



USAID
FROM THE AMERICAN PEOPLE

CAS Overview 2007

Review of Economic Performance Assessments

September 2009

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

CAS Overview 2007

Review of Economic Performance Assessments

DISCLAIMER

The 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), under Contract No. PCE-I-00-00-00013-00, Task Order 004, the Country Analytical Support (CAS) Project, 2004–2006, Nathan Associates Inc. developed a standard methodology for producing analytical reports to provide a clear and concise evaluation of economic growth performance in designated countries receiving USAID assistance. Under Contract No. GEG-I-00-04-00002-00, Task Order 004, 2006-2010, Nathan Associates continues to provide support to the EGAT Bureau by producing analytical reports evaluating economic growth performance in designated host countries. Through the same task order, Nathan is also developing a template for countries emerging from crisis, assessing data issues in countries with large gaps in their data, conducting in-depth sector reviews based on the diagnostic analysis in the country reports, and providing other analytical support to the EGAT Bureau.

The CAS Economic Performance Assessments (EPAs) are tailored to meet the needs of USAID missions and regional bureaus for country-specific analysis. This overview report presents an assessment of findings from the reports. It contains:

- A synthesis of key indicators drawn from 22 country reports prepared over the past two years (to July 2007).
- A concise narrative comparing performances and highlighting particularly strong or weak areas of performance.
- An assessment of the benchmarking methodology used to compare country performance.
- A summary of main findings and conclusions.

The authors of the report are Dirck Stryker and Mariana Stoyancheva of Associates for International Resources and Development, and Bruce Bolnick, Rose Mary Garcia, and Maureen Hinman of Nathan Associates.

The COTR for this project at USAID/EGAT/EG is Yoon Lee, and the Activity Manager is Stuart Callison. USAID missions and bureaus may seek assistance and funding for country analytical studies or in-depth follow-on studies by contacting Mr. Callison at ccallison@usaid.gov.

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

Rose Mary Garia
Nathan Associates Inc.
rgarcia@nathaninc.com

Contents

1. Introduction	1
2. Scorecard Tabulation of Strengths and Weaknesses	3
3. Comparative Assessment	7
Overview of the Economy	7
Private Sector Enabling Environment	15
Pro-Poor Growth Environment	24
4. Structural Factors and the Regression Benchmark	29
Methodology	30
Regression Examples	31
Policy Instruments	35
5. Conclusions and Recommendations	37
Appendix A. CAS Methodology	
Appendix B. Selected Indicators from 22 CAS Studies	
Appendix C. Regression Analysis of Real GDP Growth	

Illustrations

Figures

Figure 2-1. Balance of Strengths and Weaknesses for 22 Country Studies	5
Figure 2-2. Balance of Strengths and Weaknesses, by Area of Performance	6
Figure 3-1. Per Capita GDP, PPP \$	8
Figure 3-2. Real Annual GDP Growth (%)	8
Figure 3-3. Share of Gross Fixed Investment in GDP, current prices (%)	10
Figure 3-4. Population (%) below Minimum Dietary Energy Consumption (%)	11
Figure 3-5. Income Share Accruing to the Poorest 20% (%)	12
Figure 3-6. Output Structure (%GDP)	13

Figure 3-7. Urbanization Rates (%)	14
Figure 3-8. Ratio of Male to Female Gross Enrollment Rates	15
Figure 3-9. Inflation Rate (%)	16
Figure 3-10. Rule of Law Index	17
Figure 3-11. Money Supply, % GDP	18
Figure 3-12. Interest Rate Spread (%)	19
Figure 3-13. Trade, % GDP	20
Figure 3-14. Export Growth Goods and Service (%)	21
Figure 3-15. Remittance Receipts, % Exports (%)	22
Figure 3-16. Telephone Density, Fixed and Mobile Lines per 1,000 Inhabitants	23
Figure 3-17. FDI Technology Transfer Index	24
Figure 3-18. Child Immunization Rate (%)	25
Figure 3-19. Youth Literacy Rate, Male and Female (%)	26
Figure 3-20. Female Labor Force Participation Rate (%)	27
Figure 3-21. Agriculture Value Added per Worker (US dollars)	28
Figure 4-1. Actual Minus Expected Real GDP Growth (%)	33
Figure 4-2. Actual Minus Expected Population Below Minimum Dietary Energy Consumption (%)	33
Figure 4-3. Actual Minus Expected Inflation Rate (%)	34
Figure 4-4. Actual Minus Expected Money Supply, % GDP	35

Tables

Table 1-1. Topic Coverage	1
Table 2-1. Strengths and Weaknesses	4

1. Introduction

This report provides an analytical summary of key findings from 22 economic performance assessments produced by Nathan Associates for the EGAT Bureau over the two years ending June 2007, under the Country Analytical Support (CAS) project.¹ Each of those assessments was based on an examination of more than 100 indicators of economic growth performance and used international benchmarking to identify constraints, trends, and opportunities for strengthening growth and reducing poverty. Like the economic performance assessments, this report is based on an examination of indicators covering the topics shown in Table 1-1. For details on methodology, please see Appendix A.

Table 1-1
Topic Coverage

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

The purpose of this report is to highlight systemic problems facing partner countries in their efforts to achieve rapid and broad growth, and to inform USAID of challenges that need to be addressed in economic growth programming. Findings must be interpreted with care as our sampling of countries is (1) small and idiosyncratic, reflecting requests by USAID missions for assessments; and (2) heterogeneous (i.e., higher-income countries are widely distributed while five of the six poorest countries—Tanzania, Burundi, Zambia, Mali, and Nigeria—are in sub-Saharan Africa).

¹ Analysis reflects data availability at the time the study was drafted. The broad findings are unlikely to have changed significantly. The 22 countries are Afghanistan, Armenia, Burundi, Djibouti, Dominican Republic, El Salvador, Guatemala, Honduras, Jordan, Kazakhstan, Kyrgyz Republic, Mali, Montenegro, Nicaragua, Nigeria, Pakistan, Philippines, Serbia, Sri Lanka, Tanzania, and Zambia

In Chapter 2, we assess patterns across countries and topics by tabulating indicators identified as strengths or weaknesses² in the 22 studies. In Chapter 3, we examine data from the studies for 45 indicators to discern any patterns and regional trends. Indicators were chosen on the basis of authors' criteria for the importance of an indicator in explaining performance and the availability of data. For indicators that vary substantially from year to year, we use five-year unweighted means when possible; for all other indicators we use the latest available data. Results are presented in bar charts sorted by scores, and discussed in comparison with global mean values for all low-income (LI) and lower-middle-income (LMI) countries. Particular attention is also paid to the best and worst performers, with commentary on factors that might be influencing disparate outcomes. The analysis also seeks to identify regional patterns.

In Chapter 4, we explore whether regression benchmarks can predict performance outcomes better than simple comparisons of value by examining deviation of the indicator value from its expected value based on the benchmarking regression.

In Chapter 5 we present recommendations for research and suggest how an augmented regression benchmark methodology can be used to capture additional structural components affecting growth and to identify indicators strongly influenced by policies.

² For each Economic Assessment Report, over 100 indicators are examined compared to benchmarks. Those indicators that perform particularly well or poor relative to the benchmarks are noted as “strengths” or “weaknesses.” Details are found in the specific country reports.

2. Scorecard Tabulation of Strengths and Weaknesses

Each economic performance assessment begins with a table of diagnostic highlights and a scorecard tabulation of indicators that appear to be a notable strength or weaknesses for the particular country. Individual highlights tables are presented in a supplement to this report, while Table 2-1 presents an overview of the scorecard results. To obtain this overview, we tabulated the frequency of strengths and weaknesses for each country and topic area,³ assigning a value of +1 to any indicator identified as a strength and -1 to any indicator identified as a weakness and summing the values by row and column to yield scores by country and topic area.⁴

Figure 2-1 shows the scores for each country of our 22 countries. Strengths outweighed weaknesses in just five countries: Jordan (+8), Kazakhstan (+5), Montenegro (+3), Tanzania (+1), and the Philippines (+1). The five weakest performers are Tajikistan and Djibouti (-18), Guatemala and Afghanistan (-15), and Nicaragua (-13). Even the best performers have weaknesses in comparison to benchmarks. For example, Jordan performs poorly on employment, agriculture, and external sector indicators. Likewise, poor performers have some strengths (e.g., fiscal policy and education in Tajikistan).

Figure 2-2 shows the balance between strengths and weaknesses by area of performance. The scores here are column rather than row totals from Table 1-1. These tabulations reveal three areas of prominent weakness:

- Business environment (-24)
- Health (-23)
- Employment and labor force (-20).

Other areas with significant problems include poverty and inequality (-15), economic infrastructure (-14), agriculture (-11), and the financial sector (-10).

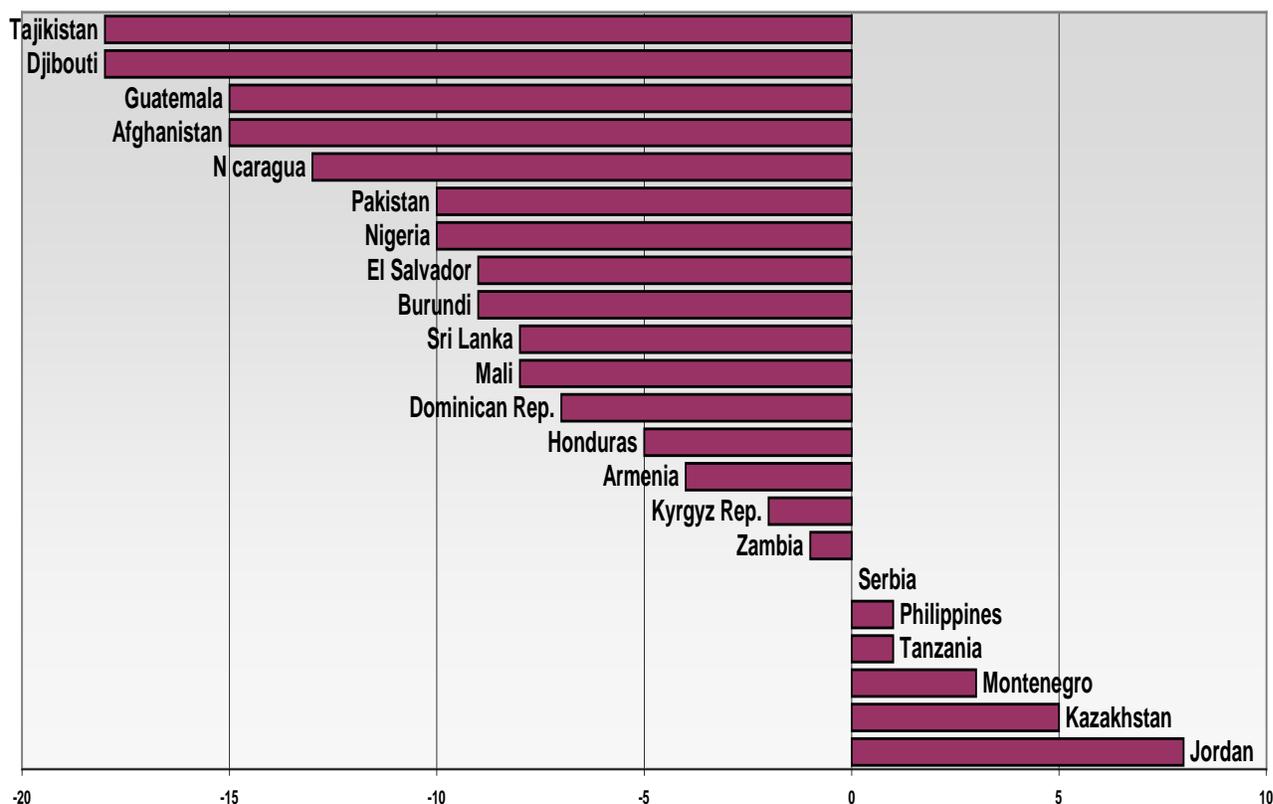
³ Each report benchmarks a country's performance relative to, among other things, two countries chosen by the USAID Mission as aspiring economies. Thus the identification of benchmarking weaknesses/strengths depends to some degree on which two economies were chosen, and the judgment call of the authors as to the indicators performance.

⁴ Each topic contains different number of indicators. This un-weighted tabulation may be biased by the number of indicators under a single topic.

Table 2-1
Strengths and Weaknesses

	Growth	Poverty & Inequality	Economic Structure	Demography & Environment	Gender	Fiscal & Monetary	Business Environment	Financial Sector	External Sector	Economic Infrastructure	Science & Technology	Health	Education	Employment & Workforce	Agriculture	Country Total
Jordan	-1	1	0	1	0	0	2	3	-1	3	0	1	2	-1	-2	8
Kazakhstan	2	1	0	1	2	1	-3	3	1	-2	0	-2	2	1	-2	5
Montenegro	-2	1	0	1	3	1	-2	-2	-1	1	1	2	2	-3	1	3
Philippines	1	0	0	-1	1	1	-4	1	3	-2	0	0	2	-1	0	1
Serbia	-2	1	0	0	3	-1	-2	-1	-2	1	1	0	1	0	1	0
Armenia	0	-2	0	1	0	-2	3	-5	1	-1	-1	0	1	-1	2	-4
Honduras	0	-2	0	-2	0	0	-2	2	0	1	0	0	1	-1	-2	-5
Dominican Rep.	2	-1	0	-1	2	-1	-5	-2	3	1	0	-3	-3	-1	2	-7
Sri Lanka	1	0	0	1	1	-5	-2	-2	-2	-2	0	1	3	-1	-1	-8
El Salvador	-2	-2	0	-1	1	-1	4	2	-4	1	0	-2	-4	1	-2	-9
Nicaragua	2	-1	-1	0	1	1	-1	-1	-1	-1	0	-1	-5	-3	-2	-13
Guatemala	-1	-2	1	-3	-2	1	-2	0	1	-2	-1	-3	0	-2	0	-15
Djibouti	-1	-2	0	-2	-2	-1	-2	0	4	-3	0	-5	-1	-1	-2	-18
Sector Total	-1	-8	0	-5	10	-6	-16	-2	2	-5	0	-12	1	-13	-7	

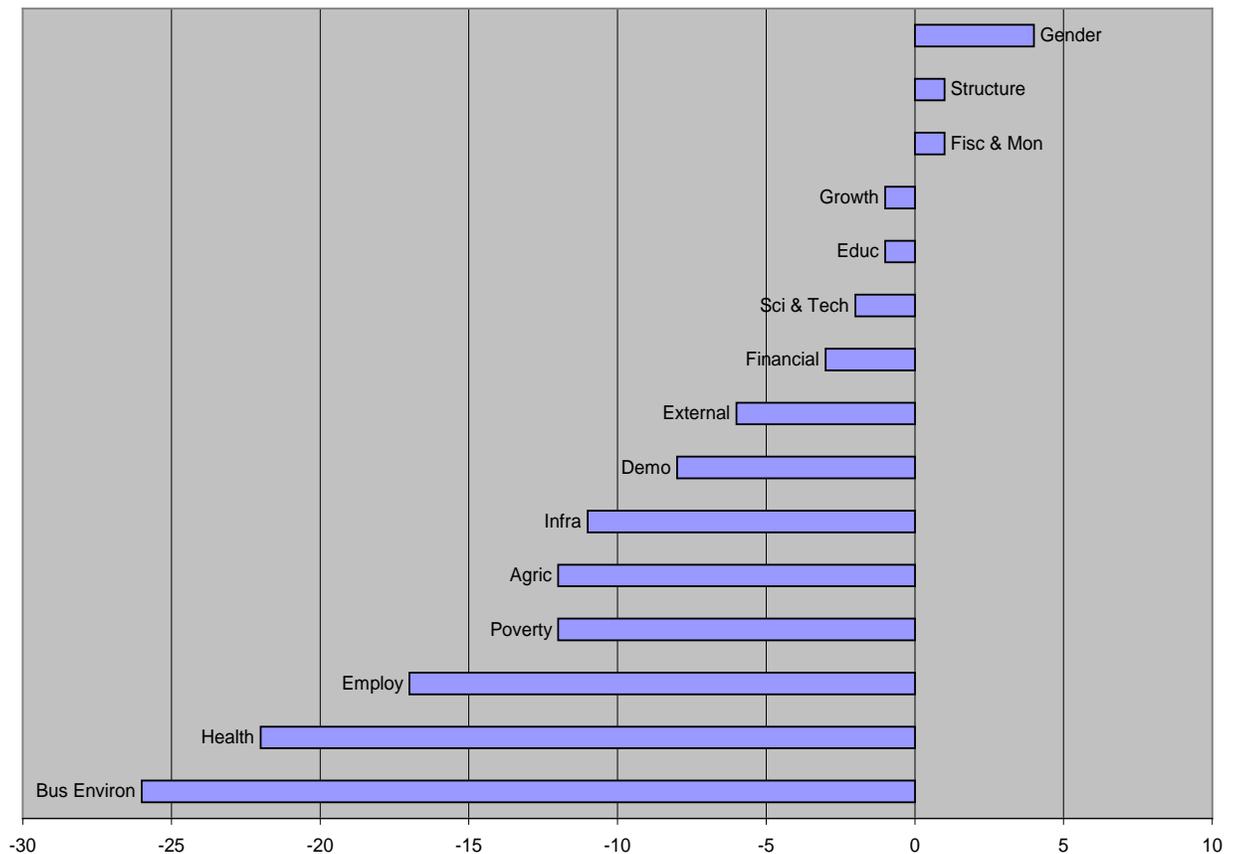
Figure 2-1
Balance of Strengths and Weaknesses for 22 Country Studies



With a net score of -2 or less as the screening criterion, the economic performance assessments flagged more than half the countries as having serious problems with their business environments. At least a third of the countries were flagged as having serious problems in economic infrastructure (40.9 percent), health (36.4 percent), and poverty and inequality (also 36.4 percent). The 9 low-income countries perform poorly relative to benchmark standards in health, infrastructure, the financial sector, and the business environment. The 13 lower-middle-income countries have problems in the business environment, employment and labor force, and health.

Though these results suggest programmatic priorities for USAID, they could also be revealing the ease with which certain weaknesses can be remedied or the bias created by the availability of indicators that can be used for benchmarking. For example, difficulty in attaining fiscal and monetary balance may be highlighting the difficulty in improving employment or agricultural performance, both of which are woven deeply into the social and economic fabric of a country. Similarly, the apparent relative seriousness of business environment problems may be reflecting the abundance of measurable indicators originating from the *Doing Business* indicators database, while this may not be captured for the financial sector.

Figure 2-2
Balance of Strengths and Weaknesses, by Area of Performance



USAID missions must assess both the *importance* of various programmatic interventions and the *ability* of interventions to improve performance. An intervention to control inflation may be easy to implement and have a big affect on growth. Where inflation is a threat, programs to improve fiscal and monetary policy should be a priority. For example, 7 of our sample of 22 countries have rates of inflation higher than 10 percent and this should be a concern. It is harder to justify programs that are easy to implement but unlikely to have a big impact in a particular country. A more difficult decision involves programs that may be hard to implement but could have a very big impact.

As noted in Chapter 1, one must view any specific observations in this report with caution because of the small size and heterogeneity of our sample, inherent data limitations, the selective set of indicators, and concerns about benchmarking methodology.

3. Comparative Assessment

In this section we examine a subset of key indicators from CAS reports.⁵ For each, we highlight commonalities, differences, and particular strengths or weaknesses in various countries and seek to discern regional patterns. Our analysis is based on indicator values using the data available at the time each CAS report was produced.

OVERVIEW OF THE ECONOMY

Per Capita GDP, PPP\$

Among the 22 countries reviewed here, the median per capita GDP (measured in purchasing power parity dollars) is \$2,511. The global median for low-income (LI) countries is \$1,672 and for lower-middle-income (LMI) countries, \$5,376 (see Figure 3-1). The Dominican Republic and Kazakhstan are the wealthiest of countries reviewed here, with a per capita GDP of \$6,784 and \$6,054, respectively. Despite its 2003 financial crisis, the Dominican Republic ranks near the top of the World Bank's LMI group. Since the original CAS study on Kazakhstan, the country has moved into the upper-middle-income category, with GDP per capita higher than the average of the former Soviet states. Although the higher-income countries in our sample are widely distributed geographically, the LI countries are concentrated in sub-Saharan Africa. Five of the six poorest countries are Tanzania (\$595), Burundi (\$678), Zambia (\$810), Mali (\$925), and Nigeria (\$1024). Three Asian countries, Tajikistan (\$1015), the Kyrgyz Republic (\$1731), and Afghanistan (\$1121) rank at the bottom.

