

# **Seychelles**

## **Public Sector Debt and Prospects for Successful Economic Reform**

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# Seychelles: Public Sector Debt Reduction Strategy

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## Executive Summary

Seychelles is at a development crossroads. Despite the impressive economic and social achievements it demonstrated during the 1980s, as the 1990s began, it has become increasingly clear that the state-led development strategy that once seemed to serve the nation well had reached its limits. The economy has been experiencing a series of downturn since the beginning of the early 1990s, manifested by years of poor economic management and rigid structure. While real GDP contracted cumulative 9 percent for the past four years, the significantly overvalued rupee has led to a loss of export competitiveness, leading to persistent balance of payments difficulties. At end-2004, the official reserves stood at US\$35 million, about 3.5 weeks of imports.

Seychelles' public sector debt has grown rapidly over the last two decades reflecting persistent fiscal deficits attributed to parastatal organizations' heavy reliance on public finances as well as aggressive public investment. At end-2004, total debt stock held by Seychelles' public sector stood at about SR7,700 million, equivalent to 205 percent of GDP, putting a significant debt service burden on the budget. Faced with acute shortages of foreign exchange, the Government has unable to honor all external obligations since 2000, leading to a build-up of external arrears. At-end 2004, arrears amounted to US\$159 million, equivalent to 23 percent of GDP, or more than three times Seychelles' official reserves.

Seychelles is faced with formidable challenges in the years ahead. Without a significant change in policy direction, Seychelles' economic prospects are bleak. The latest IMF projections indicate import compression necessitated by foreign exchange shortages would cause real GDP to decline by another 2 percent in 2005. Even with a substantial fiscal correction, the overall balance of payments is expected to worsen substantially, owing to the need to import materials for tsunami-related reconstruction. This would put further pressure on the already limited foreign reserves.

With public sector debt over 200 percent of GDP and limited external reserves, there is no painless solution to Seychelles' debt predicament. For Seychelles, the primary tool to reduce the debt burden and turn the economy back to a sustained growth path should the implementation of a comprehensive macroeconomic reform program, with a strong emphasis on fiscal adjustments, privatization, exchange rate adjustments, and a series of structural reforms. A piece-meal approach to reform will do little to address the accumulated macroeconomic imbalances and losses of competitiveness. While Paris Club debt restructuring may be a possibility, such an operation alone will neither bring about a sustained economic recovery nor establish external viability in the long run. Debt restructuring cannot be a substitute for fundamental reform.

The macroeconomic reform program discussed in this paper may appear overwhelming, but is not insurmountable, with considerable political will and leadership. The long-term benefits of such reform are great, but time is short, and implementation is key. Going forward, the Government of Seychelles must engage all stakeholders—civil society, the private sector, foreign investors, and donors—in a dialogue and partnership on the challenges and opportunities of growth and competitiveness. The World Bank stands ready to sail through the formidable challenges with the Government.

# 1. Introduction

Seychelles is at a development crossroads. With public sector debt at over 200 percent of GDP, manifested by years of poor macroeconomic management and rigid economic structure, the economy has been experiencing a serious downturn since the beginning of the 2000s. While real GDP contracted by cumulative 9 percent for the past 4 years, the significantly overvalued rupee has led to a loss of export competitiveness, leading to persistent balance of payments difficulties.

Following independence in 1976, Seychelles adopted a state-led development model, in which the Government plays a dominant role in every segment of the economy through extensive controls and regulations. It intervened directly in manufacturing, distribution, trade and other economic activities through its parastatals, often at the expense of private sector development. Provision of education and health services was predominantly the responsibility of the Government.

Despite the development challenges arising from its small size and external vulnerabilities, Seychelles has achieved sustained growth, becoming a middle income country and accomplishing high level of human development. During 1985-93, the economy grew by an average rate of more than 6 percent a year, while per capita GDP rose by about 5 percent a year on average (Table 1). The fiscal position improved markedly to the surplus of 2 percent of GDP on average during 1987-92, from an average deficit of over 13 percent during 1983-86). The primary surplus during 1987-92 exceeded 10 percent of GDP, compared with the deficit of more than 10 percent during the preceding 4 years (Box 1).

**Table 1. Seychelles: Selected Economic Indicators**

	1985-1993	1994-2004
Average real GDP growth rate (in percent p.a.) 1/	6.2	1.8 (-0.03)
Average real per capita GDP growth rate (in percent p.a.) 1/	5.1	0.3 (-1.4)
Fiscal balance, including grants (in percent of GDP)	-3.4	-7.9
BoP balance (in percent of GDP) 2/	0.7	12.4
External arrears (in percent of GDP)	1.7	9.3

Sources: IMF IFS and World Bank WDI.

Notes:

1/ Figures in parenthesis exclude data for 1996 and 1997.

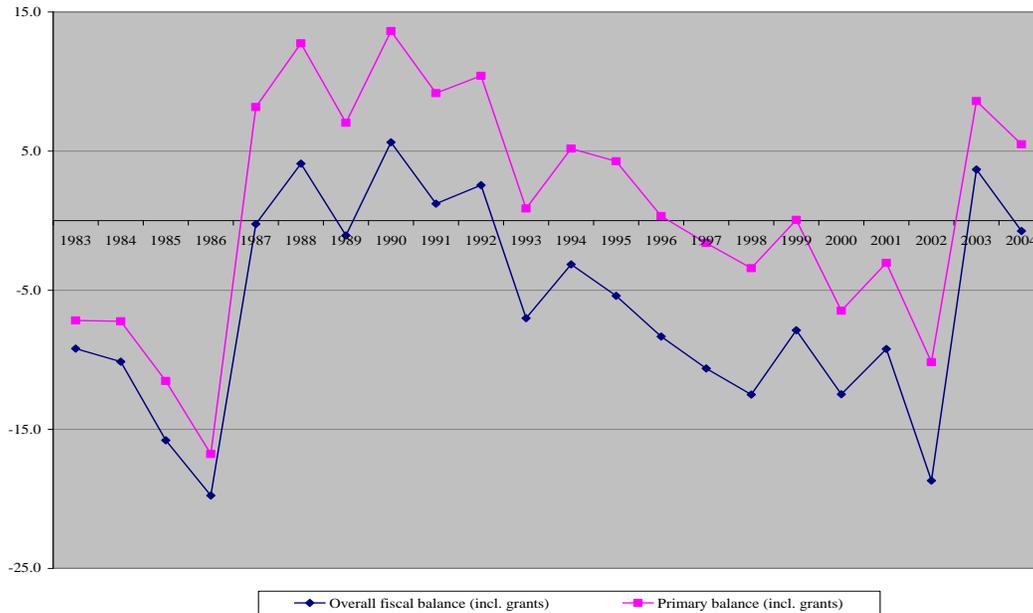
2/ The average of BoP balance for 1994-02.

Yet as the 1990s began, it has become increasingly clear that the state-led development strategy that once seemed to serve the nation well had reached its limits. Faced with slowing growth and sluggish tourism income, the Government in the mid-1990s changed its course and took some steps in the right direction by adopting more market friendly policies. One of the most notable policies was privatization of hotels, part of the tourism industry and the tuna canning factory. However, government controls on the economy remained widespread, its interventions into manufacturing and distribution persisted, and it continued to pursue large public investment programs. Meanwhile, a generous welfare system, while resulting in excellent social indicators, encouraged dependency and made labor expensive in Seychelles.

The policy shift in the mid-1990s, together with the large public investment, subsequently boosted economic growth. However, the effect was short-lived. As a result of continued fiscal expansion to accommodate high capital outlays and net transfers to parastatals, coincided with falling revenue collection, fiscal deficits, which lie at the heart of the current economic problems, rose significantly during the 1990s (Figure 1), financed by domestic and external commercial

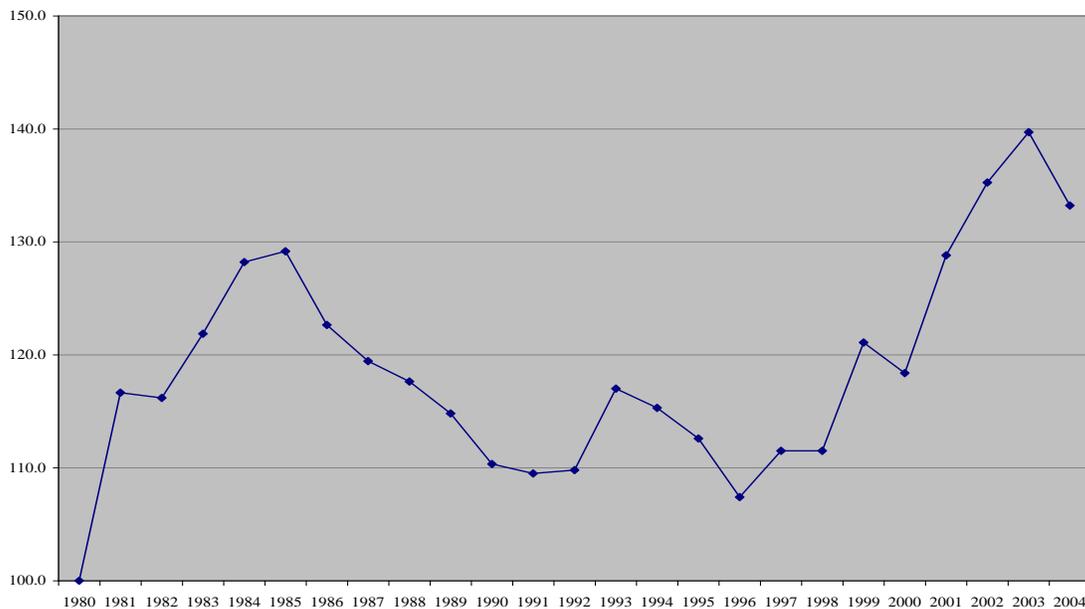
borrowing. The large fiscal deficits and deteriorating external competitiveness as reflected in the appreciation of the rupee in real effective terms (Figure 2) have put Seychelles external position under significant strain. By late 1990s, the official reserves have fallen sharply, and the country has accumulated sizable arrears on its external debt.

