

**FOR  
AGENDA**

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To: Members of the Executive Board

From: The Secretary

Subject: **Botswana—Selected Issues and Statistical Appendix**

This paper provides background information to the staff report on the 2003 Article IV consultation discussions with Botswana (to be issued shortly), which is tentatively scheduled for discussion on **Wednesday, March 24, 2004**. At the time of circulation of this paper to the Board, the Secretary's Department has not received a communication from the authorities of Botswana indicating whether or not they consent to the Fund's publication of this paper; such communication may be received after the authorities have had an opportunity to read the paper.

Questions may be referred to Mr. Kibuka (ext. 36941), Ms. J.Y. Kim (ext. 39938), and Mr. Akatu (ext. 36922) in AFR.

Unless the Documents Section (ext. 36760) is otherwise notified, the document will be transmitted, in accordance with the procedures approved by the Executive Board and with the appropriate deletions, to the WTO Secretariat on Wednesday, March 17, 2004; and to the African Development Bank, the European Commission, the European Investment Bank, the Food and Agriculture Organization, the Organisation for Economic Cooperation and Development, and the United Nations Development Programme, following its consideration by the Executive Board.

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INTERNATIONAL MONETARY FUND

BOTSWANA

**Selected Issues and Statistical Appendix**

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Approved by the African Department

March 8, 2004

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## **I. THE MACROECONOMIC IMPACT OF HIV/AIDS IN BOTSWANA: A MODIFIED FRAMEWORK<sup>1</sup>**

### **A. Introduction**

1. Botswana has one of the highest HIV/AIDS prevalence rates in the world; according to a 2002 national prevalence survey it is estimated at about 35.4 percent of adults in the 15-49-years age group. The overall prevalence rate has more than doubled since 1992, and an estimated 138,000 Botswana had died of AIDS by 2002. The high HIV/AIDS prevalence rates have resulted in declining life expectancy, from 65 years in 1991 to 56 years in 2001, according to official census data. The infant mortality rate is estimated at 55.2 per 1,000 live births, compared with 48 in 1991, and in contrast to an estimated 26.3 per 1,000 live births in the absence of AIDS. Some studies of the impact of HIV/AIDS estimate that the overall population growth rate by 2015 will average 0.9 percent per annum, compared with 2.8 percent in a no-AIDS scenario.<sup>2</sup> In addition to the human consequences, the macroeconomic impact has also been well researched, and many studies, drawing on demographic projections and standard economic theory, have modeled the long-term negative impact of HIV/AIDS on total factor productivity, labor, capital, and output, among other variables.

2. The government of Botswana has developed a medium-term program, the National Strategic Framework (NSF) for HIV/AIDS 2003–2009 (NACA, 2003), the ultimate goal of which is to have an HIV/AIDS-free generation by 2016. The projected cost of implementing the NSF is approximately Pula 12 billion over the program years. This translates into an average of 5 percent of GDP spent on HIV-related spending per year, compared with the 6 percent of annual average GDP spent on the entire health sector in the past three years. Effective management of the pandemic would enable Botswana to reverse the declining human development indices and mitigate the adverse impact on the economy.

3. The objective of this paper is to model the macroeconomic impact of an effectively implemented NSF program. This is done by modifying existing macroeconomic models to take account of the possible improvements that would ensue under the NSF program scenario.

### **B. Recent Studies**

4. A major study of the impact of HIV/AIDS on the Botswana economy was prepared by the Botswana Institute for Development and Policy Analysis (BIDPA) (2000). Using demographic projections of the population based on the future path of HIV, the study derived

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<sup>1</sup> Prepared by Iyabode Masha.

<sup>2</sup> See World Bank (2001).

projections of the size of the labor force and the subsequent effect of HIV/AIDS on the economy. The study showed the adverse effect of HIV/AIDS on aggregate output, distribution of income among different groups, and the long-term fiscal outlook for Botswana. In addition, it showed that GDP growth in Botswana would be lower by an average of 1 to 2 percentage points a year as a result of AIDS.

5. Drawing on the BIDPA model, McFarlan and Sgherri (2001) focused on the effect of HIV/AIDS on the long-term productive capacity of the economy. Based on higher prevalence rates than used in the BIDPA study, their paper showed that the nonmining GDP growth rate would be 1.38 percent in 2010, compared with 5.2 percent in the absence of AIDS. In another study, it was estimated that the Botswana economy could be 33–40 percent smaller in size in 2010 than it would have been in the absence of AIDS.<sup>3</sup> Haacker (2002) also concluded that HIV/AIDS affects per capita income mainly through its impact on human capital, as measured by the supply of experienced workers. Others include the impact on capital accumulation, on education, and on total factor productivity.

6. The negative impact of HIV/AIDS postulated in studies is sensitive to the effect of the pandemic on labor supply and the capital stock. To the extent that the NSF intervention program results in lower rates of new infection and a more productive life for the infected people, it is expected that the overall macroeconomic outcome is likely to be different.

### **C. HIV/AIDS Intervention Programs**

7. Over the years, the government's approach to managing the pandemic has been dictated by the trends in the disease. While, in the early phase of the disease, the focus was mainly on preventative health care, by 1993, as prevalence rates reached alarming proportions, comprehensive medical and social care was included in overall HIV/AIDS management scheme. The Medium-Term Program II for HIV/AIDS (1996–2002) was the first framework that undertook a multisectoral approach and consolidated program over a dispersed number of agencies. Though the government of Botswana does not disaggregate expenditure on HIV/AIDS *ex-ante*, budgetary allocations to the health sector increased remarkably over the years (see Table I) and both the public and private<sup>4</sup> sectors in Botswana have put in place extensive enlightenment programs and integrated health care arrangements for HIV-positive employees.

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<sup>3</sup> See Green and others (2002)

<sup>4</sup> According to NACA (2003), the private sector, parastatals, and the civil society are expected to implement an agreed Minimum *Internal Package* for HIV/AIDS prevention. During mission consultation, Debswana Corporation, Botswana Telecommunications, Barclays Bank of Botswana, Standard Chattered Bank, and Botswana Power Corporation, confirmed that they implement comprehensive workplace AIDS policies, some of which extends to their subcontractors. See NACA (2003) for details.

8. The National Strategic Framework (NSF) for HIV/AIDS 2003–09, the successor to the Medium-Term II HIV program, represents the most ambitious attempt so far to grapple with the scourge of the pandemic. The framework proffers a systematic, multisectoral approach to managing the pandemic and makes the National AIDS Coordinating Agency (NACA), chaired by the President of Botswana, the focal point for facilitating and coordinating the various HIV/AIDS interventions in the country. Botswana has already received extensive support from development partners, who are also expected to support the new medium-term framework financially (See Table 1.1).

Table I.1. Botswana: HIV/AIDS National Strategic Framework, Program Cost, 2002/03-2007/08<sup>1/</sup>

	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	Average
Programs	<i>(In millions of Pula)</i>						
Prevention of HIV infection	185.80	241.00	264.50	234.30	164.30	156.70	207.77
Provision of care and support	408.90	641.60	781.00	1,117.10	1,577.40	2,229.90	1,125.98
ART drugs	38.60	139.20	251.00	374.00	504.00	642.00	324.80
Other costs	354.30	299.40	455.50	617.60	868.30	1,419.40	669.08
Total program cost	949.00	1,182.00	1,501.00	1,969.00	2,610.00	3,806.00	2,002.83
	<i>(In Percent of GDP)</i>						
Total program cost	2.78	3.16	4.04	4.84	5.92	8.00	4.99

Source: NACA (2003)

1/ Fiscal year begins April 1

9. The NSF is anchored on the goals of prevention, care, and support; management of the national response; economic impact mitigation; and provision of a strengthened legal and ethical environment. These goals are supported by ten objectives with time-bound quantitative targets/indicators to measure their achievement (see Table 1.2). The treatment of the pandemic focuses on the administration of antiretroviral drugs to the infected, the effect of which would be to prolong their lifespan, as well as increase the average level of productivity. The mother-to-child transmission (MTCT) program provides treatment for pregnant women to prevent the transmission of HIV at birth. In addition, the treatment of tuberculosis and opportunistic and sexually transmitted diseases (STD) and voluntary counseling and testing (VCT), which are targeted at a wider audience than the HIV infected, reduce the rate of new HIV infections.



Table I.2. Botswana: Quantitative Targets and Outcome Indicators of the NSF  
for at Risk Population, 2006 and 2009  
(In percent, unless otherwise indicated)

Target / Outcome Indicator <sup>5</sup>	Baseline	2006	2009
<b>Voluntary Counseling and Testing (VCT)</b>			
Increase in HIV prevention and knowledge	34	80	100
Adoption of HIV prevention behavior	....	50	80
Decrease in HIV prevalence among sexually active population	6	50	80
Increase in number of people who utilize VCT services	8	70	95
<b>Mother-to-child-transmission (MTCT)</b>			
Increase in HIV+ women receiving a complete course of ART	34	70	100
Reduction in number of infected infants born to HIV+ mothers	40	20	100
<b>Antiretroviral therapy (ART)</b>			
Number of HIV+ eligible for and receiving ART in a 12 month period <sup>1/</sup>	8,000	45,000	85,000
Percentage of people living with aids (PLWA) returning to productive life	....	100	100
<b>Sexually transmitted diseases (STD)</b>			
Percent decrease in STD prevalence among the sexually active population	2	50	100

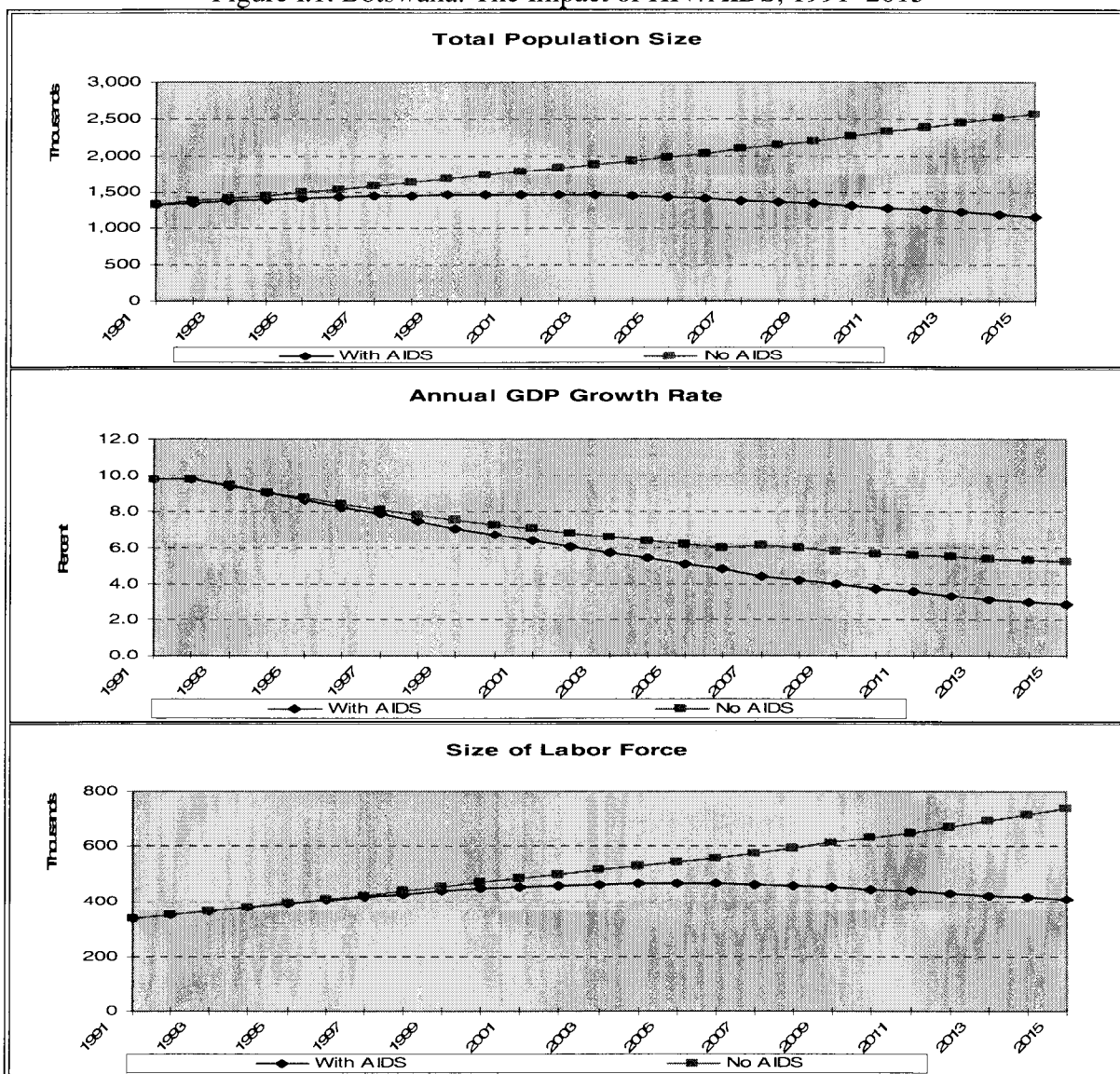
Source: NACA (2003).

1/ Units.

10. The NSF is a comprehensive strategy for coping with the pandemic, to the extent that it is based on improved prevention efforts, a reduction in the rate of new infection, the expansion of existing health services to provide care to HIV patients, and the provision of safety nets, especially for the care of orphans. The need for such an integrated approach to respond to the crisis is underscored by the grim consequences of the high prevalence rates, as indicated in the decline in human development indices referred to above. A projection of the impact of HIV/AIDS in the baseline scenario, compared with a hypothetical no-aids scenario, shows that, by 2015, the number of new infections will almost double that of 2003. Furthermore, because of the high mortality rates, the population in 2015 will be about 1.3 million in the presence of AIDS, compared with a hypothetical *no-aids* scenario of 2.5 million (see Figure 1.1). The grim economic impact of these statistics will be evidenced in the decline in the labor force and its productivity, and in the overall growth of GDP.

<sup>5</sup> List of targets and outcome indicators not exhaustive. See NACA (2003) for details.

Figure I.1. Botswana: The Impact of HIV/AIDS, 1991–2015



Sources: Spectrum Population Demographic Projection; and IMF staff estimates.

11. While the literature on the magnitude of the macroeconomic impact of HIV/AIDS is far from conclusive, some demographic studies have shown that programs that mitigate the channels through which it occurs, if successfully implemented, would likely result in better outcomes. Some important effects of intervention programs are the slowing of new infections, longer life expectancy, and a reduction in the growth of the orphan population. In the case of MTCT treatment, it was found that, compared with a no-intervention scenario that entails additional cost for treating opportunistic diseases in the orphan population, there are significant savings in the intervention scenario because of reduced infection and therefore cost of medical care in children born HIV positive.