Growth Performance

Real GDP Growth

Five-year average real GDP growth rates range from a maximum of 16.6 percent (Afghanistan) to a minimum of 2.0 percent (Burundi and El Salvador) with a median rate of 4.6 percent.⁶ This compares with the LI median of 5.8 percent and the LMI median of 4.9 percent (see Figure 3-2). The most pronounced regional pattern for real GDP growth is the fact that five of the eight countries with the slowest growth are in Central America and the Caribbean.

⁵ We limit the number of indicators in order to convey the main picture without encumbering our discussion with excessive detail. Appendix B presents the data set for other variables.

⁶ Data are what were available at the time the CAS studies under review were published.

Figure 3-1
Per Capita GDP, PPP \$

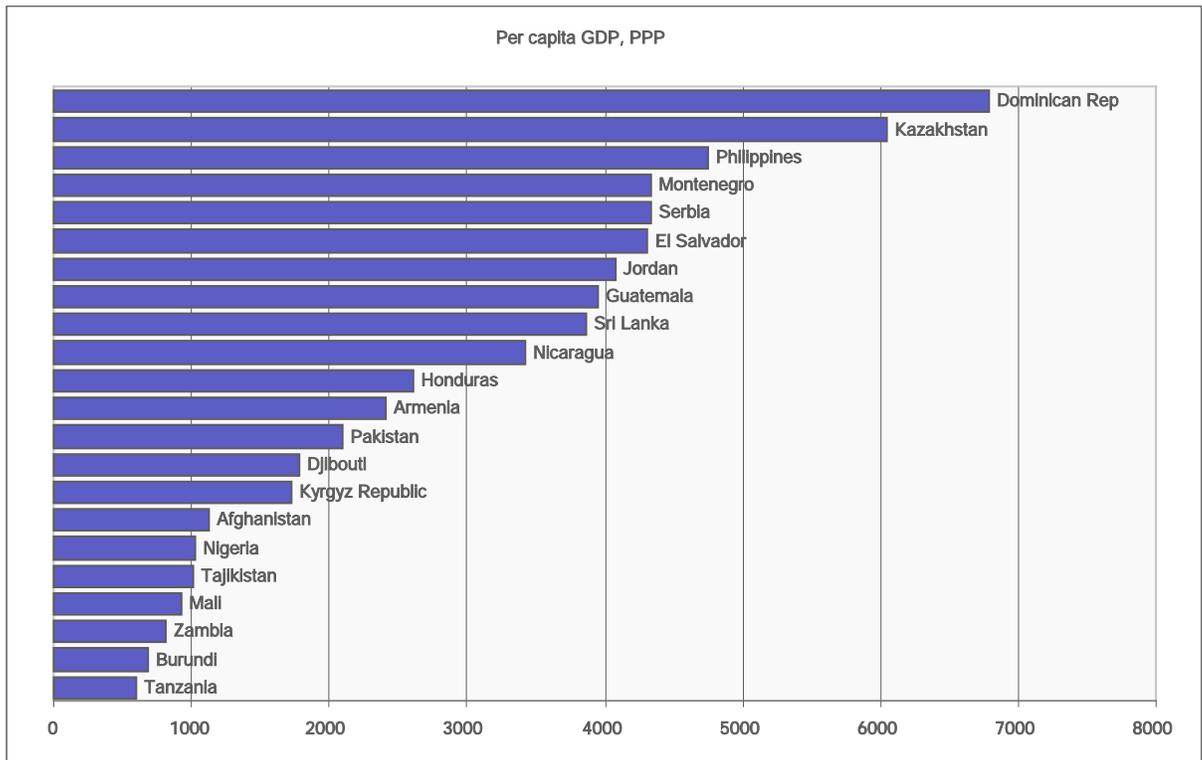
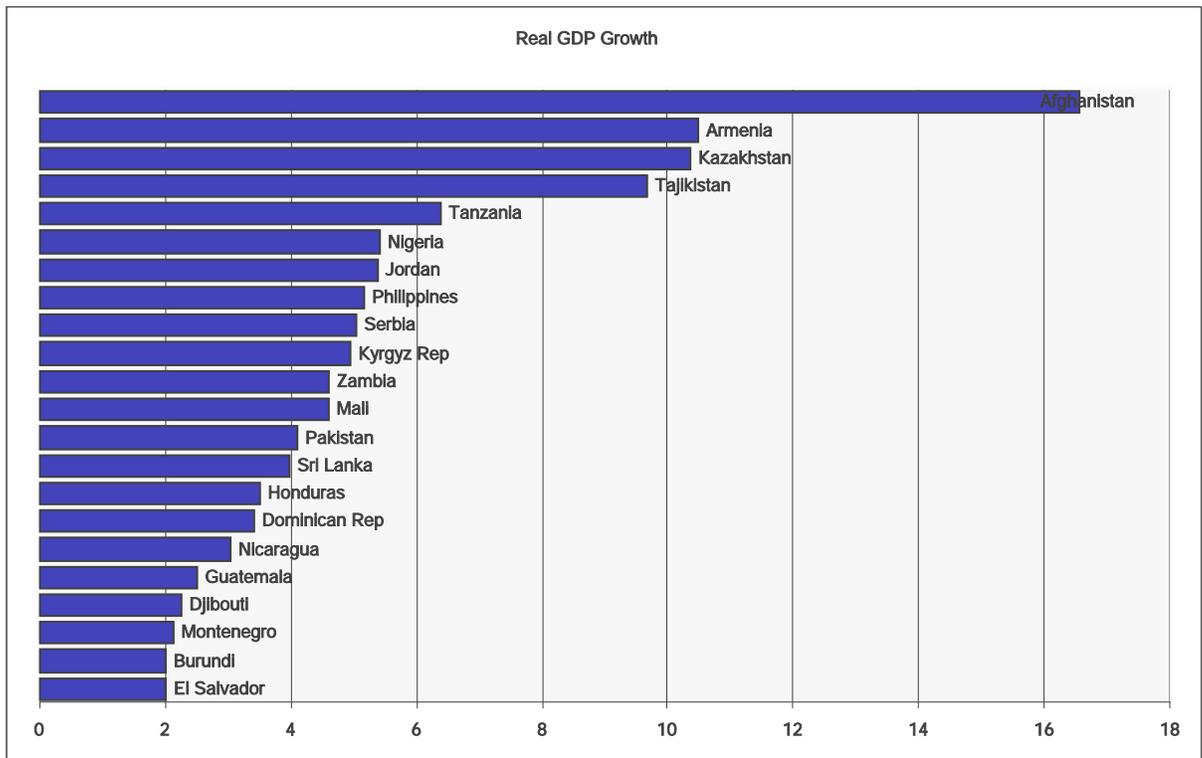


Figure 3-2
Real Annual GDP Growth (%)



Afghanistan had the highest rate of growth (16.6 percent), signaling the country's rebound from wartime economic collapse, driven by the construction and services sectors. High investment rates and rising productivity have also contributed to strong growth. The share of gross fixed investment in Afghanistan for 2002-2006 averaged 40.1 percent, the highest in the sample.

The impressive growth rates of three former Soviet Union Republics signal their economic recovery since independence from the Soviet Union in 1991. Armenia's growth rate of 10.5 percent is also related to a decade of market reforms, prudent fiscal and monetary policies, and inflows of labor remittances. Kazakhstan's growth rate of 10.4 percent is linked to the oil sector, and Tajikistan's growth rate of 9.7 percent from 2000 to 2004 is linked to macroeconomic and political stabilization, market reforms, and an inflow of remittances, loans, and grants.

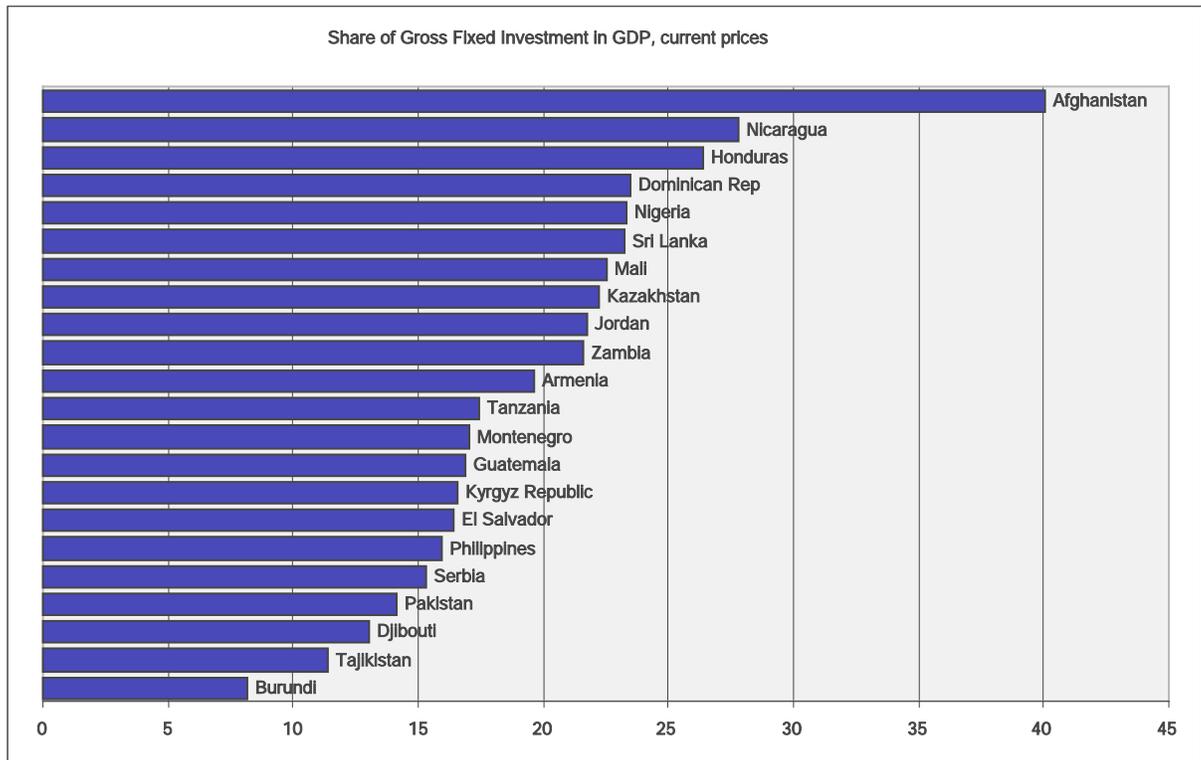
In Africa, Tanzania and Nigeria registered stable growth averaging 6.4 percent and 5.4 percent, respectively. Tanzania's strong performance is a result of responsible monetary and fiscal policy, concerted reforms, rapid export growth, and significant debt relief. The country's low level of investment clouds prospects for sustaining such growth and suggests that more reforms are required to improve the business climate and stimulate private sector development. From 1999 to 2003, gross-fixed investment in Tanzania averaged only 17.4 percent of GDP, and private investment averaged just 11.1 percent. Nigeria's growth rate of 5.4 percent reflects economic diversification prompted by a reform program consistent with IMF recommendations. According to the World Bank, however, Nigeria needs to grow at a rate of 7 percent to 8 percent a year in order to cut poverty in half by 2015 and compensate for the annual population growth rate of 2.5 percent. Weak labor productivity is also a concern.

Burundi, El Salvador, and Montenegro have the weakest growth rates. Burundi's growth rate of 2 percent is due to low investment and productivity worsened by decades of conflict. The country's reliance on coffee and tea exports, vulnerable to weather conditions and fluctuating world prices, is also a factor in erratic growth. El Salvador's poor growth is partly a reflection of low investment and weak productivity in the face of adverse external conditions, including unfavorable changes in oil and coffee prices, earthquakes, and election-related uncertainties. Montenegro's low growth rate can be explained by low rates of capital investment and a lack of technological change; the share of gross fixed investment in GDP actually declined from 17.6 percent in 2000 to 15.3 percent in 2003.

Share of Gross Fixed Investment in GDP, Current Prices

Afghanistan's strong economic growth of 16.6 percent is linked to investment rates averaging 40.1 percent of GDP for 2002-2006 (see Figure 3-3), much higher than the median investment rate of 20 percent for both LI and LMI countries and attributable to industrial sector growth and donor assistance for reconstruction. Meanwhile, the relatively high shares of gross fixed investment in three Central American countries—Nicaragua (27.8), Honduras (26.3), and the Dominican Republic (23.5)—in a context of relatively low growth suggests lagging investment efficiency and productivity growth.

Figure 3-3
Share of Gross Fixed Investment in GDP, current prices (%)



Burundi, Tajikistan, and Djibouti have had low rates of investment relative to GDP, at 8.1 percent, 11.4 percent, and 13.0 percent, respectively. In Burundi and Djibouti, these have contributed to low rates of growth. But Tajikistan achieved a high rate of growth despite the low rate of investment, mainly because growth has been concentrated in sectors that are not capital intensive, such as cotton, or have been able to make efficient use of existing capital, such as aluminum.

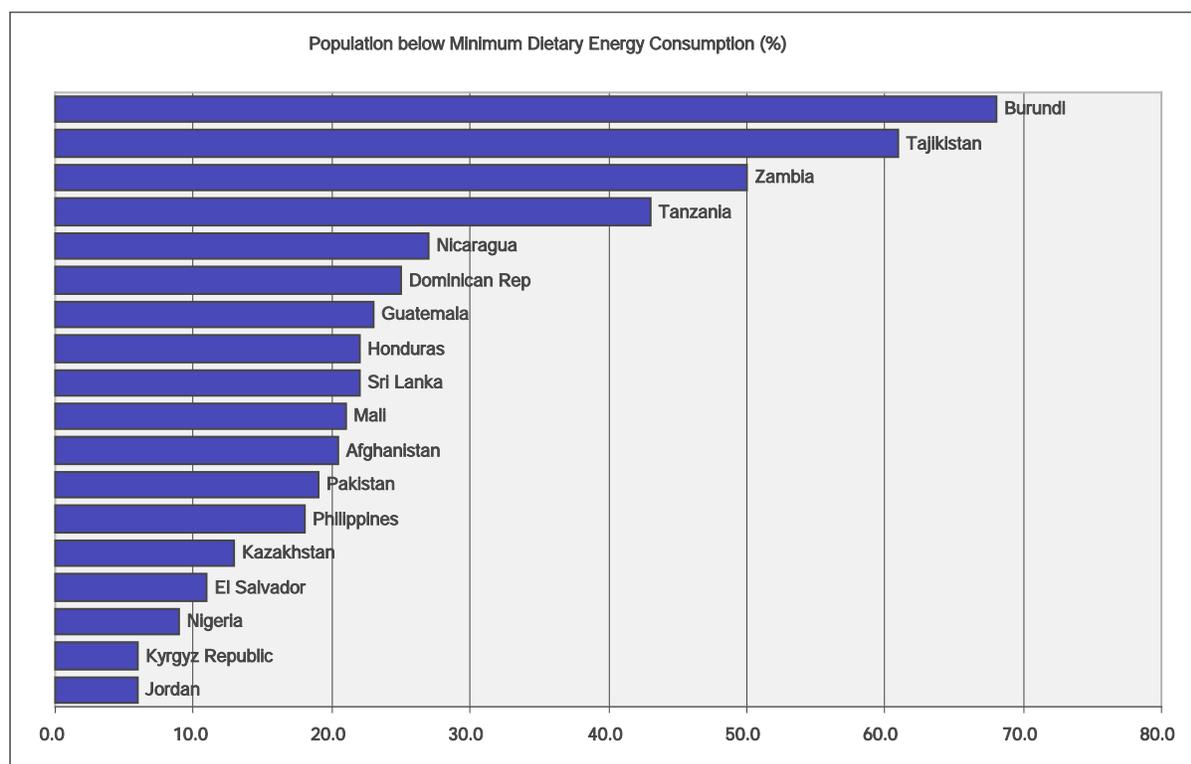
Poverty and Inequality

Population (%) Below Minimum Dietary Energy Consumption

As Figure 3-4 shows, performance on this indicator varies widely. The Kyrgyz Republic and Jordan perform best, with only 6 percent of their populations living with insufficient dietary energy consumption. In Africa, Nigeria has the lowest proportion (9.0 percent)⁷ while Burundi (68 percent), Zambia (50 percent), and Tanzania (43 percent) have the highest. In Tajikistan 68 percent of the population was living below the national poverty line in 2003, though this proportion has been declining rapidly. A high proportion of the population is also undernourished in Central America and the Caribbean, a situation linked to a high degree of income inequality.

⁷ Questions may be raised about the accuracy of the data, since other indicators show that Nigeria has a very high poverty rate.

Figure 3-4
Population (%) below Minimum Dietary Energy Consumption (%)



Income Share Accruing to Poorest 20 percent

Figure 3-5 shows data for 15 countries from our CAS sample.⁸ Within this group the median income share for the poorest quintile is 5.8 percent. The strong regional patterns found here show that regional differences are very important determinants of income inequality.

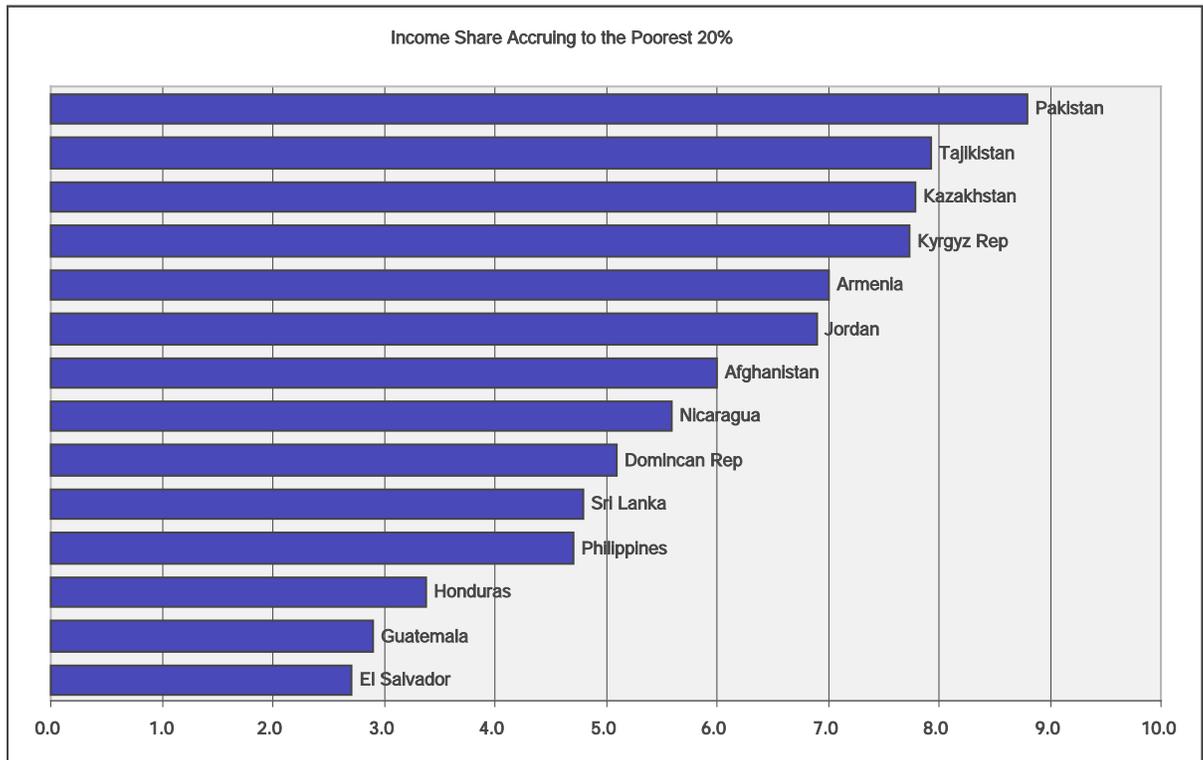
In Pakistan, the best performer, 8.8 percent of income accrues to the poorest 20 percent. The country also performs very well on the proportion of people living in absolute poverty (only 13 percent in 1999, compared to the LI Asia median of 35 percent).⁹ Three former Soviet Republics—Tajikistan, Kazakhstan, and the Kyrgyz Republic—are also at the top, with income shares to the poorest quintile of 7.9 percent, 7.8 percent, and 7.7 percent, respectively.

All the poor performers are from Central America. El Salvador, Guatemala, and Honduras appear to be most unequal, with income shares of 2.7 percent, 2.9 percent, and 3.4 percent accruing to the poorest 20 percent of their population.

⁸ Data are missing for Tanzania, Nigeria, Serbia, Zambia, Djibouti, Montenegro, Mali, and Burundi. There are also no comparative data for LI and LMI countries.