**Figure 1. Seychelles: Consolidated Government Fiscal Outturn**  
(in percent of GDP)



Source: World Bank staff estimates.

**Figure 2. Seychelles: Real Effective Exchange Rate (1980 = 100)**



Source: IMF IFS database.

In an attempt to address the acute shortages of foreign exchange, in 1998 the Government introduced a series of restrictions that aimed at limiting imports and curbing the growth of the parallel market in foreign exchange. Import permits were introduced, imports of second-hand vehicles were banned, import quotas were continued, and tourists were required to settle bills in foreign exchange. However, these measures proved merely ineffective in stemming the foreign exchange crisis. The official reserves fell to the historic lows. The economy contracted during 2000-02, and the fiscal deficit rose to over 18 percent of GDP in 2002, due primarily to the Government's failure to control unbudgeted capital outlays.

In mid-2003 the Government launched a Macroeconomic Reform Program (MERP). The determined implementation of budgetary and monetary measures initially showed some improvement. Fiscal policy was tightened dramatically in the second half of 2003, through the introduction of a broad-based general sales tax at 12 percent, a drastic reduction in capital outlays, and across the board cuts in spending on goods and services. As a result, the fiscal outturn for 2003 registered a surplus of 3.7 percent of GDP, in stark contrast to the deficit of above 18 percent in 2002.

While the general thrust of the MERP was generally positive, the piece-meal implementation of the reform program did little to address the accumulated macroeconomic imbalances. GDP plunged sharply by more than 6 percent in 2003 and further by 2 percent in 2004. Per capita GDP followed suit, by declining by over 10 percent in cumulative terms during 2002-04. The drastic fiscal tightening in 2003 proved unsustainable; the fiscal balance slipped back to a deficit in 2004.

Seychelles is faced with formidable challenges in the years ahead. With public sector debt at some 200 percent of GDP, manifested by decades of poor policy management, there is no painless solution to Seychelles' debt predicament. For Seychelles the primary tool to reduce the debt burden, and turn the economy back to a sustained growth path is the implementation of a comprehensive macroeconomic reform program, with a strong emphasis on fiscal adjustments, privatization, exchange rate realignments and structural reforms. Without a significant change in policy direction, Seychelles' medium-term prospects are bleak. Continuation of the present policies will neither mitigate the acute foreign exchange shortages nor further build-up of debt, which will be even more damaging in the future.

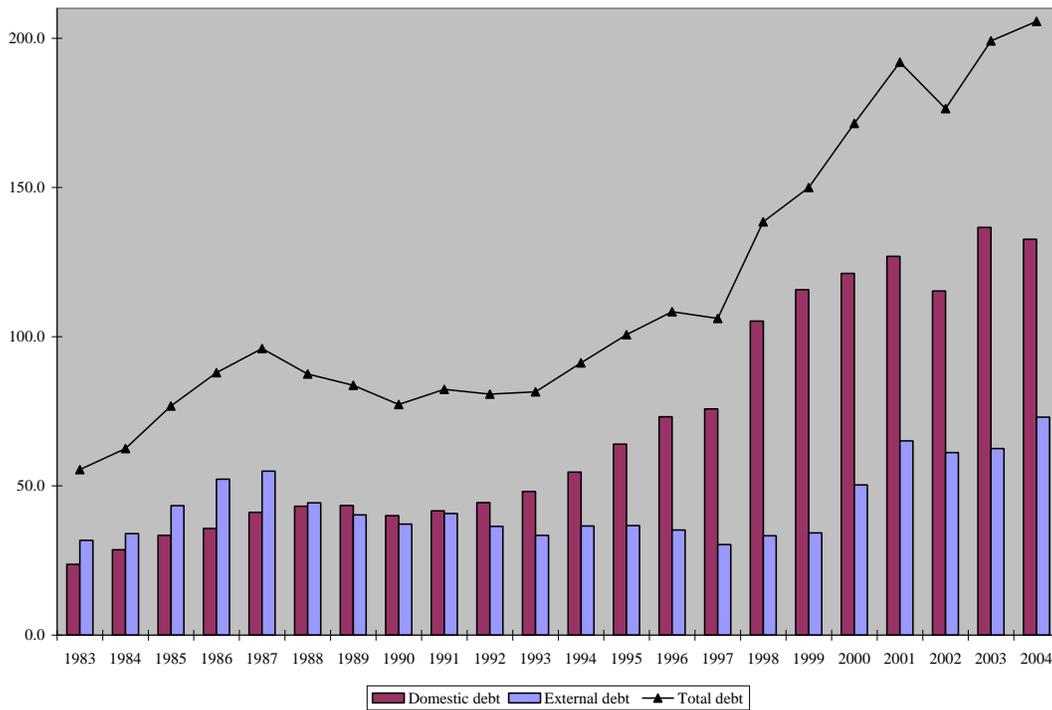
This paper is structured as follows. Section 2 presents the basic facts about Seychelles public sector debt and analyzes its burden and sustainability. Section 3 then discusses the medium-term economic outlook, assuming that no significant economic adjustments are made. Section 4 then seeks ways to reduce Seychelles public sector debt to a more sustainable level, and discusses a comprehensive macroeconomic reform package that is needed to achieve this goal. Section 5 concludes the paper.

## **2. Seychelles Public Sector Debt**

At end-2004, total debt stock, including arrears held by Seychelles' public sector—comprising the central government, the central bank and parastatals—stood at about SR7,700 million, equivalent to 205 percent of GDP. Of this amount, domestic debt accounted for about 65 percent (Table 2).

As a result of years of fiscal mismanagement, Seychelles' public sector debt has grown rapidly over the last two decades, from 55 percent of GDP in 1993 to over 200 percent in 2004 (Figure 3). While the total debt stock fell during 1987-93, reflecting the Government's adjustment efforts that yielded impressively high primary surpluses (see Box 1), the debt stock began to increase again in the mid-1990s, reflecting a significant fiscal loosening (Figure 1). Accumulation of debt became particularly pronounced in the last few years, with the debt to GDP ratio averaging 176 percent during 1998-2004, compared with 101 percent for 1994-97. The large part of this increase came from the accumulation of domestic debt, except for 2000-04 when the Government resorted to external commercial borrowing to meet their financing needs.

**Figure 3. Seychelles Public Sector Debt (in percent of GDP)**



Sources: World Bank and IMF staff estimates.

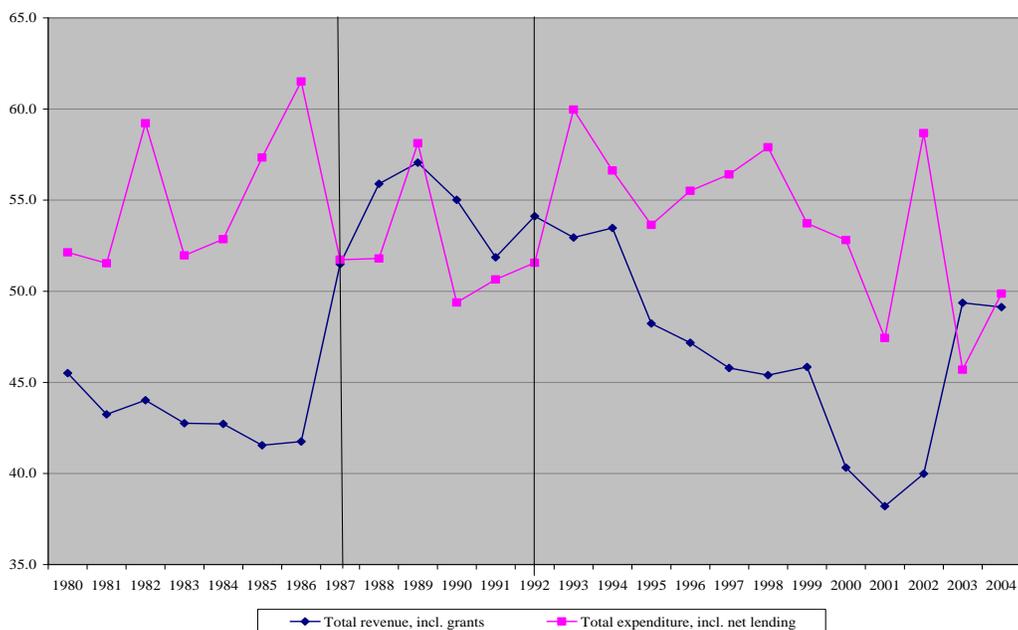
### Box 1. Fiscal Adjustments during 1987-92

Concerned about the heavy fiscal deficits that had placed serious strains on the balance of payment position, beginning in 1987 the Government reversed its expansionary fiscal stance to a contractionary one, in the aim of achieving a “target fiscal position consistent with the capacity of the domestic economy and the balance of payments”.

With the realization that the major contributory cause for fiscal deficits had been the continuous drag on public finances by the poor performance of many parastatal organizations, from the 1987 Budget the Government targeted at cuts in subventions and development grants to parastatals, while capital outlays, another source of fiscal drains, were also reduced significantly. At the same time, various revenue measures were implemented, including increases in trade tax rates, imposition of temporary surcharges of 100 percent on trade tax rates on luxury items, introduction of the business tax, and strengthened tax enforcement.

