# Morocco
## Economic Performance Assessment

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# HIGHLIGHTS OF MOROCCO'S PERFORMANCE

| | |
|---|---|
| **Economic Growth** | Annual real GDP growth, underpinned by strong private sector investment, has averaged 4.8 percent over the past five years, but the productivity of investment and labor must increase to achieve higher growth rates. |
| **Poverty** | Morocco's aggregate figures on extreme poverty and inequality compare favorably to the benchmarks, but poverty rates vary greatly by region, and extreme food poverty remains a significant problem. |
| **Economic Structure** | The sector composition of Morocco's economy is very similar to the average of LMI countries. Further structural transformation of Morocco's economy in favor of industry and services would correct gross inefficiencies in Morocco's labor allocation. |
| **Demography and Environment** | A significant demographic transition has taken place. Lower population growth and youth dependency rates should ease job market pressure and demand for public services. Although environmental protection is strong in general, dwindling water supplies and water pollution are significant concerns. |
| **Gender** | Morocco performs poorly on every basic indicator of gender equity except female life expectancy. Poor integration of Moroccan women into the workforce, while reflecting local cultural norms, undermines the country's productive potential. |
| **Fiscal and Monetary Policy** | Despite important gains in managing the budget deficit, fiscal consolidation needs to continue. Efforts to maintain domestic price stability through price subsidies in the face of significant international commodity market pressure present budget risks. Rapid growth of domestic credit heightens future risk of inflation, which has been stable. Maintaining a strong and credible commitment to macroeconomic stability is a crucial element in continuing to attract both domestic and foreign investment and should continue to be a high priority for the government. |
| **Business Environment** | Morocco's Ease of Doing Business ranking deteriorated from 121st in 2006 to 129th in 2007, suggesting that other economies are reforming their business environments faster. The impacts of recent reforms in commercial courts and public procurement are not yet discernable in the indicators. |
| **Financial Sector** | Domestic credit to the private sector and stock market capitalization exceed the regional and comparator benchmarks, though competition in the banking system is nascent and the real cost of credit is high. Recent legal and regulatory reforms should reduce nonperforming loans and improve financial sector competitiveness. |
| **External Sector** | Further reductions in multilateral tariffs and simplification of the trade regime are needed to boost growth. Worker remittances and tourism receipts offset a structural merchandise trade deficit. The removal of remaining disincentives should encourage stronger FDI. Debt is more manageable, and Morocco's foreign exchange reserves are growing. International commodity pressure, however, may push the current account into deficit in 2008. Careful monitoring of the effects of the current global commodity crisis on government finance will be prudent. |
| **Economic Infrastructure** | Morocco's scores on most infrastructure quality indicators are on par with or better than the LMI-MENA and global LMI medians and Turkey's scores, though not as good as Tunisia's scores. Rising airport and port quality scores are laudable. Continued attention to infrastructure investment and quality bode well for Morocco's ability to take advantage of new economic opportunities. |
| **Science and Technology** | Morocco's capabilities in science and technology align with the LMI-MENA median, but comparators Tunisia and Turkey outperform Morocco in certain areas. FDI is perceived positively as a source of new technology. New intellectual property rights laws are consistent with international commitments. |

| | |
|---|---|
| **Health** | Morocco's level of spending on health is low, lower than the benchmarks. Weaknesses in health sector governance underpin these indicators and require urgent attention. |
| **Education** | Morocco lags behind the comparators on most education indicators. The mismatch between expenditure and quantity and quality of educational outputs suggests that the allocation and use of educational resources need to be examined. |
| **Employment and Workforce** | Unemployment, which averaged 10.9 percent (high on an absolute basis) in the five years to 2006, declined to 9.7 in 2006; higher urban unemployment, however, underscores the need for urban job creation. A large gap between male and female labor force participation rates exists, and labor market rigidities persist. |
| **Agriculture** | Despite the important contribution of the irrigated sector to agricultural performance, the sector remains vulnerable to climate change–induced water stresses. Raising agriculture's low and volatile productivity will require improved water management, diversification into higher value products, and support for rural households to pursue nonagricultural livelihoods. |

# MOROCCO: STRENGTHS AND WEAKNESSES—SELECTED INDICATORS

| Selected Indicators, by Topic | Strengths | Weaknesses |
|---|:---:|:---:|
| **Growth Performance** | | |
| Gross fixed investment, % of GDP | X | |
| Incremental capital-output ratio | | X |
| **Poverty and Inequality** | | |
| Percentage of population living on less than $1 PPP per day | X | |
| Human Poverty Index | | X |
| **Demography and Environment** | | |
| Youth dependency rate | X | |
| Adult literacy rate | | X |
| Environmental Performance Index | X | |
| Water availability and quality | | X |
| **Gender** | | |
| Girls' primary completion rate | | X |
| Labor force participation rate, female | | X |
| **Fiscal and Monetary Policy** | | |
| Composition of government expenditures (wages and salaries) | | X |
| Government revenue, % of GDP | | X |
| Inflation rate | X | |
| **Business Environment** | | |
| Ease of doing business ranking | | X |
| Cost of starting a business, % of GNI per capita | X | |
| Procedures to start a business | X | |
| Time to start a business | X | |
| Total tax payable by business, % of operating profit | | X |
| **Financial Sector** | | |
| Money supply (M2), % GDP | X | |
| Domestic credit to the private sector | X | |
| Stock market capitalization rate | X | |
| Interest rate spread | | X |
| Real interest rate | | X |
| Legal rights of borrowers and lenders | | X |
| **External Sector** | | |
| Importance of trade, % GDP | X | |
| Trade in services, % GDP | X | |
| Ease of trading across borders ranking | X | |

| Selected Indicators, by Topic | Strengths | Weaknesses |
|---|:---:|:---:|
| Remittance receipts, % exports | X | |
| Foreign direct investment, % GDP | X | |
| Gross international reserves, months of imports | X | |
| **Economic Infrastructure** | | |
| Telephone density, fixed line and mobile per 1,000 people | X | |
| Quality of infrastructure—ports | X | |
| Internet users per 1,000 people | X | |
| **Science and Technology** | | |
| FDI Technology Transfer Index | X | |
| **Health** | | |
| Public health expenditure, % of GDP | | X |
| Access to improved water source | | X |
| Access to improved sanitation | | X |
| Maternal mortality rate per 100,000 live births | | X |
| Births attended by skilled health personnel | | X |
| **Education** | | |
| Net primary enrollment rate, total | | X |
| Persistence to grade 5, total | | X |
| Youth literacy rate, total and male to female ratio | | X |
| Net secondary school enrollment rate, total | | X |
| Gross tertiary enrollment rate, total | | X |
| **Employment and Workforce** | | |
| Unemployment rate | | X |
| Rigidity of Employment Index | | X |
| Firing costs, weeks of wages | | X |
| **Agriculture** | | |
| Agriculture value added per worker | | X |
| Cereal yield | | X |
| Growth in agricultural value added | X | |

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

# 1. Introduction

This report is one of a series of economic performance assessments prepared for the EGAT Bureau to provide USAID missions and regional bureaus with a concise evaluation of key indicators covering a broad range of issues relating to economic growth performance in designated host countries. The report draws on a variety of international data sources[1] and uses international benchmarking against reference group averages, comparator countries, and statistical norms to identify major constraints, trends, and opportunities for strengthening growth and reducing poverty. The reference groups are all lower-middle-income (LMI) countries and a subset of LMI countries in the Middle East and North Africa (MENA). Comparator countries have similar endowments and usually are selected (with concurrence from the USAID mission) from within the same income group or region. This study uses Morocco's neighbor and trade partner from the Maghreb, the LMI country Tunisia, as one comparator and Turkey, from the other side of the Mediterranean and classified as upper-middle income, as the second.

## METHODOLOGY

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

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

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

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

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

and sustainable growth. These interactions can create a virtuous cycle of economic transformation and human development.

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

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

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

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

**Table 1-1**
*Topic Coverage*

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

## DATA QUALITY AND FORMAT

The breadth and quality of economic data collected for Morocco are good. The World Bank gave Morocco a score of 79 on its 2007 Statistical Capacity Indicator index, which is above the 66 percent average observed in IDA/IBRD LMI countries with a population over one million. A few indicators, however, were either not available (such as some of the poverty indicators) or not updated (notably in the financial, health, and education sectors). These problems do not significantly affect the analysis in the present report.

# 2. Overview of the Economy

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

## GROWTH PERFORMANCE

Morocco fits squarely in the LMI category according to the World Bank's classification. Per capita income, measured in gross domestic product (GDP) per capita in current USD, was $2,368 for 2007, slightly exceeding the median per capita income for LMI-MENA countries as well as the global median for LMI countries ($2,158 and $2,310, respectively). Morocco's income per capita is well below Tunisia's $3,313, which is near the upper-middle-income threshold of $3,596, and much lower than Turkey's per capita GDP of $6,548. When the purchasing power parity (PPP) method is used, a similar picture emerges: Morocco's PPP$6,003 per head is slightly higher than the LMI-MENA and LMI medians (PPP$5,634 and PPP$5,486), but only about two-thirds the income in Tunisia (PPP$9,630) and Turkey (PPP$9,816).

Over the five years to 2007, real GDP growth averaged 4.8 percent per year (Figure 2-1), which is identical to the expected value for a country of Morocco's characteristics and on par with the LMI-MENA median (5.1 percent).

Agriculture accounted for only 16.6 percent of GDP in 2006 (see Economic Structure).  Yet fluctuations in agricultural production, which depends heavily on rainfall (see Agriculture), and the international price of phosphates[4] can affect the economic growth rate. For example, poor rainfall in 2006/07 caused agricultural GDP to fall 16.2 percent in 2007, and the real GDP growth dropped from 8.0 percent in 2006 to 2.5 percent in 2007.[5] The negative impact of agriculture on GDP was mitigated by strong performance in the financial sector (+13.2 percent), construction (+10.4 percent), and communications (+8.8 percent).[6]

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[4] Morocco is the world's leading supplier of phosphates, managed by the state-owned OCP Group.

[5] Bank Al-Maghrib reports annual GDP growth for 2007 of 2.3 percent in "Rapport sur la politique monétaire," December 2007,  8.

[6] Bank Al-Maghrib, op.cit.

**Figure 2-1**
*Real GDP Growth*

***Morocco's real GDP growth fluctuates widely according to agricultural performance.***

| Year | Value |
|------|-------|
| 2003 | 6.1 |
| 2004 | 5.2 |
| 2005 | 2.4 |
| 2006 | 8.0 |
| 2007 | 2.5 |
| **Summary for 2003–2007** | |
| Five-year average | 4.8 |
| Trend growth rate | - |

Source: IMF, World Economic Outlook July 2007                          CAS code: 11P3
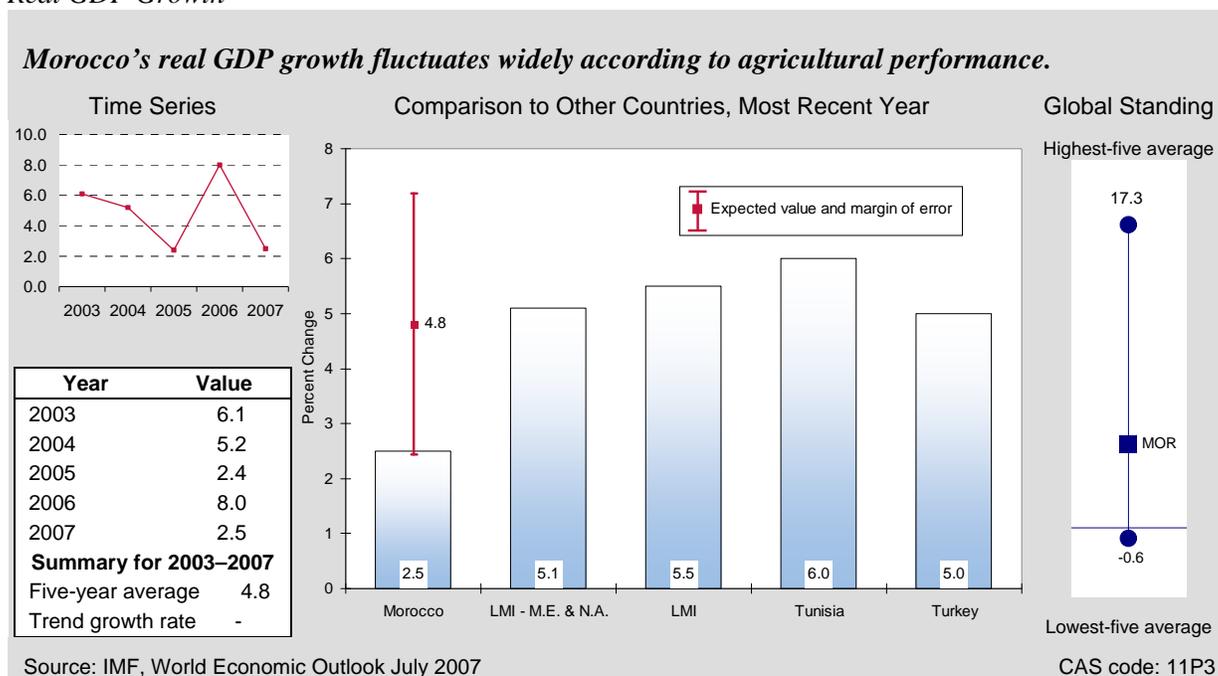
A growth diagnostic conducted by the World Bank in 2006 identified four failures of government policy that help explain Morocco's erratic and non-accelerating growth performance: (1) labor market rigidities (see Employment and Workforce), (2) a burdensome tax regime, (3) the fixed exchange rate regime (for 2 and 3, see Fiscal and Monetary Policy), and (4) antiexport bias despite free trade agreements (see External Sector).[7] In addition, the analysis found that growth is also affected by three market failures: limited circulation of information on intellectual property rights and investment opportunities, weak coordination between the public and private sectors, and lack of investment in human resource training by businesses.

Morocco's growth, however, has been underpinned by superior investment levels (Figure 2-2). Gross fixed investment rose from 25 percent of GDP in 2003 to 29 percent in 2005 and remained at that level through 2007. This investment rate exceeds the LMI-MENA median (24.3 percent) by nearly 5 percentage points and the rates in Tunisia and Turkey (23.2 percent and 17.7 percent, respectively, 2006) by even more. The private sector has been a strong engine of productivity growth—at 25 percent of GDP in 2007, accounting for over 80 percent of gross fixed investment.

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[7] World Bank, *Kingdom of Morocco: Country Economic Memorandum,* Report No. 32948-MOR, March 2006.

**Figure 2-2**

*Gross Fixed Investment, percent of GDP*

*Investment levels are rising and outperform those of all comparators.*



| Year | Value |
|------|-------|
| 2003 | 25.0 |
| 2004 | 27.0 |
| 2005 | 29.0 |
| 2006 | 29.0 |
| 2007 | 29.0 |
| **Summary for 2003–2007** | |
| Five-year average | 27.8 |
| Trend growth rate | 3.7 |

Source: World Bank Country Assistance Strategy November 2007         CAS code: 11S3
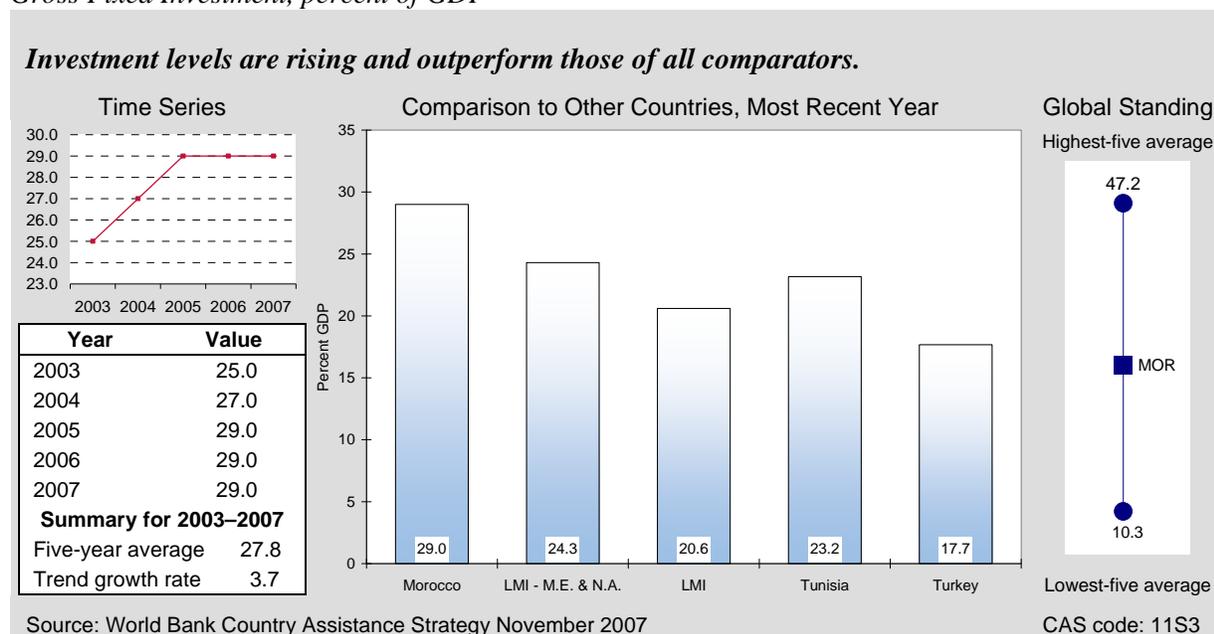
Investment productivity, though, shows scope for improvement, as measured by the incremental capital-output ratio (ICOR).[8] Morocco's ICOR averaged 6.2 during the period 2002–2006, indicating that $6.2 of capital investment was required to achieve an extra dollar of output. Although Morocco's ICOR is not far from the median of 5.1 shared by both LMI-MENA and global LMI countries or from Tunisia's 5.2, investment in Morocco, unlike in Turkey, which has an ICOR of 2.4, cannot be considered efficient.

Labor productivity growth in Morocco also fluctuates with income growth variation. In the five years to 2005, Moroccan labor productivity grew at an average rate of 1.9 percent, though it has ground to a virtual standstill in the past two years. This average compares favorably to the LMI-MENA median of -0.1 and the global LMI median of 1.2. Tunisia and Turkey, where labor productivity growth reached 2.2 percent and 5.8 percent, respectively, in 2005, show that there is ample scope for improvement here as well.

In sum, productivity of both investment and labor must increase for Morocco to achieve the authorities' growth target of 6 percent per year,[9] as well as significant reductions in unemployment, poverty, and social exclusion. Further fiscal consolidation, a more efficient financial sector, deeper integration into the world economy, strengthening of the business environment with more meaningful public–private dialogue, greater transparency and government effectiveness, improvements in health and education services, and the lessening of dependence on the unpredictable agricultural sector could also be pursued to achieve those goals.

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[8] A lower ICOR value indicates higher investment productivity, and an ICOR of 4 or less is considered indicative of efficient investment.

[9] EIU, Morocco Country Profile, March 2007, p, 28.

## POVERTY AND INEQUALITY

Morocco's rate of absolute poverty, defined as the percentage of the population living on less than PPP$1 per day, was less than 2 percent in 2000. This is comparable to the 2 percent in Tunisia in 2000 and significantly less than Turkey's 3.4 percent in 2003. Poverty headcounts according to national poverty lines in Morocco and Turkey show a similar comparison: 15 percent of Moroccans live below the poverty line (2005), whereas 27 percent of the Turkish population lives below the poverty line (2002).[10]

Although Morocco's absolute poverty figure compares favorably to the benchmarks, geographic disparities of poverty within the country—between urban and rural areas, between the faster-growing major cities and the less dynamic, secondary urban areas—belie this favorable aggregate impression. Poverty headcounts range from 2.2 percent in Casablanca and 3.3 percent in Rabat to over 30 percent in Fes and Chefchaouen.[11]

Income inequality is slightly less severe in Morocco than in comparators: in 2000, the poorest 20 percent of Morocco's population received 6.5 percent of income—higher than the 6.0 percent and 5.3 percent of income held by the poorest quintile of the population in Tunisia (2000) and Turkey (2003), respectively.[12]

On the UNDP's Human Poverty Index (HPI), however, which is derived from factors such as life expectancy, literacy, and deprivation in standard of living (access to safe water and child nutrition) in a range of 0 for no deprivation to 100 for high deprivation, Morocco's score was 33.4 in 2005. This score is well above the upper bound of the expected value range (16.0 to 27.1) for a country of Morocco's characteristics and nearly double the medians of LMI-MENA (17.9) and LMI countries (16.8), and the scores for Tunisia (17.9) and Turkey (9.2) (Figure 2-3).

Likewise, the rate of extreme food poverty in Morocco is higher than in the regional benchmarks even though it is below the LMI median: In 2002 the diets of 6 percent of Moroccans fell below minimum energy consumption requirements, while only 2.5 percent of Tunisia's population and 3 percent of Turkey's population suffered from extreme hunger that same year.

The government, with support from donors, aims to improve the poor's access to social services (education, health care, improved water), particularly in rural areas, where two-thirds of the poor reside. To address these challenges, Morocco launched the National Initiative for Human Development 2006–2010.[13] The program is designed to improve accountability and transparency at the local level and improve the use of social and economic infrastructure by the poor.

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[10] Data from other comparators were unavailable.

[11] Figures are from World Bank, *Kingdom of Morocco Poverty Report: Strengthening Policy by Identifying the Geographic Dimension of Poverty,* Report No. 28223-MOR, September 2004, pp. 85-86.

[12] Latest available data.

[13] World Bank, *Country Assistance Strategy for the Kingdom of Morocco,* Report No. 31879-MA, June 14, 2005, p. 1. On the INDH, see http://www.indh.gov.ma/fr/programme_2006-2010.asp. See also World Bank, *Kingdom of Morocco Poverty Report: Strengthening Policy by Identifying the Geographic Dimension of Poverty,* Report No. 28223-MOR, September 2004.

**Figure 2-3**
*Human Poverty Index*

*Human deprivation is much more severe in Morocco than in the comparators.*



Source: UNDP, Human Development Report 2007-2008                         CAS code: 12P1
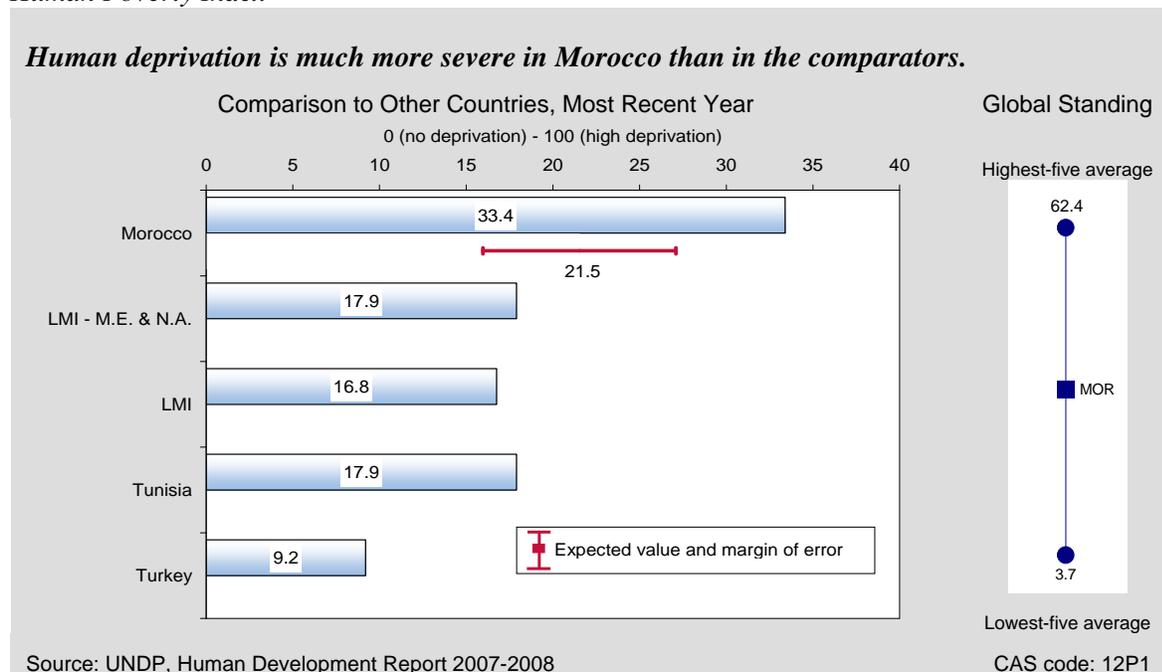
## ECONOMIC STRUCTURE

In the five-year period from 2001 to 2006, Morocco's economic structure was fairly stable. More than half of Morocco's output was generated in the services sector, which accounted for 54.4 percent of value added in 2006. Industry accounted for 29 percent of output, and agriculture for 16.6 percent.

Morocco is very similar to the averages of LMI-MENA and LMI countries globally in its economic structure. The global LMI income group generates 52.9 percent of its output from services, 31.4 percent from industry, and 15.1 percent from agriculture, while LMI-MENA countries average 48.6 percent from services, 33.6 percent from industry, and 11.2 percent from agriculture. In the two comparator countries, however, the services sector is more significant, and agriculture generates a slightly smaller share of output: in Tunisia, services account for 60.3 percent of GDP, and in Turkey, 64.7 percent. As for the share of agricultural value added, Morocco's 16.6 percent is significantly greater than Tunisia's 11.3 percent and Turkey's 12.9 percent.

Comparing data on output and employment reveals that labor productivity is much higher in industry and services than in agriculture.[14] Using five-year averages, the 20.7 percent of the labor force engaged in industry produces 29.9 percent of the economy's output, while the 34.1 percent of the labor force engaged in services produces 54.2 percent of GDP. In comparison, the 45.5 percent of Morocco's labor force engaged in agriculture produces just 15.9 percent of GDP.

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[14] The comparison is imprecise, because labor allocation data lag behind sectoral output data by one year. Nevertheless, they are still useful for indicating orders of magnitude.

This means that each job in industry and services produces over four times as much value added as does each job in agriculture. In the past five years, output has fallen slightly in agriculture and industry (-1.0 percent and -0.9 percent, respectively), while employment has grown (0.8 percent and 0.4 percent, respectively). Moreover, the share of employment in agriculture (45.5 percent) sharply exceeds its expected value of 31.9 percent, while the share of employment in services (34.1 percent) is lower than the expected 49.1 percent (Figure 2-4).

