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Sustaining Growth Takeoffs: Lessons from Mozambique

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Mozambique is a success story in sub-Saharan Africa. It has benefited from sustained large foreign aid inflows, strong and broad-based growth, and deep poverty reduction. Since its civil war ended in 1992, Mozambique's growth record has been impressive, and its growth has especially benefited the poor: consumption among people below the poverty line has grown strongly, thanks to an expanding agricultural sector, increased nonfarm activities in rural areas, and higher wages. Today, Mozambique has one of the lowest levels of income inequality in Africa, and its absolute poverty and the poverty gap (which takes into account the distance separating the poor from the poverty line) have decreased substantially. (See Figure 1.1.) This remarkable growth performance was made possible by prudent macroeconomic policies, structural reform, and substantial donor assistance. On the political side, Mozambique has succeeded in bringing about reconciliation and solidifying its nascent democracy through three general and presidential elections.¹

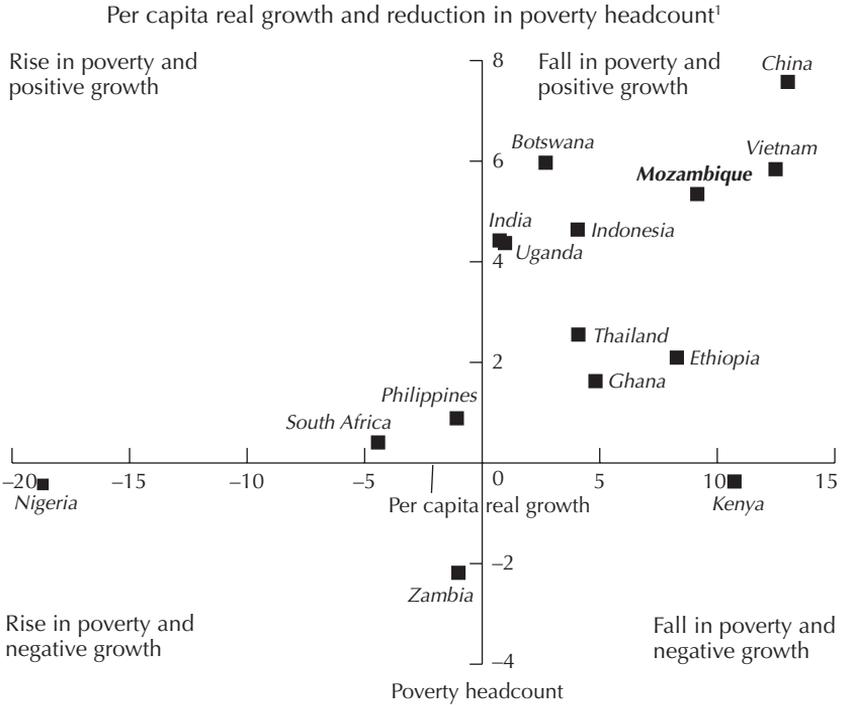
Mozambique appears well placed to achieve the United Nations Millennium Development Goal (MDG) of halving the poverty rate by 2015.² Its per capita income is US\$303 (well below the sub-Saharan African average of US\$580), however, and almost a third of the population still lives on less than US\$1 a day. Sustaining Mozambique's impressive growth

¹These elections were seen as generally open and fair by the international community.

²See Chapter 2.

Figure 1.1. Sustaining Growth Is Key to Poverty Reduction

(In percent)



Source: World Bank, World Development Indicators database.

¹The analysis is based on household survey data released between 1984 and 2004.

takeoff is thus key to ensuring swifter and deeper poverty reduction. This chapter, using the results of a benchmarking exercise comparing fast-growing Asian and post-stabilization sub-Saharan African countries with Mozambique, identifies potential constraints to sustaining rapid growth.³ Although Mozambique is well placed to sustain its growth takeoff given its sound political institutions, geography (coastal location close to South Africa), and relative income equality, weaknesses in regulatory quality and law enforcement may offset these advantages to the detriment of growth.

³Johnson, Ostry, and Subramanian (2007) undertake a similar benchmarking exercise.

The next section provides the background to the impressive performance of Mozambique in the past 15 years, while the one that follows identifies the potential constraints to sustaining growth using the benchmarking exercise mentioned above. The third section outlines the role of the IMF in Mozambique, and the fourth and last section concludes and draws lessons about how the experience of Mozambique could be of interest to other sub-Saharan African countries.

Background

Geography and Endowment⁴

Mozambique spans more than 1,500 miles of Africa's southeast coast on the Indian Ocean. It is the world's 36th-largest country; it is nearly twice the size of California and one of the most land-abundant countries in Africa. Mozambique borders Tanzania to the north; Malawi, Zambia, and Zimbabwe to the west; and South Africa and Swaziland to the south. Mozambique has several deepwater ports and many rivers; the Zambezi River, its largest, has the greatest hydroelectric power potential in Africa. Mozambique's geography and resources offer vast potential for trade and growth, especially in agriculture, fishing, tourism, regional transportation, hydroelectricity, natural gas, oil, and minerals.⁵

Mozambique's fertile soils and favorable climatic conditions permit farmers to grow a large variety of crops, ranging from traditional subsistence crops, such as maize, cassava, and vegetables, to cash crops, such as cotton, sugar, cashew nuts, fruits, tobacco, cut flowers, and spices. The low utilization rate (15 percent) of arable land and relatively low yields suggest that the agricultural sector, which employs 80 percent of the population, could expand further. The timber industry is also very dynamic, although its resources and production should be managed in a more sustainable way. Mozambique's tourism potential is virtually untapped, despite the country's abundant marine life, coral reefs, mountains, and game conservation area. The most important trading routes, which run north-south and east-west

⁴According to a 1997 census, the spoken local languages in Mozambique are Emakhuwa, 26.1 percent; Xichangana, 11.3 percent; Portuguese, 8.8 percent (official; spoken by 27 percent of the population as a second language); Elomwe, 7.6 percent; Cisena, 6.8 percent; Echuwabo, 5.8 percent; other Mozambican languages, 32 percent; other foreign languages, 0.3 percent; and unspecified, 1.3 percent. Mozambique is divided into 10 provinces, which are subdivided into 129 districts; its capital city, Maputo, has provincial status.

⁵World Bank (2004).

along the major regional corridor, could service trade to and from South Africa and other parts of the region.

Mozambique's population, approximately 20 million, is projected to grow at about 2.4 percent annually. Since dependency rates are falling, population dynamics have not been a major driver of poverty trends; indeed, demographic dynamics have helped support rising per capita incomes and falling poverty. Nonetheless, diseases common in many parts of Africa, including malaria, tuberculosis, and HIV/AIDS, are still endemic in Mozambique. The result is low life expectancy at birth—45 years, or slightly below the sub-Saharan African average of 46. In 2005, there were 123,000 AIDS-related deaths and 400,000 children were orphaned because their parents died of AIDS, creating a tremendous loss to, and burden on, society. However, Mozambique's Human Development Index (HDI) has risen steadily over the past few years, with a score of 0.448 for 2005 and preliminary data for 2006 indicating a rise to 0.458. If improvements continue at the current rate, in 2009 Mozambique will have an HDI of 0.501, enough to propel it into the ranks of countries that have achieved medium human development.

Post-Conflict Economic History

Just 15 years ago, Mozambique was the world's poorest country. "This undesirable situation was the result of a complicated historical heritage that included a period of colonization that put little emphasis on human capital, a failed socialist economic experience, and a vicious civil war that lasted more than a decade."⁶ Since signing a peace agreement in 1992 that ended 16 years of conflict, Mozambique has achieved impressive broad-based GDP growth (8 percent a year, on average) and lowered poverty (the poverty headcount index went from 69 percent in 1997 to 54 percent in 2003); this growth acceleration, more sustained than in many other post-conflict economies, has helped consolidate peace.⁷ These achievements were possible because Mozambique's fairly unified government, which has a firm commitment to poverty reduction, met the preconditions for healthy growth, implementing a first wave of far-reaching institutional and structural reforms with substantial donor support.⁸

⁶See IMF (2007a), page 17.

⁷See Clément (2004), for a discussion of post-conflict economics in sub-Saharan Africa.

⁸Mozambique is one of the biggest recipients of concessional assistance (which amounts to about 15 percent of GDP) in Africa. This has helped improve both access to and the quality of basic services.

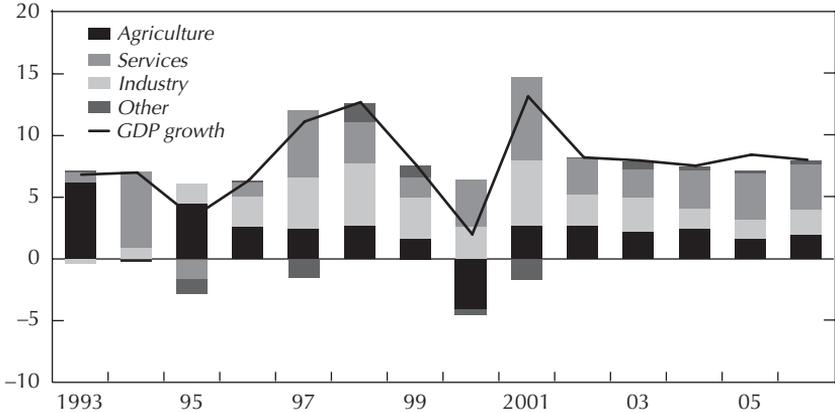
Economic growth has been broad-based and accompanied by a structural transformation away from primary sectors toward industrial and service sectors. (See Figure 1.2.) Growth has been sustained by an agricultural rebound, the rehabilitation of infrastructure-related sectors, construction of megaprojects, investment from neighboring countries, and buoyant foreign aid. The structural transformation is attributable partly to steady progress in liberalizing key sectors (for example, telecommunications and air transport) and the freeing up of internal trade and prices.⁹ A rapid expansion in communication services and the extension of urban water and electricity services to new areas added further momentum. Though growth in the country's two most important traditional activities, agriculture (including fisheries) and commerce, has slowed recently, these sectors are still Mozambique's largest in terms of economic activity and employment; together they account for almost 40 percent of GDP.

After years of high inflation lasting into the mid-1990s, Mozambique has largely succeeded in stabilizing inflation, in part thanks to the tight money-based stabilization program, supported by prudent fiscal policies, implemented under successive IMF-supported arrangements. (See Figure 1.3.) There have, however, been bouts of inflationary episodes driven by exogenous shocks. For example, after the great flood of 2000, reconstruction necessitated a fiscal expansion. Subsequent droughts resulted in higher food prices, and a banking crisis in 2002 undermined the central bank's ability to retain monetary control. Sharp adjustments to domestic fuel prices also contributed to inflationary dynamics during the same period. More recently, monetary and financial sector reforms, together with prudent macroeconomic policies, have helped Mozambique maintain macroeconomic stability in the face of exogenous shocks, particularly higher world oil prices. (See Chapter 4.) Fiscal consolidation limited the need for the authorities to resort to monetary financing and helped reduce inflation to single-digit levels, relieving pressure on domestic interest rates. The flexible exchange rate regime helped cushion the economy against exogenous shocks and maintain competitiveness.

Mozambique has made considerable progress toward establishing a modern and effective tax system by phasing in wide-ranging reforms in a number of key areas with the support of the donor community. The first phase, which started in 1996 and focused on customs, modernized customs administration, including through the introduction of modern legislation and procedures. In a bold step, the government contracted out

⁹State-sponsored interventions in the agricultural sector were all but eliminated by the mid-1990s.