12. In order to formally analyze the macroeconomic effect of an effectively implemented NSF, the dynamic change in demographics, which would moderate the pessimistic outlook for economic growth, would have to be factored into the medium-term outlook. This is done by extending current models of the macroeconomic impact of HIV, and applying the model to an AIDS-with-intervention scenario.

#### **D. A Modified Model of Macroeconomic Impact**

13. The model is a simplified Solow model that follows Cuddington (1993) but extends the framework by assuming that positive changes in the size and productivity of the labor force arising from the implementation of reform programs result in less pessimistic outcomes for the key macroeconomic variables. The modified one-sector model presented is highly generalized, yet simple enough to capture the moderating effect of changing demographic patterns on the evolution of HIV/AIDS and, subsequently, its macroeconomic effect through the labor force and capital stock. It comprises a production function equation, equations for labor and capital input, and a savings behavioral equation.

##### **Production function**

14. Production in the economy,  $Y$ , is characterized by a Cobb-Douglas-type technology with constant returns to scale. Equation (1) specifies that nonmining output is a function of labor, capital, and total factor productivity:

$$Y_t = \alpha \gamma^t L_t^\beta K_t^{(1-\beta)}, \quad (1)$$

where  $Y_t$  is the aggregate nonmining output,  $L_t$  represents the labor input, measured in efficiency units, and  $K_t$  is the capital input.  $\gamma$  is the rate of technological change over time,  $\beta$  is the share of labor in aggregate output, and capital's share is derived residually.  $\alpha$  is a scale factor adjusted to fit the actual data in the base year. Though mining output constitutes more than one-third of value added in output, its effect is abstracted from the model under the simplifying assumption that changes in mineral rents are not directly attributable to the factors of production.

##### **Labor**

15. HIV/AIDS has an impact on labor, in two ways, through the productivity and size of the labor force. The efficiency unit of labor is a function of the number of HIV infected, as well as the proportion of work period lost due to absence or reduced productivity:

$$L_t = \sum_{i=15}^{64} (1 - z_i a_{it}) \rho_{it} E_{it} . \quad (2)$$

By equation (2), effective labor supply,  $L$ , is a function of the number of the employed in the 15–64 age bracket,  $z$ , the fraction of work year lost per infected worker because of HIV-related absences and/or reduced productivity, and  $a$ , proportion of the population that is HIV

infected.  $E_{it}$  is the employed workforce of age  $i$  at time  $t$ , while  $\rho$  measures the productivity gain that comes with experience on the job.<sup>6</sup> This equation is very crucial to the impact of HIV/AIDS on the economy. The efficiency of labor depends not only on the age-specific labor force participation rate but also on the workers' experience, which is increasing in the number of years spent working. The negative impact of HIV on the size of the labor force is from the decline in population, linked to the increase in AIDS-related death and absenteeism arising from sickness. The productivity of the labor force would be compromised by both the high rate of absenteeism and the replacement of more experienced workers by less experienced ones. While the overall effect is unambiguously negative on the population growth rate, the effect on the labor force would depend on the age distribution of the infection. Therefore, denoting the population growth rate as  $gn$ ,

$$gn_t = gn_t(a_t). \quad (3)$$

By equation (3), the population growth rate is a function of  $a$ , the total number of HIV infected. Higher rates of infection would result in future declines in the population, depending on how rapidly HIV progresses to AIDS.

16. Existing models have recognized that changes in the demographic pattern, arising from the pandemic will affect the skill and experience level of the workforce. In addition, higher rates of absenteeism because of the disease would result in higher proportions of lost workdays. In the AIDS-with-treatment scenario, however, these effects are not likely to be negative throughout. Intervention programs that slow the rate of new infections and improve the productivity and efficiency of the infected would affect the value of  $gn$  and  $z$ , and therefore improve the absolute number of the workforce, as well as its productivity and efficiency.

### Savings behavior

17. It is assumed that capital accumulation is financed by domestic savings and foreign capital inflows, as expressed by

$$K = f(S, Sf), \quad (4)$$

where  $S$  is the ratio of national savings to GDP and  $Sf$  is the ratio of capital inflows to GDP. The increasing cost of managing the pandemic imposes certain constraints on public and private savings, directly or indirectly. In Botswana, some of the health care expenditure is categorized as "development" or capital expenditure. Annual health care expenditure would

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<sup>6</sup> Following Cuddington (1993), productivity gain is defined as a worker's experience, proxied by taking the worker's age and subtracting 15, the assumed age of entry into the labor force. BIDPA's estimate of the earnings function for Botswana assumes a starting age of 20 years in the formal sector as follows:  $\rho = \delta_1 + \delta_2(i - 20) + \delta_3(i - 20)^2$ , where the  $\delta$ s are estimated from earnings function of the labor force.

be increasing in the number of HIV patients, as prevalence rates rise, necessitating a financing of the cost out of savings and/or reduction of other current expenditure in order to sustain the required level of HIV expenditure. Private sector savings is also not unaffected, as firms increase the share of expenditure allocated to HIV prevention and care. Therefore, the evolution of total domestic savings behavior under for HIV pandemic is

$$S_t = s_t Y_t - x p a_t L_t . \quad (5)$$

where  $S_t$  is the total domestic savings and  $s_t$  is the domestic savings rate. Under the with-AIDS scenario therefore, national savings  $S_t$  would be equal to the national savings rate less  $x$ , the proportion of annual aids expenditure financed out of savings,  $p$ , the per patient pula cost, and  $a_t L_t$  the number of HIV-infected in the labor force.

18. There are clearly several possibilities that arise from equation (5). In the no-AIDS scenario, the second term on the right-hand side drops out. In the with-AIDS scenario, the current savings rate depends on the per patient aids expenditure, the proportion of this financed from national savings, and the size of the HIV infected population. In standard models of HIV, as the population of the infected grows and AIDS-related expenditure rises, the short- and long-run consequence is a declining national savings rate. However, this is not necessarily the case in an AIDS-with-intervention scenario. It is conceivable that the negative impact would be only in the short run, though possibly larger than in the no-intervention scenario,<sup>7</sup> while in the long run AIDS-related expenditure and the prevalence rate would decline. In any event, the savings rate would be a negative function of the AIDS prevalence rate. The effect of AIDS on foreign capital inflows is not usually as straightforward. AIDS may induce a higher level of foreign aid than would ordinarily be the case, thus moderating the impact on domestic savings. However, it could also result in reduced foreign private inflows.

### Capital accumulation

19. Capital input is a function of the domestic savings rate and foreign inflows. As noted in (5), both the domestic savings rate and the rate of foreign inflows might be affected by HIV/AIDS prevalence. If capital is expressed in terms of the labor force,  $K/L = k$ , the period-to-period change in the capital labor ratio is

$$\Delta k = [s(a) + sf] f(ka) - gn(a) k - \theta k , \quad (6)$$

where  $\theta$  is the depreciation rate and other variables are as defined earlier. The equation specifies the capital-labor ratio as a function of the total savings rate, production per worker, the HIV prevalence rate, the population growth rate, and the depreciation rate.

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<sup>7</sup> In the intervention scenario, higher levels of resources would have to be committed over the program years than in a no-intervention scenario.

20. In the one-sector model under consideration, the macroeconomic impact of HIV/AIDS could be moderated through effective intervention programs. The negative effect on the labor force would be ameliorated as new infections rates slow and the useful life span of the infected is extended. In the short run, the effect on capital accumulation will be negative, especially if a substantial proportion of the cost is financed from savings, a possibility that could be ameliorated with donor-supported capital inflows. These effects could, therefore, result in less pessimistic outlook for output growth than in a no-intervention scenario.

The model is now simulated using actual data from Botswana.

### **E. Model Simulation**

21. The specified model is simulated over the period 1991–2015, based on the actual values of the variables in 1991, and under three alternative assumptions: no-AIDS, with-AIDS and AIDS-with-intervention scenarios. The demographic estimates for the simulation were generated with the Spectrum AIM model,<sup>8</sup> using initial values from the Botswana Central Statistics Office (CSO), population census projection for 1991. The latest available labor force survey for Botswana is the 1995/96 survey, which details the labor force participation rate per four-year cohorts for the entire population.

22. 1991 data were used for the initial values of nonmining GDP, capital stock, and gross domestic investments. The scaling constant of 40.02 ensured that the value of GDP implied by the production function matched the actual value in 1991. Following closely on previous works on Botswana, the elasticity of labor and capital-to-output ratio were assumed to be 0.3 and 0.7, respectively, and the exogenous technological trend was set at 0.004. The depreciation rate was put at 7 percent, in line with Botswana CSO practice. In the preprogram years, separate data did not exist for the cost of HIV/AIDS treatment, but a range of P 400 to P 954 per patient was determined after adjusting the Ministry of Health expenditure. In the program years, the average cost per patient was P 7,383 per year. In the past, Botswana was able to run a surplus on the recurrent expenditure account, which includes health care cost. In the medium-term program however, it is assumed that Botswana would finance 50 percent of the program cost from savings.

23. In simulating the demographic projections for the AIDS-with-intervention scenario, the targets set in the NSF program were used to project the expected changes in the population and the prevalence rates. The key assumptions of the AIDS-with-intervention

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<sup>8</sup> The Spectrum AIM model is a Windows-based program designed to calculate the demographic consequences of HIV/AIDS; it can be downloaded from [www.tfgi.com](http://www.tfgi.com). 1991-2003 demographic data match the actual values, while the parameter used to generate the remaining years are from UN and U.S. Census Bureau projections. Botswana National Aids Coordinating Agency data were used for epidemiological information for the with-AIDS scenario, and the NSF targets for the AIDS-with-intervention scenario.

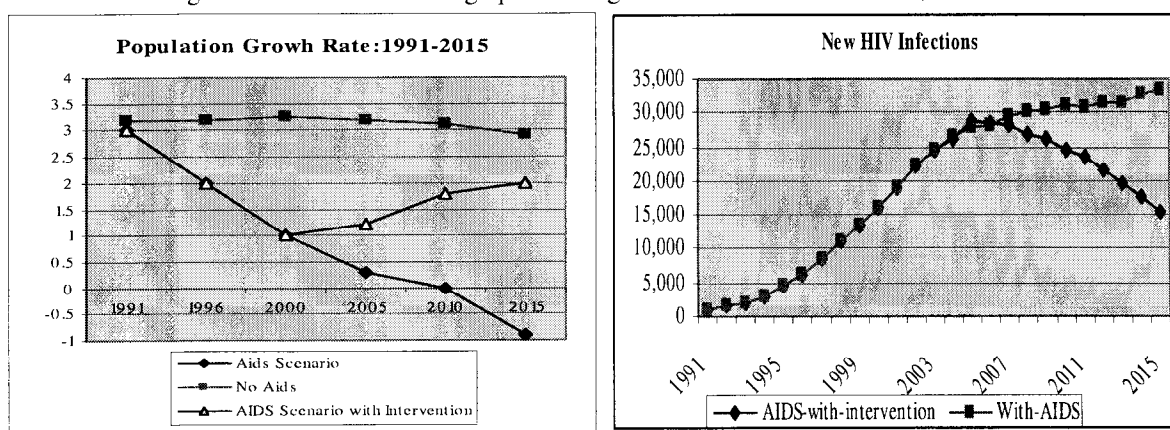
scenario are (i) mother-to-child transmission intervention, which has a baseline coverage of 34 percent of at risk population in 2002, will gradually rise to 70 percent by 2006; (ii) voluntary counseling and testing, which also has a coverage of 34 percent of the at risk population in 2002, would reach 80 percent in 2006; (iii) antiretroviral therapy would have a 90 percent coverage by 2006; and (iv) sexually transmitted disease prevalence rates will decline by 50 percent by 2006. Though the NSF's target on each of the programs is 100 percent coverage of all at-risk groups beyond 2009, in view of reservations expressed about implementation capacity and possible program reach, the targets were relaxed for the purpose of simulation, so that, beyond 2006, all interventions remain at 90 percent.

## F. Results

24. The demographic impact. The demographic projection suggests that in an AIDS-with-treatment scenario, Botswana's demographics will improve considerably. The overall population growth rate in 2015 will be 2 percent, compared with 0.9 percent in with-AIDS scenario and 2.9 percent in a no-AIDS scenario (see Figure I.2). New HIV infection rates will start to decline in 2005, and fall below 15,000 per annum by 2015, compared with more than doubling of that number in the with-AIDS scenario. AIDS-related deaths would peak at about 30,000 in 2005 but decline to less than 10,000 by 2015. This contrasts with the 33,000 AIDS-related death projected for 2015 under the with-AIDS scenario.

25. Macroeconomic impact. The most remarkable macroeconomic impact is the increase in the overall growth rate of the economy, under the AIDS-with-intervention scenario compared with the with-AIDS scenario. Under the former, by the end of the program in 2008, nonmining GDP is projected to grow at a rate of 4.4 percent, compared with the with-AIDS scenario of 3.7 percent. By 2015, nonmining GDP would grow by 4.3 percent under the AIDS-with-intervention scenario, compared with the 2.5 percent projected for the with-AIDS scenario; however, the former rate is still less than the 5.2 percent projected in the absence of AIDS.

Figure I.2. Botswana: Demographic Changes in Three AIDS Scenarios, 1991–2015



Source: Spectrum Demographic Projection.

26. The positive performance of GDP arises from the larger labor force, which is projected at 425,000, compared with 320,000 in the with-AIDS scenario. In addition, efficiency and productivity are increased because of the intervention programs. In the program years, the contribution of capital declines (see Table I.4) but by the end of the program, the negative trend begins to reverse.

27. A crucial determinant of the overall outcome is the extent to which Botswana can attract the financial support of development partners in the prosecution of the war against the pandemic. The current results are based on the assumption that 50 percent of the cost would be financed from savings. In the event of a lack of donor support, and a greater reliance on domestic savings than projected, the outlook may be much worse than expected because the negative effect on capital accumulation would be greater.