**Figure 2-4**

*Comparison of Output and Labor Force Structures, Most Recent Year*



*Morocco's agricultural sector contributes significantly to national income, but labor productivity is low.*
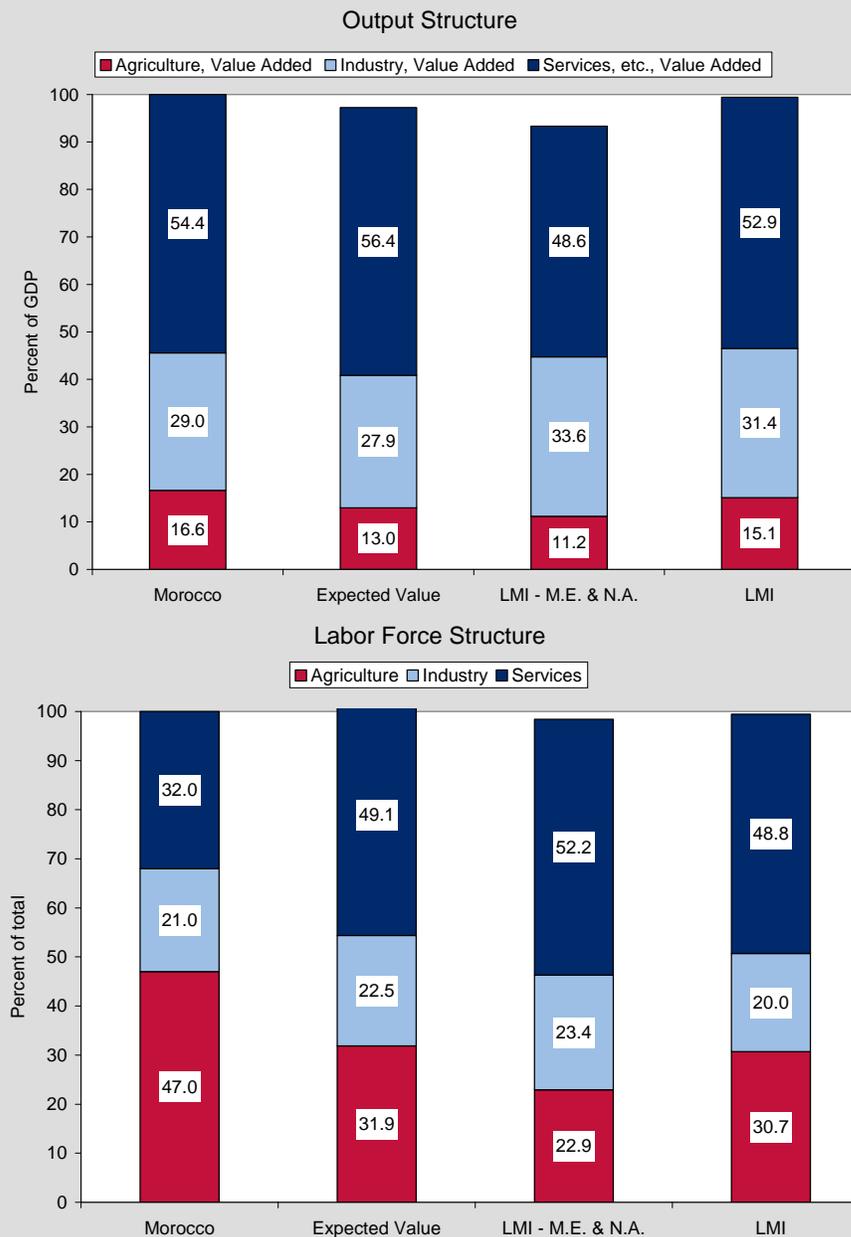
Source: World Development Indicators 2007                                    CAS code: 13P2a-c, 13P1a-c

These figures suggest that Morocco's structural economic transformation has been handicapped in some way, perhaps by social or institutional barriers that prevent agriculturally based labor from acquiring the skills needed to move into services, accessing capital to launch services-based enterprises, or relocating to take advantage of service sector employment. Further structural transformation of Morocco's economy in favor of industry and services would correct gross inefficiencies in Morocco's labor allocation. Although programs to boost productivity in agriculture will be helpful, the central implication is that measures to stimulate more rapid job creation in the industrial and services sectors will be a powerful lever for increasing aggregate labor productivity and overall economic growth.[15]

## DEMOGRAPHY AND ENVIRONMENT

Successful management of Morocco's structural economic transformation relies on the country's ability to meet the challenges posed by population and natural resource dynamics. With just over 30 million people, Morocco has made a significant demographic transition. The population growth rate for Morocco in 2006 stood at 1.2 percent per year. This is nearly half the population growth rate of 2.2 percent in the average LMI-MENA country, and on par with Tunisia's 1.0 percent and Turkey's 1.2 percent. Furthermore, the youth dependency rate—the percentage of the population below age 15 divided by the working-age population (ages 15–64)—declined from 51.3 percent in 2002 to 47.7 percent in 2006 (Figure 2-5). This rate is well below the expected value for a country of Morocco's characteristics (58.0 percent) and the LMI-MENA and LMI medians (64.0 percent and 57.8 percent, respectively). If Morocco maintains its current population growth rate, it can expect to move closer to the lower youth dependency rates observed in Tunisia (36.9 percent) and Turkey (44.0 percent). These trends bode well for Morocco, because a lower youth dependency ratio will ease pressure on the job market and enable the country to cope with demand for education and health services.

In contrast to the demographic transition indicators, however, the adult literacy rate of 52.3 percent in 2006 is of great concern. Not only is it low on an absolute basis, but it is also well below all benchmarks (Figure 2.6). Both Tunisia's rate and the LMI-MENA median are 74.3 percent. The gap is even wider between Morocco's rate and the global LMI median of 87.7 percent, and Turkey's rate of 87.4 percent adult literacy. Low adult literacy reflects a cumulative lack of educational attainment in Morocco and is a barrier to more rapid socioeconomic progress. Adult literacy programs with extensive outreach could help in closing the gap, while more attention to improving education (see Education) will help to ensure that youth who enter the workforce are better prepared for employment that requires higher skills.

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[15] For details of Morocco's Emergence Program to promote investment, see World Bank, *Fostering Higher Growth and Employment in the Kingdom of Morocco,* Country Study 37100, 2006, 74.

**Figure 2-5**
*Youth Dependency Rate*

*A declining youth dependency rate will ease pressure on the job market.*

Time Series

| Year | Value |
|------|-------|
| 2002 | 51.3 |
| 2003 | 50.3 |
| 2004 | 49.4 |
| 2005 | 48.5 |
| 2006 | 47.7 |
| **Summary for 2002–2006** | |
| Five-year average | 49.4 |
| Trend growth rate | -1.8 |

Comparison to Other Countries, Most Recent Year

Expected value and margin of error

Ratio, Youth: Working Age Population

| Morocco | LMI - M.E. & N.A. | LMI | Tunisia | Turkey |
|---------|-------------------|------|---------|--------|
| 47.7 | 64.0 | 57.8 | 36.9 | 44.0 |

58.0

Global Standing

Highest-five average

99.4

MOR

20.1

Lowest-five average

Source: World Development Indicators 2007                    CAS code: 14P2a

**Figure 2-6**
*Adult Literacy Rate*

*Morocco's low literacy rate is impeding the country's growth.*

Comparison to Other Countries, Most Recent Year

Expected value and margin of error

68.9

Percent

| Morocco | LMI - M.E. & N.A. | LMI | Tunisia | Turkey |
|---------|-------------------|------|---------|--------|
| 52.3 | 74.3 | 87.7 | 74.3 | 87.4 |

Global Standing

Highest-five average

99.7

MOR

24.7

Lowest-five average

Source: World Development Indicators 2007                    CAS code: 14P1
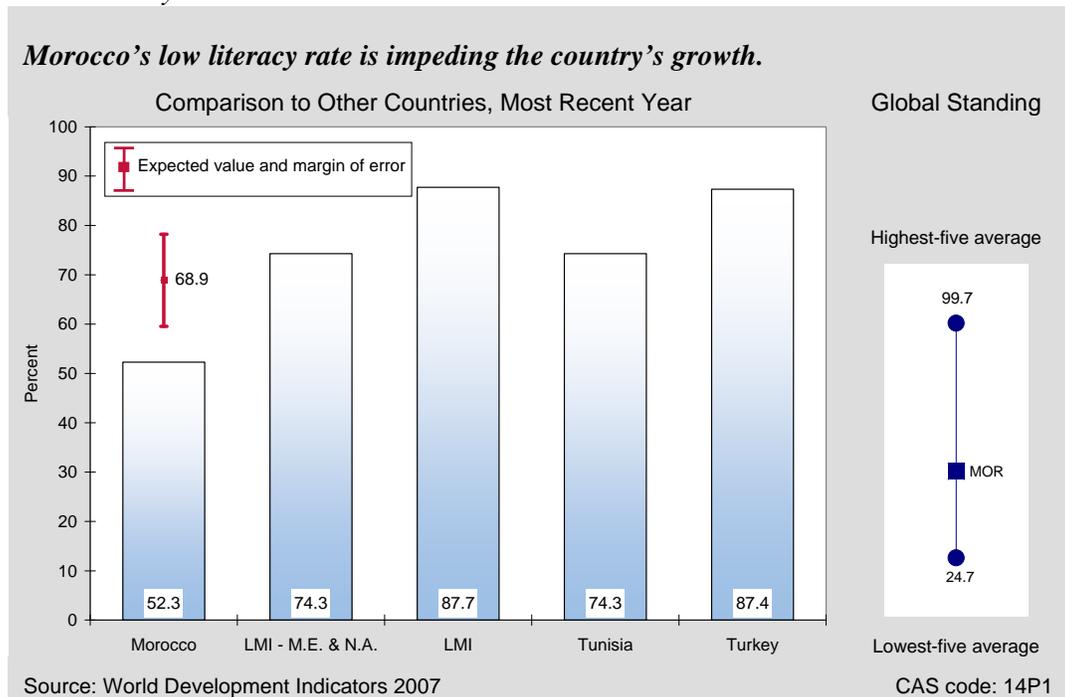
The percentage of Morocco's population living in urban areas, although not high compared to benchmark data, is increasing: from 56.5 percent in 2002 to 59.3 percent in 2006. This level of urbanization is slightly above the global LMI median of 54.3 percent and the expected value of 57.6 percent, but below the LMI-MENA median of 66.2 percent, Tunisia's 65.7 percent, and Turkey's 67.8 percent. Rural-to-urban migration is a response to the low productivity in and low income from agriculture and to attractive opportunities in urban areas.[16] In the long term, urbanization is a healthy feature of structural transformation. But it is occurring relatively rapidly in Morocco—the share of the population living in urban areas grew 2.8 percent in five years in Morocco, in between 2.3 percent in Tunisia and 3.2 percent in Turkey (although in global LMI countries, it grew 7.3 percent). This pace of urbanization intensifies pressure on urban infrastructure and services and underscores the need for investment that will create more jobs in industry and services (see Employment and Workforce).

According to a new international environmental performance index (EPI) that evaluates environmental health and ecosystem vitality in each country, Morocco scored 72.1 (out of 100) in 2007.[17] This is above the expected value for a country with Morocco's characteristics (59.4) and better than the regional (68.1) and global LMI (70.4) benchmarks.

Nonetheless, threats to the availability of specific resources—particularly water—loom. Availability of water resources is crucial to Morocco's high-value horticulture sector (see Agriculture). Although the irrigated sector in Morocco makes up only 14 percent of agricultural land use, it contributes 50 percent of agricultural value added and over 75 percent of value of agricultural exports, while it consumes 85 percent of Morocco's water resources.[18] But climate change, economic policy, and mounting demand for water from other economic sectors are straining the water supply. Anticipating a water shortage—"35 percent of Moroccans could be living in 'absolute scarcity' by 2025"—the World Bank is working with the government on a comprehensive water sector policy framework, linking water use, pollution, and agricultural development.[19]

In addition to growing supply constraints, industrial pollution affects the quality of both coastal and inland water resources. Moreover, by 2020 the volume of wastewater produced in urban areas is expected to more than double 1990 levels.[20] Degradation of the water quality of beaches and rivers therefore threatens growth prospects in key sectors, including tourism and irrigated

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[16]Although unemployment is higher in urban areas, informal livelihood opportunities are greater, as described in *Moving Out of Poverty Study,* World Bank Draft Report No. 39992-MOR, July 2007.

[17] Changes in EPI methodology between 2006 and 2008 preclude comparability of the two reported scores for Morocco.

[18] See World Bank, Program Document for a Proposed Loan to the Kingdom of Morocco for a Water Sector Development Policy Loan, Report No. 37442, March 2007, 6.

[19] World Bank, Water Development Loan Program Document, op. cit., 6.

[20] EIU, Morocco Country Profile 2007, 20.

agriculture, as well as household consumption. Reportedly, the government is working to establish a regulatory framework to slow the damage.[21]

## GENDER

Gender equity is both a fundamental human right and desirable as an instrument that enables faster economic growth by ensuring that the productive capacities of all citizens can be developed and used to their fullest extent. In its 2007 *Moving out of Poverty Study* (MOPS), the World Bank noted that poor Moroccan households' fortunes depend on the ability of female members "to play an independent economic role."[22] When they do, households are significantly less vulnerable to exogenous shocks. Yet despite examples from MOPS of the increased mobility of women, especially younger women, within and outside of Morocco in search of work—for example, as laborers in export-oriented agriculture and food processing or even in Europe,[23] in the aggregate, Morocco performs poorly on every basic indicator of gender equity, with the exception of female life expectancy.

Life expectancy at birth is a fundamental indicator of health conditions. Life expectancy of women in Morocco is 72.7 years (2005), just above the expected value (71.9 years), but somewhat below the 75.6 years in Tunisia and 73.9 years in Turkey (both 2005). Women in Morocco can anticipate outliving their male counterparts by about 4.4 years (2005), which is on par with the expected value for the differential between female and male life expectancies for a country with Morocco's characteristics. This figure is also in line with the average differential between female and male life expectancies in 2005 for LMI countries (5.5 years), Turkey (4.9 years), and Tunisia (4.1 years).

Other gender indicators, however, suggest far greater challenges for Moroccan women. The gross female enrollment rate at all levels of education—54 percent— is dramatically lower than in Turkey (63 percent), the LMI-MENA countries (71.5 percent), LMI countries (72 percent), and Tunisia (77 percent) (2004), as well as the expected value for Morocco of 64.2 percent. Although Morocco has made dramatic improvements in the primary school completion rate for girls, from 54.2 percent to 76.8 percent (2005) within five years, it still lags far behind Turkey (83.0 percent), the global LMI median (94.1 percent), the LMI-MENA country median (96.5 percent), and Tunisia (100 percent) (2005). The education problem transcends gender, however. Morocco's gross male enrollment rate of 62 percent, falls below the LMI-MENA and LMI medians and comparator country averages (see Education).

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[21] Waste water projection and environmental policy recommendations from EIU, Morocco Country Profile 2007, 20.

[22] World Bank, Kingdom of Morocco Moving Out of Poverty in Morocco, Draft Report No. 39992-MOR, July 2007, xii.

[23] "While in many [Moroccan] communities, it is not acceptable for women to travel even small distances to school or leave the house alone, in Khalouta [an urban district near a sugar processing plant in Beni Mellal province] more young women than young men have migrated to Europe." World Bank, *Moving Out of Poverty in Morocco,* Draft Report No. 39992-MOR, July 2007, 36.

The most striking indicator of the poor economic integration of women in Morocco is the low female labor force participation rate. While 86.1 percent of Moroccan males participate in the workforce, only 29.1 percent of females do so. Morocco's female labor force participation rate is dramatically lower than the LMI median of 53 percent but similar to the LMI-MENA median of 28.6 percent and the rates of comparator countries (Tunisia, 31.5 percent; Turkey, 30.3 percent) (Figure 2-7). Although reflecting historical cultural norms, this high degree of gender inequality in the labor market undermines the country's productive potential (see Employment and Workforce).

**Figure 2-7**

*Labor Force Participation Rate, Female*



*Low female participation in the labor force is consistent among regional comparators.*

| Year | Value |
|------|-------|
| 2001 | 27.1 |
| 2002 | 26.9 |
| 2003 | 28.8 |
| 2004 | 29.0 |
| 2005 | 29.1 |
| **Summary for 2001–2005** | |
| Five-year average | 28.2 |
| Trend growth rate | 2.1 |

Source: World Development Indicators 2007

CAS code: 15P4b
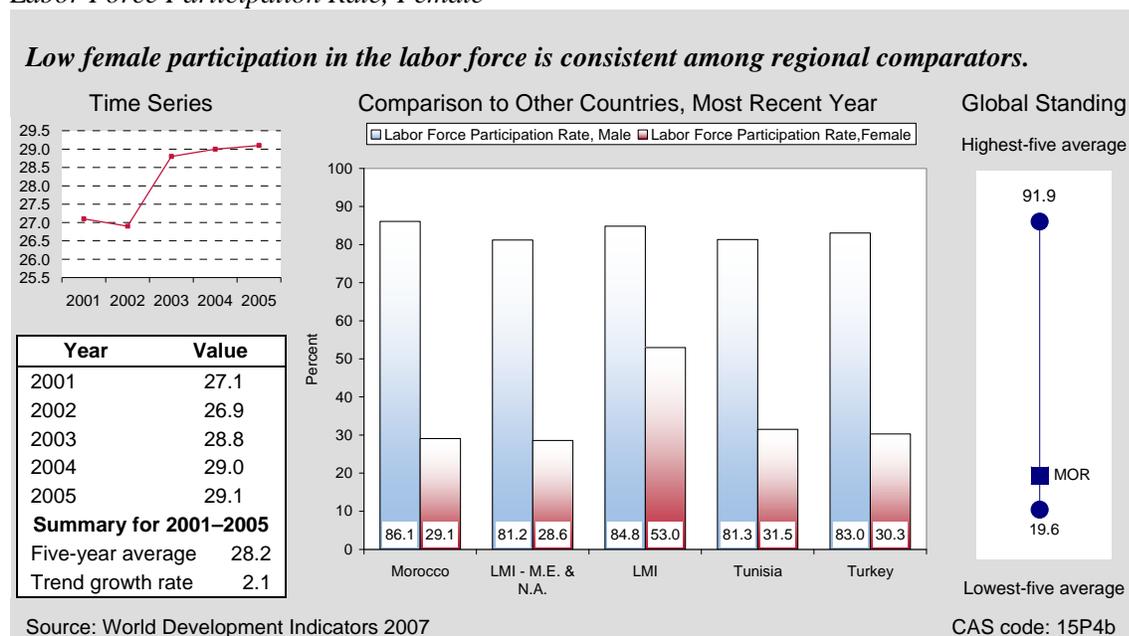
So that all Moroccans can fulfill their productive potential and contribute to national development, policymakers should focus on bridging the education gap between genders by creating culturally acceptable education, job training, and employment opportunities for women.

# 3. Private Sector Enabling Environment

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

## FISCAL AND MONETARY POLICY

Conservative fiscal policy is a stated goal of the Moroccan government. After peaking at 5.2 percent of GDP in 2005, Morocco has achieved important reductions in the government budget deficit, to 2.1 percent in 2006 and an estimated 2.5 percent in 2007 (Figure 3-1). This improvement in fiscal health has been achieved through a combination of expenditure restraint and revenue enhancement.

On the expenditure side, from a high of 29.9 percent in 2005, government expenditures fell to an estimated 26.9 percent of GDP in 2007, which is on par with the expected value of 27.2 percent for a country of Morocco's characteristics. Although an early retirement program implemented in 2005 generated substantial savings on the public sector wage bill, wages and salaries remain by far the largest component of government expenditures. Wages and salaries as a percentage of total expenditures were reduced from 42.1 percent in 2003 to an estimated 38.7 percent in 2007. In spite of this achievement, wages and salaries still make up a larger portion of the Moroccan government expenditures than the LMI-MENA median (34.1 percent) and the global LMI country median (only 23.8 percent) (Figure 3-2), suggesting that further improvements could be made in this area to improve the government's fiscal position.

**Figure 3-1**

*Overall Budget Balance (percentage of GDP)*

***Morocco's budget deficit has been variable but generally has improved in recent years.***

| Time Series | Comparison to Other Countries, Most Recent Year | Global Standing |
|---|---|---|



| Year | Value |
|---|---|
| 2003 | -4.4 |
| 2004 | -4.1 |
| 2005 | -5.2 |
| 2006 | -2.1 |
| 2007 | -2.5 |
| **Summary for 2003- 2007** | |
| Five-year average | -3.7 |
| Trend growth rate | 17.7 |

Source: IMF Article IV, September 2007

CAS code: 21P5
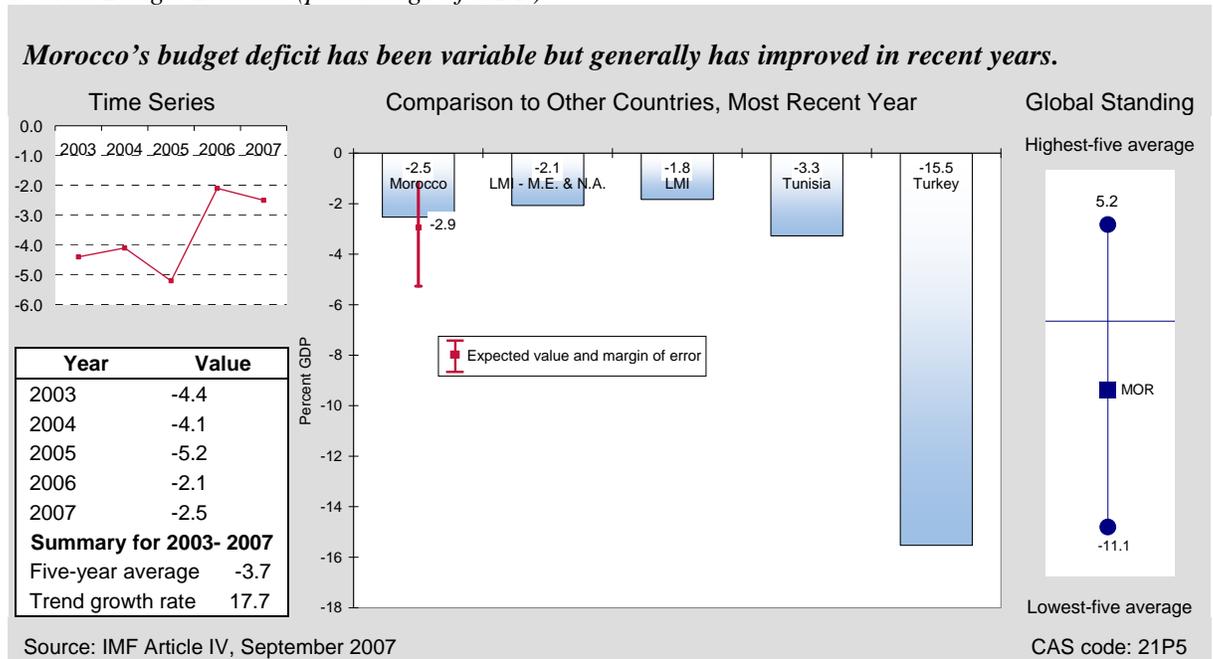
**Figure 3-2**

*Composition of Government Expenditures (Wages and Salaries)*

***Expenditures on public sector wages have decreased steadily but remain high.***

| Time Series | Comparison to Other Countries, Most Recent Year | Global Standing |
|---|---|---|



| Year | Value |
|---|---|
| 2003 | 42.1 |
| 2004 | 41.9 |
| 2005 | 39.6 |
| 2006 | 39.9 |
| 2007 | 38.7 |
| **Summary for 2003- 2007** | |
| Five-year average | 40.4 |
| Trend growth rate | -2.2 |

Source: IMF Article IV, September 2007

CAS code: 21S1a
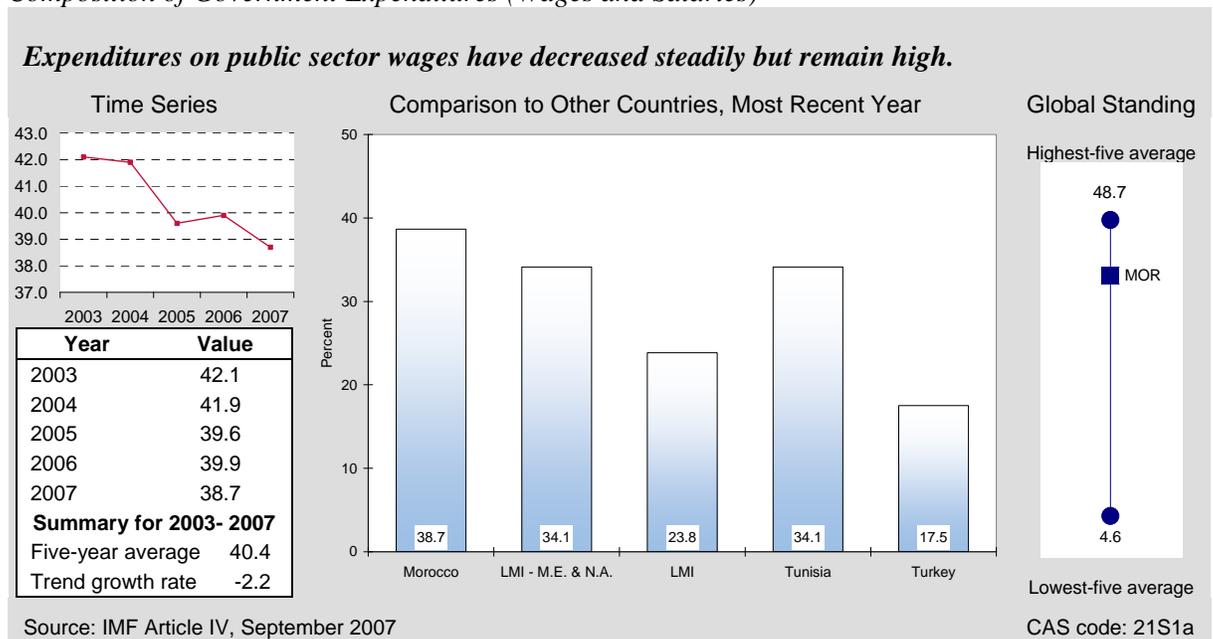
In addition to public sector wages, the cost of consumer subsidies has historically weighed on public expenditures in Morocco. Seeking to maintain stable consumer prices for food and petroleum, government expenditures on commodity price subsidies peaked at nearly 5 percent of GDP in 1974, at the height of the global oil and commodity price boom, and rose to nearly 3 percent of GDP in 1981 and again in 1985, setting the stage for structural adjustment reform

programs in the 1980s and 1990s.[24] In the face of mounting civil unrest due to food price inflation historically and in recent days,[25] the government's desire to maintain domestic price stability is understandable. The government uses tariff reductions and subsidies to mitigate the effect of surges in international commodity prices[26] on the domestic market.[27] In 2005 the cost of food and petroleum subsidies crept back up to 2.2 percent of Morocco's GDP, although a return to indexing retail petroleum product prices to international oil prices helped abate the subsidy burden, projected to be 1.7 percent of GDP in 2007. [28] Prospects for 2008, however, are worrisome. The EIU, assuming $75 per barrel oil, projected that consumer subsidies in 2008 would equal two-thirds of the investment budget.[29] With a barrel of crude oil selling for $115 in late April 2008, the situation revives the specter of fiscal strain and mounting debt caused by growing consumer subsidy costs. Providing consumer subsidies to improve efficiency and reduce costs, a topic of intense discussion during the structural adjustment period, is once again on Morocco's consultation agenda with the IMF.[30]

On the revenue side, performance has improved because of strengthened tax administration and a broader tax base, which have offset the impact of lower external tariffs.[31] Indeed, government revenue increased from 21.7 percent of GDP in 2003 to an estimated 24.2 percent in 2007 (Figure 3-3). This may be explained, in part, by the government's ability in the recent past to draw on exceptional revenues from privatization and contributions from parastatal organizations such as the Moroccan Phosphates Board to help finance public spending.[32] The most recent estimate, however, is still below the median in LMI-MENA countries (29.7 percent), as well as the revenue yields for Tunisia and Turkey, at 28.7 percent and 35.0 percent of GDP, respectively (2006). Thus, despite important gains, revenue mobilization in Morocco is still weak for an LMI country. Furthermore, although taxes on international trade (as percentage of revenue) dropped from 13.3 percent in 2002 to 11.5 percent in 2005, it is still high compared to the global LMI

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[24] Brendan Horton, *Morocco: Analysis and Reform of Economic Policy,* EDI Development Policy Case Series, no. 4 (Washington: World Bank, 1990).