Figure 1.2. Broad-Based Economic Growth Has Been Led by Agricultural Catch-up and Industrialization



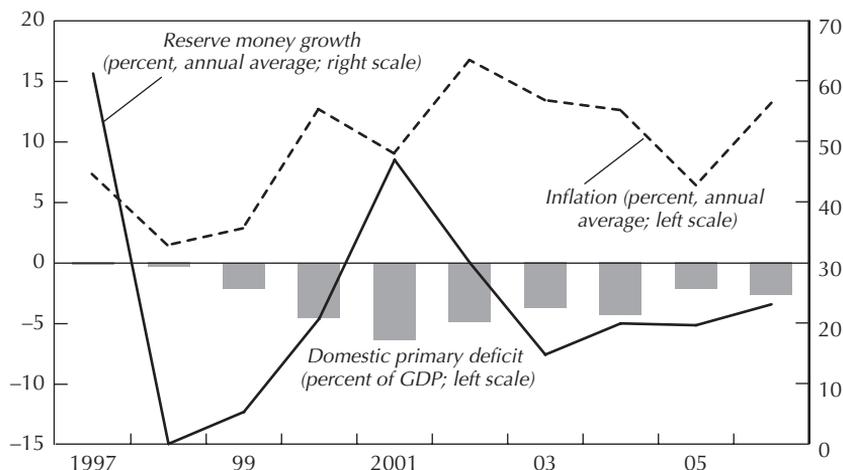
Source: IMF staff estimates.

the complete management of its customs service, with financial assistance from the U.K. Department for International Development and the World Bank;¹⁰ it resumed managing customs administration in 2003 with continuing support from Crown Agents (the firm that originally took over administration), to prepare to integrate customs into a unified revenue authority. The second phase, the introduction of a value-added tax (VAT) in mid-1999,¹¹ was successful and provided the basis for shifting the focus of revenue collection from imports to domestic transactions over the medium term. The third phase of the reform, which is now under way, aims to further strengthen the design and administration of the tax system and to increase the tax ratio over the medium term. This phase draws on a comprehensive review by the IMF conducted in February 2001 and updated in March 2006, with the IMF concluding that Mozambique's tax policy regime is generally sound and appropriate for a low-income coun-

¹⁰Crown Agents was chosen by international tender as Mozambique's operational partner. In January 1997, under the direction of the Mozambican government, Crown Agents took over operational management of customs—the first time any government had attempted a public-private partnership of this kind.

¹¹The VAT's implementation was supported from October 1996 by a technical assistance project carried out jointly by the IMF and the Swiss State Secretariat for Economic Affairs. The Fund acted as the executing agency of the project.

Figure 1.3. Prudent Monetary and Fiscal Policies Have Helped Stabilize the Economy



Source: IMF staff estimates.

try while noting that measures to strengthen tax administration are also moving ahead.¹² The remaining reform areas being implemented include making changes to direct taxation (for example, to reduce exemptions and rationalize income tax incentives) and establishing the central revenue authority (*Autoridade Tributária Moçambicana*; ATM) as a sustainable, semiautonomous agency and improving its operational performance, particularly in enforcing tax compliance.¹³ The result is a tax regime that relies less on distortionary indirect taxes and tariff barriers. Overall, the revenue-to-GDP ratio has increased steadily, from about 11 percent in 1996 to 16 percent in 2006. (See Table 1.1.)

Government expenditures in Mozambique have generally reached the most economically and socially productive sectors (World Bank, 2005). A cohesive state apparatus and development of a consensus on how best to utilize scaled-up foreign aid that initially may have been led by the international community (including through conditionality) built a sense of country ownership over time and focused on the fight against poverty.

¹²See Coelho and others (2001) and Varsano and others (2007).

¹³The ATM creation law was approved by the National Assembly in December 2005, allowing for the formal creation of the ATM at the beginning of 2006.

Table 1.1. Revenue Mobilization Has Strengthened Despite Tariff Reforms
(In percent of GDP)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Total revenue	10.8	10.4	10.4	10.7	11.5	11.2	12.1	13.3	13.1	14.1	15.6
Tax revenue	9.9	9.6	9.6	9.9	10.5	10.0	10.7	12.3	12.1	12.2	13.4
Of which:											
Taxes on income, profits, and capital gains	1.9	2.0	1.9	1.5	1.6	1.8	2.1	2.9	2.8	2.9	3.7
Of which:											
Domestic taxes on goods and services	5.3	5.4	5.6	6.3	6.6	6.1	6.4	7.0	7.3	7.2	7.5
Of which:											
Taxes on international trade and transactions	2.1	1.8	1.8	1.8	1.9	1.8	1.9	2.0	1.8	1.9	1.9
Nontax revenue	0.9	0.8	0.8	0.8	1.0	1.3	1.4	1.0	1.0	1.9	2.1

Source: IMF staff estimates.

The Poverty Reduction Strategy Paper (PRSP) process, which resulted in the *Plano de Acção para a Redução da Pobreza Absoluta* (PARPA I) for 2000–05 and PARPA II for 2006–09, has played a positive role in this regard, particularly through the design and monitoring of a simple rule specifying that 65 percent of total spending should be in priority sectors. Good reform progress has also been achieved on public financial management (PFM) reforms since 2002, when the SISTAFE (*Sistema de Administração Financeira do Estado*) project (now in its second phase) was launched. Completed project components include the creation of a Treasury Single Account (TSA), a government-wide new organic budget law (the SISTAFE law) and its information technology component (the e-SISTAFE), which at present comprises modules for budget execution and budget preparation and has already been rolled out to all line ministries. The implementation of the SISTAFE project has helped alleviate some of the weaknesses flagged by the fiscal transparency report on standards and codes conducted in 2001 (and updated in 2004 and 2007), particularly in regard to enacting a comprehensive legal framework and strengthening the accounting and reporting system. As such, the public expenditure and financial accountability (PEFA) assessment of 2006 highlights the fact that PFM systems in Mozambique have improved greatly in recent years. (See Chapter 6, Box 6.1.) The authorities' medium-term PFM action plan and budget for 2006–09 address the remaining PFM weaknesses identified by the PEFA assessments and are financed by a multidonor common fund.

Financial sector reforms to restructure and strengthen supervision of the banking system have deepened financial intermediation. An enhanced regulatory and supervisory framework and cleaned-up balance sheets following privatization and consolidation of the banking system in the aftermath of the banking crisis of 2001–02 have restored confidence in the banking sector,¹⁴ prompting broad money growth to outpace nominal GDP growth and credit to the private sector to almost double in just two years. These developments reflect structural factors associated with banks again becoming involved in providing consumer credit (for example, credit cards and loans to purchase durable goods) and lending for industrial activities as well as borrowing by domestic petroleum distributors related to the syndication of larger oil import transactions.

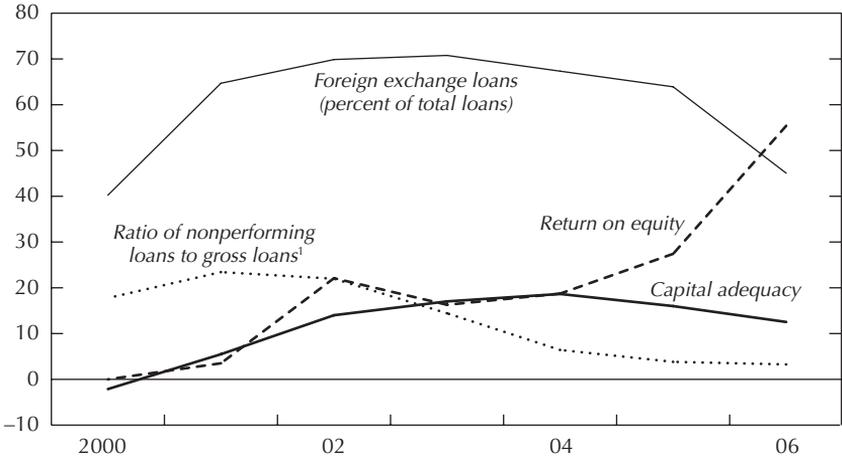
Although they are still incomplete, these reforms appear to have contributed to improvements in banking system soundness: bank profitability has recuperated, and nonperforming loans have fallen to less than 5 percent of all loans according to Mozambican accounting standards. (See Figure 1.4.)

Banks have also become more efficient. In particular, the ratios of non-interest expenses to gross income and, to a lesser extent, of personal expenses to non-interest expenses, have declined since 2004. Greater confidence in the banking system has also led to a significant decrease in liability dollarization and, thus, less financial vulnerability. Such improvements seem to have presented positive spillovers to financial intermediation. (See Figure 1.5.) Real lending rates and the spread between deposit and lending rates, on a declining trend since 2002, have been associated with a significant increase in the loan-to-deposit ratio, particularly loans denominated in domestic currency.¹⁵ Microfinance institutions (MFIs) also proliferated: between 2000 and 2005, there was about a fivefold increase in the number of their clients and a sevenfold increase in their outstanding loans. The increase in the number of MFIs has been accompanied by a substantial improvement in their operational performance and improved recovery rates. The agriculture sector and rural areas continue to have limited access to banking services and MFIs, however.

¹⁴ Following the external auditors' approval in early 2005 of the financial statements of *Banco Internacional de Moçambique* (BIM) for 2004, the enhanced supervisory regime of the BIM was discontinued.

¹⁵ The strong decline in credit denominated in foreign currency was driven, in particular, by the implementation of a prudential measure introduced in July 2005 to provision 50 percent of foreign currency-denominated loans to non-exporters.

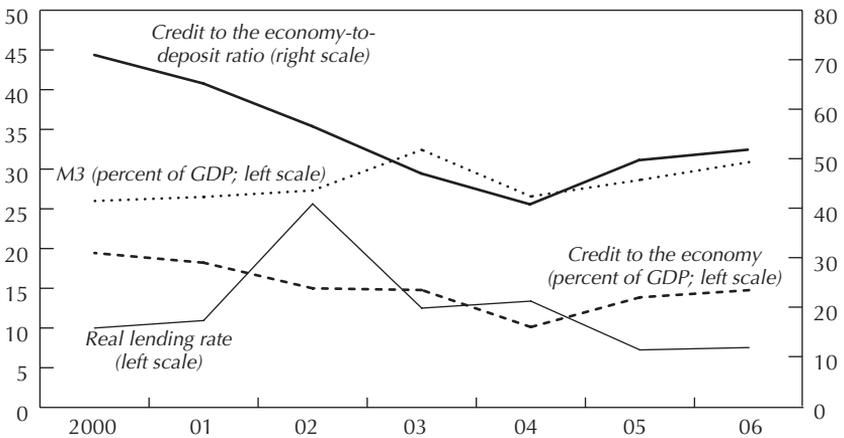
Figure 1.4. Banking System Soundness Indicators Have Improved . . .
(In percent)



Source: Bank of Mozambique.

¹According to Mozambican accounting standards, nonperforming loans include only part of past-due loans.

Figure 1.5. . . . Leading to an Increase in Financial Intermediation



Source: Bank of Mozambique.

Trade and gradual capital account liberalization has made Mozambique one of the most open economies in sub-Saharan Africa. Successive rounds of trade reform have resulted in a tariff structure that is relatively simple: import tariffs fall into four nonzero bands (2.5, 5, 7, and 20 percent).¹⁶ According to overall ratings of trade restrictiveness, Mozambique's trade barriers (tariff and nontariff) are lower than those of neighboring countries (Malawi, South Africa, Swaziland, Tanzania, and Zimbabwe) and most of the member countries of the Association of Southeast Asian Nations (ASEAN). (See Table 1.2.) Its trade-weighted average tariff is 9.1 percent, which is among the lowest in sub-Saharan Africa, although its simple average tariff (12.1 percent) is higher than that of most other sub-Saharan African countries, reflecting its relatively high tariffs in certain import categories with low import levels. It also belongs to only one regional trade agreement (the Southern African Development Community, or SADC) and has thus been able to avoid the confusion associated with participating in overlapping trade agreements. (See Yang and Gupta, 2005.) Mozambique's trade and foreign direct investment (FDI) patterns have been strongly influenced by favorable domestic policies for megaprojects.¹⁷ A strong motivation for attracting large-scale FDI projects in the immediate aftermath of the conflict was to showcase the country as a location of choice for private investment, with the aim of attracting other investors. In addition to benefiting from unrestricted inflows of FDI, as well as dividend, interest, and profit repatriation, many megaprojects qualify as export-processing zones (EPZs), which allow manufacturers to import goods duty free, offer on-site customs facilities, and obtain tax incentives. For example, Mozal (one of the largest aluminum smelters in the world), which is an EPZ, is exempt not only from customs duties on imported inputs but also from corporate income, value-added, and specific consumption taxes.¹⁸ Megaproject exports (electricity, aluminum, and gas) accounted for more than 70 percent of total exports in 2006; aluminum alone accounted for 58.6 percent of the total. The investor-friendly environment helped put Mozambique on the global FDI map and caused exports to expand sharply.¹⁹ (See Figure 1.6.) This, together with buoyant

¹⁶For example, Mozambique has gradually reduced its maximum tariff rate, from 35 percent in 1999 to 25 percent in 2002, and to 20 percent in 2006.

