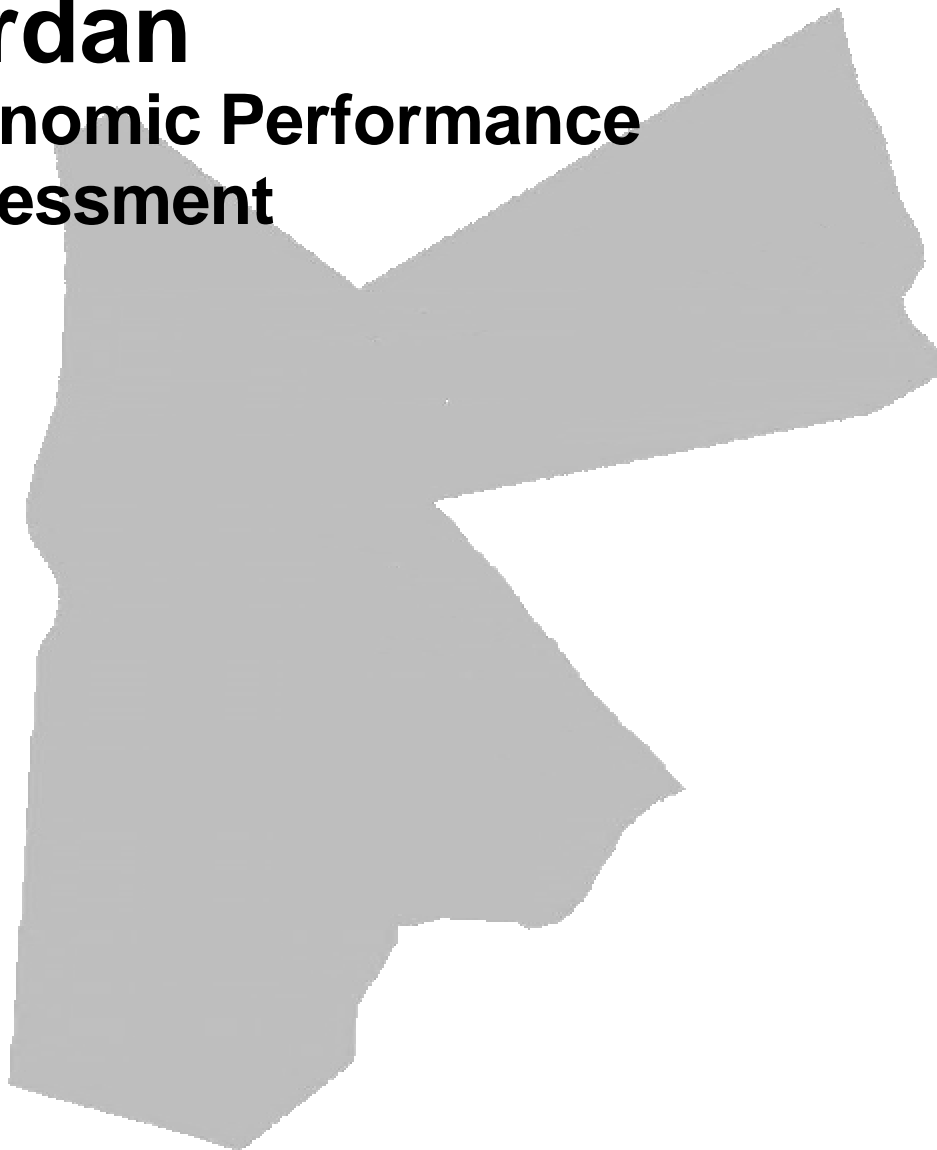




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Jordan

Economic Performance Assessment



September 2005

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Jordan

Economic Performance Assessment

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

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

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

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HIGHLIGHTS OF JORDAN'S PERFORMANCE, RELATIVE TO BENCHMARK STANDARDS

Economic Growth	Economic growth has been strong in recent years, but insufficient given the rapidly growing population. Growth is constrained by two main factors: low productivity growth and strained regional security.
Poverty	Progress in reducing poverty has been good, but inequality and interregional disparities remain a problem.
Gender	Jordan has been improving women's access to health and education services, but the women's rate of participation in the labor force is still very low.
Fiscal and Monetary Policy	The IMF has recognized Jordan's progress and prudent macroeconomic policies. Government expenditures—in particular subsidies and other transfers—as well as foreign aid remain high, however. The budget deficit is only sustainable with continued large inflows of grants.
Business Environment	In general, Jordan meets or exceeds regional benchmarks on legal/regulatory indicators, but conditions are far below the standards set by global leaders. To accelerate growth, impediments to doing business must be reduced.
Financial Sector	Jordan has a well-developed financial sector, with a high degree of monetization, high levels of credit to the private sector, and a well capitalized stock market.
External Sector	Jordan is a highly open economy, and export growth is strong. The current account balance depends heavily on remittances and official transfers, underscoring the need to encourage more inflows of private capital. Jordan also remains heavily indebted, so debt sustainability considerations are a priority.
Economic Infrastructure	Infrastructure development in Jordan—except railroads—is superior to that of its peers.
Health	Health indicators in Jordan are very good, and public expenditures on health are higher than regional benchmarks.
Education	Jordan's indicators for basic, secondary, and tertiary education are very good.
Employment and Workforce	The labor force is growing rapidly, creating pressure for productive jobs and income opportunities. Unemployment, particularly among Jordan's youth, remains high, and women's participation in the labor force is particularly low.
Agriculture	Agriculture contributes very little to Jordan's GDP. Productivity is very low by regional standards.

Note: The standards used to benchmark country performance are explained in the appendix.

JORDAN: NOTABLE STRENGTHS AND WEAKNESSES— SELECTED INDICATORS

Indicators	Strengths	Weaknesses
Growth Performance		
Real GDP growth , %	✓	
Poverty and Inequality		
Human poverty index	✓	
Demography and Environment		
Adult literacy rate	✓	
Fiscal and Monetary Policy		
Government expenditure, % of GDP		✓
Inflation rate (%)	✓	
Business Environment		
Cost of starting a business, % of GNI per capita		✓
Corruption Perception Index	✓	
Rule of Law Index	✓	
Time to register property	✓	
Financial Sector		
Domestic credit to private sector, % GDP (2004)	✓	
Money supply (M2), % GDP (2004)	✓	
Stock market capitalization rate, % of GDP (2003)	✓	
External Sector		
Aid, % GNI (2003) ^a		✓
Debt service ratio, % of exports (2003)		✓
Present value of debt, % of GNI (2003)		✓
Trade, % of GDP	✓	
Export growth, good and services	✓	
Economic Infrastructure		
Internet users per 1000 people	✓	
Telephone density, fixed line and mobile, per 1,000 people	✓	
Overall Infrastructure Quality Index	✓	
Health		
Maternal mortality rate, deaths per 100,000	✓	

Indicators	Strengths	Weaknesses
Education		
Persistence in school to grade 5, % of total	✓	
Youth literacy rate	✓	
Employment and Workforce		
Labor force participation rate, female, %		✓
Unemployment rate		✓
Rigidity of employment index	✓	
Agriculture		
Agriculture value added per worker, constant 1995 US\$		✓
Growth in agriculture value added, %		✓

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

1. Introduction

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

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

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

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

¹ Sources include the latest data from USAID’s internal Economic and Social Database (ESDB), and from readily accessible public information sources. The ESDB is compiled and maintained by the Development Information Service (DIS), under PPC/CDIE. It is accessible to staff through the USAID intranet. For benchmarking purposes, USAID/Jordan picked two world leaders to be comparator countries: Ireland and Singapore.

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 strategic objective because of its innate importance as a development goal and because growth is the most powerful engine for poverty reduction.

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*.⁴ 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 evaluation in this paper must be interpreted with caution, because a concise analysis of this sort cannot provide a definitive diagnosis of economic problems, or simple answers to questions about programmatic priorities. Instead, the aim of the analysis is to spot signs of economic growth problems based on a review of selected indicators, subject to limits of data availability and quality. The results should provide insight about potential paths for USAID intervention, to complement on-the-ground knowledge and further in-depth studies.

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

Table 1-1

Topic Coverage

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

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

2. Overview of the Economy

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

GROWTH PERFORMANCE

With an estimated per capita GDP of \$1,903 in 2004, Jordan ranks squarely in the middle of the World Bank's lower-middle income group. Over the past five years, growth averaged 5.4 percent, reaching 7.7 percent in 2004.⁶ The trend growth rate is well above the benchmark regression estimate of 3.8 percent for a country with Jordan's characteristics. But given the average population growth rate of 2.8 percent, Jordan must aim to *sustain* growth rates comparable to or better than its performance in 2004 in order to climb into the upper middle-income bracket and deliver visible and widespread improvements in living standards (see Figure 2-1).

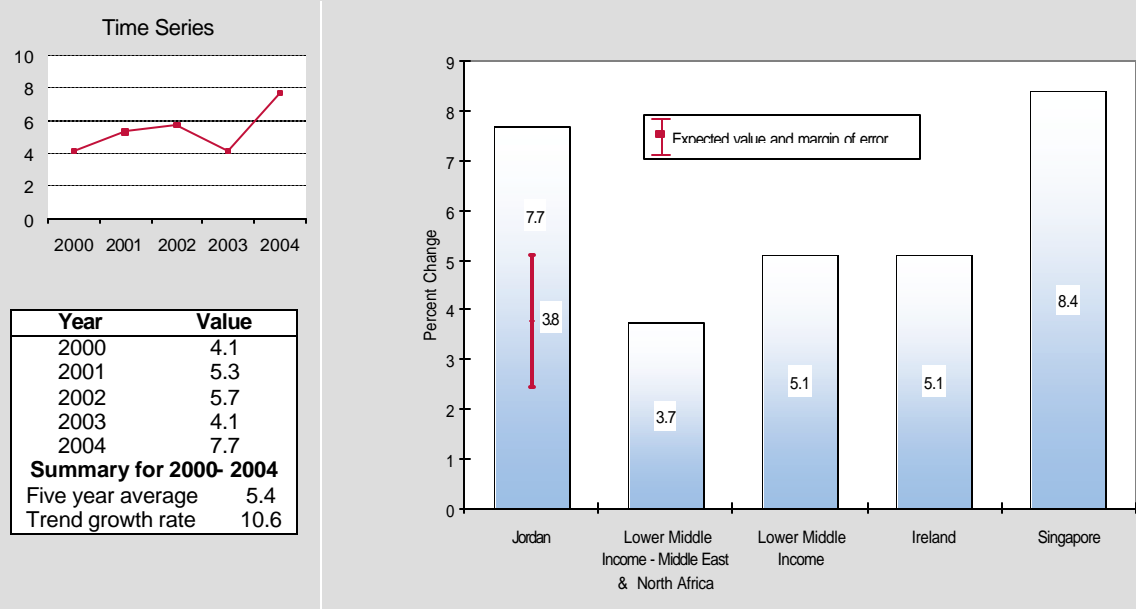
Two major constraints stand in the way of Jordan making this transformation: low productivity growth and regional instability. Labor force productivity grew by an average of only 0.4 percent in the five years to 2003 (latest year of data available) (see Figure 2-2). This is well below the average for lower middle-income countries in the Middle East and North Africa (hereafter, LMI-MENA) of 1.6 percent. It is particularly problematic given the rapid growth of the labor force (see Section 4). In addition, though investment levels are in line with all benchmarks, investment efficiency is low. The incremental capital-output ratio (ICOR) of 5.5 over the past five years shows that close to \$5.50 of gross investment has been needed per \$1 of extra output. International experience suggests that countries using capital productively have an ICOR of 4 or below. Measures to improve capital productivity (lower the ICOR) are essential if Jordan is to emulate the transformational growth of countries like Ireland and Singapore (Figure 2-3). One likely explanation for weak productivity performance is the impact of regional instability on trade and investment. Jordan's best hope for transformational growth is to support efforts to bring stability to the Middle East. The government's extensive intervention in the market through state-owned enterprises may be another factor contributing to productivity problems. Other possible impediments are discussed in Section 3.