[25] Rioting took place after a 30 percent increase in the price of bread was announced in September 2007, recalling severe food price-related riots in the early 1980s (see H. Tuluy and L. Salinger, *Trade, Exchange Rate, and Agricultural Pricing Policies in Morocco,* Washington: World Bank, 1989).

[26] For example, early 2008 world prices of wheat and corn have risen by 145 percent and 99 percent, respectively, compared with averages in the 2000–2007 period.

[27] Bank Al-Maghrib, op.cit., p. 17.

[28] IMF, Morocco: 2007 Article IV Consultation – Staff Report, No. 07/323, September 2007, p. 18. The previous peak, in 2000, was 2.6 percent of GDP for food subsidies.

[29] EIU, Morocco Country Profile 2008, p. 11.

[30] Policy options for reducing the fiscal burden of consumer subsidies were a topic of intense policy debate in Morocco in the 1980s and 1990s. For more recent perspective, see IMF, Article IV 2007, p. 9.

[31] Ibid.

[32] World Trade Organization, *Morocco Trade Policy Review: Secretariat Report,* "Economic environment," 2003.

median of 7.9 percent, and Tunisia's 6.7 percent, and very high compared to Turkey's 0.9 percent.[33]

**Figure 3-3**

*Government Revenue (percentage of GDP)*



*Government revenue is improving but remains low compared to benchmarks.*

| Time Series | Comparison to Other Countries, Most Recent Year | Global Standing |

| Year | Value |
|------|-------|
| 2003 | 21.7 |
| 2004 | 22.5 |
| 2005 | 23.9 |
| 2006 | 25.3 |
| 2007 | 24.2 |
| **Summary for 2003–2007** | |
| Five-year average | 23.5 |
| Trend growth rate | 3.4 |

Comparison to Other Countries, Most Recent Year (Percent GDP):
- Morocco: 24.2 (Expected value 25.5)
- LMI - M.E. & N.A.: 29.7
- LMI: 26.0
- Tunisia: 28.7
- Turkey: 35.0

Global Standing:
- Highest-five average: 51.8
- MOR
- Lowest-five average: 6.9

Source: IMF Article IV, September 2007                          CAS code: 21P2

Morocco's money markets have been swamped in recent years with unprecedented liquidity, owing to the strong performance of expatriates' remittances (see External Sector) and privatization receipts. This has produced a steep increase in the rate of growth of the money supply. In 2007, the broad money supply expanded by 18.5 percent, which is nearly double the rate observed in 2003 (9.9 percent). By comparison, the monetary growth rate is 11.6 percent in Tunisia and 25.7 percent in Turkey (2006). By far the largest component of money growth has been domestic credit to the private sector.

Despite the rapid expansion of the money supply, inflation in Morocco is moderate. The inflation rate estimated for 2007 is 2.5 percent (down from 3.3 percent in 2006),[34] compared with the 4.9 percent median of other LMI-MENA countries, the 3.0 percent in Tunisia, and the 8.2 percent in Turkey. Indeed, pegging Morocco's dirham to a basket of currencies dominated by the euro (reflecting the weight of Morocco's trade with Europe in its overall trade) has helped to stabilize the economy and moderate the inflationary impact of dollar-denominated commodity price surges.[35] The recent strengthening of the euro vis-à-vis the U.S. dollar, however, may hurt the

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[33] Tunisia's figure is from 2005, while Turkey's benchmark is from 2001, the latest year for which our standard source reported this measure.

[34] Morocco's central bank, Bank Al-Maghrib forecast a rate of 1.4 percent for 2007 in its December 2007 quarterly report.

[35] EIU, Morocco Country Profile 2007, p. 32.

country's export competitiveness outside the euro zone, as the value of the dirham is pulled up by the importance of the euro in the dirham's basket.[37] Furthermore, upward pressure on domestic consumer prices has been restrained by government de-taxation or subsidies on three essential goods: sugar, wheat flour, and petroleum products.[38]

The fiscal and monetary policy picture that emerges is thus clear: Despite the important gains Morocco has made in reducing expenditures and enhancing revenues, fiscal consolidation must continue if resources to address social concerns are to be freed up. Efforts to maintain domestic price stability in the face of significant international commodity market pressure present renewed budget risks, however, and the rapid growth of domestic credit to the private sector heightens inflation risks. Maintaining a strong and credible commitment to macroeconomic stability is a crucial element in continuing to attract domestic and foreign investment and should continue to be a high priority for the government.[39]

> *IMF Program Status for Morocco[36]*
>
> *Morocco's August 2007 Article IV consultation with the IMF concluded with the IMF Executive Board's praise for Morocco's "remarkable economic progress in recent years." The country's policy mix was deemed "appropriate," although the risk of future inflation was underscored as a management challenge for Bank Al-Maghrib. The IMF Executive Board urged Morocco to pursue continued economic growth, aspiring to per capita income levels observed in emerging market OECD economies, to "further reduce unemployment and poverty."*

## BUSINESS ENVIRONMENT

Institutional barriers to doing business, including corruption in government, are critical determinants of private sector development and prospects for sustainable growth. The World Bank's composite Ease of Doing Business index places Morocco at an unsatisfactory 129th of 178 countries in 2007. This ranking is lower than Morocco's ranking from 2006 of 121st. The deterioration is due in large part to a fall from 53rd to 102nd place with regard to registering property, which in turn is due to increases in the number of procedures and in the costs required. The lower ranking also suggests that other economies are reforming their business environment faster than Morocco. Looking at the comparator countries, Tunisia ranks 88th and Turkey 57th, demonstrating that Morocco has ample scope for improvement (Figure 3-4).

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[36] Summarized from the IMF's Public Information Notice No. 07/98, August 9, 2007.

[37] The IMF notes that "while there are no indications of exchange rate misalignment, opening up the capital account heightens the need to prepare for exiting the current peg of the dirham." IMF, Article IV 2007, p. 15. Bank Al-Magrib reported that the dirham had depreciated slightly in late 2007 vis-à-vis the euro ("Rapport sur la politique monétaire," p. 25). See also the discussion of Morocco's competitiveness due to its currency peg in World Bank, *Fostering Higher Growth and Employment in the Kingdome of Morocco,* Country Study 37100, 2006, p. 35.

[38] EIU, Morocco Country Profile 2007, p. 33.

[39] As per the IMF's 2007 Article IV report, p. 9.

**Figure 3-4**

*Ease of Doing Business Ranking*

***Morocco's Ease of Doing Business ranking is very low: 129 of 178 countries.***

Comparison to Other Countries, Most Recent Year
Index Rank (1 - 178)



Source: World Bank Doing Business Indicators 2007                    CAS code: 22P2
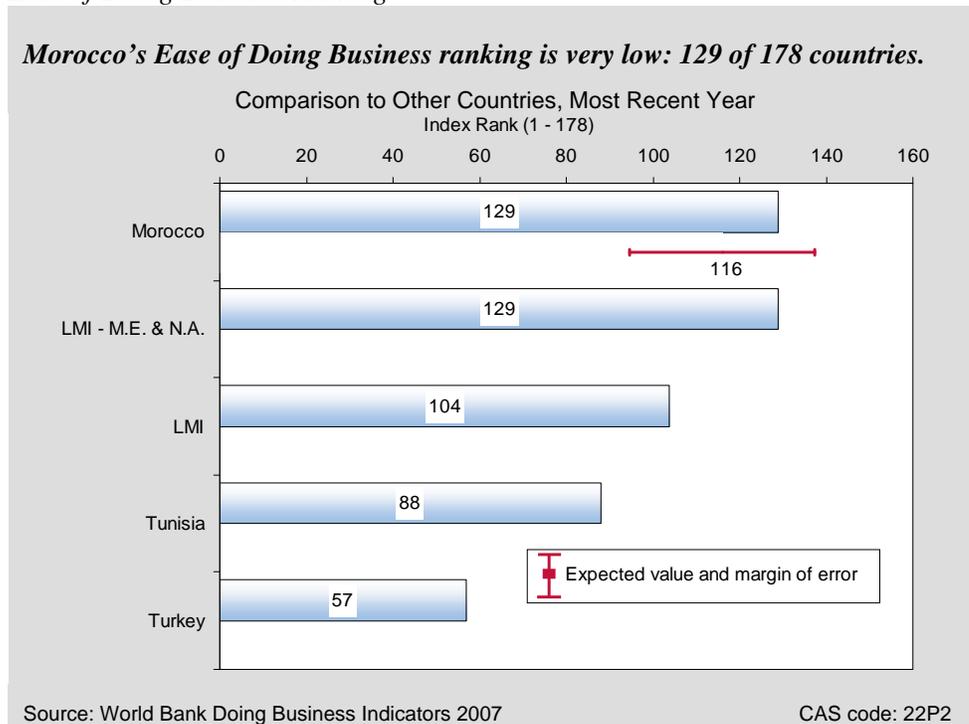
There are, however, a few bright spots in the business-enabling environment. According to the indicators, Morocco has dramatically reduced barriers to start a business. The cost of starting a business as a percentage of GNI per capita declined from 26.6 percent in 2003 to 11.5 percent in 2007. Morocco's 11.5 percent compares favorably with the much higher median cost in LMI-MENA (52.3 percent), the global LMI country median cost (33.3 percent), and the cost in Turkey (20.7 percent), though not as favorably as the cost in Tunisia (8.3 percent) (2007) (Figure 3-5). Likewise, the number of procedures required to start a business fell from 11 to 6, in line with the number for Turkey (6 procedures) and better than in Tunisia (10 procedures) during the same period. The time required to start a business in Morocco also declined in the same period, from 36 to 12 days. Morocco's 12 days compares with 6 days in Turkey and 11 days in Tunisia. Moreover, the Moroccan government has instituted significant reforms in other areas of the business environment, strengthening the commercial courts and improving the transparency of public procurement—the impacts of which are not yet discernable in the indicators.

**Figure 3-5**

*Cost of Starting a Business, percent of GNI per capita*

**Morocco has dramatically reduced the cost of starting a business.**



| Year | Value |
|------|-------|
| 2003 | 26.6 |
| 2004 | 13.7 |
| 2005 | 13.4 |
| 2006 | 12.7 |
| 2007 | 11.5 |
| **Summary for 2003–2007** | |
| Five-year average | 15.6 |
| Trend growth rate | -17.5 |

Source: World Bank Doing Business Indicators 2007                    CAS code: 22S1
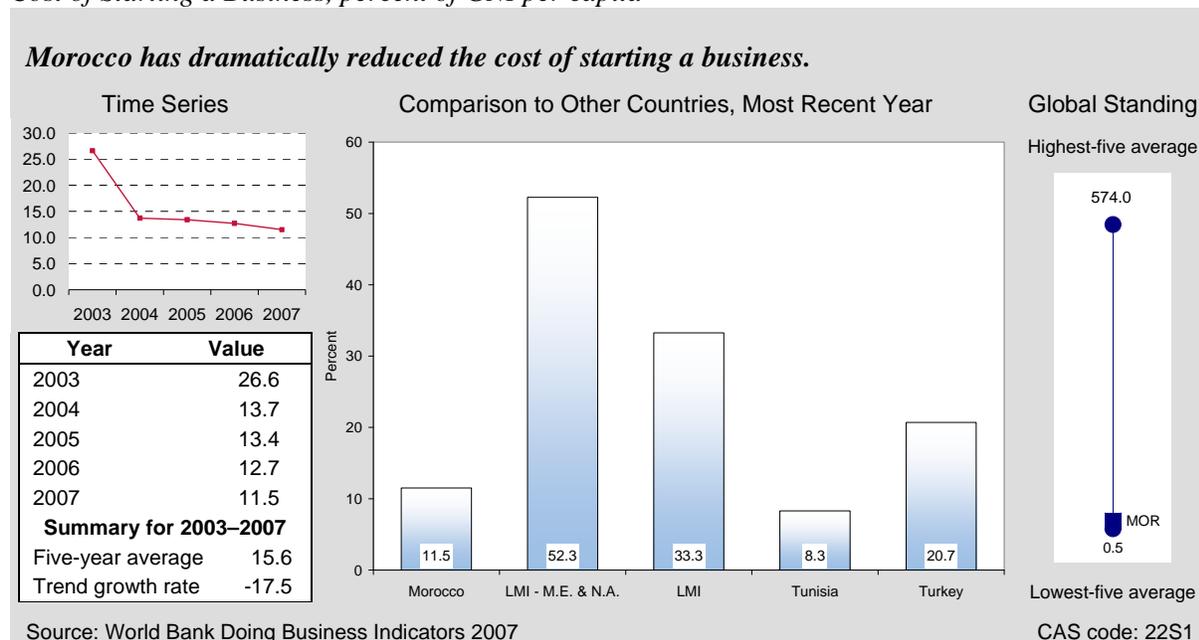
Most of Morocco's scores on the other business environment indicators examined for this report —control of corruption, government effectiveness, regulatory quality, and rule of law—compare favorably to the LMI regional medians, but not to Turkey's or Tunisia's scores.

Businesses in Morocco also face a high tax burden. Doing Business estimates that the total taxes payable by a standard business amount to 53.1 percent of operating profit in Morocco, which is higher than the LMI-MENA median of 47.1 percent, the LMI median of 41.6 percent, and the 45.1 percent in Turkey. Tunisia alone among comparators imposes a higher tax burden on businesses by this measure (61 percent).

In sum, despite its recent improvements, Morocco still has a long way to go in establishing a truly friendly business environment, with meaningful private–public sector dialogue and transparency and effectiveness of government service delivery, as an instrument to stimulate and improve investment performance, increase productivity, and foster growth.

## FINANCIAL SECTOR

A sound and efficient financial sector is a key to mobilizing savings, fostering productive investment, and improving risk management. In Morocco, the indicators for financial sector performance paint a mixed picture.

Some indicators exceed the regional and country comparison benchmarks and show positive development in recent years. For example, Morocco's ratio of broad money to GDP (a basic gauge of the development of the banking system) rose from 82.4 percent to 106.6 percent over the five years to 2007. The 2007 ratio is better than the expected value (70 percent) and far better than the global median for LMI countries (38.1 percent in 2003), as well as ratios in Turkey (47 percent in 2006) and Tunisia (58.8 percent in 2006), and the LMI-MENA median (71.6 percent in 2006). Likewise, domestic credit to the private sector rose from 51.6 percent to 72.3

percent of GDP over the same period. Here, too, the 2007 score well exceeds the expected value (47.7 percent), the global LMI median (only 23.7 percent in 2003), the LMI-MENA median (39.6 percent in 2006), Turkey's score (31.7 percent in 2006), and even Tunisia's score (65.4 percent in 2006) (Figure 3-6).[40]

**Figure 3-6**
*Domestic Credit to Private Sector (percentage of GDP)*



*Domestic credit to the private sector has been consistently strong.*

| Year | Value |
|------|-------|
| 2003 | 51.6 |
| 2004 | 52.5 |
| 2005 | 55.9 |
| 2006 | 59.0 |
| 2007 | 72.3 |
| **Summary for 2003- 2007** | |
| Five-year average | 58.3 |
| Trend growth rate | 7.9 |

Source: Morocco Central Bank                                          CAS code: 23P1
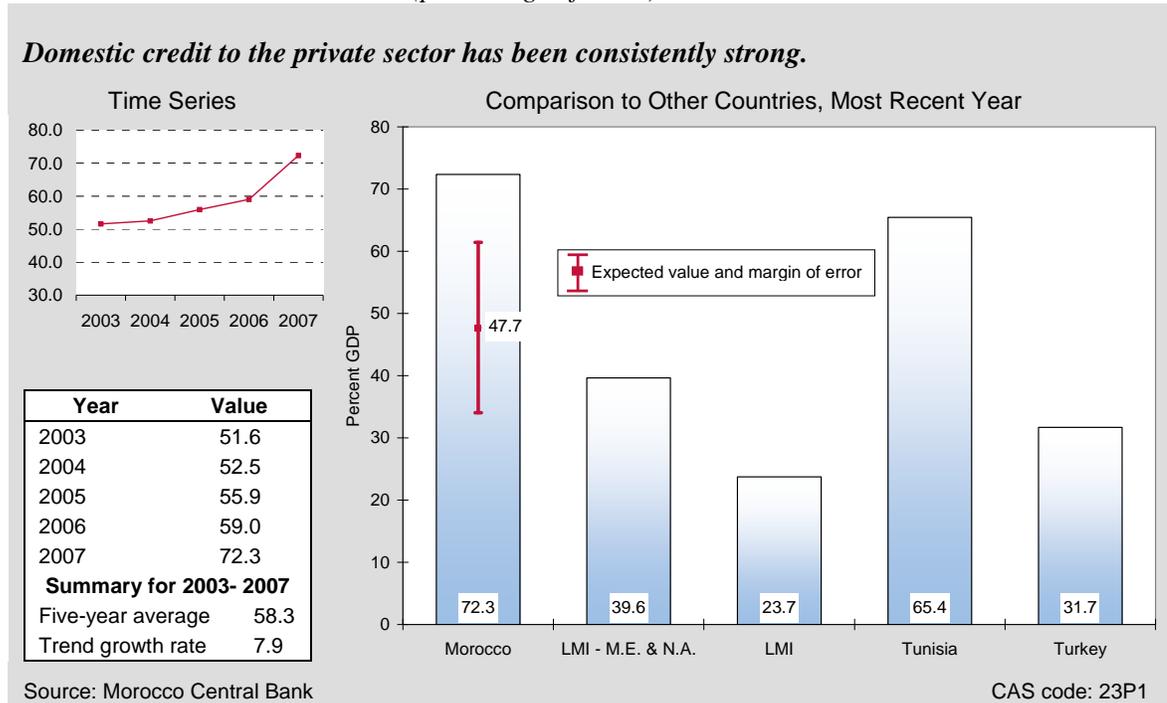
Another financial sector indicator trending upward in Morocco is the improvement in the stock market capitalization rate, a primary indicator of financial sector development for emerging economies. The ratio of stock market capitalization to GDP surged from 23.8 percent in 2002 to 86.1 percent in 2006. The capitalization ratio is well above the LMI-MENA median (78.7 percent) and quite advanced compared with Tunisia's and Turkey's scores (14.7 percent and 40.3 percent, respectively).

Nevertheless, competition within the banking sector is nascent. Dated data on the spread between lending and deposit rates and the real interest rate on loans demonstrate inefficiencies and risks in the financial intermediation process in Morocco. The interest rate spread stood at 7.9 percentage points in 2004 (latest year), which is high compared with the expected value for a country of Morocco's characteristics (5.9 percentage points) and also exceeds the global LMI median of 7 percentage points. A wider performance gap is observed when Morocco's cost of capital, measured by the real interest rate (bank lending rate after adjusting for inflation), is compared to the benchmarks. Morocco's real interest rate of 9.9 percent in 2004 (latest year) is very high

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[40] This aggregate indicator, however, says nothing about the distribution of access to capital, which may be skewed in some way.

compared to the LMI-MENA and global LMI medians of only 3.8 percent and 5.8 percent, respectively.[41]

Indeed, "serious problems" have been noted by observers in the Moroccan financial sector's ability to provide local firms with credit at reasonable rates of interest.[42] A 2005 banking sector survey by Bank Al-Maghrib suggested that as much as 44 percent of public banks' and 12 percent of commercial banks' loan portfolios are nonperforming, and that less than 4 percent of borrowers are responsible for 44 percent of nonperforming loans (although the IMF noted more recently a drop in nonperforming loans).[43] Also worrisome is the concentration of banking activity in publicly owned banks, which together make up 40 percent of the total banking sector balance sheet.[44]

In response to these shortcomings, the World Bank extended a $200 million loan (2005–2007) to improve the competitiveness of the financial sector by strengthening the legal, regulatory, and supervisory framework, increasing private participation in the banking sector, improving the transparency of corporate and accounting standards, and strengthening the financial information infrastructure, many dimensions of which were codified in the 2006 banking law.[45] Soundness of lending practices should also be enhanced by the inauguration, in early 2008, of a privately managed credit bureau.

Regarding the institutional foundations for financial sector development, Morocco receives a score of 3.0 on the World Bank's index of Legal Rights of Borrowers and Lenders for 2007, on a scale of 0 (poor) to 10 (excellent). Although comparable to all benchmark data, on an absolute basis the score is very low and highlights the need for further legal and regulatory reform to reduce the cost of and improve access to credit (Figure 3-7). Morocco's credit information index, 1.0 on a scale of 0 (poor) to 6 (excellent), is also exceedingly low, both absolutely and relative to the 4.0 of Tunisia and 5.0 of Turkey (while LMI-MENA also scores a poor median 1.8).

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[41] Comparable data are not available for Tunisia and Turkey.

[42] World Bank assessment, as cited in EIU, Morocco Country Profile 2007, p. 4.4.

[43] EIU, Morocco Country Profile 2007, p. 45. See also IMF, Article IV 2007, p. 11.

[44] Four public financial institutions—the Banque Nationale de Développement Economique, Fonds d'Equipement Communal, Crédit Immobilier et Hotelier, and Caisse Nationale de Crédit Agricole—were the object of restructuring as part of the recently concluded Financial Sector Development Policy loan. See World Bank, "Financial Sector Assessment Morocco," 2003, and World Bank, *Financial Sector Development Policy Loan Program Document,* Report No. 34357-MA, 2005.

[45] Ibid. See also IMF, Article IV 2007, p. 11.

**Figure 3-7**
*Legal Rights of Borrowers and Lenders Index*

*Further regulatory reforms are necessary in Morocco.*

Comparison to Other Countries, Most Recent Year

0 (Very poor performance) - 10 (Excellent)

| | |
|---|---|
| Morocco | 3.0 |
| LMI - M.E. & N.A. | 3.0 |
| LMI | 3.7 |
| Tunisia | 2.0 |
| Turkey | 3.0 |

Source: World Bank Doing Business Indicators 2007          CAS code: 23S1
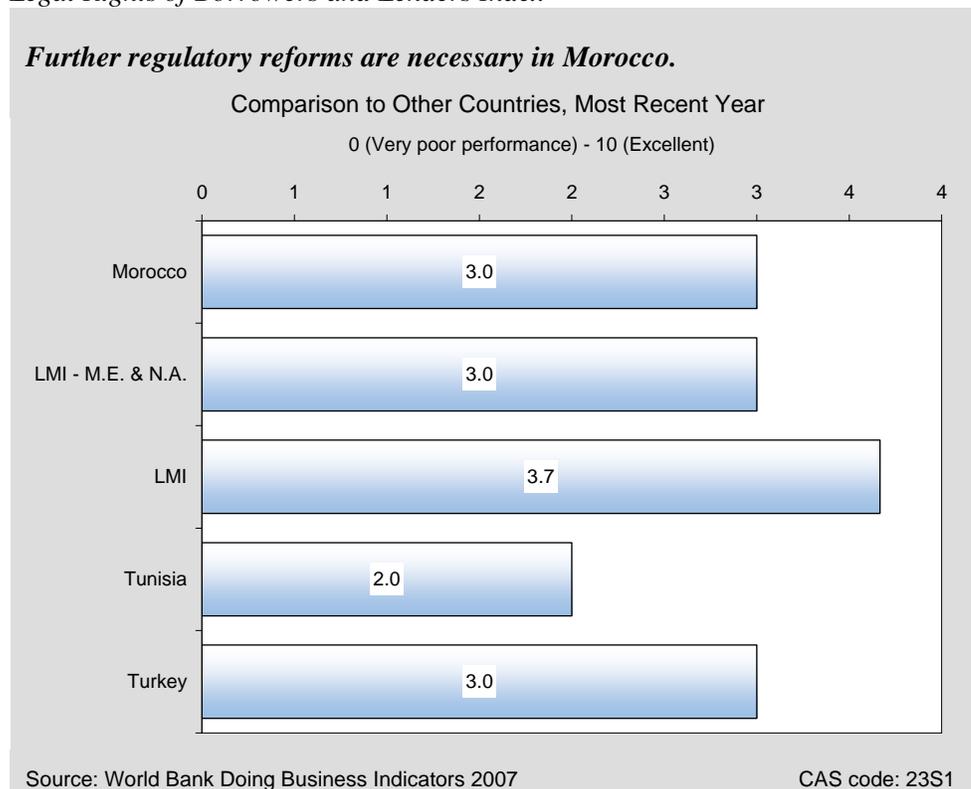
## EXTERNAL SECTOR

Fundamental changes in international commerce and finance, including reduced transport costs, advances in telecommunications technology, and lower policy barriers, have fueled a rapid increase in global integration in the past 25 years. The international flow of goods and services, capital, technology, ideas, and people offers great opportunities for Morocco to boost growth and reduce poverty by stimulating productivity and efficiency, providing access to new markets and ideas, and expanding the range of consumer choice. At the same time, globalization creates new challenges, including the need for reforms to take full advantage of international markets and cost-effective approaches to cope with the resulting adjustment costs and regional imbalances.

## International Trade and Current Account Balance

Morocco's integration into the world economy is growing, notably through its Association Agreement with the European Union, the first part of which, covering free trade in industrial products, came into operation in 2000. Discussions on the free trade of agricultural goods are ongoing. Spurred on by the EU's Barcelona Declaration for a Euro-Mediterranean partnership, the process of regional integration among Arab Mediterranean countries was launched with the signing of the Agadir Agreement in 2004, establishing free trade among Morocco, Tunisia, Egypt, and Jordan. Bilateral free trade agreements (FTAs) were implemented by Morocco with the United Arab Emirates in 2003 and with the United States and Turkey in 2006. Morocco also

has tariff agreements with Algeria, Guinea, Iraq, Libya, Mauritania, Saudi Arabia, and Senegal, and is pursuing them in other emerging markets around the globe.[46]

Total trade in Morocco (exports plus imports of goods and services) has risen from 69.1 percent of GDP in 2003 to 82.1 percent in 2006 (Figure 3-8). The latest ratio is on par with the LMI-MENA median (81.4 percent), slightly above the expected value (76.4 percent), and higher than Turkey's 62 percent. It falls short, though, of reliance on trade in Tunisia, where total trade equals 108.7 percent of GDP.