¹⁷See the Appendix for an overview of megaprojects in Mozambique.

¹⁸Firms must employ at least 250 permanent Mozambican workers to qualify as stand-alone EPZs.

¹⁹Megaproject spillovers to the rest of the economy remain subdued because of their capital-intensive nature, profit-repatriation patterns, limited vertical and horizontal link-

Table 1.2. Tariff and Nontariff Barriers Are Low

	Trade restrictiveness		
	Overall rating (1–10)	Tariff barriers rating	Nontariff barriers rating
Comparators in sub-Saharan Africa			
Angola	1	1	1
Congo, Dem. Rep. of	2	2	1
Madagascar	2	2	1
Mozambique	2	2	1
Zambia	2	2	1
Mauritius	4	1	2
Botswana	5	2	2
Lesotho	5	2	2
Namibia	5	2	2
South Africa	5	2	2
Swaziland	5	2	2
Tanzania	5	2	2
Zimbabwe	6	3	2
Comparators in Asia			
Indonesia	4	1	2
Malaysia	4	1	2
Thailand	5	2	2

Source: IMF staff estimates.

Note: 1 represents lowest trade restrictiveness.

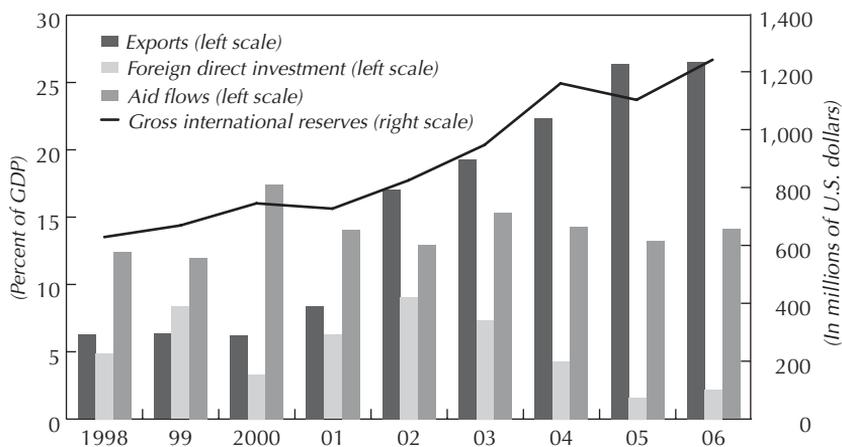
foreign aid inflows, resulted in a comfortable external position, with international reserves exceeding six months of imports at the end of 2006.

Challenges to Sustaining Rapid Growth in Mozambique

By benchmarking the experience of countries that have sustained long periods of rapid growth against conditions in Mozambique, we can identify potential constraints to sustaining Mozambique's impressive growth take-off. (See Figure 1.7.) There is not yet a unified theory of sustained growth (Johnson, Ostry, and Subramanian, 2007), although it is well established that weak economic and political institutions are associated with economic crises and faltering growth (Acemoglu, Johnson, and Thaicharoen, 2003; IMF, 2003). Although Mozambique is well placed to sustain its growth takeoff in terms of such fundamental determinants of growth as sound political institutions (IMF, 2003), geography (coastline and proximity to South Africa (Collier and O'Connell, 2008), and low inequality (Acemoglu, Johnson, and Robinson, 2005a; Rodrik, 1999; Berg, Ostry,

ages to the economy, and reduced fiscal contribution. See the Appendix for additional information.

Figure 1.6. Exports Soared, Complementing Aid Inflows and FDI, Resulting in a Comfortable External Position



Source: IMF staff estimates.

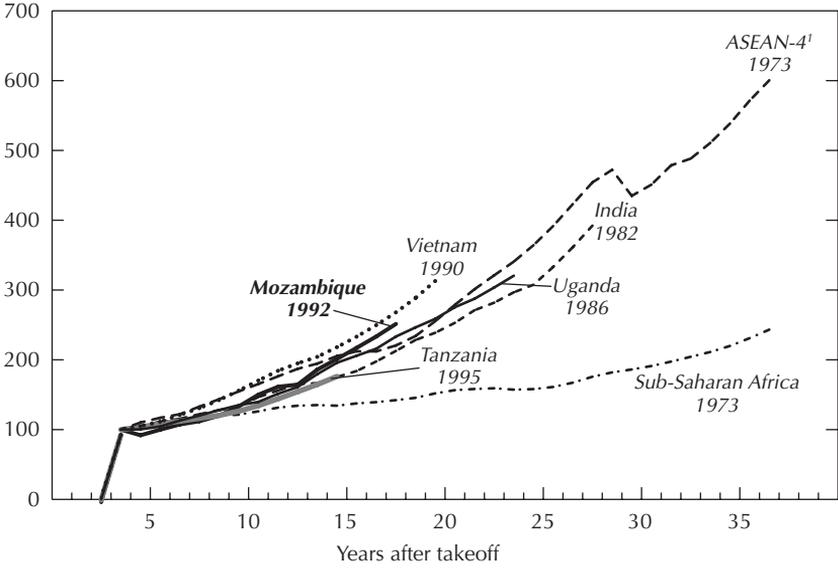
Note: FDI = foreign direct investment.

and Zettelmeyer, 2006), its broad economic institutions remain weak.²⁰ (See Figure 1.8.) In addition, it has large gaps in human capital and infrastructure (see Table 1.3), which could conceivably limit returns on productive private investments (Ndulu with others, 2007). For example, a pool of skilled labor and a basic road network may be necessary to support a modern manufacturing sector. In Mozambique, initial levels of human capital may be too low to allow further human capital to accumulate (for example, it may have too few teachers and doctors to develop skills in healthy young people).

Given growth conditions in Mozambique, we seek to benchmark it against countries that started with weak economic institutions (and relatively low income levels) but were able to sustain rapid growth. Relatively few poor countries have managed to sustain rapid growth and improve their institutions; most of the successful ones are in Asia (Hausmann, Pritchett, and Rodrik, 2004; Rodrik and Subramanian, 2004). Therefore, we choose a subset of Asian successes (and a few fast-growing African economies for comparison purposes), focusing on the evolution of their

²⁰Broad economic institutions are the laws, rules, and other practices that govern property rights. They also encompass the provision of law and order, and efficient bureaucracies.

Figure 1.7. Mozambique’s Growth Takeoff Continues
(Growth index, 0 = 100)

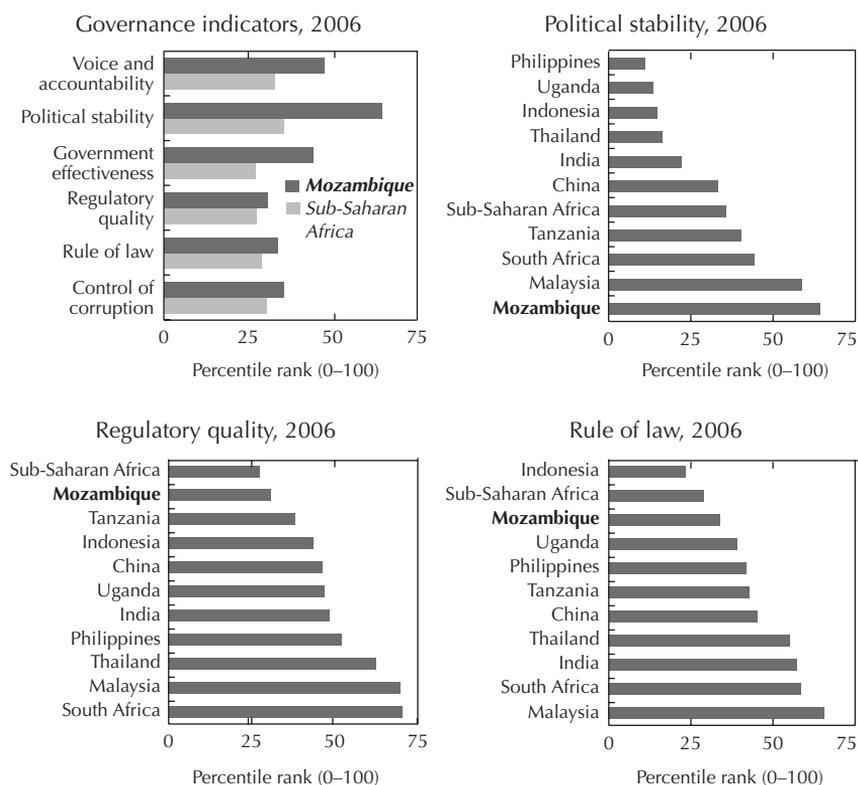


Source: IMF, World Economic Outlook database.
 Note: Excludes China for presentation purposes.
 ¹ASEAN-4 = Indonesia, Malaysia, the Philippines, and Thailand.

characteristics, to identify potential constraints to sustained growth in Mozambique.

Key Challenges

Productivity growth must be sustained by creating an enabling environment for the private sector through the acceleration of second-generation reforms. The analysis of Mozambique’s past growth performance, based on a rigorous growth accounting framework in Chapter 3, suggests that physical capital accumulation, advances in education, and improvements in total factor productivity (TFP) have generated a relatively unbiased pattern of growth. (See Table 1.4 and Figure 1.9.) At an aggregate level, this pattern is broadly similar to the examples of sustained growth found in Asia. As has been well documented, however, measures of TFP based on Solow residuals could reflect a number of factors, including changes in capacity utilization. The results presented in Chapter 3 suggest that the Solow residual appears to have been explained largely by changes in

Figure 1.8. Benchmarking Mozambique's Governance

capacity utilization in Mozambique.²¹ Thus, once Mozambique approaches its technological frontier, the task of sustaining strong productivity growth could become demanding. Given the country's relatively healthy level of fixed capital investment, the accumulation of factors of production alone is unlikely to be sufficient to sustain growth. Therefore, a critical challenge would be to strengthen productivity through technological advances, given the relatively low productivity in agriculture and manufacturing (see Chapter 2 and Eifert, Gelb, and Ramachandran, 2005), and to pursue second-generation institutional reforms.²² The focus would also need to be

²¹See Krugman (1987) for an example of the view that Asia's growth "miracle" was also driven by factor accumulation.

²²Institutional quality has been robustly associated with overall levels of productivity and economic development (see Rodrik and Subramanian, 2004).

Table 1.3. Selected Human Capital and Infrastructure Indicators

	China	India	Mozam- bique	Uganda	South Africa	Vietnam	Tanzania	SSA	ASEAN-4
Human development index rank ¹	81.0	126.0	168.0	145.0	121.0	109.0	162.0	n.a.	82.0
Life expectancy at birth (<i>total years</i>) ²	71.4	63.5	41.8	48.9	44.6	70.3	46.2	46.2	70.5
Adult literacy rate ²	90.9	61.0	33.5	66.8	82.4	90.3	69.4	n.a.	77.3
Reduction of infant mortality from 1970 to 2004	59.0	65.4	63.6	19.8	n.a.	37.6	50.6	41.4	49.0
Infant mortality (<i>per 1,000 live births</i>) ²	26.0	61.6	104.4	80.2	54.0	17.4	78.4	100.5	21.0
Poverty headcount ratio at national poverty line (<i>% of population</i>) ³	17.0	28.6	54.0	33.8	n.a.	37.4	35.7	n.a.	32.0
Gini coefficient ²	43.4	37.8	40.3	43.0	59.3	36.1	38.2	n.a.	42.9
GDP per capita (<i>constant 2000 US\$</i>) ⁴	1,444.8	586.5	291.7	267.4	3,534.6	539.0	329.9	559.7	2,231.1
Primary completion rate, total (<i>% of relevant age group</i>) ²	n.a.	83.6	29.0	61.1	95.6	100.8	55.6	61.1	96.5
Primary school enrollment ratio ²	n.a.	89.7	71.0	n.a.	90.0	93.0	85.9	n.a.	89.3
Improved water source (<i>% of population with access</i>) ²	77.0	86.0	43.0	60.0	88.0	85.0	62.0	56.2	90.0
Irrigated land (<i>% of cropland</i>) ²	35.3	32.9	2.6	0.1	9.5	33.4	3.6	3.6	15.1
Mobile phone subscribers (<i>per 1,000 people</i>)	258.3	43.8	36.4	41.9	428.5	60.4	43.6	74.1	389.6
Electric power consumption (<i>kWh per capita</i>) ²	1,378.5	435.3	338.5	n.a.	4,503.7	433.1	54.4	513.0	1,456.7
HIV prevalence ⁴	0.1	0.9	16.1	6.7	18.8	0.5	6.5	6.2	0.5

Sources: United Nations Development Program, 2006, *Human Development Report*; and World Bank, World Development Indicators database.