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

⁶ Latest data from Jordan's Ministry of Finance.

Figure 2-1. Real GDP Growth

Real GDP growth has been solid, but high growth must be sustained to raise living standards.

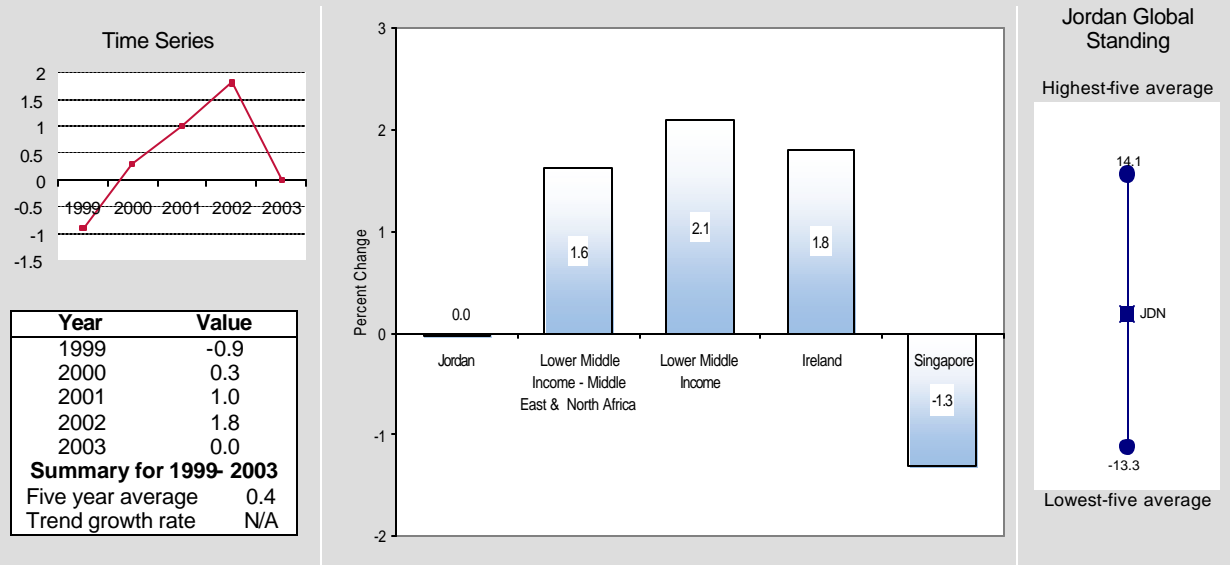


SOURCES: Ministry of Finance, Jordan, and World Development Indicators.

CAS Code: 13P3

Figure 2-2. Growth of Labor Productivity

Labor productivity in Jordan has been stagnant.

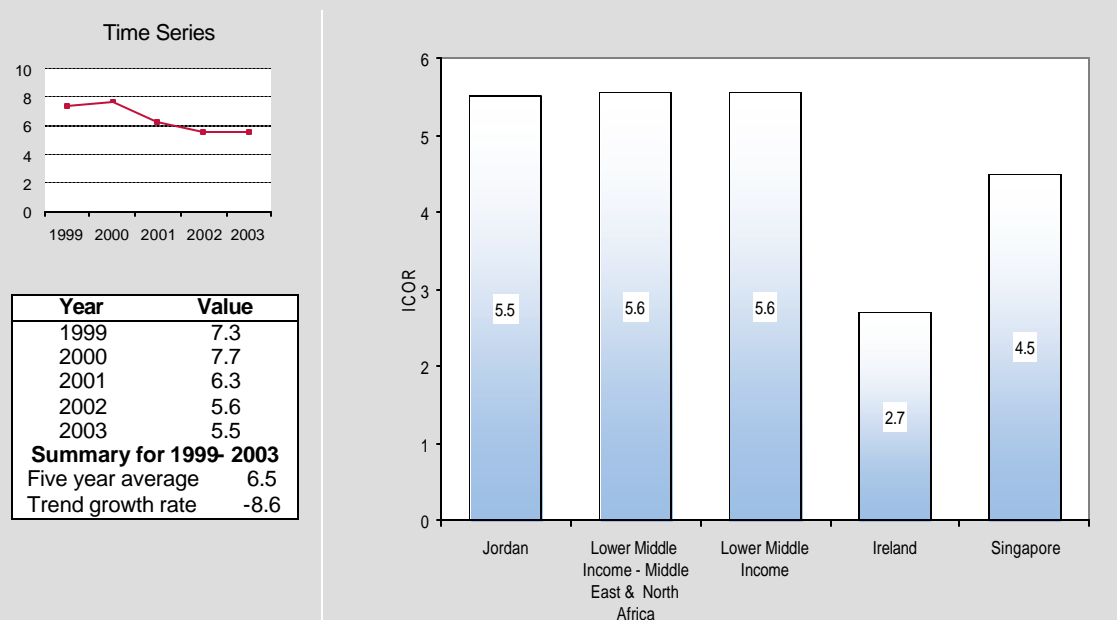


SOURCE: World Development Indicators 2005.

CAS Code: 11S1

Figure 2-3. Investment Productivity—Incremental Capital–Output Ratio

Investment has not been highly efficient—more than \$5 of capital is needed per \$1 of extra output.



SOURCE: World Development Indicators 2005. Higher ICOR values indicate *lower* investment efficiency.

11S2

POVERTY AND INEQUALITY

Jordan has made significant progress in reducing poverty. The poverty rate, measured as the percentage of people living below the national poverty line, was 14.2 percent in 2002/03, down from more than 21 percent in 1997.⁷ Moreover, Jordan’s score on the UNDP Human Poverty Index—which measures deprivation in income, health, and education—was 7.2 in 2002, far lower than the regression benchmark of 23.7 and the LMI-MENA average of 19.2.⁸ A recent United Nations assessment of Jordan’s progress in meeting the Millennium Development Goals⁹ supports the conclusion that the country is performing very well in reducing poverty, but highlights problems with income inequality and interregional disparities. The latest household survey data show that the poorest 20 percent receive 6.9 percent of the income in Jordan. This equals the regression benchmark for a country with Jordan’s characteristics, but even if the numbers are in line with international benchmarks, inequality can still be a serious political issue. Given Jordan’s progress in reducing poverty, the main programmatic requirements are to improve the efficiency of social safety nets and strengthen welfare-to-work programs, while minimizing

⁷ Jordan Poverty Assessment, 2004.

⁸ Human poverty index ranges from 0 (zero incidence of deprivation) to 100 (high incidence of deprivation).

⁹ Ministry of Planning and International Cooperation and United Nations in Jordan. “The Millennium Development Goals Jordan Report 2004.” Jordan 2004.

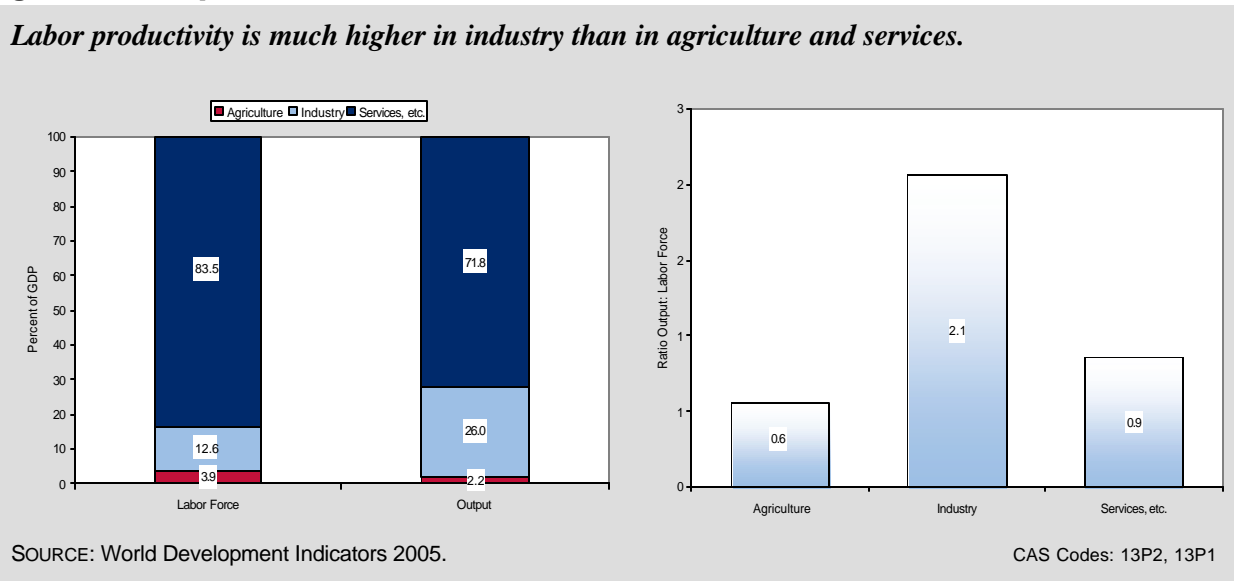
the adverse effect of welfare on incentives to work. Programs to combat regional poverty disparities are also important.

ECONOMIC STRUCTURE

The broad structure of output has been relatively stable in the past five years. Value added in agriculture accounts for 2 percent of GDP, industry for about 26 percent, and services for 72 percent. This is considerably different from the average output structure for LMI-MENA, for which agriculture accounts for 12 percent of GDP, industry for 29 percent, and services 52 percent. In fact, Jordan's output structure more closely resembles that of Ireland and Singapore, where services account for the large majority of GDP, and agriculture's role is very small.