**Figure 3-8**

*Trade, percent of GDP*



*Trade is becoming increasingly important to Morocco's economy.*

| Year | Value |
|------|-------|
| 2002 | 70.9 |
| 2003 | 69.1 |
| 2004 | 73.2 |
| 2005 | 80.8 |
| 2006 | 82.1 |
| **Summary for 2002–2006** | |
| Five-year average | 75.2 |
| Trend growth rate | 4.5 |

Source: World Development Indicators, IMF Article IV September 2007          CAS code: 24P10
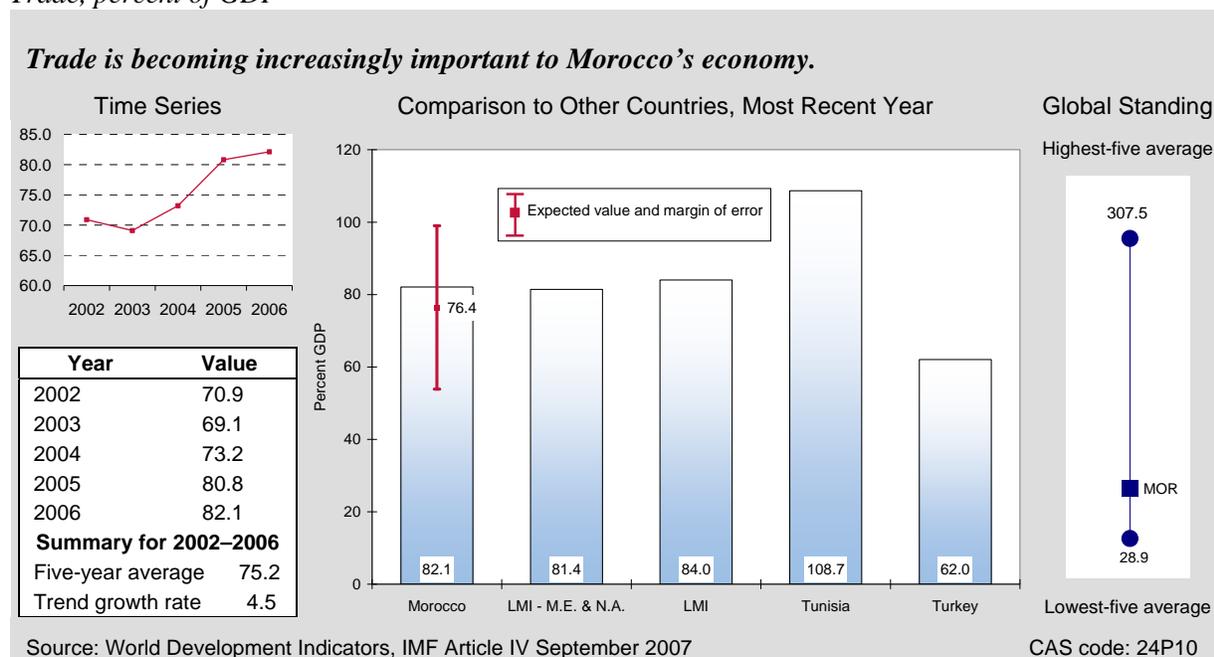
Morocco's trade balance is negative, and going deeper into the red.[47] Current account inflows from tourism and expatriate workers' remittances partially offset the deficit in merchandise trade, and should be encouraged.

Morocco's key merchandise exports are manufactures (65.2 percent of total), food products (21.5 percent), and ores and minerals (especially phosphate) (9 percent). Manufacturing is significantly more important in Morocco's exports than the medians for LMI-MENA (30.6 percent) and LMI countries (38.0 percent), but less important than in Tunisia's and Turkey's exports (77.6 percent and 81.6 percent, respectively).[48] Food exports are more significant for Morocco (21.5 percent) than for Tunisia (11.1 percent) or Turkey (10.5 percent).

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[46] EIU, Morocco Country Profile 2007, 28

[47] According to the EIU, "Morocco's merchandise trade balance runs a structural deficit, with exports (FOB) historically covering around 70 percent of imports (CIF), although with the rise in oil prices over the past few years, this ratio has widened noticeably." EIU, Morocco Country Profile 2007, 48

[48] Morocco's and Turkey's export decomposition data are from 2005, while Tunisia's are from 2004.

Morocco's merchandise export base, though, is more diversified than that of Tunisia or the median for LMI-MENA countries. Morocco's top three export items (apparel, fertilizer, and inorganic chemical elements)[49] averaged 28.1 percent of total exports over the five years to 2005, which is a less concentrated share than the median top three exports in LMI-MENA countries (35.6 percent) and the top three exports in Tunisia (38.4 percent). Turkey's exports are more diversified than Morocco's, with its top three export items amounting to only 16.4 percent of total exports in 2005.

Not surprisingly, given Morocco's export structure, intermediate and final manufactures comprise the largest share of merchandise imports in Morocco (61.9 percent), as in Turkey (68.7 percent) and Tunisia (72.0 percent) (all figures, 2005).[50] Morocco, however, relies more on imports for fuel and food than the two comparators. In 2005, 21.5 percent of Morocco's total merchandise imports were of fuel, compared with 14 percent in Turkey and 13.7 percent in Tunisia. Morocco relies on imports of crude oil, petroleum, and coal for 95 percent of its energy needs.[51] Food imports as a share of total merchandise imports are 10.6 percent in Morocco, 2.9 percent in Turkey, and 8.5 percent in Tunisia. These figures—Morocco's disproportionately large shares of fuel and food imports—underscore the country's vulnerability during the current surges in commodity prices.

From 2001 to 2005, exports of goods and services grew by an average of 4.7 percent per year, and at more than 8 percent in 2005 and 2006 (latest year), reflecting growth in exports of manufactured goods and tourism. This growth compares favorably to the LMI-MENA median of 3.9 percent and the global LMI country median (5.4 percent), as well as Tunisia's 3.9 percent export growth (2006). Again, Turkey performed better than all benchmarks, with 14.3 percent export growth in the same year. Not surprisingly, given the strong growth in its tourism industry, Morocco's trade in services as a percentage of GDP increased during the period under review, from 18.1 percent of GDP in 2001 to 23.1 percent in 2005. Morocco's 2005 trade in services as a percentage of GDP exceeds all the benchmarks (also for 2005): Turkey (10.4 percent), LMI-MENA median (17.3 percent), global LMI median (17.8 percent), and Tunisia (21.6 percent).

An increasingly favorable policy environment has helped improve Morocco's trade performance. Morocco's score on the Trade Freedom Index (TFI) compiled by the Heritage Foundation, which gauges the degree of freedom from quantitative trade restrictions (tariffs) and nonquantitative trade restrictions (nontariff barriers) on a scale of 0 to 100, with 100 a complete absence of tariffs and nontariff barriers, has improved notably, from 34.2 in 2004 to 62.6 in 2008. Its improvement notwithstanding, Morocco's TFI score is low both in absolute terms and in comparison with the scores of benchmark countries—2008 TFI scores are 71.8 for Tunisia and 86.8 for Turkey—and

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[49] Data aggregated according to SITC-Rev. 3 classification.

[50] Merchandise import decomposition data from World Bank's World Development Indicators, accessed March 2008.

[51] The government's policy agenda includes developing alternative, renewable energy resources (e.g., wind and solar) to reduce dependency on imports, improve energy sector efficiency, and gradually reduce or eliminate consumer subsidies on petroleum products. See World Bank, *Program Document for Proposed Loan to the Kingdom of Morocco for an Energy Sector Development Policy Loan,* Report No. 37350-MOR, May 2007, pp. 6-7.

thus has room for improvement. The Heritage Foundation cites persistent trade barriers, such as import regulations, restrictions on access to service markets, and prohibitive tariffs, that increase the cost of trade and pull down Morocco's score. [52] Further trade liberalization, although important to growth, is difficult for the government, which is constrained by the continued importance of trade taxes to revenue (see Fiscal and Monetary Policy) and the desire to maintain domestic price stability and protect farms and firms.[53]

Morocco has also made recent improvements in the ease with which goods are imported into or exported out of the country. From 2006 to 2007 Morocco's ranking in ease of trading across borders improved from 89th to 67th of 178 economies covered by the index. It is now easier to trade with Morocco than with the median LMI-MENA country (the median rank is 88th). Morocco's successful customs administration reform in the early 2000s has been cited as "best practice."[54] Tunisia and Turkey's rankings—28th and 56th, respectively—however, show that there is till scope for improvement.

Moroccan worker remittance inflows figure prominently in offsetting the structural merchandise trade deficit. Morocco ranks among the world's top 10 recipient countries of worker remittances from abroad measured in dollar value. Between 2003 and 2007, remittances, measured as a percentage of annual export earnings, remained stable at an average 30.6 percent (Figure 3-9). This large influx of foreign exchange indicates extensive work opportunities for Moroccans outside the country, as well as a lack of attractive job opportunities within the country. Remittances typically bolster private consumption and savings (including through real estate assets); they are used less commonly for productive investment.[55] Morocco has simplified trade and investment procedures to encourage remittances and promotes direct investment by expatriates through the Hassan II Foundation for Moroccans Residing Abroad. The economic growth effects of remittances could be enhanced if more remittance income were channeled into productive investment.

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[52] A weighted average tariff rate of 13.7 percent in 2005 masks prohibitive tariffs in certain product areas. For instance, tariff bindings notified to the WTO for sensitive food product imports are in excess of 100 percent, though these do not reflect actual applied rates. Heritage Foundation, *Index of Economic Freedom 2008,* Morocco, http://www.heritage.org/research/features/index/country.cfm?id=Morocco, accessed April 24, 2008.

[53] EIU Country Profile, 2007, pp. 28, 49.

[54] James T. Walsh, "New Customs," *Finance & Development,* 43, 1, March 2006, based on Luc De Wulf, "Best practices in customs reform – lessons from Morocco," PREM Notes, No. 67, World Bank, April 2002.

[55] As summarized in Jacques Bouhga-Hagbe, "Altruism and Workers' Remittances: Evidence from Selected Countries in the Middle East and Central Asia," IMF Working Paper WP/06/130, May 2006, p. 5.

**Figure 3-9**

*Remittance Receipts (percentage of Exports of Goods and Services)*

*Moroccan worker remittances are a prominent component of export earnings.*

| Time Series | Comparison to Other Countries, Most Recent Year | Global Standing |
|---|---|---|

| Year | Value |
|---|---|
| 2003 | 31.7 |
| 2004 | 32.0 |
| 2005 | 29.7 |
| 2006 | 30.1 |
| 2007 | 29.5 |
| **Summary for 2003–2007** | |
| Five-year average | 30.6 |
| Trend growth rate | -2.1 |

Comparison to Other Countries, Most Recent Year:
Morocco 29.5 (19.8), LMI - M.E. & N.A. 13.8, LMI 8.3, Tunisia 9.6, Turkey 0.8

Global Standing: Highest-five average 102.3, MOR, Lowest-five average 0.0

Source: IMF Article IV September 2007                      CAS code: 24P9

Morocco's current account balance has been consistently positive for several years, averaging a surplus of 2.5 percent of GDP over the five years to 2007. However, in spite of a rise in Morocco's merchandise export earnings, remittances inflows, and tourism receipts in 2007, the combination of rising food imports due to weak harvests and skyrocketing commodity prices pushed up the value of imports, closing the surplus. The September 2007 IMF Article IV consultation report projected a current account surplus of 1.8 percent of GDP (including official transfers) for 2007, while the EIU's January 2008 country profile estimates that Morocco's current account might have "slipped into deficit for the first [time] since 2000," estimating a deficit in 2007 of 2.6 percent of GDP.[56] The government will need to carefully monitor the effects of the global commodity crisis on government finance to avert another structural adjustment showdown, as in the 1970s and 1980s.

## Foreign Investment, External Assistance, and International Reserves

The other half of Morocco's balance of payments also looks bright, with a minor deficit on capital account and strong surpluses in the financial account leading to growth in reserves.

In July 2007, Morocco announced its intention to liberalize its capital account gradually.

> "Measures include (a) a reduction in the surrender requirement on export proceeds; (b) the partial liberalization of trade-related credit and payments; (c) the broadening of the range of transactions that can be covered by currency hedging instruments, and extending the maximum maturity allowed; and (d) the partial liberalization of

[56] EIU, Morocco Country Report, January 2008, p. 8

> outward portfolio investment by banks, insurance companies and mutual funds, as
> well as foreign direct investment by firms."[57]

Morocco's financial account surplus is a result of strong direct and portfolio investment performance, whose inflows exceed the value of debt service payments. Foreign direct investment (FDI) can catalyze productivity gains and growth by transferring technology, developing human capital, and enhancing competition. The flow of FDI into Morocco, linked partly to significant telecommunications privatizations, averaged 3.3 percent of GDP during the five-year period 2003 to 2007. This five-year average compares favorably with the expected value for a country like Morocco (1.8 percent), and to all regional and country benchmarks (a median of 2.5 percent for LMI countries and Tunisia, and 2.7 percent in Turkey [2005]) (Figure 3-10). Notwithstanding this strong performance, FDI levels could improve further and contribute more to Morocco's development, particularly if red tape were eliminated and legal and regulatory weaknesses were addressed (see Business Environment).

**Figure 3-10**
*Foreign Direct Investment (percent of GDP)*



**FDI levels in Morocco exceed all benchmarks, boding well for future growth.**

| Year | Value |
|------|-------|
| 2003 | 4.6 |
| 2004 | 1.5 |
| 2005 | 2.6 |
| 2006 | 3.6 |
| 2007 | 4.0 |
| **Summary for 2003- 2007** | |
| Five-year average | 3.3 |
| Trend growth rate | 6.0 |

Source: IMF Article IV September                                    CAS code: 24P5
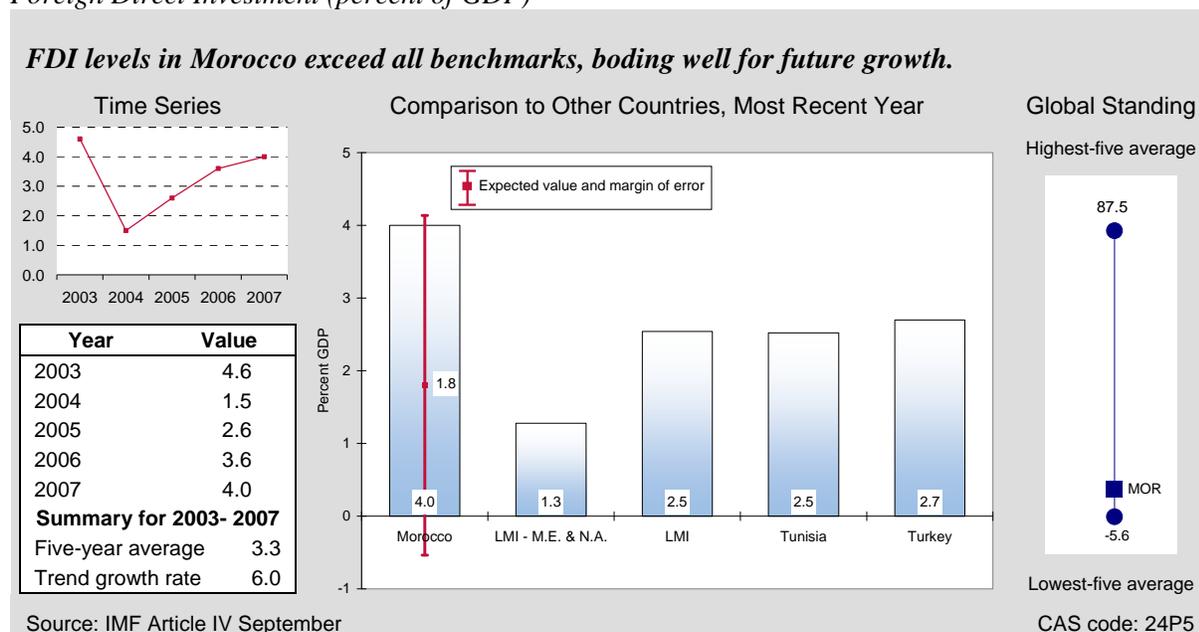
Interest payments on foreign debt are a constant drain on the current account, although Morocco's payments have fallen steadily. A debt management campaign involving debt buy-backs and swaps has sharply reduced the size and cost of the public external medium- and long-term and commercial debt stock.[58] With rising export earnings, the debt service ratio, expressed as a percentage of export value, has become more manageable. From 2001 to 2005, debt service was reduced from 22.2 percent of exports to 12.6 percent. This is a substantial improvement that places Morocco well below the debt service ratio threshold of 20 percent that is often considered the sustainable maximum. This is despite the fact that the 2005 level of debt service in Morocco

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[57] IMF, op. cit., p. 32.

[58] EIU, Morocco Country Profile 2007, p. 52

is above the expected value (9.0 percent) and the global LMI median (9.7 percent). Morocco's debt service ratio is, however, on par with indicators for Tunisia and Turkey (12.7 percent and 12.8 percent, respectively). Likewise, the present value of debt obligations fell from 39.2 percent of gross national income (GNI) in 2004 to 34.2 percent in 2005 (latest year). By this measure, Morocco outperforms the expected value of 55.0 percent of GNI, as well as Tunisia and Turkey (69 percent and 59.1 percent, respectively).

A positive bottom line is seen in Morocco's balance of payments with the net accumulation of foreign exchange reserves. The size of Morocco's gross international reserves from 2003 to 2007 remained fairly stable, averaging 8.1 months of import requirements throughout the period. Normally, at least 4 months of import cover is considered a prudent minimum to hedge against trade shocks. Thus, Morocco's level of reserves—double the prudent minimum—is very healthy.

## ECONOMIC INFRASTRUCTURE

Reliable physical infrastructure—for transportation, communications, power, and information technology—is critical for improving competitiveness and expanding productive capacity. Morocco's scores on most infrastructure quality indicators are on par with or better than the LMI-MENA and global LMI medians, as well as Turkey's scores. Tunisia, however, receives better scores on all indicators except Internet usage.

Responses to the World Economic Forum's Executive Opinion Survey led to Morocco's Overall Infrastructure Quality score for 2007 of 3.5 on a scale of 1 (poor) to 7 (excellent). Morocco's score is in line with the median score for LMI-MENA countries of 3.6 and Turkey's 3.7 and is better than the LMI median score of 3.0. Tunisia, however, outperformed all with a score of 5.0.

A widely used indicator of the extent to which a country's road network performs well is the percentage of roads that are paved. According to World Bank data (2004), 56.9 percent of roads in Morocco were paved. There is a wide differential between the LMI country median (49 percent) and LMI-MENA country median (65.9 percent), and Morocco's performance falls between these. Tunisia's performance exceeds that of Morocco (65.8 percent), while Turkey lags significantly behind (41.6 percent).

Telephone density, measured as the number of fixed lines and mobile subscribers per 1,000 people, has also improved greatly, bolstered by competition from providers in the wake of telecommunications privatization. Although much lower than Tunisia's and Turkey's rates (691.85 per thousand and 868.5 per thousand, respectively), Morocco's telephone density in 2005 of 455.6 per thousand significantly exceeds the LMI and LMI-MENA medians (245.5 per thousand and 353 per thousand, respectively) and is more than double its density of 206.8 per 1,000 people just five years earlier.

Facile and low-cost access to information and communications technology (ICT) is key to promoting economic growth. Morocco has undergone dramatic increases in the use of ICT in the five-year period 2001–2005, far exceeding the expected values. For example, the number of Internet users per 1,000 people jumped from a mere 13.9 people in 2001 to 152.6 people in 2005. Information technology usage in Morocco far surpasses the LMI country median (51.9 per

thousand), the LMI-MENA country median (58.5 per thousand), and even Tunisia's rate (95.1 per thousand) (Figure 3-11).

**Figure 3-11**
*Internet Users per 1,000 people*



*Internet use in Morocco has soared in recent years.*

| Year | Value |
|------|-------|
| 2001 | 13.9 |
| 2002 | 24.0 |
| 2003 | 33.9 |
| 2004 | 117.3 |
| 2005 | 152.6 |
| **Summary for 2001–2005** | |
| Five-year average | 68.3 |
| Trend growth rate | 63.8 |

Source: World Development Indicators 2007                CAS code: 25P1
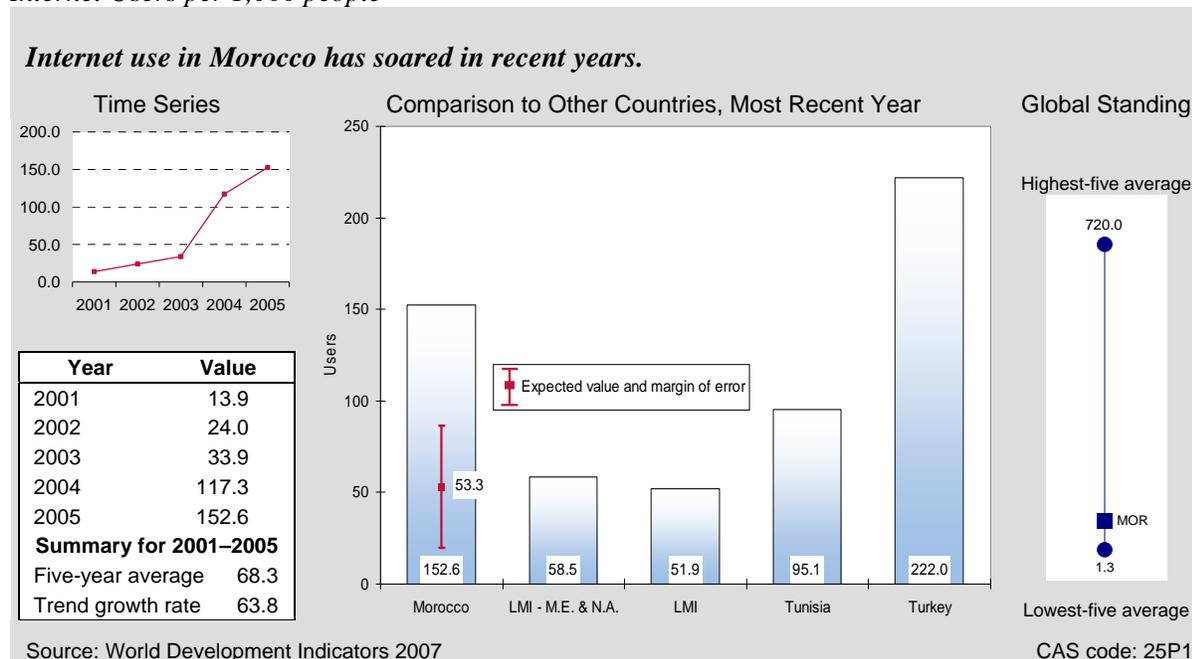
Morocco has also pursued investment to modernize its electricity and port infrastructure. On the quality-of-infrastructure index (0 [low] to 7 [high]), Morocco in 2007 had scores of 5.2 for electricity and 4.1 for ports. These scores exceed those of the regional benchmarks, including those of Turkey (4.3 for electricity and 3.4 for ports), though not those of Tunisia (5.7 for electricity and 4.8 for ports). These scores are also increases over the 2006 levels. For air transport quality, which is crucial for attracting foreign visitors, Morocco's score also increased, to 4.7 in 2007, exceeding the scores of LMI and LMI-MENA countries, though lower than the scores for Turkey (5.1) and Tunisia (5.4). Continued attention to infrastructure investment and quality will improve Morocco's ability to take advantage of new economic opportunities.

## SCIENCE AND TECHNOLOGY

Science and technology are vital to a dynamic business environment and are a driving force behind increased productivity and competitiveness. Even for LMI countries such as Morocco, transformational development depends on acquiring and adapting technology from the global economy. Lack of capacity to access and use technology prevents an economy from leveraging the benefits of globalization. Unfortunately, few indicators are available to judge performance in this area for low- and lower-middle-income countries. From the limited information available, in general, science and technology capability in Morocco is comparable to the median of LMI-MENA countries. Tunisia and Turkey outperform Morocco in certain areas, but not consistently.

UNESCO compiles international data on research and development (R&D) spending. The latest data for Morocco, Tunisia, and Turkey are from 2002. At that time, R&D spending amounted to

0.6 percent of GDP, which is equivalent to R&D spending in Tunisia and Turkey (0.6 percent and 0.7 percent, respectively) and exceeds the expected value of 0.4 percent.[59]

Morocco's indicators demonstrating local capacity for science and engineering—availability of scientists and engineers and the number of scientific and technology journal articles published per million people—are on par with the LMI-MENA median.

On the World Economic Forum (WEF) Index of the availability of scientists and engineers, Morocco's score of 4.9 in 2007 on a scale of 1 (poor) to 7 (excellent) falls between Turkey's 4.7 and the LMI-MENA median of 5.1. Tunisia's performance is better, with a score of 5.6.

The number of scientific and technology journal articles published in Morocco every year averaged 451 over the five years to 2003, nearly double the median publication rate in LMI-MENA countries (242 articles per million) and much more than the LMI country median (20 articles per million). By this measure, Morocco's performance is on par with that of Tunisia (452 articles per million). Turkey's 6,224 articles published per million people in 2003, however, significantly surpasses all other benchmarks.

Executives' perceptions of the role of FDI in bringing new technology to Morocco are fairly positive. For the WEF's FDI Technology Transfer index, survey respondents gave Morocco a score of 5.1 on a scale of 1 (poor) to 7 (excellent) in 2007. In addition to being a positive score in absolute terms, it also slightly exceeds most benchmarks: Turkey, at 4.8; the LMI-MENA country median of 5.0; and the LMI median of 4.7. With regard to protection of intellectual property rights (IPR), Morocco's 17/97 law brings Morocco into compliance with its IPR commitments under WTO and its free trade agreements.[60] The country received an IPR protection score of 3.8 in 2007 (up from 3.5 in 2006, where 1 is poor and 7 is excellent), which is on par with the LMI-MENA median score of 3.6 and Turkey's 3.4, but below Tunisia's score of 4.6.

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[59] Data from LMI and LMI-MENA groups are unavailable.

[60]  The Moroccan Industrial and Commercial Property Office oversees Morocco's IPR laws. See www.ompic.org.ma.

# 4. Pro-Poor Growth Environment

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

## HEALTH

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

Life expectancy at birth is commonly regarded as the best indicator of the overall health status of a population. In 2005 (most recent year for which data are available), life expectancy at birth in Morocco stood at 70.4 years, up from 69.5 in 2002. Life expectancy, however, is still slightly below the LMI-MENA median (71.7 years) and life expectancy in Turkey (71.3 years) and Tunisia (73.5 years).

Morocco's data show low levels of spending in the health sector, and unsurprisingly, poor health outcomes. Morocco's public health expenditure was only 1.7 percent of GDP in 2004. Although this is an increase from 1.5 percent in 2000, it is still far below the LMI-MENA and the LMI medians (2.9 percent and 3.2 percent, respectively), and health care spending in Tunisia (2.8 percent in 2003) and Turkey (5.2 percent in 2005) (Figure 4-1).