Note: SSA = Sub-Saharan Africa.

¹2006 data.

²2004 data.

³2000 data except Mozambique (2002).

⁴2005 data.

Table 1.4. Comparative Growth Accounting Evidence; Annual Rates of Growth
(In percent)

		Decomposition of ΔY				
		ΔY	ΔA	ΔK	ΔL	ΔH
1990–2000	Africa	2.3	–0.5	–0.1	2.5	0.4
1990–2000	East Africa	5.7	0.5	2.3	2.4	0.5
1990–2000	Latin America	3.3	0.4	0.2	2.4	0.3
1990–2000	South Asia	5.3	1.2	1.2	2.5	0.4
1992–1998	Mozambique	5.22	1.67	1.84	1.31	0.4
1999–2004	Mozambique	7.4	1.11	3.84	1.5	0.92
1980–2004	Mozambique	2.6	–0.27	1.2	1.13	0.52

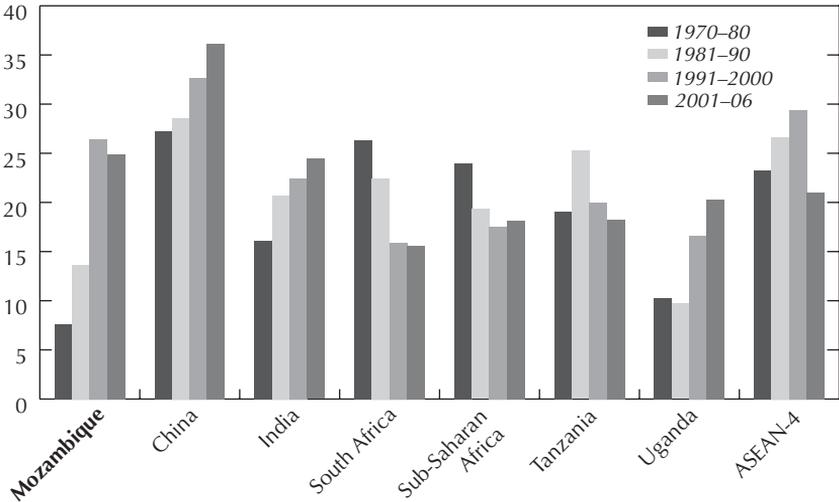
Sources: Bosworth and Collins (2003) for regions; and Chapter 4 for Mozambique.

on sustaining public and private investment levels, improving average education levels, and minimizing the impact of the HIV/AIDS epidemic. In addition, although foreign aid is likely to continue to play a major role in financing government spending (about 50 percent in 2006), the level and quality of public investment will depend on the effective management of absorptive capacity pressures and public financial management systems.

Macroeconomic stability should be consolidated to help maintain growth momentum.²³ Inflation is still higher in Mozambique than in the successful Asian countries benchmarked here and in South Africa, its main trading partner. (See Figure 1.10.) The relatively high level of GDP volatility is explained mostly by weather-related shocks to agriculture, which call for better mitigation mechanisms, such as irrigation and crop diversification. (See Figure 1.11.) Fiscal policy has an important role to play in consolidating macroeconomic stability by anchoring inflationary expectations as postulated by the Sargent-Wallace framework of the so-called unpleasant monetary arithmetic, and the fiscal theory of the price level. (See Chapter 4.) In a shock-prone economy like Mozambique's, a more consistent and sophisticated management of monetary and exchange rate policy is critical, possibly through the implementation of a "lite" inflation targeting regime, as suggested in Chapters 4 and 5. Deepening domestic financial markets and building the Bank of Mozambique's credibility through greater central bank autonomy and transparency would be important in this regard. (See Chapter 4.) Real exchange rate misalign-

²³Sustaining Mozambique's growth takeoff is dependent on avoiding a return to the high-inflation episodes that characterized much of the 1980s and the first half of the 1990s. For example, Berg, Ostry, and Zettelmeyer (2006) show that reducing inflation from 50 percent to 10 percent halves the risk of a slowdown in growth in any given year.

Figure 1.9. Gross Fixed Capital Formation Is Healthy
(Percent of GDP)



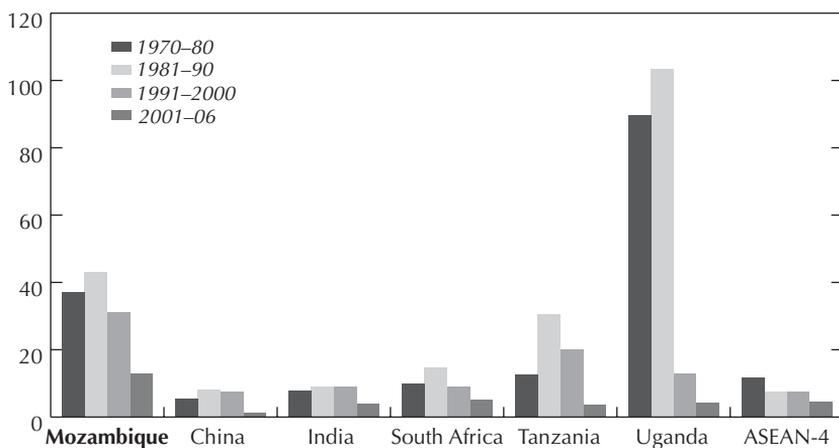
Source: World Bank, World Development Indicators database.

Note: ASEAN-4 = Indonesia, Malaysia, the Philippines, and Thailand.

ments also must be guarded against, to avoid stymieing growth.²⁴ In this respect, Mozambique has been largely successful in maintaining competitiveness by avoiding persistent real exchange rate overvaluations through a flexible exchange rate regime. Econometric results presented in Chapter 10 suggest that the real effective exchange rate (REER) may have been temporarily overvalued in times of tight exchange rate management in Mozambique. With a supportive fiscal stance, Mozambique should continue to aim to keep inflation in single digits through an appropriate mix of monetary policy instruments; it should also pursue greater exchange rate flexibility to cushion against exogenous shocks and avoid real exchange rate overvaluation.²⁵

²⁴Across a variety of methodologies, for example, overvaluation is robustly correlated with crises and derailment of growth, even when controlling for inequality and institutions (Acemoglu, Johnson, and Thaicharoen, 2003; Berg, Ostry, and Zettelmeyer, 2006; and Johnson, Ostry, and Subramanian, 2007).

²⁵Since Fischer (1993), several authors have tried to identify and locate a “kink” in the relation between inflation and economic growth—associated with a maximum growth rate. Empirical studies using panels of countries have located this kink in the inflation-

Figure 1.10. Inflation Needs to Fall Further*(Average for period, percent)*

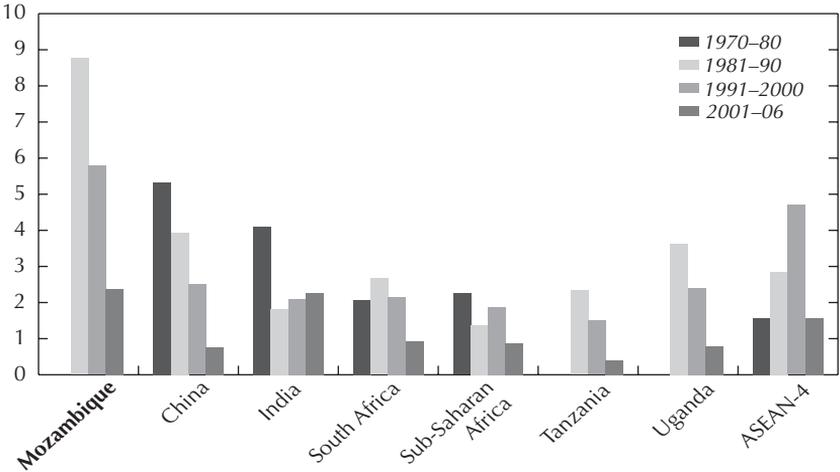
Source: World Bank, World Development Indicators database.

Note: ASEAN-4 = Indonesia, Malaysia, the Philippines, and Thailand.

Fiscal policy could continue to focus on achieving the MDGs but be carefully managed to ensure long-term fiscal sustainability and avoid a loss of competitiveness. Foreign aid inflows, amounting to about 15 percent of GDP, could continue to be fully spent and focused on priority sectors (for example, agriculture, education, health, and infrastructure, as defined in the PRSP) to help achieve the MDGs and address Mozambique's vast socioeconomic needs. The Heavily Indebted Poor Countries (HIPC) and Multilateral Debt Relief Initiatives (MDRI) have reduced Mozambique's debt levels and provided it with the fiscal space to maintain a relatively high level of expenditures (about 25–30 percent of GDP), financed mainly through concessional external borrowing and foreign grants. (See Figure 1.12.) Given the low tax-to-GDP ratio and the need to guard against aid volatility and gradually reduce dependence on donors, however, an annual average revenue increase of 0.5 percent of GDP should continue to be targeted through the Medium-Term Fiscal Framework. (See Figure 1.13.) This can be achieved by widening the tax base and improving revenue administration (Chapter 6). Beyond the PARPA II period (2006–09), strong growth and increased fiscal revenues from megaprojects—including

growth nexus at a level of inflation somewhere between 3 percent and 40 percent, with a majority suggesting a level in the 5–10 percent range (Ghosh and Phillips, 1998).

Figure 1.11. Exogenous Shocks Need to Be Better Mitigated
(GDP growth in percent; standard deviation)



Source: World Bank, World Development Indicators database.

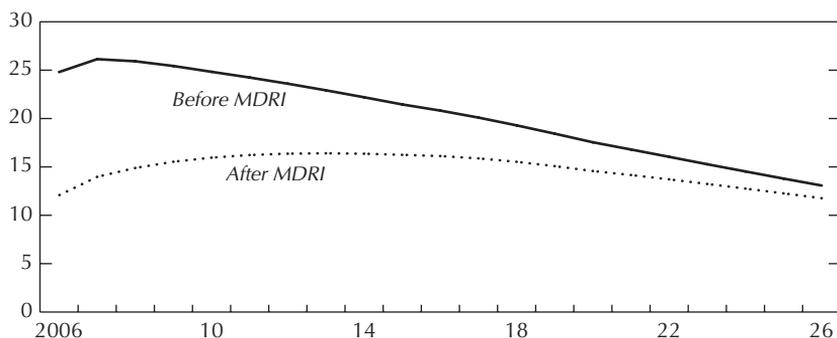
Note: ASEAN-4 = Indonesia, Malaysia, the Philippines, and Thailand.

the development of the multibillion-dollar Moatize coal mine project and the Pande-Temane gas project (still in its cost-recovery phase)—would help Mozambique maintain long-term fiscal sustainability and possibly allow it to start tapping international capital markets.²⁶ This approach would provide a strategy for exiting from aid dependence in the long run and ensure that at least recurrent spending could be financed from domestic resources. In this manner, the government can avoid recourse to unsustainable domestic borrowing to offset a decline of external assistance that could occur in the future, particularly after 2015. Mozambique has made good progress in improving aid effectiveness through enhanced donor coordination, which has recently reduced aid volatility (Chapter 7), in contrast to many other sub-Saharan African countries (Bulir̄ and Hamann, 2005; and Collier and Dollar, 2002), although firm donor commitments are still short term.²⁷ Therefore, if aid is lumpy or becomes less persistent, or

²⁶Mozambique's sovereign Standard & Poor's credit rating (B) is expected to improve, especially because of the country's efforts to buttress institutional capacity and maintain debt levels closer to emerging market thresholds established by World Bank-IMF debt-sustainability analyses.