The labor force is even more heavily skewed, with 84 percent of the workers in the service sector, 4 percent in agriculture, and just 13 percent in industry. A comparison of the output and labor force structures highlights that productivity is much higher in industry than in services or agriculture. Programs to reduce obstacles to efficient private investment in the industrial sector can make a major contribution to transformational growth (Figure 2-4).

Figure 2-4. Output Structure and Labor Force Structure

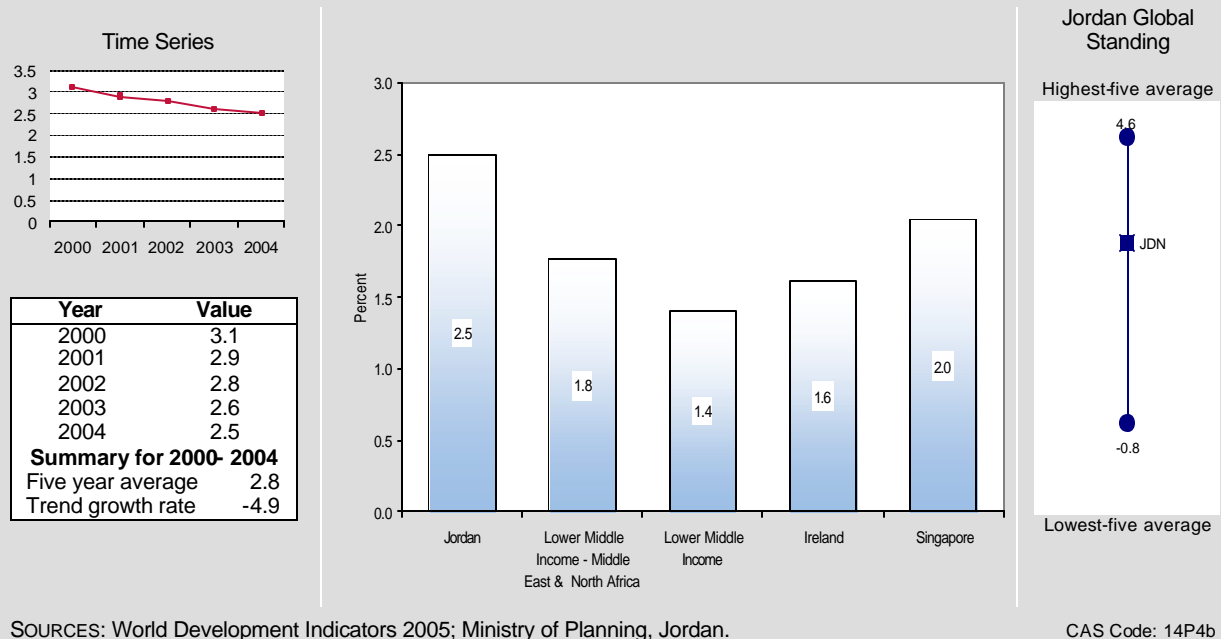


DEMOGRAPHY AND ENVIRONMENT

Jordan's population in 2003 was estimated at 5.3 million, with nearly 80 percent living in urban areas. The population growth rate averaged 2.8 per annum in the preceding five years, which is very high for a middle-income country, and a notable cause of slow growth in *per capita* income (Figure 2-5). One direct result of the rapid population growth is that the age dependency ratio is high, with 0.68 dependents per person of working age, compared with an average of 0.61 for LMI-MENA and 0.58 for lower middle-income countries in general. In Ireland and Singapore, which have already gone through the demographic transition to lower population growth, the dependency ratios are 0.48 and 0.39, respectively.

Figure 2-5. Population Growth Rate

The population is growing rapidly.



Rapid population growth also accentuates the demand for public services, such as education and health. As discussed in Section 4, Jordan has coped well with these pressures. Among other things, the working-age population is better educated than the regional average: the adult literacy rate reached 90.9 percent in 2002, compared to 73.2 percent average for LMI-MENA. However, Jordan still lags behind leaders like Ireland and Singapore, where literacy rates are 99 percent and 92 percent, respectively.

Rapid population growth can also strain the environment. A new international index of environmental sustainability that evaluates each country’s ability to maintain favorable environmental conditions gives Jordan a score of 47.8.¹⁰ This is in the middle quintile of 146 countries so evaluated, and comparable to the LMI-MENA average of 49.0, but considerably below Ireland’s score of 59.2.¹¹ Looking at the index subcategories, it is not surprising to see that Jordan’s most serious problems are water quality and water stress. Water management programs are clearly a leading priority for sustainable development.

GENDER

Jordan scores well on gender equity compared to other LMI-MENA countries, with steady improvement in women’s access to health and education services, resulting in improvements in

¹⁰ The index ranges from 0 (for countries poorly positioned to maintain favorable environmental conditions) to 100 (for countries very well positioned to maintain favorable conditions); most scores cluster between 40 and 60.

¹¹ Environmental sustainability index is not available for Singapore.

women's life expectancy, maternal mortality, and women's literacy rates. Indeed, the male adult literacy rate is only 1.11 times higher than the rate for females, compared to a ratio of 1.31 for the LMI-MENA benchmark. Similarly, the gross enrollment rate for all levels of schooling demonstrates full gender equity, with a male-to-female ratio of 0.99. This matches Singapore, and is much better than the average ratio of 1.07 for LMI-MENA, and even Ireland's ratio of 1.08. In terms of life expectancy, the male-to-female ratio of 0.96 for Jordan is virtually the same as for other low-income countries and LMI-MENA countries.

Education alone, however, needs to be complemented by opportunities for women to use education in obtaining suitable employment. Jordan is improving in this area, as women enter the workforce in greater numbers in sectors such as teaching and health care, and have greater influence in sectors such as banking, advertising, and other services.¹² The rate of female participation in the labor force improved from 26.3 percent to 29.4 percent in the period 1999–2003. But this is still very low, even compared to the median for LMI-MENA of 33.3 percent. Efforts to in close the gender gap in the labor market can help to accelerate growth and improve living standards.¹³

¹² Jordan Country Profile, Economist Intelligence Unit, London: March 2005, p. 13.

¹³ Female labor force participation rates for our economic performance assessments are estimated from the World Bank's World Development Indicators data series, multiplying female labor force (% of total) times total labor force to obtain the numerator; and multiplying the total population times the percentage of the population of aged 15–64 times the percentage of females in the total population. Estimates derived this way differ considerably from data reported in Jordan's Ministry of Planning Report of June 2005, which reports that women's participation in the labor force is 11.2% in 2003 (up from 6.6% in the 1991–1994 period). The report did not provide details on the methodology used to derive the rates, which may be the source of the large discrepancy. Nevertheless, both sets of estimates point to recent improvements in this area, but still considerably behind LMI-MENA and Ireland and Singapore benchmarks.

3. Private Sector Enabling Environment

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

FISCAL AND MONETARY POLICY¹⁴

In general, fiscal and monetary policies provide a sound footing for private sector growth in Jordan. Because the Jordanian dinar is pegged to the U.S. dollar,¹⁵ the government needs to intervene in foreign exchange markets and thus has limited control over monetary policy. Inflation has been very low, though creeping up gradually. In 2004, consumer prices rose by 3.4 percent. Growth in the broad money supply has averaged 9.4 percent per year for the period 2000–2004. As long as real growth is healthy, this pace of monetary growth is consistent with relatively low inflation.

Fiscal policy is also in reasonably good shape. Sound policies have broadened Jordan's tax base, increasing revenue to 26.2 percent of GDP in 2004.¹⁶ This is in line with the regression benchmark of 27.0 percent. That a successful country like Singapore raises only 22.2 percent of

¹⁴ The World Development Indicators 2005 database adopts new categories for Government Finance Statistics. As a result, WDI 2005 has fiscal data for very few developing countries, and group medians for fiscal variables are no longer meaningful because of the limited sample size. The benchmarking analysis for fiscal indicators is therefore based on data from WDI 2004.

¹⁵ US\$1 = 0.708 Jordanian dinar.

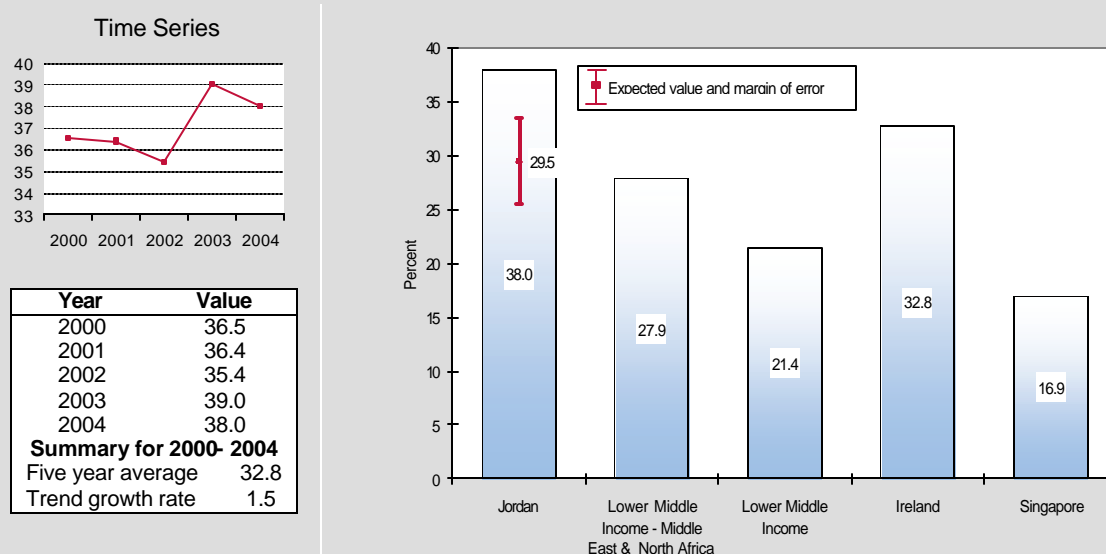
¹⁶ Ministry of Finance, Jordan.

GDP in revenue suggests that the government in Jordan may be encroaching excessively on economic resources, but Ireland has been equally successful with a revenue ratio of 34.1 percent. The IMF acknowledges that Jordan's revenue performance is strong,¹⁷ while stressing the need to broaden the sales tax base and adjust the pricing of petroleum products to improve revenue mobilization.

Government expenditure accounts for a very high percentage of GDP—38.0 percent in 2004.¹⁸ This is about 9 percentage points higher than the regression benchmark, around 5 percentage points higher than the value for Ireland, and nearly double the value for Singapore (Figure 3-1). Government subsidies and transfers, which have increased steadily in recent years, account for more than one-fourth of expenditures. Also, according to the IMF, expenditures on health and education are highly inefficient and need to be tightened.¹⁹ Defense spending is also a heavy burden, accounting for 15 percent of expenditures, though this may be warranted given regional security conditions.

Figure 3-1. Government Expenditure, % GDP

Government expenditure absorbs a very high share of the economy's resources.