⁹ Figures are based on the most recent data provided through the World Bank's 1998-1999 household survey of Pakistan.

Figure 3-5
Income Share Accruing to the Poorest 20% (%)



Economic Structure

As Figure 3-6 shows, agriculture's share of GDP for our 22 countries ranged from 2 percent to 50 percent, with a median share of 19 percent. Globally, the median share of agriculture is 35 percent for LI countries and 15 percent for the LMI countries, confirming that economic development is associated with a decline in the relative dependence on agriculture.

The median GDP share for industry is 28 percent; the global median for LI countries is 21 percent and for LMI countries 31 percent. In most of our sample countries the services sector contributes the largest proportion of total value added, with a median of 52 percent, with a range from 25 percent to 82 percent. This compares with a median of 43 percent for LI countries and 53 percent for LMI countries.

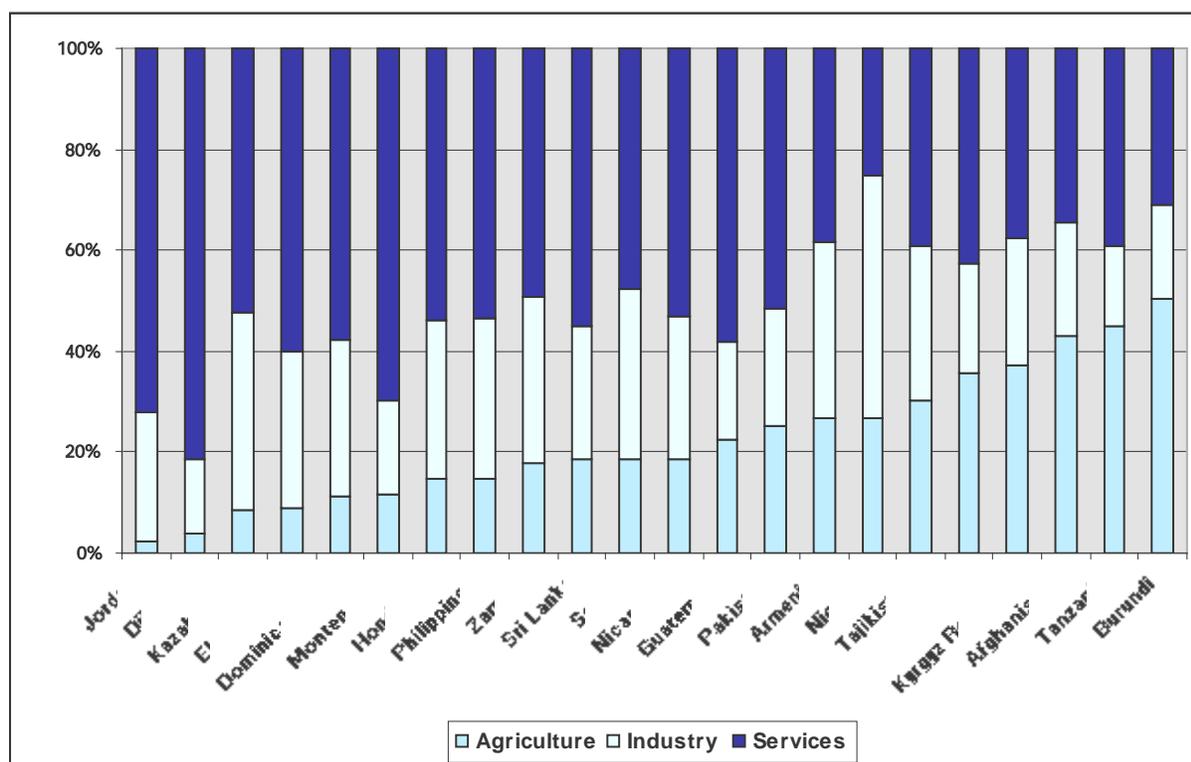
In Burundi, agriculture contributed 50 percent of GDP. Almost 94 percent of Burundi's labor force is engaged in agriculture and labor productivity is very low. This pattern is replicated in nearly every country studied. In Tajikistan, the agricultural sector contributes 28 percent of GDP while employing 66.2 percent of the labor force, again signaling very low labor productivity in agriculture. Likewise, in Nicaragua, Guatemala, and Honduras, the agricultural sector contributes 20 percent or less of GDP but employs 35 percent to 40 percent of the labor force. The exception is the Dominican Republic, where value added shares and labor force shares were remarkably similar, suggesting that the labor market has been quite efficient in allocating labor.

The large share of output in agriculture characterizes much of sub-Saharan Africa and Central Asia: over 27 percent of GDP, on average. Agriculture contributes little to GDP in Jordan (2.2 percent) and Djibouti (3.7 percent).

The share of industry is heavily influenced in some countries by the production of petroleum and mineral resources, which are merged with manufacturing, construction, and utilities in the industrial sector, broadly defined in Nigeria, Kazakhstan, and Zambia. The large share of industry in Armenia and Serbia is heavily influenced by construction, particularly housing. In Djibouti, Tanzania, and Burundi industry contributes less than 20 percent to GDP. The services sector contributes more than 30 percent of GDP for *all* countries in our sample except Nigeria (25 percent), where petroleum is dominant, and for 12 countries it contributes more than half of value added. Services in Djibouti comprises 82 percent of GDP, with the economy largely based on the port, the railway, the civil service, the French military garrison, and German and US military bases.

The extremely low labor productivity in agriculture in most countries is a serious developmental concern, since low productivity means low incomes for agricultural households. In programming economic growth resources, USAID must decide whether to raise agricultural productivity directly, to improve the enabling environment for productivity, or to develop other sectors to attract workers out of agriculture and into more productive work. These three options, of course, are not mutually exclusive.

Figure 3-6
Output Structure (%GDP)

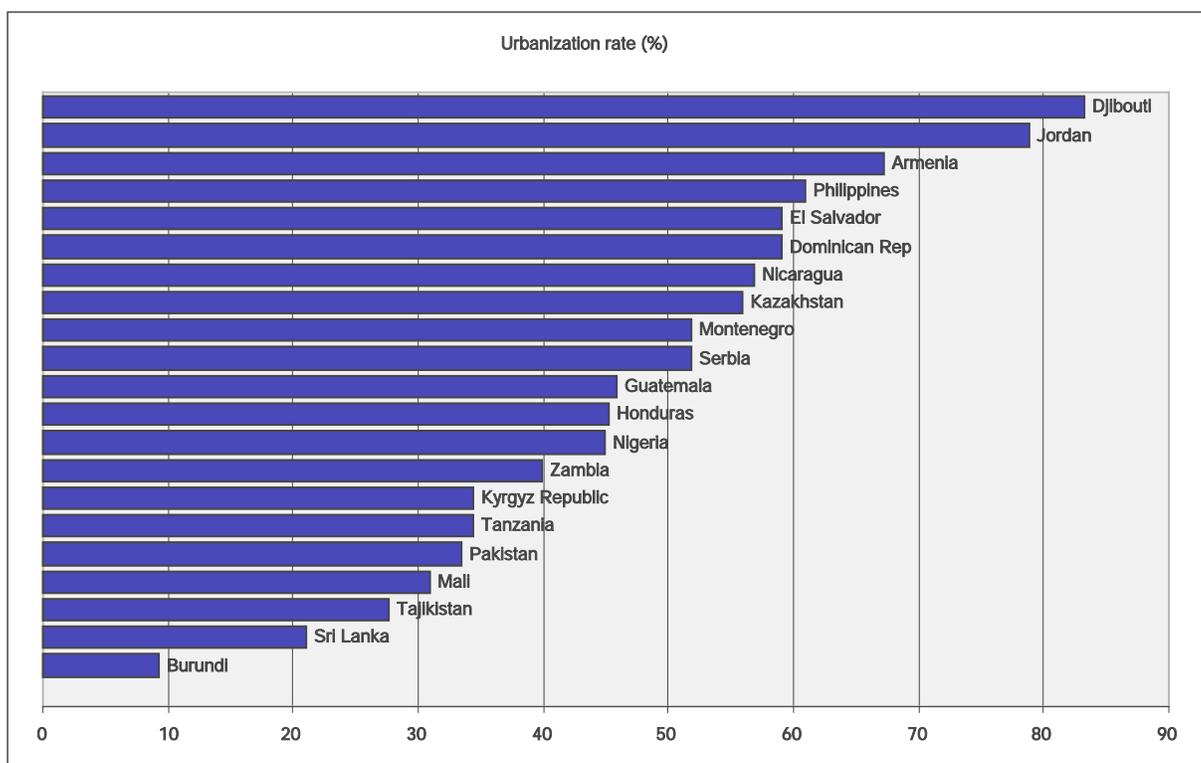


Demography and the Environment

Urbanization Rate

The proportion of a country's population living in cities and other urban areas is an important factor in donor programming for job creation, fiscal decentralization, municipal governance, the provision of local services, and infrastructure planning. Urbanization rates vary greatly in our sample countries, ranging from 9.3 percent to 83 percent with a median of 45 percent (Figure 3-7). The median for LI countries is 31 percent and for LMI countries 55 percent, in keeping with the familiar pattern of economic development accompanied by urbanization.

Figure 3-7
Urbanization Rates (%)



Djibouti and Jordan are the most urbanized, with 83 percent and 79 percent of their population, respectively, residing in urban areas. In Burundi only 9.3 percent live in urban areas. In general, Africa is more rural than Central America and Central Asia, though Nigeria (45 percent) and Zambia (40 percent) have higher urbanization rates than the rest of Africa.

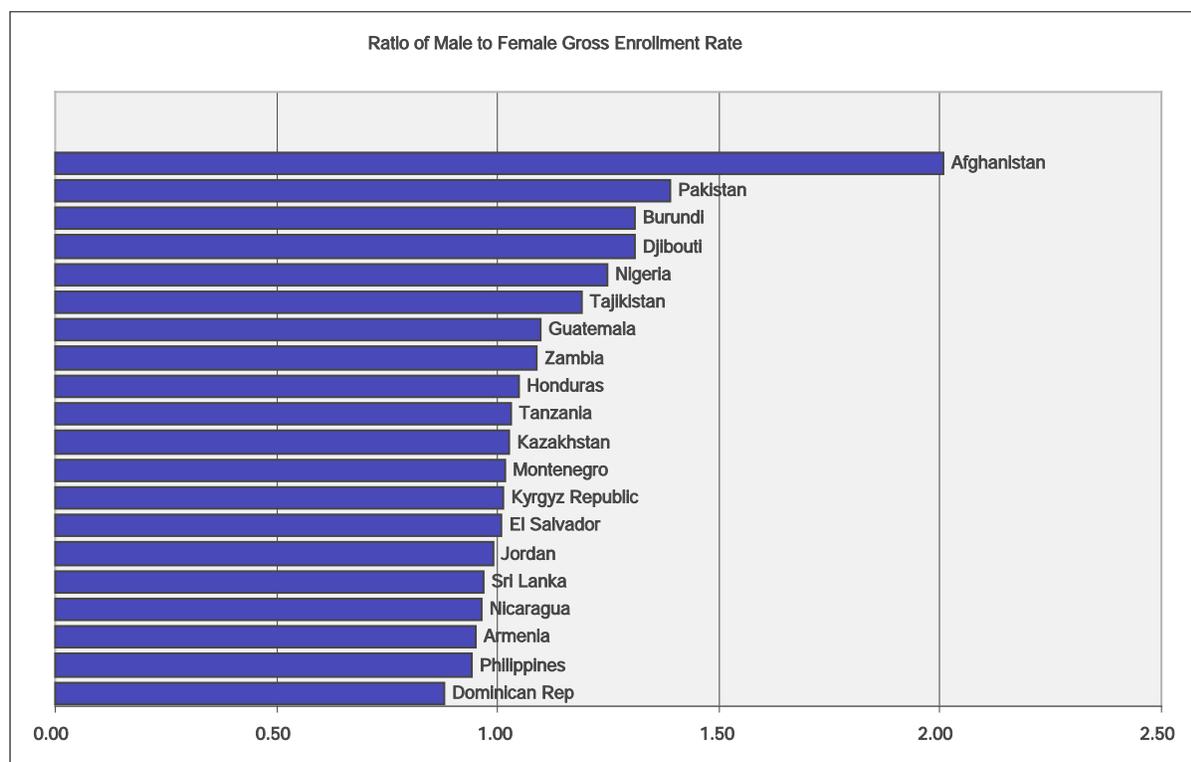
Gender

Gender equity is an essential component of pro-poor growth. Countries with high levels of gender equity tend to have higher rates for human development and lower rates for poverty and higher workforce productivity. Here we focus on one vital indicator as a proxy for a broad set of gender measures: the ratio of male to female gross enrollment rate, all levels. This indicator combines all levels of schooling. A value of 1.00 indicates full parity in access to education, whereas higher values indicate greater gender inequality. In our CAS sample, 20 countries have data for this

indicator. Within this group, the sample median is 1.03, with ratios ranging from 2.01 to 0.88. This compares with the LI country median of 1.13 and the LMI median of 0.96, showing that gender imbalances are generally more serious in LI countries.

Afghanistan's extremely high ratio of 2.01 for the male to female enrollment rate reflects the severe inequalities in that country, stemming from both cultural norms and poverty. High ratios in Pakistan (1.39), Burundi (1.31), Djibouti (1.31) and Tajikistan (1.19) also indicate gender disparities. Meanwhile, enrollment rates for women exceed rates for men in 6 out of the 20 countries in our sample: Jordan (0.99), Sri Lanka (0.97), Nicaragua (0.97), Armenia (0.95), the Philippines (0.94), and the Dominican Republic (0.88). Allowing for measurement errors, ratios close to 1.0 may indicate virtually full gender equity in access to education, but several ratios are far enough below 1.0 to suggest that dropout rates are higher for men than for women. More men may be choosing to join the workforce rather than finish school because of necessity or because the job market favors young males.

Figure 3-8
Ratio of Male to Female Gross Enrollment Rates



PRIVATE SECTOR ENABLING ENVIRONMENT

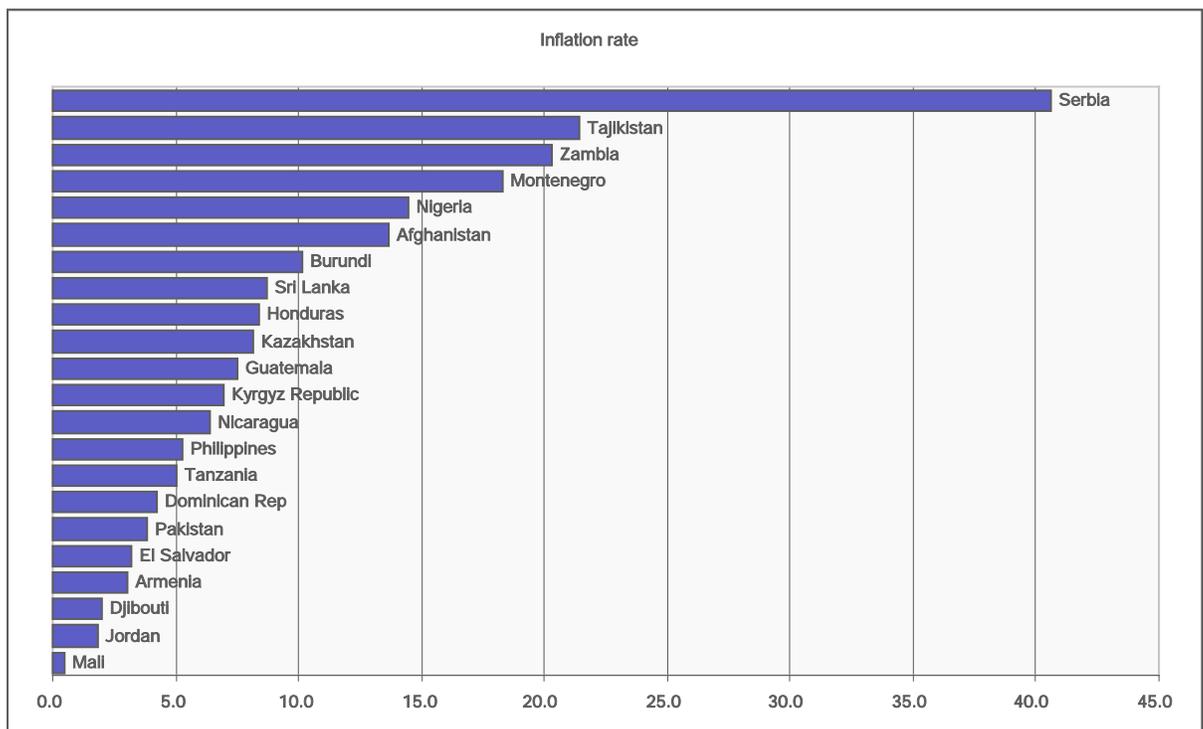
Fiscal and Monetary Policy

The rate of inflation is a fundamental indicator of fiscal and monetary performance because governments have full control of budget parameters and central banks can control the supply of money and credit in order to curb increases in the general level of prices. The rate of inflation in

the CAS sample of countries varies widely, from 40.6 percent to 0.5 percent with a median of 7.3 percent. The median for LI countries is 7.8 percent and for LMI countries, 5.2 percent.

As shown in Figure 3-9, 11 out of the 22 countries covered by the CAS studies had inflation rates averaging in the double digits. Serbia had an alarmingly high average inflation rate of 40.6 percent. Inflation rates above 20 percent in Tajikistan, Zambia, and Montenegro are also worrisome. In contrast, inflation was kept below 5 percent in seven countries—Armenia, Djibouti, the Dominican Republic, El Salvador, Jordan, Mali, and Pakistan. The lack of regional pattern in inflation differentials supports the argument that inflation is largely driven by policy. Hence, programs to enhance government capacity to improve fiscal and monetary management should be high priorities in countries where inflation is high enough to impede economic progress.

Figure 3-9
Inflation Rate (%)



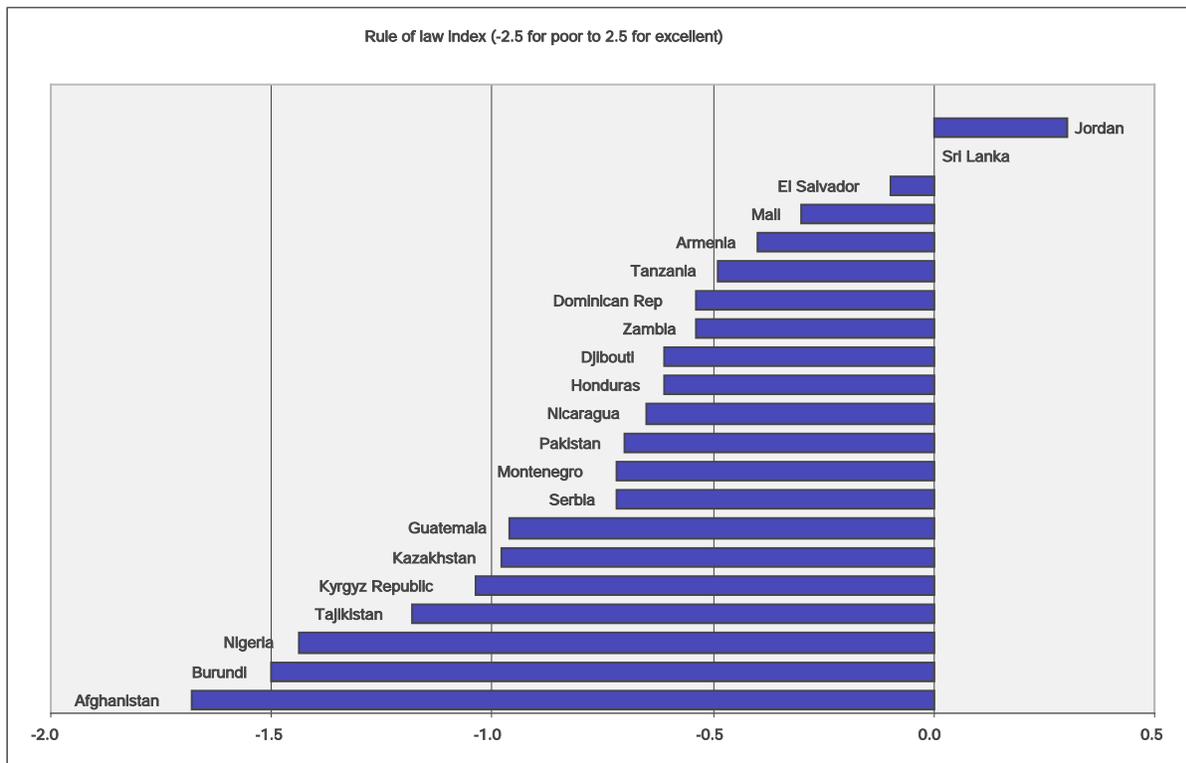
Business Environment

CAS studies examine the business environment from numerous perspectives, including *Doing Business* indicators and World Bank Governance indicators. Indeed, the numerous indicators for the business environment make it stand out on the scorecard tabulations discussed in Chapter 2 of this report. Here, we focus one basic indicator, the Rule of Law index, which is strongly associated with business environment problems in general. For example, rankings for the World Bank's Regulatory Quality Index are quite similar to those for Rule of Law Index in our CAS sample.