²⁷A recent commitment by the United Kingdom to provide assistance over three years is an exception.

Figure 1.12. External Vulnerability Has Decreased
(External debt, percent of GDP)



Sources: Mozambican authorities and IMF staff projection.

Note: MDRI = Multilateral Debt Relief Initiative.

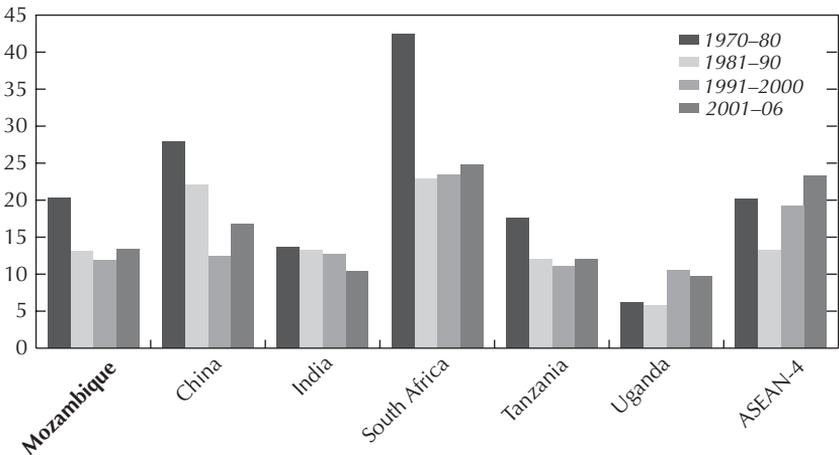
microeconomic capacity constraints become binding in some sectors, the authorities may consider smoothing the expenditure pattern and saving part of the aid in international reserves to be spent and absorbed at a later date. The scaling up of spending, whether financed by donors or not, will tend to cause the real exchange rate to appreciate and, therefore, could potentially hurt the export sector and long-run growth (Chapters 6 and 10).²⁸ Thus, there is a need to effectively reach the most productive priority sectors to elicit a supply response and mitigate potential Dutch-disease effects by strengthening PFM systems while embarking on a public sector reform program to improve efficiency and public service delivery.²⁹

Reducing the costs of business would help Mozambique diversify its export sector. Mozambique's export levels, which are similar to those of most countries in sub-Saharan Africa, are comparable to the export levels of the ASEAN-4 countries (Indonesia, Malaysia, the Philippines, and Thailand) during their initial growth takeoffs. (See Figure 1.14.) Its share of world trade has also been expanding, but that increase can be attributed to only a few sectors (Chapter 10). Mozambique's exports are dominated by capital-intensive megaprojects, though sustained growth tends to be asso-

²⁸The impact on the real exchange rate and exports of spending scaled-up foreign aid explains the weak link between aid inflows and growth in developing countries, according to Rajan and Subramanian (2005).

²⁹Dutch disease is defined in Chapter 6.

Figure 1.13. Revenue Mobilization Is Key to Fiscal Sustainability
(In percent of GDP)



Source: World Bank, World Development Indicators database.

Notes: Data for China include grants. ASEAN-4 = Indonesia, Malaysia, the Philippines, and Thailand.

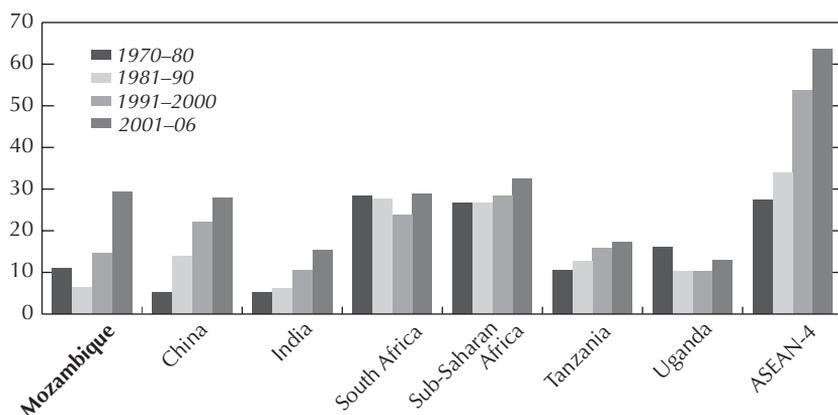
ciated with strong manufacturing exports.³⁰ The narrow export base and the lack of manufacturing exports may be due partly to the wide gap in business competitiveness between Mozambique, on the one hand, and the ASEAN-4 and African competitors, on the other hand, as measured by the World Bank's Doing Business and governance indicators. (See Table 1.5.) As such, lowering the costs of doing business must be at the core of the authorities' reform strategy to promote export diversification (see Chapter 9). Key priorities are to support financial sector development,³¹ further liberalize trade, and reduce labor and other indirect costs, particularly costs related to trade regulations and infrastructure bottlenecks.

The cost of credit is relatively high in Mozambique, as in the rest of sub-Saharan Africa (with the exception of South Africa).³² (See Figure 1.15.)

³⁰In addition to being a labor-intensive and high-productivity growth sector, manufacturing may also support institutional development and thus improve long-term growth prospects (Acemoglu, Johnson, and Robinson, 2005b; and IMF, 2003).

³¹See Gulde and others (2006) for a comprehensive look at the financial sector challenges facing sub-Saharan Africa.

³²Recent business surveys continue to identify the high cost of finance as the top constraint to private sector growth, and access to financial services is among the top three constraints. The lack of access to finance is also a major factor stifling firm growth in Mozambique: more than 70 percent of firms do not have access to bank lending or to

Figure 1.14. Export Growth Needs to Be Sustained*(In percent of GDP)*

Source: World Bank, World Development Indicators database.

Note: ASEAN-4 = Indonesia, Malaysia, the Philippines, and Thailand.

Although benchmark treasury bill and deposit rates have started to come down as prices and the financial sector have become more stable, the spread between deposit and lending rates has remained stubbornly high (Chapter 4). The reasons for these large spreads, such as high credit risks and overhead costs and weak competition, also explain the low access to finance. The agriculture/rural sector's lack of access to credit is of particular concern, as indicated by this sector's shrinking share of total credit and inadequate microfinance outreach in rural areas. These problems call for a forward-looking financial sector reform strategy focused on consolidating financial stability, deepening financial markets, and improving access, particularly by addressing the institutional lending environment by such means as reducing costs of contract enforcement, enhancing credit registry coverage, and facilitating collateralized lending using property and movable assets (Chapters 4 and 9).

In the manufacturing sector, the low supply of skilled workers and labor market rigidities explain both the relatively high labor costs and low productivity (Chapter 9). In addition, high indirect costs and loss of output because of inadequate infrastructure and burdensome regulations

overdraft facilities (the percentage is even higher for small and medium-size enterprises), according to the 2003 Investment Climate Assessment (World Bank, 2003) and 2006 survey carried out by Mozambique's Ministry of Planning and Development and the Confederation of Mozambican Business Associations (CTA).

Table 1.5. Mozambique and Comparators: Distance to Top Rank in Business Environment

	Governance	Doing business
Comparators in sub-Saharan Africa		
South Africa	0.59	0.16
Mauritius	0.22	0.18
Namibia	0.37	0.23
Botswana	0.19	0.27
Zambia	0.55	0.58
Malawi	0.50	0.62
Lesotho	0.43	0.65
Mozambique	0.53	0.79
Tanzania	0.67	0.81
Madagascar	0.48	0.85
Zimbabwe	0.93	0.87
Angola	0.77	0.89
Comparators in Asia		
Thailand	0.63	0.10
Malaysia	0.34	0.14
Indonesia	0.20	0.77
Average, sub-Saharan African countries for this sample		
	0.45	0.48
Average, Asian countries for this sample		
	0.39	0.33

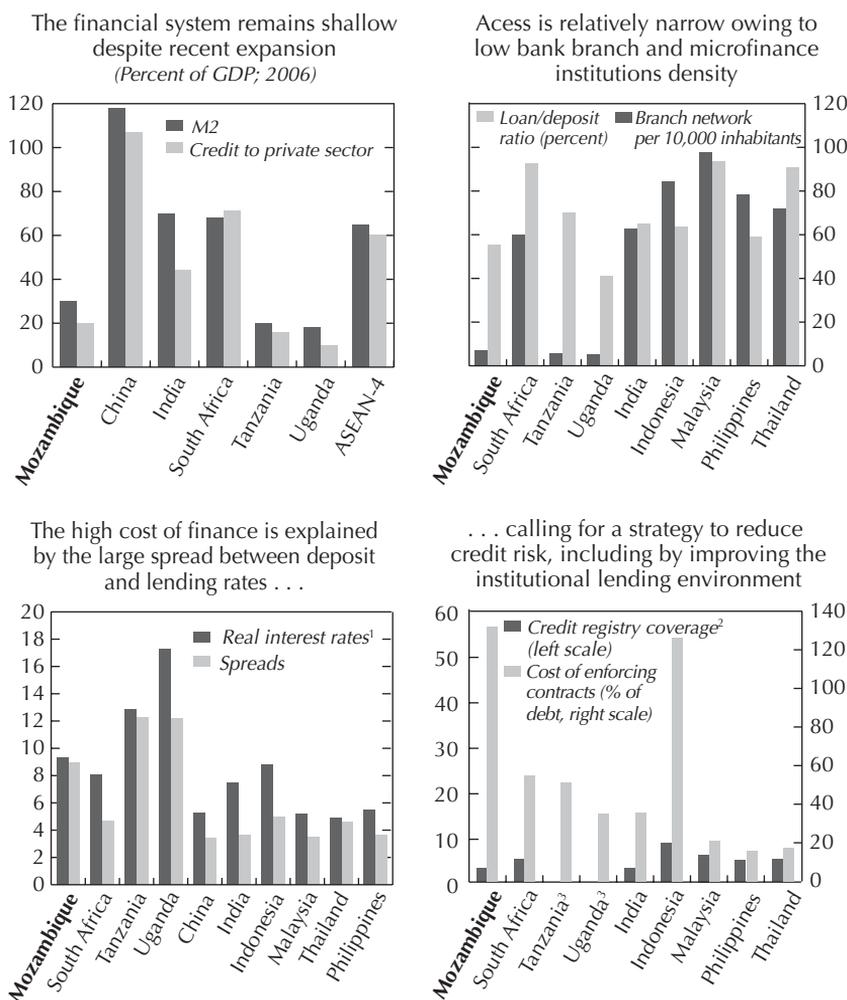
Sources: Kaufmann, Kraay, and Mastruzzi (2007); and World Bank (2007).

hamper the growth of manufacturers and small and medium-size enterprises, including those engaged in agribusiness/aquaculture and tourism. The focus should be on the timely implementation of the government's action plan to systematically improve on the World Bank's doing business rankings by accelerating business registration, reducing employment costs, simplifying trade regulations, and reducing the time it takes to register property (see Chapter 9). Recent progress in authorizing firms to publish their bylaws electronically and approval of a new labor law that significantly decreases the costs of hiring and firing workers are noteworthy in this regard. Infrastructure services, which are partly in the hands of state-owned or public-participating institutions, are inadequate, however.³³ This calls for clearly identifying infrastructure providers and drawing up a coherent multisector strategy to address infrastructure gaps, through such means as transparent sales of remaining public-participating enterprises and public-private partnerships (PPPs).³⁴

³³Public-participating institutions are enterprises with some private equity participation, and the remaining shares held by the state.

³⁴PPPs should be carefully managed to minimize fiscal risks by transparently reporting contingent liabilities or quasi-fiscal operations in budget documents.

Figure 1.15. Financial Sector Challenges



Sources: Beck, Demirguc-Kunt, and Peria (2006); IMF, International Financial Statistics; and Mozambican authorities.

Note: Average, 2000–04.

¹Real lending rate; percent per year.

²Index of measures affecting scope, access, and quality of credit information.

³Index was zero.