SOURCES: Ministry of Finance, Jordan; World Development Indicators; Central Statistics Office of Ireland CAS Code: 21P1

The high level of government expenditure is affordable primarily because of heavy reliance on foreign aid. Including grants, the budget deficit in 2004 was only 1.9 percent of GDP; when grants are excluded from revenue and viewed as a financing item, the deficit was more than 10

¹⁷ Ibid.

¹⁸ Ibid.

¹⁹ IMF. Jordan: Post-Program Monitoring Discussion. March 2005.

percent of GDP. This would be unsustainable without large donor flows. Aid is likely to remain high in coming years because of Jordan's critical security status. Still, the government should consider establishing strong public expenditure management systems to reduce aid dependence. As noted, areas government subsidies and transfers, health expenditures, and education expenditures merit attention.

BUSINESS ENVIRONMENT

Institutional barriers to doing business, including corruption in government, are critical determinants of private sector development and prospects for sustainable economic growth. Most business environment indicators for Jordan are close to or better than the LMI-MENA median. However, these regional standards do not exemplify the performance needed to promote strong private sector development. Ireland and Singapore, where the enabling environment provides the backbone for rapid and sustained growth, are better examples.

A composite index of the World Bank's Doing Business indicators²⁰ shows that Jordan's institutional environment matches the median for LMI-MENA (62.8 out of 100). On many important components of the index—including the time and number of procedures required to start a business, procedures to enforce a contract, procedures to register property, and time to enforce a contract—conditions in Jordan are in line with the LMI-MENA average, but well below the scores for Ireland and Singapore. Business startup costs remain discouragingly high: the cost to start a simple business in Jordan requires an average of 52.0 percent of Gross National Income (GNI) per capita, compared with only 27.3 percent for the LMI-MENA average, and much less in Ireland or Singapore (see Figure 3-2). More positively, registering property takes just 22 days in Jordan, compared with 38 days in Ireland and an average of 52 days for LMI-MENA; in Singapore, however, registering property takes only 9 days.

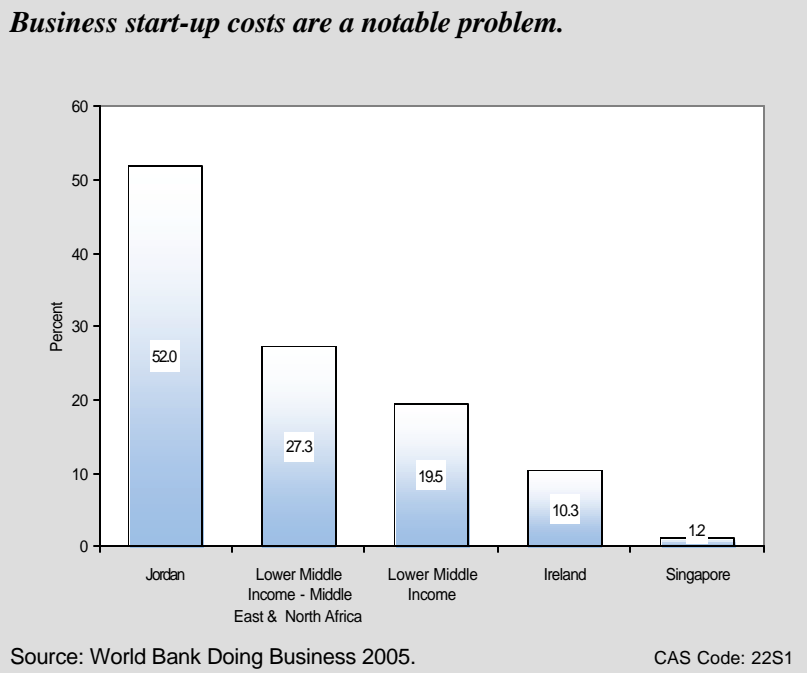
IMF Program Status for Jordan

Jordan graduated from the IMF program in 2004. After the IMF held the first Post-Program Monitoring Discussions with Jordan in January 2005 it stated in its Public Information Notice (No. 05/20):

Over the past few years the Jordanian economy has made impressive progress. Spurred by rising domestic demand, global economic recovery, restoration of trade links with Iraq, and the continued implementation of prudent macroeconomic policies, economic growth has picked up sharply in 2004, while inflation remained moderate. The external position is strong, with usable gross official reserves presently comfortable at the equivalent of about seven months of prospective imports. Reflecting buoyant tax revenues and tight expenditure management, the fiscal position has strengthened and the total public debt/GDP ratio has fallen.

(Note: To qualify for enhanced HIPC debt relief and the Poverty Reduction and Growth Facility, low-income countries need to have a poverty reduction strategy paper. Jordan is not in the HIPC group nor eligible for facility support, and does not have a formal PRSP. It does have a poverty reduction strategy developed under the USAID Jordan Poverty Alleviation Program (2002-2005).

²⁰ The composite index was constructed for this report on the basis of guidance from USAID/EGAT. Details are in the technical notes in the Data Supplement.

Figure 3-2. Cost of Starting a Business, % GNI per capita

The Millennium Challenge Account uses a rule-of-law index from the World Bank as an eligibility criterion. On a scale of -2.5 to +2.5 (with a global mean of 0.0), Jordan's score is 0.3. As shown in Figure 3-3, this is higher than the average of -0.4 for LMI-MENA, but, once again, well below the standards of Singapore and Ireland (1.8 and 1.6, respectively). Likewise, Jordan's score of 0.1 on the World Bank's regulatory quality index²¹ compares favorably to the average -0.9 for LMI-MENA. On Transparency International's corruption perceptions index, Jordan's score of 5.3 out of 10 in 2004 (with a higher number indicating less corruption) is better than the LMI-MENA average of 3.2, and has improved in recent years; but it is considerably lower than the scores for Ireland (7.5) and Singapore (9.3).

The Ireland and Singapore benchmarks illustrate that Jordan has a long way to go in offering an investor-friendly business environment. Further legal and regulatory reforms warrant serious consideration as a priority for donors and the government, to stimulate investment, productivity, and more rapid economic growth.

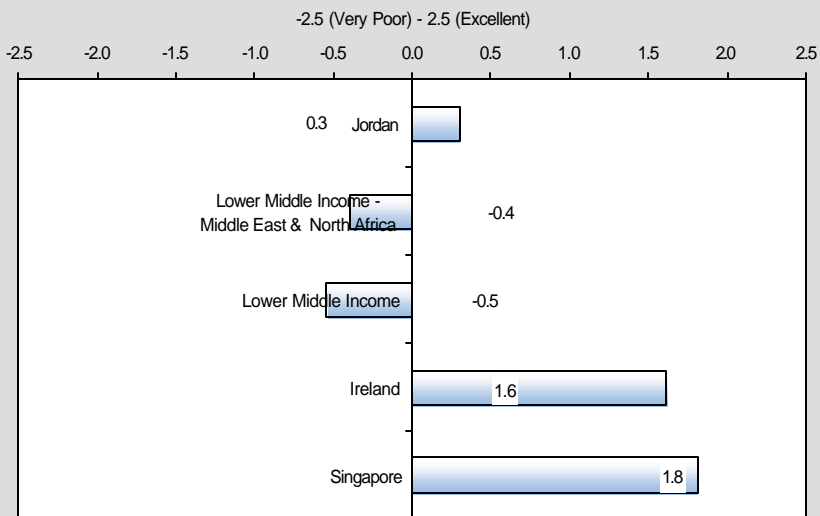
FINANCIAL SECTOR

A sound, efficient, and competitive financial sector is a fundamental mechanism for mobilizing saving, allocating financial resources, fostering entrepreneurship, and improving risk management. Jordan's financial sector is highly developed, on par with that of many upper middle-income countries. A simple indicator of financial development is the degree of monetization, measured by the ratio of broad money (currency plus bank deposits) to GDP. In

²¹ This index is also an eligibility criterion for the MCA.

Figure 3-3. Rule of Law Index

Rule of law is reasonably good, but far behind the standard set by global leaders.



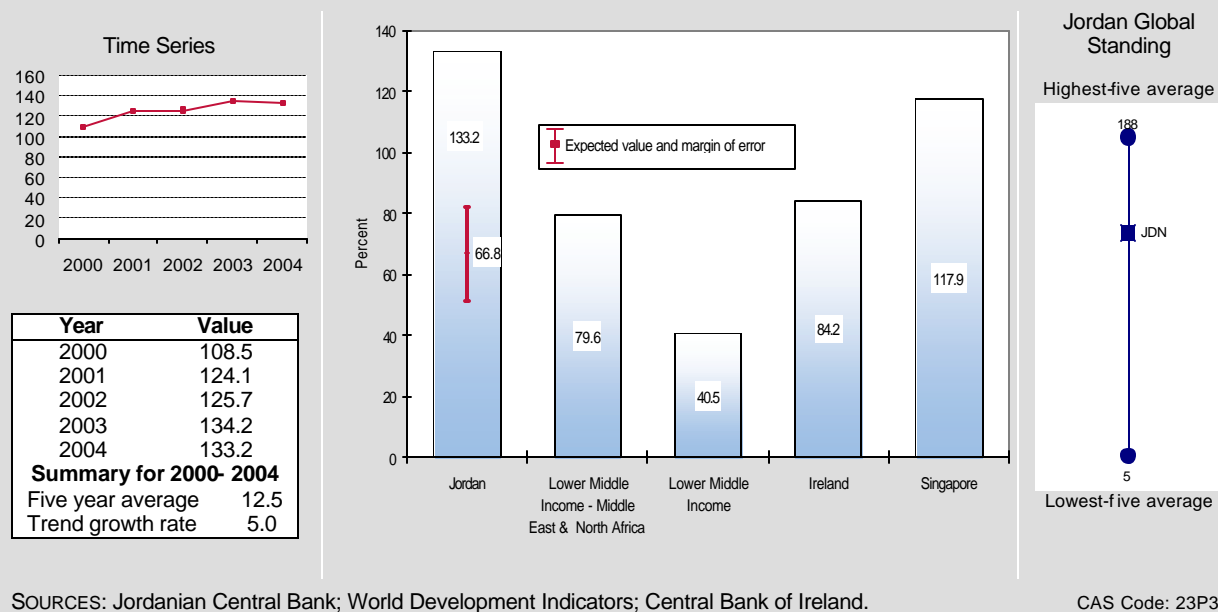
SOURCE: World Bank Institute.

CAS Code: 22P3

2004, Jordan's money supply was 133 percent of GDP, 66 percent higher than the LMI-MENA average and even slightly higher than monetization rates in Singapore and Ireland (Figure 3-4), indicating that Jordan's banking system is highly developed. Another indicator of an active banking system is domestic credit to the private sector. In 2004, domestic credit to the private sector amounted to 73 percent of GDP. This far exceeds the LMI-MENA average of 56 percent. Still, the financial system would have to jump to a higher plateau to match the intermediation performance of Ireland and Singapore, where private sector credit amounts to 118 and 116 percent of GDP, respectively. There are also signs of concern about the efficiency of the banking system. In particular, the spread between lending rates and borrowing rates has been rising, reaching 6.2 percentage points in 2003, compared to the benchmark regression value of 5.4 percent and spreads of 2.8 in Ireland and 4.8 in Singapore. This suggests that financial intermediation in Jordan is unusually costly, or that competition in the banking system is weak.