The World Bank’s Rule of Law index is a composite of various surveys measuring the extent to which agents in each country have confidence in the rule of law, the control of crime, the reliability of the judicial system, and the enforceability of contracts. The values range from –2.5 (very poor performance) to + 2.5 (excellent performance), around a global mean of 0.0. The median for the 22 countries reviewed here is –0.65, with a range from + 0.30 to –1.68. This compares with the median of –0.93 for LI countries and –0.59 for LMI countries. That these global medians are so low highlights the fact that the weak institutional capacity typical of LI countries makes ensuring the rule of law systematically more difficult.

As shown in Figure 3-10, most countries in our sample do not perform well on this indicator. Jordan ranks best at + 0.3, with Sri Lanka second at 0.0. In Africa, Mali, Tanzania, Zambia, and Djibouti score relatively well compared with Nigeria and Burundi, which are near the bottom of the scale with scores of –1.4 and –1.5. Central Asian countries rank poorly, as well.

Figure 3-10
Rule of Law Index



Financial Sector

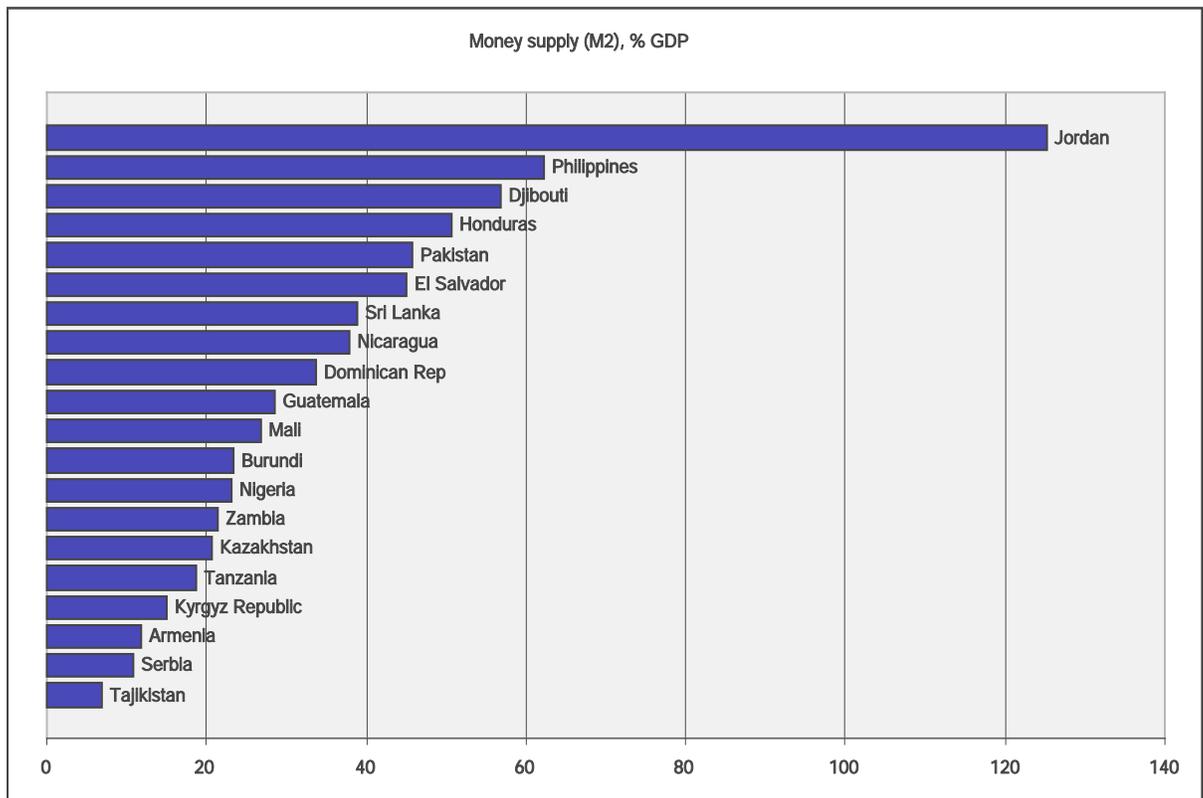
A sound and efficient financial sector is a key to mobilizing savings, fostering productive investment, and improving risk management. We focus here on two basic indicators of financial sector depth and efficiency: the ratio of the broad money supply to GDP and the interest rate spread.

Money Supply

The ratio of broad money supply (M2) to GDP shows an economy's degree of monetization, including the use of bank deposits as a store of value for transactions and savings. The data show huge performance variations for this indicator. The median is 28 percent, with a maximum of 125 percent and a minimum of just 7.0 percent. The global median for LI countries is 25 percent, and for LMI countries, 38 percent.

As shown in Figure 3-11, Jordan has by far the highest monetization rate (125 percent), far above the LMI average and even slightly higher than monetization rates in Singapore and Ireland, indicating that Jordan's banking system is highly developed and broadly based. In contrast, Tajikistan's financial sector appears to be seriously underdeveloped and its level of monetization extremely low, with M2 amounting to just 7.0 percent of GDP. In general, monetization tends to be low in Central Asia, the Balkans, and sub-Saharan Africa and somewhat higher in Central America. In Chapter 4 we show that much of the variance in M2/GDP is structurally determined, in that deviations from the international benchmarks, based on a simple regression that controls for basic structural characteristics, cuts the high–low range in half for our sample of countries.

Figure 3-11
Money Supply, % GDP



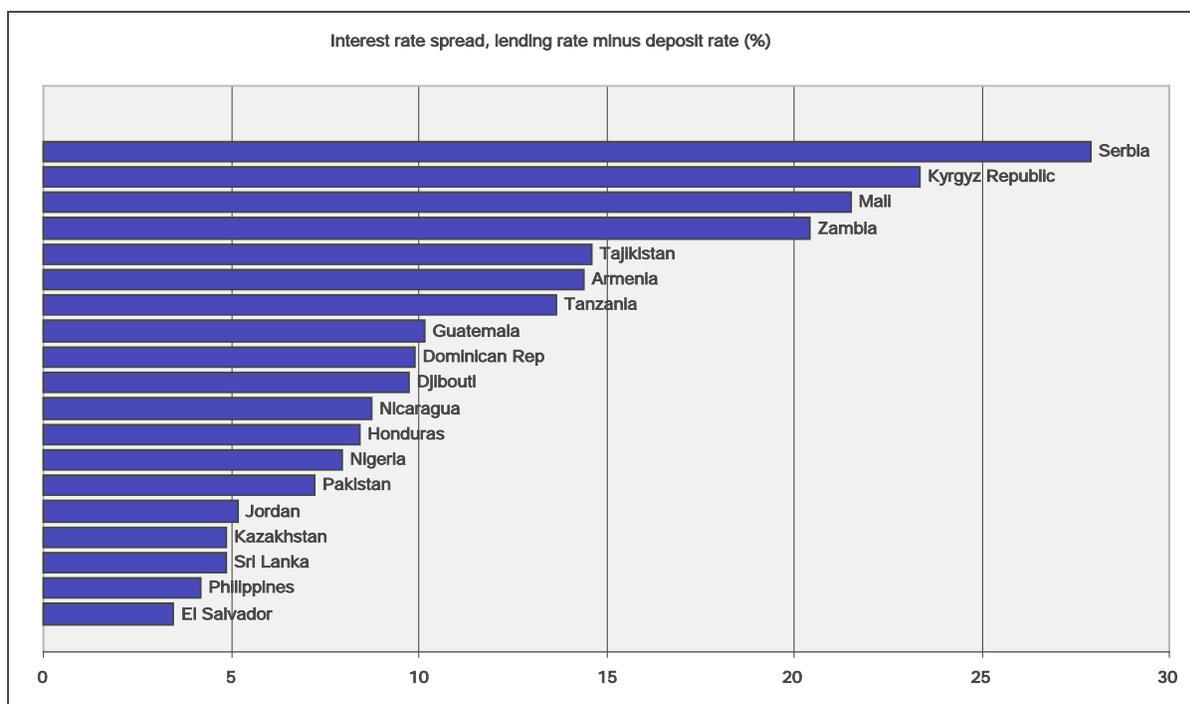
Interest Rate Spread

The interest rate spread is the difference between reference interest rates on bank loans versus deposits. It is widely used as a measure of efficiency in financial intermediation in the banking

sector. In contrast to the ratio of money supply to GDP, it appears to be less related to structural conditions, at least among our sample countries.

Figure 3-12 shows the five-year average for the interest rate spread as reported in the 22 CAS reports under review. Within this sample the median spread is 9.7 percentage points, with a range from 27.9 to just 3.5 percentage points. In comparison, the LI country median is 13.6 percentage points and the LMI country median is 7.5 percentage points. These two global figures show that banking efficiency is positively associated with economic development; this relationship operates in both directions, in that an efficient financial sector supports economic growth, but also countries with higher income tend to have stronger institutional capacity and more competition for bank clients.

Figure 3-12
Interest Rate Spread (%)



Serbia is the worst performer, with an average spread of 27.9 percentage points as reported in the CAS study. In fact, Serbia underperformed on *all* financial indicators, signaling the generally poor state of its financial sector. High inflation and currency depreciation is the most likely explanation for Serbia's poor performance at that time. Banking sector efficiency was also very weak in the Kyrgyz Republic, in Mali, and in Zambia, where the spread between deposit and loan rates exceeded 20 percentage points.

El Salvador had the lowest intermediation cost, with a spread of 3.5 percentage points. The Philippines, Sri Lanka, Kazakhstan, and Jordan also had low interest rate spreads of 4-5 percentage points.

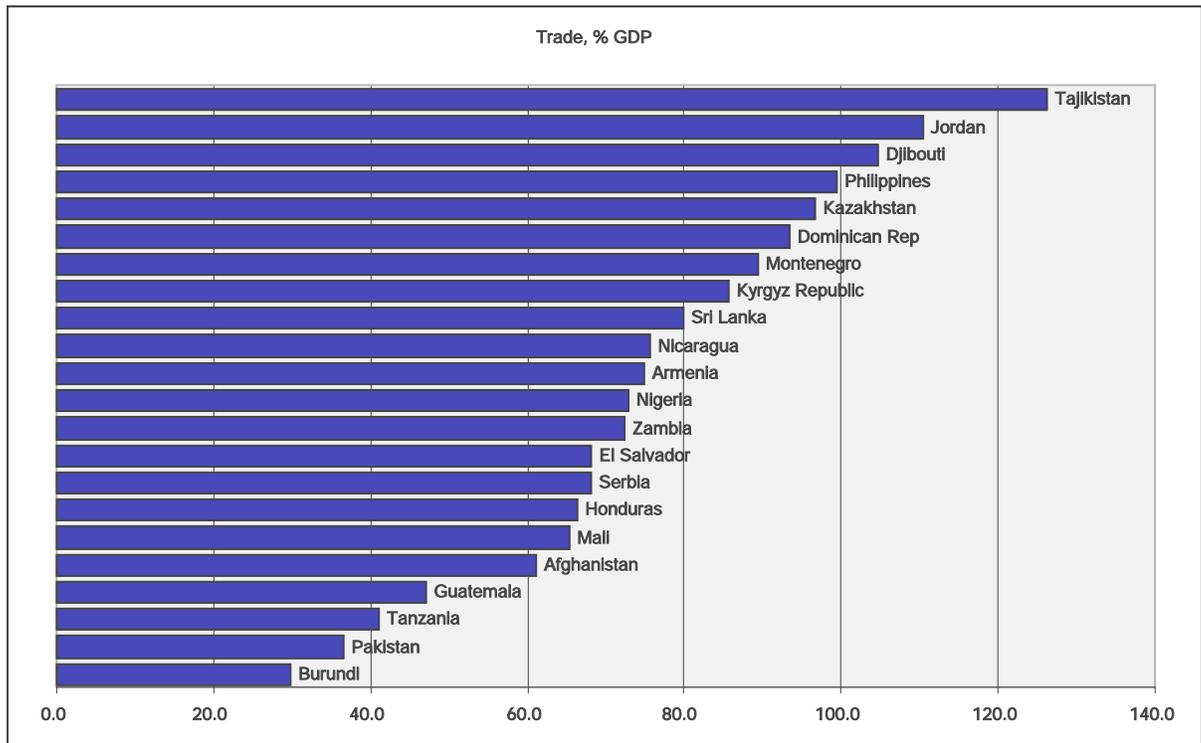
External Sector

By stimulating productivity and efficiency, providing access to markets and ideas, and expanding the range of consumer choice, the international flow of goods and services, capital, technology, ideas, and people offers great opportunities to boost growth and reduce poverty. It also highlights the need for reforms to take full advantage of those opportunities and for cost-effective approaches to coping with adjustment costs and regional imbalances. In this section we examine patterns for three indicators of external sector performance: ratio of trade to GDP, export growth, and the volume of recorded remittances relative to export earnings.

Ratio of Trade to GDP

Much theoretical and empirical literature supports the view that trade spurs economic growth. Figure 3-13 presents data on the relative importance of trade as measured by exports plus imports of goods and services as a percentage of GDP. The median for the 22 countries in our sample equals 74 percent, with a maximum of 126 percent (Tajikistan) and a minimum of 30 percent (Burundi). The global median for LI countries is 67 percent and for LMI countries 83 percent. This shows that middle-income countries tend to be more engaged in the world economy than low-income countries. There are no clear regional patterns for this indicator.

Figure 3-13
Trade, % GDP

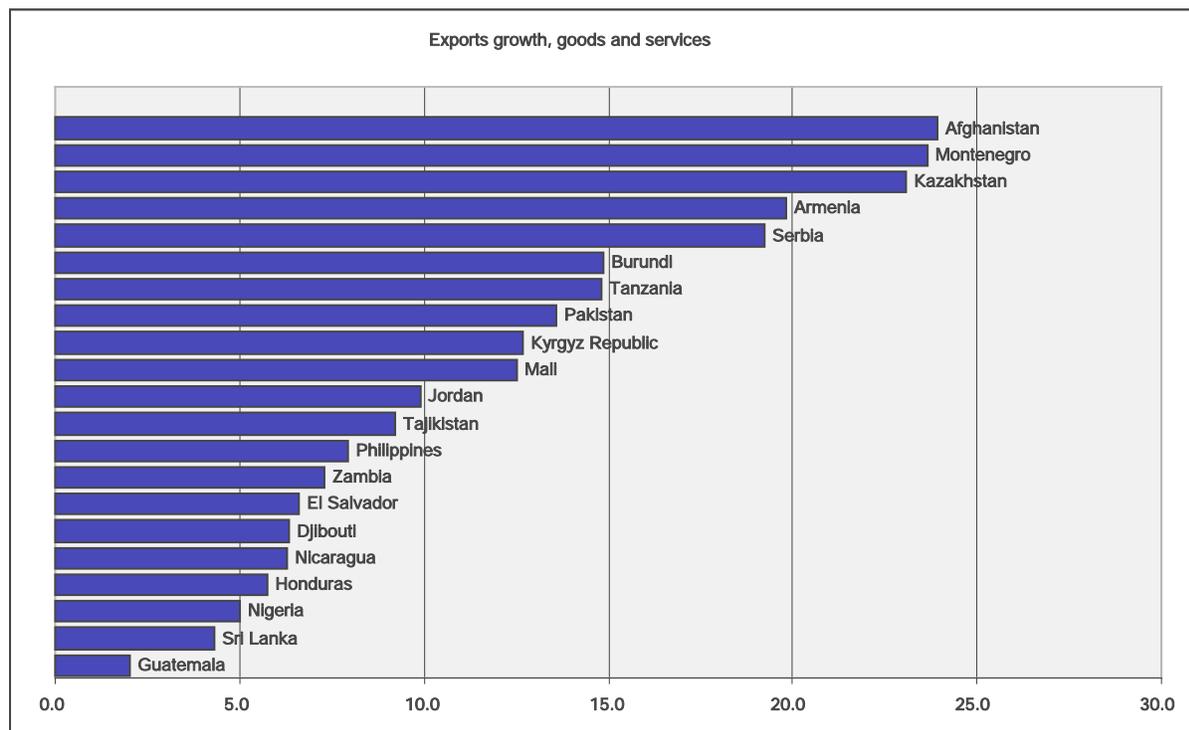


Export Growth

In our sample of 22 countries the export growth rate ranges from 23.9 percent to 2.0 percent, with a median of 9.9 percent, significantly higher than the LI median (6.5 percent) and the LMI (5.5 percent) (Figure 3-14). Thus, on average, the countries under review have enjoyed unusually

strong export performance. Export growth has been especially rapid in Central Asia and the Balkans, perhaps because these countries are still in the catch-up phase from their period of socialism and the period of instability that followed. The slowest growing region has tended to be Central America, though the passage of CAFTA-DR should stimulate trade flows in the region.

Figure 3-14
Export Growth in Goods and Service (%)

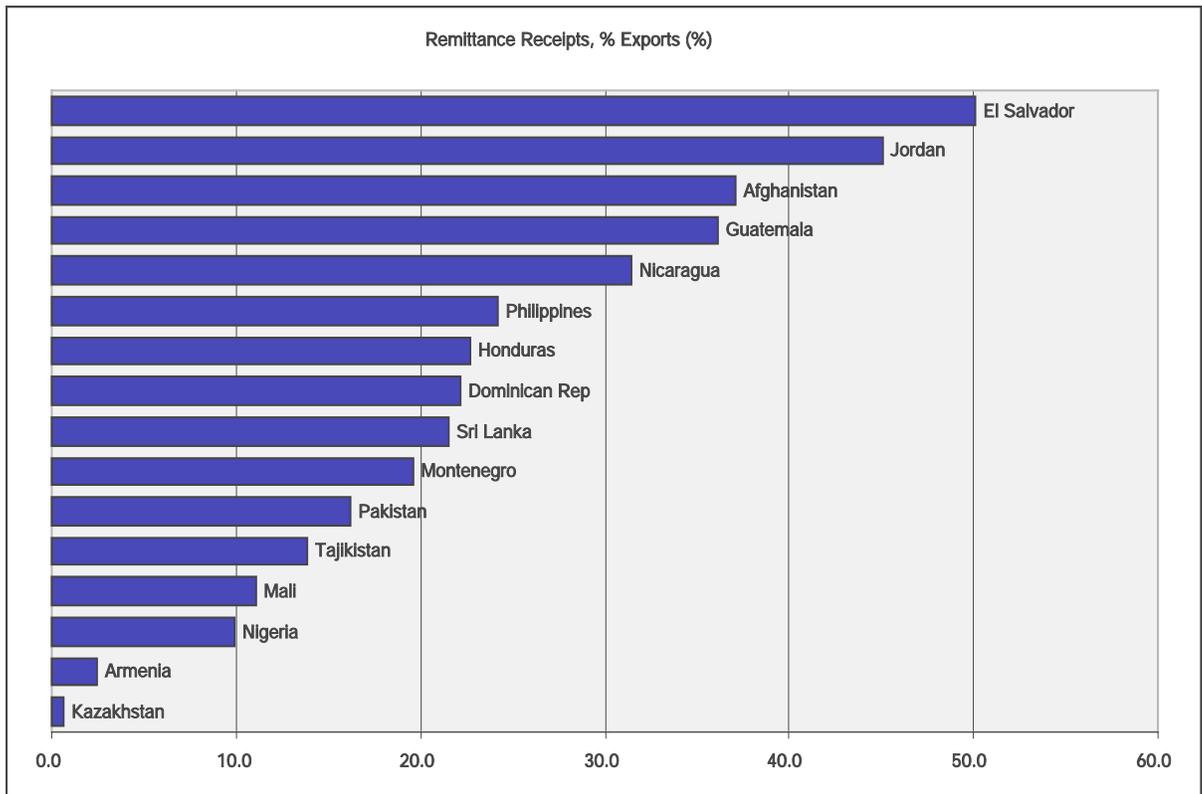


Remittance Receipts

Workers' remittance receipts as a percentage of exports have been very high and increasing in most of the countries covered by CAS reports, ranging from 0.7 percent to 50.1 percent with a median five-year average of 21.9 percent, (Figure 3-15). Excepting Kazakhstan and Armenia, all countries had remittance receipts exceeding 10 percent of export earnings. In contrast, the median ratio of remittances to exports for LI countries is just 7.5 percent and for LMI countries 7.9 percent. As with export growth, the countries reviewed here are atypical in remittance income.