The efficient and transparent management of natural resources is vital to ensure a virtuous cycle of resource use.³⁵ Mozambique has proven resources of coal, diamonds, gold, titanium, and petroleum and the potential to produce hydropower, but countries rich in natural resources have seldom attained sustained growth.³⁶ To avoid the resource curse that has plagued much of sub-Saharan Africa, Mozambique needs (1) efficient tax and regulatory regimes to attract investment while maximizing benefits to the economy,³⁷ and (2) more transparent management of resource revenue.³⁸

Now that investors have more confidence in Mozambique (see Figure 1.16), the government recognizes that generous tax exemptions, which in the past have limited the contribution of new projects (see Appendix and Chapter 8), are not needed to attract quality investment. The Council of Ministers therefore approved both a new mining fiscal law and a new petroleum fiscal law that were in line with best international practices; both were approved by the Assembly in June 2007.³⁹ The government also adopted new model contracts for mining concessions, and exploration and production concession contracts (EPCCs) in the petroleum sector to complement the new laws. Since then, the government has ensured that any sizable new mineral resource projects or EPCCs in the petroleum sector adhere to the new fiscal regime. This augurs well for future revenues from the mining and petroleum sectors. The introduction of model agreements and a standardized fiscal regime is a good start, but further work remains to be done. A macroeconomic fiscal model for the extractive sector could be developed as a tool to help authorities formulate policies. A variety of taxes and fees are currently levied on the industry, and it is not always clear how they relate to each other, both in amounts and over time. The ability to forecast revenues and to understand how the ongoing reforms will affect them can aid policymakers. It is important to forecast realistic

³⁵See Chapter 8 for a literature survey of the resource curse and strategies to address it.

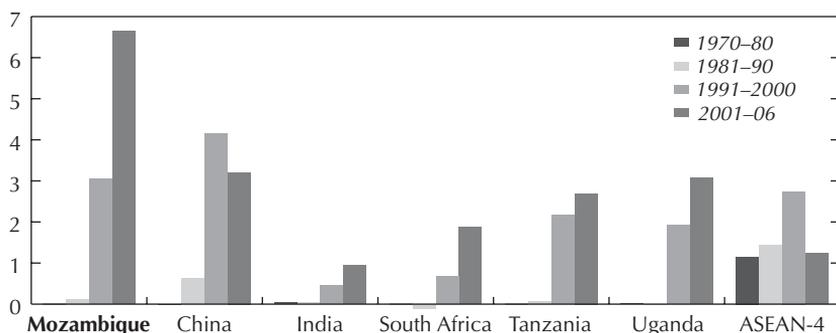
³⁶See Sachs and Warner (1995) and Stijns (2005). It should also be noted that the fast-growing Asian economies do not have particularly abundant natural resources.

³⁷See Nellor and Sunley (1994) and IMF (2007b).

³⁸In this regard, Botswana and Chile's experiences are more encouraging, although their initial economic institutions were probably stronger than Mozambique's. See Chapter 8 for an overview.

³⁹The IMF and the World Bank have collaborated closely to assist the authorities in strengthening the mining and petroleum fiscal regime.

Figure 1.16. Megaprojects Have Put Mozambique on the Global FDI Map
(In percent of GDP)



Source: World Bank, World Development Indicators database.

Note: ASEAN-4 = Indonesia, Malaysia, the Philippines, and Thailand.

fiscal revenues to ensure good budgeting practices, given the volatility of revenue flows from the sector.⁴⁰

It is well established that revenue and expenditure transparency can play an important role in avoiding the resource curse. The Extractive Industries Transparency Initiative (EITI) is aimed directly at defeating the resource curse by improving transparency and accountability in resource-rich countries through the full publication and verification of company payments and government revenues from the oil, gas, and mining sectors. Implementing the EITI as part of a program of improved governance can help ensure that revenues from extractive industries contribute to sustainable development and poverty reduction by holding decision makers accountable for the use of those revenues. The EITI principles guarantee transparency of revenue flows to the government and can contribute to improved governance in PFM systems by using principles of revenue transparency. The Mozambican government declared in March 2008 that it will follow the EITI principles to improve transparency, revenue management, and governance in the mining and petroleum sectors, as well as to govern expansion of related megaprojects. The early adoption of the EITI principles would be a good first step in improving the transparency

⁴⁰The Ministry of Finance currently undertakes tax projection work but does not do this yet for mineral resource projects. Because the sector is expected to grow rapidly, with several new megaprojects beginning production, there is a need to create a unit that will closely monitor these projects.

of resource revenues. The IMF (2007b) recently published its *Guide on Resource Revenue Transparency*, and government implementation of these guidelines could complement the EITI initiative. Looking forward, once revenues from natural resource use start flowing in significant amounts (for example, beyond 2010—see Appendix), the government may wish to consider the merits of a stabilization fund similar to those in Chile and Norway, for example (see Davis, Ossowski, and Fedelino, 2003), as a means to ensure fiscal stability and intergenerational equity. Finally, transparency and fiscal stability are likely to be easier to pursue in a generally applicable fiscal regime than in case-by-case negotiation, as was done in the past.

The realization of Mozambique's hydropower potential can be a future engine of growth. The transfer of ownership of the Cahora Bassa dam from Portugal to Mozambique is a historic event that, if carefully managed, can open up tremendous opportunities for exports and future infrastructure projects, including by providing access to international capital markets. An agreement to transfer majority ownership of the 2,075 megawatt (MW) Cahora Bassa hydropower plant from Portugal to a Mozambican parastatal, Hidroeléctrica de Cahora Bassa (HCB), was signed on October 31, 2006. This opens up the possibility of further hydropower development on the Zambezi, in particular the proposed Mphanda Nkuwa project (1,300 MW in the first stage, with potential for 2,275 MW), 60 kilometers downstream from Cahora Bassa, and the development of a second, 600 MW powerhouse on the north bank of Cahora Bassa itself, providing tremendous potential for export of power, energy-intensive industries, and benefits to agriculture and aquaculture from better water control. As part of the restructuring agreement signed, the government of Mozambique acquired 85 percent ownership of HCB, with the remaining 15 percent retained by the government of Portugal. In return, Portugal received payments of US\$950 million, of which US\$250 million was paid from retained earnings in an offshore account of HCB. The government of Mozambique decided to undertake a competitive bidding process for the selection of the lead arranger and underwriter for the financing of the remaining US\$700 million and an additional US\$100 million for transaction costs, relying on the A- rating of the South African power utility, Eskom (which receives most of Cahora Bassa's power output). An international banking consortium formed by Calyon and Banco BPI was selected, and commercial borrowing through a syndication of financial institutions, including hedging of exchange rate risks faced by HCB, has been secured. Importantly, the proposed project finance structure avoids any financial government guarantees through the principle of nonrecourse financing using special purpose vehicles (SPVs). Moreover, indications are that the pricing (spreads)

of the borrowing is closer to emerging market levels for a tenure between 10 and 15 years. The successful conclusion of the transaction securing nonrecourse financing for the purchase of majority ownership of HCB so as not to increase the government's liabilities to commercial creditors is a historic event for Mozambique and holds promise as a means to finance future infrastructure projects while minimizing risks to debt sustainability. It would also be important to

- ensure that both the process and the final financing package are transparent, and that HCB is managed in a commercially efficient manner, is audited by external auditors, and is subject to the regular concession and tax regimes; and
- identify and incorporate into the fiscal accounts and budget documents fiscal risks and quasi-fiscal transactions, if any.⁴¹

Role of the IMF in Mozambique

Mozambique satisfactorily completed four IMF-supported programs during 1987–2003. These programs were instrumental in helping the country move from a centrally planned to a market-based economy, achieve macroeconomic stability, and substantially reduce its debt burden. Over this period, real GDP growth averaged close to 7 percent a year; the international reserves position was strengthened; the net present value of the public external debt was reduced from more than 500 percent of exports at the end of 1998 to less than 100 percent; and significant progress was made in implementing first-generation reforms. In addition, the share of the population living in absolute poverty declined from an estimated 80 percent during 1989–94 to 69 percent in 1997, and during 2000–03 progress was made toward achieving the objectives specified in PARPA I (2000–05). Political stability and the authorities' strong commitment to structural reform were essential to the process.

Mozambique's 2004–07 IMF-supported program under the Poverty Reduction and Growth Facility (PRGF) helped the country maintain macroeconomic stability in the face of exogenous shocks and address struc-

⁴¹Public-private partnerships, such as the one devised to carry out the proposed Cahora Bassa dam transaction, are not a panacea, however. Recognizing that such transactions carry fiscal risks because of their complex nature, the authorities see the merits of encouraging greater private participation, where possible, as the preferred mode of financing infrastructure projects to realize Mozambique's growth potential.

tural weaknesses identified in an ex post assessment (EPA).⁴² The request for the program targeted fiscal consolidation in the face of an expected decline in aid inflows after the aid surge and high inflation (2000–03) that followed the floods of 2000. Fiscal consolidation limited recourse to monetary financing and helped reduce inflation to single-digit levels, relieving pressure on domestic interest rates. Mozambique’s improved performance with respect to its structural program since March 2005 has also helped the authorities complete outstanding first-generation reforms identified in the EPA—in particular, strengthening revenue mobilization by creating a central revenue authority (the ATM), improving expenditure efficiency through the rollout of a government financial management information system (e-SISTAFE), and addressing vulnerabilities in the financial system.

While reiterating a commitment to improving the quality of and access to public services, the government’s PARPA II (2006–09) recognizes that to sustain growth more emphasis must be placed on productivity growth and the role of the private sector. The strategy aims to achieve this by

- consolidating macroeconomic stability and maintaining competitiveness through prudent monetary and fiscal policies in the context of a flexible exchange rate regime;
- improving the investment climate and promoting employment generation by reducing the cost of doing business; and
- enhancing governance and the management of natural resources.

These near- and medium-term challenges are addressed in a three-year IMF Policy Support Instrument (PSI) designed to consolidate macroeconomic stability and sustain rapid economic growth. Given its economic stability, comfortable level of international reserves, policy performance, and lack of need for balance of payments support, Mozambique graduated to a PSI when its PRGF arrangement expired in July 2007. The government favored such an arrangement to monitor its ambitious reform program and send a signal of its commitment to donors. This approach was closely coordinated with the World Bank’s new Country Partnership Strategy (2007–11) and the joint Performance Assessment Framework (PAF) of the government and donor community.

Refinements to the design of the PRGF program during its later stages allowed for a smooth transition to a PSI. The streamlining of quantitative performance criteria and adjusters at the completion of the fourth review under the PRGF program helped focus the quantitative program,

⁴²IMF (2004).

particularly in accommodating both the spending and the absorption of foreign aid as needed.⁴³ The replacement of the domestic primary deficit by an asymmetric ceiling on net credit to the government with regard to external financing and the removal of the indicative target on the wage bill were particularly useful in reinforcing the management of foreign aid once it became clear that the decline in aid in 2004–05 would be reversed. Further streamlining of structural conditionality and strengthening of the interministerial committee monitoring the program helped build ownership and allowed reform priorities to be updated regularly. Given the likelihood of a further scaling up of foreign aid and Mozambique's strong performance under the PRGF program, it was decided that reform would continue under the PSI.

Close collaboration between the partners and targeted capacity building will need to continue to facilitate the realization of the reform agenda (Chapter 7). The IMF and the World Bank have worked together closely on, among other projects, the Poverty Reduction Support Credit and PRGF program content, the Cahora Bassa hydropower project, and reform of the fiscal code governing mineral resources. The practice of holding joint IMF-Bank missions has had synergistic benefits and reduced the government's burden in preparing for multiple missions. The authorities have welcomed the close coordination between the Bank, the IMF, and the donor community in Maputo. Continuous IMF technical assistance, provided in close coordination with donors (for example, in tax reform), has helped build Mozambique's administrative capacity as it takes the reform process forward. More recently, PFM reforms, on which performance lagged in the past, are progressing well. These reforms were initiated with substantial technical assistance from the IMF; the IMF has since shifted to an advisory role, and the medium-term PFM reform plan is being financed by a multidonor common fund. Mozambique's experience highlights that, by catalyzing progress early on, intensive and well-coordinated technical assistance can help build ownership and sustain the reform momentum.

