2000s. Detecting a trend in the data is difficult because of wide annual fluctuations due to the poor quality of the data and large and variable migration. According to the 2002 census, the population stood at 7.5 million, down 3.7 percent from 1998. This decline was on par with the population decline in Bulgaria and more substantial than that found in Romania over the past several years. To some extent the decline is attributable to a low birth rate.

An aging population is a problem in Serbia and Montenegro. Although the age dependency ratio in Serbia and Montenegro is not among the highest in a rapidly aging Europe, at 0.50 dependents per worker it is higher than the ratios of 0.44 for both Bulgaria and Romania and the average ratio of 0.46 for the LMI CEECs. Like other countries in Europe, Serbia will need policies to address the challenges of a declining and aging population and increased spending on pensions and health care for the elderly.

Serbia's adult literacy rate was 96.5 percent in 2002. Although marginally lower than that found in Bulgaria and Romania, it is consistent with an educated work force.

The environmental sustainability index for Serbia or for Serbia and Montenegro is not available.

GENDER

Gender equality contributes to pro-poor growth by using the productive capacities of all citizens and enabling the fulfillment of human potential. Serbia performs well on gender indicators, with the male-to-female life expectancy ratio at birth equal to the benchmark for LMI CEECs at 0.93. Serbia also performs well in gender equity in education. The male-to-female ratio of adult literacy, at 1.05, trails only slightly the LMI CEECs' average of 1.02. Serbia's laudable performance on gender equality indicators is a prerequisite for pro-poor growth.

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

Serbian fiscal and monetary policies have tightened in the past few years and resulted in a rapid deceleration of inflation. On the fiscal side, the central government's budget deficit declined from 3.5 percent in 2002 to 1.7 percent in 2004, the same as the average budget deficit level in LMI CEECs and well below that of Romania (Figure 3-1, Government Budget Balance).¹³

Serbia intends to tighten its fiscal policy, primarily by restraining expenditures, which should help make further gains in reducing inflation and reduce the current account deficit. The IMF, in general, positively assesses the recent and planned fiscal policy measures related to both fiscal tightening and changes in the composition of taxes (Exhibit 3-1, IMF Program Status for Serbia

¹³ The World Development Indicators 2005 database adopts new categories for government finance statistics. As a result, the database has fiscal data for few developing countries, and group medians for fiscal variables are no longer meaningful because the sample size is so limited. The international benchmarking analysis for fiscal indicators is therefore based on data from World Development Indicators 2004.

and Montenegro¹⁴). For example, the February 2005 Article IV Report welcomed the reduction of the corporate tax rate and the introduction of a VAT.

Figure 3-1

Overall Government Budget Balance, Including Grants (Percent)

Fiscal tightening has resulted in a decrease in the budget deficit.

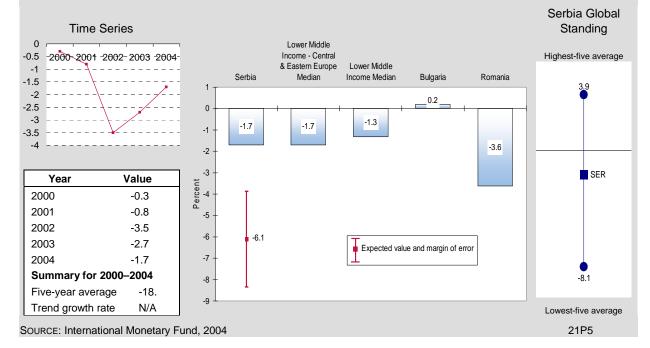


Exhibit 3-1

IMF Program Status for Serbia and Montenegro

An Extended Arrangement for US\$951.1 million was approved in May 2002. The executive board of the IMF completed the fifth review of Serbia and Montenegro's economic performance in June 2005 and enabled the release of US\$182.9 million to bring the total program disbursement to date to US\$859.7 million.

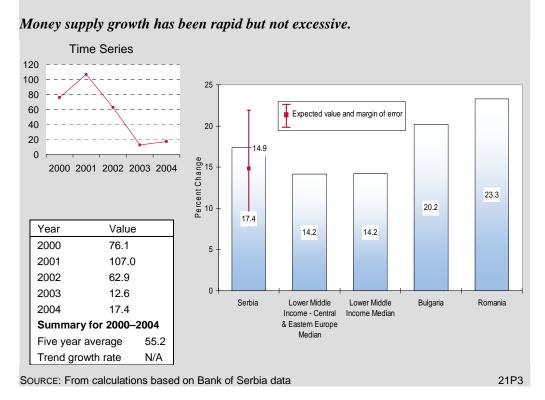
Monetary policy tightened in the period 2001–2003, as evidenced by slower money supply growth. In 2004, however, money supply growth accelerated (Figure 3-2, Growth in the Broad Money Supply). Broad money supply grew at 17.4 percent that year, more rapidly than the average for the two benchmark country groups, but more slowly than in Bulgaria and Romania. From a medium-term perspective, Serbian money supply growth does not appear excessive. However, as the IMF noted, the monetary authorities should be ready to curb the expansion of credit if it does not decelerate or inflation rebounds, especially given Serbia's growing external

¹⁴ The status is for both entities combined because they do not have separate agreements with the IMF.

imbalances (discussed below). Controlling money supply growth is especially important to avoid inflationary pressures just when inflation appears to be subsiding.

Figure 3-2

Growth in the Broad Money Supply (Percent)



Serbia's ratios of government expenditure and revenue to GDP rose steadily in the past five years. Government expenditures (excluding social security) rose from 13.2 percent in 2000 to 27.0 percent in 2004. Government revenues rose from 12.9 percent in 1999 to 25.4 percent in 2004. Both indicators suggest that the Serbian government is a smaller share of the economy than the governments of Bulgaria, Romania, and the LMI CEECs, but this is misleading. The Serbian central government budget does not include the social security system, so the magnitude of Serbian government operations is probably equal to or greater than that of peer countries.

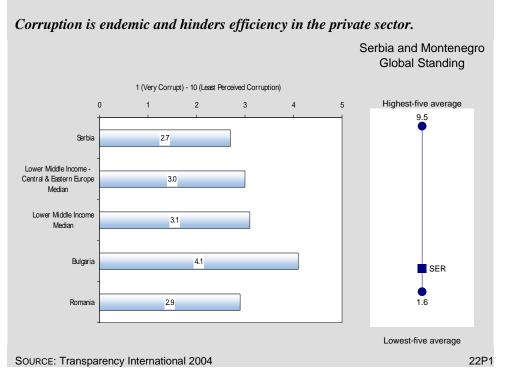
According to the IMF, the private sector accounts for only 45 percent of GDP. As economic experience in OECD countries shows, good economic performance is compatible with substantial variance in the share of the government sector in the economy; it is the impact of the government sector on savings and investment, incentives, and economic governance that is key. Serbia appears to have problems in these areas. In its February 2005 Article IV Consultation Report, the IMF noted that the economic imbalances in Serbia and Montenegro are largely a consequence of inefficiencies in state- and socially owned enterprises, whose financial discipline is often weak, resulting in excessive wage growth. The Serbian authorities need to improve the economic governance of state- and socially owned enterprises. This should be done through a well-thought-out combination of privatization, tighter budget constraints, and financial discipline.

BUSINESS ENVIRONMENT

Institutionalized corruption poisons private sector development by creating impediments to otherwise simple business transactions and subsequently handicapping businesses' ability to respond to the market. Although corruption in Serbia and Montenegro has improved a little, it remains an endemic problem. In 2004, the country's Corruption Perception Index score was 2.7,¹⁵ and it had a Rule of Law Index score of -0.7¹⁶ (Figure 3-3, Corruption Perception Index). Although Serbia and Montenegro (with average scores of 3.0 and -0.3 for Corruption Perception Index and Rule of Law Index, respectively) ranks slightly behind the LMI CEEC average, performance at or near the regional averages does not elucidate Serbia and Montenegro's shortcomings in these areas. It is absolute performance that is relevant; low levels of corruption and adherence to the rule of law are prerequisites for a burgeoning private sector.

Figure 3-3

Corruption Perception Index



The most recent World Bank Doing Business figures show that Serbia and Montenegro was the most improved of any country. Among its many achievements in this area, the government has made substantial progress in reducing the time and the number of procedures required to conduct regular business activities. In some areas, Serbia and Montenegro outperforms its competitors.

¹⁵ The Corruption Perception Index scores corruption on a scale of 1 (worst) to 10 (best), with any score of 3 or below indicating "rampant corruption."

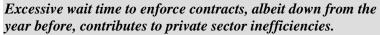
¹⁶ The Rule of Law Index is a composite of various surveys on public confidence in the rule of law, the incidence of crime, the reliability of the judicial system, and the enforceability of contracts. The global mean is defined as zero, with associated individual scores defined as standard deviations above or below. The index ranges from -2.5 (for poor performance) to 2.5 (for excellent performance).