Looking beyond the banking system, one primary indicator of financial development is the stock market capitalization rate. This is in excellent shape. Stock market capitalization in Jordan has been growing 12 percent per year, and stood at a remarkable 111 percent of GDP in 2003. That is more than three times the LMI-MENA average of 32 percent, and twice Ireland's level of 55 percent. The capitalization rate in Singapore is much higher, at 159 percent of GDP, reflecting the role of the city-state as a highly successful regional financial center.

Overall, Jordan has a highly developed financial sector; consequently, scarce donor resources should probably be directed to programmatic activities in other areas of the economy.

Figure 3-4. Money Supply (M2), % of GDP*Jordan has a highly developed banking sector.*

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

International Trade and the Current Account

Jordan's economy is very open and strongly integrated with international markets. The ratio of trade (exports plus imports of goods and services) to GDP reached 114 percent in 2003, compared to an average of 66 percent for LMI-MENA. In 2004, exports increased by 20.4 percent and since 2000 have grown at an average 9.9 percent per annum, close to double the regression benchmark of 5.5 percent for a country with Jordan's characteristics. Although Jordan's exports are not heavily concentrated—the top three exports (at the 3-digit SITC classification level) accounted for 37.2 percent of the total value in 2003, compared with 38.9 in Ireland and 43.4 in Singapore—clothing has been the dominant engine of export growth in recent years, accounting for 30 percent of exports in 2004.²² The termination of textile quotas under the Multi-Fiber Agreement in

²² As reported in the EIU's Jordan Country Profile 2005, London, p. 44.

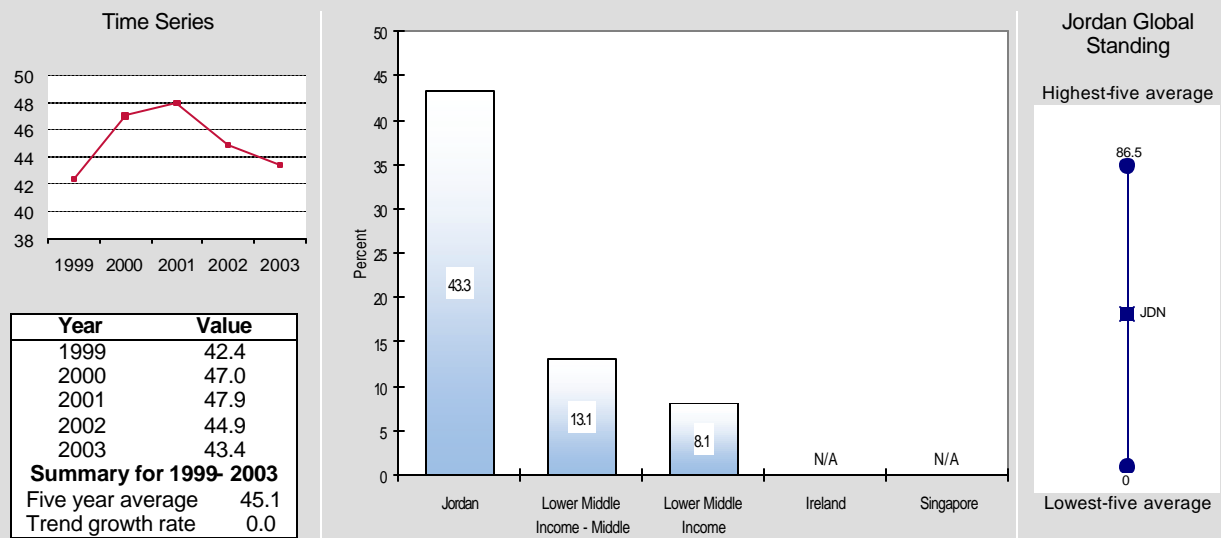
January of 2005 means that Jordan's export performance is now more vulnerable to competition. Hence, programs to facilitate export diversification require serious attention.

Despite the high level of trade and export growth, Jordan scores a 4 on a scale of 1 (very good) to 5 (very bad) on the Heritage Foundation's trade policy index, which the MCC uses as a criterion of eligibility. This score is based on the average level of import duties, as well as information about various nontariff barriers and corruption in the customs service. For Jordan, the low rating (high score) seems counterintuitive. It may be driven by the high maximum duty rate of 35 percent, and the implied high effective rates of protection.

Jordan has historically suffered from chronic trade deficits, reflecting a narrow industrial base and dearth of raw materials. However, workers' remittances and official transfers have made a strong positive contribution to the current account. Indeed, remittances have been equivalent, on average, to 45.1 percent of exports of goods and services over the five years to 2003, indicating a large export of labor services (Figure 3-5). This is indicative of opportunities to work outside of Jordan, but also a lack of attractive jobs in the country.

Figure 3-5. Remittance Receipts, % of Exports of Goods and Services

Remittance receipts are a very important source of foreign exchange receipts.



SOURCE: World Development Indicators 2005.

CAS Code: 24P9

The overall current account balance varies widely from year to year, averaging 2.5 percent of GDP for the period 2000–2004. For 2004, the deficit was 2.6 percent of GDP. This does not suggest any serious problems. Note, though, that the balance has been worsening at a time of strong export growth, which signals even more rapid growth of imports. This can be explained by rising oil prices, the high import content of manufactured exports, robust consumer spending, and higher government expenditure. Economic managers must pay careful attention to prevent this trend from triggering macroeconomic instability.

The analysis suggests that Jordan could benefit from reducing trade restrictions, which will reduce the price of imports, increase efficiency, and encourage more investment in export activities. Programs to foster export diversification would also contribute to maintaining export growth, especially in light of the lifting of textile quotas in 2005. Additionally, it may be possible to develop innovative programs to enhance the growth impact of remittances.

International Financing

As mentioned, foreign aid has been a major source of external financing. Net aid inflows rose from 5.4 percent of gross national income in 1999 to 12.6 percent in 2003, extremely high compared to the LMI-MENA benchmark of 1.2 percent (Figure 3-6). According to the EIU, if official transfers had returned to pre-2003 levels, then (all things being equal) the overall current account deficit would have reached about US\$1 billion, equivalent to more than 9 percent of GDP in 2004.²³ The high degree of aid dependence underscores the need to attract more private capital inflows. In 2004, foreign direct investment (FDI) inflows stood at 3.8 percent of GDP, which is quite good compared with the LMI-MENA median of just 1.0 percent, but far from Singapore's or Ireland's landmark inflows of 12.5 percent and 17.3 percent of GDP, respectively (Figure 3-7). Moreover, foreign investment in Jordan in 2004 was well below the levels achieved in 2000 and 2001, when FDI exceeded 9 percent of GDP. UNCTAD's index of inward FDI potential measures a country's attractiveness to foreign investors in terms of 12 factors. On a scale of 0.0 (poor) to 1.0 (excellent), Jordan's score of 0.26 places it 45th out of 140 countries. As with many other indicators, Jordan's attractiveness for foreign investment is reasonably good relative to the average for the LMI-MENA region, but there is great scope for improvement.

Any gap between the amount of financing coming in through the capital account and the current account balance is reflected in foreign exchange reserves. Over the past five years, Jordan's gross international reserves averaged 8.3 months of import cover. This very healthy level of reserves corroborates other signs of prudent macroeconomic management.

Debt

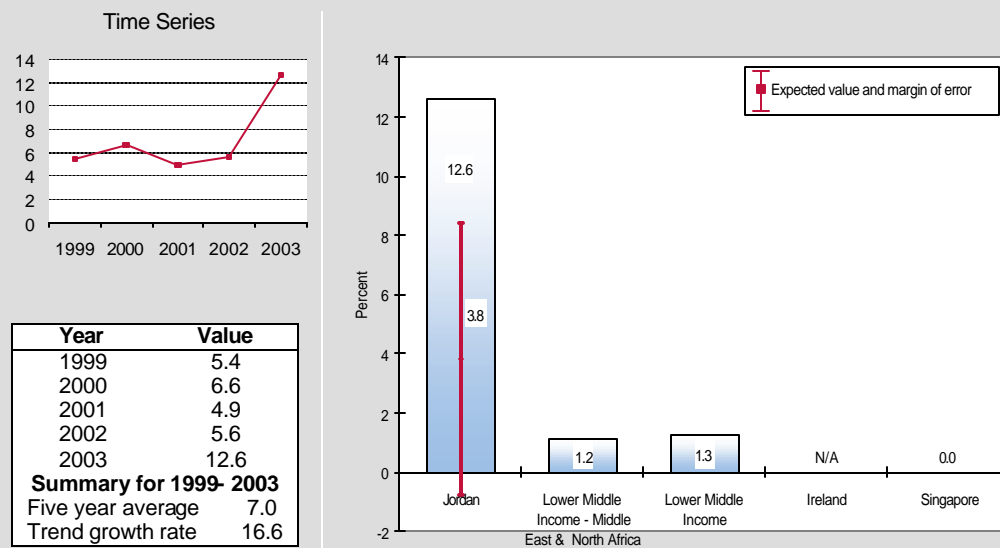
Despite debt forgiveness, rescheduling, and government buybacks, Jordan remains heavily indebted. Although the present value of debt as a percentage of GNI has declined from 94.5 percent in 2000 to 84.0 percent in 2003, it is still very high by benchmark standards and absolute standards²⁴ (Figure 3-8). In addition to this large stock of debt, a weakening of the U.S. dollar, to which the dinar is pegged, contributed to an increase the debt service ratio from 8.8 percent of exports in 2002 to 16.4 percent in 2003.

²³ Jordan Country Report. The Economist Intelligence Unit Limited: June 2005, p. 34.

²⁴The World Bank classifies as "severely indebted" countries with a present value of debt service greater than 80 percent of GNI. Likewise, the median value for LMI-MENA countries is 47.2 percent.

Figure 3-6. Aid, % GNI

Aid to Jordan has increased sharply in recent years.