Table I.3. Botswana: percentage Contribution to Changes in GDP, 2005–15

With-AIDS Scenario				
Change in	Due to Change in:			
	Real Output	TFP	Labor	Capital
2005	4.0	-1.8	-1.1	4.7
2008	3.7	-0.9	-0.5	4.1
2011	3.3	-0.6	-0.3	3.6
2012	3.2	-0.4	-0.1	3.5
2013	3.1	-0.3	-0.1	3.3
2014	2.8	-0.2	0.0	3.0
2015	2.5	-0.3	0.0	2.7

No-AIDS Scenario				
Change in	Due to Change in:			
	Real Output	TFP	Labor	Capital
2005	6.2	0.4	0.8	5.0
2008	5.9	0.4	1.0	4.6
2011	5.6	0.4	0.9	4.2
2012	5.5	0.4	1.0	4.1
2013	5.4	0.4	1.0	4.0
2014	5.3	0.4	1.0	3.9
2015	5.2	0.4	1.0	3.9

AIDS-with-intervention Scenario				
Change in	Due to Change in:			
	Real Output	TFP	Labor	Capital
2005	5.1	-0.4	0.7	4.8
2008	4.4	-0.2	0.9	3.8
2011	3.8	0.0	0.9	2.9
2012	3.6	0.1	0.9	2.6
2013	4.0	0.1	0.8	3.1
2014	4.2	0.3	0.9	3.1
2015	4.3	0.3	0.9	3.1

28. The effect on poverty and inequality. Recent estimates of the poor in Botswana indicate that about 47 percent live below the poverty datum line. Botswana's National



Poverty Strategy (2002), recognizes the crucial role played by poverty in the transmission of HIV/AIDS. High prevalence rates among the working population affect the traditional support network. As households spend more of their income on relatives' illnesses and funeral expenses, they sink more into poverty, and losing family members to HIV/AIDS create a negative income effect. Though improving the condition of the HIV-positive individuals would have salutary effect on poverty incidence, the overall effect is ambiguous since expenditures benefiting the poor could be disproportionately affected, because of the high fiscal outlay for the program, thus worsening the poverty situation.

### **G. Conclusion: The Policy Challenge**

29. In the context of the Botswana NSF, the substantial allocation of resources to a medium-term HIV management program is grounded in the potential impact of the strategy in reversing the impact of the HIV/AIDS on human development and macroeconomic performance. By committing substantial financial resources in the current period, in the long term, HIV-related death rates will be lower, patients would have longer and more productive lives, the number of orphans would be smaller and mother-to-child transmission rates could be considerably reduced.

30. Implementing the program would, however, put pressure on an already overburdened fiscal operation. In order to arrive at the true fiscal implications of the program, the government needs to integrate the National Strategy for Poverty and the NSF into the NDP 9 macroeconomic framework, so as to have a timely, comprehensive overview and overarching strategy to effectively deal with HIV/AIDS. Second, the trade-offs to committing resources to the fight against HIV/AIDS should be carefully weighed. The authorities should bear in mind the intergenerational issues involved in committing current resources to improving the future well-being of the country, a commitment that would have an impact on the development spending in other sectors.

31. The growth possibilities indicate that the high expenditure on the NSF program is justified if approached in an integrated fashion. One possibility open to the government is to prioritize the interventions proposed, based on cost-effectiveness, in meeting the goals of reduced/averted HIV infections. More detailed studies of how falling death rates and prolonged and more productive lives would translate into increased and productive labor force participation and positive effects on savings and investments could then inform the choices to be made. This could provide a basis for the authorities to further expand and update the BIDPA macroeconomic analysis of the impact of HIV/AIDS in Botswana.

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## **II. FISCAL POLICY CHALLENGES UNDER THE NINTH NATIONAL DEVELOPMENT PLAN, 2003/04–2008/09<sup>9</sup>**

### **A. Introduction**

32. Botswana's long record of fiscal prudence is a key feature of the country's strong overall economic performance over the last three decades. Despite implementing public investment programs that have vastly transformed the country's physical and social infrastructures and improved the provision of current public services, the government's budget has been kept in overall surplus during most of the last 20 years. These surpluses averaged about 9 percent of GDP between mid-1980 and 2000, and accumulated government savings in the form of deposits at the central bank remain high (29 percent of GDP at the end of 2003), despite recent declines associated with the partial privatization of the public service pension scheme.

33. In the last three years, deficits have emerged in the government's fiscal operations, owing mainly to temporary factors, but increasingly to developments in both revenue and expenditure that are more structural in nature. First, HIV/AIDS-related expenditures have risen sharply since 2001/02 and are expected to be a growing source of pressure on the budget over the medium term and beyond. Second, education spending has been growing rapidly, and the trend could continue under existing policies aimed at expanding ongoing programs at all levels of the educational system. Third, recurrent expenditures have increased rapidly for some time in most areas, including transfers to local governments. Fourth, there has been a broadly downward revenue trend, mainly reflecting the sluggish performance of nonmineral revenue. Against this backdrop, and in the absence of structural revenue and expenditure reforms, the fiscal outlook is likely to pose a challenge for the implementation of the Ninth National Development Plan (NDP 9), 2003/04–2008/09 (April–March), which Botswana launched in April 2003.

34. This paper reviews recent fiscal developments against the background of the broad macroeconomic framework of the NDP 9 (See Box II.1) and considers the challenges entailed in its successful implementation. Its broad conclusion underscores the importance of the reforms that the authorities have embarked upon to enhance revenue mobilization, achieve savings in public expenditures, and continually reexamine spending priorities.

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<sup>9</sup> Prepared by Patrick Akatu.

### Box II.1 Macroeconomic Targets of the NDP 9

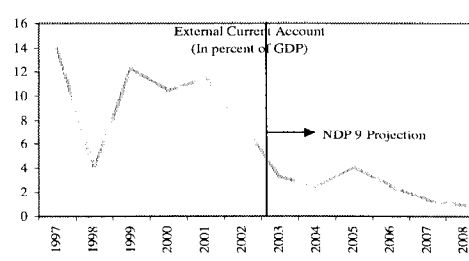
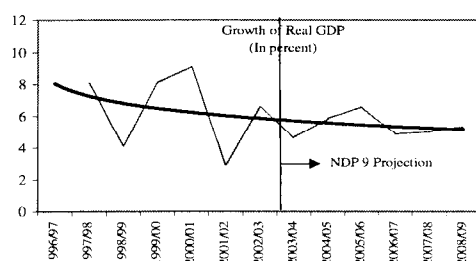
The NDP 9 targets an average real GDP growth of 5.5 percent a year, which is about the same average rate of growth (5.6 percent) achieved during the previous plan period, the Eight National Development Plan (NDP 8) 1997/98–2002/03 (April–March) (left chart). The nonmining sectors are projected to continue growing at a relatively fast pace, averaging about 7 percent a year, in response to the policies and reforms envisaged under the plan. Growth of the mining sector on the other hand, is projected to average less than ½ of 1 percent per year, compared with an average 5.3 percent rate of growth during the NDP 8, mainly because diamond production is assumed to be close to full capacity. However, recent productivity gains from the application of improved mining technology suggest that this assumption is likely to be unduly pessimistic.

Employment is targeted to grow by 5.6 percent per year, a stronger performance than under the NDP 8 (3.4 percent) but consistent with progress in diversifying the economy and the proposed investment in human capital. Private sector employment is projected to grow by an average of 7.7 percent a year, while growth in the public sector will be held to no more than 2.4 percent a year.

Investment is projected to increase from 26 percent of GDP in 2002/03 to an average of 30 percent over the plan period, with foreign direct investment rising steadily to over 5½ percent of GDP in 2008/09 from about 4 percent of GDP in 2002/03. While this target is recognized as ambitious, the planned privatization program and ongoing promotional efforts, including through the encouragement of joint ventures are expected to provide the necessary boost.

The government's investment program over the six-year period is estimated at P 35.7 billion (US\$7.4 billion), compared with actual development expenditure of P 20.4 billion (US\$4.3 billion) under the previous plan.

The external current account is projected to remain in surplus throughout the plan period. However, with diamond exports projected to remain unchanged in volume terms, the surpluses would decline sharply compared with the past (right chart). Diamond exports would grow by an average of 5.1 percent in pula terms, (18 percent during NDP 8) reflecting U.S. dollar price increases and a depreciation of the pula against the U.S. dollar with no increases in volume. Nontraditional exports (excluding diamond, other minerals and meat) are expected to expand by an average of nearly 17 percent per year in response to diversification policies. International reserves are expected to rise slowly from US\$6.8 billion in 2003/04 to US\$7.1 billion in 2008/09.



## B. Background

35. The overarching objectives of the NDP 9 are to diversify the economy away from mining, create employment, and reduce poverty.<sup>10</sup> Integral to these objectives is the goal of effectively combating HIV/AIDS, to which the government attaches the highest priority in view of the danger that the pandemic poses to economic gains of the past and the attainment of the economic and social objectives of the plan. The broad strategies of the NDP 9 include maintaining macroeconomic stability and financial discipline, implementing public sector

<sup>10</sup> The diamond sector accounts for about 35 percent of GDP, 72 percent of exports of goods and services, and 50 percent of government revenue.

reforms, including the privatization of public enterprises, and developing Botswana's human resources.<sup>11</sup>

36. The key objective of fiscal policy under the NDP 9 is to support macroeconomic stability. To this end, government will restrain expenditure as necessary to avoid crowding out the private sector, which is expected to emerge as the main engine of growth. Consistent with this broad objective, a balanced budget is envisaged over the NDP 9 period. In addition, in formulating the budget, the government will continue to be guided by a fiscal rule that seeks to channel mineral revenue into an expansion of the productive base to support future growth, as opposed to consumption. This rule requires that the ratio of noninvestment current expenditure to nonmineral revenue, referred to as the "sustainability," ratio be kept at or below 1.<sup>12</sup> It is envisaged that the sustainability ratio will be reduced to well below 1 by end-2008/09.

### **C. Recent Budgetary Developments**

37. The government's operations moved into deficit in 2001/02 for only the second time in nearly 20 years, owing mainly to an unanticipated fall in diamond revenue (of about 10 percent of GDP) and an increase in current expenditure (of 2 percent of GDP) (see table below). In 2002/03, a modest recovery in revenue was more than matched by an increase in expenditure, and, as a result, the budget deficit increased to about 4 percent of GDP from 3 percent of GDP in the previous year. Staff estimates indicate a movement close to an overall budget balance in 2003/04, largely based on an expected improvement in revenue of about 4 percent of GDP from the value-added tax (VAT), personal and company income taxes, and increase in Southern African Customs Union (SACU) receipts owing mainly to the pula depreciation against the South African rand.<sup>13</sup> The VAT revenue, however, significantly underperformed the 2003/04 budget estimates (1.5 percent of GDP), owing to problems of administration. Thus, while the downward trend in revenue since the mid-1990s accounts for some of the recent deterioration in the overall budget position, the increase in expenditure (5 percent of GDP since 2000/01) has been an important contributory factor.

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<sup>11</sup> The broad goals of the government's AIDS programs were articulated in a recent strategy document and include the following: strengthening prevention efforts; stepping up the provision of treatment, care and support for AIDS' patients; mitigating the social and economic impact of the pandemic; and improving the management of the country-wide response.

<sup>12</sup> Noninvestment current expenditure is defined as total current expenditure excluding outlays on health and education, which are regarded as investment in human capital.

<sup>13</sup> The VAT was introduced in July 2002 at a single, nonzero rate of 10 percent. It has a broader coverage of goods and services than the sales tax that it replaced. Petrol, diesel, paraffin, maize meal, sorghum meal and exports are zero-rated. The SACU comprises Botswana, Lesotho, Namibia, South Africa, and Swaziland. Customs and excise duties collected are paid into South Africa's National Revenue Fund, and the revenue is shared among members according to a revenue-sharing formula that was revised in 2002.

Table II. 1. Botswana: Central Government Operations, 1982/83-2003/04 1/  
(In percent of GDP)

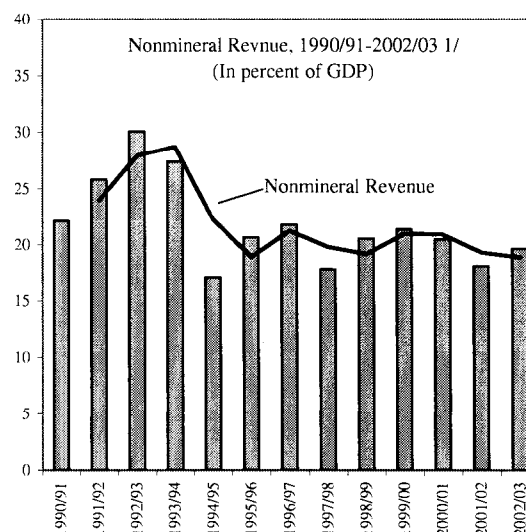
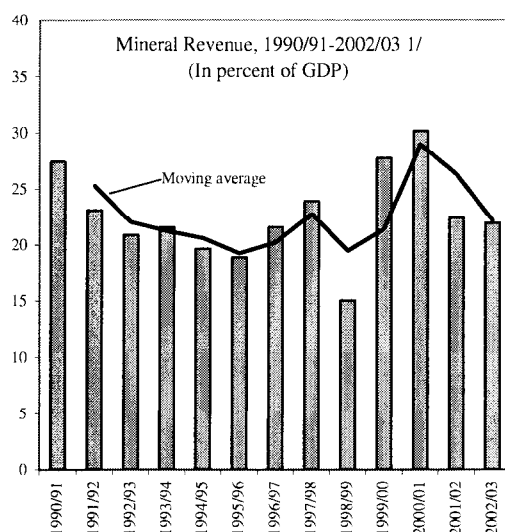
	1982/83- 1989/90	1990/91- 1994/95	1995/96- 2000/01	2000/01	2001/02	2002/03	2003/04	2003/04
	Average					Preliminary	Rev. Budget	Proj. 2/
Total revenue and grants	46.7	48.2	42.4	50.9	40.8	41.9	46.9	46.1
Revenue	44.7	47.0	41.9	50.7	40.6	41.6	46.4	45.5
Mineral revenue	23.1	22.5	21.4	30.2	22.4	21.9	21.8	21.9
Nonmineral revenue	21.6	24.5	20.4	20.5	18.1	19.9	19.7	23.6
Grants	2.3	1.2	0.5	0.2	0.2	0.2	0.5	0.5
Total expenditure and net lending	35.2	40.3	39.2	41.6	43.9	45.9	50.2	46.8
Current expenditure	19.3	23.2	26.3	30.2	31.9	33.9	36.9	37.2
Of which : education	5.1	6.4	8.1	8.6	9.9	10.5	10.0	10.1
health	1.4	1.6	2.0	1.9	2.4	3.2	2.3	2.3
Capital expenditure	13.3	13.6	13.5	11.3	11.9	11.2	14.4	10.8
Of which : education	1.7	2.0	2.8	1.8	1.8	1.5	2.1	2.1
health	0.6	0.4	0.4	0.3	0.4	1.0	1.6	1.6
Net lending	2.5	3.4	-0.6	0.1	0.1	0.9	-1.1	-1.1
Overall surplus/deficit (-)	11.5	7.9	3.2	9.3	-3.1	-4.1	-3.3	-0.7

Sources: Botswana authorities; and Fund staff estimates and projections.