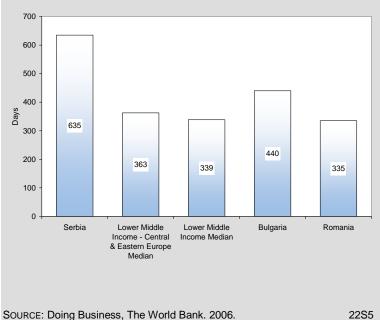
For example, while in Serbia and Montenegro starting a business takes 15 days, in Bulgaria and Romania, starting a business takes 32 days and 28 days, respectively. The regional average is even higher—40 days. Similarly, it takes only 6 procedures to register a property Serbia and Montenegro compared to 8 or 9 in the comparator countries and country groups. At 10, the number of procedures needed to start a business in Serbia and Montenegro is on par with the regional average and the figure for Bulgaria, though twice the number necessary in Romania.

One of the greatest impediments to doing business in Serbia and Montenegro is the length of time required to enforce a contract – 635 days (2005). Although substantially lower than the 1,028 days needed a year before, this figure remains high (Figure 3-4, Time to Enforce a Contract). The time required to register property is also excessive: 111 days,¹⁷ compared to an average of 61 days for LMI CEECs and 19 days for Bulgaria.¹⁸

Figure 3-4

Time to Enforce a Contract (Days)





Legal and regulatory reforms to reduce corruption and improve the ease of doing business are essential if Serbia and Montenegro is to take full advantage of its proximity to Western European markets and competitive wage structure.

¹⁷ This is a decline from 186 days in 2004.

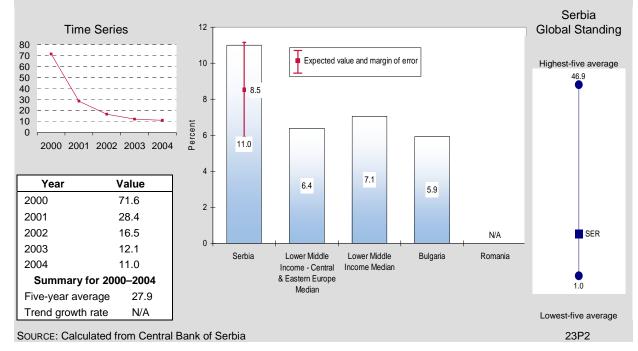
¹⁸ It takes 170 days to register property in Romania, which has been struggling with this issue since the beginning of its transition.

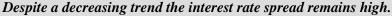
FINANCIAL SECTOR

Serbia's financial sector performance is generally poor. The interest rate spread in Serbia dropped dramatically in the period 2001–2004 (Figure 3-5, Interest Rate Spread). The interest rate spread was 11.0 percent in 2004,¹⁹ far exceeding the average spread for LMI CEECs (6.4 percent) and for Bulgaria (5.9 percent), and is indicative of financial sector inefficiency both relatively and on an absolute scale.²⁰ Similarly, the money supply–to-GDP ratio was only 11.4 percent in Serbia in 2004 which is not only well below the average for LMI CEECs (42.9 percent) and ratios in Bulgaria (44.6 percent) and Romania (22.1 percent), but also well below any absolute standard for a country of Serbia's level of development. A low level of monetization is a strong indicator of an underdeveloped financial sector, which can help explain low rates of saving, inefficient patterns of investment, and poor growth performance. Several explanations are possible for this: one of the most likely is that the public is reluctant to hold domestic currency and deposits because of the recent experience of high inflation (92 percent in 2000) and currency depreciation. Serbia and Montenegro's stock market capitalization of 0.7 percent of GDP in 2003 shows that this market is virtually nonexistent. This low level is a sharp contrast to Bulgaria's capitalization rate of 8.8 percent, Romania's rate of 9.8 percent, and the LMI CEEC average of 9.3 percent.

Figure 3-5

Interest Rate Spread—Lending Rate Minus Deposit Rate (Percent)





¹⁹ The lending rate was 14.6 percent and the deposit rate was 3.6 percent.

²⁰ Data for Romania are not readily available.

One bright spot is a relatively low real interest rate. It stood at 4.5 percent in 2004, substantially below the real interest rates for LMI CEECs as a whole (9.8 percent) and Bulgaria (6.6 percent).²¹

Taken together, these indicators show that Serbia's financial markets are underdeveloped and inefficient. An inefficient and undersized financial sector leads to both inadequate investment and a misallocation of investment, and is consistent with Serbia's low level of fixed investment relative to GDP (discussed above). International donor organizations might help Serbia identify the causes of the financial market inefficiencies and suggest remedies that would enable further reduction in the interest rate spread. Consolidation of the progress made in reducing inflation will increase confidence in the currency and likely increase the ratio of money supply to GDP. Serbia may be able to expand and deepen its stock market by learning from the experience of neighboring transition countries, although only if progress continues to be made on privatization. Because private transfers, such as workers' remittances, are the main source of Serbia's external financing (see the section below), assistance in channeling these transfers into the formal financial system may help support stronger investment in the country.

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 over the past 25 years. The international flow of goods and services, capital, technology, ideas, and people offers great opportunities for Serbia to boost growth and reduce poverty by stimulating productivity and efficiency, providing access to new markets and ideas, and expanding the range of consumer choice. Globalization also creates new challenges in the need for institutions, policies, and regulations to take full advantage of international markets, develop cost-effective approaches to cope with adjustment costs, and establish systems for monitoring and mitigating the associated risks.

Serbia has integrated rapidly into the world economy since the beginning of reform and the lifting of international sanctions in 2001. Although this process is generally beneficial, in Serbia's case it has been accompanied by growing external imbalances that are unsustainable and risk undermining the country's economic stability and future growth.

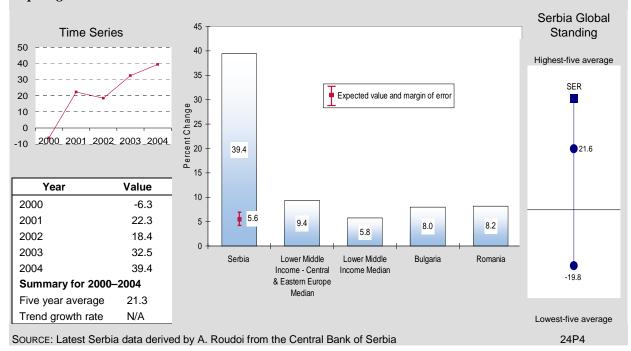
International Trade and the Current Account

Since 2001, Serbian foreign trade measured in U.S. dollars has grown rapidly. In the four years leading up to 2004, exports of goods and services grew at double-digit levels, increasing by 39.4 percent in 2004 alone; imports more than tripled during the same period (Figure 3-6, Export Growth, Goods and Services). Nevertheless, relative to GDP, trade increased much less substantially since GDP also surged in dollar terms.

²¹ Data for Romania are not readily available.

Figure 3-6

Export Growth, Goods and Service (Percent)



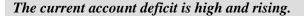
Export growth has been robust.

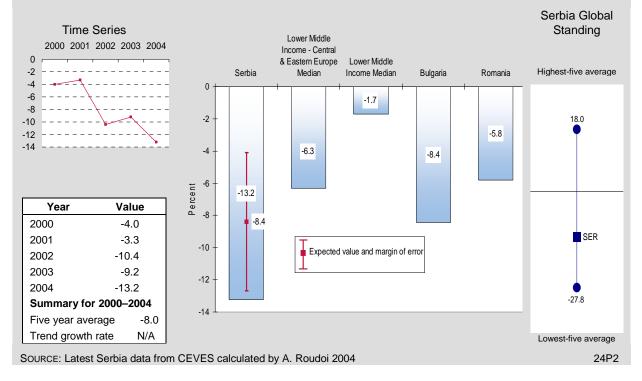
Trade levels as a share of GDP were 78.8 percent in 2004, almost the same as in the benchmark country groups and in Romania, but substantially below the 116.2 percent in Bulgaria. A large trade-to-GDP ratio, however, is in large part due to surging imports. In its February 2005 Article IV Consultation Report, the IMF pointed out that relative to GDP, exports in Serbia and Montenegro were among the lowest in the region. The fund noted that this could be caused by problems with cost competitiveness or structural deficiencies in the export sector. This is confirmed by the figure for Serbia and Montenegro's trade policy index, which is poor on an absolute scale (4.0), though identical to that of Bulgaria and Romania and the LMI CEEC average.

With export growth lagging far behind the growth rate of imports, the trade deficit reached an astonishing 30.0 percent of GDP in 2004. More than half of this gap was financed through current transfers, mostly private. Despite the rapid growth of current private transfers, the current account deficit is very high and rising: in 2004, it reached 13.2 percent of GDP. This figure was well above all comparative benchmarks: the regression benchmark was 8.4 percent for a country with Serbia's characteristics, the LMI CEECs' average was 4.1 percent, and the figures for Bulgaria and Romania were 6.3 and 5.8 percent, respectively (Figure 3-7, Current Account Balance). This deficit is not sustainable and represents one of the most acute economic problems confronting Serbian authorities.