For all Central American countries covered by the CAS studies, remittances are a vital source of family income and a major source of foreign exchange earnings to finance imports. For example, remittances to El Salvador averaged 50 percent of the country's export earnings, and over 30 percent for Guatemala and Nicaragua. Remittances also constitute a very high percentage of export earnings in Jordan (40.5) percent and Afghanistan (37.1 percent). Although remittances are very important for some countries, they can also complicate monetary policy by flooding the economy with unpredictable inflows of liquidity, which can be difficult for the monetary authorities to sterilize.

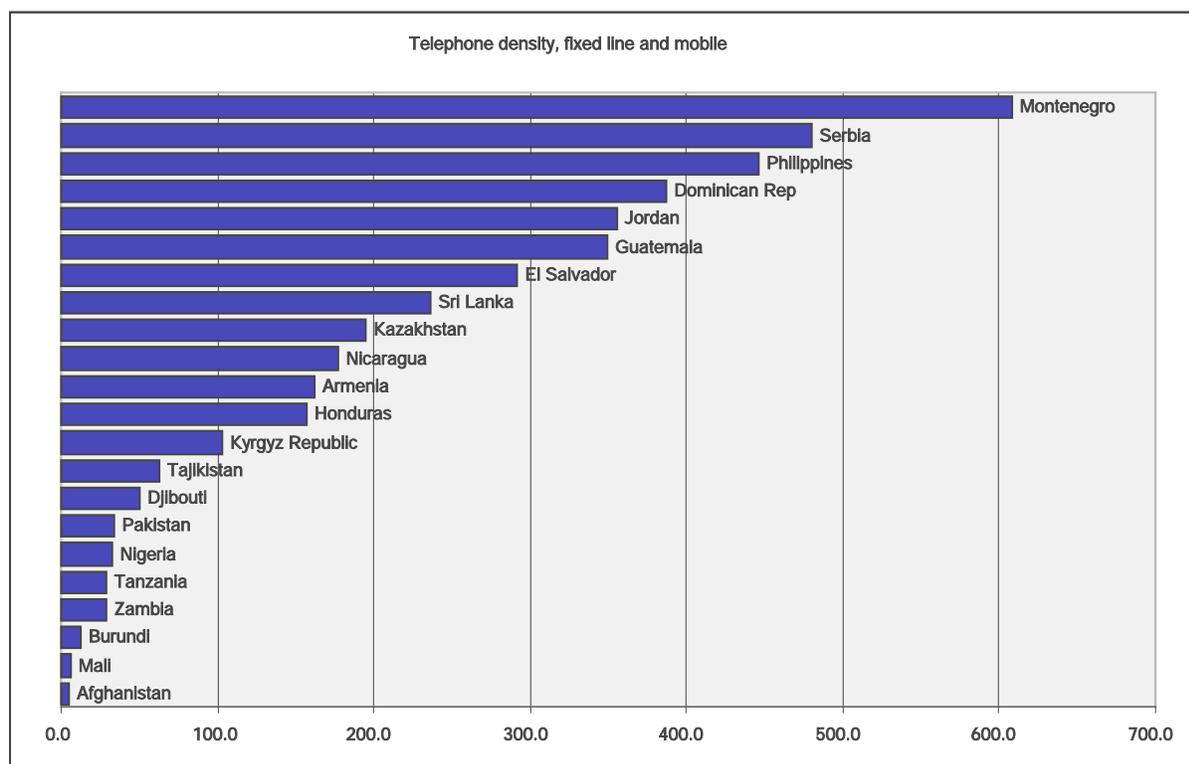
Figure 3-15
Remittance Receipts, % Exports (%)



Economic Infrastructure

Reliable physical infrastructure—for transportation, communications, power, and information technology—is essential to improving competitiveness and expanding productive capacity. Here, we highlight telecommunications, a form of infrastructure essential to international trade and investment and to the growth and development of local markets. The CAS reports found stark differences in telephone density among the 22 countries studied, ranging from a mere 5 fixed plus mobile lines per 1,000 inhabitants to 608 lines, with a median of 159 lines (Figure 3-16). By this measure, communications infrastructure is poor in Central Asia and sub-Saharan Africa, with most countries having fewer than 100 lines per 1,000 inhabitants. Afghanistan, Mali, and Burundi have only 5, 6, and 12 lines, respectively. The data reported in the CAS studies, however, hardly do justice to the rapid expansion of cellular phone systems in nearly every country.

Figure 3-16
Telephone Density, Fixed and Mobile Lines per 1,000 Inhabitants



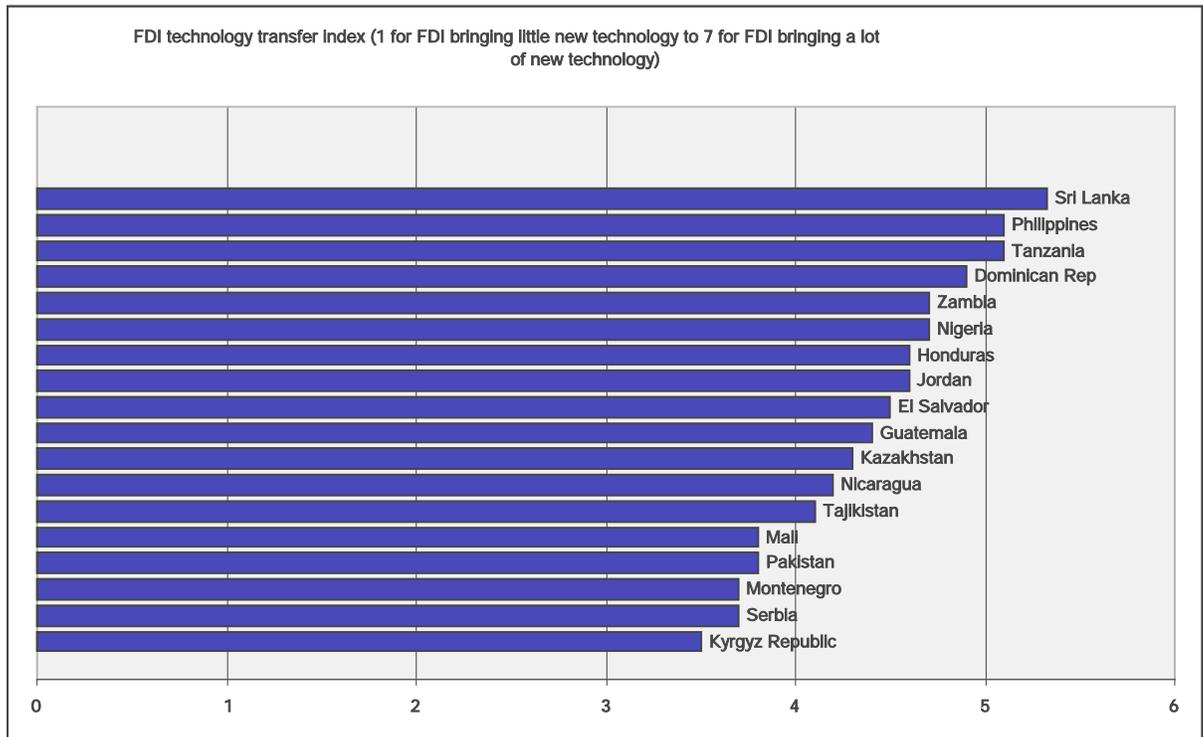
Science and Technology

Science and technology are central to a dynamic business environment, and a driving force behind improvements in productivity and competitiveness. Even for low and lower-middle income countries, transformational development depends on acquiring and adapting technology from the global economy. Inability to access and use technology prevents an economy from benefiting from globalization. Unfortunately, there are few international indicators useful for gauging performance in this important area for low and lower-middle income countries.

The World Economic Forum's FDI Technology Transfer Index gauges executive perceptions of the quality of FDI entering a country as a source of new technology. It scores countries on a scale from 1 (FDI brings little new technology) to 7 (FDI is an important source of technology). All of the countries in our 22 CAS reports have benefited significantly from FDI technology, with scores ranging from 3.5 to 5.3 and median of 4.5 (Figure 3-17). Still, only a few scored better than the median for LI countries (4.8) or LMI countries (4.9). The top five global performers had an average score of 5.9.

Sri Lanka's high score of 5.3 reflects not only large inflows of FDI, but also the talents of the country's scientists and engineers. The same holds true for the Philippines (5.1), but Tanzania's high score (also 5.1) reflects mainly the technological benefits of FDI on the supply side as local absorptive capacity is weak.

Figure 3-17
FDI Technology Transfer Index



These scores highlight the value of FDI and how foreign firms create opportunities for introducing technology and enhancing productivity into an economy. The challenge lies less in having technology transferred via FDI than in creating the conditions necessary to attract FDI. Host countries need to ensure that intellectual property rights are adequately protected while creating a business environment conducive to FDI.

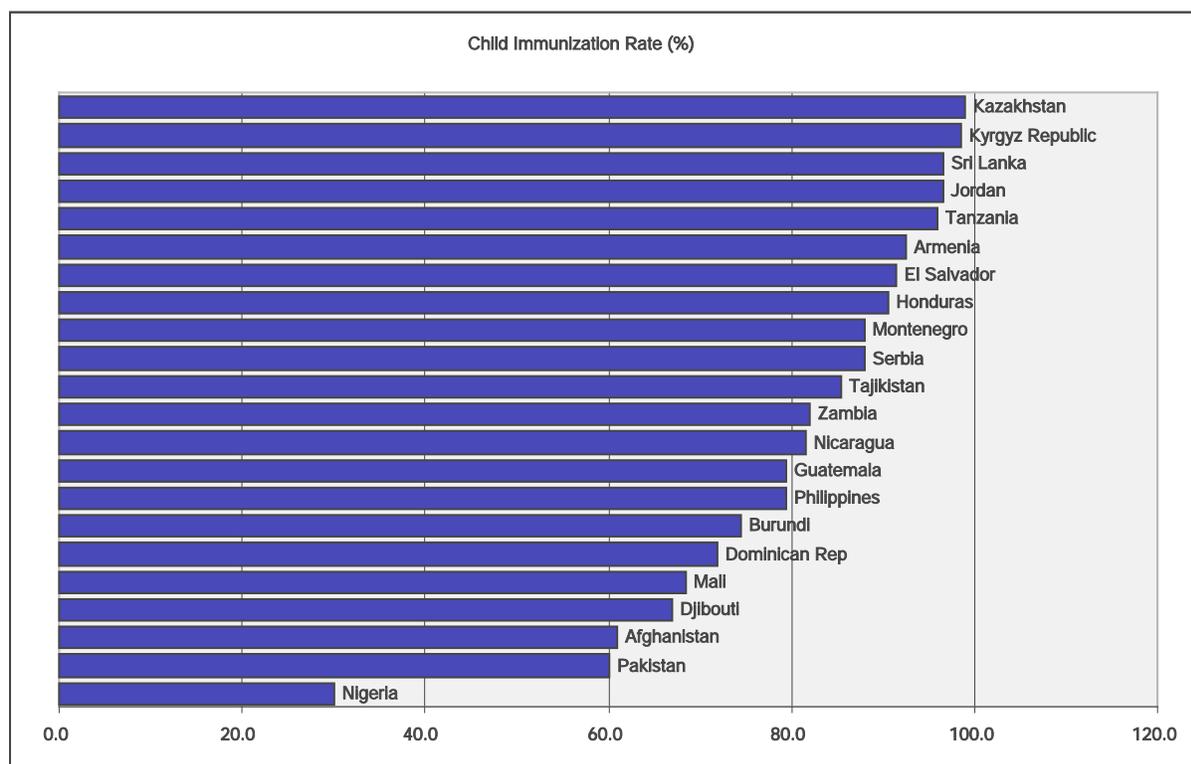
PRO-POOR GROWTH ENVIRONMENT

Health

The provision of basic health services is a major form of investment in human capital and a way to reduce poverty. Access to quality health care varies by country. Armenia, Jordan, Montenegro, and Serbia perform well on all core health indicators, while Afghanistan, Burundi, Djibouti, Mali, Nigeria, and Pakistan perform poorly. The former socialist countries perform better than the rest of the countries for most health indicators, a legacy of their socialist past. Here we focus on child immunization, which can be considered an indicator of a government's commitment to improving the health of the population.

As shown in Figure 3-18, the median child immunization rate reported in the 22 CAS countries was 84 percent, with a range of 30 percent (Nigeria) to 98 percent (Kyrgyz Republic). By comparison, the median for LI countries is 79.5 percent, and for LMI countries 91 percent. There is little regional pattern in the data, suggesting that this is a good measure of performance, and not largely predetermined by exogenous variables.

Figure 3-18
Child Immunization Rate (%)



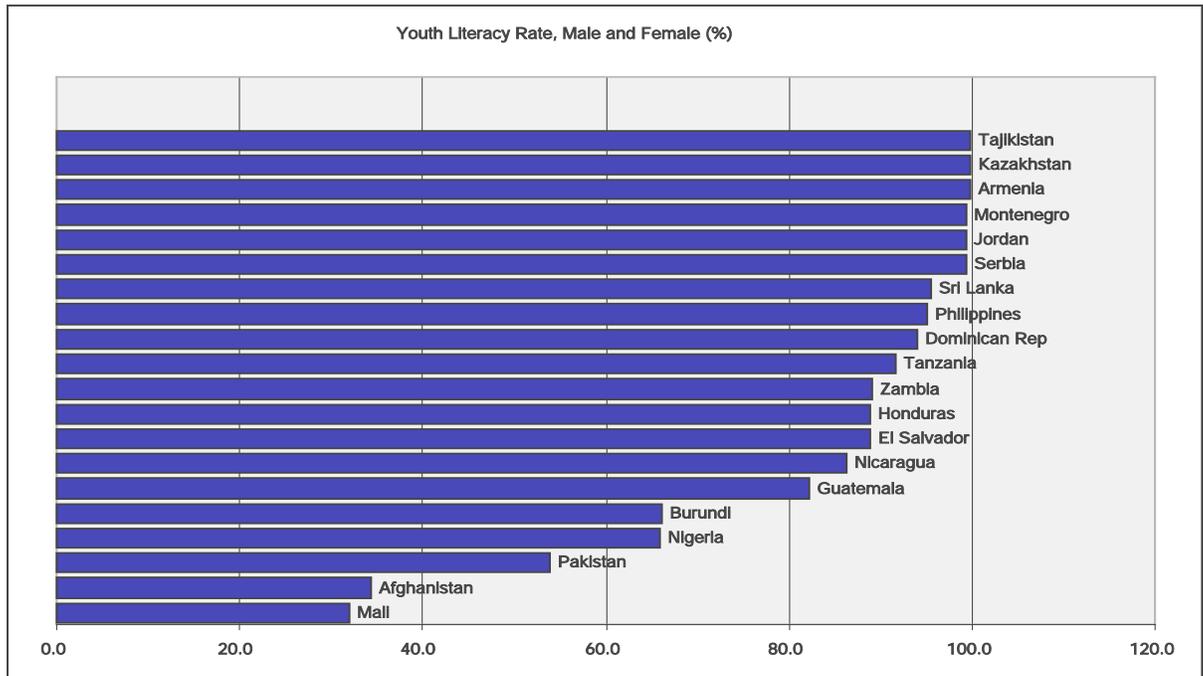
Education

Investment in human capital is a cornerstone of economic growth and development. The CAS studies generally confirm the perception that African countries perform poorly on most education indicators when compared to countries in Central America and Central Asia. Here, we focus on youth literacy, a very important indicator of the potential for future productive employment.

Within the CAS sample, the youth literacy rate ranges from 32 percent to 100 percent with a median of 90 percent (Figure 3-19). The median for LI countries is 71 percent and for LMI countries 97 percent. All of the former socialist countries (Armenia, Kazakhstan, Montenegro, Tajikistan, and Serbia) had high youth literacy rates (99 percent and over). Jordan also performs extremely well (99.4 percent) due to its high net primary school enrollment rate, close to 100 percent persistence in school to grade five, and a very high enrollment rate in secondary school.

In Africa, Tanzania and Zambia have the highest youth literacy rates of 91 percent and 89 percent, respectively. In contrast, youth literacy in Mali is a startlingly low 32 percent, suggesting severe deficiencies in the country's education system, which is also characterized by a very low net primary enrollment and an extremely high pupil–teacher ratio of 57:1, one of the highest in the world. Youth literacy is also very low in Afghanistan (34 percent) and Pakistan (54 percent.).

Figure 3-19
Youth Literacy Rate, Male and Female (%)



Employment

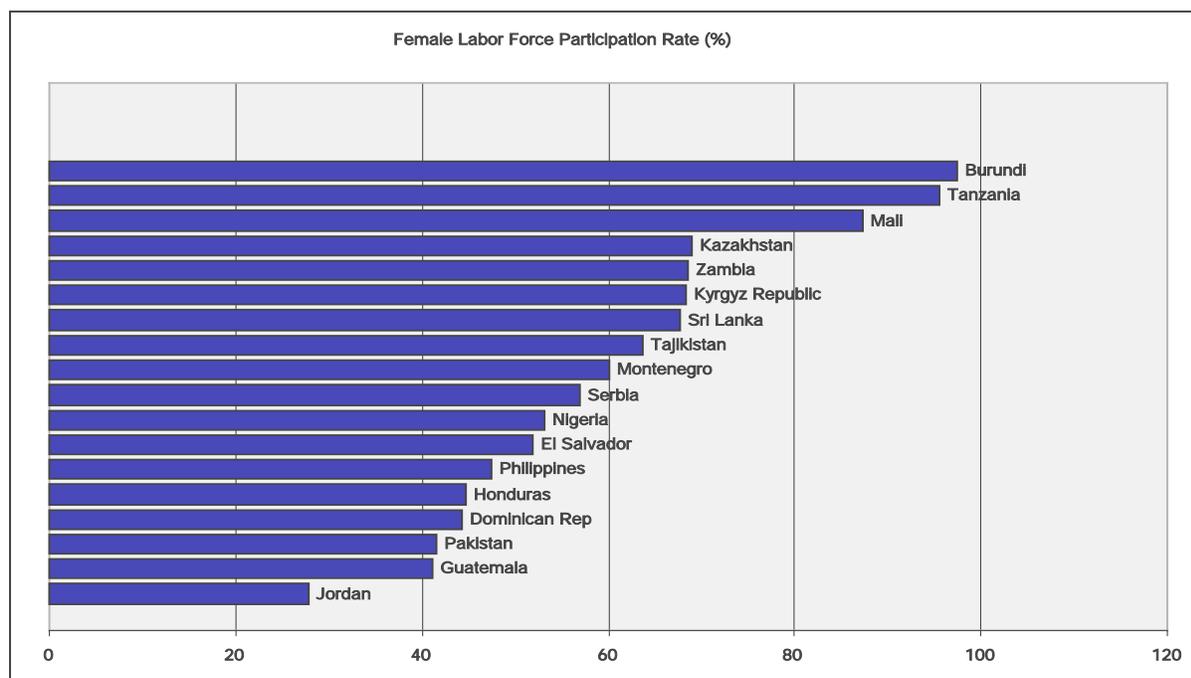
More and better earning opportunities—whether in the formal or informal sector or through self-employment—are the most important means for the poor to benefit from economic growth. And the main source of opportunity is growing demand for labor spurred by new investment and private sector development. Earlier, we examined indicators for the investment and business environment; here, we focus on the female labor force participation rate as an indicator of opportunities to participate in the labor market. The female rate of participation is more sensitive than the male rate as it reflects not only job opportunities but also cultural mores.

Within our CAS sample¹⁰ the rate of female labor force participation ranges from 28 percent to 97.5 percent, with a median of 57 percent (Figure 3-12). Among African countries, rates are highest in Burundi, Tanzania, and Mali—from 87 percent to 97 percent. These rates reflect an extremely high overall participation rate in subsistence activities associated with deep and severe poverty and the use of child labor. The high rates in the Central Asian countries (64 percent and higher), reflect ready access to jobs as a legacy of the socialist heritage.

Central American countries generally have very low female participation rates relative to Africa and Central Asia. But Jordan has by far the lowest rate, a mere 28 percent. This is changing, however, as well educated women increasingly seek to join the labor force.

¹⁰ Data for this indicator are lacking for Afghanistan, Armenia, Nicaragua, and Djibouti.