1/ Fiscal year begins April 1.

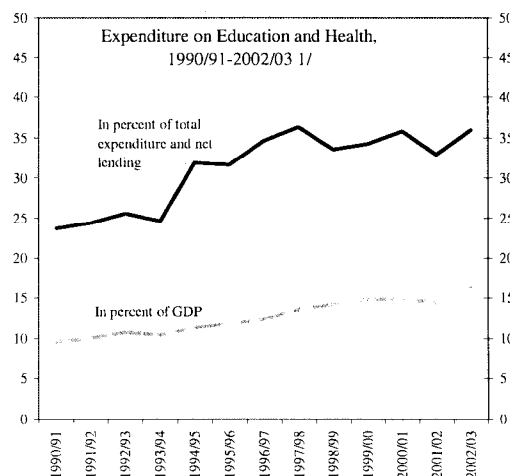
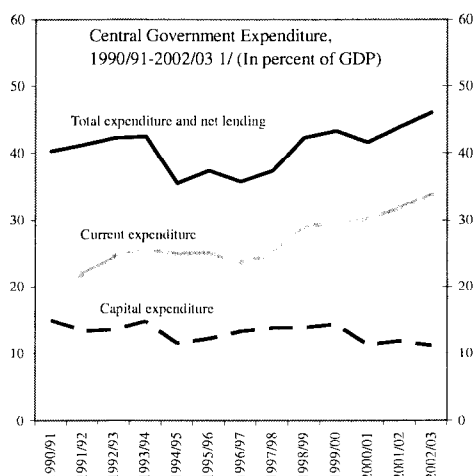
2/ Authorities' and staff estimates and projections.

38. On the revenue side, market-related factors have contributed to sharp fluctuation in mineral revenue, while nonmining revenue has remained well below its peak (30 percent of GDP) reached in 1993/94 (see figure). The main nonmineral sources of revenue are SACU receipts, income from the Bank of Botswana (BoB) profits, personal income and company taxes, and the VAT, which replaced the sales tax in 2002. Of these, SACU and BoB profits, which were much larger sources of revenue in the first half of the 1990s, have witnessed significant declines (see Figure II.1). Revenues from the other two sources, by contrast, have been growing in the last few years, but not nearly enough to fully offset the declines from SACU and BoB receipts. Moreover, problems of tax administration—mainly ineffective audits and follow-up—have been hampering the collection of personal and company income taxes, and of the VAT.



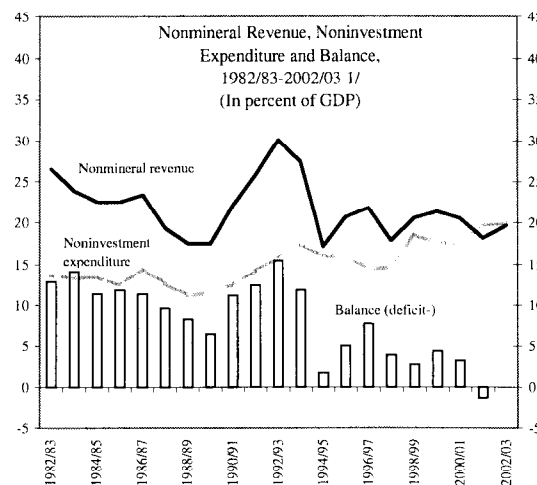
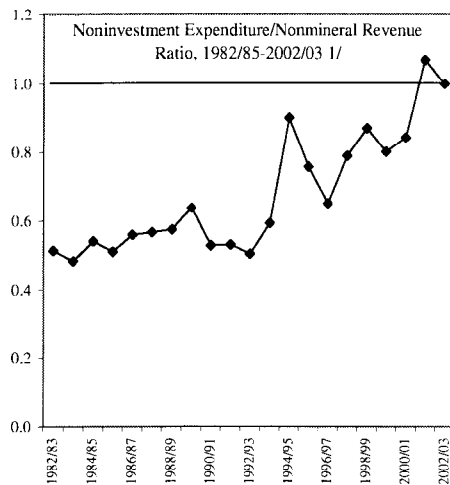
1/ Fiscal year begins April 1.

39. Government expenditure, in contrast, has risen sharply in recent years after remaining broadly stable at about 40 percent of GDP for about a decade (see figure below). Total expenditure and net lending reached a new peak (47 percent of GDP) in 2002/03, largely reflecting current spending on education, health, and general public services. Expenditure on current services increased from an average of about 26 percent of GDP in the five-year period ended 2000/01 to about 34 percent of GDP in 2002/03, with education and health spending accounting for about half of the increase. Capital expenditure was reduced sharply in 2001/01, partly reflecting capacity constraints in implementing public sector projects, and has since been kept at about 11 percent of GDP.



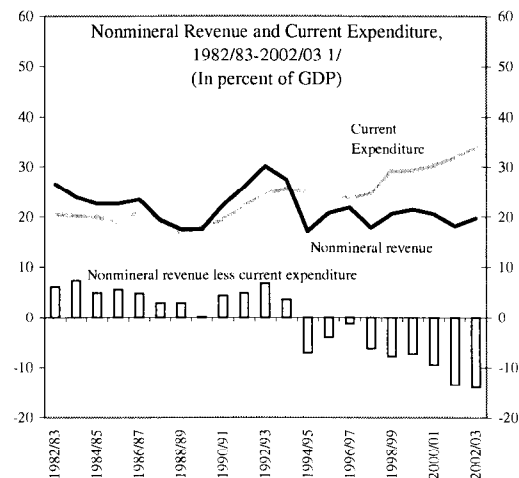
1/ Fiscal year begins April 1.

40. The fiscal rule has been observed consistently for more than 20 years, most of the time by wide margins. However, in the last few years, a combination of weak nonmineral revenue performance, especially since 1994/95, and strong growth in noninvestment expenditure has contributed to a steep rise in the sustainability ratio and a shrinking of the surpluses in the balance between nonmineral revenue and noninvestment expenditure (see figures below).



1/ Fiscal year begins April 1.

41. Both the increasing difficulty in adhering to the fiscal rule and the emergence of fiscal deficits since 2001/02 are a reflection of the divergence in the long-term nonmineral revenue and total current expenditure trends. Until 1993/94, nonmineral revenue in each year was sufficient to cover all current outlays and leave a balance for other purposes, including capital expenditure. However, since 1994/95, the balance between nonmineral revenue and current expenditure has moved into deficit, and this deficit has been growing steadily (see figure above). In 2003/04, this gap, which has had to be covered by mineral revenue, will reach 14 percent of GDP. With mineral revenue at 22 percent of GDP in recent years and capital expenditure maintained at about 11 percent of GDP, the government not surprisingly, found it difficult to avoid running into overall budget deficits in the last few years.



1/ Fiscal year begins April 1.



## **D. Meeting the Fiscal Challenges**

42. To return to the strong fiscal path of the past, or a balanced budget over the NDP 9 period as intended by the government, efforts are needed on both the revenue and expenditure fronts. On the revenue side, SACU receipts face considerable uncertainty arising from the tariff reductions that, in the context of the trade agreements between South Africa and the European Union, have yet to be phased in, the ongoing negotiations between SACU and the United States, and the new revenue-sharing formula due to go into effect in 2006.<sup>14</sup> Income from the BoB profits has been squeezed in recent years by relatively low equity prices and interest earnings on financial investment in the world financial centers, as well as by recent drawings on the BoB's reserves, as the government used its deposits at the bank to fund the privatized government employees' pension fund.<sup>15</sup> A recovery of revenue from this source to levels comparable to the past is unlikely. Revenue from personal and company taxes increased in 2002/03 by about 1.4 percent of GDP after several years of stagnation, mainly in response to a streamlining of tax legislation aimed at closing loopholes and supporting better enforcement. However, compliance remains a problem, and continued strong performance of revenue from both these taxes depends on the success of planned reforms aimed at strengthening tax administration. Moreover, the government has indicated that rates on both these taxes will be kept at the existing levels to serve as an incentive to attract foreign investment.<sup>16</sup> Similarly, while revenue from the VAT in six months of 2002/03 (3.6 percent of GDP) substantially exceeded sales tax revenue in the previous year (1.7 percent of GDP), earlier expectations about the full-year outturn have proved overly optimistic. Problems of administration have contributed to a significant downward revision in the original 2003/04 revenue estimates to be under 5 percent of GDP. Mineral revenue is likely to strengthen modestly over the medium term in light of the recent increase in diamond production. However, with the existing diamond mining industry reaching full production capacity, the prospects for strengthening revenue depends increasingly on the success of efforts to improve revenue from nonmineral sources.

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<sup>14</sup> The New SACU Agreement was covered in a recent staff paper, SM/04/5; 1/8/04). Under the new revenue-sharing formula, members' receipts have three components: a customs component, based on intra-SACU imports; an excise component, by which 85 percent of excise collections are shared according to members' shares of SACU GDP; and a development component for distributing the remaining 15 percent of union-wide excise collection.

<sup>15</sup> Transfers to private pension managers in respect of the accumulated benefits under the previous pension scheme since the Government began implementing the new pension system in 2001, reached P 10 billion (27 percent of GDP) at the end of 2003. In addition to the impact of the stock reduction, net earnings have also been reduced by the interest cost of BoB certificates, which had to be issued to drain excess liquidity in the banking system caused by the transfers.

<sup>16</sup> A top rate of 25 percent applies to personal and company income taxes, and the capital gains. Manufacturing companies are subject to a basic 5 percent rate and an additional rate of 10 percent.

43. On the expenditure side, health spending is set to grow rapidly as current and new HIV/AIDS programs are implemented. While the NDP 9 provides for a number of programs for combating the pandemic, a comprehensive framework, the National Strategic Framework (NSF) for HIV/AIDS (2003–08) was launched more recently.<sup>17</sup> An illustrative exercise by staff to integrate the estimated HIV/AIDS program expenditures in the NSF into the NDP 9 macroeconomic framework indicates that full implementation of the programs, after allowing for the expected donor assistance, could lead to budget deficits that are estimated to reach nearly 7 percent of GDP in 2008/09 (see table below). Education spending has been increasing rapidly and could continue, based on the expansion envisaged in the government's education programs including in the area of tertiary education. Two other factors are likely to put pressure on the budget. First, current expenditures associated with new public investment projects have been substantially understated under the previous plan and are likely to continue to be significant. Second, increases in project costs, which arise in large part from capacity-related delays in completing projects, are also likely to remain significant. Such upward revisions in project costs led to a doubling of the total development program under the NDP 8.

Table II. 2. Botswana: Government Operations--Baseline and Illustrative NSF Scenarios, 2000/01-2008/09 1/  
(In percent of GDP)

	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
			Prel.	Staff est.		Staff projections			
Baseline scenario									
Total revenue and grants	50.9	40.8	41.9	46.1	48.9	50.4	49.6	48.7	47.9
Total expenditure	41.6	43.9	45.9	46.8	50.0	50.6	50.6	49.3	48.2
Current expenditure	30.2	31.9	33.9	37.2	38.5	37.7	37.0	36.2	35.4
Capital expenditure	11.3	11.9	11.2	10.8	12.8	14.1	13.8	13.2	12.9
Overall budget balance (deficit-)	9.3	-3.1	-4.0	-0.7	-1.1	-0.2	-1.0	-0.6	-0.3
NSF scenario									
Total revenue and grants	50.9	40.8	41.9	46.1	48.9	50.4	49.5	48.7	47.9
Total expenditure	41.6	43.9	45.9	46.8	50.8	52.3	54.1	55.0	54.8
Current expenditure	30.2	31.9	33.9	37.2	38.8	38.6	39.6	40.3	40.4
Capital expenditure and net lending	11.3	11.9	11.2	10.8	12.0	13.7	14.5	14.7	14.4
Overall budget balance (deficit-)	9.3	-3.1	-4.0	-0.7	-1.9	-1.9	-4.6	-6.3	-6.9

1/Fiscal year begins April 1.

Staff projections are based on NDP 9 allocations to the Ministry of Health, and HIV/AIDS program cost estimates from the National Strategic Framework for HIV/AIDS 2003-2009.

44. The authorities recognize these challenges and have embarked on a number of reforms to address them. The VAT was introduced with a much broader base than the sales tax that it replaced, partly to shore up the government's revenue performance against possible declines in receipts from SACU and other sources. Measures taken to improve collections from personal and company income taxes have produced some results. To consolidate these efforts, the cabinet in November 2003, approved the setting up of the Botswana Unified

<sup>17</sup> National AIDS Coordinating Agency: *National Strategic Framework for HIV/AIDS 2003-09*. The NSF brings together all HIV/AIDS programs and projected expenditures, including identified donor funding, which is estimated at about 30 percent of projected total expenditure.

Revenue Service (BURS), which is planned to begin operating later this year. As regards expenditure, there is an emphasis on prioritization within the available resource envelope and stricter control of spending by line ministries and agencies. In 2004/05, for example, allocations to ministries are based on global ceilings for both current and capital spending, with no provision for inflation adjustments. Moreover, a range of user charges has been approved by the cabinet. In December 2003, water tariffs were raised by 23 percent, while others user charges are to follow in about two year's time. Included in the latter group are user charges on education and health, which are two areas where expenditures have been growing rapidly. Against the backdrop of the broad range of freely provided services and safety nets in place, the authorities expect any regressive impact of these user charges on the poor and vulnerable groups to be fully offset.<sup>18</sup> Ongoing civil service reforms aimed at improving productivity in the civil service are expected to generate cost savings, in addition to improved service delivery. The planned privatization program is also expected to ease the pressure on the budget, more likely beyond the medium term.

45. With the shift in the composition and balance between nonmineral revenue and total current expenditure the observance of the fiscal rule that has guided budget policy over the years may no longer guarantee an overall surplus or balanced budget as in the past. Indeed, if the rule had been observed in 2002/03, the overall budget deficit would have been only slightly lower, at 3.8 percent of GDP, as against the actual 4 percent. An overall deficit of about 0.7 percent of GDP is envisaged in 2003/04, even though the balance between noninvestment expenditure and nonmineral revenue is projected to show a surplus of 2.4 percent of GDP. Hence, while the existing rule remains relevant as a guide for the prudent use of mineral resources, it has become necessary to impose a second constraint on spending to better ensure the attainment of the government's overall budget objectives.