Figure 3-7

Current Account Balance (Percent of GDP)





International Financing

Private transfers are by far the most important source of Serbia's external financing. Official transfers are much less important. At the same time, relative to GNI,²² foreign aid to Serbia and Montenegro is substantial, though declining. Foreign aid averaged 10 percent of GDP from 1999 to 2003 and still stood at 6.4 percent of GDP in 2003, which is well above the regression benchmark for a country with Serbia's characteristics (4.9 percent) and levels in the benchmark country groups (3.6 percent), Bulgaria (2.1 percent), and Romania (1.1 percent).

Serbia has been attracting more private capital inflows in the past several years. In 2004, private capital inflows reached 14.3 percent of GDP. The inflow of FDI accounted for 4.4 percent of GDP in 2004. This is higher than LMI CEECs' average of 3.1 percent, but insufficient given low domestic investment, the ballooning current account gap, and the substantial external debt.

The capital account surplus has exceeded the current account deficit in the past several years. This has resulted in an increase in official foreign exchange reserves, but at 3.7 months of imports in 2004, reserves are barely above the absolute minimum level of 3 months. They are also below the average level of reserves in the LMI CEECs (4.6 months) and Romania (4.3 months) and well below the 6.2 months found in Bulgaria.

²² We use GNI instead of GDP only when the World Bank uses it in its indicators.

Debt

The magnitude of Serbia and Montenegro's external debt is a matter of concern. Relative to GNI, the present value of debt stood at 83.3 percent in 2003, on par with Bulgaria's debt (85.5 percent), but exceeding the regression benchmark of 46.3 percent, levels in Romania (46.0 percent), and the average for LMI CEECs (43.2 percent). On the positive side, the ratio of the present value of debt to GNI in Serbia and Montenegro was lower than in 2001 because of the rise in GNI measured in dollars. The ratio of debt service to exports also increased sharply from 1999 levels and is above that of most of the various benchmarks, though not by as much as debt levels.

Serbia needs to cut its current account deficit; diversify the sources of external financing, primarily by attracting FDI; and reduce its foreign debt. Because the ratio of exports relative to GDP is so low, this is a primary area for international support. An in-depth study that analyzes Serbia's competitiveness could help design policies to improve export performance.

ECONOMIC INFRASTRUCTURE

A country's physical infrastructure—for transportation, communications, power, and information technology—is the backbone for strengthening competitiveness and expanding productive capacity. Although infrastructure data from the Global Competitiveness Report is unavailable for Serbia and Montenegro, the Serbian Poverty Reduction Strategy Paper (PRSP) outlines the need for new infrastructure—roads, electrical, water supply, and telecommunications.

Good telecommunications infrastructure links markets globally and provides access to global markets. Serbia and Montenegro had an average telephone density of 480 fixed-line and mobile subscribers per 1,000 inhabitants. This is below the regional average of 524 lines as well as the figures for Romania (524 lines) and Bulgaria (847 lines), indicating the need to improve telecommunications infrastructure.

SCIENCE AND TECHNOLOGY

Science and technology are central to dynamic growth, because technical knowledge is a driving force for improving productivity and competitiveness. Even for low-income countries such as Serbia, transformational development increasingly depends on acquiring and adapting technology from the global economy, and applying it in ways that are appropriate to their level of development. A lack of capacity to access and utilize technology prevents an economy from leveraging the benefits of globalization. Unfortunately, few international indicators of science and technology are available for judging performance in lower-middle-income developing countries. Hence, one must draw inferences from a very limited data set, proxies for other missing information.

Despite a low level of government expenditure on research and development, new technology is nascent in Serbia and Montenegro. Serbia's expenditure on research and development is low—at 0.4 percent of GDP—but increasing from near zero several years ago. Serbia and Montenegro's research and development spending is equivalent to those for Bulgaria and Romania—0.5 and 0.4 percent respectively—as well as the average of LMI CEECs, also 0.4 percent. Residents filed 507 patent applications in 2002, well above the LMI CEEC average of 174, and between the figures for Bulgaria and Romania. The FDI and Technology Transfer Index score of 3.7 for

Serbia and Montenegro indicates that FDI into Serbia and Montenegro does bring some new technology into the area, but the score is lower than the scores of other LMI CEECs (4.4), Bulgaria (4.4) and especially Romania (5.1).²³ Serbia's limited success in attracting new technology could be augmented through investment promotion highlighting Serbia's educated workforce and proximity to industrial markets.

²³ The FDI and Technology Transfer Index rates on a scale from 1 to 7whether FDI (1) brings little new technology or (7) is an important source of new technology.

4. Pro-Poor Growth Environment

Although rapid growth is the most powerful and dependable instrument for poverty reduction, 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, microfinance, agricultural development, and gender equality.²⁴ 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 an important determinant of growth and poverty reduction. Although health programs do not fall under the purview of the EGAT bureau, an understanding of health conditions can influence the design of economic growth interventions.

Overall Serbia and Montenegro has had relatively good performance in public health. Life expectancy at birth for Serbia and Montenegro was equal to the average for LMI CEECs and Bulgaria, at 72.8 and 72.1 years, respectively, and slightly higher than for Romania at 70.1 years. Serbia's maternal mortality rate was below the LMI CEEC average of 41 and Bulgaria's and Romania's rates of 32 and 49. In fact, at 13 deaths per 100,000 births, Serbia's rate is comparable to that of the United Kingdom (Figure 4-1, Maternal Mortality Rate). Although HIV rates are low and do not yet pose a serious threat to public health, prevalence rates are rising, especially among young Serbians, signaling the need for prevention among this cohort.

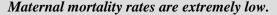
Although Serbia and Montenegro's access to improved sanitation and water sources and child immunization rates are near regional averages, there is a substantial urban–rural split. Health indicators tend to be lower in rural areas. For example, in Serbian towns, 87.5 percent of households are connected to the sewage system, compared to 22.2 percent in Serbian villages (PRSP 2004, xxxiv). Special attention should be paid to delivering basic health services and

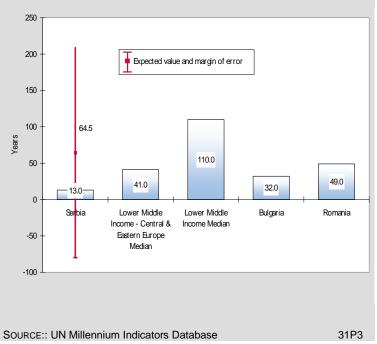
²⁴ For purposes of economic growth programming, the template does not cover emergency relief.

social infrastructure to vulnerable groups such as the rural poor and children because they are the most at risk of death as a result of preventable illness or ailment.²⁵



Maternal Mortality Rate, Deaths per 100,000 Live Births





EDUCATION

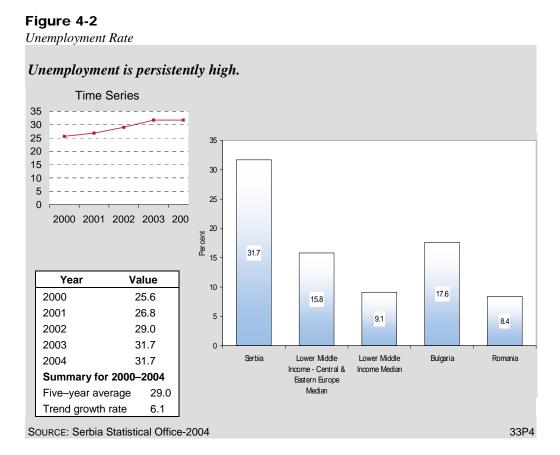
One of Serbia's most abundant resources is its educated labor force. Serbia enjoys a high youth literacy rate, 99.3 percent. This strong performance is similar to that found in most of the region: all the comparator countries and country groups had youth literacy rates above 96.8 percent. Serbia also has a good average distribution of pupils to educators, with a pupil–teacher ratio of 15.3. In comparison, the pupil–teacher ratios in Romania and Bulgaria are 17.4 and 16.8, respectively, and the LMI CEEC average 17.4. Net primary enrollment rates are also up since the war. In 2004, total net primary enrollment was 95.8 percent, substantially higher than the LMI CEECs' average (90.4 percent), or the rate of Bulgaria (90.6 percent) or Romania (88.9 percent). Our standard indicators do not measure secondary or tertiary education, but as in other transition countries, Serbia's historically high quality of education may not provide its labor force with the skills necessary to keep Serbia competitive or facilitate labor force participation (LFP) (see

²⁵ Individuals below the poverty line are most at risk and have a higher incidence of chronic medical conditions—30.3 percent of people below the poverty line have been diagnosed with chronic medical conditions, compared to 26.6 percent of those above the poverty line (IMF PRSP 2004, xxv).

below).²⁶ Serbia could benefit from an in-depth study of its educational system and labor force, either as a stand-alone study or as part of a competitiveness study.

EMPLOYMENT AND WORKFORCE

Productive employment serves a society by providing livelihoods and strengthening social cohesion. Lack of employment opportunities for large swaths of Serbia's nearly 3 million-strong labor force poses a serious problem. The unemployment rate in Serbia for 2004 stood at 31.7 percent, nearly twice the regional average of 15.8 percent²⁷ (Figure 4-2, Unemployment Rate). This high recorded unemployment rate, combined with rapid economic growth, has been common in transition countries after the beginning of economic reform. Serbia's high unemployment has no doubt been exacerbated by economic displacements caused by the war in the former Yugoslavia in the late 1990s.