These measures, together with increased grant receipts, produced remarkable fiscal results, except for 1989, when there was a lapse in fiscal moderation, attributed to heavy capital expenditure (Figure B1.1). The average fiscal position during 1987-92 was in surplus of 2 percent of GDP, while the average primary fiscal surplus exceeded 10 percent of GDP for the same period, contributing to a fall in public sector debt stock from 96 percent to 80 percent of GDP.

**Figure B1.1. Seychelles: Revenue and Expenditure (in percent of GDP)**



Source: World Bank and IMF staff estimates.

The impressive fiscal adjustments came to an abrupt halt in 1993, when the first multiparty election took place. Temporary surcharges on trade taxes were abolished, and trade tax rates on essential imported food items were reduced. Meanwhile, subventions and net lending to parastatals were increased, and infrastructure projects were actively taken up, putting significant

pressure on public expenditure. See Figure B1.2., which shows a close relationship between total expenditure and capital expenditure, including net lending to parastatals.<sup>1/</sup>

Coincided with a decline in grant receipts, the fiscal outturn in 1993 registered a deficit of 7 percent of GDP, a sharp fall from the surplus of 2.5 percent in 1992. Ever since, the fiscal position has continued to deteriorate, attributed to resumed large net transfers to parastatals from the budget, large capital expenditure, and most notably, sharply declining revenue collection, explained largely by the drop in trade tax collection, occasioned by the quantitative restrictions on imports.

**Figure B1.2. Seychelles: Total Expenditure and Capital Expenditure, including Net Lending**  
(in percent of GDP)



Source: World Bank and IMF staff estimates.

<sup>1/</sup> A simple regression analysis over total expenditure indicates a correlation coefficient of 0.7 for capital expenditure and 0.9 for net lending. Reliable time series data on subventions to parastatals are not available, and thus are not included in the analysis.

Note that the debt to-GDP ratios discussed above could be misleading in the case of Seychelles, since the external debt component (denominated in foreign currencies) is converted to the rupee value using the overvalued official exchange rate, SR5.5 per US dollar. If the parallel market exchange rate, SR10 per US dollar at the time this paper is written, were used instead, total public sector debt would amount to 265 percent of GDP (Table 2).

**Table 2. Seychelles Total Public Sector Debt (as of end-2004)**

	In millions of SR	In percent of total debt stock
Domestic debt	5,131.5	64.5
External debt (incl. arrears)	2,824.3	35.5
<b>Total debt (incl. arrears)</b>	<b>7,955.7</b>	<b>100.0</b>
<i>Memorandum items (in percent)</i>		
Domestic debt in percent of GDP	132.6	
External debt in percent of GDP 1/	73.0	
Total debt in percent of GDP 1/	205.6	
External debt (converted by parallel market exchange rate) in percent of GDP	132.7	
Total debt (converted by parallel market exchange rate) in percent of GDP	265.3	

Sources: World Bank GDF, IMF and World Bank staff estimates.

Note:

1/ Converted by the official exchange rate (SR5.5/US\$).

## 2.1 Public Sector Domestic Debt

As of end-2004, public sector domestic debt stood at SR513 million, equivalent to 133 percent of GDP. Public sector domestic debt in Seychelles consists of: (i) advances from the Central Bank of Seychelles (CBS); (ii) treasury bills; (iii) treasury bonds; (iv) advances from the Treasury; and (v) government stocks (Table 3). Of these, domestic borrowing through the first three debt instruments composes more than 90 percent of total domestic debt.

About two thirds of CBS advances to the Government are pure short-term central bank advances carrying a flat interest rate of 5 percent, and the remainder represents on-lending to the Government of collateralized external loans contracted by the CBS (“back-to-back facility”) together with the outstanding balance of treasury bonds, totaling to SR1,459 million, were securitized into a 20-year treasury bond (“restructuring bond”) bearing an interest rate of 0.67 percent above the prevailing 365-day treasury bill.<sup>2</sup>

Treasury bills (short-term instruments) and bonds (medium-term instruments) carry administratively-set interest rates to keep borrowing costs very low for the Government. Besides the restructuring bond issued to the CBS, a treasury bond has also been issued to the Social Security Funds (SSF) on a private placement basis.<sup>3</sup> This bond (SR200 million), which is

<sup>2</sup> As of April 2005, the interest rate on the restructuring bond (including the 0.67-percent spread) was 4.5 percent.

<sup>3</sup> While unknown, the bond issue to the SSF coincides with the period when the operations of the SSF were consolidated to those of the Central Government, to comply with the GFS convention.

maturing in 2046, was issued in 1986 and carry an interest rate of 2.5 percent. The main subscribers of treasury bonds in public placement are commercial banks, holding more than half of total stock, while the remaining portion is held by parastatals and general public.

**Table 3. Seychelles: Public Sector Domestic Debt**

	As of end-2004		As of end-March 2005	
	In millions of SR	% of total domestic debt stock	In millions of SR	% of total domestic debt stock
<b>Domestic debt stock by type of instruments</b>				
CBS advances	1,287.6	25.1	129.1	2.5
Treasury bills	1,577.9	30.7	1,431.5	27.5
Treasury bonds	1,958.1	38.2	3,348.9	64.4
Government stocks	150.0	2.9	150.0	2.9
Advances from Treasury	157.9	3.1	139.5	2.7
<b>Domestic debt stock by creditors</b>				
CBS	1,287.7	25.5		
Commercial banks	2,753.3	54.6		
Others	1,005.9	19.9		
<b>Total public sector domestic debt stock</b>	<b>5,131.5</b>	100.0	<b>5,198.95</b>	100.0

Source: World Bank and IMF staff estimates.

Government stocks are long-term instruments that are generally issued for the financing of capital expenditure. Over the last two years, no new government stocks have been issued. Commercial banks are the main subscriber to this instrument.<sup>4</sup>

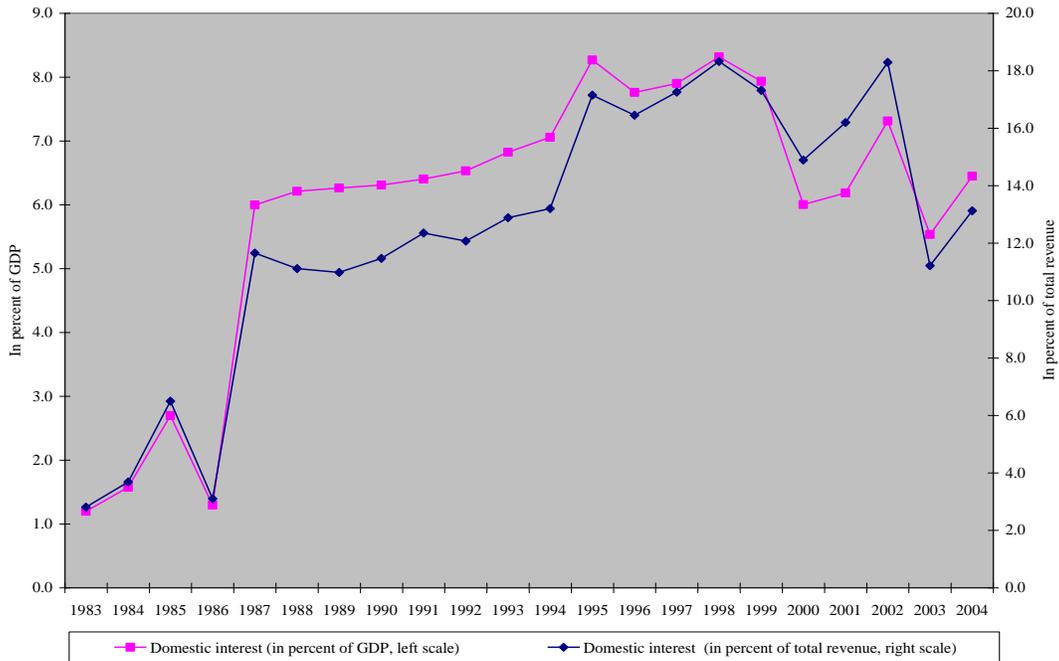
Besides the explicit liabilities presented in Table 3, the Government may hold sizable contingent liabilities. For example, in 1986 the Government assumed responsibility of a parastatal debt to a local commercial bank, of SR56.2 million (about 4 percent of GDP). However, the lack of information prevents further analysis on contingent liabilities.

The Government's domestic interest burden has not increased drastically despite the rapid accumulation of the domestic debt stock that began in the late 1990s (Figure 4), as a result of administratively repressed interest rates, achieved through capital controls. The effective interest rates on domestic debt—derived from the actual interest payments and debt stock—have been on a declining trend since the mid-1990s, and stabilized at 5-6 percent in nominal terms (1-6 percent in real terms) in the 2000s (Figure 5).

Despite the low interest rates, however, the share of domestic interest payments has been very high in the budget, absorbing over 10 percent of total revenue in 2004. The Government has so far been current on domestic debt. Given that a large part of domestic debt is held by domestic commercial banks, default on domestic debt will have severe repercussions on the soundness of the domestic financial system.