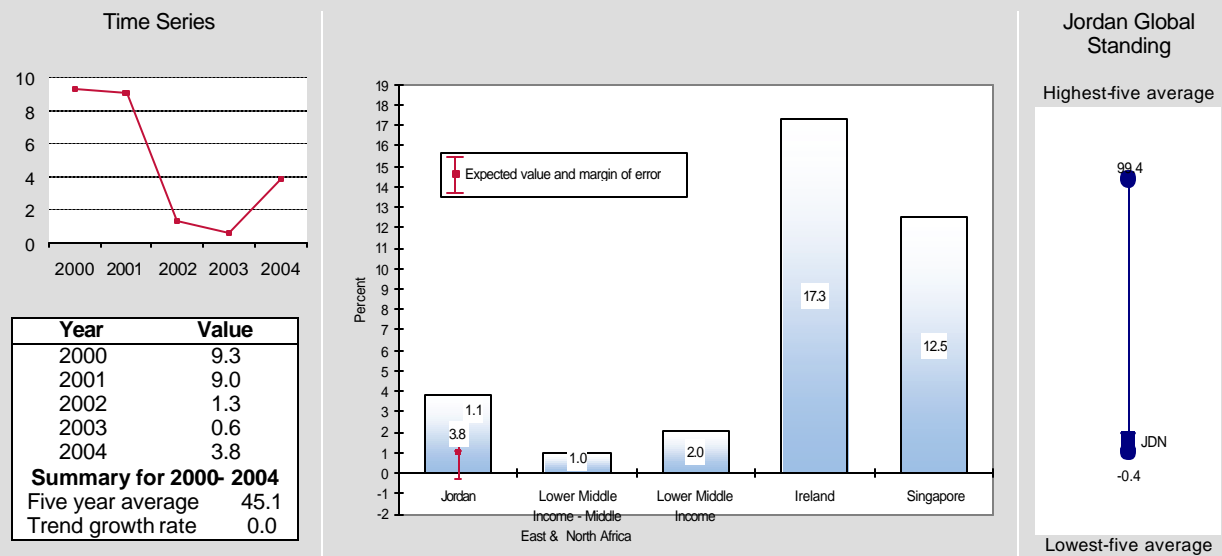


SOURCE: World Development Indicators 2005.

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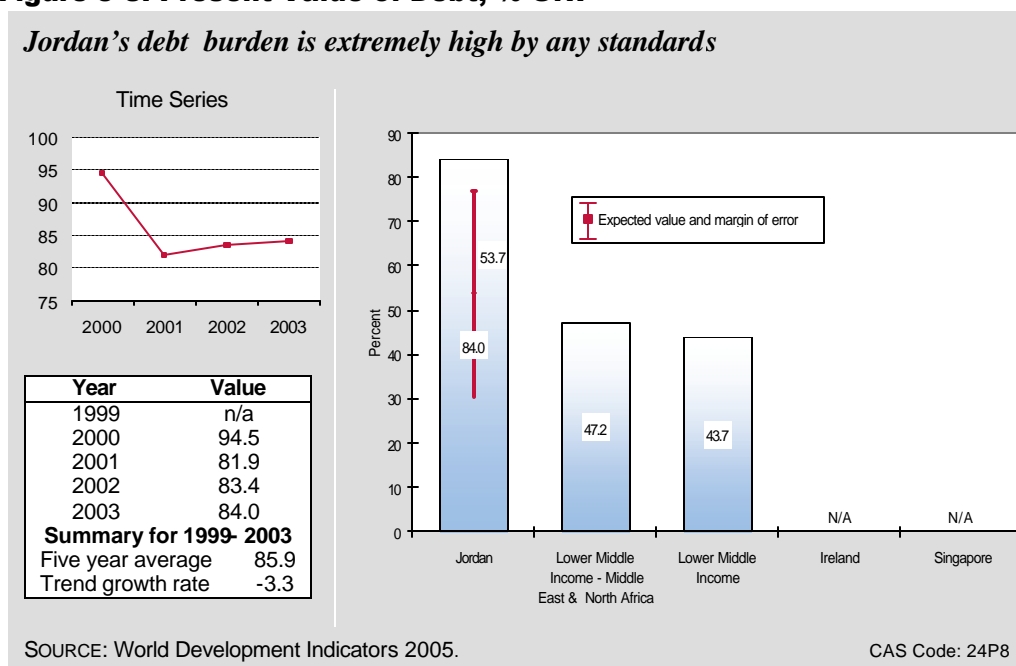
Figure 3-7. Foreign Direct Investment, %GDP

FDI has been erratic and too low to act as a catalyst for transformational growth.



SOURCES: World Development Indicators 2005; IMF International Financial Statistics, June 2005.

CAS Code: 24P5

Figure 3-8. Present Value of Debt, % GNI

About 43 percent of Jordan's debt is denominated in euro and yen.²⁵ This high debt burden augments Jordan's dependence on foreign aid to finance development programs, and increases the risk of investing in the country. Further efforts to reduce the debt burden, through careful economic management, faster growth, and debt relief negotiations on the approximately 35 percent of total debt that is from official bilateral sources,²⁶ will both improve the balance of payments and strengthen the investment climate.

ECONOMIC INFRASTRUCTURE

A country's physical infrastructure—for transportation, communications, power, and information technology—is the backbone for strengthening competitiveness and expanding productive capacity.²⁷ The broadest indicator of infrastructure quality is a subjective index of executive perceptions compiled by the World Economic Forum (WEF). The value for Jordan is 5.0 (out of 7), which is superior to the average of 3.9 for LMI-MENA and even Ireland's score of 3.8, although not as high as Singapore's 6.6.²⁸ Jordan scores well above the LMI-MENA average for the sub-indices for air transport, electricity, and ports, but not on the sub-index for the quality of

²⁵ Jordan Country Report, p. 35.

²⁶ Ministry of Finance. General Government Finance Bulletin. July 2005.

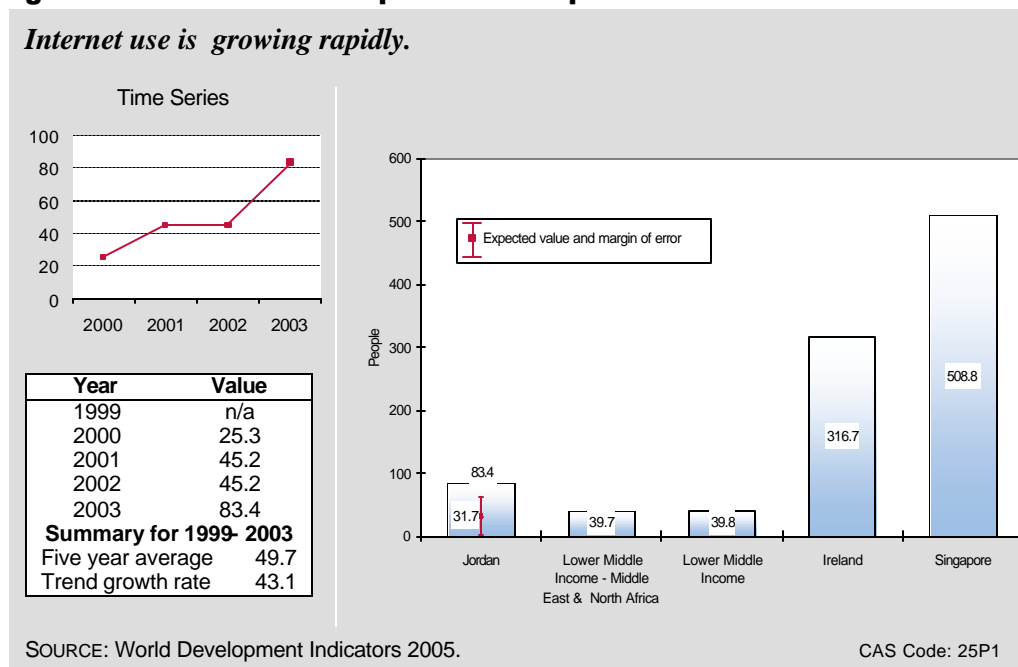
²⁷ This section relies on perception indicators to assess infrastructure quality and adequacy. Objective measures of infrastructure *quantity* often have little diagnostic value. For example, a low value for kilometers of paved roads does not imply that there is a problem to be fixed, since unpaved all-weather roads may be more efficient than paving secondary and tertiary roads in poor countries.

²⁸ Overall infrastructure quality index ranges from 1 (poorly developed and inefficient) to 7 (among the best in the world).

railroad services, where the score is 2.0. Improvement in this area can enhance transportation efficiency and competitiveness. The shortfall has not gone unnoticed: the Economist Intelligence Unit (EIU) reports that the Ministry of Transport recently initiated a process for establishing a railway development strategy.²⁹

In terms of telecommunications infrastructure, Jordan's indicators also show strong development in comparison to the LMI-MENA average, while lagging far behind the standards of Singapore and Ireland. In 2003, telephone density in Jordan reached 355 lines per 1,000 people (including mobile phones), compared to a regression benchmark of 164 lines; the corresponding values for Singapore and Ireland exceed 1,300 lines. Internet use is also growing fast in Jordan. From 25 Internet users per 1,000 people in 2000, the figure tripled to 83 in 2003 (Figure 3-9). This compares very favorably with the LMI-MENA median of roughly 40, but not the levels in Ireland or Singapore (316 and 508, respectively).

Figure 3-9. Internet Users per 1000 People



The picture is therefore quite clear. With the important exception of rail service, Jordan has highly developed infrastructure for a lower middle-income country. While there is certainly scope for improvement, basic infrastructure problems do not appear to be a critical constraint on private sector development.

²⁹ Jordan Country Profile, 2005, p.20

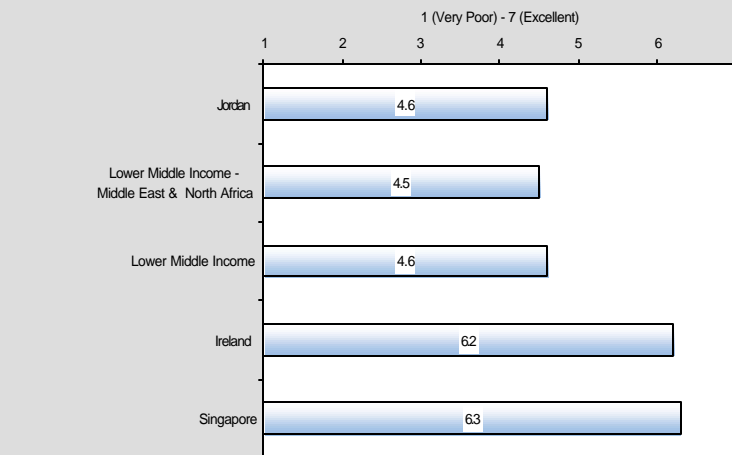
SCIENCE AND TECHNOLOGY

Science and technology are central elements of a dynamic growth process because technical knowledge is a driving force for rising productivity and competitiveness. For lower middle-income countries like Jordan, transformational development increasingly depends on acquiring and adapting technology from the global economy, and applying it in ways that are appropriate to their level of development. A lack of capacity to acquire and use technology prevents an economy from benefiting fully from globalization. Unfortunately, few international indicators of science and technology are available for judging performance in lower income countries. Hence, one must draw inferences from a very limited data set, as proxies for other missing information.