²⁶ Most transition countries in Central and Eastern Europe report good numbers on a variety of education indicators. Our indicators are geared to basic literacy, however, because they focus on the MDGs rather than on the competitiveness issues that are more relevant to transition countries. Still, it is unclear whether Serbia's educational achievement is relevant for a competitive economy in today's globalized world.

²⁷ Such comparisons should be interpreted with caution because definitions of unemployment vary between countries.

Wages for Serbia and Montenegro's skilled labor force are well below Western European averages. This places Serbia and Montenegrin producers in an excellent position to compete in Western European markets and makes it a desirable location for foreign investors interested in export processing.

Evidence of the rigidity of the Serbian labor market is mixed. The Rigidity of Employment Index gauges the liquidity of the labor market by measuring the ease of hiring, firing, and requesting work beyond the standard work week. Serbia and Montenegro's score was 28.0, identical to that of Bulgaria and substantially less than the more rigid LMI CEEC average of 43.5, or Romania's 63.0 score.²⁸ This seems to suggest that the labor market is fairly flexible, yet at the same time, some studies, such as those conducted by the World Bank, suggest that labor markets are relatively rigid. ²⁹

The data before 2002 show LFP rates comparable to the benchmark country groups and regions. The data supplied by the Serbian authorities show a very sharp one-time drop in the LFP figures between 2001 and 2002. With the census conducted in 2002, new data became available, and LFP was recalculated. Thus, the sharp decline in the rate may be due in part to adjustments in the data. The post-2002 figures show LFP rates much lower than in other countries in the region; the total LFP rate for 2003 was only 55.5 percent, compared with an average for LMI CEECs of 70.8 percent, 73.6 percent in Bulgaria, 67.9 percent in Romania, and even Serbia's own 1999 level of 72.2 percent. The decline in LFP rates has been essentially gender neutral.

Programs that emphasize job creation will be an important remedy to Serbia's employment woes. Job creation is critical because attempts to improve financial discipline on state and socially owned enterprises will generate layoffs. To make tighter budgets politically feasible, the Serbian authorities will need to address employment creation proactively.

AGRICULTURE

Agricultural performance in Serbia and Montenegro is strong. Agriculture accounts for about 20 percent of exports and output. The cereal yield is robust and consistent with regional averages: an average of 3,485 kilograms per hectare annually, compared to the regional average of 3,143 kilograms per hectare. Furthermore, the crop production index (at 126.6 in 2004, with 1999–2001 as the base) reveals that Serbia and Montenegro has production volumes above the LMI CEEC average (103.4) and near those of upper-middle-income Central and Eastern European averages; the livestock production index (at 94.5 in 2004, with 1999–2001 as the base) is slightly worse than the average for LMI CEECs (105.0) and than Romania (119.1), but on par with Bulgaria (95.9). Based on the agricultural policy index (3.5 on a scale of 1 to 7), agricultural policy in Serbia is less burdensome than in Bulgaria (with an index value of 2.7³⁰), Romania (3.0), and LMI CEECs as a whole (2.9). Because agriculture is a substantial industry in Serbia

²⁸ The rigidity-of-employment index ranges from 1 (minimum rigidity) to 100 (maximum rigidity).

²⁹ Based on the feedback received from USAID.

³⁰ The Agricultural Policy Costs Index ranges from 1 (excessively burdensome) to 7 (balances all economic agents' interests).

and Montenegro, assistance in bringing processed agricultural goods up to international standards could be an effective way to add value to the sector.

Appendix

CRITERIA FOR SELECTING INDICATORS

The scope of the paper is constrained by the availability of suitable indicators. Indicators were chosen to balance the need for broad coverage and diagnostic value, on the one hand, and the need of brevity and clarity, on the other. The analysis covers 15 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 and suggests priorities for USAID intervention. The accompanying table lists all the indicators examined for this report. The separate Data Supplement contains the complete data set for Serbia, 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? Primary indicators also include descriptive variables such as per capita income, poverty head count, and age dependency rate.

In areas of weak performance, a limited set of diagnostic supporting indicators is analyzed. These "Level II" indicators provide more details about the problem or shed light on why the primary indicators may be weak. For example, if economic growth is poor, investment and productivity data can serve as diagnostic indicators. If a country performs poorly on educational achievement as measured by the youth literacy rate, expenditure on primary education and the pupil–teacher ratio can serve as diagnostic indicators.³¹

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

³¹ Deeper analysis of the topic using more detailed data (level III) is beyond the scope of papers in this series.

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

BENCHMARKING METHODOLOGY

Comparative benchmarking is the main tool used to evaluate each indicator. The analysis draws on several criteria, rather than a single mechanical rule. The starting point is a comparison of performance in Serbia relative to the average for countries in the same income group and region —in this case, lower-middle-income countries in Central and Eastern Europe.³² 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 Serbia and Montenegro mission (Bulgaria and Romania), and (3) the average for the five best- and five worst-performing countries globally. Most comparisons are framed in terms of values for the latest year of data from available sources. Five-year trends are also taken into account if they shed light on the performance assessment.³³

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.³⁴ This approach has three advantages. First, the benchmark is customized to Serbia's specific level of income. Second, the comparison does not depend on the exact choice of reference group. Third, the methodology allows quantification of the margin of error and establishment of a "normal band" for a country with Serbia's characteristics. A value falling outside this band on the side of poor performance signals a serious problem.³⁵

Finally, when relevant, Serbia's performance is weighed against absolute standards.

³² 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.

³³ 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 diverge from the underlying trend.

³⁴ 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) = $a + b * \ln PCI + c * Region + error - where PCI is per capita income in PPP$, and Region is a set of 0-1 dummy variables indicating the region in which each country is located. After estimates are obtained for the parameters a, b, and c, the predicted value for Serbia is computed by plugging in Serbia-specific values for PCI and Region. When applicable, the regression also controls for population size and petroleum exports (as a percentage of GDP).$

³⁵ This report uses a margin of error of 0.66 times the standard error of estimate (adjusted for heteroskedasticity, when appropriate). With this value, 25 percent of the observations should fall outside the normal range on the side of poor performance (and 25 percent on the side of good performance). Some regressions produce a very large standard error, giving a "normal band" that is too wide to provide a discerning test of good or bad performance.

INDICATORS

	3	MDG, MCA, or	CAS Indicator
Indicator	Level ^a	EcGov ^b	Code
Overview	of the Econ	omy	
Growth Performance			
Per capita GDP, \$PPP	Ι		11P1
Per capita GDP, current US\$	Ι		11P2
Real GDP growth	Ι		11P3
Growth of labor productivity	II		11S1
Investment Productivity-incremental capital-output ratio	II		1182
Gross fixed investment, % GDP	II		1183
Gross fixed private investment, % GDP	II		1184
Poverty and Inequality			
Human poverty index	Ι		12P1
Income-share, poorest 20%	Ι		12P2
Population living on less than \$1 PPP per day	Ι	MDG	12P3
Poverty headcount, by national poverty line	Ι	MDG	12P4
PRSP Status	Ι	EcGov	12P5
Population below minimum dietary energy consumption	Π	MDG	12S1
Poverty gap at \$1 PPP a day	II		1282
Economic Structure			
Labor force structure	Ι		13P1
Output structure	Ι		13P2
Demography and Environment			
Adult literacy rate	Ι		14P1
Age dependency rate	Ι		14P2
Environmental sustainable index	Ι		14P3
Population size and growth	Ι		14P4
Urbanization rate	Ι		14P5
Gender			
Adult literacy rate, ratio of male to female	Ι	MDG	15P1
Gross enrollment rate, all levels, ratio of male to female,	Ι	MDG	15P2
Life expectancy at birth, ratio of male to female	Ι		15P3
Private Sector		vironment	
Fiscal and Monetary Policy			
Govt. expenditure, % GDP	I	EcGov	21P1
Govt. revenue, % GDP	Ι	EcGov	21P2
Growth in the money supply	Ι	EcGov	21P3
Inflation rate	Ι	MCA	21P4
Overall govt. budget balance, including grants, % GDP	Ι	EcGov	21P5
Composition of govt. expenditure	II		21S1
Composition of govt. revenue	II		2182
Composition of money supply growth	II		2183