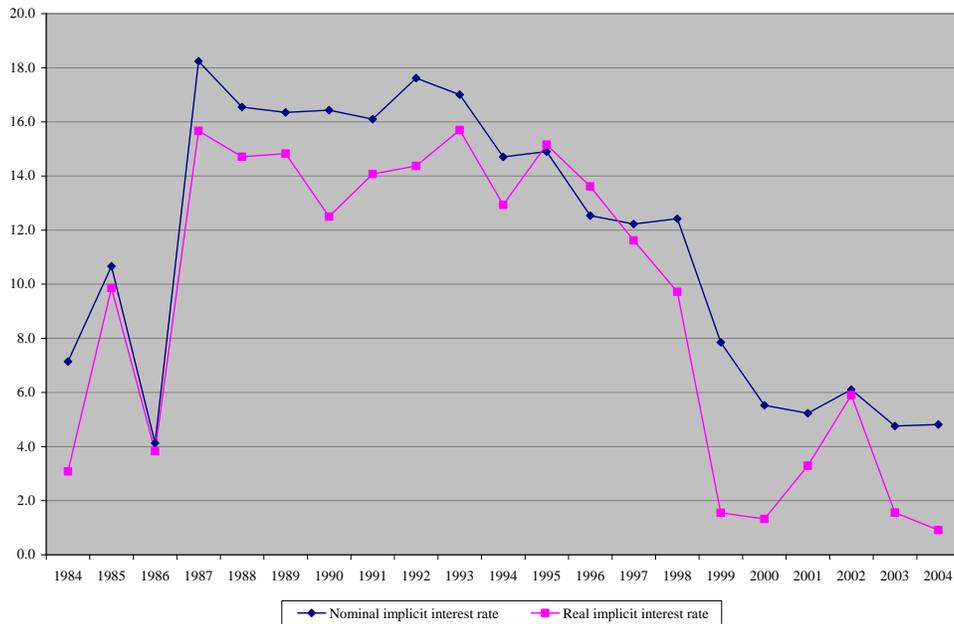
<sup>4</sup> Little information is available regarding the nature of Treasury advances.

**Figure 4. Seychelles: Domestic Interest Payments (in percent)**



Source: World Bank staff estimates.

**Figure 5. Seychelles: Effective Interest Rates on Domestic Debt (in percent)**



Source: World Bank staff estimates.

**Table 4. Seychelles: Public Sector External Debt as of end-2004**  
(in millions of US dollars, unless otherwise indicated)

	Outstanding external debt stock incl. arrears	In percent of total external debt (%)
<b>Long-term debt</b>	<b>513.5</b>	<b>81.1</b>
Official creditors	256.8	40.6
Multilateral	74.7	
Concessional	28.9	
Bilateral	182.2	
Concessional	116.4	
Commercial creditors	256.7	40.5
Collateralized	101.7	
Others	155.0	
<b>Short-term debt</b>	<b>119.6</b>	<b>18.9</b>
<b>Total external debt</b>	<b>633.1</b>	<b>100.0</b>
<b>o/w Total arrears</b>	<b>159.1</b>	
Arrears on principal	112.5	19.4
Official creditors	99.0	
Commercial creditors	13.5	
Interest arrears	46.6	7.4
Official creditors	41.3	
Commercial creditors	5.3	
<i>Memorandum item:</i>		
Concessional debt	145.3	23.0

Sources: World Bank GDF database.

## 2.2 Public Sector External Debt

At end-2004 Seychelles public sector external debt was estimated at US\$633 million, which included principal arrears (US\$112.5 million) and interest arrears (US\$47 million).<sup>5</sup> Total external debt accounts for about 73 percent of GDP, equivalently 82 percent of exports, if foreign denominated values are converted using the official exchange rate. If the parallel market exchange rate were used instead, Seychelles public sector external debt would exceed 130 percent of GDP.

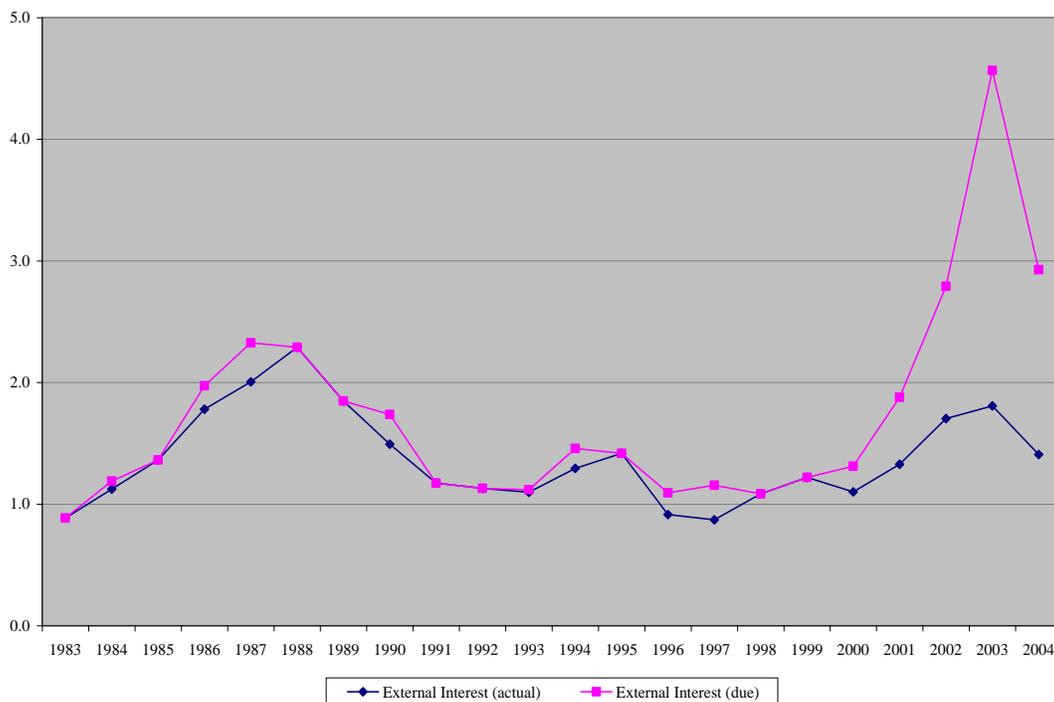
Long-term debt comprises more than 80 percent of total external debt (Table 4). Of this amount, commercial debt accounts for as much as 41 percent of total debt. About 30 percent of outstanding long-term external debt is principal arrears, much of which is to official creditors including the World Bank (about US\$1.4 million). Short-term debt accounts for a small proportion of total debt, and nearly half of short-term debt is interest arrears. Despite arrears, a few creditors have continued extend project financing.

<sup>5</sup> This paper relies on external debt data from the Global Development Finance database. While the external debt data maintained by the Department of Finance indicate that as of end-2004 the total external debt stock amounted at US\$428 million, including arrears of US\$158 million, there are serious concerns about the quality of data maintained by the Department of Finance.

What makes Seychelles' external debt complicated is its structure. Faced with acute foreign exchange shortages, during 2001-04, the Government resorted to four commercial loans collateralized by export receipts, introducing rigidities in the debt structure<sup>6</sup>. As of end-2004, US\$102 million was outstanding as collateralized debt. While these loans have been serviced in full, the Government has continued to dishonor the uncollateralized part of external debt. The Government's practice of securing collateralized loans has violated the negative pledge clause in the loan agreements with many creditors, including the IBRD and African Development Bank.

Owing to the rapid build-up of public sector external debt, the Government's external interest burden has risen sharply in the 2000s (Figure 6). When measured by GDP (total revenue), the external interest obligation has increased from the average of 1.3 percent (2.5 percent) during 1990-99 to 2.1 percent (6.1 percent) during 2000-04. The Government has been unable to meet all external obligations since 2000. The actual interest payments stood at 0.4 percent of GDP per year for 2000-04 on average, significantly lower than the interests due, 2.1 percent of GDP.

**Figure 6. Seychelles: External Interest Payments (in percent of GDP)**



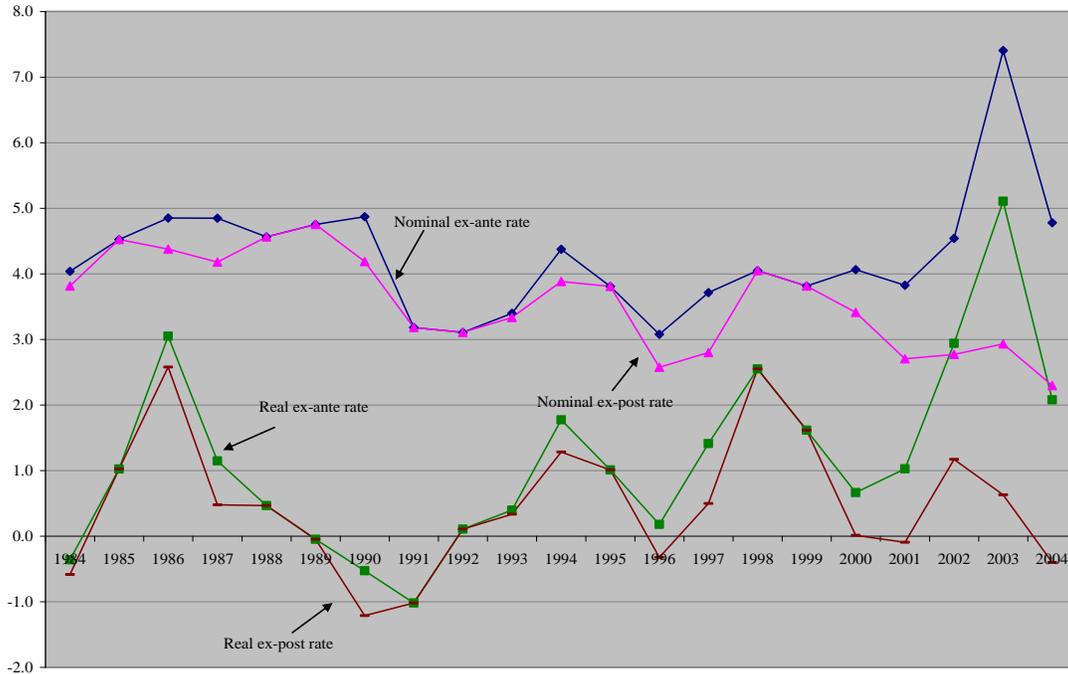
Source: World Bank staff estimates.