**Figure 4-1**

*Public Heath Expenditure, percent of GDP*



*Morocco lags behind all comparators in public health expenditures.*

| Year | Value |
|------|-------|
| 2000 | 1.5 |
| 2001 | 1.6 |
| 2002 | 1.6 |
| 2003 | 1.7 |
| 2004 | 1.7 |
| **Summary for 2000–2004** | |
| Five-year average | 1.6 |
| Trend growth rate | 3.8 |

Source: Millennium Challenge Corporation October 2006          CAS code: 31S6
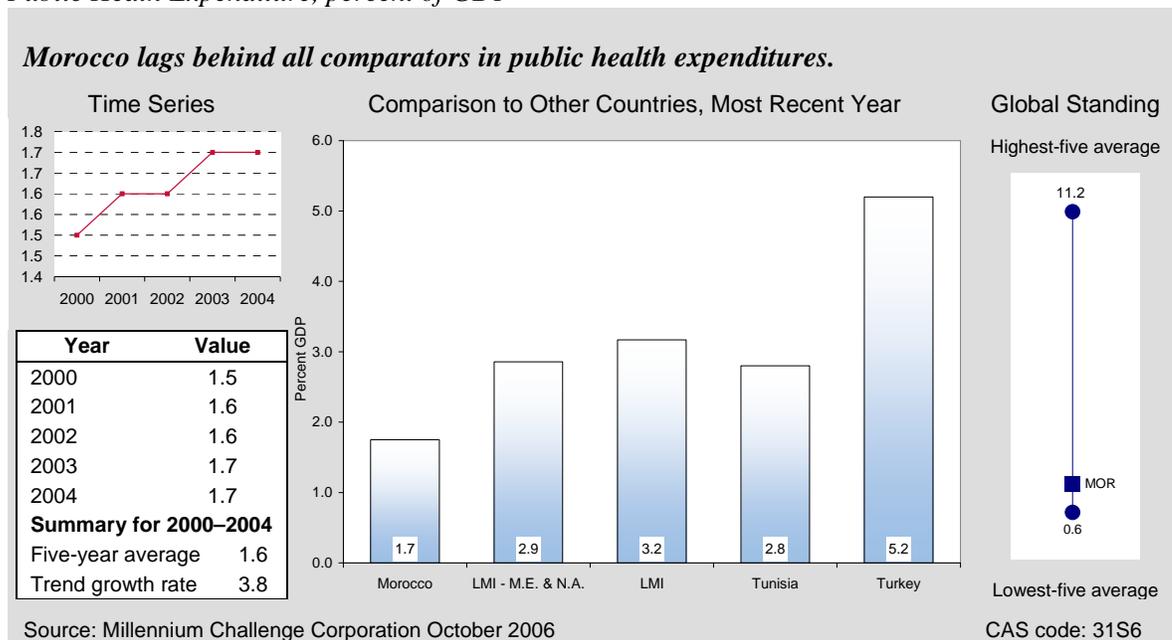
Access to improved water and sanitation is among the most important determinants of health outcomes. In 2004, approximately 81 percent of Moroccans had access to clean water, which is far below the LMI-MENA median of 92.5 percent and Tunisia's and Turkey's rates of 93 percent and 96 percent, respectively. Similarly, only 73 percent of Moroccans had access to improved sanitation. Once again, this indicator is far below the LMI-MENA median of 82 percent and Tunisia's and Turkey's rates of 85 percent and 88 percent, respectively.

Another commonly used health indicator is the maternal mortality rate (MMR), which provides insight into the quality of health care services available to women. In Morocco, the MMR is estimated to be about 220 per 100,000 live births (2000). This is significantly worse than the LMI-MENA median of 130, the LMI median of 120, Tunisia's rate of 120, and Turkey's rate of 70 maternal deaths per 100,000 live births (Figure 4-2). Furthermore, in Morocco, only 62.6 percent of births were estimated to be attended by skilled health personnel in 2004, compared to the LMI-MENA median of 89.8 percent, the LMI country median of 89.1 percent, Turkey's 83 percent (in 2003), and Tunisia's 89.9 percent (2000).

The 2005 Human Development Report highlights weaknesses in health sector governance—e.g., the absence of a strategic vision for the sector's future, over-reliance on the state as a provider of health services, ambiguous role of the Ministry of Health as regulator and provider, excessive centralization of administration, loss of confidence in the quality of public hospitals, and embryonic health insurance efforts—that underpin the indicators reported.[61] These issues will require urgent attention to maximize human capacity to participate in Morocco's economic growth.

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[61] Moroccan Human Development Report Committee, *Fifty Years of Human Development & Perspective 2025: The future is underway and the best is possible,* January 2006, pp. 18-19.

**Figure 4-2**

*Maternal Mortality Rate*

***Morocco's high maternal mortality rate reflects poor health conditions in the country.***

Comparison to Other Countries, Most Recent Year



Source: UN Millennium Indicators Database, December 2006                    CAS code: 31P3
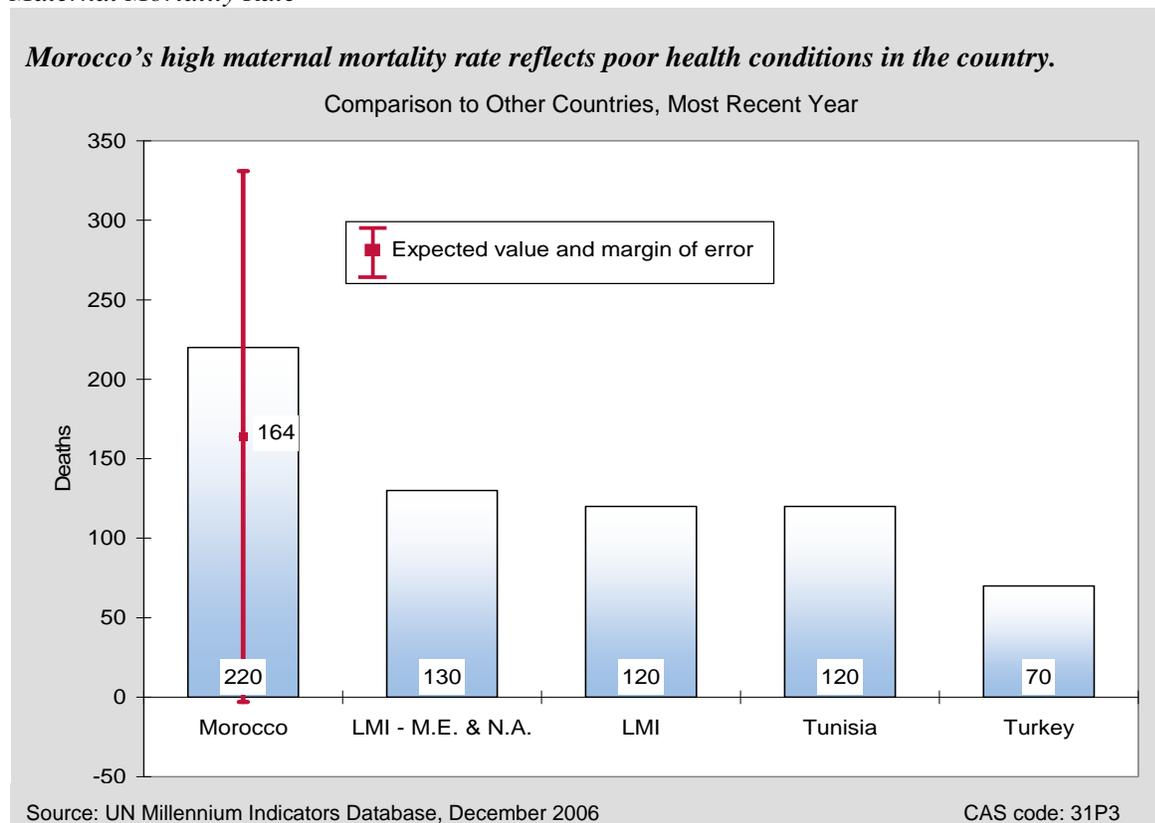
# EDUCATION

Investment in human capital through education is a second cornerstone of economic growth and development, but most of Morocco's education indicators demonstrate weak performance. Morocco has made great strides in the past 30 years in increasing the availability of schooling in rural areas and for girls, but its accomplishments still lag behind those of comparator regions and countries, suggesting that demand for education reform in Morocco will continue. The World Bank suggests that some countries "possess education systems that exhibit better engineering,[62] more aligned incentives, and greater public accountability" than other countries—and Morocco clearly falls into the second category.[63] Morocco's net enrollment rate, indicating access to primary education services, is 88.1 percent—90.8 percent for males and 85.4 percent for females (2006). Although these figures reflect improvements from five years before,[64] they still remain

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[62] "Engineering" here includes approaches to learning (pedagogy), teaching capacity, educational system structure and flow, and resource mobilization.

[63] See Chapter 6, "Why Some MENA Countries Did Better than Others," in World Bank, *The Road Less Traveled: Education Reform in the Middle East and North Africa,* 2008, p. 165.

[64] Net enrollment rates for Morocco were 39.1 percent in 1970 and 60.7 percent in 1985, compared with 75.6 and 93.1 percent in Tunisia. World Bank, *The Road Less Traveled,* 2008, p. 13. The same document reports higher government figures for net primary enrollment rates in Morocco (total) of 92 percent in 2003 (Table B.4, p. 319). It also suggests that the gender gap in primary gross enrollment (female enrollment relative to male enrollment) had narrowed to 0.90 by 2003.

lower than all benchmarks—the net enrollment median of LMI-MENA countries of 91.6 percent, the LMI median of 92.1 percent, Turkey's 91.4 percent, and Tunisia's 96.1 percent (both Turkey and Tunisia are from 2006).

Moroccan primary schools also exhibit a low rate of retention, an indicator that gauges the efficiency of the primary education program. In 2004, male persistence to grade 5 was 81.2 percent and female persistence to grade 5 was 77.1 percent. These figures are significantly below regional comparators' rates: the LMI-MENA medians of 93 percent for males and 94.1 percent for females; Tunisia's rates of 96.7 percent for males and 97.4 percent for females; and Turkey's rates of 97.2 percent for males and 96.6 percent for females) (Figure 4-3).

**Figure 4-3**
*Persistence to Grade 5*



Source: World Development Indicators 2007                                CAS code: 32P2a
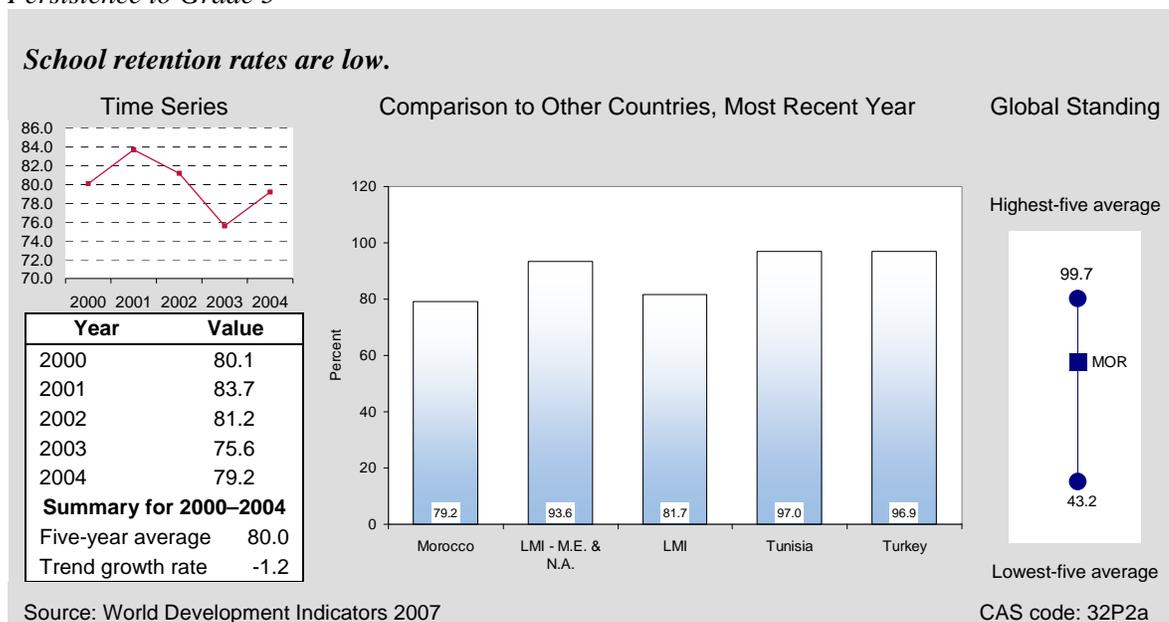
Given the access and retention rates outlined above, it is not surprising that educational outcomes suffer. Youth literacy rates (Figure 4-4), particularly for females, are much lower than those observed in all benchmarks. Female youth literacy rates are particularly a cause for concern. In 2006, Morocco's female youth literacy rate was only 60.5 percent, compared to the LMI-MENA median of 90.2 percent, the LMI median of 96.5 percent, Tunisia's 92.2 percent, and Turkey's 93.3 percent.

For secondary schooling, the net enrollment rate—35.1 percent—is very poor compared to all benchmarks, which range from 65 percent to 66.8 percent. Predictably, the gross tertiary enrollment is also low, only 11.3 percent (2005). While relatively close to the LMI median of 16.9 percent, it is much lower than both Tunisia's 30.2 percent and Turkey's 31.2 percent. Morocco's poor performance in higher education limits the country's prospects for transformational growth in the medium term.

**Figure 4-4**
*Female Youth Literacy Rate*

**Female youth literacy is low compared to benchmarks.**

Comparison to Other Countries, Most Recent Year

| Country | Percent |
|---|---|
| Morocco | 60.5 |
| LMI - M.E. & N.A. | 90.2 |
| LMI | 96.5 |
| Tunisia | 92.2 |
| Turkey | 93.3 |

Source: World Development Indicators 2007    CAS code: 32P3c
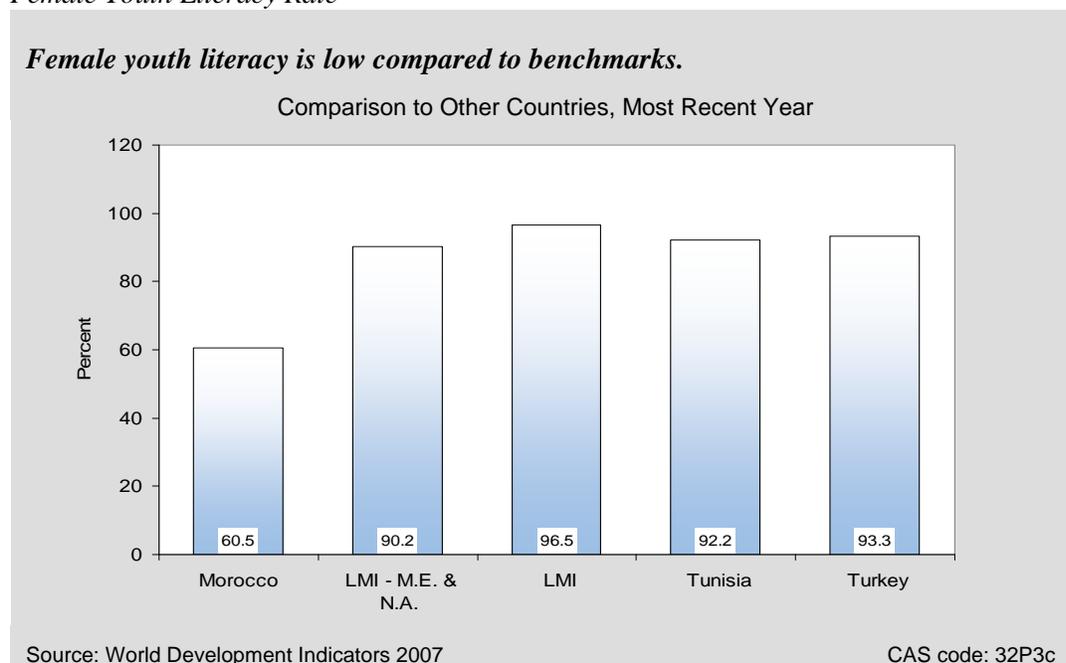
Education quality is difficult to measure. At the primary level, a crude but common proxy is the pupil–teacher ratio. In 2005, Morocco's pupil–teacher ratio was 27.1, slightly above the LMI-MENA median of 24.0 and the LMI median of 23.6, and significantly higher than the ratio of 20.0 found in Tunisia. Another discouraging aspect of Morocco's weak educational performance is not just the dismal output, but the fact that the output is produced with a relatively high level of educational expenditure. Morocco's expenditure on primary education as a percentage of GDP and educational expenditure per student as a percentage of GDP per capita at the primary, secondary, and tertiary levels are all far higher than the benchmarks. For instance, Morocco's level of expenditure at the tertiary level was 93 percent of per capita GDP in 2005, whereas the LMI median is only 36.9 percent, Tunisia's rate is 56.4 percent, and Turkey's rate is 44.7 percent of per capita GDP. Spending at the primary and secondary levels is similarly disproportionate to spending in comparator countries. The mismatch between educational expenditures and quantity and quality of educational output suggests that allocation and use of educational resources must be examined. Donor programs targeted at increasing enrollment and retention, improving educational engineering, and boosting female literacy rates would be especially useful to help Morocco develop an adequately skilled workforce.[65]

## EMPLOYMENT AND WORKFORCE

Morocco performs poorly on several employment and workforce indicators that could deter future growth. Morocco's workforce was estimated at 11.3 million people in 2006. The workforce growth rate appears to have stabilized at 1.8 percent for the most recent two years for which data

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[65] The World Bank's 2006–2009 Country Assistance Strategy references a strategic plan for development of Morocco's education sector to address quality, relevancy, and cost-effectiveness. World Bank, *Country Assistance Strategy for the Kingdom of Morocco,* Report No. 31879-MA, June 2005, p. 8.

are available (2005–2006). At this rate, the economy will have to absorb roughly 200,000 new workers each year to stay even, and more if it is to reduce structural unemployment. Indeed, unemployment according to official statistics averaged 10.9 percent for the five years to 2006, which is high in absolute terms, but comparable to the benchmarks (Figure 4-5).

Not only the unemployment rate but also the large inflow of remittances (see External Sector) suggests that the economy has failed to provide adequate job opportunities for a large share of the labor force. Nevertheless, from 2005 to 2006, unemployment fell from 11.1 percent to 9.7 percent. Morocco will have to sustain, if not improve, the strong GDP growth rates achieved recently for this trend to continue.

**Figure 4-5**

*Unemployment Rate*



**Unemployment is falling and is consistent with benchmarks.**

| Year | Value |
|------|-------|
| 2002 | 11.6 |
| 2003 | 11.4 |
| 2004 | 10.8 |
| 2005 | 11.1 |
| 2006 | 9.7 |
| **Summary for 2002–2006** | |
| Five-year average | 10.9 |
| Trend growth rate | -3.8 |

Comparison to Other Countries, Most Recent Year

Expected value and margin of error — 10.9

| Morocco | LMI - M.E. & N.A. | LMI | Tunisia | Turkey |
|---------|-------------------|-----|---------|--------|
| 9.7 | 13.9 | 10.2 | 14.7 | 10.3 |

Global Standing

Highest-five average — 29.7

MOR

Lowest-five average — 1.7

Source: IMF Article IV September

CAS code: 33P4

Adding to the challenge, Morocco's unemployment is much higher in urban settings. According to the latest estimates, urban unemployment stood at 15.9 percent in 2007.[66] This underscores the need for rapid employment creation to absorb the increasing numbers of workers migrating to urban areas (see Demography and Environment), especially outside agriculture where the labor force is more productive (as discussed in Economic Structure).

Furthermore, the data raise serious concerns about labor market performance: first, the very large gap between male and female labor force participation rates—57 percentage points—in 2005 (see Gender). Greater effort is needed to enhance opportunities for women to participate in the labor force, not only to redress gender inequality, but also to alleviate poverty and boost economic growth.

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[66] Bank Al-Maghrib, op.cit., 14.

Another concern is that labor market rigidity is still impeding investment and job creation in Morocco, even after the introduction of a new labor code in mid-2004 designed to encourage investment and job creation by making labor markets more flexible.[67] On the World Bank's Rigidity of Employment index (measuring the difficulty that firms face in hiring and firing workers, where 0 is minimum rigidity and 100 is maximum rigidity), Morocco scored 63 in 2007 (Figure 4-6). This is actually worse than in 2003, when Morocco scored 60, and is above the upper limit of the normal range for the expected value (40.8) and about twice as high as the LMI-MENA and LMI median scores (39.0 and 30.5, respectively). It is unclear whether the new law is having unintended negative effects, or whether there has not yet been enough time for its impact on flexibility to be discerned by businesses. By comparison, Tunisia's score was 49, while Turkey was somewhat less rigid, with a score of 42. Adding some perspective, the World Bank estimates that the cost of firing a worker, in a standard situation, amounted to 85 weeks (a little more than a year and half) of wages. The costs are high when compared to the LMI-MENA median (68 weeks) and the global LMI country median (52.5 weeks), but even more so when compared to the exemplary 17 weeks in Tunisia. In Turkey, however, firing costs are even higher than in Morocco, amounting to 95 weeks of wages.

The analysis here points to the need for policymakers, businesses, and donors to make job creation in highly productive sectors a top priority. The legal and regulatory regime governing labor markets appears to impede job creation and deter the investment needed to achieve more rapid growth, as underscored in the World Bank growth diagnostic.

**Figure 4-6**
*Rigidity of Employment Index*



*Labor market rigidity impedes job creation.*

| Year | Value |
| --- | --- |
| 2003 | 60.0 |
| 2004 | 60.0 |
| 2005 | 63.0 |
| 2006 | 63.0 |
| 2007 | 63.0 |
| **Summary for 2003–2007** | |
| Five-year average | 61.8 |
| Trend growth rate | 1.5 |

Source: World Bank Doing Business 2007                                        CAS code: 33P2

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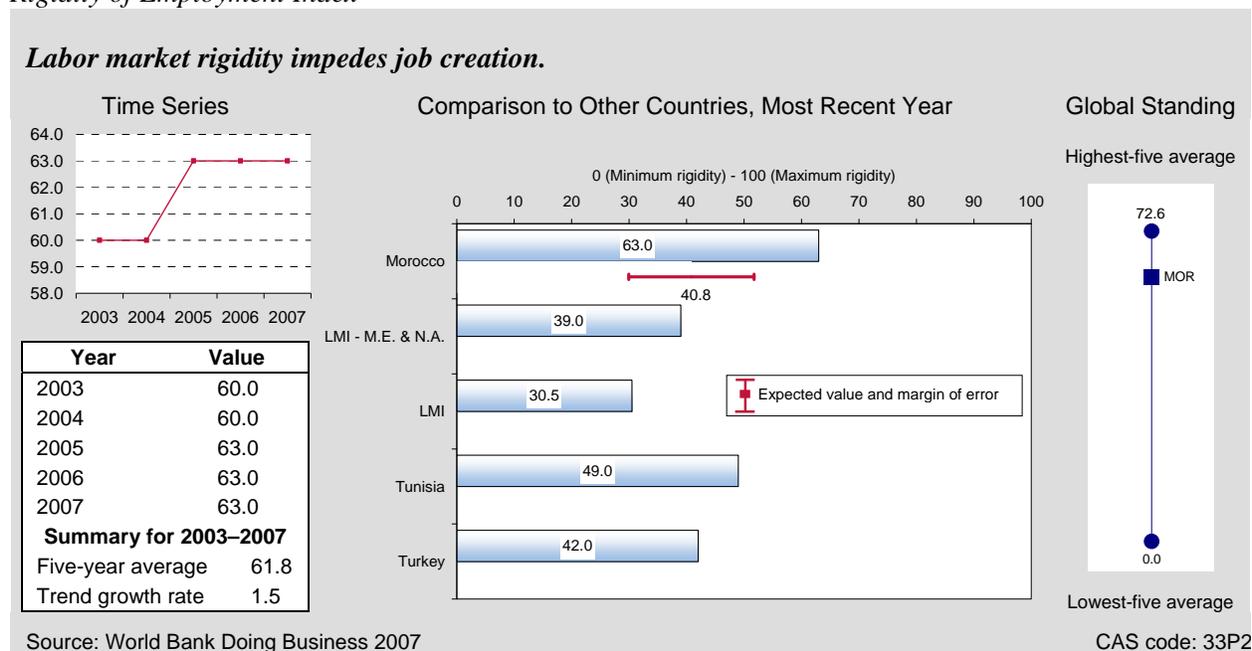
[67]The new labor code "formalizes the right to trade union representation, and allows short-term contracts under certain conditions… However, employers have said that the law is too restrictive and has not made the labor market flexible enough, whereas the unions have said that it removes too many worker's rights." EIU, Morocco Country Profile 2007, 30.

## AGRICULTURE

Although agriculture accounts for only 16.6 percent of Morocco's GDP, it remains a vital, labor-intensive sector employing a little under half of the country's workforce. Morocco's economic growth rates therefore fluctuate sharply according to the sector's performance. In turn, agriculture's performance in Morocco depends on the availability of water, either directly through annual rains or harvested from groundwater and delivered through irrigation. Below-average rains, which used to occur every five years, now occur every other year on average.[68] Making the most efficient use of this scarce resource is crucial to agriculture's success. Moroccans cultivate some 8.73 million hectares, of which about 1.25 million hectares, or just over 14 percent, are irrigated; in Tunisia, only about 8 percent of cropland is irrigated, while in Turkey 20 percent is irrigated. Irrigated agriculture in Morocco tends to be cultivated with more capital-intensive techniques on larger land holdings, often to produce higher value-added crops such as fruits and vegetables, while the rainfed sector remains largely traditional and is dominated by holdings of 5 hectares or less that commonly produce lower-value cereals and oilseeds. After policy reforms in the 1990s eliminated special incentives for cultivating corn, which requires more water than Morocco's other traditional cereals, more drought-sensitive grains (barley, durum, bread wheat) dominate Morocco's agricultural sector today.

Although the country is a significant exporter of fresh and processed fruits, vegetables, olives, and (increasingly) olive oil, large volumes of basic foods (grains, oilseeds, sugar) must be imported for human and animal consumption, depending on the domestic harvest.[69] Agricultural exports are destined largely for the European market, mainly in the early and late European production seasons so as not to compete directly with European production. Meat imports to Morocco historically have been tightly restricted, although the U.S.–Morocco FTA allows for limited quantities of beef and poultry to enter the country. Seafood products are another important component of food exports.

Not surprisingly, given the dependence on variable rainfall, average agricultural productivity is low (and volatile) in Morocco. Annual agricultural value added per worker (measured in constant U.S. dollars) averaged $1,763 in the five years to 2006. Morocco's latest figure of $2,037 (2006) is above the expected value ($1,580) and the corresponding 2004 value for Turkey ($1,793), but still below Tunisia's $2,874 (2004). Morocco's value added in agriculture grew at an average annual rate of 8.9 percent between 2002 and 2006, although with varied performance year over year—from -12.8 percent in 2005 to 23.0 percent the following year.[70]

Cereal yields, another measure of productivity, also fall well below the benchmarks. In the five years to 2005, annual yields in Morocco averaged 1,162 kg per hectare. The most recent year for which cereal-yield data are available is 2005, when the yield was 814 kg per hectare, well below the LMI-MENA figure of 1,483 kg and the expected value of 1,552 kg and just half the global LMI median cereal yield of 2,397 kg per hectare. Cereal yields are also higher in Tunisia

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[68] EIU, Morocco Country Profile 2007, 19. The World Bank's water sector development policy loan program document cites a "30 percent drop in average precipitations since 1970." Op. cit., 6.