Conclusions and Lessons for Sub-Saharan Africa

Mozambique's growth takeoff since the end of the civil war has been similar to that of several fast-growing Asian economies, particularly the

⁴³Aid absorption is defined as the extent to which a country's non-aid current account deficit (in foreign currency terms) widens in response to an increase in aid inflows.

ASEAN-4 countries and China, India, and Vietnam. Its commitment to the stabilization effort, success in implementing first-generation structural reforms, and substantial donor assistance helped make this growth possible. The support of the international community, including the IMF, also helped Mozambique sustain its reform momentum and expand such basic services as primary education and health care. Political stability and the consolidation of democracy in three general and presidential elections, which yielded a fairly unified government with a firm commitment to stability and growth, have helped underpin growth.

Now that the post-stabilization rebound has largely run its course and first-generation reforms have been completed, however, more must be done to sustain Mozambique's growth takeoff and further ease poverty. Mozambique has relatively sound political institutions, a favorable geography, and low income inequality—conditions common to many countries that have sustained growth. What, then, may be the major constraints to sustaining Mozambique's takeoff in the years to come?

According to our benchmarking exercise, at the institutional level the country must make more progress in enhancing voice and participation at all levels, given the relatively high degree of societal fractionalization and regional disparities, so that more areas and groups benefit from growth.⁴⁴ Mozambique's economic institutions—particularly in terms of regulatory quality and the rule of law—though improving, are also relatively weak. For the latter, as our benchmarking exercise shows, it is possible to sustain growth while building institutions over the longer term, especially if efforts are made to invest in human capital and further integrate Mozambique into the global economy (Acemoglu, Johnson, and Robinson 2005a; IMF, 2005).

At the macroeconomic level, the consolidation of overall stability and a second wave of reforms would likely help Mozambique accumulate more capital and enhance its productivity growth. Inflation should be firmly anchored to single-digit levels, and real exchange rate overvaluations should be avoided. In this regard, it will be important for Mozambique to pursue a prudent macroeconomic policy mix and fine-tune its monetary policy framework.

In terms of reducing poverty, including achieving the non-income-related MDGs covering primary school completion, gender equality, and HIV/AIDS, Mozambique would need to efficiently absorb and spend addi-

⁴⁴Measures of societal fractionalization are an indicator of the potential for conflict; thus, the potential for intense and disruptive conflict should not be discounted, particularly from a regional perspective (see Alesina and others, 2003; Easterly and Levine, 1997).

tional foreign aid to expand basic services.⁴⁵ This challenge would need to be carefully managed to ensure long-term fiscal sustainability, avoid a loss of competitiveness, and ease microeconomic absorptive-capacity constraints.

To promote export diversification and generate employment, Mozambique must address its relatively high costs of doing business. In particular, manufacturing exports, an engine of growth, should be promoted by deepening the financial system, further liberalizing trade and removing regulatory obstacles, and addressing human capital and infrastructure gaps.

Finally, the efficient and transparent management of natural resources is vital to ensure a virtuous cycle of natural resource use and avoid the resource curse that has plagued much of sub-Saharan Africa.

In addition to identifying the challenges ahead to sustaining Mozambique's growth takeoff, which is likely to be relevant to many sub-Saharan African countries that are in the midst of a growth acceleration,⁴⁶ we draw lessons from the experience of Mozambique for the rest of sub-Saharan Africa and the international community, including the IMF.

- Macroeconomic stability is an important prerequisite for a growth takeoff. Implementing a money-based stabilization program supported by prudent fiscal policies and first-generation structural reforms in the context of a flexible exchange rate regime can help countries sustain a broad-based growth takeoff. Reform sequencing should, in particular, pay attention to revenue-mobilization efforts and exchange system reforms, and address vulnerabilities in the financial system early on. The steadfast implementation of reform priorities tailored to particular country circumstances can be facilitated by political stability and a government commitment to focus on improving the lives of its citizens.
- A prudent external borrowing strategy combined with productive, well-governed megaproject investments can help countries consolidate long-term fiscal sustainability and gradually reduce dependence on donors. Trade and gradual capital account liberalization to attract large-scale FDI can contribute greatly to growth and spur further private investment. Consideration must be given, however, to maximizing fiscal returns and economic linkages, particularly if the

⁴⁵Achieving the MDGs by improving education, health, and well-being will also help sustain the growth takeoff (Acemoglu and Johnson, 2006; Johnson, Ostry, and Subramanian, 2007).

⁴⁶See Bio-Tchané and Christensen (2006) for background on sub-Saharan African countries that have experienced recent growth acceleration.

megaprojects are concentrated in natural resources or other capital-intensive sectors, which tend to have limited spillovers to the rest of the economy. The fiscal regime for mining and petroleum resources, if it is to be comprehensive, must be embodied in a country's general tax laws and supplemented by model contracts to avoid fiscal terms being negotiated on a case-by-case basis. For a country to realize its growth potential while minimizing risk, the transparency regime governing resource use and megaprojects, including public-private partnerships on infrastructure projects, should follow international best practices. Adherence to EITI principles could help ensure a virtuous cycle of natural resource exploitation.

- If scaled-up foreign aid is absorbed efficiently and deployed in productive ways, great strides in human development and poverty reduction can be made in a short time. Such quick gains create an environment conducive to sustaining growth and reform momentum. To ensure that foreign aid supports development, it seems especially important to focus on coordinating monetary policy operations with fiscal policy and to improve the efficiency and equity of spending.
- The IMF can be particularly instrumental in helping a country consolidate macroeconomic stability and complete far-reaching structural reforms that are critical to sustaining rapid, broad-based growth and poverty reduction. This requires responding rapidly to take advantage of windows of opportunity by providing balance of payments financing, technical assistance, and policy advice based on sound analysis and the lessons learned from success stories in other countries facing similar circumstances and challenges. Programs should also be designed to be flexible and responsive to the situation in each country, in particular to ensure that foreign aid is absorbed and deployed in ways that do not undermine macroeconomic stability.
- Close collaboration among development partners and the authorities, and targeted capacity building can foster authorities' sense of ownership and advance the reform agenda. Cross-fertilization of ideas, timely exchange of information, sequencing of missions, complementary technical assistance, and close coordination between bilateral and multilateral agencies are key to providing a common view to the authorities on the lessons for, and challenges facing, their country. Close coordination between the IMF and the World Bank, and with the donor community and the authorities (for example, through joint reviews and technical assistance, a common policy assessment framework matrix among donors, and alignment of missions to the country budget cycle) can build efficiency and foster country ownership.

Appendix. Megaprojects in Mozambique⁴⁷

Oil and Gas Sector

Pande-Temane

The first contract for the exploitation of gas in Mozambique (Pande-Temane) was signed in October 2000 to develop rich gas fields near Vilanulos in Inhambane Province and to export gas to South Africa via a 900-kilometer pipeline and a central processing facility (CPF) in Temane. The gas exploration contract was granted to a joint venture between South Africa's gas giant, Sasol (70 percent); a Mozambican state-owned enterprise, CMH (Mozambican Hydrocarbons Company) (25 percent); and the International Finance Corporation (5 percent).⁴⁸ The pipeline agreement is a joint venture between Sasol (50 percent), CMH (25 percent), and IGAZ, a South African company (25 percent).

Production in 2006 amounted to 102 million gigajoules (gJs), or approximately 85 percent of total capacity. It comprised 2.4 billion cubic meters of gas (15 percent more than in 2005) and 696,000 barrels of condensed gas (31 percent more than in 2005). In value terms, US\$65.6 million worth of gas and US\$26.2 million worth of condensed gas were sold in 2006, implying a 25 percent rise in turnover since 2005. Although all the condensed gas is exported, approximately 4 percent of the gas produced stayed in Mozambique. (See Table A1.1.)

Pande-Temane was signed as a petroleum production agreement (PPA) under the old fiscal code, which stipulates 5 percent royalty payments on production and a tax of 17.5 percent (rising to 35 percent six years after commercial production commences) on total revenues.⁴⁹ Part of this royalty is, however, paid in kind. Total royalties paid to the authorities in 2006 comprised 1.3 million gJs of gas paid in kind, and another US\$2.4 million paid in cash. The contractor is exempt from paying any withholding tax on dividends or interest payments under the PPA. Simulations done by Daniel and others (2007) suggest that the end of the cost-recovery phase and a ramping up of production from existing fields will dramatically

⁴⁷Information in this section is based on discussions with the authorities and background work undertaken by Julien Hartley and Magnus Saxegaard.

⁴⁸The International Finance Corporation, the private sector arm of the World Bank Group, may decide to sell its stake in the joint venture company to CMH (80 percent) and a private Mozambican company (20 percent).

⁴⁹As with current petroleum contracts, tax concessions are made on expenditures relating to exploration, operating expenditures, and capital expenditures.

Table A1.1. Pande-Tehmane and Sasol Projects, 2004–06

	2004	2005	2006
Gas			
Production (<i>million gjs</i>)	52.6	88.9	102.1
Exports (<i>million gjs</i>)	49.6	86.0	98.0
Royalties in kind (<i>million gjs</i>)	0.09	0.14	0.14
Royalties paid (<i>million US\$</i>)	1.5	2.3	2.4
Sales (<i>million US\$</i>)	30.4	57.2	65.6
Condensate			
Production (<i>thousand barrels</i>)	294.5	531.1	696.0
Sales (<i>thousand barrels</i>)	211.5	532.8	539.5
Exports (<i>million US\$</i>)	5.7	16.3	26.2
Royalties (<i>million US\$</i>)	0.3	0.8	1.3

Source: National Petroleum Institute of Mozambique.

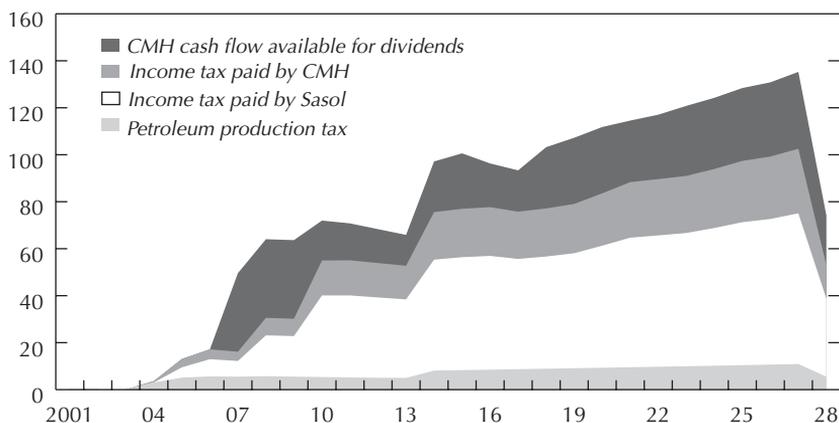
raise the contribution of Pande-Temane to the budget, to approximately US\$130 million (including taxes and dividends) by 2027, the most conservative estimated date for resource exhaustion, and excluding expansion and finds from prospective fields (see Figure A1.1).

In 2005, Sasol and ENH (National Hydrocarbons Company of Mozambique) signed a production-sharing agreement (PSA) to develop two new fields in the Temane area (Inhassorio and G East).⁵⁰ The project, which is expected to expand capacity from 120 million gJs to 183 million gJs, also includes the expansion of the existing pipeline to South Africa and the CPF. The fiscal terms of the Pande-Temane PSA differ somewhat from those of the PPA. In particular, the contractor is subject to withholding tax on interest payments to nonresidents (20 percent), while the rate of corporate income tax is fixed at 35 percent throughout. The two new gas fields are currently in the development stage, whereas INP (National Petroleum Institute of Mozambique) is awaiting the development plan for the pipeline.⁵¹

⁵⁰PPAs are signed if there are proven gas resources, as was the case initially in Pande-Temane, whereas PSAs are signed if exploration is necessary. In both cases, Sasol produces on behalf of CMH, which owns the concession by virtue of its being a public company. (CMH is a subsidiary of ENH.) Since 2001, the trend has been toward signing exploration and production concession contracts whereby the producer is granted a concession and pays royalties to the government.