46. In the medium term and beyond, the revenue and expenditure adjustment efforts the authorities are implementing should pay appropriate dividends toward fiscal stability. From the staff's baseline scenario, Botswana's public debt appears sustainable under all shocks considered (Table 1).<sup>19</sup> In the near term, the authorities could achieve their twin budget objectives by adopting an approach to investment spending that is more internally consistent. In particular, current spending on education and health is regarded as "investment spending," even though they are not classified as development or capital expenditure in the budget. Their inclusion would raise the level of capital spending to about 25 percent of GDP in recent years. It could be argued that this level of investment spending provides room to reprioritize

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<sup>18</sup> These include an old-age pension scheme introduced in 1976, an orphanage support program for all orphans, and a destitute policy introduced in 1980 and revised in 2000. The National Poverty Program approved in 2003, as well as the NSF, reinforces these programs of support for the vulnerable.

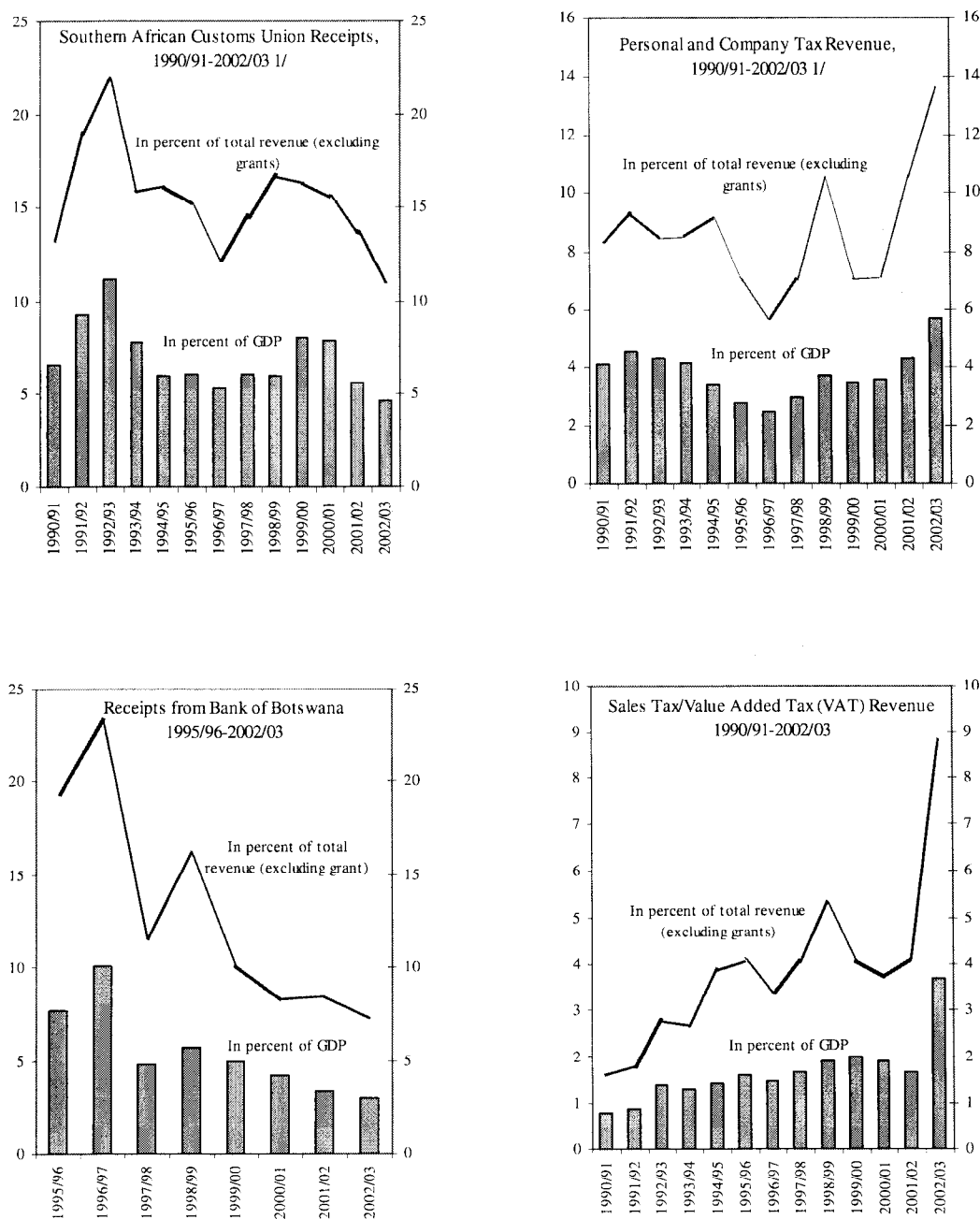
<sup>19</sup> Botswana's public debt has been historically low (under 10 percent of GDP in 2002). The first issue of domestic debt in 2003 in the form of bonds was only for the purpose of stimulating the development of the domestic financial market.

and reduce capital expenditure, in order to allow the authorities to achieve the objective of a balanced budget over the medium term. Moreover, this approach would be consistent with the objective of dedicating mineral revenue entirely to investment spending, as intended by the fiscal rule.

## **E. Conclusion**

47. The Botswana authorities face an uphill task in implementing the public investment programs under the NDP 9, while maintaining a balanced budget over the period of the plan. While the deposits built up by the government in the era of budget surpluses remain substantial and offer some scope for financing budget deficits on the scale of the last few years, a sustained effort at budget consolidation has become necessary, if the government is to cope with the spending pressures, especially on HIV/AIDS over the medium term and beyond. The authorities have embarked on reforms to strengthen revenue mobilization and improve expenditure efficiency, including cost recovery on a variety of public services, which could make an important contribution if implemented fully. However, in order to come to a firm assessment of the effort required, priority needs to be given to the full integration of the government's programs to address HIV/AIDS into the expenditure framework of the NDP 9. In this connection, the authorities have requested Fund technical assistance to help improve budget classification and tracking of social expenditures.

Figure II.1. Botswana: Nonmineral Revenue, 1990/91–2002/03



Source: Botswana authorities.  
1/ Fiscal year begins April 1.

Table II.3. Botswana: Public Sector Debt Sustainability Framework, 1998-2008  
(in percent of GDP, unless otherwise indicated)

	Actual										Projections					Debt-stabilizing primary balance 11/
	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>Public sector debt 1/</b>																
o/w foreign-currency denominated	11.0	10.9	10.8	10.4	9.0	9.5	9.4	10.3	8.9	8.0	8.7					
Change in public sector debt																
Identified debt-creating flows (4+7+12)	-0.2	-0.1	-0.4	-1.4	0.4	0.0	0.0	0.9	-1.5	-0.9	0.7	14.7	13.4	12.4	11.6	10.1
Primary deficit	-0.4	-0.4	-0.3	-0.2	-0.1	0.0	0.0	0.0	-0.1	-0.1	0.0	7.8	1.3	1.2	1.1	1.0
Revenue and grants	-0.5	-0.1	-0.9	-0.5	-0.3	-0.2	-0.2	-0.2	-0.2	-0.2	0.0	5.9	-1.3	-0.9	-0.8	-0.7
Primary (noninterest) expenditure	51.4	40.3	39.3	43.2	42.7	37.4	46.5	49.7	43.2	41.5	1.1	0.5	0.2	0.6	0.6	0.2
Automatic debt dynamics 2/	41.9	36.2	36.4	35.7	36.5	40.4	42.7	40.9	41.9	45.0	44.8	48.2	50.0	49.7	48.9	48.4
Contribution from interest rate/growth differential 3/	0.1	-5.2	-2.4	-0.3	0.1	-0.3	0.2	3.2	-0.5	-0.2	0.0	-0.2	-0.6	-0.5	-0.5	-0.2
Of which contribution from real interest rate	0.0	-0.2	-0.8	-1.2	-1.0	-0.7	-0.9	-1.3	-0.5	-0.2	0.1	-0.2	-0.6	-0.5	-0.5	-0.2
Of which contribution from real GDP growth	-0.2	0.2	-0.2	-0.3	-0.7	-0.5	-0.2	-0.4	-0.6	-0.2	0.1	0.2	0.0	0.0	0.0	0.0
Contribution from exchange rate depreciation 4/	-0.2	-0.4	-0.4	-0.5	-0.5	-0.5	-0.5	-0.5	-0.7	-0.3	0.0	0.0	0.0	0.0	0.2	0.4
Other identified debt-creating flows	0.1	-5.0	-1.6	1.5	1.1	0.4	1.1	4.5	0.0	0.0	0.0	-0.4	-0.6	-0.3	-0.4	-0.4
Privatization receipts (negative)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Repayment of implicit or contingent liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other (specify, e.g. bank recapitalization)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Residual, including asset changes (2-5) 5/	9.2	9.2	4.9	5.8	6.6	-2.7	4.5	4.1	0.9	-2.5	5.1	-1.1	-0.7	-1.0	-1.1	-0.9
Public sector debt-to-revenue ratio 1/	21.2	26.7	26.5	20.9	22.1	25.2	23.2	17.8	18.5	21.0	32.7	27.7	24.8	23.3	22.1	21.0
<b>Gross financing need 6/</b>																
in billions of U.S. dollars	-7.5	-2.1	-1.0	-6.1	-5.0	4.1	-2.5	-7.7	-0.3	4.5	2.2	1.5	1.4	1.7	1.6	1.1
	-0.3	-0.1	0.0	-0.3	-0.3	0.2	-0.1	-0.4	0.0	0.2	0.2	0.1	0.1	0.1	0.1	0.1
<b>Key Macroeconomic and Fiscal Assumptions</b>																
Real GDP growth (in percent)	2.1	3.5	4.5	5.7	6.7	5.9	6.3	8.6	3.4	3.9	5.4	4.5	3.7	3.6	3.6	3.5
Average nominal interest rate on public debt (in percent) 7/	7.9	7.6	7.0	6.6	6.2	5.0	4.7	4.2	4.2	6.2	7.3	4.0	3.9	3.7	3.6	3.6
Average real interest rate (nominal rate minus change in GDP deflator, in percent)	2.5	1.8	-3.2	-7.7	-5.7	-2.2	-4.2	-5.7	-2.5	1.2	2.6	3.0	0.0	-0.1	1.7	3.6
Nominal appreciation (increase in US dollar value of local currency, in percent)	-0.1	5.8	2.2	-2.6	-2.5	-1.4	-3.7	-15.6	0.0	0.0	-1.8	5.6	...	...	...	...
Inflation rate (GDP deflator, in percent)	5.4	5.7	10.3	14.4	11.9	7.2	8.9	9.9	6.7	5.0	8.5	3.1	...	...	...	...
Growth of real primary spending (deflated by GDP deflator, in percent)	11.3	-5.7	3.5	3.7	8.2	13.5	9.2	1.8	6.3	12.9	8.5	5.9	7.0	11.0	7.6	4.2
Primary deficit	-9.5	-4.1	-2.9	-7.5	-6.3	-2.9	-3.8	-8.8	-1.3	3.4	-3.8	4.3	...	...	...	...
<b>Alternative Scenarios</b>																
A1. Key variables are at their historical averages in 2004-08 8/																
A2. Primary balance under no policy change in 2004-08																
A3. Country-specific shock in 2004, with reduction in GDP growth (relative to baseline) of one standard deviation 9/																
A4. Selected variables are consistent with market forecast in 2004-08																
<b>B. Bound Tests</b>																
B1. Real interest rate is at historical average plus two standard deviations in 2004 and 2005																
B2. Real GDP growth is at historical average minus two standard deviations in 2004 and 2005																
B3. Primary balance is at historical average minus two standard deviations in 2004 and 2005																
B4. Combination of 2-4 using one standard deviation shocks																
B5. One time 10 percent real depreciation in 2004 10/																
B6. 10 percent of GDP increase in other debt-creating flows in 2004																

1/ Includes coverage of public sector, e.g. general government or nonfinancial public sector. Also whether net or gross debt is used.

2/ Derived as  $[1 - (d1/r1) - (g + \alpha)(1 + r1)/(1 + g + \alpha)]$  times previous period debt ratio, with  $r1$  = interest rate,  $g$  = real GDP growth rate,  $\alpha$  = share of foreign-currency denominated debt, and  $\epsilon$  = annual exchange rate depreciation (measured by increase in local currency value of U.S. dollar).

3/ The real interest rate contribution is derived from the denominator in formula 2/ as  $r - \pi(1 + g)$  and the real growth contribution as  $-g$ .

4/ The exchange rate contribution is derived from the numerator in formula 2/ as  $\alpha g(1 + r1)$ .

5/ For projections, this line includes exchange rate changes.

6/ Defined as public sector deficit, plus amortization of medium and long-term public sector debt, plus short-term debt at end of previous period.

7/ Derived as nominal interest expenditure divided by previous period debt stock.

8/ The key variables include real GDP growth, real interest rate, and primary balance in percent of GDP.

9/ The implied change in other key variables under this scenario is discussed in the text.

10/ Real depreciation is defined as nominal depreciations (measured by percentage fall in dollar value of local currency) minus domestic inflation (based on GDP deflator).

11/ Assumes that key variables (real GDP growth, real interest rate, and primary balance) remain at the level in percent of GDP/growth rate of the last projection year.

### III. FINANCIAL SECTOR DEVELOPMENT AND REFORM<sup>20</sup>

#### A. Introduction

48. Recent economic developments have highlighted the need for an efficient financial system in Botswana. The plateauing of the diamond production (a major source of growth) highlights the need for a private sector-led economic diversification. For diversification to succeed, it is crucial to develop a financial system that efficiently mobilizes private savings to finance investments. The authorities have recognized the vital role of the financial sector and have included its transformation as one of major objectives in the Ninth National Development Plan (NDP 9).

49. The need for financial sector reform became more evident when the government shifted its public officers' pension scheme from a defined-benefit to a defined-contribution system. The government partially privatized the scheme and has, since July 2001, transferred part of the accumulated civil servants' pension claims of about P 10.5 billion (27 percent of GDP) to the private fund managers.<sup>21</sup> This has led to large injections of liquidity in domestic financial system. However, with few opportunities for investment in the local capital markets, investments abroad, as well as investment in the Bank of Botswana Certificates (BoBCs), have increased significantly. The volume of outstanding BoBCs almost doubled to P 10.2 billion from 2001 to 2003. The Bank of Botswana (BoB) has offered high return on the BoBCs in order to stem off inflationary pressure from the excess liquidity, and it has been successful in doing so. However, this has come at a high price: the BoB has been burdened with high interest rate costs, and the concentration of funds in BoBCs has disrupted an efficient allocation of resources that could otherwise have been used to finance private investments and enhance diversification. The privatization of the public pension fund scheme also contributed to the decline in the international reserves in months of imports, which, albeit still high by international standards, fell from 33 months to 25 months due to the demand for foreign exchange by private fund managers seeking investment opportunities overseas.