[69] Ibid, p. 36.

[70] The standard deviation over the five years is 17.6, over twice the average, underscoring the variability.

(1,450 kg) and Turkey (2,457 kg) (Figure 4-7). Yet grain farmers continue to benefit from trade protection resulting in domestic prices that—until recently, before the price run-up in world commodity markets—were twice world levels.[71]

**Figure 4-7**
*Cereal Yield*



***Cereal yield is volatile and far below comparators' yields.***

| Year | Value |
|------|-------|
| 2001 | 895 |
| 2002 | 1,070 |
| 2003 | 1,524 |
| 2004 | 1,507 |
| 2005 | 814 |
| **Summary for 2001- 2005** | |
| Five-year average | 1162 |
| Trend growth rate | 1.5 |

Source: World Development Indicators 2007                    CAS code: 34P2
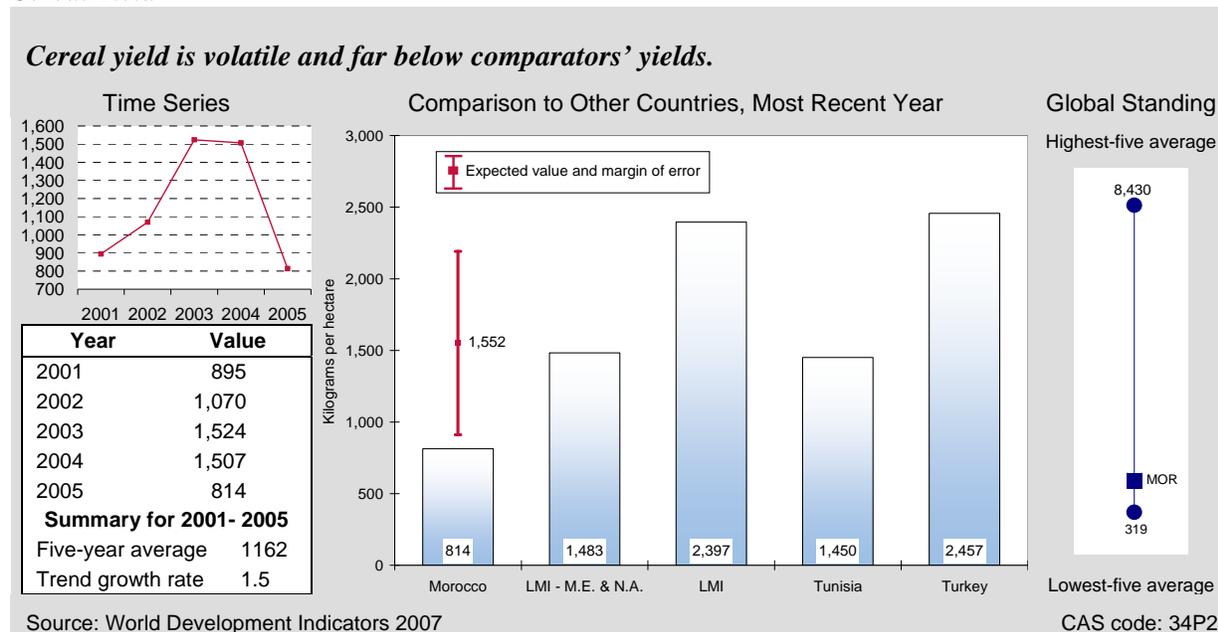
In sum, continued gains in agricultural productivity are needed to improve the lives of the rural poor and strengthen the base for economic growth. To this end, the government must address a number of fundamental constraints in the long term. These include the need to promote the diversification of the agricultural sector from less-productive, drought-prone, and lower-value cereal crops and livestock in favor of higher-value horticulture and other specialty crops, for both the enlarged EU market and non-European markets. Attention to policy and technology to enhance the efficiency of irrigation will be crucial as rainfall becomes less reliable. It is also critical to reduce the rural workforce's dependence on farming by creating rural, nonagricultural livelihood opportunities that depend less on water resources and by improving skills appropriate for the handicrafts, tourism, and services sectors.[72]

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[71] EIU, Morocco Country Profile 2007, p. 37.
[72] Ibid, p. 37

# Appendix A. CAS Methodology

## CRITERIA FOR SELECTING INDICATORS

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

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

When Level I indicators suggest weak performance, we review a limited set of *diagnostic supporting indicators*. These Level II indicators provide additional details, or shed light on *why* the primary indicators may be weak. For example, if economic growth is poor, one can examine data on investment and productivity as diagnostic indicators. If a country performs poorly on educational achievement, as measured by the youth literacy rate, one can examine determinants such as expenditure on primary education, and the pupil–teacher ratio.[73]

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

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[73] Deeper analysis of the topic using more detailed data (Level III) is beyond the scope of this series.

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

## BENCHMARKING METHODOLOGY

Comparative benchmarking is the main tool used to evaluate each indicator. The analysis draws on several criteria, rather than a single mechanical rule. The starting point is a comparison of performance in Morocco relative to the average for countries in the same income group and region —in this case, lower-middle income countries in the Middle East and North Africa.[74] For added perspective, three other comparisons are examined: (1) the global average for this income group; (2) respective values for two comparator countries approved by the Morocco mission; and (3) the average for the five best- and five worst-performing countries globally. Most comparisons are framed in terms of values for the latest year of data from available sources. Five-year trends are also taken into account when this information sheds light on the performance assessment.[75]

For selected variables, a second source of benchmark values uses statistical regression analysis to establish an expected value for the indicator, controlling for income and regional effects.[76] This approach has three advantages. First, the benchmark is customized to Morocco's specific level of income. Second, the comparison does not depend on the exact choice of reference group. Third, the methodology allows the quantification of the margin of error and establishment of a "normal band" for a country with Morocco's characteristics. An observed value falling outside this band on the side of poor performance signals a serious problem.[77]

Finally, where relevant, Morocco's performance is weighed against absolute standards. For example, a corruption perception index below 3.0 is a sign of serious economic governance problems, regardless of the regional comparisons or regression result.

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[74] Income groups as defined by the World Bank for 2004. For this study, the average is defined in terms of the median because the values are not distorted by outliers.

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

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

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

## STANDARD CAS INDICATORS

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

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

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

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

[a] *Level I = primary performance indicators, Level II = supporting diagnostic indicators*

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

# Appendix B. Data Supplement

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

| | Growth Performance | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Statistical Capacity Indicator | Per capita GDP, in Purchasing Power Parity Dollars | Per capita GDP, in current U.S. Dollars | Real GDP Growth | Growth of Labor Productivity | Investment Productivity, Incremental Capital-Output Ratio (ICOR) | Gross Fixed Investment, % of GDP | Gross Fixed Private Investment, % of GDP |
| Indicator Number | 11P0 | 11P1 | 11P2 | 11P3 | 11S1 | 11S2 | 11S3 | 11S4 |
| *Morocco Data* | | | | | | | | |
| *Latest Year (T)* | 2007 | 2007 | 2007 | 2007 | 2005 | 2006 | 2007 | 2007 |
| Value Year T | 79 | 6,003 | 2,368 | 2.5 | 0.0 | 5.6 | 29.0 | 25.0 |
| Value Year T-1 | 77 | 5,765 | 2,149 | 8.0 | 0.1 | 5.7 | 29.0 | 25.0 |
| Value Year T-2 | 73 | 5,225 | 1,956 | 2.4 | 3.7 | 5.8 | 29.0 | 25.0 |
| Value Year T-3 | 66 | 4,993 | 1,890 | 5.2 | 1.5 | 7.4 | 27.0 | 23.0 |
| Value Year T-4 | . | 4,663 | 1,688 | 6.1 | 4.2 | 6.4 | 25.0 | 21.0 |
| Average Value, 5 year | . | 5,330 | 2,010 | 4.8 | 1.9 | 6.2 | 27.8 | 23.8 |
| Growth Trend | . | 6.5 | 8.1 | . | . | -5.3 | 3.7 | 4.3 |
| *Benchmark Data* | | | | | | | | |
| Regression Benchmark | . | . | . | 4.8 | . | . | . | . |
| Lower Bound | . | . | . | 2.4 | . | . | . | . |
| Upper Bound | . | . | . | 7.2 | . | . | . | . |
| *Latest Year Tunisia* | 2007 | 2007 | 2007 | 2007 | 2005 | 2006 | 2006 | 2000 |
| Tunisia Value Latest Year | 66 | 9,630 | 3,313 | 6.0 | 2.2 | 5.2 | 23.2 | 18.8 |
| *Latest Year Turkey* | 2007 | 2007 | 2007 | 2007 | 2005 | 2006 | 2006 | 2001 |
| Turkey Value Latest Year | 74 | 9,816 | 6,548 | 5.0 | 5.8 | 2.4 | 17.7 | 14.9 |
| LMI - M.E. & N.A. | 70 | 5,634 | 2,158 | 5.1 | -0.1 | 5.1 | 24.3 | 16.6 |
| Lower Middle Income | 68 | 5,486 | 2,310 | 5.5 | 1.2 | 5.1 | 20.6 | 17.4 |
| High Five Avg. | 91 | 50,789 | 67,174 | 17.3 | 14.8 | 30.0 | 47.2 | 30.5 |
| Low Five Avg. | 25 | 592 | 162 | -0.6 | -4.4 | -19.9 | 10.3 | 4.4 |

| | Poverty and Inequality | | | | | | |
|---|---|---|---|---|---|---|---|
| | Human Poverty Index (0 for no deprivation to 100 for high deprivation) | Income Share, Poorest 20% | Percentage of Population Living on Less Than $1 PPP per Day | Percentage of Population Living on Less Than $2 PPP per Day | Poverty Headcount, National Poverty Line | PRSP Status | Population % Below Minimum Dietary Energy Consumption |
| Indicator Number | 12P1 | 12P2 | 12P3a | 12P3b | 12P4 | 12P5 | 12S1 |
| *Morocco Data* | | | | | | | |
| *Latest Year (T)* | 2005 | 2000 | 2000 | . | 2005 | . | 2002 |
| Value Year T | 33.4 | 6.5 | less than 2 | . | 15.0 | . | 6.0 |
| Value Year T-1 | 33.4 | . | . | . | . | . | . |
| Value Year T-2 | . | . | . | . | . | . | . |
| Value Year T-3 | . | . | . | . | . | . | . |
| Value Year T-4 | . | . | . | . | . | . | . |
| Average Value, 5 year | . | . | . | . | . | . | . |
| Growth Trend | . | . | . | . | . | . | . |
| *Benchmark Data* | | | | | | | |
| Regression Benchmark | 21.5 | 7.6 | 6.0 | 26.7 | 20.8 | . | . |
| Lower Bound | 16.0 | 6.7 | -1.2 | 18.3 | 12.6 | . | . |
| Upper Bound | 27.1 | 8.5 | 13.2 | 35.0 | 28.9 | . | . |
| *Latest Year Tunisia* | 2005 | 2000 | 2000 | 2000 | . | . | 2002 |
| Tunisia Value Latest Year | 17.9 | 6.0 | 2.0 | 6.6 | . | . | 2.5 |
| *Latest Year Turkey* | 2005 | 2003 | 2003 | 2003 | 2002 | . | 2002 |
| Turkey Value Latest Year | 9.2 | 5.3 | 3.4 | 18.7 | 27.0 | . | 3.0 |
| LMI - M.E. & N.A. | 17.9 | . | . | . | . | . | 5.0 |
| Lower Middle Income | 16.8 | . | . | . | . | . | 11.0 |
| High Five Avg. | 62.4 | 9.5 | 61.8 | 88.7 | 67.5 | . | 67.0 |
| Low Five Avg. | 3.7 | 2.2 | 2.0 | 2.0 | 13.6 | . | 2.5 |

|  | Economic Structure | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
|  | Labor Force Structure (Employment in agriculture, % total) | Labor Force Structure (Employment in industry, % total) | Labor Force Structure (Employment in services, % total) | Output structure (Agriculture, value added, % GDP) | Output structure (Industry, value added, % GDP) | Output structure (Services, etc., value added, % GDP) |
| Indicator Number | 13P1a | 13P1b | 13P1c | 13P2a | 13P2b | 13P2c |
| *Morocco Data* | | | | | | |
| *Latest Year (T)* | 2005 | 2005 | 2005 | 2006 | 2006 | 2006 |
| Value Year T | 47.0 | 21.0 | 32.0 | 16.6 | 29.0 | 54.4 |
| Value Year T-1 | 46.0 | 21.0 | 33.0 | 14.1 | 29.9 | 55.9 |
| Value Year T-2 | 43.9 | 20.2 | 35.9 | 15.9 | 30.4 | 53.8 |
| Value Year T-3 | 44.4 | 20.1 | 35.5 | 16.7 | 29.9 | 53.5 |
| Value Year T-4 | 46.0 | 21.0 | 34.0 | 16.1 | 30.3 | 53.6 |
| Average Value, 5 year | 45.5 | 20.7 | 34.1 | 15.9 | 29.9 | 54.2 |
| Growth Trend | 0.8 | 0.4 | -1.9 | -1.0 | -0.9 | 0.8 |
| *Benchmark Data* | | | | | | |
| Regression Benchmark | 31.9 | 22.5 | 49.1 | 13.0 | 27.9 | 56.4 |
| Lower Bound | 25.3 | 19.2 | 43.9 | 7.0 | 22.3 | 50.2 |
| Upper Bound | 38.5 | 25.7 | 54.2 | 18.9 | 33.5 | 62.5 |
| *Latest Year Tunisia* | . | . | . | 2006 | 2006 | 2006 |
| Tunisia Value Latest Year | . | . | . | 11.3 | 28.4 | 60.3 |
| *Latest Year Turkey* | 2005 | 2005 | 2005 | 2006 | 2006 | 2006 |
| Turkey Value Latest Year | 29.5 | 24.7 | 45.8 | 12.9 | 22.4 | 64.7 |
| LMI - M.E. & N.A. | 22.9 | 23.4 | 52.2 | 11.2 | 33.6 | 48.6 |
| Lower Middle Income | 30.7 | 20.0 | 48.8 | 15.1 | 31.4 | 52.9 |
| High Five Avg. | 75.3 | 38.4 | 78.7 | 55.4 | 61.1 | 82.4 |
| Low Five Avg. | 0.8 | 5.8 | 16.6 | 0.5 | 11.8 | 21.8 |

| | Demography and Environment | | | | | | |
|---|---|---|---|---|---|---|---|
| | Adult Literacy Rate | Youth Dependency Rate | Elderly Dependency Rate | Environmental Performance Index (1 to 100) | Population Size (Millions) | Population Growth, Annual % | Percent of Population Living in Urban Areas |
| Indicator Number | 14P1 | 14P2a | 14P2b | 14P3 | 14P4a | 14P4b | 14P5 |
| *Morocco Data* | | | | | | | |
| *Latest Year (T)* | *2006* | *2006* | *2006* | *2007* | *2005* | *2006* | *2006* |
| Value Year T | 52.3 | 47.7 | 7.5 | 72.1 | 30.2 | 1.2 | 59.3 |
| Value Year T-1 | . | 48.5 | 7.5 | 64.1 | 29.8 | 1.0 | 58.7 |
| Value Year T-2 | 52.3 | 49.4 | 7.5 | . | 28.8 | 1.1 | 58.0 |
| Value Year T-3 | . | 50.3 | 7.4 | . | 28.5 | 1.1 | 57.3 |
| Value Year T-4 | . | 51.3 | 7.3 | . | 28.2 | 1.2 | 56.5 |
| Average Value, 5 year | . | 49.4 | 7.4 | . | 29.1 | 1.1 | 58.0 |
| Growth Trend | . | -1.8 | 0.7 | . | 1.8 | . | 1.2 |
| *Benchmark Data* | | | | | | | |
| Regression Benchmark | 68.9 | 58.0 | 7.0 | 59.4 | . | . | 57.6 |
| Lower Bound | 59.6 | 51.4 | 5.0 | 54.2 | . | . | 47.7 |
| Upper Bound | 78.2 | 64.6 | 9.0 | 64.6 | . | . | 67.6 |
| *Latest Year Tunisia* | *2006* | *2006* | *2006* | *2007* | *2005* | *2006* | *2006* |
| Tunisia Value Latest Year | 74.3 | 36.9 | 9.2 | 78.1 | 10.0 | 1.0 | 65.7 |
| *Latest Year Turkey* | *2006* | *2006* | *2006* | *2007* | *2005* | *2006* | *2006* |
| Turkey Value Latest Year | 87.4 | 44.0 | 8.4 | 75.9 | 72.1 | 1.2 | 67.8 |
| LMI - M.E. & N.A. | 74.3 | 64.0 | 6.9 | 68.1 | 20.6 | 2.2 | 66.2 |
| Lower Middle Income | 87.7 | 57.8 | 7.7 | 70.4 | 5.1 | 1.5 | 54.3 |
| High Five Avg. | 99.7 | 99.4 | 28.3 | 86.9 | 620.5 | 4.4 | 98.6 |
| Low Five Avg. | 24.7 | 20.1 | 2.7 | 31.8 | 0.1 | -0.7 | 11.9 |

| | Gender | | | | | | |
|---|---|---|---|---|---|---|---|
| | Girls' Primary Completion Rate | Gross Enrollment Rate, All Levels of Education, Male | Gross Enrollment Rate, All Levels of Education, Female | Life Expectancy, Male | Life Expectancy, Female | Labor Force Participation Rate, Male | Labor Force Participation Rate, Female |
| Indicator Number | 15P1 | 15P2a | 15P2b | 15P3a | 15P3b | 15P4a | 15P4b |
| *Morocco Data* | | | | | | | |
| *Latest Year (T)* | *2005* | *2004* | *2004* | *2005* | *2005* | *2005* | *2005* |
| Value Year T | 76.8 | 62.0 | 54.0 | 68.3 | 72.7 | 86.1 | 29.1 |
| Value Year T-1 | 72.0 | . | . | 67.8 | 72.2 | 86.0 | 29.0 |
| Value Year T-2 | 63.4 | . | . | . | . | 85.4 | 28.8 |
| Value Year T-3 | 57.2 | . | . | . | . | 85.9 | 26.9 |
| Value Year T-4 | 54.2 | . | . | . | . | 85.8 | 27.1 |
| Average Value, 5 year | 64.7 | . | . | . | . | 85.8 | 28.2 |
| Growth Trend | 9.2 | . | . | . | . | 0.1 | 2.1 |
| *Benchmark Data* | | | | | | | |
| Regression Benchmark | 88.0 | 69.2 | 64.2 | 68.8 | 71.9 | 82.6 | 31.4 |
| Lower Bound | 78.7 | 63.0 | 57.0 | 65.2 | 67.8 | 79.0 | 23.1 |
| Upper Bound | 97.3 | 75.4 | 71.3 | 72.4 | 76.0 | 86.3 | 39.7 |
| *Latest Year Tunisia* | *2005* | *2004* | *2004* | *2005* | *2005* | *2005* | *2005* |
| Tunisia Value Latest Year | 100.1 | 74.0 | 77.0 | 71.5 | 75.6 | 81.3 | 31.5 |
| *Latest Year Turkey* | *2005* | *2004* | *2004* | *2005* | *2005* | *2005* | *2005* |
| Turkey Value Latest Year | 83.0 | 75.0 | 63.0 | 69.0 | 73.9 | 83.0 | 30.3 |
| LMI - M.E. & N.A. | 96.5 | 73.5 | 71.5 | 70.3 | 73.0 | 81.2 | 28.6 |
| Lower Middle Income | 94.1 | 70.0 | 72.0 | 67.8 | 73.3 | 84.8 | 53.0 |
| High Five Avg. | 122.3 | 101.2 | 106.8 | 78.9 | 84.4 | 98.4 | 91.9 |
| Low Five Avg. | 20.3 | 28.2 | 21.8 | 39.5 | 40.4 | 66.6 | 19.6 |

| | Fiscal and Monetary Policy | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Government Expenditure, % of GDP | Government Revenue, % of GDP | Growth in the Money Supply | Inflation Rate | Overall Budget Balance, Including Grants, % of GDP | Composition of Government Expenditure (Wages and salaries) | Composition of Government Expenditure (Goods and services) | Composition of Government Expenditure (Interest payments) | Composition of Government Expenditure (Subsidies and other current transfers) | Composition of Government Expenditure (Capital expenditure) | Composition of Government Expenditure (Other expenditure) |
| Indicator Number | 21P1 | 21P2 | 21P3 | 21P4 | 21P5 | 21S1a | 21S1b | 21S1c | 21S1d | 21S1e | 21S1f |
| *Morocco Data* | | | | | | | | | | | |
| *Latest Year (T)* | 2007 | 2007 | 2007 | 2007 | 2007 | 2007 | 2007 | 2007 | 2007 | 2007 | 2007 |
| Value Year T | 26.9 | 24.2 | 18.5 | 2.5 | -2.5 | 38.7 | 20.6 | 12.0 | 13.9 | 14.9 | 0.0 |
| Value Year T-1 | 27.6 | 25.3 | 16.8 | 3.3 | -2.1 | 39.9 | 19.0 | 11.7 | 15.1 | 14.7 | -0.3 |
| Value Year T-2 | 29.9 | 23.9 | 13.0 | 1.0 | -5.2 | 39.6 | 23.1 | 11.1 | 13.5 | 12.8 | -0.1 |
| Value Year T-3 | 27.0 | 22.5 | 7.5 | 1.5 | -4.1 | 41.9 | 17.1 | 13.0 | 12.4 | 15.8 | -0.1 |
| Value Year T-4 | 26.5 | 21.7 | 9.9 | 1.2 | -4.4 | 42.1 | 18.1 | 13.8 | 10.1 | 15.7 | 0.2 |
| Average Value, 5 year | 27.6 | 23.5 | 13.2 | 1.9 | -3.7 | 40.4 | 19.6 | 12.3 | 13.0 | 14.8 | -0.1 |
| Growth Trend | 0.5 | 3.4 | . | 22.6 | 17.7 | -2.2 | 3.6 | -3.8 | 8.4 | -1.7 | . |
| *Benchmark Data* | | | | | | | | | | | |
| Regression Benchmark | 27.2 | 25.5 | 9.7 | 3.9 | -2.9 | . | . | . | . | . | . |
| Lower Bound | 20.0 | 20.5 | 3.3 | 1.1 | -5.3 | . | . | . | . | . | . |
| Upper Bound | 34.4 | 30.5 | 16.2 | 6.6 | -0.6 | . | . | . | . | . | . |
| *Latest Year Tunisia* | . | 2006 | 2006 | 2007 | 2006 | 2000 | 2000 | 2000 | 2000 | 2000 | . |
| Tunisia Value Latest Year | . | 28.7 | 11.6 | 3.0 | -3.3 | 34.1 | 41.0 | 10.2 | 25.0 | 23.2 | . |
| *Latest Year Turkey* | 2006 | 2006 | 2006 | 2007 | 2001 | 2001 | 2001 | 2001 | 2001 | 2001 | . |
| Turkey Value Latest Year | 29.3 | 35.0 | 25.7 | 8.2 | -15.5 | 17.5 | 23.6 | 50.0 | 19.8 | 6.7 | . |
| LMI - M.E. & N.A. | . | 29.7 | 14.4 | 4.9 | -2.1 | 34.1 | 41.0 | 10.8 | 21.7 | 22.8 | . |
| Lower Middle Income | . | 26.0 | 14.9 | 5.4 | -1.8 | 23.8 | 42.9 | 9.7 | 18.5 | 19.7 | . |
| High Five Avg. | 48.1 | 51.8 | 196.2 | 1,179.8 | 5.2 | 48.7 | 77.2 | 35.6 | 69.2 | 43.7 | . |
| Low Five Avg. | 9.8 | 6.9 | -1.3 | 0.6 | -11.1 | 4.6 | 16.2 | 0.9 | 2.1 | 2.3 | . |

| | Fiscal and Monetary Policy (cont'd) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Composition of Government Revenue (Taxes of income, profits and capital gains) | Composition of Government Revenue (Taxes on goods and services) | Composition of Government Revenue (Taxes on international trade) | Composition of Government Revenue (Social contributions) | Composition of Government Revenue (Other taxes) | Composition of Government Revenue (Grants and other revenue) | Composition of Money Supply Growth (Domestic credit to the public sector) | Composition of Money Supply Growth (Domestic credit to the private sector) | Composition of Money Supply Growth (Domestic credit to non-financial public enterprises) | Composition of Money Supply Growth (Net foreign assets, reserves) | Composition of Money Supply Growth (Other items net) |
| Indicator Number | 21S2a | 21S2b | 21S2c | 21S2d | 21S2e | 21S2f | 21S3a | 21S3b | 21S3c | 21S3d | 21S3e |
| *Morocco Data* | | | | | | | | | | | |
| *Latest Year (T)* | 2005 | 2005 | 2005 | . | 2005 | 2005 | 2007 | 2007 | . | 2007 | 2007 |
| Value Year T | 32.1 | 36.4 | 11.5 | . | 4.8 | 15.3 | 2.4 | 109.8 | . | 20.0 | -32.1 |
| Value Year T-1 | 30.1 | 36.8 | 11.4 | . | 4.6 | 17.1 | 0.2 | 58.9 | . | 30.8 | 10.0 |
| Value Year T-2 | 30.0 | 38.4 | 11.9 | . | 4.9 | 14.7 | 8.2 | 50.2 | . | 36.8 | 4.9 |
| Value Year T-3 | 27.2 | 38.4 | 13.3 | . | 3.3 | 17.8 | -19.5 | 55.6 | . | 57.3 | 6.6 |
| Value Year T-4 | . | . | . | . | . | . | -7.0 | 64.2 | . | 53.2 | -10.4 |
| Average Value, 5 year | . | . | . | . | . | . | -3.1 | 67.7 | . | 39.6 | -4.2 |
| Growth Trend | . | . | . | . | . | . | . | 11.3 | . | -25.8 | . |
| *Benchmark Data* | | | | | | | | | | | |
| Regression Benchmark | . | . | . | . | . | . | . | . | . | . | . |
| Lower Bound | . | . | . | . | . | . | . | . | . | . | . |
| Upper Bound | . | . | . | . | . | . | . | . | . | . | . |
| *Latest Year Tunisia* | 2006 | 2006 | 2006 | 2006 | 2006 | 2006 | . | . | . | . | . |
| Tunisia Value Latest Year | 25.9 | 34.6 | 6.7 | 18.0 | 3.8 | 10.9 | . | . | . | . | . |
| *Latest Year Turkey* | 2001 | 2001 | 2001 | . | 2001 | 2001 | . | . | . | . | . |
| Turkey Value Latest Year | 35.5 | 40.2 | 0.9 | . | 7.4 | 16.0 | . | . | . | . | . |
| LMI - M.E. & N.A. | 22.4 | 25.9 | 9.8 | . | 3.5 | 28.1 | . | . | . | . | . |
| Lower Middle Income | 19.4 | 35.1 | 7.9 | . | 1.6 | 15.7 | . | . | . | . | . |
| High Five Avg. | 56.9 | 58.4 | 45.5 | 47.3 | 20.8 | 79.5 | . | . | . | . | . |
| Low Five Avg. | 1.7 | 3.2 | -0.2 | 0.3 | 0.0 | 3.7 | . | . | . | . | . |