The ex-ante effective interest rates on Seychelles' external debt—calculated using the interest payments due and debt stock—exhibit a large increase during 2002-04, due to the new external borrowing from commercial creditors as well as the rising interest rates in industrial countries (Figure 7). The ex-ante interest rate averaged 5.6 percent in nominal terms (3.5 percent in real

<sup>6</sup> A US\$80 million loan between the CBS and the Bank of Tokyo-Mitsubishi (2004), two loans (US\$12 million and US\$5 million) between the CBS and the Mauritius Commercial Bank (2001, 2002), and a US\$25.8 million loan between the Public Utilities Corporation of Seychelles (PUC), a parastatal, and the ABN-Amro Bank. For all four loans, the Government serves as a guarantor. Detailed information as to how these loans are serviced is not available.

terms) during 2002-04, compared with 3.8 percent (0.8 percent) during 1990-99. The ex-post effective interest rates—derived from the actual interest payments and debt stock, and thus reflect loan defaults— show a different pattern. While the ex-post effective rate has followed the ex-ante implicit rate rather closely during most part of the 1990s, the two rates began to diverge in 2000, when the Government began to fall into arrears with external interest obligations.

**Figure 7. Seychelles: Implicit Interest Rates on External Debt (in percent)**

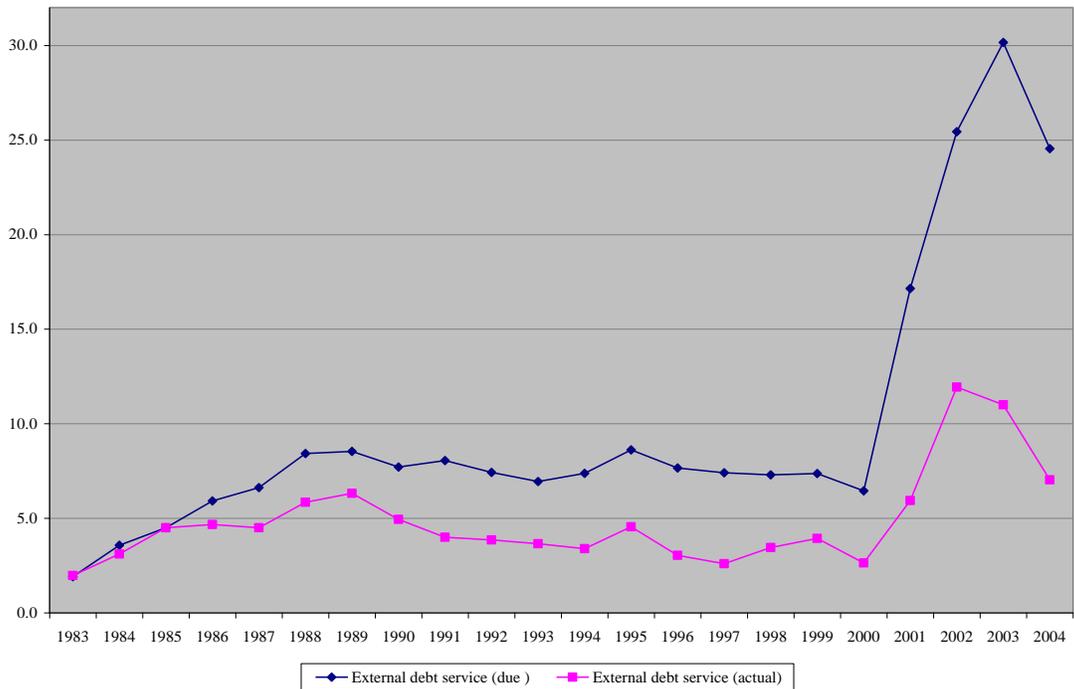


Source: World Bank staff estimates.

Total external debt service due, presented in Figure 8, shows how fast Seychelles' external debt burden has increased just over the past 4 years. In 2004 alone, the Government would have had to transfer abroad as much as a quarter of the country's GDP, or half of government spending, in gross terms as external debt service payments to honor all the contractual obligations. On the top of that, it had to make interest payments, equivalent to 6.5 percent of GDP to domestic creditors. Clearly this is not a sustainable level of indebtedness.

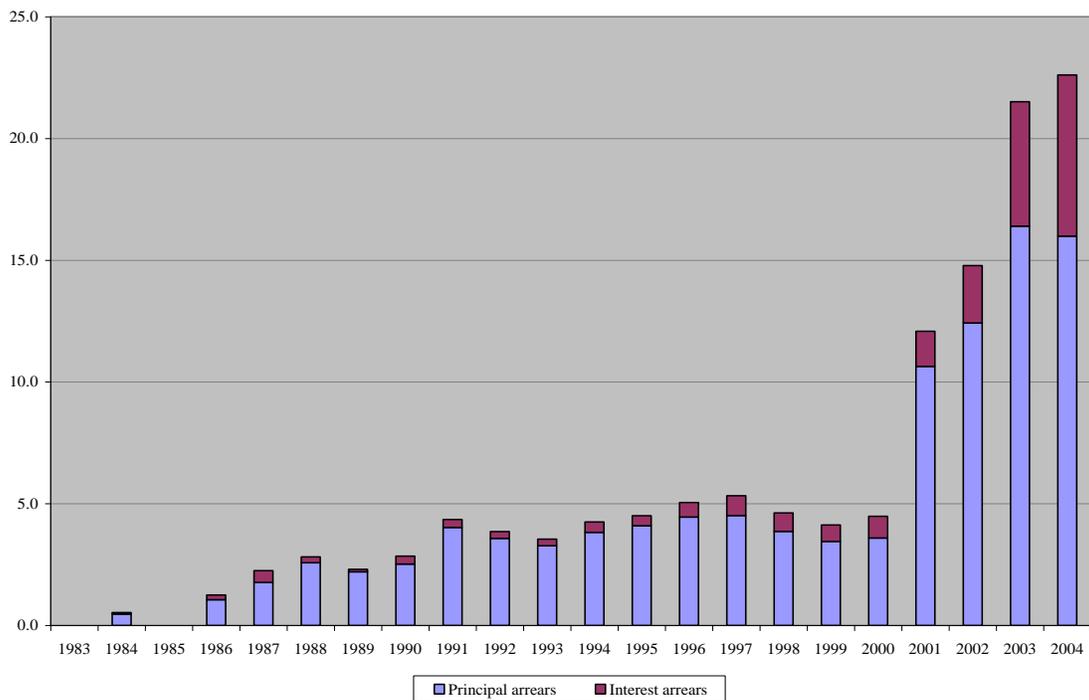
Default on external debt during the last few years has led to a sizable build-up of arrears (Figure 9). At the end of 2004, total external arrears (principal and interest arrears combined) amounted to US\$159 million, equivalent to 23 percent of GDP, or more than three times Seychelles' international reserves. Thus far, the Government's external debt strategy appears to be one of selective default, with accumulation of arrears to all external creditors with the notable exception of holders of collateralized commercial debt.

**Figure 8. Seychelles: External Debt Service (in percent of GDP)**



Sources: World Bank GDF database, and staff estimates.

**Figure 9. Seychelles: Stock of External Arrears (in percent of GDP)**



Sources: World Bank GDF database, and staff estimates.

## 2.3 Debt Sustainability

As is well known in the debt literature, the intertemporal debt sustainability condition requires that the present discounted value of debt must tend towards zero in the long run. Technically, this condition is called the “transversality condition” or “non-Ponzi game condition”. This condition equivalently requires that the growth rate of debt be less than the rate of interest in the long run, which prevents the borrower’s debt from growing exponentially. See Appendix 1 for technical discussions.

Applying the theoretical sustainability condition in an operational context, however, suffers data and methodological problems. Considering these limitations, therefore, sustainability of sovereign debt is usually assessed in terms of conventional debt indicators, or in a highly simplified sustainability framework discussed below.

Table 5 presents the average annual growth rates of GDP and the debt stock, as well as the weighted average of ex-ante and ex-post interest rates for three periods: a period of fiscal surpluses (1987-92), a period of moderate fiscal deterioration (1993-97), and a period of further fiscal and economic deteriorations (1998-04).<sup>7</sup> All figures in Table 5 are expressed in real terms.

According to Table 5, Seychelles public sector debt has declined at the annual rate of 1.2 percent during 1987-92 and increased at 5.8 percent during 1993-97, while the ex-ante (ex-post) real effective interest rate for corresponding periods were 7.2 percent (7.1 percent) and 9.2 percent (9.0 percent), respectively, indicating the growth rates of debt have been below the interest rates, i.e., public sector debt was sustainable during these periods. In contrast, during 1998-04, the average annual growth rate of debt, 10.5 percent, was well over the interest rates 3.2 percent (2.7 percent), suggesting that the level of public sector indebtedness is unsustainable, according to the intertemporal sustainability condition.

**Table 5. Seychelles: Sustainability Indicators (in percent)**

	Real annual growth rate		Real effective interest rate	
	GDP	Debt	Ex-ante rate	Ex-post rate
1987-92	6.3	-1.2	7.2	7.1
1993-97	5.5	5.8	9.2	9.0
1998-04	-0.1	10.5	3.2	2.7

Source: World Bank staff estimates.

## 3. Economic Prospects with No Policy Change

Without decisive actions, Seychelles’ economic outlook for 2005 and beyond is grim. The IMF projects that import compression necessitated by foreign exchange shortages would cause real GDP to decline by 2 percent this year (Table 6). The fiscal position is projected to be brought back to a surplus in 2005 through aggressive cuts in current expenditure, while allowing an increase in capital expenditure for tsunami-related reconstruction. The external current account deficit would widen significantly owing to high world oil prices and the need to import reconstruction materials and two tankers. Despite a moderate amount of international financial support (about US\$5.4 million), the overall balance of payments is expected to worsen

<sup>7</sup> Weighted average of interest rates on domestic and external debts.

substantially, putting further pressure on the already limited foreign reserves. Although the projected fiscal surplus will reduce the domestic debt stock, it will not improve the Government's debt external servicing capacity.