Figure 3-20
Female Labor Force Participation Rate (%)



Agriculture

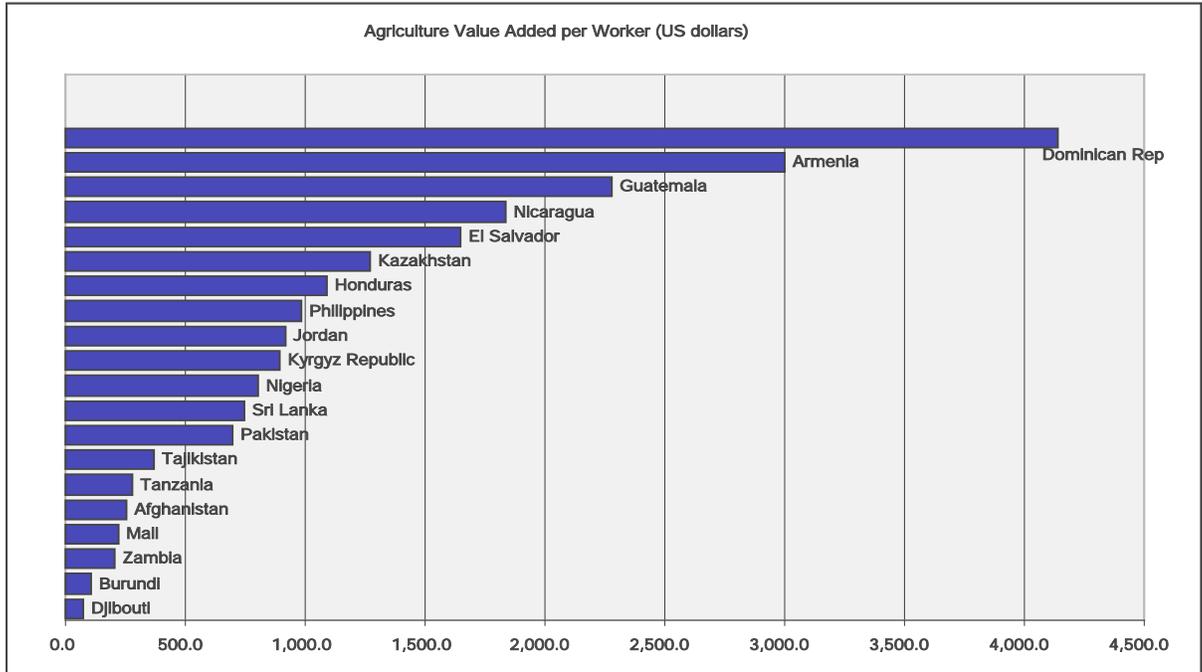
Agriculture is a primary source of employment and income for a large portion of the population in most countries covered by the CAS studies. It is also a basic source of food security, raw material for the development of agro-industry, and export earnings. An important goal of development policy is to shift labor out of traditional agriculture and into more productive activities over the long term. Over the medium term, programs to improve agricultural productivity and market opportunities can have a major impact on poverty.

Value added per worker, measured in \$US, is a basic indicator of productivity in the agricultural sector. Within our CAS sample, value added per worker ranges from \$71 to \$4,142 with a median of \$849. The median for LI countries is \$288 and for LMI countries \$1,415 (Figure 3-21). The Dominican Republic has the highest agriculture value added per worker at \$4,142. This is almost twice the regional benchmark of \$2,102 for LMI in Latin America and the Caribbean. By comparison, the agricultural value added per worker in the United States is \$ 6,431. Armenia and Guatemala rank second and third at \$3,000 and \$2,280, respectively.

At the other end of the spectrum are Djibouti (\$71), Burundi (\$103), Zambia (\$207), Mali (\$225) and Afghanistan (\$255). Djibouti, of course, has very little scope for agricultural development. Mali, too, is not in a favorable climate zone. But the other three countries have much greater potential. Burundi's productivity per agricultural worker is one of the lowest in the world and clearly linked to the country's high level of poverty. The productivity indicator shows that agriculture is exceedingly labor-intensive as a result of high population density and lack of opportunity for nonfarm employment. The poor conditions can also be seen in the slow growth of agricultural value added in Burundi, which averaged just 1.5 percent per year for the period 1999-

2003, compared to an average of 4.2 percent for LI countries in Africa. Labor productivity in agriculture is also extremely low in Zambia and Mali.

Figure 3-21
Agriculture Value Added per Worker (US dollars)



4. Structural Factors and the Regression Benchmark

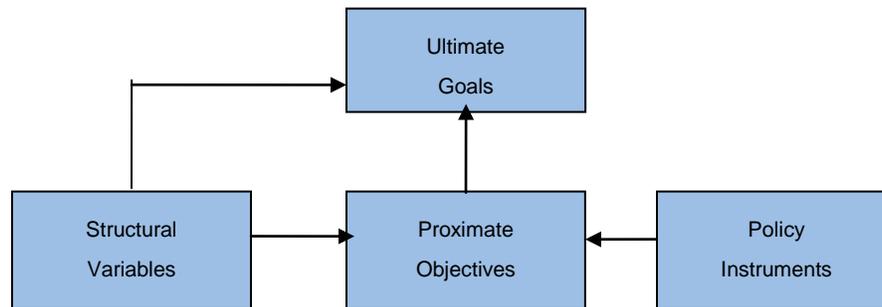
Programmatic interventions to improve performance in the short to medium term will have little impact if the value of a particular indicator is determined largely by an economy's structural characteristics as opposed to government policy. So how can we best assess the extent to which a policy influences economic performance and/or performance on a particular indicator?

Real GDP growth, for example, is unquestionably influenced by policy (e.g., through programs to improve investment incentives and strengthen the role of market forces in allocating financial resources) while income distribution is much less easily influenced.¹¹ To fully grasp this relationship it is useful to view benchmarking in relation to ultimate goals, proximate objectives, policy instruments, and structural variables:

- **Ultimate goals**, such as economic growth and poverty reduction, are those for which national development policies and donor assistance programs are designed.
- **Proximate objectives**—gross fixed investment as percentage of GDP, rate of inflation, legal and judicial structures, etc., — are the pathway to ultimate goals and can be influenced by policy and by structural variables.
- **Policy instruments**—balance of the government budget, rate of expansion of money and credit, improvements in the business environment, etc.—are used by governments to influence proximate objectives and through them ultimate goals.
- **Structural variables**—region, per capita income, population size, growth of the labor force, geographic status (e.g., landlocked)—cannot be influenced by policy, at least in the short to medium term.

Performance can be judged in relation to ultimate goals, proximate objectives, and policy instruments but not in relation to structural variables, which are not amenable to change in the short to medium term. The relationship between these variables can be seen in the following diagram:

¹¹ In this case, regional differences in social structure and historical experience, such as in Latin America, may be much more important.



Per capita income and region are both structural conditions that governments cannot directly influence in the short or medium term. Comparing performance against values derived from a descriptive regression captures differences based on those two structural conditions more systematically than the simple comparison of group averages presented in Chapter 3 and in most benchmarking literature. In this chapter we examine how performance rankings and patterns may change when indicators are assessed in relation to regression benchmarks based on per capita income and region.

METHODOLOGY

The benchmarking norms that we use for this purpose are derived from a statistical regression analysis for each indicator that allows us to establish an “expected value” for each country based on global patterns relative to per capita income and region.¹² The attributes of per capita income and region are used because most benchmarking exercises compare the performance for a particular country to the norm for its income group or region. Furthermore, the history of estimating “patterns of development” on the basis of these attributes dates back to the influential work of Hollis Chenery and Moises Syrquin in the 1970s.¹³

This approach has three advantages over the simple benchmarking methods common to international comparisons. First, expected values derived from regression analysis are customized to the level of income for each country, in contrast to simple benchmarks by income group which take an average across a wide range of income levels and are not especially meaningful for countries with income considerably above or below the group average. Second, reference values derived from regression analysis are not sensitive to the exact thresholds used to define an income group. Finally, while simple benchmarking provides no clue as to whether the comparisons are

¹² This is a cross-sectional OLS regression using data for all developing countries. For any indicator, Y , the regression equation takes the form: Y (or $\ln Y$, as relevant) = $a + b * \ln \text{PCI} + c * \text{Region} + \text{error}$ – where PCI is per capita income in PPP\$, and Region is a set of 0-1 dummy variables indicating the region in which each country is located. When estimates are obtained for the parameters a , b , and c , the predicted value for a particular country is computed by plugging in country-specific values for PCI and Region. Where applicable (as indicated by standard statistical tests of significance), the regression also controls for population size and petroleum exports (as a percentage of GDP), in order to incorporate the effects of these additional structural characteristics. The regression estimates are also adjusted for nonconstant variance (heteroskedasticity) where this proves to be a problem, to obtain a more accurate estimates and country-specific estimates of the standard error.

¹³ Chenery and Syrquin (1975), *Patterns of Development 1950-1970*, London. Oxford University Press.

meaningful, the regression methodology allows one to quantify a margin of error associated with any given value and assess whether the attributes of income and region have any predictive value. Often the answer is not much, in which case one can also infer that simple benchmarks also lack much explanatory value. However, as an exercise in descriptive statistics the “patterns of development” regression lets us see how countries perform relative to a predicted value based on a handful of basic attributes. The methodology is too simplistic to provide any rigorous testing of hypotheses about relationships characterizing international development experience.

In our examples below—covering growth, poverty, inflation, and monetization ratio—we show how performance assessments for our sample countries are, or are not, altered by comparing indicator values for each country to the benchmark derived from the international patterns regression. The bar charts are similar to those in Chapter 3 but the countries are ranked by the deviation between the indicator value and the expected value. We refer to these as *adjusted values*.¹⁴ In effect, adjusted values show how each country is performing after controlling for the effect of region and income—both structural conditions that governments cannot directly influence in the short or medium run. If there are underlying structural or cultural differences associated with income and region, then adjusted values provide a more meaningful basis for a diagnostic analysis. For some countries this form of benchmarking does little to change the assessment arrived at by simply examining indicator values themselves; for others it makes a big difference in highlighting negative and positive performance gaps and in determining how the country compares to others.

REGRESSION EXAMPLES

Growth

Figure 4-1 ranks country performance in terms of the deviation between the actual five-year average growth rate and its expected value, as derived from the benchmark regression. Though all 22 of our sample countries achieved growth rates of 2 percent or more, adjusted values were negative for 15, indicating that growth performance fell short of the benchmark standard. The lowest adjusted value was -3.6 percent for Montenegro. The growth rate in Afghanistan, however, exceeded the expected value by 10.7 percentage points. On the basis of the adjusted values, the margin between the best and worst performers is 14.1 percentage points. If we refer to Figure 3-2, the margin between best and worst was 14.6 percentage points in terms of actual indicator values. Hence, the benchmarking adjustment does little to alter the overall performance range.

The number in parentheses next to each bar label in Figure 4-1 shows how the country rankings have changed as a result of using the adjusted indicator values rather than actual values. This shows that the benchmarking had no effect on rankings for the top five countries, and hardly any effect on the top seven. There is also not much reordering at the very bottom. In the middle range, however, there is some reshuffling. Honduras and the Dominican Republic each move up by seven places, while El Salvador jumps up by four. This shows that the weak performance in absolute terms for these Latin American countries looks less problematic after adjusting for

¹⁴ Adjusted values for other variables are presented in Appendix C.

region and income level. In contrast, the benchmark adjustment causes the Kyrgyz Republic to drop ten places and Serbia by four.

Thus, while benchmarking of growth performance against income and region may alter assessments for some countries it has limited explanatory power relative to an international comparison based on the indicator value itself. This may be because other structural variables are missing from the regression, as discussed below, or because growth performance is driven mainly by policy rather than structural conditions.

Poverty

We next repeat the exercise for the percentage of population living below the minimum required level of dietary energy consumption, which we use here as our measure of poverty incidence. Figure 4-2 shows the actual minus expected values for this indicator for countries in our sample having data. In this case, controlling for income and region shrinks the range between best and worst to 39 percentage points, compared to 62 percentage points for the unadjusted variable.

The benchmarking adjustment has little effect on country rankings at the bottom of the scale. (Note that a positive deviation implies worse performance, in that the malnutrition rate exceeds the expected value.) Within our sample, countries with the highest malnutrition rates in absolute terms—especially Tajikistan, Burundi and Zambia—also perform poorly relative to the expected value for this indicator. Their poor performance cannot be attributed to income or region. Indeed, benchmarking yields a notable reshuffling in the ranks for only 4 of the 18 countries with data for this indicator. In particular, the performance for Mali (-6) and Afghanistan (-6) looks much better in the adjusted indicator values, whereas Jordan (+6) and Pakistan (+4) fare considerably worse relative to expected values.

For this indicator, framing comparisons in relation to the structural expected value makes a substantial difference in distinguishing the degree to which performance is favorable or unfavorable, but only in a limited number of cases does it alter the country's position in the international rankings.

Inflation

The inflation rate is another variable for which structural regression based on income and region has little predictive power beyond the standard value approach. Accordingly, benchmarking against group averages by income and region also adds little to a performance assessment based on the indicator value itself. Figure 4-3 shows that the high–low range of deviations between actual and expected inflation is virtually the same as the high–low range from the actual data. In addition, there are only a few substantial changes in the rank ordering, especially among the 10 countries with the worst inflation performance.

Figure 4-1
Actual Minus Expected Real GDP Growth (%)

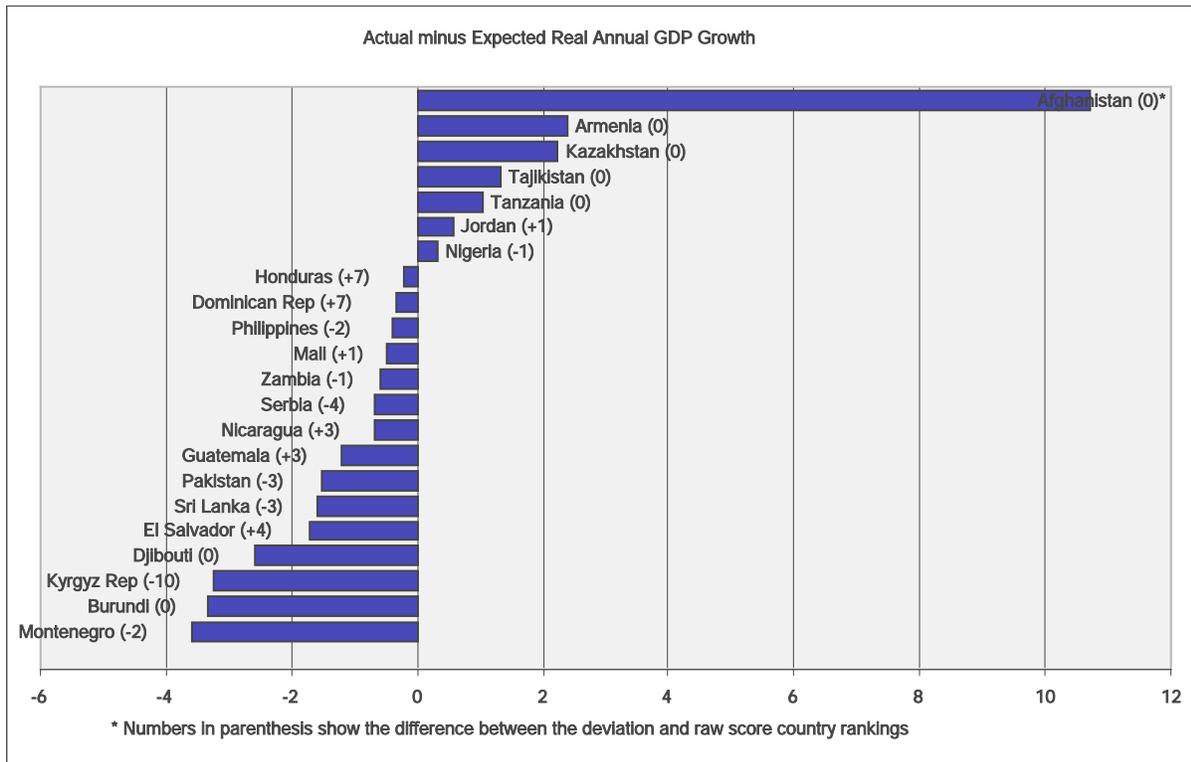


Figure 4-2
Actual Minus Expected Population Below Minimum Dietary Energy Consumption (%)

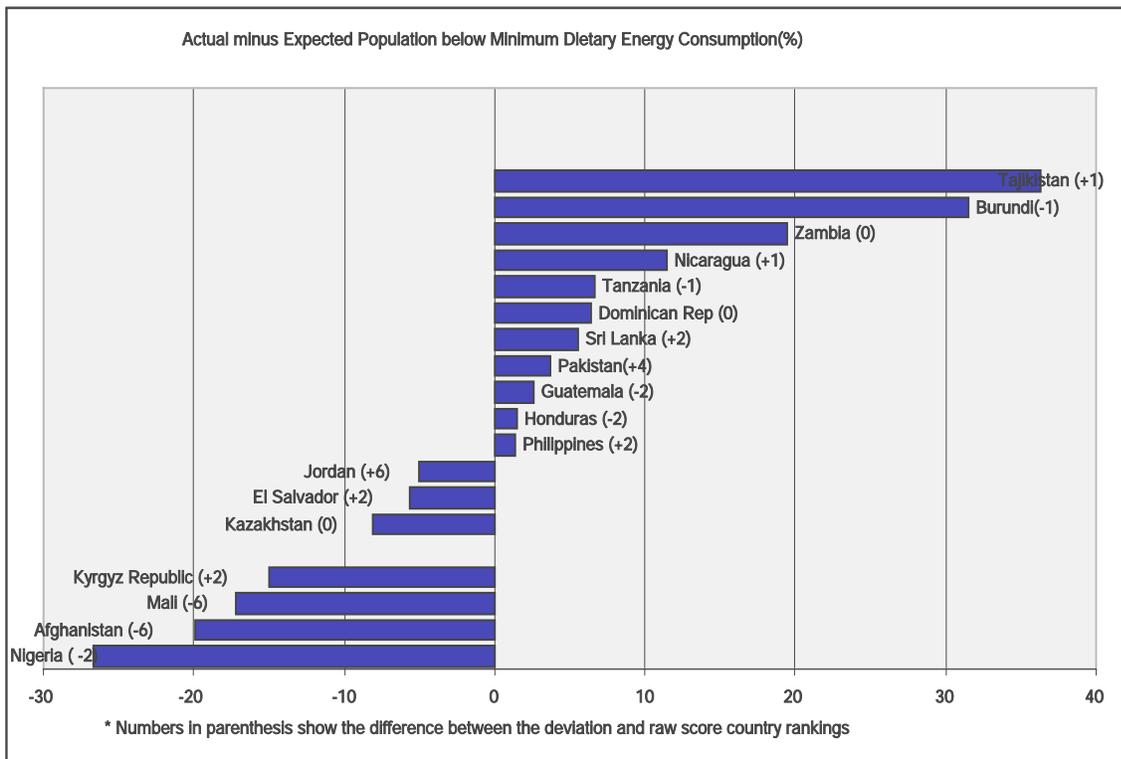
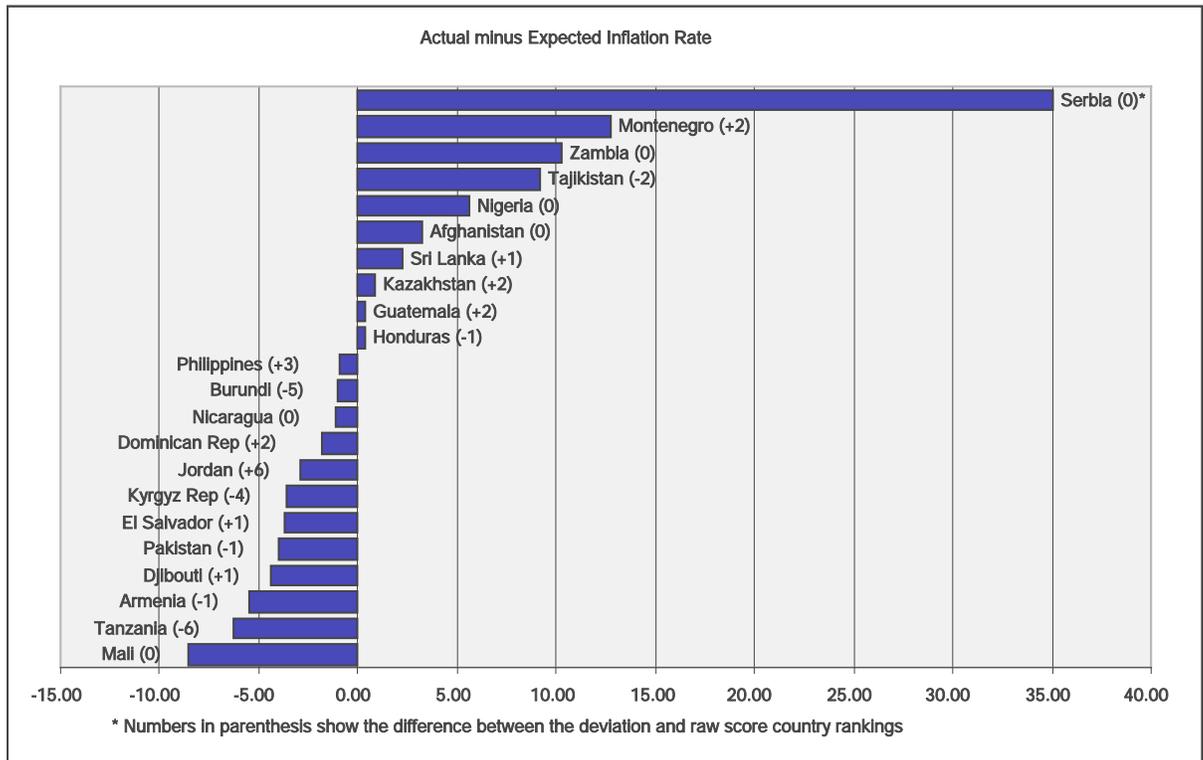