| | Business Environment | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Control of Corruption Index (-2.5 for poor to 2.5 for excellent) | Ease of Doing Business Ranking (1 to 178) | Rule of Law Index (-2.5 for very poor to 2.5 for excellent) | Regulatory Quality Index (-2.5 for very poor to 2.5 for excellent) | Government Effectiveness Index (-2.5 for very poor to 2.5 for excellent) | Cost of Starting a Business % GNI per Capita | Procedures to Enforce a Contract | Procedures to Register Property | Procedures to Start a Business |
| Indicator Number | 22P1 | 22P2 | 22P3 | 22P4 | 22P5 | 22S1 | 22S2 | 22S3 | 22S4 |
| *Morocco Data* | | | | | | | | | |
| *Latest Year (T)* | *2006* | *2007* | *2006* | *2,006.00* | *2006* | *2007* | *2007* | *2007* | *2007* |
| Value Year T | *-0.06* | *129* | *-0.03* | *-0.15* | *0.02* | *11.5* | *40* | *8* | *6* |
| Value Year T-1 | *-0.11* | *121* | *-0.10* | *-0.32* | *-0.19* | *12.7* | *40* | *5* | *6* |
| Value Year T-2 | *-0.01* | *.* | *0.04* | *-0.18* | *-0.08* | *13.4* | *40* | *5* | *6* |
| Value Year T-3 | *-0.10* | *.* | *-0.05* | *-0.16* | *-0.08* | *13.7* | *40* | *5* | *6* |
| Value Year T-4 | *-0.08* | *.* | *0.00* | *-0.09* | *-0.10* | *26.6* | *40* | *.* | *11* |
| Average Value, 5 year | *-0.07* | *.* | *-0.03* | *-0.18* | *-0.09* | *15.6* | *40* | *.* | *7* |
| Growth Trend | *5.0* | *.* | *.* | *-18.8* | *.* | *-17.5* | *0.0* | *.* | *-12.1* |
| *Benchmark Data* | | | | | | | | | |
| Regression Benchmark | *-0.17* | *116* | *-0.14* | *-0.42* | *-0.3* | *.* | *.* | *.* | *.* |
| Lower Bound | *-0.43* | *95* | *-0.42* | *-0.69* | *-0.5* | *.* | *.* | *.* | *.* |
| Upper Bound | *0.09* | *137* | *0.14* | *-0.15* | *0.0* | *.* | *.* | *.* | *.* |
| *Latest Year Tunisia* | *2006* | *2007* | *2006* | *2006* | *2006* | *2007* | *2007* | *2007* | *2007* |
| Tunisia Value Latest Year | *0.20* | *88* | *0.38* | *0.23* | *0.5* | *8.3* | *39* | *5* | *10* |
| *Latest Year Turkey* | *2006* | *2007* | *2006* | *2006* | *2006* | *2007* | *2007* | *2007* | *2007* |
| Turkey Value Latest Year | *0.06* | *57* | *0.08* | *0.21* | *0.2* | *20.7* | *36* | *6* | *6* |
| LMI - M.E. & N.A. | *-0.48* | *129* | *-0.53* | *-0.73* | *-0.6* | *52.3* | *41.0* | *7.0* | *10.8* |
| Lower Middle Income | *-0.51* | *104* | *-0.58* | *-0.41* | *-0.5* | *33.3* | *39.0* | *6.2* | *10.5* |
| High Five Avg. | *2.37* | *176* | *.* | *1.80* | *2.1* | *574.0* | *53.7* | *13.9* | *18.5* |
| Low Five Avg. | *-1.57* | *3* | *.* | *-2.31* | *-1.8* | *0.5* | *23.1* | *1.6* | *2.4* |

| | Business Environment (cont'd) | | | | | |
|---|---|---|---|---|---|---|
| | Time to Enforce a Contract | Time to Register Property | Time to Start a Business | Total Tax Payable by Business, % operating profit | Business Costs of Crime, Violence and Terrorism (1 for poor to 7 for excellent) | Senior Manager Time Spent Dealing with Government Regulations (%) |
| Indicator Number | 22S5 | 22S6 | 22S7 | 22S8 | 22S9 | 22S10 |
| *Morocco Data* | | | | | | |
| *Latest Year (T)* | 2007 | 2007 | 2007 | 2007 | 2007 | 2004 |
| Value Year T | 615 | 47 | 12 | 53.1 | 5.0 | 9.2 |
| Value Year T-1 | 615 | 48 | 12 | 51.9 | 4.6 | . |
| Value Year T-2 | 615 | 47 | 12 | 51.9 | . | . |
| Value Year T-3 | 615 | 47 | 12 | . | . | . |
| Value Year T-4 | 615 | . | 36 | . | . | . |
| Average Value, 5 year | 615 | . | 17 | . | . | . |
| Growth Trend | 0.0 | . | -22.0 | . | . | . |
| *Benchmark Data* | | | | | | |
| Regression Benchmark | . | . | . | . | . | . |
| Lower Bound | . | . | . | . | . | . |
| Upper Bound | . | . | . | . | . | . |
| *Latest Year Tunisia* | 2007 | 2007 | 2007 | 2007 | 2007 | . |
| Tunisia Value Latest Year | 565 | 49 | 11 | 61.0 | 5.7 | . |
| *Latest Year Turkey* | 2007 | 2007 | 2007 | 2007 | 2007 | 2005 |
| Turkey Value Latest Year | 420 | 6 | 6 | 45.1 | 4.9 | 10.8 |
| LMI - M.E. & N.A. | 659.5 | 45.9 | 30.5 | 47.1 | 5.2 | . |
| Lower Middle Income | 562.5 | 49.5 | 42.0 | 41.6 | 3.9 | 7.1 |
| High Five Avg. | 1,611.6 | 485.8 | 287.7 | 251.2 | 6.6 | 21.3 |
| Low Five Avg. | 182.6 | 2.1 | 4.3 | 12.2 | 2.0 | 1.5 |

| | Financial Sector | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Domestic Credit to Private Sector, % GDP | Interest Rate Spread | Money Supply (M2), % GDP | Stock Market Capitalization Rate, % GDP | Credit Information Index (0 for poor to 6 for excellent) | Legal Rights of Borrowers and Lenders (0 for poor to 10 for excellent) | Real Interest Rate | Number of Microfinance Borrowers |
| Indicator Number | 23P1 | 23P2 | 23P3 | 23P4 | 23P5 | 23S1 | 23S2 | 23S3 |
| *Morocco Data* | | | | | | | | |
| *Latest Year (T)* | 2007 | 2004 | 2007 | 2006 | 2007 | 2007 | 2004 | . |
| Value Year T | 72.3 | 7.9 | 106.6 | 86.1 | 1.0 | 3.0 | 9.9 | . |
| Value Year T-1 | 59.0 | 8.8 | 96.6 | 52.7 | 1.0 | 3.0 | 12.6 | . |
| Value Year T-2 | 55.9 | 8.6 | 90.8 | 50.1 | 1.0 | 3.0 | 12.5 | . |
| Value Year T-3 | 52.5 | 8.2 | 83.3 | 30.0 | 1.0 | 3.0 | 11.3 | . |
| Value Year T-4 | 51.6 | 8.2 | 82.4 | 23.8 | 1.0 | . | 11.6 | . |
| Average Value, 5 year | 58.3 | 8.3 | 92.0 | 48.6 | 1.0 | . | 11.6 | . |
| Growth Trend | 7.9 | 0.0 | 6.6 | 31.4 | 0.0 | . | -2.1 | . |
| *Benchmark Data* | | | | | | | | |
| Regression Benchmark | 47.7 | 5.9 | 70.0 | 38.8 | 2.1 | . | . | . |
| Lower Bound | 34.0 | 2.9 | 54.5 | 8.0 | 0.8 | . | . | . |
| Upper Bound | 61.4 | 9.0 | 85.6 | 69.5 | 3.4 | . | . | . |
| *Latest Year Tunisia* | 2006 | . | 2006 | 2006 | 2007 | 2007 | . | . |
| Tunisia Value Latest Year | 65.4 | . | 58.8 | 14.7 | 4.0 | 2.0 | . | . |
| *Latest Year Turkey* | 2006 | . | 2006 | 2006 | 2007 | 2007 | . | . |
| Turkey Value Latest Year | 31.7 | . | 47.0 | 40.3 | 5.0 | 3.0 | . | . |
| LMI - M.E. & N.A. | 39.6 | 6.0 | 71.6 | 78.7 | 1.8 | 3.0 | 3.8 | . |
| Lower Middle Income | 23.7 | 7.0 | 38.1 | 12.6 | 2.8 | 3.7 | 5.8 | . |
| High Five Avg. | 198.4 | 36.4 | 194.8 | 241.5 | 6.0 | 9.4 | 35.7 | . |
| Low Five Avg. | 2.9 | 1.4 | 9.4 | 0.3 | 0.0 | 0.6 | -35.6 | . |

| | External Sector | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Aid, % of GNI | Current Account Balance, % GDP | Debt Service ratio, % Exports | Exports Growth, Goods and Services | Foreign Direct Investment, % GDP | Gross International Reserves, Months of Imports | Gross Private Capital Inflows, % GDP | Present Value of Debt, % GNI | Remittance Receipts, % Exports | Trade, % GDP | Trade in Services, % GDP |
| Indicator Number | 24P1 | 24P2 | 24P3 | 24P4 | 24P5 | 24P6 | 24P7 | 24P8 | 24P9 | 24P10 | 24P11 |
| *Morocco Data* | | | | | | | | | | | |
| *Latest Year (T)* | 2005 | 2007 | 2005 | 2006 | 2007 | 2007 | 2005 | 2005 | 2007 | 2006 | 2005 |
| Value Year T | 1.3 | 1.8 | 12.6 | 8.3 | 4.0 | 8.4 | 3.1 | 34.2 | 29.5 | 82.1 | 23.1 |
| Value Year T-1 | 1.4 | 3.4 | 15.6 | 8.5 | 3.6 | 7.8 | 2.8 | 39.2 | 30.1 | 80.8 | 20.3 |
| Value Year T-2 | 1.3 | 2.4 | 26.4 | 3.4 | 2.6 | 7.4 | 5.3 | . | 29.7 | 73.2 | 19.0 |
| Value Year T-3 | 1.4 | 1.7 | 24.7 | -3.1 | 1.5 | 8.5 | 0.2 | . | 32.0 | 69.1 | 18.8 |
| Value Year T-4 | 1.6 | 3.2 | 22.2 | 6.5 | 4.6 | 8.3 | 0.4 | . | 31.7 | 70.9 | 18.1 |
| Average Value, 5 year | 1.4 | 2.5 | 20.3 | 4.7 | 3.3 | 8.1 | 2.4 | . | 30.6 | 75.2 | 19.9 |
| Growth Trend | -3.8 | -4.6 | -15.8 | . | 6.0 | -0.6 | 67.3 | . | -2.1 | 4.5 | 5.7 |
| *Benchmark Data* | | | | | | | | | | | |
| Regression Benchmark | 2.4 | 0.0 | 9.0 | 11.5 | 1.8 | 5.7 | | 55.0 | 19.8 | 76.4 | 20.9 |
| Lower Bound | -2.4 | -5.0 | 4.0 | 5.2 | -0.5 | 4.1 | . | 33.6 | 11.1 | 53.9 | 10.3 |
| Upper Bound | 7.2 | 4.9 | 13.9 | 17.8 | 4.1 | 7.2 | . | 76.3 | 28.4 | 99.0 | 31.4 |
| *Latest Year Tunisia* | 2005 | 2005 | 2005 | 2006 | 2005 | 2005 | 2005 | 2005 | 2005 | 2006 | 2005 |
| Tunisia Value Latest Year | 1.4 | -1.1 | 12.7 | 3.9 | 2.5 | 3.3 | 2.6 | 69.0 | 9.6 | 108.7 | 21.6 |
| *Latest Year Turkey* | 2005 | 2005 | 2005 | 2006 | 2005 | 2005 | 2005 | 2005 | 2005 | 2006 | 2005 |
| Turkey Value Latest Year | 0.1 | -6.4 | 12.8 | 14.3 | 2.7 | 4.8 | 6.8 | 59.1 | 0.8 | 62.0 | 10.4 |
| LMI - M.E. & N.A. | 1.3 | 2.3 | 7.5 | 3.9 | 1.3 | . | 1.0 | 35.0 | 13.8 | 81.4 | 17.3 |
| Lower Middle Income | 2.4 | -3.3 | 9.7 | 5.4 | 2.5 | 3.3 | 3.1 | 39.7 | 8.3 | 84.0 | 17.8 |
| High Five Avg. | 49.6 | 15.5 | 38.2 | 43.5 | 87.5 | 16.2 | 197.8 | 364.0 | 102.3 | 307.5 | 90.4 |
| Low Five Avg. | 0.0 | -28.2 | 0.7 | -5.8 | -5.6 | 0.4 | -3.5 | 11.1 | 0.0 | 28.9 | 4.1 |

| | External Sector (Cont'd) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Concentration of Exports | Inward FDI Potential Index (0 for poor to 1 for excellent) | Net Barter Terms of Trade (2000 = 100) | Real Effective Exchange Rate (REER) (2000 = 100) | Structure of Merchandise Exports (Agricultural raw materials exports) | Structure of Merchandise Exports (Fuel exports) | Structure of Merchandise Exports (Manufactures exports) | Structure of Merchandise Exports (Ores and metals exports) | Structure of Merchandise Exports (Food exports) | Trade Freedom Index (0 for very poor to 100 for excellent) | Ease of Trading Across Borders Ranking |
| Indicator Number | 24S1 | 24S2 | 24S3 | 24S4 | 24S5a | 24S5b | 24S5c | 24S5d | 24S5e | 24S6 | 24S7 |
| *Morocco Data* | | | | | | | | | | | |
| *Latest Year (T)* | 2005 | 2005 | 2005 | 2007 | 2005 | 2005 | 2005 | 2005 | 2005 | 2008 | 2007 |
| Value Year T | 29.1 | 0.1 | 99.8 | 91.1 | 1.9 | 2.5 | 65.2 | 9.0 | 21.5 | 63 | 67 |
| Value Year T-1 | 27.0 | 0.2 | 104.6 | 96.1 | 1.7 | 2.0 | 69.1 | 8.2 | 19.0 | 61 | 89 |
| Value Year T-2 | 28.3 | 0.2 | 105.5 | 96.6 | 1.8 | 1.1 | 68.6 | 7.1 | 21.5 | 35 | . |
| Value Year T-3 | 27.2 | 0.2 | 101.0 | 96.5 | 1.6 | 2.8 | 65.9 | 8.2 | 21.5 | 29 | . |
| Value Year T-4 | 28.9 | 0.2 | 96.9 | 101.7 | 1.4 | 4.2 | 64.8 | 8.5 | 21.0 | 34 | . |
| Average Value, 5 year | 28.1 | 0.2 | 101.5 | 96.4 | 1.7 | 2.5 | 66.7 | 8.2 | 20.9 | 44 | . |
| Growth Trend | 0.1 | -1.0 | 0.9 | -2.2 | 5.9 | -14.2 | 0.6 | 1.2 | -0.8 | 20 | . |
| *Benchmark Data* | | | | | | | | | | | |
| Regression Benchmark | . | . | . | . | . | . | . | . | . | . | . |
| Lower Bound | . | . | . | . | . | . | . | . | . | . | . |
| Upper Bound | . | . | . | . | . | . | . | . | . | . | . |
| *Latest Year Tunisia* | 2005 | 2005 | 2005 | . | 2004 | 2004 | 2004 | 2004 | 2004 | 2008 | 2007 |
| Tunisia Value Latest Year | 38.4 | 0.2 | 96.6 | . | 0.7 | 9.6 | 77.6 | 1.1 | 11.1 | 72 | 28 |
| *Latest Year Turkey* | 2005 | 2005 | 2006 | . | 2005 | 2005 | 2005 | 2005 | 2005 | 2008 | 2007 |
| Turkey Value Latest Year | 16.4 | 0.2 | 96.2 | . | 0.5 | 3.6 | 81.6 | 2.5 | 10.5 | 87 | 56 |
| LMI - M.E. & N.A. | 35.6 | 0.2 | 124.3 | . | 0.7 | 43.1 | 30.6 | 1.1 | 11.1 | 51 | 88 |
| Lower Middle Income | . | 0.1 | 100.0 | . | 2.4 | 5.2 | 38.0 | 1.6 | 21.1 | 61 | 98 |
| High Five Avg. | 59.4 | 0.5 | 119.1 | . | 50.2 | 93.7 | 94.2 | 55.4 | 88.8 | 97 | 175 |
| Low Five Avg. | 0.2 | 0.1 | 77.8 | . | 0.0 | 0.0 | 1.2 | 0.0 | 0.2 | 26 | 3 |

| | Economic Infrastructure | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Internet Users per 1,000 people | Overall Infrastructure Quality (1 for poor to 7 for excellent) | Telephone Density, Fixed Line and Mobile per 1,000 people | Quality of Infrastructure - Air Transport Infrastructure Index (1 for poor to 7 for excellent) | Quality of Infrastructure - Port Infrastructure Quality Index (1 for poor to 7 for excellent) | Quality of Infrastructure - Rail Development Index (1 for poor to 7 for excellent) | Quality of Infrastructure - Quality of Electricity Supply Index (1 for poor to 7 for excellent) | Roads, Paved (% total) |
| Indicator Number | 25P1 | 25P2 | 25P3 | 25S1a | 25S1b | 25S1c | 25S1d | 25S2 |
| *Morocco Data* | | | | | | | | |
| *Latest Year (T)* | 2005 | 2007 | 2005 | 2007 | 2007 | 2007 | 2007 | 2004 |
| Value Year T | 152.6 | 3.5 | 455.6 | 4.7 | 4.1 | 3.0 | 5.2 | 56.9 |
| Value Year T-1 | 117.3 | 3.4 | 356.8 | 4.2 | 3.6 | 3.1 | 4.9 | 56.9 |
| Value Year T-2 | 33.9 | . | 290.6 | . | . | . | . | 56.4 |
| Value Year T-3 | 24.0 | . | 251.0 | . | . | . | . | 56.4 |
| Value Year T-4 | 13.9 | . | 206.8 | . | . | . | . | 56.4 |
| Average Value, 5 year | 68.3 | . | 312.2 | . | . | . | . | 56.6 |
| Growth Trend | 63.8 | . | 19.3 | . | . | . | . | 0.3 |
| *Benchmark Data* | | | | | | | | |
| Regression Benchmark | 53.3 | 3.7 | 334.6 | . | . | . | . | . |
| Lower Bound | 20.0 | 3.2 | 188.4 | . | . | . | . | . |
| Upper Bound | 86.6 | 4.1 | 480.8 | . | . | . | . | . |
| *Latest Year Tunisia* | 2005 | 2007 | 2005 | 2007 | 2007 | 2007 | 2007 | 2004 |
| Tunisia Value Latest Year | 95.1 | 5.0 | 691.8 | 5.4 | 4.8 | 4.6 | 5.7 | 65.8 |
| *Latest Year Turkey* | 2005 | 2007 | 2005 | 2007 | 2007 | 2007 | 2007 | 2002 |
| Turkey Value Latest Year | 222.0 | 3.7 | 868.5 | 5.1 | 3.4 | 2.4 | 4.3 | 41.6 |
| LMI - M.E. & N.A. | 58.5 | 3.6 | 353.0 | 4.6 | 3.7 | 3.0 | 5.0 | 65.9 |
| Lower Middle Income | 51.9 | 3.0 | 245.5 | 4.1 | 3.1 | 1.8 | 4.0 | 49.0 |
| High Five Avg. | 720.0 | 6.6 | 1,777.9 | 6.6 | 6.6 | 6.5 | 6.8 | 100.0 |
| Low Five Avg. | 1.3 | 1.8 | 13.7 | 2.4 | 1.4 | 1.1 | 1.5 | 2.6 |

| | Science and Technology | | | | |
|---|---|---|---|---|---|
| | Expenditure in Research and Developement, % GDP | FDI Technology Transfer Index (1 for poor to 7 for excellent) | Availability of Scientists and Engineers (1 for poor to 7 for excellent) | Scientific and Technology Journal Articles, per Million People | IPR Protection (1 for poor to 7 for excellent) |
| Indicator Number | 26P1 | 26P2 | 26P3 | 26P4 | 26P5 |
| *Morocco Data* | | | | | |
| *Latest Year (T)* | *2002* | *2007* | *2007* | *2003* | *2007* |
| Value Year T | *0.6* | *5.1* | *4.9* | *428* | *3.8* |
| Value Year T-1 | *0.7* | *5.0* | *5.1* | *461* | *3.5* |
| Value Year T-2 | *.* | *.* | *.* | *469* | *.* |
| Value Year T-3 | *.* | *.* | *.* | *471* | *.* |
| Value Year T-4 | *0.3* | *.* | *.* | *425* | *.* |
| Average Value, 5 year | *.* | *.* | *.* | *451* | *.* |
| Growth Trend | *.* | *.* | *.* | *0* | *.* |
| *Benchmark Data* | | | | | |
| Regression Benchmark | *0.4* | *5.0* | *5.4* | *523* | *3.9* |
| Lower Bound | *0.2* | *4.6* | *5.0* | *483* | *3.6* |
| Upper Bound | *0.5* | *5.4* | *5.8* | *563* | *4.2* |
| *Latest Year Tunisia* | *2002* | *2007* | *2007* | *2003* | *2007* |
| Tunisia Value Latest Year | *0.6* | *5.3* | *5.6* | *452* | *4.6* |
| *Latest Year Turkey* | *2002* | *2007* | *2007* | *2003* | *2007* |
| Turkey Value Latest Year | *0.7* | *4.8* | *4.7* | *6,224* | *3.4* |
| LMI - M.E. & N.A. | *.* | *5.0* | *5.1* | *242* | *3.6* |
| Lower Middle Income | *.* | *4.7* | *4.0* | *20* | *3.0* |
| High Five Avg. | *3.7* | *6.1* | *6.1* | *75,712* | *6.3* |
| Low Five Avg. | *0.0* | *3.6* | *2.7* | *0* | *2.0* |

| | Health | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | HIV Prevalence | Life Expectancy at Birth | Maternal Mortality Rate, per 100,000 Live Births | Access to Improved Sanitation | Access to Improved Water Source | Births Attended by Skilled Health Personnel | Child Immunization Rate | Prevalence of Child Malnutrition, Weight for Age | Public Health Expenditure, % GDP |
| Indicator Number | 31P1 | 31P2 | 31P3 | 31S1 | 31S2 | 31S3 | 31S4 | 31S5 | 31S6 |
| *Morocco Data* | | | | | | | | | |
| *Latest Year (T)* | 2005 | 2005 | 2000 | 2004 | 2004 | 2004 | 2005 | 2004 | 2004 |
| Value Year T | 0.1 | 70.4 | 220 | 73.0 | 81.0 | 62.6 | 97.5 | 10.2 | 1.7 |
| Value Year T-1 | . | . | . | . | . | . | 96.0 | . | 1.7 |
| Value Year T-2 | 0.1 | . | . | . | . | . | 90.5 | . | 1.6 |
| Value Year T-3 | . | 69.5 | . | . | . | . | 95.0 | . | 1.6 |
| Value Year T-4 | . | . | . | . | . | . | 96.0 | . | 1.5 |
| Average Value, 5 year | . | . | . | . | . | . | 95.0 | . | 1.6 |
| Growth Trend | . | . | . | . | . | . | 0.4 | . | 3.8 |
| *Benchmark Data* | | | | | | | | | |
| Regression Benchmark | 0.1 | 70.3 | 164 | . | . | . | . | . | . |
| Lower Bound | -3.5 | . | -3 | . | . | . | . | . | . |
| Upper Bound | 3.8 | . | 331 | . | . | . | . | . | . |
| *Latest Year Tunisia* | 2005 | 2005 | 2000 | 2004 | 2004 | 2000 | 2005 | 2000 | 2003 |
| Tunisia Value Latest Year | 0.1 | 73.5 | 120 | 85.0 | 93.0 | 89.9 | 97.0 | 4.0 | 2.8 |
| *Latest Year Turkey* | 2005 | 2005 | 2000 | 2004 | 2004 | 2003 | 2005 | 2003 | 2005 |
| Turkey Value Latest Year | 0.2 | 71.3 | 70 | 88.0 | 96.0 | 83.0 | 90.5 | 3.9 | 5.2 |
| LMI - M.E. & N.A. | 0.2 | 71.7 | 130 | 82.0 | 92.5 | 89.8 | 96.0 | 6.9 | 2.9 |
| Lower Middle Income | 0.2 | 69.2 | 120 | 73.0 | 85.0 | 89.1 | 89.5 | 10.6 | 3.2 |
| High Five Avg. | . | 81.3 | 1,800 | 100.0 | 100.0 | 100.0 | 99.0 | 48.2 | 11.2 |
| Low Five Avg. | . | 37.0 | 3 | 11.4 | 34.0 | 11.4 | 33.2 | 2.1 | 0.6 |

| | Education | | | | | |
|---|---|---|---|---|---|---|
| | Net Primary Enrollment Rate, Total | Net Primary Enrollment Rate, Female | Net Primary Enrollment Rate, Male | Persistence to Grade 5, Total | Persistence to Grade 5, Female | Persistence to Grade 5, Male |
| Indicator Number | 32P1a | 32P1b | 32P1c | 32P2a | 32P2b | 32P2c |
| *Morocco Data* | | | | | | |
| *Latest Year (T)* | *2006* | *2006* | *2006* | *2004* | *2004* | *2004* |
| Value Year T | 88.1 | 85.4 | 90.8 | 79.2 | 77.1 | 81.2 |
| Value Year T-1 | 87.5 | 84.7 | 90.1 | 75.6 | 74.1 | 77.1 |
| Value Year T-2 | 86.8 | 84.1 | 89.5 | 81.2 | 80.4 | 82.0 |
| Value Year T-3 | 87.0 | 84.0 | 89.8 | 83.7 | 83.4 | 84.0 |
| Value Year T-4 | 85.3 | 82.0 | 88.5 | 80.1 | 81.0 | 79.3 |
| Average Value, 5 year | 86.9 | 84.0 | 89.7 | 80.0 | 79.2 | 80.7 |
| Growth Trend | 0.7 | 0.9 | 0.5 | -1.2 | -2.2 | -0.4 |
| *Benchmark Data* | | | | | | |
| Regression Benchmark | 90.6 | . | . | 89.1 | | . |
| Lower Bound | 82.9 | . | . | 81.5 | . | . |
| Upper Bound | 98.2 | . | . | 96.6 | . | . |
| *Latest Year Tunisia* | *2006* | *2006* | *2006* | *2004* | *2004* | *2004* |
| Tunisia Value Latest Year | 96.1 | 96.7 | 95.5 | 97.0 | 97.4 | 96.7 |
| *Latest Year Turkey* | *2006* | *2006* | *2006* | *2004* | *2004* | *2004* |
| Turkey Value Latest Year | 91.4 | 89.4 | 93.2 | 96.9 | 96.6 | 97.2 |
| LMI - M.E. & N.A. | 91.6 | 90.8 | 94.0 | 93.6 | 94.1 | 93.0 |
| Lower Middle Income | 92.1 | 91.4 | 91.8 | 81.7 | 84.0 | 82.1 |
| High Five Avg. | 99.4 | 99.3 | 99.8 | 99.7 | 99.9 | 99.9 |
| Low Five Avg. | 40.6 | 36.5 | 43.5 | 43.2 | 39.6 | 43.6 |