Over the five years to 2004, Jordan averaged 42.2 patent applications filed by residents, an indicator of a country's indigenous capability in science and technology. Jordan's score exceeds the LMI-MENA benchmark of 13, which provides evidence of a superior local science and technology capacity than the country group of reference. Nevertheless, it is still far behind Ireland and Singapore, where patent applications by residents reached 1,255 and 511 in 2002, respectively.

Figure 3-10. FDI and Technology Transfer Index

Technology transfer from FDI could be making a greater contribution to achieve economic growth.



SOURCE: WEF Global Competitiveness Report, 2004-2005.

CAS Code: 26P2

Another indicator is the World Economic Forum's FDI technology transfer index, which gauges executive perceptions of the extent to which FDI brings in new technology (on a scale of 1 to 7). Jordan's score of 4.6 is in line with the median of 4.5 for LMI-MENA, but far from Ireland's and Singapore's 6.2 and 6.3, which are the world's best (Figure 3-10). Another basic indicator of technology status is the number of internet users per 1,000 people; as mentioned in the discussion of infrastructure, Jordan's internet use is growing rapidly, but is far behind the world class standards of Ireland and Singapore.

Given the importance of technology to modern economic growth, Jordan could focus more on attracting FDI that embodies a high rate of technology transfer, and strengthening the quality of science and technology education (as discussed below). The broader concern, of course, is to increase FDI overall, as discussed in the previous section.

4. Pro-poor Growth Environment

Although rapid growth is the most powerful and dependable instrument for poverty reduction, the relationship of growth to poverty reduction is not mechanical. In some countries, income growth for poor households exceeds the overall rise in per capita income, while in others growth benefits the non-poor far more than the poor. A pro-poor growth environment stems from policies and institutions that improve opportunities and capabilities for the poor, while reducing their vulnerabilities. Pro-poor growth is associated with improvements in primary health and education, the creation of jobs and income opportunities, the development of skills, microfinance, agricultural development (in countries with heavily rural poverty), and gender equality.³⁰ This section focuses on four of these issues: health; education; employment and the workforce; and agricultural development.

HEALTH

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

Jordan's health care sector is relatively well developed. The broadest indicator of health is life expectancy. In Jordan, life expectancy is 72 years, marginally higher than the benchmark regression value of 70 but lower than the level of 78 years in both Ireland and Singapore. Maternal care is also relatively advanced. The maternal mortality rate (MMR) was 41 per 100,000 in 2000, far better than the LMI-MENA average of 110, and not much higher than Singapore's rate of 30. Jordan is also very close to reaching the Millennium Development Goal, which calls for a three-fourths reduction from the MMR prevailing in 1990. By this standard, the goal for Jordan is 37, to be achieved by 2015. HIV is also well under control, with just 0.1 percent of the population suffering from the virus.

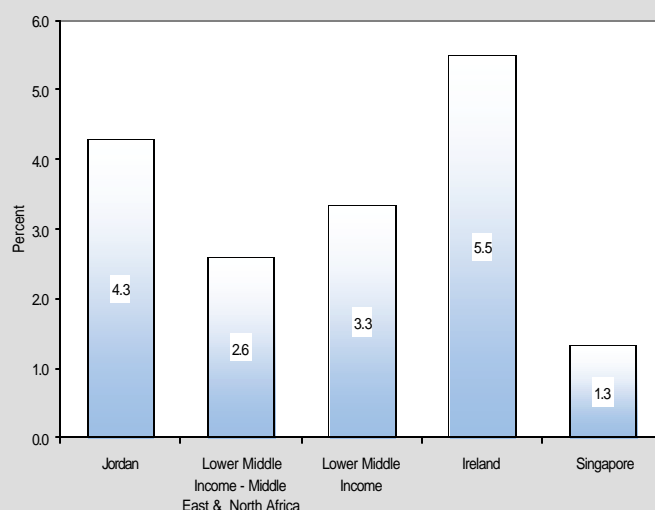
Jordan's improved health environment can be attributed partly to increases in public health expenditures as a percentage of GDP. In 2002, this figure was 4.3 percent, considerably above the LMI-MENA average, and more than three times the spending rate in Singapore, though lower than in Ireland (Figure 4-1). The World Bank commends Jordan for its efforts to increase health

³⁰ For purposes of economic growth programming, the template does not cover emergency relief.

spending, but warns that much of the spending is inefficient, and points out that service delivery in the sector needs to improve.³¹

Figure 4-1. Public Health Expenditure, %GDP

Health expenditures are comparatively high, but the funds must be spent as efficiently as possible.



SOURCE: World Development Indicators 2005.

CAS Code: 31S1

The evidence indicates that health conditions are not a major constraint on growth in Jordan, though better outcomes could be achieved with improvements in public expenditure management, as suggested in the discussion of fiscal and monetary policy.

EDUCATION

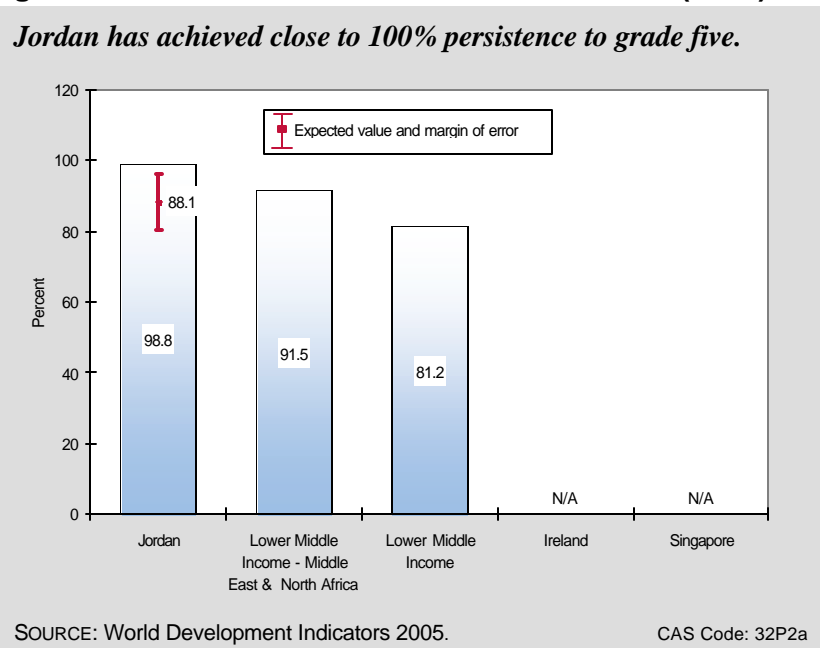
Jordan is committed to universal education. The net primary enrollment rate was 92 percent in 2002 (latest data available), which is on par with the LMI-MENA benchmark of 91.7 percent, and not far from Ireland's rate of 96 percent. Moreover, net primary enrollment has improved by 2.4 percentage points over the latest five-year period. Persistence in school to grade 5 is also very high, 98.8 percent, indicating a high degree of efficiency in retaining students in primary school (Figure 4-2). The youth literacy rate of 99.4 percent is also outstanding. In comparison, the median for LMI-MENA is 94.3 percent. It is difficult to gauge education quality using international statistics. One rough proxy is the pupil-teacher ratio for primary schools,³² which reached 23.9 in 2002 according to UNDP. This compares favorably with the LMI-MENA

³¹ World Bank. The Hashemite Kingdom of Jordan Country Assistance Evaluation. October 2003.

³²Evidence of the link between class size and educational outcomes is far from clear-cut. Nonetheless, there is a presumption that small classes permit teachers to attend more closely to individual students and facilitate learning. Thus, the pupil-teacher ratio is a popular if rough indicator of educational quality and a measure of the country's commitment to primary education.

benchmark of 27.5. According to a recent EIU report, the pupil–teacher ratio has now declined to 19.5, including both primary and secondary schools.³³ These impressive educational indicators suggest that the system of basic education is building a sound foundation for transformational growth. Equally important, the statistics for higher levels of education also appear to be very good. In particular, the net secondary enrollment rate of 81 percent and the gross tertiary enrollment rates of 31 percent are not far out of line with world leaders.³⁴

Figure 4-2. Persistence in School to Grade Five (total)



Since the 1970s, Jordan has been highly successful in educating its citizens to obtain professional jobs in the oil-rich states of the Gulf.³⁵ The challenge is to create more opportunities in Jordan itself for well-educated workers. The investment environment is weakened by regional security problems, but, as the discussion in Section 3 showed, much could still be done to improve the business enabling environment. In addition, as with health spending, better management of public expenditure might boost the cost-effectiveness and quality of funding for education at all levels.

EMPLOYMENT AND WORKFORCE

Previous sections highlighted the need for Jordan to accelerate the creation of productive jobs and income-generating opportunities for its growing population. Reflecting Jordan's youthful demographic structure, the labor force is estimated to be expanding by 3.6 percent per year. Consequently, the economy needs to absorb roughly 60,000 new workers each year, while

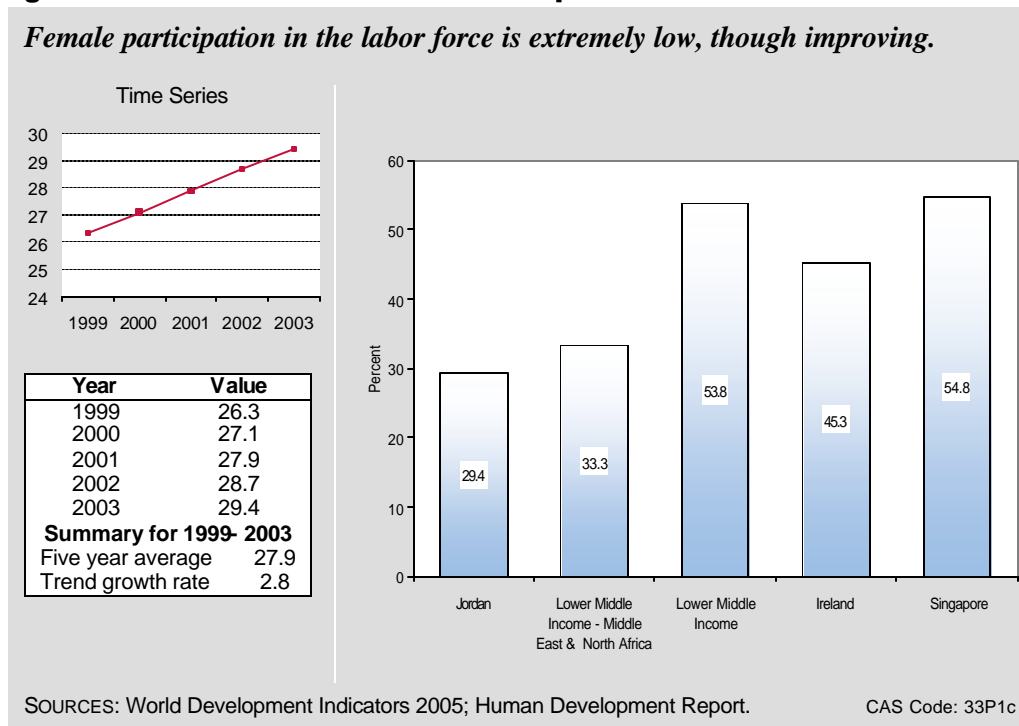
³³ Jordan Country Profile, p. 18.