50. Botswana's financial system is in need of a strengthened prudential framework. This need is driven not only by the substantial resources the government has put at the disposal of the private pension fund managers, but also by the offshore financial center (OFC), the International Financial Services Center (IFSC), which was established in 1999. The main objective of setting up the IFSC was to increase employment and expertise in financial services, in order to make Botswana a financial hub for the sub-Saharan African countries. The authorities anticipate the IFSC to play an important role in developing the local financial market. However, the existing regulatory and legal framework is not well established for the

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<sup>20</sup> Prepared by Jung Yeon Kim.

<sup>21</sup> For details on the privatization of the pension scheme, see Poddar (2002).

supervision of nonbank financial institutions (NBFIs), in particular those operating under the IFSC, as well as of the private pension funds. While the responsibilities for regulating and supervising banks lie with the central bank, the supervision of the NBFIs and pension funds currently fall under the Ministry of Finance and Development Planning (MFDP), which has a limited capacity to discharge these duties.<sup>22</sup> Given the special concerns regarding the operation of OFCs and global initiatives for anti-money-laundering (AML) activities, and considering the size of the liquidity linked to pension funds in Botswana's financial system, there is an urgent need to upgrade the existing regulatory framework. Thus, the promotion of an efficient financial system, supported by a comprehensive supervisory framework, has become an important economic reform requirement to ensure long-term sustainability and to maintain the integrity of the economy, which has recorded one of the highest credit ratings in Africa.

51. This paper reviews developments and reforms in the financial system in Botswana. Subsection B provides an overview of the sector, and Subsection C discusses developments leading to, and the progress of ongoing financial reforms in, the financial intermediaries and in the capital market operation. Subsection D discusses the supervisory and regulatory framework for financial institutions, and Subsection E draws the conclusions of this paper.

## **B. Overview of the Financial Sector**

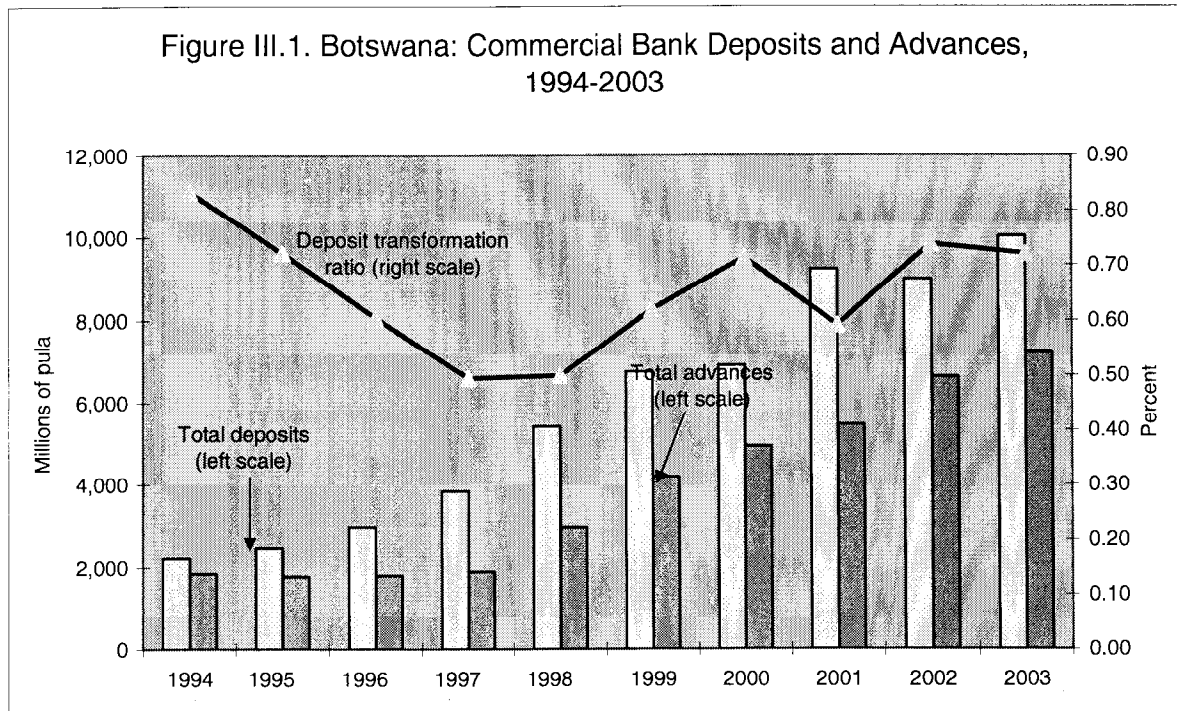
52. Earlier growth in Botswana's financial sector was owed largely to the robust economic expansion in the past decades fueled by diamond production. Since the establishment of the central bank in 1975, and until the mid-1980s, the BoB exercised a considerable degree of direct control over the operation of commercial banks with respect to maximum lending and minimum deposit rates. The BoB also imposed exchange controls on capital transactions. Real interest rates were low or negative, and encouraged some inefficient and marginal investments. Nevertheless, there was a rapid growth of financial savings (Figure III.1), largely owing to the rapid economic growth in the past decades, which fueled a near tripling of GDP per capita since the 1980s.

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<sup>22</sup> The BoB supervises the banking sector, namely, commercial banks, the Botswana Savings Bank (BSB), and the Collective Investment Undertaking (CIU). The MFDP supervises mostly the NBFIs including the National Development Bank (NDB), the Botswana Building Society (BBS), insurance companies, and pension funds.



Figure III.1. Botswana: Commercial Bank Deposits and Advances, 1994-2003



Source: Bank of Botswana.

53. The institutional structure and the type of financial services also expanded, influenced by growth performance and global financial innovations. Currently, the financial sector includes the central bank (the BoB),<sup>23</sup> five commercial banks,<sup>24</sup> two investment banks, and other finance institutions.<sup>25</sup> A relatively active insurance industry and pension fund operate in Botswana (with 13 insurance companies and over 100 private pension funds). Also included are the Botswana Development Corporation (BDC) and National Development Bank (NDB), which are both owned by the government, and the Public Debt Service Fund (PDSF) which was the government's direct lending facility to public enterprises until 2002. In addition, the IFSC, whose services include banking, the funds management and administration, captive insurance, and financial intermediaries, has been operating in Botswana since 1999. As of end-2003, 20 companies were operating under the IFSC. A total of 25 companies and

<sup>23</sup> For details on monetary policy, see Subsection D.

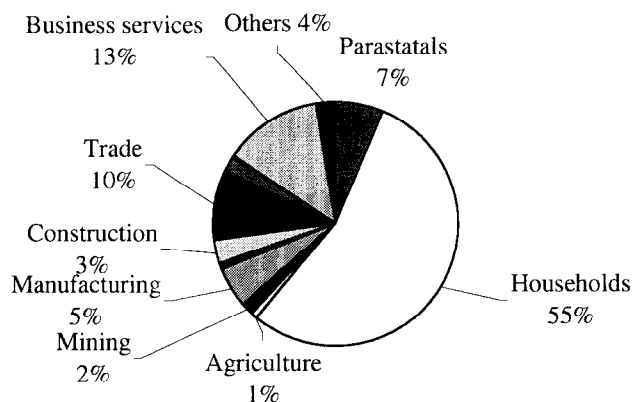
<sup>24</sup> Commercial banks include Barclays, the Standard Chartered Bank, Stanbic, the First National Bank, and the Bank of Baroda.

<sup>25</sup> Leasing finance institutions, the Collective Investment Unit (CIU), the Botswana Savings Bank (BSB), the Botswana Building Society (BBS), the Botswana Stock Exchange (BSE), and several microlenders are included.

32 securities firms are listed on the Botswana Stock Exchange (BSE), which began operation in 1989.

54. Lending by financial institutions has grown rapidly. As of end-2002, the total outstanding loans and advances by banks, NBFIs, and the government through PDSF loans totaled about P 10.5 billion (31 percent of GDP), a large increase from about P 1.8 billion (13 percent of GDP) in 1990. The households surpassed the business sector as the largest borrower in the economy in 2001. As of September 2003, households' outstanding credit accounted for 55 percent of total loans. In terms of sectors, the retail and wholesale trade sector dominated credits to business until the early 1990s; however, this sector has been overtaken by the business services sector (14.8 percent) and the trade sector (8.7 percent of total loans) (Figure III.2).

Figure III. 2. Botswana: Commercial Bank Loans and Advances by Sector, September 2003



Source: Bank of Botswana.

55. The commercial banks have dominated other financial intermediaries in Botswana.<sup>26</sup> The commercial banks, of which all are subsidiaries of foreign banks, accounted for over 90 percent of total deposits and advances of deposit-taking institutions in 2002. The largest

<sup>26</sup> The government has remained the major net saver, accounting for over 65 percent of the central bank's total liabilities in 2001. Government deposits declined, however, since the transfer of public officers' claims to the pension funds, to about 40 percent of the BoB's total liability as of August 2003.

share of this segment is held by Barclays and the Standard Chartered Bank.<sup>27</sup> Overall, the banking industry is financially sound, solvent, profitable, and highly liquid, with banks maintaining prudential ratios in excess of statutory requirements (15-20 percent capital adequacy ratios) and low ratios of nonperforming loans (NPLs) (Table III. 1). However, commercial banks' lending is dominated by overdrafts and short-term loans, with a large proportion being accounted for by loans with maturities of up to three years (Figure III. 3). The ratio of total advances to deposits has stayed roughly in the 60-70 percent range since 1999, down from 83 percent in 1994, partly because of increased investment in the BoBCs. Recent survey by the Botswana Institute for Development Policy Analysis (BIDPA, 2003), a nongovernmental research organization, suggests that bank charges are high and banking services need improvement.<sup>28</sup> As of end-2000, about 43 percent of the population held bank accounts, compared with 32 percent in 1990.

Table III.1. Botswana: Commercial Banks Measures of Soundness and Efficiency, 1998-2002 1/  
(In percent, unless otherwise indicated)

	1998	1999	2000	2001	2002
Regulatory capital to risk-weighted assets 2/	16.0	17.2	27.1	27.6	20.2
Past due advances (NPLs) to total advances 3/	2.4	3.9	1.7	4.1	3.5
Loan loss provisions to NPLs	43.5	58.2	96.1	118.3	131.8
Liquid assets to total assets	29.5	27.5	21.5	23.7	19.6
Total advances to deposits	53.9	60.3	70.5	57.7	71.4
Return on average assets	3.3	3.4	3.9	4.0	4.3
Return on equity	43.1	46.4	37.7	40.6	43.8
Net spread	5.8	6.7	7.6	9.4	9.1
Net interest margin	5.7	6.5	6.3	6.8	7.0
Interest income to gross income	77.2	79.6	79.3	78.2	77.4
Net operating margin	8.7	9.4	7.1	10.0	5.3
Cost-to-income ratio	41.4	44.4	41.7	44.2	47.2

Sources: Bank of Botswana (2001, 2002 and 2003).

1/ For 2003, data as of end-September.

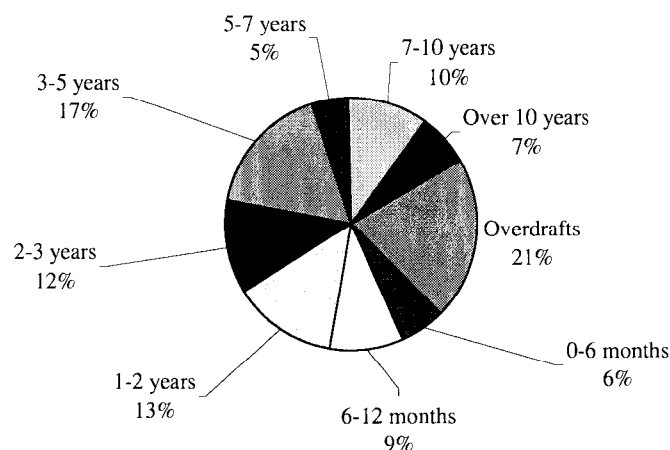
2/ Average capital adequacy ratio of banks in Botswana.

3/ Arrears on loans and advances over six months. From 2001, due to the change in reporting requirements, the figures are loans over 90 days.

<sup>27</sup> The market shares of value of deposit liabilities (advances) as of end-2002 were 34 percent (35 percent) and 25 percent (23 percent) for Barclays and the Standard Chartered Bank, respectively.

<sup>28</sup> On average, banks in Botswana charge P 14.67 (P 8.00) for over-the-counter withdrawals (deposits), while South African banks charge on average the equivalent of P 9.73 (P 1.76). The average bank charge for interim bank statement is the equivalent of P 2.41 for banks in South Africa, whereas in Botswana the charge is P 20.90.

Figure III. 3. Botswana: Commercial Bank Loans and Advances by Maturity, September 2003



Source: Bank of Botswana.

56. The increase in the flow of funds to NBFIs, in particular, to contractual savings institutions,<sup>29</sup> has been one of the major developments in the financial sector over the past decade. In 1998, total assets under the management of the contractual savings sector were P 64 million. In 2003, due to the partial privatization of pension scheme, about P 10.5 billion in civil servants' accumulated pension claims has been transferred from the government to private pension funds, as mentioned above. Meanwhile, data from the BoB suggest that households have been increasing their holdings of contractual savings assets much faster than their deposits in the banking system. In 1988, pension and life assets were equivalent to 35 percent of deposits held by households in the banks, but by 2000 pension and life assets had surpassed bank deposits, indicating the diversification of household savings held as financial assets.

57. The government's presence in the financial system has been gradually reduced in recent years. The largest government scheme was the PDSF, which had been financing the public enterprises until 2002, when the government decided to shift its funding toward commercial sources of finance. The Financial Assistance Policy (FAP), which provided grants to new or expanding enterprises and the Small, Medium, and Micro Enterprises (SMME),<sup>30</sup> which provided subsidized loans to approved borrowers, have been replaced by a

<sup>29</sup> These include the insurance companies, brokers/agents, private pension funds, and fund managers.

<sup>30</sup> The FAP was established in 1982, and by its closure in mid-2001, it had lent about P 901 million (2.6 percent of GDP), while the SMME, which was established in 1999, had lent P 10.8 million by 2001. Both the FAP and SMME loans were transferred to the Citizen Entrepreneurial Development Agency (CEDA) in August 2001, to improve the effectiveness of these loan schemes.

new agency, the Citizen Entrepreneurial Development Agency (CEDA), which provides subsidized loans to commercially viable enterprises. As of end-2003, the CEDA had received a total of 5,293 applications and approved 1,053 projects, valued at P 592 million (1.6 percent of GDP), of which 82 percent had been disbursed. The majority of funds was allocated to the commerce (44 percent) and retailing (23 percent) sectors.