Indicator	Level ^a	MDG, MCA, or EcGov ^b	CAS Indicator Code
Business Environment			
Corruption perception index	I	EcGov	22P1
Doing business composite index	Ι	EcGov	22P2
Rule of law index	Ι	MCA / EcGov	22P3
Cost of starting a business, % GNI per capita	II	EcGov	22\$1
Procedures to enforce contract	II	EcGov	2282
Procedures to register property	II	EcGov	2283
Procedures to start a business	II	EcGov	2284
Time to enforce a contract	II	EcGov	2285
Time to register property	II	EcGov	2286
Time to start a business	II	EcGov	2287
Financial Sector			
Domestic credit to private sector, % GDP	I		23P1
Interest rate spread	Ι		23P2
Money supply, % GDP	Ι		23P3
Stock market capitalization rate, % of GDP	Ι		23P4
Cost to create collateral	II		23\$1
Country credit rating	II	MCA	23S2
Legal rights of borrowers and lenders index	II		23\$3
Real Interest rate	Ι		2384
External Sector			
Aid , % GNI	I		24P1
Current account balance, % GDP	Ι		24P2
Debt service ratio, % exports	Ι	MDG	24P3
Export growth of goods and services	Ι		24P4
Foreign direct investment, % GDP	Ι		24P5
Gross international reserves, months of imports	Ι	EcGov	24P6
Gross Private capital inflows, % GDP	Ι		24P7
Present value of debt, % GNI	Ι		24P8
Remittance receipts, % exports	Ι		24P9
Trade, % GDP	Ι		24P10
Concentration of Exports	II		24S1
Inward FDI Potential Index	II		24S2
Net barter terms of trade	II		24\$3
Real effective exchange rate (REER)	II	EcGov	24S4
Structure of merchandise exports	II		24S5
Trade policy index	II	MCA / EcGov	24S6
Economic Infrastructure			
Internet users per 1,000 people	I	MDG	25P1
Overall infrastructure quality	Ι	EcGov	25P2
Telephone density, fixed line and mobile	Ι	MDG	25P3
Quality of infrastructure—railroads, ports, air transport,			25S1

Indicator	Level ^a	MDG, MCA, or EcGov ^b	CAS Indicator Code
Telephone cost, average local call	II		25S2
Science and Technology			
Expenditure for R&D, % GNI	Ι		26P1
FDI and technology transfer index	Ι		26P2
Patent applications filed by residents	Ι		26P3
Pro-Poor (Growth Enviro	nment	
Health			
HIV prevalence	I		31P1
Life expectancy at birth	Ι		31P2
Maternal mortality rate	Ι	MDG	31P3
Access to improved sanitation	Π	MDG	31S1
Access to improved water source	II	MDG	31S2
Births attended by skilled health personnel	Π	MDG	31S3
Child immunization rate	Π		31 S 4
Prevalence of child malnutrition (weight for age)	Π		31S5
Public health expenditure, % GDP	II	EcGov	31S6
Education			
Net primary enrollment rate	Ι	MDG	32P1
Persistence in school to grade 5	Ι	MDG	32P2
Youth literacy rate	Ι		32P3
Education expenditure, primary, % GDP	Π	MCA/ EcGov	3281
Expenditure per student, % GDP per capita (primary, secondary, and tertiary)	П	EcGov	3282
Pupil-teacher ratio, primary school	Π		32\$3
Employment and Workforce			
Labor force participation rate, females, males, total	Ι		33P1
Rigidity of employment index	Ι	EcGov	33P2
Size and growth of the labor force	Ι		33P3
Unemployment rate	Ι		33P4
Agriculture			
Agriculture value added per worker	Ι		34P1
Cereal yield	Ι		34P2
Growth in agricultural value-added	Ι		34P3
Agricultural policy costs index	II	EcGov	34S1
Crop production index	II		34S2
Livestock production index	Π		34S3

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

 b MDG—Millennium Development Goal indicator

MCA—Millennium Challenge Account indicator

EcGov—Major indicators of economic governance, which USAID's Strategic Management Interim Guidance defines 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.



Serbia Economic Performance Assessment



September 2005

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

Serbia Economic Performance Assessment

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.

Sponsored by the Economic Growth office of USAID's Bureau of Economic Growth, Agriculture and Trade (EGAT), and implemented by Nathan Associates Inc. under Contract No. PCE-I-00-00-00013-00, Task Order 004, the Country Analytical Support (CAS) Project, 2005-2006, 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 used by USAID for economic growth analysis, as well as accessible host-country data sources;
- international benchmarking to assess country performance in comparison to similar countries and groups of countries;
- an easy-to-read analytic narrative that highlights areas in which a country's performance is particularly strong or weak, thereby assisting in the identification of future programming priorities.

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

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The CTO for this project is Yoon Lee. USAID missions and bureaus may seek assistance and funding for CAS studies by contacting Rita Aggarwal, USAID/EGAT/EG Activity Manager for the CAS project, at <u>raggarwal@usaid.gov</u>.

Electronic copies of reports and materials relating to the CAS project are available at <u>www.nathaninc.com</u>. For further information or hard copies of CAS publications, please contact

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A Note on the Serbia Study

Though most international sources treat Serbia and Montenegro as a unit, it is important in designing policies to support economic growth and poverty reduction to recognize the heterogeneity of these two states within a state. The data presented here do not include Kosovo. Because this study focuses on Serbia alone, we have attempted, where possible, to disaggregate data for Serbia and Montenegro and present data for Serbia alone. We use data for Serbia and Montenegro only when data for Serbia alone are not available. The figures for Serbia alone are not derived from the standard sources for each indicator listed in the technical notes. We have relied heavily on data from: the International Monetary Fund (IMF); the Serbian Republic's Statistical Office; the National Bank of Serbia; and Serbia's Poverty Reduction Strategy Paper (PRSP) of May 2004. The authors of this report would like to acknowledge the substantial contribution to the compilation of data for Serbia made by the Belgrade based think tank, Centar Za Visoke Ekonomske Studije (CEVES)

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			Gro	wth Performa	nce		
	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
Serbia/Serbia and Montenegro Data*	а	а	а	b	а	b	b
Latest Year (T)	2004	2004	2004	2003	2004	2004	2004
Value Year T	4,933	2,938	7.0	2.7	3.0	16.5	13.6
Value Year T-1	4,646	2,536	3.0	3.7		16.1	13.4
Value Year T-2	4,518	1,940	4.0	5.2		16.1	12.2
Value Year T-3	4,270	1,445	5.5	5.1		13.6	11.7
Value Year T-4	3,867	1,051	5.7	-18.1		14.2	12.2
Average Value, 5 year	4,331	1,982	5.0	-0.3		15.3	12.6
Growth Trend	6.1	29.9	-1.9			4.8	
Benchmark Data							
Regression Benchmark			5.1				
Lower Bound			3.7				
Upper Bound			6.4				
Latest Year Bulgaria	2004	2004	2004	2003	2003	2003	
Bulgaria Value Latest Year	8,500	3,074	5.7	4.7	4.1	19.6	
Latest Year Romania	2004	2004	2004	2003	2003	2003	
Romania Value Latest Year	7,641	3,207	8.3	4.7	7.3	22.5	
Lower Middle Income Central & Eastern Europe	7,370	2,684	5.8	4.4	5.7	19.7	
Lower 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	

			Pove	erty and Inequ	uality		
	Human poverty index	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
Serbia/Serbia and Montenegro Data*				а	а		
Latest Year (T)				2002			
Value Year T				10.6	Yes		
Value Year T-1							
Value Year T-2		•					
Value Year T-3							
Value Year T-4							
Average Value, 5 year							
Growth Trend							
Benchmark Data							
Regression Benchmark	14.5	7.9	4.9	18.3			
Lower Bound	8.8	7.1	-2.8	8.3			
Upper Bound	20.1	8.7	12.6	28.2			
Latest Year Bulgaria		2001	2001	2001		2001	2001
Bulgaria Value Latest Year		6.7	4.7	12.8		16.0	1.4
Latest Year Romania		2002	2002				2002
Romania Value Latest Year		7.9	2.0				0.5
Lower Middle Income Central & Eastern Europe	12.0	8.5	2.0	22.5		8.0	0.5
Lower Middle Income Avg.	14.7	8.2	4.2	49.0		11.0	1.2
High Five Avg.	58.7	8.7	33.5	41.2		66.0	11.8
Low Five Avg.	3.9	5.9	2.0	37.1		3.0	0.5

			Economic	Structure		
	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
Serbia/Serbia and Montenegro Data*	a	a	a	a	a	a
Latest Year (T)	2004	2004	2004	2002	2002	2002
Value Year T	4.4	41.1	54.4	17.8	32.3	49.9
Value Year T-1	4.6	43.1	52.3	-	33.0	48.1
Value Year T-2	4.8	44.1	51.1	17.0	35.7	47.3
Value Year T-3	4.9	45.8	49.4	20.5	33.5	46.0
Value Year T-4						
Average Value, 5 year	4.7	43.5	51.8			
Growth Trend						
Benchmark Data						
Regression Benchmark						
Lower Bound						
Upper Bound						
Latest Year Bulgaria	2001	2001	2001	2003	2003	2003
Bulgaria Value Latest Year	26.3	27.6	46.0	11.7	30.7	57.5
Latest Year Romania	2001	2001	2001	2003	2003	2003
Romania Value Latest Year	42.3	26.2	31.5	11.9	36.1	52.1
Lower Middle Income Central & Eastern Europe	32.6	26.2	43.1	12.8	30.6	56.7
Lower 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