| | Youth Literacy Rate, Total | Youth Literacy Rate, Male | Youth Literacy Rate, Female | Net Secondary Enrollment Rate, Total | Gross Tertiary Enrollment Rate, Total | Expenditure on Primary Education, % GDP | Educational Expenditure per Student, % GDP per capita, Primary | Educational Expenditure per Student, % GDP per capita, Secondary | Educational Expenditure per Student, % GDP per capita, Tertiary | Pupil-teacher Ratio, Primary School |
|---|---|---|---|---|---|---|---|---|---|---|
| **Education (Cont'd)** | | | | | | | | | | |
| Indicator Number | 32P3a | 32P3b | 32P3c | 32P4 | 32P5 | 32S1 | 32S2a | 32S2b | 32S2c | 32S3 |
| *Morocco Data* | | | | | | | | | | |
| *Latest Year (T)* | 2006 | 2006 | 2006 | 2003 | 2005 | 2007 | 2005 | 2005 | 2005 | 2005 |
| Value Year T | 70.5 | 80.8 | 60.5 | 35.1 | 11.3 | 2.5 | 22.9 | 39.6 | 93.0 | 27.1 |
| Value Year T-1 | . | . | . | 34.0 | 10.6 | 2.5 | 18.6 | 44.4 | 83.9 | 27.6 |
| Value Year T-2 | 70.5 | 80.8 | 60.5 | . | 10.5 | 1.1 | 18.0 | 46.2 | 86.8 | 28.2 |
| Value Year T-3 | . | . | . | 30.7 | 10.0 | 1.1 | 18.3 | 47.7 | 95.4 | 28.3 |
| Value Year T-4 | . | . | . | . | 9.9 | . | 17.9 | 46.0 | 101.2 | 28.1 |
| Average Value, 5 year | . | . | . | . | 10.4 | . | 19.1 | 44.8 | 92.1 | 27.9 |
| Growth Trend | . | . | . | . | 3.2 | . | 5.1 | -3.7 | -3.0 | -1.0 |
| *Benchmark Data* | | | | | | | | | | |
| Regression Benchmark | 85.1 | . | . | 60.2 | 22.5 | . | . | . | . | . |
| Lower Bound | 76.6 | . | . | 52.1 | 15.3 | . | . | . | . | . |
| Upper Bound | 93.6 | . | . | 68.3 | 29.7 | . | . | . | . | . |
| *Latest Year Tunisia* | 2006 | 2006 | 2006 | 2003 | 2005 | 2007 | 2005 | 2005 | 2005 | 2005 |
| Tunisia Value Latest Year | 94.3 | 96.4 | 92.2 | 65.0 | 30.2 | 2.9 | 21.1 | 24.4 | 56.4 | 20.0 |
| *Latest Year Turkey* | 2006 | 2006 | 2006 | 2005 | 2005 | . | 2003 | 2003 | 2003 | . |
| Turkey Value Latest Year | 95.6 | 98.0 | 93.3 | 66.8 | 31.2 | . | 11.8 | 14.8 | 44.7 | . |
| LMI - M.E. & N.A. | 92.2 | 94.3 | 90.2 | 65.2 | 23.9 | 2.7 | 17.4 | 21.5 | . | 24.0 |
| Lower Middle Income | 97.1 | 97.7 | 96.5 | 66.8 | 16.9 | 2.1 | 14.2 | 17.3 | 36.9 | 23.6 |
| High Five Avg. | 99.9 | 99.9 | 99.9 | 97.0 | 79.4 | 7.1 | 31.0 | 55.0 | 689.4 | 71.2 |
| Low Five Avg. | 32.8 | 45.9 | 21.3 | 6.8 | 0.5 | 0.4 | 3.4 | 5.0 | 5.1 | 10.4 |

| | Employment and Workforce | | | | | | |
|---|---|---|---|---|---|---|---|
| | Labor Force Participation Rate, Total | Rigidity of Employment Index (0 for minimum rigidity to 100 for maximum rigidity) | Size of the Labor Force | Growth of the Labor Force, Labor Force, Annual % Change | Unemployment Rate | Economically Active Children, % Children Ages 7-14 | Firing Costs, Weeks of Wages |
| Indicator Number | 33P1 | 33P2 | 33P3a | 33P3b | 33P4 | 33P5 | 33S1 |
| *Morocco Data* | | | | | | | |
| *Latest Year (T)* | *2005* | *2007* | *2006* | *2006* | *2006* | . | *2007* |
| Value Year T | 57.4 | 63.0 | 11,300,000 | 1.8 | 9.7 | . | 85.0 |
| Value Year T-1 | 57.3 | 63.0 | 11,100,000 | 1.8 | 11.1 | . | 85.0 |
| Value Year T-2 | 56.9 | 63.0 | 10,900,000 | 4.8 | 10.8 | . | 85.0 |
| Value Year T-3 | 56.2 | 60.0 | 10,400,000 | 3.0 | 11.4 | . | 54.0 |
| Value Year T-4 | 56.3 | 60.0 | 10,100,000 | 1.7 | 11.6 | . | 54.0 |
| Average Value, 5 year | 56.8 | 61.8 | 10,760,000 | 2.6 | 10.9 | . | 72.6 |
| Growth Trend | 0.6 | 1.5 | 2.9 | . | -3.8 | . | 13.6 |
| *Benchmark Data* | | | | | | | |
| Regression Benchmark | 57.0 | 40.8 | . | 3.6 | 10.9 | 1.3 | . |
| Lower Bound | 52.4 | 30.0 | . | 2.2 | 8.4 | -9.4 | . |
| Upper Bound | 61.6 | 51.7 | . | 5.1 | 13.3 | 12.0 | . |
| *Latest Year Tunisia* | *2005* | *2007* | *2006* | *2006* | *2003* | . | *2007* |
| Tunisia Value Latest Year | 56.6 | 49.0 | 3,954,524 | 2.8 | 14.7 | . | 17.0 |
| *Latest Year Turkey* | *2005* | *2007* | *2006* | *2006* | *2005* | . | *2007* |
| Turkey Value Latest Year | 56.9 | 42.0 | 27,000,000 | 0.4 | 10.3 | . | 95.0 |
| LMI - M.E. & N.A. | 55.8 | 39.0 | 6,400,881 | 3.6 | 13.9 | . | 68.0 |
| Lower Middle Income | 67.2 | 30.5 | 2,455,780 | 2.5 | 10.2 | . | 52.5 |
| High Five Avg. | 92.4 | 72.6 | 313,014,657 | 6.0 | 29.7 | 70.2 | 226.3 |
| Low Five Avg. | 49.8 | 0.0 | 7,986 | -1.0 | 1.7 | 2.8 | 0.0 |

| | Agriculture | | | | | | |
|---|---|---|---|---|---|---|---|
| | Agriculture Value Added per Worker | Cereal Yield | Growth in Agricultural Value-Added | Agricultural Policy Costs Index (1 for poor to 7 for excellent) | Crop Production Index (1999-2001 = 100) | Livestock Production Index (1999-2001 = 100) | Agricultural Export Growth |
| Indicator Number | 34P1 | 34P2 | 34P3 | 34S1 | 34S2 | 34S3 | 34S4 |
| *Morocco Data* | | | | | | | |
| *Latest Year (T)* | *2006* | *2005* | *2006* | *2007* | *2004* | *2004* | *2005* |
| Value Year T | *2,037* | *814* | *23.0* | *3.6* | *148.6* | *99.8* | *27.6* |
| Value Year T-1 | *1,657* | *1,507* | *-12.8* | *3.3* | *135.1* | *101.0* | *7.4* |
| Value Year T-2 | *1,901* | *1,524* | *7.7* | *.* | *116.5* | *105.2* | *20.0* |
| Value Year T-3 | *1,766* | *1,070* | *21.7* | *.* | *104.7* | *101.7* | *26.7* |
| Value Year T-4 | *1,453* | *895* | *4.9* | *.* | *91.2* | *99.3* | *-32.2* |
| Average Value, 5 year | *1,763* | *1,162* | *8.9* | *.* | *119.2* | *101.4* | *9.9* |
| Growth Trend | *6* | *2* | *.* | *.* | *12.3* | *0.0* | *.* |
| *Benchmark Data* | | | | | | | |
| Regression Benchmark | *1,580* | *1,552* | *4.2* | *.* | *.* | *.* | *.* |
| Lower Bound | *940* | *941* | *0.0* | *.* | *.* | *.* | *.* |
| Upper Bound | *2,220* | *2,162* | *8.4* | *.* | *.* | *.* | *.* |
| *Latest Year Tunisia* | *2004* | *2005* | *2006* | *2007* | *2004* | *2004* | *2004* |
| Tunisia Value Latest Year | *2,874* | *1,450* | *3.0* | *5.0* | *101.7* | *98.8* | *-4.5* |
| *Latest Year Turkey* | *2004* | *2005* | *2006* | *2007* | *2004* | *2004* | *2005* |
| Turkey Value Latest Year | *1,793* | *2,457* | *8.6* | *3.3* | *103.4* | *106.5* | *-8.3* |
| LMI - M.E. & N.A. | *2,055* | *1,483* | *4.0* | *3.8* | *119.1* | *104.9* | *11.4* |
| Lower Middle Income | *1,395* | *2,397* | *3.0* | *3.6* | *109.5* | *108.0* | *10.2* |
| High Five Avg. | *44,368* | *8,430* | *14.8* | *5.1* | *146.2* | *148.4* | *1,079.1* |
| Low Five Avg. | *95* | *319* | *-13.9* | *2.6* | *67.5* | *86.1* | *-23.4* |

# Technical Notes

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

## STATISTICAL CAPACITY

### Statistical Capacity Indicator

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

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

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

*CAS Code # 01P1*

## GROWTH PERFORMANCE

### Per capita GDP, in Purchasing Power Parity Dollars

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

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

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

*CAS Code #11P1*

### Per capita GDP, in current US Dollars

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

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

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

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

*CAS Code #11P2*

### Real GDP Growth

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

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

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

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

*CAS Code #11P3*

### Growth of Labor Productivity

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

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

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

*CAS Code # 11S1*

### Investment Productivity, Incremental Capital-Output Ratio (ICOR)

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

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

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

*CAS Code #11S2*

### Gross Fixed Investment, Percentage of GDP

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

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

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

*CAS Code # 11S3*

### Gross Fixed Private Investment, Percentage of GDP

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

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

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

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

*CAS Code #11S4*

## POVERTY AND INEQUALITY

### Human Poverty Index

*Source:* UNDP, Human Development Report.

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

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

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

*CAS Code #12P1*

### Income Share, Poorest 20%

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

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

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

*CAS Code # 12P2*

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

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

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

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

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

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

*CAS Code #12P3a*

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

*Source:* World Development Indicators, most recent publication series SI.POV.2DAY, original data from national surveys. Alternative source for target countries: the country's Poverty Reduction Strategy Paper: http://www.imf.org/external/np/prsp/prsp.asp

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

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

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

*CAS Code #12P3b*

### Poverty Headcount, National Poverty Line

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

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

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

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

*CAS Code #12P4*

### PRSP Status

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

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

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

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

*CAS Code #12P5*

**Percent of Population below Minimum Dietary Energy Consumption**

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

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

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

*CAS Code # 12S1*

## ECONOMIC STRUCTURE

**Employment or Labor Force Structure**

*Source:* World Development Indicators, most recent publication series SL.AGR.EMPL.ZS for agriculture, series SL.IND.EMPL.ZS for industry, and series SL.SRV.EMPL.ZS for services. Alternative source: CIA World Fact Book: https://www.cia.gov/library/publications/the-world-factbook/index.html

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

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

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

*CAS Code #13P1*

**Output Structure**

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

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

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

*Coverage:* Data are available for about 86 USAID countries.

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

*CAS Code #13P2*

## DEMOGRAPHY AND ENVIRONMENT

**Adult Literacy Rate**

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

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

*Coverage:* Data are available for about 66 USAID countries.

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

*CAS Code # 14P1*

**Youth Dependency Rate**

*Source:* World Development Indicators, most recent publication series.

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

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

*CAS Code #14P2a*

**Elderly Dependency Rate**

*Source:* World Development Indicators, most recent publication series.

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

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

*CAS Code #14P2b*

**Environmental Performance Index**

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

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

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

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

*CAS Code #14P3*

### Population Size and Growth

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

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

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

*CAS Code # 14P4*

### Percent of Population Living In Urban Areas

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

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

*Coverage:* Data are available for about 86 USAID countries.

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

*CAS Code #14P5*

## GENDER

### Girls' Primary Completion Rate

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

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

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

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

*CAS Code #15P1*

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

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

http://hdr.undp.org/hdr2006/statistics/indicators/224.html

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

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

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

*CAS Code #15P2*

### Life Expectancy, Male and Female

*Source:* Estimated from UNDP Human Development Indicators: http://hdr.undp.org/hdr2006/statistics/indicators/221.html.

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

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

*CAS Code #15P3*

### Labor Force Participation Rate, Male and Female

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

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

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

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

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

*CAS Code #15P4*

## FISCAL AND MONETARY POLICY

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

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

## Government Expenditure, Percentage of GDP

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

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

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

*CAS Code # 21P1*

## Government Revenue, excluding grants, Percentage of GDP

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

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

*Gaps:* Data missing for about 24 USAID countries.

*CAS Code # 21P2*

## Growth in Broad Money Supply

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

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

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

*CAS Code #21P3*

## Inflation Rate

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

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

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

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

*CAS Code # 21P4*

## Overall Budget Balance, Including Grants, Percentage of GDP

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

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

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

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

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

*CAS Code # 21P5*

## Composition of Government Expenditure

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

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

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

*CAS Code # 21S1*

## Composition of Government Revenue

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

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

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

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

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

*CAS Code # 21S2*

### Composition of Money Supply Growth

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

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

*Coverage:* Data are available for about 86 USAID countries.

*CAS Code # 21S3*

## BUSINESS ENVIRONMENT

### Control of Corruption Index

*Source:* World Bank Institute
http://www.govindicators.org

*Definition:* The Control of Corruption index is an aggregation of various indicators that measure the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests. Index ranges from -2.5 (for very poor performance) to +2.5 (for excellent performance).
This is also an MCC indicator, under the criterion of ruling justly. The MCC rescales the values as percentile rankings relative to the set of MCA eligible countries, ranging from a value from 0 (for very poor performance) to 100 (for excellent performance). Some country reports use the MCC scaling.

*Coverage:* Data are available for nearly all USAID countries.

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

*CAS Code # 22P1*

### Ease of Doing Business Index

*Source:* World Bank, Doing Business Indictors http://rru.worldbank.org/DoingBusiness/

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

*Coverage:* Data are available for nearly all USAID countries.

*CAS Code # 22P2*

### Rule of Law Index

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

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

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

*Coverage:* Data are available for nearly all USAID countries.

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

*CAS Code #22P3*

### Regulatory Quality Index

*Source:* World Bank Institute;

http://www.govindicators.org

*Definition:* The regulatory quality index measures the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development. It is computed from survey data from multiple sources. The index values range from -2.5 (very poor performance) to +2.5 (excellent performance).
This is also an MCC indicator, under the criterion of encouraging economic freedom. The MCC rescales the values as percentile rankings relative to the set of MCA eligible countries, ranging from a value from 0 (for very poor performance) to 100 (for excellent performance). Some country reports use the MCC scaling.

*Gaps:* Data are available for nearly all USAID countries.

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

*CAS Code #22P4*

### Government Effectiveness Index

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

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

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

*Coverage:* Data are available for nearly all USAID countries.

*CAS Code #22P5*

**Cost of Starting a Business**

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

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

*Coverage:* Data are available for nearly all USAID countries.

*CAS Code #22S1*

**Procedures to Enforce a Contract**

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

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

*Coverage:* Data are available for nearly all USAID countries.

*CAS Code # 22S2*

**Procedures to Register Property**

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

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

*Coverage:* Data are available for nearly all USAID countries.

*CAS Code #22S3*

**Procedures to Start a Business**

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

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

*Coverage:* Data are available for nearly all USAID countries.

*CAS Code # 22S4*

**Time to Enforce a Contract**

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

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

*Coverage:* Data are available for nearly all USAID countries.

*CAS Code # 22S5*

**Time to Register Property**

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

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

*Coverage:* Data are available for nearly all USAID countries.

*CAS Code #22S6*

**Time to Start a Business**

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

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

*Coverage:* Data are available for nearly all USAID countries.

*CAS Code #22S7*

**Total Tax Payable by Business**

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

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

*Coverage*: Data are available for nearly all USAID countries

*CAS Code #22S8*

**Business Costs of Crime, Violence and Terrorism Index**

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

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

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

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

*CAS Code #22S9*

**Senior Manager Time Spent Dealing with Government Regulations**

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

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

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

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

*CAS Code #22S10*

## FINANCIAL SECTOR

**Domestic Credit to Private Sector, Percentage of GDP**

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

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

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

*CAS Code # 23P1*

**Interest Rate Spread**

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

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

*Coverage:* Data are available for about 66 USAID countries.

*CAS Code # 23P2*

**Money Supply, Percentage of GDP**

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

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

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

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

*CAS Code # 23P3*

**Stock Market Capitalization Rate, Percentage of GDP**

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

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

*Coverage:* Data are available for about 54 USAID countries.

*CAS Code # 23P4*

**Credit Information Index**

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

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

*Coverage:* Data are available for nearly all USAID countries.

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

*CAS Code # 23P5*

**Legal Rights of Borrowers and Lenders Index**

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

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

*Coverage:* Data are available for nearly all USAID countries.

*CAS Code # 23S1*

**Real Interest Rate**

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

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

*Coverage:* Data are available for about 68 USAID countries.

*CAS Code # 23S2*

**Number of Active Microfinance Borrowers**

*Source:* The Mix Market.

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

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

*Coverage:* Data are available for about 68 USAID countries.

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

*CAS Code # 23S3*

## EXTERNAL SECTOR

### Aid, Percentage of GNI

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

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

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

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

*CAS Code #24P1*

### Current Account Balance, Percentage of GDP

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

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

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

*CAS Code # 24P2*

### Debt Service ratio

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

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

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

*Coverage:* Data are available for about 77 USAID countries.

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

*CAS Code # 24P3*

### Exports Growth, Goods and Services

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

www.imf.org/external/np/sec/aiv/index.htm. Benchmarking data from World Development Indicators, most recent publication, series NE.EXP.GNFS.KD.ZG, based on World Bank national accounts data, and OECD National Accounts data files.

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

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

*CAS Code # 24P4*

### Foreign Direct Investment, Percentage of GDP

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

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

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

*CAS Code #24P5*

### Gross International Reserves, Months of Imports

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

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

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

*Coverage:* Data are available for about 77 USAID countries.

*CAS Code # 24P6*

### Gross Private Capital Inflows, Percentage of GDP

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

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

*Coverage:* Information on coverage is not easily accessible.

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

*CAS Code #24P7*

**Present Value of Debt, Percentage of GNI**

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

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

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

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

*CAS Code # 24P8*

**Remittances Receipts, Percentage of Exports**

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

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

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

*CAS Code # 24P9*

**Trade, Percentage of GDP**

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

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

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

*CAS Code # 24P10*

**Trade in Services, Percentage of GDP**

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

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

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

*CAS Code # 24P11*

**Concentration of Exports**

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

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

*Coverage:* Available for about 74 USAID countries.

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

*CAS Code # 24S1*

**Inward FDI Potential Index**

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

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

*Coverage:* Data are available for about 77 USAID countries.

*CAS Code # 24S2*

**Net Barter Terms of Trade**

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

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

*Coverage:* Data are available for about 51 USAID countries.

*CAS Code # 24S3*

**Real Effective Exchange Rate (REER)**

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

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

*Coverage:* Information on coverage is not easily accessible.

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

*CAS Code # 24S4*

**Structure of Merchandise Exports**

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

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

*Coverage:* Data are available for about 78 USAID countries.

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

*CAS Code # 24S5*

### Trade Policy Index

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

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

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

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

*CAS Code # 24S6*

### Ease of Trading Across Borders Ranking

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

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

*Coverage:* Data are available for nearly all USAID countries.

*CAS Code # 24S7*

## ECONOMIC INFRASTRUCTURE

### Internet Users per 1,000 people

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

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

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

*CAS Code # 25P1*

### Overall Infrastructure Quality Index

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

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

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

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

*CAS Code # 25P2*

### Telephone Density, Fixed Line and Mobile

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

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

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

*CAS Code #25P3*

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

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

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

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

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

*CAS Code #25S1*

### Roads, paved (% total)

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

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

*Coverage:* Data are available for nearly all USAID countries.

*CAS Code #25S2*

## SCIENCE AND TECHNOLOGY

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

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

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

*Coverage:* Data are available for about 26 USAID countries.

*CAS Code #26P1*

**FDI Technology Transfer Index**

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

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

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

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

*CAS Code # 26P2*

**Availability of Scientists and Engineers Index**

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

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

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

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

*CAS Code #26P3*

**Science and Technology Journal Articles, per Million People**

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

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

*Coverage:* Data are available for about 82 USAID countries.
*CAS Code #26P4*

**IPR Protection Index**

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

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

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

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

*CAS Code #26P5*

## HEALTH

**HIV Prevalence**

*Source:* UNAIDS for most recent country data:
http://data.unaids.org/pub/GlobalReport/2006/2006_GR_AN

N2_en.pdf. World Development Indicators, most recent publication for benchmark data, series SH.DYN.AIDS.ZS.

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

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

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

*CAS Code # 31P1*

**Life Expectancy at Birth**

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

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

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

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

*CAS Code # 31P2*

**Maternal Mortality Rate**

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

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

*Coverage:* Data are available for about 87 USAID countries.

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

*CAS Code # 31P3*

**Access to Improved Sanitation**

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

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

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

*CAS Code #31S1*

**Access to Improved Water Source**

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

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

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

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

*CAS Code # 31S2*

**Births Attended by Skilled Health Personnel**

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

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

*Coverage:* Data are available for about 62 USAID countries.

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

*CAS Code # 31S3*

**Child Immunization Rate**

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

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

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

*CAS Code #31S4*

**Prevalence of Child Malnutrition—Weight for Age**

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

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

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

*CAS Code # 31S5*

**Public Health Expenditure, Percentage of GDP**

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

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

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

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

*CAS Code #31S6*

## EDUCATION

**Net Primary Enrollment Rate—Female, Male and Total**

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

*Definition:* The indicator measures the proportion of the population of the official age for primary, secondary, or tertiary education according to national regulations who are enrolled in primary schools. Primary education provides children with basic reading, writing, and mathematics skills along with an elementary understanding of such subjects as history, geography, natural science, social science, art, and music.

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

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

*CAS Code # 32P1*

**Persistence to Grade 5—Female, Male, and Total**

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

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

*Coverage:* Data are available for about 48 USAID countries.

*CAS Code # 32P2*

**Youth Literacy Rate—Female, Male, and Total**

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

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

*Coverage:* Data are available for about 67 USAID countries.

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

*CAS Code #32P3*

**Net Secondary Enrollment Rate, Total**

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

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

*Coverage:* Not available for draft.

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

*CAS Code #32P4*

**Gross Tertiary Enrollment Rate, Total**

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

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

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

*Coverage:* Not available for draft.

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

*CAS Code #32P5*

### Expenditure on Primary Education, Percentage of GDP

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

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

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

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

*CAS Code #32S1*

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

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

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

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

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

*CAS Code # 32S2*

### Pupil-teacher Ratio, Primary School

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

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

*Coverage:* Data are available for about 76 USAID countries.

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

*CAS Code # 32S3*

## EMPLOYMENT AND WORKFORCE

### Labor Force Participation Rate

*Source:* Derived from World Development Indicators, but the precise computation differs depending on whether a particular country study uses the 2004 or 2005 and years subsequent WDI.
To calculate the *total* labor force participation rate using WDI 2004: the numerator is Labor force, total (SL.TLF.TOTL.IN), and the denominator is Population ages 15-64, total (SP.POP.1564.TO). Using WDI 2005 and subsequent years, the denominator is calculated as the total population (SP.POP.TOTL) times the percentage of the population in the age group 15-64 (SP.POP.1564.IN.ZS).
*Definition:* The percentage of the working age population that is in the labor force. The labor force comprises people who meet the International Labor Organization definition of the economically active population: all people who supply labor for the production of goods and services during a specified period. It includes both the employed and the unemployed.

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

*CAS Code #33P1*

### Rigidity of Employment Index

*Source:* World Bank, Doing Business in 2007, Employing workers category:
http://www.doingbusiness.org/ExploreTopics/EmployingWorkers/

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

*Coverage:* Data are available for nearly all USAID countries.

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

*CAS Code # 33P2*

### Size and Growth of the Labor Force

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

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

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

*CAS Code #33P3*

### Unemployment Rate

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

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

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

*Coverage:* Data are available for about 50 USAID countries.

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

*CAS Code # 33P4*

**Economically Active Children, Percentage Children Ages 7-14**

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

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

*CAS Code # 33P5*

**Firing Costs, Weeks of Wages**

*Source:* World Bank, Doing Business, Employing Workers Category: http://www.doingbusiness.org/ MethodologySurveys/EmployingWorkers.aspx.

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

*Coverage:* Data available for nearly all USAID countries.

*CAS Code # 33S1*

## AGRICULTURE

**Agriculture Value Added per Worker**

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

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

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

*CAS Code # 34P1*

**Cereal Yield**

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

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

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

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

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

*CAS Code # 34P2*

**Growth in Agricultural Value-Added**

*Source:* The latest country data are taken from national data sources or from IMF Article IV consultation reports: www.imf.org/ external/np/sec/aiv/index.htm. The benchmarking data are from World Development Indicators, most recent publication series NV.AGR.TOTL.KD.ZG

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

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

*CAS Code # 34P3*

**Agricultural Policy Costs Index**

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

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

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

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

*CAS Code # 34S1*

**Crop Production Index**

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

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

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

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

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

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

*CAS Code # 34S2*

**Livestock Production Index**

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

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

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

*Data Quality:* See comments on the Crop Production Index.

*CAS Code # 34S3*

**Agriculture Export Growth**

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

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

*Coverage:* Not available for draft.

*CAS Code # 34S4*