58. Although there have been ongoing efforts to boost capital market activities, significant room remains for further improvement. The BSE has grown in size since its establishment in 1989, and the number of listed companies had increased from 5 to 17 as of end-2003 (Table III. 2). Over that period, the domestic company index (DCI) rose from 100.0 to 2,394.5, and market capitalization rose from P 120 million to P 15.6 billion. The BSE experienced a temporary boost in its activities during 2002, as the government undertook a partial privatization of the civil servant pension scheme. The BSE's DCI grew by 2.6 percent in pula terms (16 percent in U.S. dollar terms), largely reflecting the transfer of assets by private pension fund managers to the stock market. The nominal value of the bond market also grew by 85 percent during this period. However, the effect was short-lived: there was virtually no trading in the commercial paper and bond markets during 2003, and the yields on these securities have remained stable. A more fundamental problem of the BSE is that assets traded are illiquid, as measured by the turnover ratio,<sup>31</sup> which is much lower than that of other emerging markets. A large proportion of shares on the BSE are held either by controlling interests or by local institutional investors, who are unwilling to sell for fear of loss of control and because of a lack of alternative investment opportunities.

Table III. 2. Botswana: Activities of Botswana Stock Exchange, 2001-2003

Year	2001	2002	2003
Number of domestic companies	18	17	17
Number of foreign companies	7	6	6
Number of bonds listed on BSE	4	5	6
Number of commercial paper listed	1	1	1
Total number of securities	30	31	32
Domestic company index (DCI)	2,455.4	2,493.0	2,498.7
Foreign company index	648.7	492.1	567.3
All-company index	701.6	541.3	618.4
Market capitalization (in millions of pula, all companies)	182,127	135,796	156,751
Volume traded (in millions of pula)	95,053,191	67,113,685	55,346,811
Value traded (in millions of pula)	682,977	376,466	55,347
Turnover ratio	3.8	2.8	0.4

Source: Botswana Stock Exchange.

<sup>31</sup> The total value of stocks traded during a year relative to average market capitalization.

### C. Reforms in the Financial Sector

59. During the Seventh National Development Plan (NDP 7, 1991-1997), the authorities recognized the critical role of the financial sector and began implementing reform measures. In 1986, interest rate controls were lifted, and the financial sector expanded with the introduction of the BoBCs as a tool for indirect monetary control. This was followed by the liberalization of licensing requirements for the commercial banks, reforms in the NBFIs, and enhancement of prudential supervision and the payment system (Table III. 3). However, further efforts are needed to enhance the price-discovery mechanism of liquidity, and to develop the domestic capital market. Such efforts need to be accompanied by a strengthened supervision and regulatory framework.

Table III. 3. Botswana: Financial Sector Reforms, 1986-2003

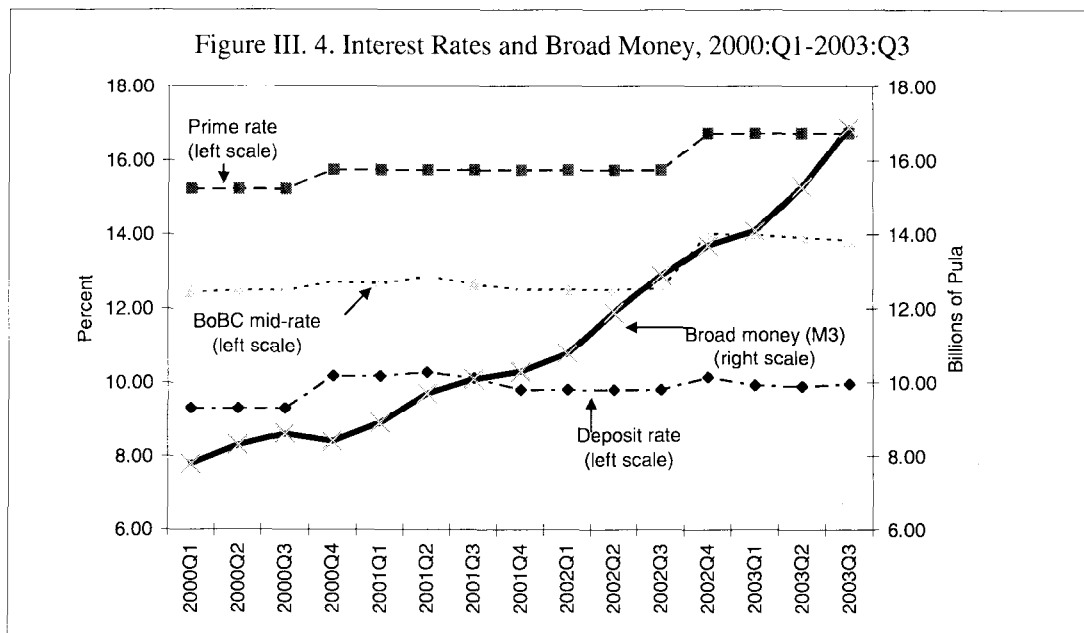
Year	Reform Measures
1986	Removal of control on interest rates
1989	Establishment of Botswana Stock Exchange (BSE)
1990	Liberalization of commercial bank licensing requirements
1991	Introduction of BoBCs
1995-96	Modernization of legislation (revised Bank of Botswana Act; Banking Act)
1999	Removal of foreign exchange controls
2000	Launching of IFSC operations
2001	Privatization of pension scheme for public officers
2003	Introduction of 2-, 5-, and 12-year government bonds

Source: Bank of Botswana.

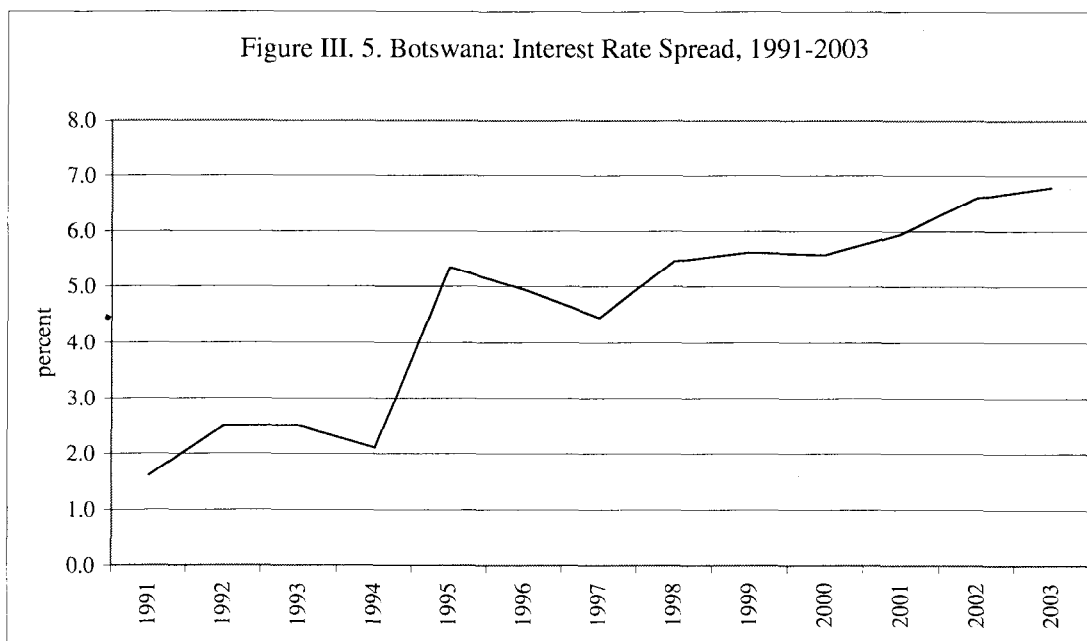
#### Pricing of liquidity in the money market

60. The interest rates are high, and the spread has been widening despite the excess liquidity in the market following the privatization of pension funds (Figure III. 4 and III. 5). This can be attributed to the lack of domestic absorptive capacity and the low level of competition among banks, which is also reflected in the rising bank charges, high reliance of banks on noninterest income,<sup>32</sup> and the informal arrangement of interbank rates at 1 percent below the Bank rate by commercial banks.

<sup>32</sup> The ratio of noninterest income (the bulk of which comprises commissions and fees) to total income for commercial banks in Botswana was about 23 percent between 1996 and 2001; in comparison, the ratio for Mauritius during that period was 17.3 percent.



Source: Bank of Botswana



Source: Bank of Botswana

61. Interest rates in Botswana do not reflect appropriately the market liquidity condition. This can be attributed to the following. First, as mentioned above, the interbank rate has been set at 1 percent below the Bank rate by an informal agreement. Second, interbank activities are low because banks prefer to transact in repos or reverse repos with the central bank to

meet the daily liquidity requirements, which is offered at the same rate as the interbank rate. There is no price incentive for banks to look first to the interbank market to place or borrow funds overnight. Third, the short-term interest rate—the BoBC rate—has followed closely the direction of Bank rate, as the central bank had been, de facto, targeting the price of BoBCs than quantity through the uniform price auction method.<sup>33</sup> Fourth, the prime lending rate has been consistently 1.5 percent above the Bank rate. As a result, the interest rates in Botswana reflect closely the direction of monetary policy, as they are linked systematically to the Bank rate, but do not mirror the liquidity condition in the market. Such arrangements have not been conducive to the most efficient channeling of liquidity, and may have disrupted the transmission of monetary policy adjustments.

62. The functioning of the price-discovery mechanism has also been complicated by an economic structure dominated by the mining sector. The amount of liquidity buildup in the banking system depends largely on the timing of tax payments from major taxpayers in the mining sector, who pay taxes on a quarterly basis.<sup>34</sup> Meanwhile, the Southern African Customs Union (SACU) payments and transfers to local governments have been lumpy as well, disrupting the smooth flow of liquidity in the financial system.

63. While financial intermediaries have invested heavily in the BoBCs, due to their attractive return and very low risk, the secondary market trading for BoBCs has been slow to develop. Investors tend to hold the BoBCs until maturity owing to a lack of investment alternatives. In addition, secondary market activities for the BoBCs have been dominated by transactions with the BoB, rather than among banks. This is because the BoB has committed itself to buying the BoBCs along a yield curve based on the auction cutoff rate, so that participants in the market have no incentive to seek out buyers in the private market. This has discouraged the discovery of the price of liquidity in the market.

64. The authorities have formulated various policies to enhance price discovery in the money market and to reflect accurately future expectations concerning the interest rates. In 2001, the BoB shortened and standardized the BoBC maturity period to 91 days because shorter maturities would attract lower interest rates. The BoB also introduced weekly auction schedules to increase flexibility in liquidity management. Effective May 1, 2004, the BoB will conduct the BoBC auctions using a multiple price format. This will ensure that BoBC counterparties submit competitive bids, reflecting the liquidity conditions in the money market, and better mirroring expectations about future interest rates. In addition, the BoB is embarking on a gradual process of withdrawing from the secondary market by restricting the trades to P 25 million per deal. With inflation declining, the BoB is also working to reduce

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<sup>33</sup> Under the uniform price auction system (the Dutch system), all successful bids are allocated at a uniform price, as long as the bids are at or above the minimum acceptable price.

<sup>34</sup> The diamond sector (comprising one large company, Debswana) accounted for over 50 percent of total revenue in 2002/03 (April-March), (60 percent of beginning-of-period M3 money stock).



the current high BoBC rates and has arranged for the banks in Botswana to share credit information on borrowers—a move that could help lower the current high real interest rates and provide investment incentives for the private sector.

#### **D. Development of Domestic Capital Market**

65. The recent partial privatization of the civil servants' pension scheme and the resulting transfer of government funds have highlighted the need to develop the domestic capital market and financial instruments that will cater to the new forms of savings. In particular, the pension funds generally invest a large proportion of funds in long-term instruments to match the risk, return, and maturity profiles of their liabilities, rather than in bank deposits. Without access to a broad range of instruments in domestic capital markets, the market remains vulnerable to capital outflow, as investors seek profit opportunities overseas that match their needs. Institutional investors operating in Botswana are required to hold at least 30 percent of their portfolios as domestic assets, and the remaining can be invested offshore. So far, owing to the attractive return on the BoBCs, the domestic asset portfolios remain well above the 30 percent floor. However, this may change, depending on developments in domestic interest rates and global financial market conditions. The privatization of the civil servants' pension scheme, if accompanied by appropriate policy measures, could benefit the financial system, as there will be considerable demand from savers for financial instruments with the risk, return, and maturity characteristics that capital markets generally provide, in the form of equities and longer-term bonds. In light of this demand, firms and public enterprises earmarked for privatization should find it more attractive to issue such instruments. As in the case of Chile, pension privatization could result in a significant development of local capital market and financial services.

66. To develop the domestic capital market, the government introduced 2-, 5-, and 12-year bonds in 2003. This widened the selection of investment instruments and enabled the establishment of a relatively risk-free yield curve to serve as a benchmark for other bond issues. The bonds were targeted to raise about P 2.0-2.5 billion, under the presumption that concentrating on a limited number of issues would facilitate the development of an active secondary market, which is essential for a well-functioning capital market. Up to 20 percent of the bonds could be purchased by foreigners, as it would increase price competition and liquidity and bring sophisticated trading and investment techniques to the market. The bonds were oversubscribed, indicating high demand for these assets, but secondary market transactions have so far been limited. To facilitate bond trading, the authorities plan to list the government bonds on the BSE.

67. The authorities have taken various measures to enhance activities in the BSE. Recognizing the importance of a stock exchange in the development of the capital market, the authorities have eased the stock market listing requirement and have also provided for the favorable treatment of capital gains on the disposal of shares. The authorities also abolished the double-tax burden on dividends. The government has set up a Central Securities Deposit to improve securities transactions, and will draft a Securities Bill in 2004/05 to replace the

outdated Botswana Stock Exchange Act (1994). The government also proposes to float additional bonds on the local bourse in the coming year. While encouraging the public enterprises to list on the BSE, the government also took steps to sell the public loan book of the PDSF (amounting to 2.8 percent of GDP) to the private sector. These actions are expected to encourage capital market development. Further changes in the law and reform measures are needed, so that local governments, public utilities, and other investors can raise capital through the BSE, and in order to promote a mortgage industry in Botswana.