³⁴ World Development Indicators 2005.

³⁵ Jordan Country Profile, p. 18.

offering more opportunities for the current stock of well-educated labor. Although labor laws and regulations are not a critical impediment to job creation,³⁶ unemployment is already a serious problem. According to the Ministry of Finance, the unemployment rate in 2004 was 12.5 percent, on par with the LMI-MENA average of 12 percent, but far higher than the rates in Ireland (4.2) and Singapore (5.2). More worrying, the *Human Development Report* for Jordan reports that 30 percent of the youth are unemployed. Furthermore, women's participation in the labor force is extremely low (Figure 4-3). This is changing, and as educated young women increasingly seek to join the labor force the need for job creation will be even greater.

Figure 4-3. Female Labor Force Participation Rate



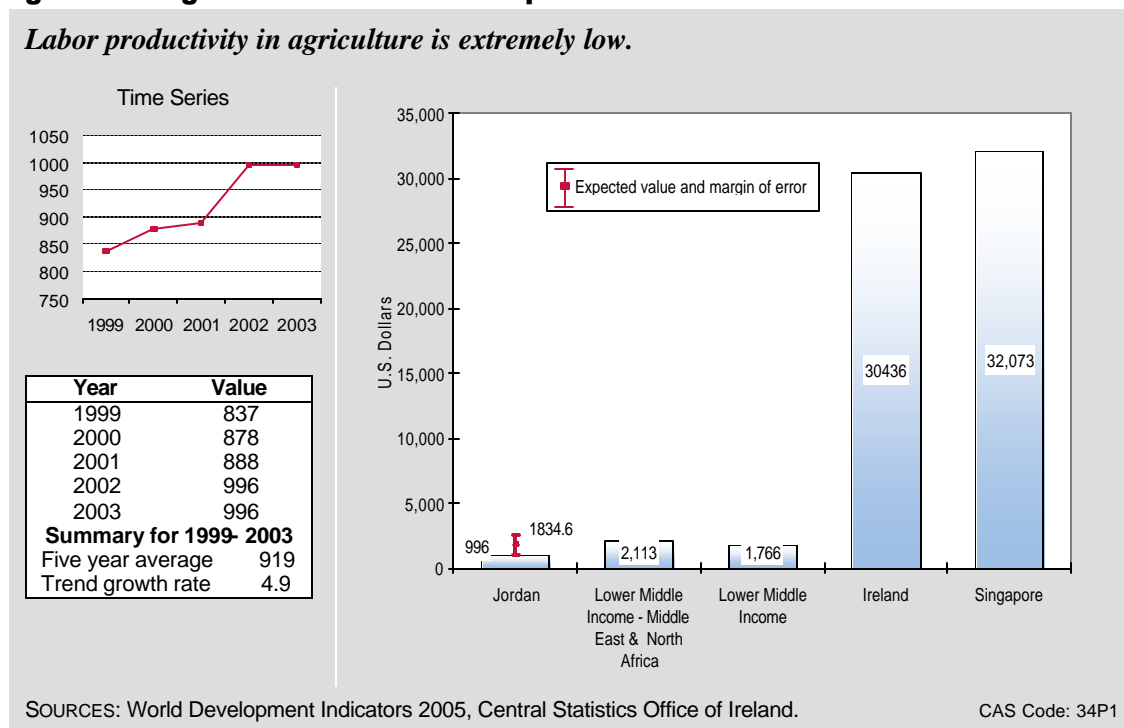
Programs to promote skill development and youth employment are needed, along with work-oriented safety nets to prevent young jobseekers from falling into the poverty trap at the outset of their careers. But the critical mechanism for job creation has to be private investment, to ensure that these workers contribute productively to growth and wealth creation. Here, too, the critical concern is to pursue further reforms to improve the investment climate, as discussed earlier.

³⁶ The World Bank's index of Rigidity of Employment, which measures the difficulty in hiring and firing worker on a scale of 0 to 100 (with higher values indicating greater rigidity), gives Jordan a score of 34, much lower than the LMI-MENA average of 53, and only marginally higher than the score of 29 for Ireland.

AGRICULTURE

As indicated in the section on economic structure, agriculture contributes only 2 percent of GDP and employs about 4 percent of the labor force. Thus, in Jordan, the sector’s role in the economy is minimal. Agricultural activity is divided into two main areas: rain-fed upland crops, mainly cereals, and capital-intensive, high-yield irrigated farms in the Jordan Valley, which produce fruit and vegetables, some for export to the Gulf. The irrigated farms mainly employ low-paid migrant workers.³⁷ Overall production does not come near to satisfying Jordan’s growing demand for food, which is to be expected given the arid environment and severe water constraints.

Figure 4-4. Agriculture Value Added per Worker



Nonetheless, recent performance in the sector has been poor. Agricultural value added has been growing erratically in recent years, but not enough to recover from a steep decline of 29.3 percent in 1999. Value added per worker in agriculture—a basic measure of labor productivity—has risen by 4.9 percent per year over the five years to 2003, but the absolute level of productivity, at US\$996 per worker,³⁸ is far below the LMI-MENA benchmark of US\$2,113 (Figure 4-4). Cereal yields, though fluctuating from year to year, have been comparable to the LMI-MENA benchmark of 1,439 kg per ha, but dropped sharply from 1,403 in 2003 to a mere 521 in 2004 because of extreme weather.³⁹ A broad measure of crop production from the Food and Agriculture Organization shows sluggish growth in recent years. The index, defined to equal 100

³⁷ Jordan Country Profile, p. 36

³⁸ See Technical Notes for details. Data measured in constant 1995 US\$.

³⁹ Jordan Country Profile, p. 36.

for 1999–2001, stood at 116.7 in 2000 and 127.4 in 2004. A similar index of livestock production has shown no increase at all since 1999-2001. In short, productivity is low, and agriculture has not contributed significantly to recent growth. It is unlikely to have much of an impact in the future, though further investment in capital-intensive high-value crops, with sophisticated water management techniques, might spur potential for growth.

Appendix

CRITERIA FOR SELECTING INDICATORS

The scope of the paper is constrained by the availability of suitable indicators. Indicators have been chosen to balance the need for broad coverage and diagnostic value, on the one hand, and the need of brevity and clarity, on the other. The analysis covers 15 EG-related topics, and just over 100 variables. For the sake of brevity, the main 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 the indicators examined for this report. A separate Data Supplement contains the complete data set for Jordan, including data for the benchmark comparisons, and technical notes for every indicator.

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

In areas of weak performance, the analysis proceeds to review a limited set of *diagnostic supporting indicators*. These “level II” indicators provide more details about the problem or shed light on *why* the primary indicators may be weak. For example, if economic growth is poor, 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.¹

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

¹ Deeper analysis of the topic using more detailed data (level III) is beyond the scope of papers in this series.

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

BENCHMARKING METHODOLOGY

Comparative benchmarking is the main tool 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 Jordan 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 (LMI-MENA).² For added perspective, three other comparisons are made: (1) the global average for this income group; (2) respective values for two comparator countries selected by the Jordan mission (Ireland and Singapore); and (3) the average for the five best and five worst performing countries globally. Most comparisons are framed in terms of values for the latest year of data from available sources. Five-year trends are also taken into account if they shed light on the performance assessment.³

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.⁴ This approach has three advantages. First, the benchmark is customized to Jordan's specific level of income. Second, the comparison does not depend on the exact choice of reference group. Third, the methodology allows one to quantify the margin of error and establish a "normal band" for a country with Jordan's characteristics. An observed value falling outside this band on the side of poor performance signals a serious problem.⁵

Finally, where relevant, Jordan's performance is weighed against absolute standards. For example, the unemployment rate for Jordan was 12.5 percent in 2004. Regardless of the regional comparisons or regression results, this is a high percentage that needs to be reduced.

² Income groups as defined by the World Bank for 2004. For this study, the average is defined in terms of the mean; future studies will use the median instead, because the values are not distorted by outliers.

³ 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.

⁴ This is a cross-sectional OLS regression using data for all developing countries. For any indicator, Y, the regression equation takes the form: Y (or $\ln Y$, as relevant) = $a + b * \ln \text{PCI} + c * \text{Region} + \text{error}$ – where PCI is per capita income in PPP\$, and Region is a set of 0-1 dummy variables indicating the region in which each country is located. Once estimates are obtained for the parameters a, b and c, the predicted value for Jordan is computed by plugging in Jordan-specific values for PCI and Region. Where applicable, the regression also controls for population size and petroleum exports (as a percentage of GDP).

⁵ 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.

LIST OF INDICATORS EXAMINED

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

	Level	MDG/MCA/EcGov ^a	CAS Indicator Code
Business Environment			
Corruption perception index	I	EcGov	22P1
Doing business composite index	I	EcGov	22P2
Rule of law index	I	MCA / EcGov	22P3
Cost of starting a business, % GNI per capita	II	EcGov	22S1
Procedures to enforce contract	II	EcGov	22S2
Procedures to register property	II	EcGov	22S3
Procedures to start a business	II	EcGov	22S4
Time to enforce a contract	II	EcGov	22S5
Time to register property	II	EcGov	22S6
Time to start a business	II	EcGov	22S7
Financial Sector			
Domestic credit to private sector, % GDP	I		23P1
Interest rate spread	I		23P2
Money supply, % GDP	I		23P3
Stock market capitalization rate, % of GDP	I		23P4
Cost to create collateral	II		23S1
Country credit rating	II	MCA	23S2
Legal rights of borrowers and lenders index	II		23S3
Real Interest rate	I		23S4
External Sector			
Aid , % GNI	I		24P1
Current account balance, % GDP	I		24P2
Debt service ratio, % exports	I	MDG	24P3
Export growth of goods and services	I		24P4
Foreign direct investment, % GDP	I		24P5
Gross international reserves, months of imports	I	EcGov	24P6
Gross Private capital inflows, % GDP	I		24P7
Present value of debt, % GNI	I		24P8
Remittance receipts, % exports	I		24P9
Trade, % GDP	I		24P10
Concentration of Exports	II		24S1
Inward FDI Potential Index	II		24S2
Net barter terms of trade	II		24S3
Real effective exchange rate (REER)	II	EcGov	24S4
Structure of merchandise exports	II		24S5
Trade policy index	II	MCA / EcGov	24S6
Economic Infrastructure			
Internet users per 1000 people	I	MDG	25P1
Overall infrastructure quality	I	EcGov	25P2
Telephone density, fixed line and mobile	I	MDG	25P3
Quality of infrastructure – railroads, ports, air Transport, and electricity	II		25S1
Telephone cost, average local call	II		25S2

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

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

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.