**Table 6. Seychelles: IMF Medium-term Projection, No Reform Scenario**

	2004 Est.	2005 Post-Tsunami	2006 Proj. Baseline	2007 Proj. Baseline	2008 Proj. Baseline	2009 Proj. Baseline	2010 Proj. Baseline
(Annual percentage change, unless otherwise indicated)							
National income and prices							
Nominal GDP (in millions of Seychelles rupees)	3,869	3,877	3,971	3,975	3,983	3,991	3,999
Real GDP	-2.01	-2.0	-2.0	-1.0	-1.0	-1.0	-1.0
Retail price index	3.9	2.3	4.5	1.1	1.2	1.2	1.2
End-of-period inflation	3.9	6.3	1.1	1.2	1.2	1.2	1.2
(In percent of GDP)							
Government budget							
Total revenue, excluding grants	49.1	48.6	47.5	46.8	46.7	46.7	46.7
Identified expenditure and net lending	50.6	45.6	46.4	46.0	45.7	45.5	45.7
Current expenditure	46.3	40.2	41.9	41.5	41.2	41.0	41.2
Capital expenditure and net lending	4.3	5.4	4.5	4.5	4.5	4.5	4.4
Overall balance, including grants (above the line)	-1.5	3.8	1.1	0.8	1.0	1.2	1.0
Primary balance	6.3	9.2	9.1	8.5	8.7	8.9	9.1
Total public debt 1/	205.6	201.8	200.7	199.9	198.9	197.6	196.6
External sector							
Current account balance after official transfers	-3.0	-21.9	-15.2	-7.8	2.4	5.2	9.0
(In millions of U.S. dollars, unless otherwise indicated)							
Overall external balance (in millions of US dollars)	-61.6	-45.1	-80.5	-50.0	-30.6	3.7	41.0
Gross official reserves (end of year)	34.1	46.7	51.7	56.7	61.7	65.4	106.4
In weeks of imports, c.i.f.	3.7	4.2	4.2	4.9	5.8	6.2	10.1
In percent of broad money	4.6	6.9	7.7	8.5	9.4	10.0	16.6
Exchange rate							
Seychelles rupees per US\$1 (end of period)	5.50	5.50	5.50	5.50	5.50	5.50	5.50
Seychelles rupees per US\$1 (period average)	5.50	5.50	5.50	5.50	5.50	5.50	5.50

Note:

1/ World Bank staff estimates.

Source: IMF staff estimates.

In the absence of immediate and comprehensive corrective measures, Seychelles' medium-term economic performance would continue to deteriorate and external vulnerability would persist. As the crisis deepens, economic recovery will become increasingly costly and painful. Reflecting continued shortages of foreign exchanges, imports will be further compressed, constraining growth of import-intensive industries. The gap between the official and parallel exchange rates will likely widen. With the economy projected to contract further, revenue collection will suffer, limiting resources available for social services. The delivery of social services will weaken, jeopardizing the impressive social gains made to date. Arrears will continue to rise, making normalization of relations with official creditors more difficult.

## 4. How to Reduce Public Sector Indebtedness?

Then should Seychelles do to reduce public sector indebtedness? For Seychelles, the primary tool to reduce the debt burden and turn the economy back to a sustained growth path should be the implementation of a comprehensive macroeconomic program.

This section discusses four key elements of such a program: (i) fiscal adjustments; (ii) sale of government assets and privatization; (iii) exchange rate realignments; and (iv) comprehensive structural adjustment reform. It cannot be overemphasized enough that these key policy elements will have to be undertaken all together, and a piece-meal approach will not address the

fundamental problems. Since this strategy has been discussed thoroughly with the Government on many occasions, the discussion provided below is concise, only to grasp the main thrust.<sup>8</sup> A possibility for external debt restructuring is also discussed.

#### ***4.1 Fiscal Adjustments***

One of the most important messages derived from the analysis presented earlier in this paper is the need for decisive fiscal adjustments. To contain further growth of indebtedness, the Government needs to maintain a sizable primary fiscal surplus for the foreseeable future, as it succeeded in doing so during 1987-92. Box 2 discusses possible fiscal scenarios within a forward-looking simulation framework. Also see Box 3 for Jamaica's strategy to reduce public debt through tight fiscal management.

The most appropriate approach to increase and maintain high primary fiscal surpluses for Seychelles is expenditure restraint, supported by sales of government assets and privatization (see Section 3.2 for further discussions). Since revenue collection in Seychelles is already at a very high level, near 50 percent of GDP, further increases in taxation would dampen private sector activities, and thus should be avoided.

With limited resources available, a public expenditure review should be conducted to seek ways to improve efficiency and quality of government expenditure, while identifying fiscal drains, such as large net transfers to parastatals (see Section 3.2), as well as spending that can be compressed. In this regard, the introduction of additional benefits announced by the President in June 2005—a gift of SR1,000 to every Seychellois child born in 2006 and beyond, increased housing allowances for public sector employees, and a new pension scheme—is expected to put additional pressure on the budget, and poses a significant concern.<sup>9</sup>

#### ***4.2 Sale of Government Assets***

As clearly identified in the Government's Macroeconomic Reform Program, privatization is a crucial component of the comprehensive economic reform package. While the objectives of privatization are multi-fold, one primary driving force for the Government is to use the proceeds of privatization to retire part of its debt stock.<sup>10,11</sup>

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<sup>8</sup> Detailed discussions can be found in, for example, Seychelles Development Policy Review (2004), Economic Reform and Public Debt Workout mission Aide Memoire (2005), and Privatization TA Mission Report (2005).

<sup>9</sup> Address by President James Michel on the occasion of the National Day, June 18, 2005.

<sup>10</sup> Note that some loan contracts may include a clause that requires the Government to pay a penalty for a loan prepayment.

<sup>11</sup> The scope for raising revenue and reducing debt stock through privatization varies widely across countries, but in general these steps cannot be relied on to generate large proceeds to retire debt. Cross country experience shows that privatization receipts have been disappointingly low, rarely exceeding 5 percent of GDP at any point in time (Sahay, 2005). Also note that the argument of using privatization proceeds for debt retirement holds only when the overall fiscal is in surplus.

## Box 2. Simulation Analysis

While the Government well understands the urgent need for serious fiscal consolidation, little has been discussed as to the degree of fiscal adjustments needed to achieve a more sustainable debt level. Possible fiscal scenarios are illustrated below using a simple forward looking simulation framework. The simulation period is 6 years (2005-10), where 2005 is the base year. This paper assumes that a comprehensive macroeconomic program, including a devaluation of the rupee at 61 percent, is implemented in early 2006. Table B2.1 presents the key assumptions employed in this framework. These assumptions are taken from the latest IMF medium-term projection under the reform scenario.<sup>1/</sup>

Note that this simulation model is not a general equilibrium framework. Specifically, GDP is not generated within the framework, and is determined outside the model. Interest rates for domestic and external debt are also given. For simplicity, the model assumes that domestic government borrowing and/or higher inflation will not affect the interest rates on domestic debt.

The IMF projects that following the devaluation the economy will contract by 1.2 percent in 2006, and that inflation will rise to 20 percent, fueled by higher domestic prices of imported goods. However, the initial negative effect of devaluation is expected to be short-lived. With improved competitiveness, the export sector will experience a strong recovery, provided that the underlying structural impediments have been removed through various adjustment measures discussed in Section 3.4. Part of the increased economic activities in the export sector would be offset by compressed government capital expenditure to maintain a significantly tightened fiscal stance. The economy is projected to bounce back strongly in 2007. The medium-term growth prospects will be bright, with the economy expanding at 5-6 percent per year. By 2008 real GDP is expected to return to the 2000 level.

On the other hand, import demand will subside due to the devaluation, leading to an improvement in the balance of payments. This will mitigate the foreign exchange shortages, and the Government's external debt service capacity will improve.

Let us assume that the Government's objective is to run fiscal policy so as to achieve the target debt-to-GDP ratio in 2010. A simulation analysis is conducted to examine the magnitude of fiscal adjustments needed every year by varying the target debt-to-GDP.

**Table B2.1. Seychelles: Assumptions for Simulation Analysis**  
(in percent, unless otherwise specified)

	2005	2006	2007	2008	2009	2010
Net external borrowing 1/	-4.0	-5.2	-4.5	-3.9	-3.0	-2.6
Interest rate on domestic debt	3.3	5.3	5.3	5.5	5.6	6.0
Interest rate on external debt	1.5	1.7	1.6	1.3	1.2	1.0
Exchange rate (SR/SU\$)	5.5	9.0	9.0	9.0	9.0	9.0
Real growth rate	-2.0	-1.2	8.0	6.0	5.0	5.0
Inflation	2.3	20.0	5.0	2.0	2.0	2.0
Changes in arrears 1/	0.0	0.0	0.0	0.0	0.0	0.0
Privatization proceeds 1/	0.0	2.0	1.0	0.0	0.0	0.0

Note:

1/ In percent of GDP

Source: IMF staff projection and World Bank staff projection.

**Table B2.2. Seychelles: Simulation Results**  
( in percent of GDP)

Target debt GDP ratio	Primary balance	Interest due	Fiscal balance
150	0.0	6.9	-6.9
140	2.1	6.5	-4.5
130	4.2	6.3	-2.1
120	6.3	6.1	0.1
110	8.3	5.9	2.5
100	10.3	5.8	4.5
90	12.5	5.3	7.2
80	14.5	5.4	9.1
70	16.7	5.1	11.6
60	18.7	4.8	13.9

Source: World Bank staff estimates.