		De	emography ar	nd Environme	ent		Gender			
	Adult literacy rate	Age dependency rate	Environmental sustainability index	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	
Indicator Number	14P1	14P2	14P3	14P4a	14P4b	14P5	15P1	15P2	15P3	
Serbia/Serbia and Montenegro Data*	а	b		b	b	b	а		а	
Latest Year (T)	2002	2003		2002	2002	2002	2002		2002	
Value Year T	96.5	0.50	-	7.5	-2.9	52.0	1.05		0.93	
Value Year T-1		0.51	-	7.7	1.0	51.9				
Value Year T-2		0.51	-	7.7	-1.4	51.7				
Value Year T-3		0.51		7.8	-0.4	51.6				
Value Year T-4		0.51		7.8		51.5				
Average Value, 5 year		0.51		7.7		51.8				
Growth Trend		0.00				0.3				
Benchmark Data										
Regression Benchmark			48.7			54.4				
Lower Bound			45.0			45.1				
Upper Bound			52.4			63.6				
Latest Year Bulgaria	2002	2003		2003	2003	2003	2002	2002	2002	
Bulgaria Value Latest Year	98.6	0.44		7.8	-0.6	67.5		0.97	0.90	
Latest Year Romania	2002	2003		2003	2003	2003	2002	2002	2002	
Romania Value Latest Year	97.3	0.44		21.7	-0.3	55.7	1.02	0.96	0.90	
Lower Middle Income Central & Eastern Europe	97.9	0.46	50.4	6.0	0.6	57.6	1.02	0.97	0.93	
Lower 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	-	607.0	4.6	100.0	2.40	1.69	1.01	
Low Five Avg.	35.7	0.38		0.0	-0.8	9.0	0.92	0.84	0.85	

]				Fiscal	and Monetary	Policy			
	Government expenditure, % GDP	Government revenue, % GDP	Growth in the broad money supply	Inflation rate	Overall government budget balance, inlcuding 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)
Indicator Number	21P1	21P2	21P3	21P4	21P5	21S1a	21S1b	21S1c	21S1d
Serbia/Serbia and Montenegro Data*	а	а	а	а	а	а	а	а	а
Latest Year (T)	2004	2004	2004	2004	2004	2004	2004	2004	2004
Value Year T	27.0	25.4	17.4	10.1	-1.7	5.2	1.0	1.7	17.7
Value Year T-1	26.8	24.6	12.6	11.7	-2.7	5.6	0.9	1.9	16.3
Value Year T-2	29.0	24.7	62.9	19.5	-3.5	4.3	0.7	1.6	20.6
Value Year T-3	16.2	15.8	107.0	91.8	-0.8	4.2	0.1	2.5	8.9
Value Year T-4	13.2	12.9	76.1	70.0	-0.3	4.4	0.1	2.0	5.0
Average Value, 5 year	22.4	20.7	55.2	40.6	-1.8	4.7	0.6	1.9	13.7
Growth Trend	21.3	19.5	-39.9	-45.5	-59.8	7.3	97.4	2.7	20.1
Benchmark Data									
Regression Benchmark	37.2	30.5	14.9	6.1	-6.1				
Lower Bound	33.2	26.5	7.8	2.8	-8.4				
Upper Bound	41.2	34.5	21.9	9.4	-3.9				
Latest Year Bulgaria	2003	2003	2003	2004	2003	2003	2003	2003	2003
Bulgaria Value Latest Year	34.0	35.4	20.2	6.1	0.2	11.6	6.2	23.4	56.5
Latest Year Romania	2001	2001	2003	2004	2001	2001	2001	2001	2001
Romania Value Latest Year	28.4	26.7	23.3	11.9	-3.6	15.4	10.7	19.8	48.5
Lower Middle Income Central & Eastern Europe	29.8	29.8	14.2	4.5	-1.7	11.9	11.3	21.1	52.3
Lower Middle Income Avg.	21.4	19.3	14.2	5.5	-1.3	24.1	8.9	15.7	30.8
High Five Avg.	43.7	44.1	134.4	85.3	3.9	52.5	18.8	47.7	71.8
Low Five Avg.	12.1	8.6	-8.5	-2.7	-8.1	6.2	1.9	6.0	2.6

	Fiscal and Monetary Policy (cont'd)										
	Composition of government expenditure (capital expenditure)	Composition of governement revenue (Taxes on goods and services)	Composition of government revenue (Taxes of income, profits and capital gains)	Composition of government revenue (Social security taxes)	Composition of government revenue (Taxes on international trade)	Composition of government revenue (Grants)	Composition of government revenue (Non-tax revenue as a percentage of total revenue)	Composition of money supply growth (Net credit to government)	Composition of money supply growth (Credit to the private sector)		
Indicator Number	21S1e	21S2a	21S2b	21S2c	21S2d	21S2e	21S2f	21S3a	21S3b		
Serbia/Serbia and Montenegro Data*	а	а	а	а	а	а	а	а	а		
Latest Year (T)	2004	2004	2004	2004	2004	2004	2004				
Value Year T	2.1	14.8	4.5		2.4	0.2	3.4				
Value Year T-1	1.9	14.2	4.8		2.5	0.2	2.8	-			
Value Year T-2	1.9	13.9	4.8		2.4	1.0	1.9	-			
Value Year T-3	0.5	8.1	4.5		0.0	0.4	1.0				
Value Year T-4	1.3	5.3	3.5		0.0	0.0	1.3				
Average Value, 5 year	1.5	12.8	4.7		2.4	0.4	2.1				
Growth Trend	25.8	20.9	-11.0				10.2		0.9		
Benchmark Data											
Regression Benchmark											
Lower Bound											
Upper Bound											
Latest Year Bulgaria	-	2003	2003	2003	2003						
Bulgaria Value Latest Year		38.6	11.8	29.2	1.9						
Latest Year Romania		2001	2001	2001	2001						
Romania Value Latest Year		30.0	10.3	41.3	3.1						
Lower Middle Income Central & Eastern Europe		32.7	11.4	29.3	2.5		19.8				
Lower Middle Income Avg.		38.1	16.7	8.7	7.8		15.8				
High Five Avg.		57.9	53.7	45.0	34.1			-			
Low Five Avg.		5.0	3.3	0.5	0.5						

	Fiscal and	Monetary Pol	icy (cont'd)	Business Environment					
	Composition of money supply growth (Net credit to non-financial public enterprises)	Composition of money supply growth (Net foreign assets)	Composition of money supply growth (Other items, net)	Corruption perception index	Doing business composite index	Rule of law index	Regulatory quality index	Cost of starting a business, % GNI per capita	
Indicator Number	21S3c	21S3d	21S3e	22P1	22P2	22P3	22P4	22S1	
Serbia/Serbia and Montenegro Data*	а	а	а	b	b	b	b	b	
Latest Year (T)			2004	2004		2004	2004	2005	
Value Year T				2.7	•	-0.7	58	6	
Value Year T-1				2.3	•			10	
Value Year T-2					•	-1.0			
Value Year T-3									
Value Year T-4				1.3		-1.0			
Average Value, 5 year						-0.9			
Growth Trend									
Benchmark Data									
Regression Benchmark					•				
Lower Bound					•				
Upper Bound					•				
Latest Year Bulgaria				2004	2004	2004	2004	2004	
Bulgaria Value Latest Year				4.1	66.0	0.1	76.4	10.3	
Latest Year Romania			•	2004	2004	2004	2004	2004	
Romania Value Latest Year			•	2.9	62.5	-0.2	52.5	7.4	
Lower Middle Income Central & Eastern Europe				3.0	64.1	-0.3		19.0	
Lower Middle Income Avg.			•	3.1	64.9	-0.5		19.5	
High Five Avg.			•	9.5	82.5	2.0	121.6	726.5	
Low Five Avg.			•	1.6	41.8	-1.9	21.3	0.5	

		Βι	isiness Envir	onment (cont	'd)		Financia	al Sector
	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	Domestic credit to private sector, % GDP	Interest rate spread, lending rate minus deposit rate
Indicator Number	22S2	22S3	22S4	22S5	22S6	22S7	23P1	23P2
Serbia/Serbia and Montenegro Data*	b	b	b	b	b	b		а
Latest Year (T)	2005	2005	2005	2005	2005	2005		2004
Value Year T	33	6	10	635	111	15		11.0
Value Year T-1	36	6	11	1,028	186	51		12.1
Value Year T-2						•	-	16.5
Value Year T-3								28.4
Value Year T-4								71.6
Average Value, 5 year								27.9
Growth Trend								-36.9
Benchmark Data								
Regression Benchmark							14.1	8.5
Lower Bound						•	-1.1	5.9
Upper Bound							29.3	11.2
Latest Year Bulgaria	2004	2004	2004	2004	2004	2004	2003	2003
Bulgaria Value Latest Year	34	9	10.0	440	19	32	27.6	5.9
Latest Year Romania	2004	2004	2004	2004	2004	2004	2003	
Romania Value Latest Year	43	8	5.0	335	170	28	9.5	
Lower Middle Income Central & Eastern Europe	35	8	10.5	363	61	40	17.9	6.4
Lower Middle Income Avg.	29	7	10.0	339	45	43	24.6	7.1
High Five Avg.	55	16	17.2	1,178	485	172	171.0	46.9
Low Five Avg.	13	2	2.4	51	2	4	1.6	1.0