⁵¹The development stage comes after the exploration stage, in which drilling and seismic surveys are conducted to find gas reservoirs and determine their commercial viability. After the development stage, a field enters the production stage. Given that there is no concession fee, Mozambique's government receives no revenue until the production stage.

Figure A1.1. Projected Government Revenue from Pande-Temane Project
(In millions of U.S. dollars)



Source: IMF staff estimates based on World Economic Outlook database oil prices until 2012 and constant real terms thereafter.

Note: CMH denotes the Mozambican Hydrocarbons Company, a state-owned enterprise and a subsidiary of ENH (National Hydrocarbons Company of Mozambique).

Zambezi offshore

An EPCC was signed in June 2002 with Petronas (Malaysia) to explore for oil in the Zambezi basin. The project is currently in the exploration phase; three possible sites are being explored. Drilling started in June 2007 at one of the sites (at a cost of US\$47 million), while seismic surveys are being conducted at the other two sites before a decision is made as to whether to start drilling there as well. Note that current legislation allows companies eight years to explore a site before deciding whether or not to develop it.

Inhaminga onshore

An EPCC was signed in June 2003 with DNO (Norway). Thus far, two dry wells have been drilled. A third well is scheduled to be drilled this year.

Zambezi onshore

An EPCC was signed with Zambezi Onshore (a subsidiary of BANG) in November 2006 to explore for oil. The company, which is confident that the area possesses oil reserves, has committed to drill one well in 2007.

Rovuma basin

A total of six EPCCs have been negotiated for the exploration of offshore and onshore oil in the Rovuma basin, in northern Mozambique (see Figure A1.2), by the following companies:

- Norsk Hydro (Norway) and ENH—January 2006;
- Anadarko (United States)—December 2006;
- Ente Nazionale Idrocarburi (ENI) (Italy)—December 2006;
- Artumas (Canada)—contract has been signed; and
- Petronas (Malaysia)—under negotiation.

Except for the concession awarded to Norsk Hydro, which was negotiated directly, all other concessions were awarded after a competitive bidding round. All these concessions are covered by the old fiscal code. The government has committed not to sign any new agreements before the new fiscal regime is in place. It is expected that bidding will start on a new set of concessions in 2008.

Petroline

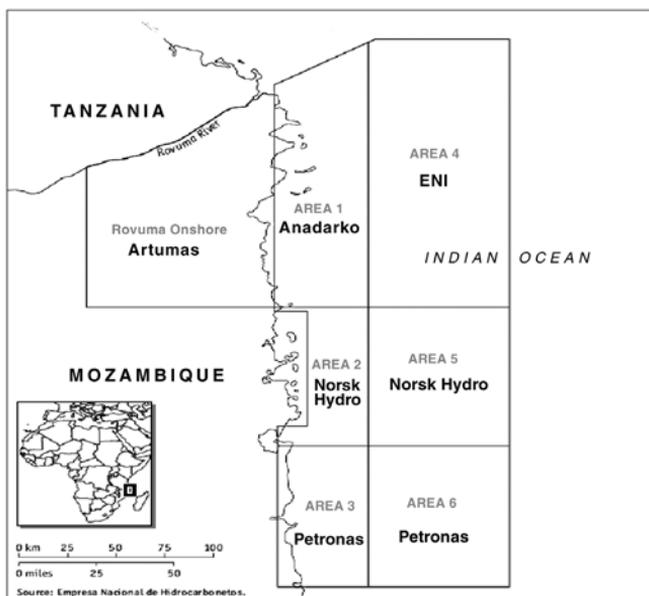
Petroline is a joint venture between Petromac (a state-owned petroleum distributor in Mozambique) and Gigajoule International (South Africa) that was established to set up a pipeline for the reexportation of petroleum products from Maputo to Nelspruit in South Africa. The petroleum will be delivered to Matola harbor by oil tankers; it will then be pumped into the proposed pipeline and on to South Africa.

Based on the development plan submitted by Petroline at the end of 2006, demand for the pipeline will be between 700 million and 1.4 billion liters of petroleum product over the next eight years. Demand is then expected to rise by 3.5–4 percent a year. The direct capital investment required for the project is estimated at US\$180 million.

The company has been granted a license to operate in Mozambique and is currently awaiting a license to sell fuel in South Africa.

Hydropower

Hidroeléctrica de Cahora Bassa (HCB) is the concession company for the Cahora Bassa dam and the 2,075 MW hydroelectric power plant in Tete Province of Mozambique and the electric current transmission line from Cahora Bassa to the border with South Africa and certain other lines in Mozambique. Construction of the dam started in 1969; its commercial operation started in 1977. The company was established in 1975 as a joint

Figure A1.2. Oil and Gas Exploration in the Rovuma Basin

venture between the government of Mozambique, with a share of 18 percent, and the government of Portugal, with a share of 82 percent.

As part of the restructuring agreement signed in October 2006, the ownership of HCB changed, with Mozambique holding 85 percent and Portugal holding 15 percent. In return, the government of Portugal received payments, with all figures in U.S. dollars, of \$950 million, \$250 million of which was paid in November 2006 by HCB, as repayment of debt.⁵² The balance of \$700 million was paid in 2007.

As part of the restructuring agreement, HCB has been awarded a new 25-year concession to operate the existing facilities. The agreement entitles the company to the revenues generated. In return, Mozambique will receive 10 percent of HCB's gross revenues and will impose normal company taxes. This contrasts with the 1975 concession agreement under which the government of Mozambique made the dam and the power station available to HCB free of charge and levied no taxes in an attempt to expedite amortization of

⁵²HCB's initial debt to the government of Portugal was US\$500 million. Under the 1975 concession, all free cash flow was used to repay this debt. Under the new restructuring plan, the remaining debt will be converted to equity.

the debt to the government of Portugal.⁵³ The new concession also includes the right to develop the north bank of the Lake Cahora Bassa, where plans are under way to develop a second power station with a capacity of 850 MW. Plans are also under way to construct a second dam at Mphanda Nkuwa, 70 kilometers downstream from Cahora Bassa, with a capacity of 1,300 MW. Increased capacity to generate electricity is a requirement for several other industrial projects being considered in Mozambique, such as the phase 3 expansion of Mozal, an aluminum smelter (see below), and the proposed titanium and zirconium mine at Chibuto.

HCB sells its electricity under two long-term PSAs and one short-term PPA. The PSA with Eskom (the national electricity utility of South Africa) provides for the supply of up to 1,450 MW under a tariff formula that was renegotiated in 2004 and is designed to reflect a gradually increasing percentage (reaching 100 percent in 2007 from 50 percent in 2003) of Eskom's full avoided cost for the generation and transmission of the electricity. Increasing demand for power in South Africa and the region is expected to raise tariffs (and thus Eskom's avoided cost) at a rate greater than inflation over the next 10–15 years.⁵⁴

The electricity sold to Eskom includes 300 MW allocated to EDM (Eledricidade de Moçambique) under the second PSA. The EDM tariff was set at 55 percent of the Eskom tariff in 2005 and 2006 and will rise to 70 percent in 2007. In addition, HCB provides 150 MW of electricity to ZESA (the national electricity utility of Zimbabwe) under a contract underwritten by Eskom. The terms of this contract are confidential. In the event of excess capacity, HCB has the opportunity to sell its excess power to the Southern Africa Power Pool. Newspaper reports also suggest that negotiations may be under way to sell electricity to Malawi.

Over the past five years, HCB's revenues have more than doubled, while earnings before interest and taxes (EBIT) have increased threefold. Owing to high interest payments and the effect of exchange rate fluctuations on the company's foreign currency debt to the government of Portugal, the company's after-tax profits have been negative every fiscal year since 2001, except for fiscal year 2004 (when exchange rate appreciation contributed to an increase in profits).⁵⁵ After the rescheduling, total sales are projected

⁵³In fact, the debt was not serviced, owing in part to civil disturbances in Mozambique, and it has now grown beyond the cash-flow capabilities of HCB. This provides part of the rationale for the decision to restructure HCB.

⁵⁴Eskom's avoided cost estimates are not very transparent, however, giving it an advantage in overall negotiations.

⁵⁵Mozambique's fiscal year runs from January 1 to December 31.

Table A1.2. HCB Projections*(In millions of U.S. dollars)*

	2006	2007	2008	2009	2010
Total sales	202.6	247.0	254.0	268.7	282.7
Operating costs	79.0	92.5	95.6	99.7	103.9
<i>Of which, salaries</i>	28.3	30.0	31.8	33.7	35.7
<i>Of which, amortization</i>	29.1	27.9	27.9	27.9	27.9
Operating result	123.6	154.5	158.3	169.0	178.8

Source: HCB.

to average US\$251 million annually for 2006–10 while operating results (after tax) are projected to average US\$156 million annually over the same period. (See Table A1.2.) Concession fees and taxes are expected to rise to nearly US\$12 million by 2010.

Minerals and Mining

*Mozal*⁵⁶

Mozal's production of aluminum has grown steadily over the past three years, from 532 thousand tons in 2004 to 557 thousand tons in 2006. This is close to the current capacity of the Mozal smelter, whose capacity doubled in 2003 as part of the Mozal II expansion. Reports from various sources suggest that BHP Billiton is considering expanding the capacity of the Mozal smelter by another 250 thousand tons (Mozal III expansion). This expansion, which, it has been speculated, may come online in 2009, will make the Mozal smelter one of the biggest in the world. A feasibility study for the expansion has already been completed, according to BHP Billiton, and the key aspect of the project agreement is the agreement of a power contract.

Although production has remained relatively steady, profits have increased dramatically in line with the rise in world aluminum prices. BHP Billiton's profits derived from Mozal increased by 42 percent (from US\$130 million to US\$185 million) between Mozambique's fiscal years 2005 and 2006. Indications from the first half of fiscal year 2007 (up 105 percent relative to the first half of fiscal year 2006) suggest that profits will be substantially higher next year.

⁵⁶The information in this section is based mainly on reports from the BHP Billiton Group, which has a 47 percent stake in Mozal.

Moma

Kenmare Resources announced in April 2007 that mining operations had commenced at the Moma Titanium Minerals Mine, which is estimated to contain one of the largest deposits of titanium-bearing mineral sands in the world (accounting for approximately 8 percent of global titanium feedstock). In addition, recent drilling has increased the mineral resources within the concession by more than 60 percent, which should enable Kenmare to significantly increase production while maintaining a long-life mine. (Financing for this project is based on a 20-year life for the mine.)

Production is estimated to reach 389 thousand tons in 2007, although Kenmare expects to reach 800 thousand tons per year once it starts operating at full capacity. Expansions are already being planned that would raise annual production to 1.2 million tons per year by the end of 2009. Market agreements covering more than 60 percent of the first five years of revenue have been concluded. Kenmare expects that the world market for titanium, driven by strong demand and tight supply, will continue to perform well.

Kenmare also has an active uranium exploration program in northern Mozambique in Tete and Niassa Provinces. Initial results have been promising, with some deposits of uranium identified. Further exploration work is under way.

Moma benefits from substantial fiscal benefits by virtue of its status as an industrial free zone (IFZ). Projects with IFZ status can be exempted from VAT, excise duties, customs duties on capital goods, and real property transfer tax, and can benefit from a reduced corporate income tax rate (12.8 percent).

*Moatize coal mine*⁵⁷

The Moatize coal mine project is located in western Tete Province and is being developed by the Brazilian mining firm Companhia do Vale do Rio Doce (CVRD), the world's largest iron ore miner. In November 2004, CVRD won the bid, for US\$123 million, for the rights to explore and develop the deposit; to undertake feasibility studies to develop a 1,500 MW coal-fired power plant, port facilities, and a rail link to the port; and to assess other domestic industrial projects linked to the mine. The feasibility study, which was submitted to the government in November 2006, indicates that by 2010 the project will mine about 26 million tons of coal a year, of which about 11 million tons will be marketed for export and 4 million tons will be made available to the planned domestic power

⁵⁷See Chapter 8.

plant. The area around Moatize is considered by some to be the largest unexplored coal province in the world, with reserves estimated at 2.4 billion tons, allowing the extraction of metallurgical and thermal coals. Total investment is estimated at US\$2 billion.

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