The simulation results, presented in Table B2.2, show that the Government could reduce the debt-to-GDP ratio to 100 percent by maintaining a primary surplus (a fiscal surplus) of about 10 percent (4.5 percent) of GDP for the next 5 years. With this fiscal adjustment scenario, the Government's interest bill would decline to 5.8 percent of GDP per year on average, lower than the average interest bill of 7.5 percent of GDP and average actual interest payments of 6.7 percent of GDP for 2000-04.

The simulated fiscal paths should be treated only as indicative benchmarks to examine the overall fiscal sustainability based on a forward looking analysis. The medium-term fiscal path may be simulated by varying underlying assumptions (e.g., growth rate, interest rates) and incorporating prevailing economic conditions.

1/ Excluding assumptions for private sector proceeds.

Another benefit of privatization is its impact on the budget. As discussed in Box 1, large net transfers to parastatals have been one major contributory cause for large fiscal deficits over the past two decades. A formal analysis on the relationship between the fiscal balance and net transfers to parastatals is not possible in the absence of detailed data. However, information available for 1999-04, presented in Table 7, shows that the budgetary implications of parastatals are significant. During 2000-02, for example, net transfers to parastatals, 4 percent of GDP on average, accounted for nearly 30 percent of overall fiscal deficits, 13.5 percent of GDP on average. As part of the fiscal austerity measures, during 2003-04 the Government tightened transfers to parastatals substantially, bringing net transfers to parastatals virtually zero. The sustainability of this measure is uncertain, as fiscal loosening that began in 1993 was attributed in part to growing net transfers to parastatals.

As privatization progresses, the fiscal burden of parastatals is expected to fall. In particular, subventions to parastatals for wages, a large component of current transfers, will decline immediately after privatization, unless a large scale retrenchment takes place prior to privatization.

**Table 7. Seychelles: Net Transfers to Parastatals**  
(in millions of Seychelles Rupees, unless otherwise indicated)

	1999	2000	2001	2002	2003	2004
Dividend transfer from parastatals	151	53	25	52	149	94
Transfers and net lending to parastatals	19	121	125	329	143	83
Current transfers to parastatals	85	115	91	220	133	36
Capital transfers to parastatals	10	58	6	66	9	47
Net lending to parastatals	-76	-51	27	43	1	0
Net transfers to parastatals 1/ (in percent of GDP)	-132 -4.0	68 1.9	100 2.8	277 7.2	-6 -0.2	-11 -0.3
<i>Memorandum item:</i>						
Overall fiscal balance (in percent of GDP)	-7.9	-12.5	-9.2	-18.7	3.7	-0.7

Note:

1/ Negative figures represent net transfers from parastatals.

Sources: IMF staff estimates and CBS Annual Reports (various issues).

Despite the strong realization of the benefits associated with privatization, little progress has been made on this front. While the Government has recently completed a divestiture strategy paper laying out principles and objectives, it does not provide concrete discussions on the privatization mechanism, necessary institutional, legal and regulatory changes, and a clear timeframe. Moreover, the appointment of the Transaction Advisor, a consult to help guide the Government throughout the privatization process, has been delayed, and no financial evaluation has been conducted for parastatals being considered for privatization.<sup>12</sup>

Besides privatization of parastatals, the Government is interested in selling or leasing some of its islands. Currently, two islands from Seychelles are on sale—Anonyme Island (€8.5 million) and Marianne Island (US\$5 million)—along with a number of other islands in various regions in the world. The realtor handling the sale of above islands is a company called Vlade Private Islands, GmbH, which specializes in sales and rental of islands.<sup>13</sup>

### ***4.3 Exchange Rate Adjustment and Liberalization of Foreign Exchange Regime***

A sizable exchange rate adjustment, followed by a gradual elimination of the extensive foreign exchange restrictions, is a critical element of the reform package. The fiscal adjustments discussed above alone will not ease the balance of payments difficulties. A sizable devaluation of the rupee would help restore Seychelles export competitiveness, easing the ongoing acute foreign exchange shortage and allowing imports of critical inputs for production. To this effect, the detailed step-by-step recommendations provided by the May 2005 IMF mission should be undertaken without further delay.

In the presence of chronic excess demand, the foreign exchange pipeline (a complicated system of managing foreign exchange allocation) has created distortions in the economy, undermining

<sup>12</sup> The Bank's recommendation on privatization was provided in April 2005, following a private sector development specialist's mission to Seychelles in March 2005.

<sup>13</sup> See [www.vlade-private-islands.de](http://www.vlade-private-islands.de).

growth and leading in the creation of a parallel exchange rate market. The black market exchange rate is currently about SR10 per US dollar, compared with the official rate of SR5.5 per US dollar.

An exchange rate adjustment that reflects the market value of the Seychelles rupee, and the elimination of foreign exchange controls are actions that will not only greatly stimulate exports and contain domestic demand, thereby improving the external position, but also enhance the credibility of the government's reform plan, improving the business climate.

The inflationary effect of devaluation is a significant source of concern for the vulnerable people. A recent study conducted by the World Bank, however, suggest that the welfare loss following devaluation would be relatively small in the case of Seychelles, and keeping social spending constant in real terms is consistent with ensuring that poverty remains at its present low levels (see Ivaschenko and Kojo, 2006).

#### ***4.4 Structural Adjustment Reform Package***

While reducing government financing needs and restoring export competitiveness, the Government is urged to make significant structural adjustments without further delay to ensure that gains from external competitiveness from the exchange rate realignment will be channeled to the economy. Such adjustments should include, but not limited to (i) trade liberalization; (ii) deregulation of the economy, including price liberalization; and (iv) labor market reform. The adjustment strategies are discussed extensively in the Development Policy Review (2004) and FIAS report (2005). Credibility of the adjustment program would help improve investor confidence and create room for the private sector to flourish.

##### ***(i) Trade Liberalization***

While good progress has been made on trade liberalization under the MERP, further measures are needed for the economy to fully benefit from the exchange rate adjustment.

Over the past years, Seychelles has undertaken substantial reductions in basic tariff rates, abolished export and import permits for most products, and rescinded the exclusive right of the Seychelles Marketing Board (SMB) to import certain categories of goods. Rates on many items have been reduced from 50 percent or 25 percent to 15 percent or less, and further reductions are scheduled for 2006. Despite these tariff reductions, trade tax revenue is expected to rise as a result of the rupee devaluation.

Weaknesses still exist despite the recent liberalization measures, particularly in systems of duty reductions and exemptions. In Seychelles discretionary duty exemption and reduction are widespread. Regardless of published schedules, individual investors can negotiate even more favorable deals. This could lead to competitiveness imbalance, and thus should be eliminated.

##### ***(ii) Deregulation and Liberalization***

Trade liberalization should to be accompanied by serious deregulation and liberalization measures, to move away from a centrally planned economy to an economy driven by market forces. Key actions in this area include elimination of price controls, dismantling of the monopoly positions held by parastatals, and creation of good business environment.

First, price controls in Seychelles, such as the markups on the imported goods and the price ceilings on some essential goods, should be eliminated. Under the current system, prices are not responsive to changes in the economy and their allocative role is limited. Limits on the profit margins have seriously undermined business incentives. With the abolition of price controls, the prices of imported goods are expected to rise following the rupee devaluation. The impact on prices may, however, not be a full pass-through, since some imported goods are already financed through and thus reflect the black market exchange rate.

Second, any remaining statutory monopoly by parastatals should be eliminated, and private sector businesses should be granted a level playing field with parastatals. Control on foreign exchange allocations and prices have led to the reinforcement of anti-competitive monopolies. The SMB, the largest wholesaler and retailer in the country, is one of a handful number of businesses that are not subject to price controls and have almost unlimited access to foreign exchange. While the monopoly privilege of the SMB on the import of many essential food, household and industrial commodities has been scrapped, in the wake of serious economic difficulties in the early 2000s, SMB continues to enjoy substantial advantages over its private sector competitors, which operate under much more onerous restrictions.

Third, a more favorable business environment needs be established to foster private sector activities. According to the FIAS report, the business environment in Seychelles is characterized by a high degree of discretion, serious administrative barriers, especially for business entry, and a non-transparent and cumbersome regulatory structure. Moreover, Seychelles's judiciary system is generally perceived to be politicized and not independent. Elimination of such obstacles is essential to promote market-based competition and send a positive signal to investors.

#### ***(iv) Labor Market Reform***

Channeling the full benefits of devaluation and structural adjustments into improved employment requires reform that makes Seychelles excessively rigid labor market more flexible. In Seychelles the Employment Department intrudes into the employment market in an unusual way by obliging employers to list vacancies through the Department and by providing lists of suitably qualified registered job-seekers. In addition, employers cannot lay off workers without approval of the Employment Department and can do so only after a lengthy, time-consuming process of negotiation. This reduces the flexibility that employers seek to adapt quickly to changing business conditions and to create most dynamic and productive possible work force.

The requirement that employers submit all vacancies to the Employment Department and that the Department provide lists of suitably qualified registered job-seekers should be abolished. Procedures for dismissing workers should be shortened and simplified. Employers should not be required to seek the permission of the Employment Department to dismiss a worker. In the event of layoffs or retrenchments, employers should be free to dismiss workers based on the needs of their business, provided that they pay the severance benefits mandated by law.

### ***4.5 External Debt Restructuring***

While the reform program discussed above should be the primary tool for the Government to lower its debt burden and stimulate the economy, restructuring of external debt to official creditors, if possible, could mitigate the costs of reform implementation.