]			Financial Se	ctor (cont'd)			E	External Secto	or
	Money supply (M2), % GDP	Stock market capitalization rate, % GDP	Cost to create collateral	Country credit rating	Legal rights of borrowers and lenders index	Real interest rate	Aid, % GNI	Current account balance, % GDP	Debt service ratio, % exports
Indicator Number	23P3	23P4	23S1	23S2	23\$3	23S4	24P1	24P2	24P3
Serbia/Serbia and Montenegro Data*	а	b			b	а	b	а	b
Latest Year (T)	2004	2003	-		2005	2004	2003	2004	2003
Value Year T	11.4	0.7			5.0	4.5	6.4	-13.2	13.6
Value Year T-1	11.4				5.0	3.1	12.4	-9.2	-
Value Year T-2	12.1	0.0			•	-0.3	11.3	-10.4	2.4
Value Year T-3	9.4	0.1				-59.3	13.2	-3.3	3.2
Value Year T-4	9.2	0.3				7.9	6.9	-4.0	-
Average Value, 5 year	10.7				•	2.4	10.0	-8.0	
Growth Trend	6.4						-2.0	-40.8	64.8
Benchmark Data									
Regression Benchmark							4.9	-8.4	17.7
Lower Bound							0.3	-12.7	10.4
Upper Bound							9.5	-4.1	25.0
Latest Year Bulgaria	2003	2003	2004		2004	2003	2003	2003	2003
Bulgaria Value Latest Year	44.6	8.8	1.0		6.0	6.6	2.1	-8.4	10.5
Latest Year Romania	2003	2003	2004		2004		2003	2003	2003
Romania Value Latest Year	22.1	9.8	1.1		4.0		1.1	-5.8	17.3
Lower Middle Income Central & Eastern Europe	42.9	9.3	8.2		5.5	9.8	3.6	-6.3	11.7
Lower Middle Income Avg.	40.5	25.1	11.2	29.7	5.0	8.9	1.3	-1.7	11.6
High Five Avg.	188.2	238.9	121.6	51.5	9.6	36.2	66.1	18.0	61.5
Low Five Avg.	4.8	1.0	0.0	9.4	1.2	-4.6	-0.3	-27.8	0.9

				Exter	nal Sector (co	ont'd)			
	Exports growth, goods and services	Foreign direct investment, % GDP	Gross international reserves, months of imports	Gross private capital inflows, %GDP	Present value of debt, % GNI	Remittance receipts, % exports	Trade, % GDP	Concentration of exports (top three exports, 3-digit SITC)	Inward FDI potential index
Indicator Number	24P4	24P5	24P6	24P7	24P8	24P9	24P10	24S1	24S2
Serbia/Serbia and Montenegro Data*	а	а	а	а	b	а	а		
Latest Year (T)	2004	2004	2004	2004	2003		2004	-	
Value Year T	39.4	4.4	3.7	14.3	83.3		78.8		
Value Year T-1	32.5	7.1	3.6	13.6	102.4		63.1		
Value Year T-2	18.4	3.3	3.1	14.4	117.3		63.7		
Value Year T-3	22.3	1.5	2.4	7.8			65.0		
Value Year T-4	-6.3	0.6		4.5			70.0		
Average Value, 5 year	19.2	3.4	3.2	10.9			68.1		
Growth Trend	-8.0	72.5	15.6	33.2			2.10		
Benchmark Data									
Regression Benchmark	5.6	4.5	4.7		46.3		88.5		
Lower Bound	0.1	0.8	3.4		22.8		68.6		
Upper Bound	11.1	8.2	6.0		69.8		108.3		
Latest Year Bulgaria	2003	2003	2003	2003	2003	-	2003	-	2002
Bulgaria Value Latest Year	8.0	7.2	6.2		85.5		116.20		0.2
Latest Year Romania	2003	2003	2003	2003	2003	2003	2003	-	2002
Romania Value Latest Year	8.2	3.2	4.3		46.0	0.1	71.56		0.2
Lower Middle Income Central & Eastern Europe	9.4	3.1	4.6		43.2	8.5	77.98		0.2
Lower Middle Income Avg.	5.8	2.0	4.0		43.7	8.1	78.14		0.2
High Five Avg.	21.6	99.4	18.6	•	380.0	86.5	228.00	-	0.5
Low Five Avg.	-19.8	-0.4	0.3		9.1	0.0	27.10		0.1

				External Se	ctor (cont'd)				Economic Inf	Economic Infrastructure		
	Net barter terms of trade	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	Internet users per 1000 people	Overall infrastructure quality index		
Indicator Number	24S3	24S4	24S5a	24S5b	24S5c	24S5d	24S5e	24S6	25P1	25P2		
Serbia/Serbia and Montenegro Data*								b	а			
Latest Year (T)								2003	2002			
Value Year T								4.0	59.7			
Value Year T-1								4.0	56.2			
Value Year T-2					•				37.6			
Value Year T-3												
Value Year T-4												
Average Value, 5 year									51			
Growth Trend									26.0			
Benchmark Data												
Regression Benchmark					•				64			
Lower Bound					•				34.6			
Upper Bound					•				92.5			
Latest Year Bulgaria	-		2003	2003	2003	2003	2003	2004	2003	2004		
Bulgaria Value Latest Year			2.3	5.8	65.8	10.3	10.2	4.0	81	2.8		
Latest Year Romania			2003	2003	2003	2003	2003	2004	2003	2004		
Romania Value Latest Year			3.1	6.5	82.5	4.2	3.2	4.0	191	2.7		
Lower Middle Income Central & Eastern Europe	98.0		2.3	5.4	82.5	4.2	10.0	4.0	65	2.8		
Lower Middle Income Avg.	98.0		2.3	5.8	48.1	3.2	14.3	4.0	40	3.3		
High Five Avg.	149.8		30.8	92.8	94.2	51.5	91.0	5.0	586	6.7		
Low Five Avg.	71.8		0.0	0.0	2.6	0.0	0.5	1.4	1	1.5		

		Eco	onomic Infras	structure (con	nt'd)		Scien	ce and Techr	ology
	Telephone density, fixed line and mobile, per 1000 people	Quality of infrastructure index - air transport	Quality of infrastructure index - ports	Quality of infrastructure index - railroads	Quality of infrastructure index - electricity	Telephone cost, average local call	Expenditure for R&D, % GDP	FDI and technology transfer Index	Patent applications filed by residents
Indicator Number	25P3	25S1a	25S1b	25S1c	25S1d	25S2	26P1	26P2	26P3
Serbia/Serbia and Montenegro Data*	а					b	а	b	b
Latest Year (T)	2002				-	2002	2004	2004	2002
Value Year T	480		•			0.01	0.4	3.7	507
Value Year T-1	416					0.01	0.4		470
Value Year T-2	349					0.00	0.0		396
Value Year T-3	271					0.01	0.0		340
Value Year T-4	241					0.01	0.1		526
Average Value, 5 year	351					0.01	0.2		448
Growth Trend	19.8					2.3			2.5
Benchmark Data									
Regression Benchmark	339								
Lower Bound	248.2								
Upper Bound	429.0								
Latest Year Bulgaria	2003	2004	2004	2004	2004	2003	2002	2004	2002
Bulgaria Value Latest Year	847	2.7	3.7	3.700	4.3	0.03	0.5	4.4	306
Latest Year Romania	2003	2004	2004	2004	2004	2003	2002	2004	2002
Romania Value Latest Year	524	4.1	4.0	3.400	3.8	0.12	0	5.1	1,486
Lower Middle Income Central & Eastern Europe	524	3.4	3.7	2.850	4.1	0.08	0.4	4.4	174
Lower Middle Income Avg.	273	4.1	3.7	2.300	4.1	0.03	0.3	4.6	13
High Five Avg.	1,686	6.7	6.6	6.480	6.9	0.41	3.5	5.9	153,540
Low Five Avg.	10	2.4	1.3	1.1	1.4	0.00	0.1	3.3	0

					Health				
	HIV prevalence	Life expectancy at birth	Maternal mortality rate	Access to improved sanitation	Access to improved water source	Births attended by skilled health personnel	Child immunization rate	Prevalence of child malnutrition (weight for age)	Public health expenditure, % GDP
Indicator Number	31P1	31P2	31P3	31S1	31S2	31S3	31S4	31S5	31S6
Serbia/Serbia and Montenegro Data*	b	b	b	b	b	b	b	b	а
Latest Year (T)	2003	2003	2000	2002	2002	2000	2003	2000	2004
Value Year T	0.2	72.8	13.0	87.0	93.0	98.9	88.0	1.9	5.0
Value Year T-1		72.7					93.5		5.3
Value Year T-2	0.2						91.5		5.2
Value Year T-3	-						92.0		4.6
Value Year T-4	0.1					92.6	88.0	1.6	
Average Value, 5 year							90.6		5.0
Growth Trend									2.7
Benchmark Data									
Regression Benchmark		70.4	64.5						
Lower Bound		66.7	-79.8						
Upper Bound		74.0	208.8						
Latest Year Bulgaria	2003	2003	2000	2002	2002		2003		2002
Bulgaria Value Latest Year	0.1	72.1	32.0	100.0	100.0		96.0		4.5
Latest Year Romania	2003	2003	2000	2002	2002	1999	2003	2002	2002
Romania Value Latest Year	0.1	70.1	49.0	51.0	57.0	97.9	97.0	3.2	4.2
Lower Middle Income Central & Eastern Europe	0.1	72.8	41.0	89.0	97.0	96.0	95.5	3.2	4.4
Lower Middle Income Avg.	0.1	69.5	110.0	74.0	85.5	69.0	92.5	7.0	3.3
High Five Avg.	30.2	80.5	1,720.0	100.0	100.0		99.0	36.3	8.7
Low Five Avg.	0.1	37.3	8.0	8.0	26.4	20.8	39.0	7.3	0.6