Figure 4-3
Actual Minus Expected Inflation Rate (%)

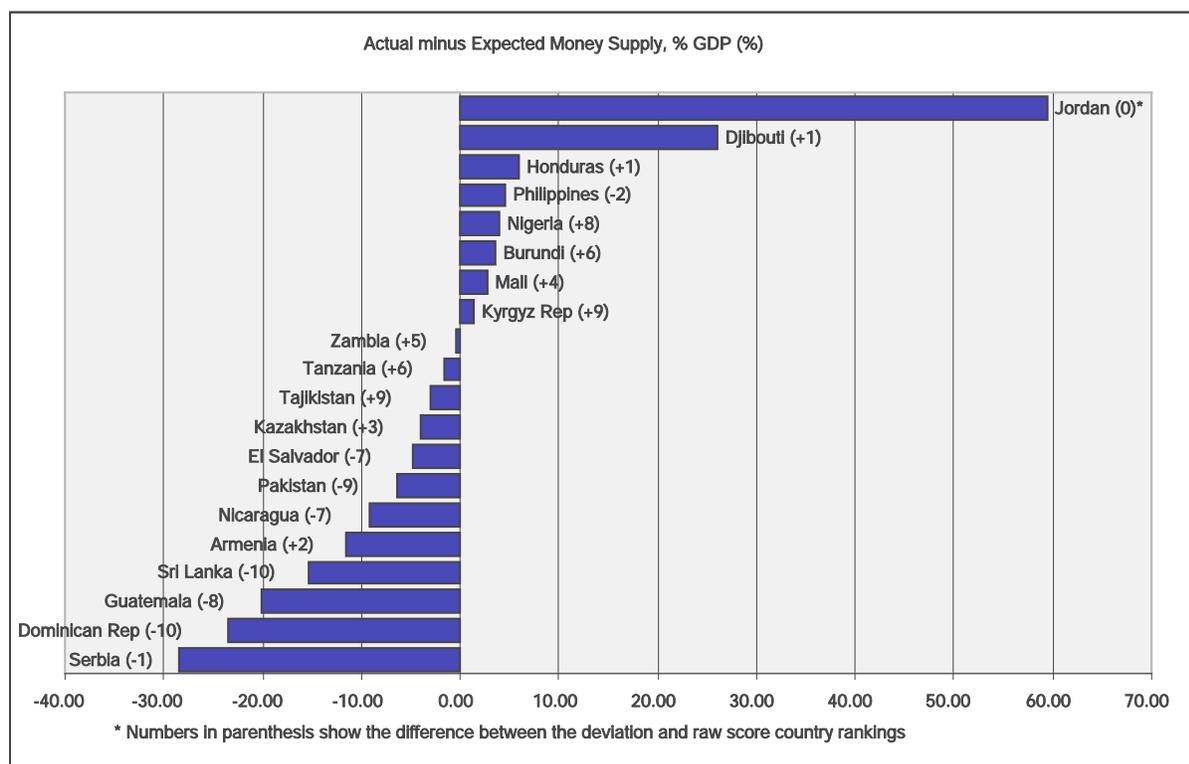


Monetization Ratio

In contrast, structural factors appear to be much more important in determining the ratio of broad money (M2) to GDP. Figure 4-4 shows the deviations between actual and expected values for our sample of 22 countries. For this indicator, the regression benchmarking reduces the high–low range by 37 percentage points, compared to the range found in the raw data. This implies that the *depth of the financial system is strongly associated with per capita income and region*. We draw the same conclusion from changes in the rankings that occur as a result of looking at the benchmark comparisons. For example, Tajikistan, the Kyrgyz Republic, and Nigeria move up substantially when M2/GDP is measured relative to its expected value, whereas the Dominican Republic, Sri Lanka, and Pakistan are seen to have monetization ratios well below the benchmarks based on income and region.

Even so, there is still a very large difference between the best and worst performers as measured by the deviation between actual and expected values for this indicator. This suggests that *the structural determinants leave abundant room for policies to make a difference over the medium run*.

Figure 4-4
Actual Minus Expected Money Supply, % GDP



POLICY INSTRUMENTS

The purpose of policy instruments is to influence proximate objectives, which, in turn, influence the achievement of ultimate goals. For example, if a USAID mission assists a government in instituting better controls on expenditures and thereby reducing inflation then the influence on economic growth should be positive. To measure the impact on inflation and growth, it is important to isolate the effects of structural variables that cannot be influenced, hence the interest in regression analysis and other types of international benchmarking that help us determine whether progress or lack of it is due to structural factors or policy. In this regard, the international benchmarking used for the CAS country studies has some limitations:

- Per capita income and region are not the only structural variables that influence economic performance. Others include population size, growth rate of the labor force, and whether a country is an oil exporter or is landlocked. These variables can be influenced by policy over the long term but their effects are predetermined in the short term and their combined effect should serve as a point of departure against which to measure performance, as such.
- While the broad regional classifications used in the CAS studies conform to USAID definitions, they are arbitrary for analytical purposes. Many regions, such as the LAC, contain very diverse countries. One way to improve regional analysis is to use a narrower classification based on common elements of history and culture. One classification could include East and Southeast Asia, South Asia, Central Asia, Eastern Europe, North Africa and the Middle East, Sub-Saharan Africa, Central America, South America, the

Caribbean, and Oceania and the Pacific. Although these regions are far from homogeneous, they would appear from the preliminary analysis for this report to be a considerable improvement over the broad regional groupings used to date.

- Comparisons with the median value of indicators within income groups can be arbitrary and misleading. A country's per capita income may not be very close to the median, which itself is derived from a classification based on arbitrary thresholds. The regression analysis aims to overcome this problem by introducing the country's actual per capita income in obtaining predicted values. However, many indicators are not well correlated with per capita income; hence the need to introduce other structural variables.

To explore these issues, we have undertaken a preliminary analysis to test a larger set of structural variables as determinants of real GDP growth, based on the full CAS data set covering 185 countries. In particular, we included population size, region (with the narrower classifications noted above), growth of labor force, and trade as a percentage of GDP. Results indicate that this expanded set of structural determinants does explain a larger fraction of the variance in GDP growth rates. The deviations between actual and expected values, based on this expanded regression, may provide a more discerning assessment of performance problems.¹⁵

¹⁵ We also tested the relationship between certain proximate objectives and economic growth, controlling for the effects of the expanded set of structural variables (see Appendix B). This preliminary analysis confirms that the investment rate and the rate of inflation are two important proximate objectives influencing economic growth. Both are also amenable to policy instruments such as those related to the business environment and growth of the money supply. Performance can be measured in terms of the ultimate goal (real GDP growth), the proximate objectives (GFI/GDP and rate of inflation), and the various policy instruments.

5. Conclusions and Recommendations

Our review of 22 economic performance assessments revealed significant weakness in business environment, health, and employment/labor force performance, and that the best performers overall were Jordan, Kazakhstan, and Montenegro, and the worst were Tajikistan, Djibouti, Guatemala, Afghanistan, and Nicaragua. Our comparison of performance on selected indicators revealed clear differences between low-income and middle-income countries, but no strong regional patterns. Given the heterogeneity of our sample countries, we conclude that there is no substitute for country-specific analysis of constraints on growth. We also conclude that USAID missions need to assess both the *importance* of various programmatic issues and the *tractability* of potential interventions to mitigate performance problems.

For programmatic planning, a performance assessment is meaningful to the extent that it reveals what can be influenced by government policy. In fact, *performance variation due to policy is what we most want to measure*. Arriving at sound measurement requires benchmarking performance in relation to ultimate goals, proximate objectives, policy instruments, and structural variables. Policy instruments influence proximate objectives, which, in turn, impact the ultimate goals—and performance can be judged in relation to all three but not in relation to structural variables, which are not amenable to change in the short to medium term. To measure performance, it is important to isolate the effects of structural variables. This is the underlying reason for international benchmarking, especially regression analysis, to establish *expected values* in terms of underlying structural attributes. In sum, if the value of an indicator is determined largely by an economy's structural characteristics, then there is less scope for constructive programmatic engagement.

We observed four indicators' *adjusted values*—defined as the deviation between *actual* and *expected* values—and saw that the benchmark controls help to explain a considerable portion of variation in actual values for some indicators and some countries. In other cases, however, the benchmarking results were no different from a simple examination of values. This lack of explanatory power may arise because (1) per capita GDP and the broad regional categories used in the CAS studies might be insufficient to describe the structural characteristics affecting variables, or (2) variations across countries for many variables are due in large measure to differences in policy rather than structural attributes.

Should this overview report stand as a prototype for an annual CAS report on growth performance for wide distribution? We do not believe that the approach taken in this report—

involving an overview of past studies as required in the CAS contract—is appropriate for an annual report. Instead, we propose further technical evaluation of an alternative approach in relation to the benchmarking methodology used in CAS studies. This evaluation would include extending analysis to the full range of CAS indicators and assessing results in terms of performance strengths and weaknesses for future CAS reports.

We propose to produce a report that includes international rankings based on observed and adjusted data, and a brief discussion on each topic featuring the 10 best and 10 worst performers on selected indicators (similar to the *Doing Business* reports). The annual report would be structured like a standard CAS report, with the addition of selected conflict indicators for designated post-conflict countries. Finally, each year the report could feature a chapter on a topic of special interest.

Determining the exact structure of the proposed annual report will take considerable experimentation and creativity, but the concept is feasible and the final product would present a great deal of information on economic growth performance in a concise and accessible format, in keeping with all products of the CAS project.

Appendix A. CAS Methodology

The methodology used in the CAS Economic Performance Assessments 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 trouble and determine the best course of action.¹ Similarly, the Economic Performance Assessments are based on an examination of a limited set of key indicators covering the topics listed in the table below to see which ones are signaling serious problems that affect economic growth outcomes. Some “blinking” indicators have clear implications, while others may require further study to investigate the problems more fully and identify appropriate courses for programmatic action.²

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

The analysis in each CAS study is organized around two mutually supportive goals: transformational growth and poverty reduction.³ Broad-based growth is the most powerful instrument for poverty reduction. At the same time, programs to reduce poverty and lessen inequality can help to underpin rapid and sustainable growth. These interactions can create a virtuous cycle of economic transformation and human development.

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

¹ Sometimes, too, the problem is faulty wiring to the indicator—analogue here to faulty data.

² Since October 2006 some CAS studies have included a section on conflict risk, which has become a strategic issue for USAID. The CAS project is helping USAID develop a template for assessing economic performance in post-conflict states but results are too preliminary to be included in this overview for 2007.

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

efficient financial system; openness to trade and investment; sustainable debt management; investment in education, health, and workforce skills; infrastructure development; and sustainable use of natural resources.

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

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

In individual country reports, each indicator is evaluated with reference to several benchmarks, including the median values for all low-income or lower-middle-income countries, as appropriate; all countries in the region; and all countries that are in the region and the respective income group. Comparisons are also made with two designated benchmark countries, and with the average for five best and five worst performers globally. A final benchmark is obtained using statistical regression analysis to establish an expected value for the indicator, controlling for the effects of per capita income and region, and where applicable, population size and petroleum exports. The diagnostic analysis takes into account not only the latest values for a given indicator, but also the trend and the five-year average (where available).

Appendix B. Selected Indicators from 22 CAS Studies

		Growth Performance						Poverty and Inequality					
		Per Capita GDP, PPP		Per capita GDP, current U.S. Dollars		Real GDP growth		Share of gross fixed investment in GDP, current prices		Income share accruing to poorest 20%		Population (%) below minimum dietary energy consumption	
Indicator Number		11P1		11P2		11P3		11S3		12P2		12S1	
Value Type		AVG	A-P	AVG	A-P	AVG	A-P	AVG	A-P	MRY	A - P	MRY	A - P
Afghanistan	AFG	1121.5	.	233.8	.	16.6	10.7	40.1	.	6	-1.9	20.4	-19.9
Armenia	ARM	2,408.0	.	645.0	.	10.5	2.4	19.6	.	7.0	-0.7	.	.
Burundi	BDI	677.7	.	94.4	.	2.0	-3.3	8.1	.	.	.	68.0	31.5
Djibouti	DJI	1,789.3	.	759.3	.	2.2	-2.6	13.0	.	.	.	.	.
Dominican Rep	DOM	6,784.0	.	2,467.0	.	3.4	-0.3	23.5	.	5.1	1.5	25.0	6.5
El Salvador	SLV	4,305.2	.	2,277.6	.	2.0	-1.7	16.4	.	2.7	-1.2	11.0	-5.6
Guatemala	GTM	3,954.1	.	1,873.4	.	2.5	-1.2	16.9	.	2.9	-1.1	23	2.6
Honduras	HND	2,613.4	.	1,003.9	.	3.5	-0.2	26.4	.	3.4	-0.8	22	1.5
Jordan	JOR	4,074.3	.	1,778.7	.	5.4	0.6	21.7	.	6.9	-0.6	6.0	-5.0
Kazakhstan	KAZ	6,052.7	.	1,834.4	.	10.4	2.2	22.2	.	7.8	0.4	13.0	-8.1
Kyrgyz Republic	KGZ	1,730.9	.	344.1	.	5.0	-3.3	16.6	.	7.7	-0.4	6.0	-15.0
Mali	MLI	925.0	.	313	.	4.6	-0.5	22.5	.	.	.	21	-17.2
Montenegro	MNE	4,330.9	.	2,212.5	.	2.1	-3.6	17.0	.	.	.	.	.
Nicaragua	NIC	3,415.9	.	795.0	.	3.0	-0.7	27.8	.	5.6	1.6	27.0	11.5
Nigeria	NGA	1,024.2	.	394.1	.	5.4	0.3	23.4	.	.	.	9.0	-26.7
Pakistan	PAK	2,095.0	.	462.0	.	4.1	-1.5	14.1	.	8.8	1.3	19.0	3.7
Philippines	PHL	4,755.5	.	1096.9	.	5.2	-0.4	15.9	.	4.7	-2.4	18.0	1.4
Serbia	SRB	4,330.9	.	1,981.9	.	5.0	-0.7	15.3	.	.	.	.	.
Sri Lanka	LKA	3,865.3	.	978.1	.	4.0	-1.6	23.2	.	4.8	-2.4	22.0	5.6
Tajikistan	TJK	1,015.4	.	220.8	.	9.7	1.3	11.4	.	7.9	-0.5	61.0	36.3
Tanzania	TZA	594.6	.	280.9	.	6.4	1.0	17.4	.	.	.	43.0	6.6
Zambia	ZMB	809.9	.	375.4	.	4.6	-0.6	21.6	.	.	.	50.0	19.4

Economic Structure											
		Labor force in agriculture as a share of output in Agriculture		Labor force in agriculture, % total		Output structure (agriculture, value added, % GDP)		Output structure (industry, value added, % GDP)		Output structure (services, etc., value added, % GDP)	
Indicator Number		13P1a		13P2a		13P2b		13P2c			
Value Type		AVG	A-P	AVG	A-P	AVG	A-P	AVG	A-P	AVG	A-P
Afghanistan	AFG	.	.	.	.	42.9	9.3	22.6	.	34.6	.
Armenia	ARM	1.7	.	44.8	9.1	26.6	8.3	34.9	8.5	38.5	-15.1
Burundi	BDI	1.9	.	93.7	15.3	50.3	10.2	18.6	1.8	31.2	-15.9
Djibouti	DJI	.	.	.	.	3.7	-22.0	14.8	.	81.6	.
Dominican Rep	DOM	1.5	.	17.0	2.1	11.3	2.2	31.1	5.2	57.6	-7.1
El Salvador	SLV	2.6	.	23.2	-2.0	9.1	-5.7	30.9	6.4	60.1	-0.7
Guatemala	GTM	1.5	.	37.6	10.6	22.6	6.9	19.4	-5.1	58.0	-2.0
Honduras	HND	2.4	.	35.0	1.3	14.6	-4.8	31.4	8.9	54.0	-4.8
Jordan	JOR	.	.	.	.	2.2	-9.4	25.7	-2.1	72.1	14.5
Kazakhstan	KAZ	3.9	.	34.2	11.7	8.7	-2.4	39.0	-5.6	52.3	5.8
Kyrgyz Republic	KGZ	1.4	.	52.7	1.8	37.1	10.4	25.4	1.6	37.5	-12.2
Mali	MLI	.	.	.	.	39.7	5.5	23.9	2.0	36.4	-9.3
Montenegro	MNE	0.3	.	3.2	-28.6	11.5	-5.4	18.8	-10.0	69.7	15.7
Nicaragua	NIC	2.0	.	40.0	10.2	19.5	2.3	29.6	6.0	55.2	-4.4
Nigeria	NGA	1.2	.	31.3	-35.7	26.7	-7.1	48.3	7.8	25.0	-7.1
Pakistan	PAK	1.9	.	46.8	-6.8	25.1	0.3	23.3	-6.3	51.6	4.0
Philippines	PHL	2.5	.	36.8	-3.9	14.7	-3.0	31.9	-0.7	53.4	2.8
Serbia	SRB	0.3	.	4.7	-27.1	18.6	1.7	33.6	4.8	47.8	-6.1
Sri Lanka	LKA	1.8	.	33.4	-9.7	18.5	-0.5	26.6	-5.2	54.9	4.7
Tajikistan	TJK	2.4	.	66.2	6.1	28.0	-3.8	28.8	.	43.2	.
Tanzania	TZA	.	.	.	.	44.9	4.5	15.9	.	39.2	.
Zambia	ZMB	.	.	.	.	17.7	-19.3	32.9	13.4	49.4	3.2

		Demography and Environment						Gender	
		Age Dependency		Population growth		Urbanization rate		Ratio of Male to Female gross enrollment rate	
Indicator Number		14P2a		14P4b		14P5		15P2a	
Value Type		AVG	A-P	AVG	A-P	AVG	A-P	MRY	A - P
Afghanistan	AFG	.	.	3.0	.	.	.	2.01	0.9
Armenia	ARM	.	.	-1.2	.	67.3	13.2	0.95	0.0
Burundi	BDI	0.94	0.0	1.9	.	9.3	-16.4	1.31	0.0
Djibouti	DJI	0.86	0.1	1.9	.	83.2	42.3	1.31	0.2
Dominican Rep	DOM	0.59	0.0	1.5	.	59.0	2.9	0.88	-0.1
El Salvador	SLV	0.67	0.0	1.7	.	59.1	8.6	1.01	0.0
Guatemala	GTM	0.92	0.3	2.4	.	45.9	-3.6	1.10	0.1
Honduras	HND	0.80	0.1	2.3	.	45.2	-0.6	1.05	0.0
Jordan	JOR	0.70	0.1	2.8	.	78.8	19.8	0.99	-0.1
Kazakhstan	KAZ	0.51	0.0	0.0	.	55.9	-5.3	1.03	0.1
Kyrgyz Republic	KGZ	0.65	0.0	1.0	.	34.5	-11.1	1.01	0.0
Mali	MLI	1.00	0.1	2.4	.	30.9	-1.2	.	.
Montenegro	MNE	0.51	0.0	0.0	.	51.8	-1.6	1.02	0.0
Nicaragua	NIC	0.78	0.1	.	.	56.9	8.9	0.97	0.0
Nigeria	NGA	0.87	0.0	2.4	.	44.9	12.4	1.25	0.0
Pakistan	PAK	0.80	0.1	2.1	.	33.5	1.1	1.39	0.3
Philippines	PHL	0.67	0.0	1.9	.	61.0	21.4	0.94	0.0
Serbia	SRB	0.51	0.0	-4.8	.	51.8	-1.6	.	.
Sri Lanka	LKA	0.47	-0.2	1.3	.	21.1	-17.2	0.97	0.0
Tajikistan	TJK	0.75	0.2	1.9	.	27.6	-12.6	1.19	0.1
Tanzania	TZA	0.90	0.0	2.1	.	34.3	9.0	1.03	-0.3
Zambia	ZMB	0.90	-0.1	2.2	.	39.9	10.9	1.09	-0.2