Nevertheless, programs for concessionary official restructurings are typically aimed at much lower income countries than Seychelles. Besides, the Paris Club debt restructuring requires that the London Club provide debt restructurings on comparable terms, and that the debtor country show satisfactory performance under an IMF program. The first requirement is particularly difficult to clear, as holders of collateralized commercial debt are unlikely to agree on debt restructuring.

To facilitate a debt restructuring operation, relations with the international community needs to be rebuilt, supported by the formulation of a credible arrears clearance strategy and a track record of policy implementations based on a comprehensive macroeconomic reform plan with a clear time frame. The success of a Donors Conference will crucially depend on the credibility of the policy actions and on the quality and credibility of the reform plan. It is essential that a clear message be sent to the financial institutions that the policy actions and economic plan are for real and will not be reversed in the near future. For reestablishing relations with the World Bank and African Development Bank, not only do the arrears have to be cleared, but a solution to the problem of collateralization must be found. Needless to say, no additional collateralized debt should be contracted for by the public sector.

It cannot be over-emphasized enough here that even if debt restructuring became available for Seychelles, debt restructuring operation alone would neither bring about sustained economic recovery nor establish external viability in the long run. External debt restructuring is not a substitute for fundamental reform.

## **5. Conclusions**

With public sector debt at some 200 percent of GDP, manifested by years of poor policy management, there is no painless solution to Seychelles debt predicament. The primary means for the Government to reduce the debt burden is to follow through a comprehensive economic program, in which the main focus is large fiscal adjustments and an exchange rate adjustment. A piece meal approach – selective tax exemptions and investment incentives—as contemplated in the 2005 budget, will do little to address the accumulated macroeconomic imbalances and losses of competitiveness.

The macroeconomic reform program discussed in this paper may appear overwhelming, but is not insurmountable, with considerable political will and leadership. The long-term benefits of such reform are great, but time is short, and implementation is key. Going forward, the Government of Seychelles, rather than raising expectations about donors flows, must engage all stakeholders—civil society, the private sector, foreign investors, and donors—in a dialogue and partnership on the challenges and opportunities of growth and competitiveness. Business as usual will no longer be viable. The World Bank stands ready to sail through the formidable challenges with the Government.

## Appendix. Theory: Fiscal Policy and Debt Sustainability

### A. Dynamic Budget Constraint

A dynamic budget constraint of a government is given by

$$(1) \quad e(D_t^* - D_{t-1}^*) + (D_t - D_{t-1}) = P_t + r^* eD_{t-1}^* + rD_{t-1},$$

where,  $D^*$  is the government's external debt denominated in the US dollar,  $D$  the government's domestic debt at the end of period  $t$ , and  $e$ ,  $r^*$  and  $r$  are the exchange rate of the rand/loti against the US dollar, interest rates for external and domestic debts respectively. For simplicity,  $e$ ,  $r^*$  and  $r$  are assumed to be constant.  $P_t$  is the primary deficit including grants in period  $t$  (primary surplus if  $P < 0$ ). All the variables are in real terms. Equation (1) says that the budget deficit must be financed by the combination of external and domestic borrowing.

Letting  $Y_t$  be GDP and dividing Equation (1) by  $Y_t$  yields

$$(2) \quad \frac{eD_t^*}{Y_t} + \frac{D_t}{Y_t} = \frac{P_t}{Y_t} + \frac{(1+r^*)D_{t-1}^*}{Y_t} + \frac{(1+r)D_{t-1}}{Y_t},$$

Since  $Y_t = Y_{t-1}(1+g)$  where  $g$  is the real GDP growth rate (assumed to be constant for simplicity), Equation (2) can be rewritten as:

$$ed_t^* + d_t = p_t + \frac{(1+r^*)eD_{t-1}^*}{Y_{t-1}(1+g)} + \frac{(1+r)D_{t-1}}{Y_{t-1}(1+g)}$$

or

$$(3) \quad ed_t^* + d_t = p_t + \left( \frac{1+r^*}{1+g} \right) ed_{t-1}^* + \left( \frac{1+r}{1+g} \right) d_{t-1},$$

where  $d$  represents the debt-to-GDP ratio ( $d \equiv D/Y$ ) and  $p$  is the primary deficit-to-GDP ratio ( $p \equiv P/Y$ ).

Equation (3) shows the dynamic relationship among debt, exchange rate, primary deficit, growth and interest rates. While it is highly simplified, Equation (3) serves to demonstrate the main point that the debt-to-GDP ratio in period  $t$  ( $d_t^*$ ,  $d_t$ ) are determined by the size of primary deficit ( $p$ ), the exchange rate ( $e$ ), and the relationship between interest rates ( $r^*$ ,  $r$ ) and the economy's growth rate ( $g$ ).

Note that the foreign interest rate,  $r^*$  is exogenous for Seychelles, while  $p$ ,  $r$  and  $g$  are endogenous, and can be influenced by domestic policy.

## B. Transversality Condition

Note that lenders impose the transversality condition, or non-Ponzi game condition for both domestic and external debt:

$$(4) \quad \lim_{t \rightarrow \infty} \sum_t \frac{D_0}{(1+r)^t} = 0,$$

$$(5) \quad \lim_{t \rightarrow \infty} \sum_t \frac{D_t^*}{(1+r^*)^t} = 0,$$

where  $D_0^*$  and  $D_0$  are the government's foreign and domestic debt stock as of today ( $D_0^*, D_0 > 0$ ). Equations (4) and (5) require that the present discounted value of government debt must tend towards zero in the long-run. Equivalently, the condition requires that the long-run growth rate of debt be less than the average rates of interest on government debts, which prevents debt from increasing exponentially. When the transversality condition is met, debt is said to be sustainable.

### **Box 3. Jamaica's Strategy for Debt Reduction**

Jamaica's high public debt, nearly 150 percent of GDP, is mainly a legacy of high fiscal deficits during the 1980s, and the resolution cost of the financial crisis in the mid-1990s. With this high level of debt, the burden of interest payments on the budget is significant, at around 13-18 percent of GDP, or 40-50 percent of total public expenditure, introducing significant rigidities in budget appropriation. In order to maintain their reputation as a good payer, the authorities, with considerable determination, have remained current on all their debt payments.

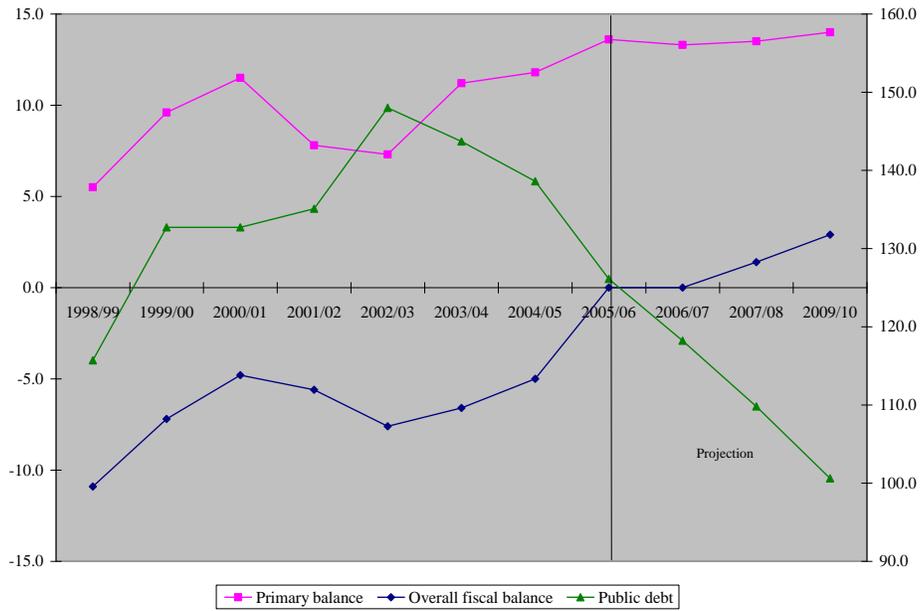
The scope for external debt restructuring is limited, since most of the external debt has a fairly long maturity profile without repayment humps. To ease the strain on the budget, the Jamaican authorities have attempted to lengthen the maturity of their domestic debt, although at relatively high interest rates. Paying down their debt through large privatization receipts is not a feasible option as most of the large state enterprises have already been privatized.

Running out of option, the authorities in the late 1990s embarked on an economic program aimed at reversing adverse debt dynamics and laying the foundation for economic growth in the medium term. To this end, the economic program included (i) ambitious fiscal corrections; (ii) growth enhancing structural reform; and (iii) monetary and exchange rate policies to reduce inflation, interest rates and avoid losses in external competitiveness.

The Jamaican authorities have shown a strong commitment to their medium-term strategy despite several exogenous shocks that hit the economy (e.g., Hurricane Ivan). During 2000/01-04/05, the primary fiscal position has been in significant surplus, at about 10 percent of GDP on average (Figure B3.1). Reflecting the heavy interest burden, however, overall fiscal balance has remained in deficit for the same period. Another strong fiscal performance is expected for 2005/06. The IMF projects a primary surplus of 14 percent of GDP, leading to a significant debt-to-GDP ratio to about 126 percent, down from the peak of 150 percent in 2002/03. Jamaica is likely to achieve a balanced fiscal position.

With continuation of strong fiscal discipline and adherence to the reform plan, the IMF is cautiously optimistic about Jamaica's medium-term prospects. With primary surpluses of 13-14 percent of GDP, Jamaica's public debt is expected to decline to 100 percent of GDP by 2010.

**Figure B3.1 Jamaica: General Government Operation (in percent of GDP)**



Source: Jamaica IMF Staff Reports (various issues).

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