				Education			
	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
Indicator Number	32P1a	32P1b	32P1c	32P2a	32P2b	32P2c	32P3
Serbia/Serbia and Montenegro Data*	b	b	b				а
Latest Year (T)	2000	2000	2000				2002
Value Year T	95.8	95.9	95.7				99.3
Value Year T-1	96.4	96.1	96.8		•		-
Value Year T-2	79.8	79.2	80.3		•		-
Value Year T-3							
Value Year T-4							
Average Value, 5 year	90.7						
Growth Trend							
Benchmark Data							
Regression Benchmark	89.3			84.4			95.2
Lower Bound	82.4			75.9	•		87.7
Upper Bound	96.2			92.9			102.6
Latest Year Bulgaria	2002	2002	2002				2002
Bulgaria Value Latest Year	90.6	90.4	90.9				99.69
Latest Year Romania	2002	2002	2002				2002
Romania Value Latest Year	88.9	88.5	89.4				97.76
Lower Middle Income Central & Eastern Europe	90.4	89.9	90.8				98.72
Lower Middle Income Avg.	92.0	91.5	92.3	81.2	80.4	79.5	96.81
High Five Avg.	100.0	100.0	100.0	99.2	99.8	99.3	99.82
Low Five Avg.	42.3	36.9	47.6	52.3	51.5	51.8	46.44

		Ed	ucation (con	t'd)		Employ	ment and Wo	orkforce
	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)
Indicator Number	32S1	32S2a	32S2b	32S2c	32S3	33P1a	33P1b	33P1c
Serbia/Serbia and Montenegro Data*					а	b	b	b
Latest Year (T)		-			2002	2003	2003	2003
Value Year T					15.3	55.5	62.5	48.4
Value Year T-1					15.8	55.8	63.0	48.5
Value Year T-2					16.2	72.7	82.2	63.0
Value Year T-3						72.5	82.2	62.7
Value Year T-4						72.2	81.9	62.2
Average Value, 5 year					15.8		74.4	57.0
Growth Trend					-2.8	-7.6	-7.8	-7.3
Benchmark Data								
Regression Benchmark								
Lower Bound								
Upper Bound								
Latest Year Bulgaria		2001	2001	2001	2001	2003	2003	2003
Bulgaria Value Latest Year		16.86	19.1	20	16.8	73.6	77.5	69.8
Latest Year Romania				2001	2001	2003	2003	2003
Romania Value Latest Year				30	17.4	67.9	75.4	60.6
Lower Middle Income Central & Eastern Europe		14.25	16.5	30	17.4	70.8	80.4	59.8
Lower Middle Income Avg.	2.37	11.52	14.8	36	21.6	69.7	85.0	53.8
High Five Avg.	5.54	31.33	46.9	344	65.5	102.4	112.6	97.0
Low Five Avg.	0.17	6.24	6.0	10	11.7	50.4	70.9	21.5

	Em	ployment and W	orkforce (cor	nt'd)		Agriculture						
	Rigidity of employment index	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	Crop production index (1999- 01=100)	Livestock production index (1999-01=100)		
Indicator Number	33P2	33P3a	33P3b	33P4	34P1	34P2	34P3	34S1	34S2	34S3		
Serbia/Serbia and Montenegro Data*	b	а	а	а		b		b	b	b		
Latest Year (T)	2005	2004	2004	2004		2004		2004	2004	2004		
Value Year T	28.0	2,984,200	-0.2	31.7		3,783		3.5	126.6	94.5		
Value Year T-1	23.0	2,988,695	2.7	31.7		2,755			94.7	93.4		
Value Year T-2		2,909,321	1.4	29.0		3,976			108.8	96.9		
Value Year T-3		2,870,268	1.8	26.8		4,269			111.1	93.9		
Value Year T-4		2,819,018	-2.4	25.6		2,640			83.7	102.3		
Average Value, 5 year		2,914,300	0.7	29.0		3,485			105.0	96.2		
Growth Trend		1.6		6.1		2.9			6.9	-1.6		
Benchmark Data												
Regression Benchmark					2,487							
Lower Bound					1,617.4							
Upper Bound					3,355.6							
Latest Year Bulgaria	2004	2003	2003	2002	2003	2004	2003	2004	2004	2004		
Bulgaria Value Latest Year	28.0	4,061,858	-0.4	17.6	6,826	3,544	-1.3	2.7	106.0	95.9		
Latest Year Romania	2004	2003	2003	2002	2003	2004	2003	2004	2004	2004		
Romania Value Latest Year	63.0	10,481,040	0.0	8.4	3,621	3,899	3.0	3.0	132.6	119.1		
Lower Middle Income Central & Eastern Europe	43.5	3,003,914	1.0	15.8	3,096	3,143	2.1	2.9	103.4	105.0		
Lower Middle Income Avg.	40.0	4,374,291	2.3	9.1	1,766	2,434	2.5	3.5	105.3	105.1		
High Five Avg.	84.6	320,847,150	5.7	24.3	40,135	7,775	22.0	5.3	134.9	145.5		
Low Five Avg.	1.2	127,087	-0.3	1.7	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

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.GDI.FTOT.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/reports/global/2004/pdf/hdr04_HDI.pdf for 2004 edition; updates may be found at http://hdr.undp.org/reports/view_reports.cfm?type=1

Definition: The index measures deprivation in terms of not meeting target levels for specified economic and quality of life indicators. Values are based on (1) percentage of people not expected to survive to age 40, (2) percentage of adults who are illiterate, and (3) percentage of people who fail to attain a 'decent living standard,' which is subdivided into three (equally weighted) separate items: (a) percentage of people without access to safe water, (b) percentage of people without access to health services, and (c) percentage of underweight children. The HPI ranges in value from 0 (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, 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 <u>http://www.yale.edu/esi/ESI2005.pdf</u>. For updates: <u>http://www.yale.edu/esi/</u>.

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: <u>http://hdr.undp.org/statistics/data/</u>

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: <u>http://hdr.undp.org/statistics/data/</u>.

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: <u>http://hdr.undp.org/statistics/data/</u>.

*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.

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.

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 noncomparable 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.

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 # 2151

Composition of government revenue

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

CAS Code # 21S2

Composition of money supply growth

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

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;

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.¹

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.² Original source of WDI data is the

GB.XPD.TOTL.GD.ZS.² 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.

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. 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. Benchmarking data are from World Development Indicators 2005, series FM.LBL.MQMY.ZG. Original source of WDI data is

¹ 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.

² 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://www.transparency.org/cpi/2004/cpi2004.en.html.

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

Doing business composite index

Source: Constructed using World Bank, Doing Business Indictors <u>http://rru.worldbank.org/DoingBusiness/</u> by scaling all the "Doing Business" indicators from 0 (lowest in the world) to 100 (highest) and then taking an average of all the scaled indicators, weighting each of seven Doing Business categories equally.

Definition: Index measures the quality of a country's business environment, composed of performance measures and indicators related to Starting a Business, Hiring and Firing Workers, Registering Property, Getting Credit, Protecting Investors, 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/ind ex.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/ind ex.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/Enfor cingContracts/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/Regis teringProperty/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/Enfor cingContracts/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/Regis teringProperty/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/Getti ngCredit/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/Getti ngCredit/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. 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. 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. 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. 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. 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. 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. 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. 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 <u>http://www.unctad.org/Templates/WebFlyer.asp?intItemID=</u>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 unweighted average of the scores of 12 normalized economic and social variables.

Coverage: Data are available for about 77 USAID countries. *CAS Code # 24S2*

Net barter terms of trade

Source: World Development Indicators 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*

AS COUE # 24F 0

Real effective exchange rate (REER)

Source: IMF Article IV Reviews:

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.

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. 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. 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 <u>http://www.heritage.org/research/features/index/downloads.c</u> <u>fm</u>.

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 # 2456

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

Definitions: 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*

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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 2004-2005, 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/Unaids/EN/Resources/epidemiology.a <u>sp.</u> 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 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 (whopping 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 # 3155*

Public health expenditure, percent of GDP

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

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 ages 15-64 (SP.POP.1564.IN.ZS) times the percentage of the population ages 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/Hirin gFiringWorkers/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. 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 2004-2005, 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