		Fiscal and Monetary Policy						Business Environment			
		Government expenditure, % GDP		Government revenue, excluding grants (% GDP)		Inflation rate		Rule of law index (-2.5 for poor to 2.5 for excellent)		Regulatory quality index (2.5 for poor to 2.5 for excellent)	
Indicator Number		21P1		21P2		21P4		22P3		22P4	
Value Type		AVG	A-P	AVG	A-P	AVG	A-P	MRY	A - P	MRY	A - P
Afghanistan	AFG	10.8	-19.5	4.6	-6.6	13.7	3.3	-1.7	.	-1.6	.
Armenia	ARM	.	.	.	.	3.0	-5.5	-0.4	0.3	.	.
Burundi	BDI	31.0	2.8	20.0	5.7	10.2	-1.0	-1.5	-0.9	.	.
Djibouti	DJI	33.4	8.5	23.0	-1.9	2.0	-4.4	-0.6	.	-0.8	.
Dominican Rep	DOM	19.1	-6.4	18.5	-5.3	4.2	-1.8	-0.5	-0.6	-0.3	-0.7
El Salvador	SLV	18.1	-6.7	15.5	-5.7	3.2	-3.7	-0.1	0.3	0.7	0.7
Guatemala	GTM	11.9	-12.8	10.5	-10.2	7.5	0.4	-1.0	-0.5	-0.1	0.0
Honduras	HND	24.9	0.2	18.8	0.1	8.4	0.4	-0.6	0.0	-0.3	-0.1
Jordan	JOR	37.1	9.8	25.3	-1.2	1.9	-2.9	0.3	0.3	0.1	0.4
Kazakhstan	KAZ	22.5	-9.0	24.2	-1.7	8.2	0.9	-1.0	-0.3	-0.9	-0.6
Kyrgyz Republic	KGZ	27.4	-3.4	20.6	2.8	7.0	-3.6	-1.0	0.0	-0.1	0.6
Mali	MLI	23.4	-3.0	16.5	-2.4	0.5	-8.5	-0.3	0.4	-0.3	0.5
Montenegro	MNE	25.4	-12.0	21.8	-11.3	18.3	12.8	-0.7	0.0	-0.7	-0.5
Nicaragua	NIC	20.1	-4.6	19.4	-0.6	6.4	-1.1	-0.7	-0.1	-0.2	0.0
Nigeria	NGA	39.6	13.3	40.2	22.5	14.5	5.6	-1.4	0.0	-1.3	0.0
Pakistan	PAK	18.5	-10.4	16.4	0.9	3.8	-4.0	-0.7	-0.2	.	.
Philippines	PHL	19.0	-10.0	14.9	-5.4	5.2	-0.9	.	.	.	.
Serbia	SRB	22.4	-14.9	20.7	-12.5	40.6	35.0	-0.7	0.0	.	.
Sri Lanka	LKA	25.0	-3.8	16.1	-4.3	8.7	2.3	0.0	0.3	-0.1	0.2
Tajikistan	TJK	19.2	-12.5	16.0	1.7	21.4	9.2	-1.2	.	-1.2	.
Tanzania	TZA	19.1	-9.1	12.0	-1.7	5.0	-6.3	-0.5	.	.	.
Zambia	ZMB	29.5	2.3	18.2	1.5	20.3	10.3	-0.5	0.2	-0.5	0.2

Indicator Number		Financial Sector						External Sector					
		Domestic credit to private sector, % GDP		Interest rate spread, lending rate minus deposit rate		Money supply (M2), % GDP		Aid, % GNI		Current account balance, % GDP		Exports growth, goods and services	
		23P1		23P2		23P3		24P1		24P2		24P4	
Value Type		AVG	A-P	AVG	A-P	AVG	A-P	AVG	A-P	AVG	A-P	AVG	A-P
Afghanistan	AFG	.	.	.	.	.	.	35.9	.	-2.8	.	23.9	10.8
Armenia	ARM	8.2	-9.0	14.4	4.0	11.7	-11.6	10.6	4.4	-10.8	-2.6	19.8	5.9
Burundi	BDI	25.6	12.2	.	.	23.3	3.6	22.4	-2.9	-9.1	-0.8	14.9	10.3
Djibouti	DJI	26.8	.	9.7	-1.7	56.9	26.0	12.2	.	-7.0	.	6.3	2.3
Dominican Rep	DOM	27.9	-16.9	9.9	1.0	33.7	-23.5	0.6	-2.1	0.7	8.0	.	.
El Salvador	SLV	41.7	9.0	3.5	-7.0	45.0	-4.8	1.5	-3.6	-3.2	4.4	6.6	-1.7
Guatemala	GTM	19.6	-10.9	10.1	-0.6	28.5	-20.1	1.1	-4.4	-5.0	2.6	2.0	-6.4
Honduras	HND	39.4	14.0	8.4	-3.1	50.6	6.0	8.2	0.0	-4.8	3.7	5.7	-3.0
Jordan	JOR	73.3	22.2	5.2	-0.4	125.1	59.5	7.0	5.2	2.5	2.6	9.9	-1.5
Kazakhstan	KAZ	20.2	8.3	4.9	-3.5	20.8	-4.0	0.9	2.1	-1.6	0.1	23.1	10.1
Kyrgyz Republic	KGZ	4.7	0.9	23.3	11.1	14.9	1.3	15.3	3.0	-3.6	5.7	12.7	-1.9
Mali	MLI	18.0	3.3	21.5	8.7	26.7	2.7	14.2	-3.5	-6.7	-0.7	12.5	8.1
Montenegro	MNE	8.1	-6.4	.	.	.	.	10.0	6.2	-13.9	-6.1	23.6	7.5
Nicaragua	NIC	25.2	-3.3	8.7	-2.3	37.8	-9.1	20.4	13.8	-18.1	-10.1	6.3	-2.3
Nigeria	NGA	15.0	23.3	8.0	-4.8	23.1	4.0	0.6	-11.7	0.9	0.0	5.0	0.6
Pakistan	PAK	28.3	-6.9	7.2	-2.3	45.7	-6.4	2.2	-7.9	0.9	0.9	13.6	1.0
Philippines	PHL	37.6	-8.7	4.2	-3.6	62.3	4.6	0.7	-4.5	3.2	2.1	8.0	-3.9
Serbia	SRB	.	.	27.9	20.1	10.7	-28.4	10.0	6.2	-8.0	-0.3	19.2	3.1
Sri Lanka	LKA	30.2	-14.3	4.9	-3.3	38.8	-15.3	2.5	-3.6	-1.7	-2.5	4.3	-7.7
Tajikistan	TJK	17.2	.	14.6	1.5	7.0	-2.9	13.2	.	-3.3	.	9.2	-5.7
Tanzania	TZA	5.6	.	13.7	0.1	18.8	-1.7	13.1	.	-6.4	.	14.8	10.3
Zambia	ZMB	7.4	-6.4	20.4	7.2	21.4	-0.4	17.7	-3.5	-8.8	-1.7	7.3	2.8

External Sector Con't													
		Remittance receipts, % exports		Trade, % GDP		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)	
Indicator Number		24P9		24P10		24S5a		24S5b		24S5c		24S5d	
Value Type		AVG	A-P	AVG	A-P	AVG	A-P	AVG	A-P	AVG	A-P	AVG	A-P
Afghanistan	AFG	37.1	20.6	61.1	-26.3	.	.	.	.	.	.	.	.
Armenia	ARM	2.4	-10.2	74.9	-27.3	.	.	.	.	.	.	.	.
Burundi	BDI	.	.	29.9	-32.1	2.1	.	.	.	0.7	.	3.3	.
Djibouti	DJI	.	.	104.6	23.2	.	.	.	.	.	.	.	.
Dominican Rep	DOM	22.2	-0.6	93.5	-1.0	1.4	.	14.1	.	28.8	.	1.2	.
El Salvador	SLV	50.1	20.2	68.1	-16.7	0.7	.	5.3	.	53.8	.	2.7	.
Guatemala	GTM	36.1	5.4	47.0	-36.0	3.7	.	7.3	.	36.6	.	0.9	.
Honduras	HND	22.7	-10.3	66.3	-11.2	6.8	.	0.7	.	24.9	.	5.3	.
Jordan	JOR	45.1	26.7	110.4	30.4	0.3	.	0.1	.	65.8	.	18.4	.
Kazakhstan	KAZ	0.6	-2.8	96.7	-17.2	1.4	.	53.9	.	20.4	.	17.8	.
Kyrgyz Republic	KGZ	.	.	85.5	-3.8	15.5	.	17.4	.	30.8	.	5.9	.
Mali	MLI	11.1	0.2	65.26	-3.8	81.1	.	0	.	11.6	.	0.4	.
Montenegro	MNE	19.6	-5.5	89.5	-0.6	.	.	.	.	.	.	.	.
Nicaragua	NIC	31.4	-0.4	75.6	-5.3	2.5	.	1.4	.	12.7	.	1.0	.
Nigeria	NGA	9.9	-1.2	72.9	9.7	0.4	.	97.5	.	1.6	.	0.0	.
Pakistan	PAK	16.2	-0.9	36.5	-56.1	1.9	.	1.3	.	84.6	.	0.2	.
Philippines	PHL	24.2	11.8	99.5	-8.1	0.5	.	1.2	.	83.9	.	1.8	.
Serbia	SRB	.	.	68.1	-22.0	.	.	.	.	.	.	.	.
Sri Lanka	LKA	21.5	7.9	79.9	-29.1	1.9	.	0.0	.	74.8	.	2.0	.
Tajikistan	TJK	13.8	-1.7	126.3	44.1	.	.	.	.	.	.	.	.
Tanzania	TZA	.	.	41.0	-18.9	12.5	.	0.6	.	16.9	.	6.4	.
Zambia	ZMB	.	.	72.4	6.8	5.1	.	1.4	.	15.6	.	68.3	.

		External Sector		Science and Technology				Health					
		Structure of merchandise exports (food)		Telephone density, fixed line and mobile		FDI Technology Transfer Index (1 for poor to 7 for excellent)		Life expectancy at birth		Maternal mortality rate, per 100,000 live births		Child immunization rate	
Indicator Number		24S5e		25P3		26P2		31P2		31P3		31S4	
Value Type		AVG	A-P	MRY	A-P	MRY	A-P	MRY	A-P	MRY	A-P	MRY	A-P
Afghanistan	AFG	.	.	5.0	-52.1	.	.	45.0	-16.4	1,900.0	1241.0	61.0	.
Armenia	ARM	.	.	161.7	-148.2	.	.	72.9	4.7	20.0	-46.0	92.5	.
Burundi	BDI	93.8	.	12.4	-20.4	.	.	41.6	-2.1	1,000.0	-226.0	74.5	.
Djibouti	DJI	.	.	49.65	-57.5	.	.	43.0	-7.1	730.0	52.0	67.0	.
Dominican Rep	DOM	37.2	.	387.0	-140.6	4.9	-0.3	67.1	-4.5	150.0	25.0	72.0	.
El Salvador	SLV	37.1	.	292.0	-35.7	4.5	-0.5	70.9	1.0	150.0	-64.0	91.5	.
Guatemala	GTM	51.6	.	349.8	47.0	4.4	-0.6	67.9	-1.7	240.0	6.0	79.5	.
Honduras	HND	62.2	.	156.8	-65.3	4.6	-0.4	68.6	0.3	110.0	-214.0	90.5	.
Jordan	JOR	15.5	.	355.4	-19.9	4.6	-0.4	72.1	1.4	41.0	-97.0	96.5	.
Kazakhstan	KAZ	6.4	.	194.7	-373.2	4.3	-0.4	61.3	-9.0	210.0	256.0	99.0	.
Kyrgyz Republic	KGZ	16.5	.	102.7	-51.3	3.5	-0.8	68.2	3.1	50.9	-240.1	98.5	.
Mali	MLI	7	.	6.3	-47.1	3.8	-0.9	40.6	-5.9	1,200.0	225.0	68.5	.
Montenegro	MNE	.	.	608.3	49.6	3.7	-1.0	73.1	1.3	22.7	-60.3	88.0	.
Nicaragua	NIC	82.1	.	177.3	-89.4	4.2	-0.8	70.1	1.0	230.0	-38.0	81.5	.
Nigeria	NGA	0.5	.	32.5	-22.6	4.7	0.0	44.9	-1.7	800.0	-160.0	30.0	.
Pakistan	PAK	11.8	.	33.5	-84.2	3.8	-1.0	63.8	-1.2	500.0	133.0	60.0	.
Philippines	PHL	5.5	.	445.7	232.7	5.1	0.1	70.8	3.3	162.0	-36.0	79.5	.
Serbia	SRB	.	.	480.0	-78.7	3.7	-1.0	72.8	1.0	13.0	-70.0	88.0	.
Sri Lanka	LKA	20.9	.	236.0	44.9	5.3	0.4	74.4	7.4	92.0	-131.0	96.5	.
Tajikistan	TJK	.	.	63.0	-37.8	4.1	-0.2	66.3	3.4	40.6	-427.4	85.5	.
Tanzania	TZA	63.5	.	29.5	-2.5	5.1	0.3	42.7	-0.9	1,500.0	260.0	96.0	.
Zambia	ZMB	8.9	.	29.4	-12.8	4.7	0.0	52.4	7.2	729.0	-362.0	82.0	.

		Health Con't		Education						Empolymnt and Workforce			
		Prevalence of child malnutrition (weight for age)		Net primary enrollment rate (total)		Persistence in school to grade 5 (total)		Youth literacy rate (total)		Female Labor force participation rate		Labor force (growth)	
Indicator Number		31S5		32P1a		32P2a		32P3a		15P4b		33P3b	
Value Type		MRY	A-P	AVG	A-P	MRY	A - P	MRY	A-P	AVG	A-P	AVG	A-P
Afghanistan	AFG	39.3	.	.	.	.	.	34.3	-41.2	.	.	.	.
Armenia	ARM	2.6	.	.	.	.	.	99.8	3.4	.	.	0.3	-0.1
Burundi	BDI	45.1	.	52.4	-10.8	.	.	66.1	8.8	97.5	21.9	2.1	-0.4
Djibouti	DJI	18.0	.	33.0	-40.3	.	.	.	.	.	.	.	.
Dominican Rep	DOM	5.3	.	93.5	-0.5	.	.	94.0	-1.1	44.3	-7.7	2.2	-0.5
El Salvador	SLV	10.3	.	.	.	68.8	-7.4	88.9	-0.1	51.9	-1.0	2.1	-1.1
Guatemala	GTM	22.7	.	88.5	-3.5	63.4	-11.8	82.2	-5.8	41.2	-12.0	.	.
Honduras	HND	17.0	.	89.0	-1.4	.	.	88.9	4.5	44.7	-10.2	2.8	-0.6
Jordan	JOR	4.4	.	90.7	-0.3	.	.	99.4	12.9	27.9	-3.1	4.0	0.5
Kazakhstan	KAZ	4.2	.	87.2	-6.1	.	.	99.8	-4.3	69.0	9.7	-0.2	0.0
Kyrgyz Republic	KGZ	5.8	.	90.0	2.9	.	.	.	.	68.4	3.2	2.2	1.5
Mali	MLI	33.2	.	42.4	-25.4	79	12.8	32.0	-29.9	87.4	18.9	2.0	-0.6
Montenegro	MNE	1.9	.	96.5	6.3	.	.	99.4	5.7	60.2	5.3	-1.2	-2.4
Nicaragua	NIC	9.6	.	85.4	-6.0	70.7	-3.0	86.2	-0.3	.	.	3.2	0.0
Nigeria	NGA	28.7	.	60.0	-8.1	73.0	6.6	88.6	26.4	53.1	-15.0	2.6	0.0
Pakistan	PAK	38.0	.	.	.	.	.	53.9	-29.2	41.6	-16.3	3.4	0.1
Philippines	PHL	28.0	.	93.4	2.8	76.9	-5.1	95.1	5.0	47.4	-7.2	2.9	0.0
Serbia	SRB	1.9	.	90.7	0.5	.	.	99.3	5.6	57.0	2.1	0.7	-0.5
Sri Lanka	LKA	29.7	.	.	.	.	.	95.6	6.8	67.6	12.7	0.5	-2.6
Tajikistan	TJK	.	.	.	.	102.1	34.8	99.8	15.8	63.7	-6.1	2.4	1.6
Tanzania	TZA	29.4	.	48.9	-14.1	.	.	91.6	34.5	95.5	19.5	2.3	-0.2
Zambia	ZMB	28.1	.	67.1	1.5	78.5	13.6	89.2	29.5	68.5	-3.2	1.8	-0.8

		Agriculture	
		Agriculture value added per worker	
Indicator Number		34P1	
Value Type		AVG	A-P
Afghanistan	AFG	254.8	-54.2
Armenia	ARM	3,000.4	1585.7
Burundi	BDI	103.1	-46.2
Djibouti	DJI	71.2	-340.5
Dominican Rep	DOM	4,142.0	1575.6
El Salvador	SLV	1,644.8	-154.2
Guatemala	GTM	2,280.7	596.7
Honduras	HND	1,093.0	-232.8
Jordan	JOR	919.0	-845.5
Kazakhstan	KAZ	1,274.3	-927.6
Kyrgyz Republic	KGZ	891.7	84.4
Mali	MLI	225.0	-2.1
Montenegro	MNE	.	.
Nicaragua	NIC	1,840.1	305.1
Nigeria	NGA	807.1	597.4
Pakistan	PAK	698.0	197.8
Philippines	PHL	981.7	131.2
Serbia	SRB	.	.
Sri Lanka	LKA	744.2	-84.7
Tajikistan	TJK	371.7	-194.8
Tanzania	TZA	274.6	132.5
Zambia	ZMB	207.2	21.3

Appendix C. Regression Analysis of Real GDP Growth

Dependent Variable: GWTHGDP

Method: Least Squares

Date: 10/24/07 Time: 14:31

Sample (adjusted): 2 185

Included observations: 161 after adjustments

	Coefficient	Std. Error	t-Statistic	Prob.
LPCGDPPPP	-0.146721	0.256985	-0.570933	0.5689
LPOP	0.161010	0.150173	1.072164	0.2854
GRWTHLAB	0.402438	0.175168	2.297446	0.0230
TRADEGDP	0.006912	0.005071	1.362999	0.1750
CENTASIA	4.843892	1.124793	4.306476	0.0000
EEUROPE	2.327920	0.804261	2.894483	0.0044
SSA	0.827548	0.875345	0.945397	0.3460
ESEASIA	1.358536	1.063116	1.277881	0.2033
SASIA	1.158646	1.443949	0.802415	0.4236
NAFRMIDEAST	1.057984	0.870942	1.214759	0.2264
CENTAMER	0.042129	1.083850	0.038870	0.9690
SAMER	0.488819	0.891812	0.548119	0.5845
CARIB	0.064946	1.134608	0.057241	0.9544
OCEANPAC	0.027903	1.369451	0.020375	0.9838
GFIGDP	0.115796	0.031750	3.647095	0.0004
INFL	-0.019171	0.005926	-3.234856	0.0015
C	1.020247	2.722579	0.374735	0.7084
R-squared	0.359178	Mean dependent var		4.858509
Adjusted R-squared	0.287976	S.D. dependent var		2.896564
S.E. of regression	2.444165	Akaike info criterion		4.724873
Sum squared resid	860.2478	Schwarz criterion		5.050239
Log likelihood	-363.3523	Hannan-Quinn criter.		4.856985
F-statistic	5.044464	Durbin-Watson stat		1.990435
Prob(F-statistic)	0.000000			

Dependent variable: Growth of real GDP (GWTHGDP)

Independent variables:

Structural Variables: Log of per capita GDP (PPP) (LPCGDPPPP), log of population size (LPOP), growth of labor force (GRWTHLAB), trade as % GDP (TRADEGDP), regional dummy variables (EEUROPE, SSA, ESEASIA, SASIA, NAFRMIDEAST, CENTAMER, SAMER, CARIB, OCEANPAC)

Proximate Objectives: Gross fixed investment as % GDP (GFIGDP), rate of inflation (INFL)