### **E. Strengthening of Regulatory and Supervisory Framework**

68. The growing role of capital markets, wider range of savings and borrowing instruments, and increase in the flow of funds to NBFIs have highlighted the importance of institutional arrangements for prudential regulation and supervision. While the supervision of banks is adequately covered by the BoB, there is an immediate need to supervise private pension fund managers, all NBFIs (including those operating under the IFSC), and the BSE, not all of which are adequately regulated by the authorities.<sup>35</sup> This is all the more important because of the large size of government funds recently transferred to private pension fund managers, as mentioned above. In addition, the BSE needs to be regulated by a securities commission that ensures the provision of timely and accurate information and has the authority to enforce to fight securities fraud.<sup>36</sup> Meanwhile, the AML regulations have become effective for banking institutions operating under the IFSC, but do not strictly apply to the NBFIs under the IFSC. The authorities are examining whether further legal arrangements are needed to ensure an effective coverage of all financial institutions in AML settings.

69. The authorities are planning to establish a financial supervisory authority—an independent watchdog for the nonbanking financial sector—which will oversee the supervision of NBFIs and the operation of the capital market. The MFDP has also initiated a review of the 1987 Pension Act and has been communicating with private fund managers on developments in investment activities. The government is expecting to receive a report on investment of assets from fund managers. The sizable resources being committed in the capital market and the need to build momentum in the secondary markets call for prompt action to strengthen supervision in this area.

70. Efforts to improve the legal framework for property rights, insolvency, and creditor rights should also be included in the financial sector reform. The financial sector in Botswana has not yet experienced the kind of serious systemic crisis experienced in some other

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<sup>35</sup> It has also been argued that the BoB has developed a strong capacity to supervise onshore banks but need to strengthen its supervisory skills for offshore banks.

<sup>36</sup> The fledgling BSE regulatory procedures have been under scrutiny following the Botswana Insurance Holding Limited (BIHL) insider trading scandal in 2003. The BSE has called for tighter controls on the clearance and settlement of transactions and on issues of internal trading.

countries. A few institutions experienced problems in the early 1990s owing to inadequate internal controls, and, in the case of publicly owned financial institutions, to a lack of effective supervision. During such periods, timely interventions by the authorities prevented these problems from developing into a systemic crisis. However, the legal framework needs to be strengthened now, in particular, in light of the rapid increase in domestic credit to households in the last two years, and in line with the maturation of the financial sector, in order to ensure sound lending practices and the integrity of the financial system.

## **F. Conclusion**

71. Botswana faces the typical problems of a small, open, developing economy, such as a limited domestic market with few players, a tendency for institutions to be all either in surplus or shortage of funds at the same time, and a tendency for investors to hold securities until maturity due to a lack of investment alternatives. The authorities have recognized the importance of the financial sector for their efforts to diversify the economy, and have highlighted financial reforms in the NDP 9 to address these limitations.

72. Further efforts are needed to improve the operation of the money market and to expedite the development of the local capital market. Interest rates in Botswana are high and do not accurately mirror liquidity conditions. Also, despite excess liquidity in the market, interest rate spreads have been widening. Policies aimed at promoting competition among banks and the development of secondary markets for the BoBCs could encourage the discovery of the price of liquidity. Meanwhile, the partial privatization of the civil servants' pension scheme warrants the urgent development of the local capital markets to minimize the leakage of resource and to channel them into financing of private sector-led investments to support economic diversification. The Chilean experience suggests that pension scheme privatization, if accompanied by appropriate policy measures, can benefit the financial system, as there will be considerable demand from savers for financial instruments in the form of equities and longer-term bonds. In light of this demand, firms and public enterprises earmarked for privatization should find it more attractive to issue such instruments. This could lead to a significant development of the local capital market.

73. A financial system with a more active nonbank financial sector and local capital market will require a more comprehensive regulatory and supervisory framework to maintain its integrity—a factor that has played a crucial role in the past economic growth. The need for strengthened supervision has increased with the introduction of the IFSC, whose success depends on improved regulatory capacity and administrative arrangements. The regulatory framework needs to ensure that the business environment is appropriate, while protecting against any risk to reputation that may arise from weak regulation.

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#### **IV. EXTERNAL COMPETITIVENESS, EXCHANGE RATE FLEXIBILITY, AND THE MONETARY POLICY FRAMEWORK IN BOTSWANA<sup>37</sup>**

##### **A. Introduction**

73. Botswana has made several adjustments to its exchange rate regime over the last 20 years, mainly with the objectives of maintaining inflation at reasonable levels, restoring external competitiveness, and coping with external shocks. In particular, the exchange rate has played an important role in maintaining the flexibility in Botswana's macroeconomic framework to deal with the changes in the country's external terms of trade caused by the narrow export base. In February 2004, the pula was depreciated by 9.4 percent against the U.S. dollar, as the authorities became increasingly concerned about the adverse impact of the strong South African rand on external competitiveness. In light of these developments, a number of important policy questions emerge: What is the appropriate exchange rate regime for Botswana? What is the link between exchange rate developments and competitiveness? Apart from the exchange rate regime, what can Botswana do to increase competitiveness and to reduce its vulnerabilities to external shocks (for example, export diversification and financial deepening). What are the implications or options for monetary policy? This section discusses these issues, focusing in particular on the tension between the two key exchange rate policy objectives of maintaining a low inflation rate, which is helped by exchange rate stability, and promoting external competitiveness, which can sometimes require exchange rate adjustments to take account of inflation differentials with trading partners or productivity shocks.

74. The section starts with a discussion of Botswana's exchange rate arrangement, its evolution, the factors underlying the decisions behind the adjustments to the exchange rate regime, and the impact of recent exchange rate developments on external competitiveness. The discussion emphasizes that the impact of external shocks on domestic economic activity depends in part on the nature of the exchange rate regime, and that it is all the more important in economies with a narrow export base. It then turns to the core issue of the trade-off between price stabilization and the competitiveness of exports. This discussion points to the important role of policy credibility in the choice of exchange rate regime, which leads to an analysis in the last part of the paper of the complications arising from nominal anchors that are based on the exchange rate, and the choice between monetary and inflation targeting.

##### **B. Evolution of the Exchange Rate Regime**

75. Although Botswana gained independence in 1966, it continued to use the South African rand until 1976, when its own currency, the pula, was introduced. At that time, since both the rand and the pula were pegged to the U.S. dollar, the exchange rate regime served to protect external competitiveness because it provided a stable relationship between the pula

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<sup>37</sup> Prepared by Iqbal Zaidi.

and the exchange rates of Botswana's major trading partners. However, after the introduction of the floating exchange rate regime in South Africa in 1979, and the subsequent depreciation of the pula against the rand, the authorities decided to adopt a basket peg to control inflation, which had risen to double-digit levels by 1980.

76. Since June 1980, the exchange rate of the Botswana pula has been determined with reference to a weighted basket of currencies comprising the SDR and the South African rand, but the authorities have occasionally changed the composition of the basket and made discrete adjustments to the peg when circumstances required. While the introduction of the currency basket helped to bring down inflation, the country faced a number of external shocks linked to the South African economy and the international diamond market that adversely affected external competitiveness and prompted the authorities to devalue the pula on a few occasions. In the early 1980s, diamond prices fell sharply in the aftermath of the recession in the major industrial countries, and the authorities devalued the pula against the basket by 10 percent to check the deterioration in the external current account balance.

77. The Bank of Botswana (BoB) has accorded a high priority to achieving a low rate of inflation, but the monetary policy also aims to support the national objectives of economic diversification and export competitiveness. By attempting to keep the real effective exchange rate (REER) of the pula stable, the authorities aim to avoid an erosion in external competitiveness.<sup>38</sup> However, developments in the external sector, such as the sharp fluctuations in the exchange rate of the rand against the currencies in the SDR basket, have impinged on the conduct of monetary policy, which has been geared toward the task of reconciling inflation control with external competitiveness.<sup>39</sup> For example, the pula was devalued against the basket in 1984 and 1985, by 5 percent and 15 percent; the devaluations were mainly attributed to the concerns regarding external competitiveness arising from the instability of the rand against the U.S. dollar. The nominal effective exchange rate (NEER) and the REER have on occasion not moved in tandem, because the inflation rate in Botswana has differed from the rates in major trading-partner countries.

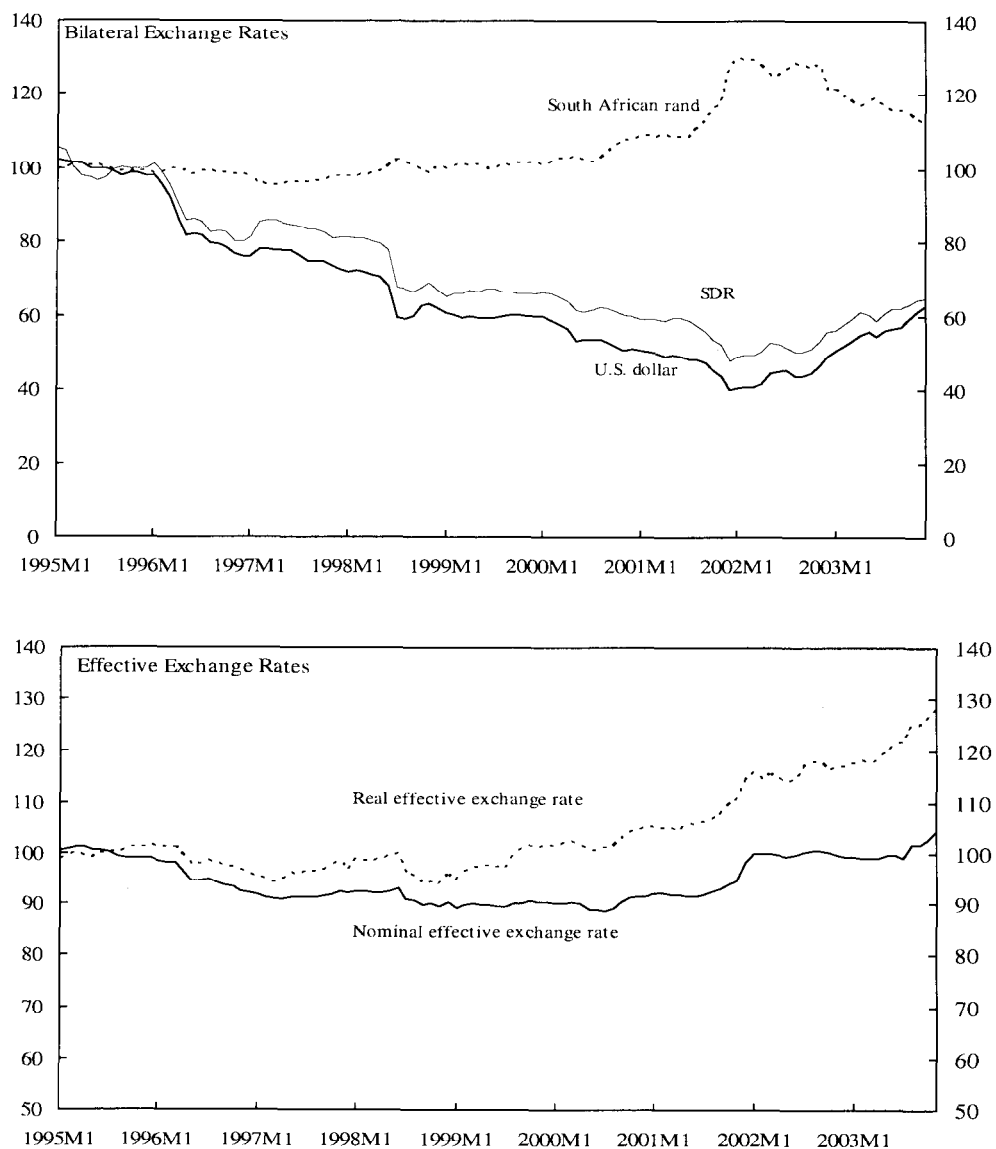
78. The Botswana pula exchange rate regime has undergone five distinct phases since the late 1980s. First, the authorities allowed a significant real appreciation of the pula during 1988–89 to reduce imported inflation and absorb some of the demand pressures through higher imports (Figure IV.1). Second, the authorities implemented a policy to maintain a broadly stable real exchange rate against the rand in the early 1990s. This policy required discrete adjustments to the rate of the pula relative to the currency basket; the pula was devalued by 5 percent against the basket in both 1990 and 1991 (Figure IV.2). Third, from 1994 to August 2000, the exchange rate rarely moved out of the range of R 1.25–1.35 per

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<sup>38</sup>The Bank of Botswana is able to peg the exchange rate and retain some monetary independence because financial markets are not adequately developed to permit full arbitrage.

<sup>39</sup>The currency basket, based on the SDR and the rand, is not fully aligned to a trade-weighted composition.

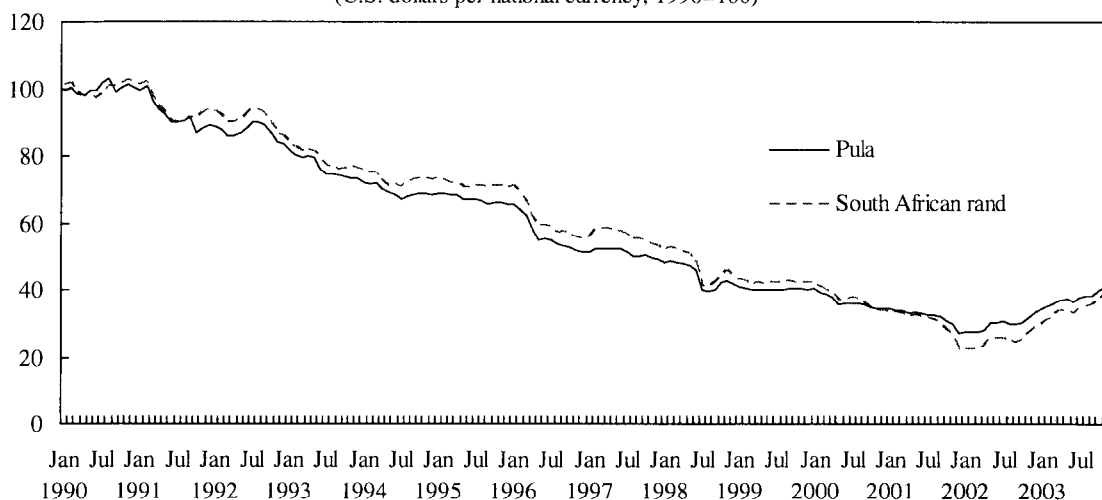
Figure IV.1. Botswana: Selected Exchange Rate Indicators  
January 1995 - December 2003; (1995 = 100; foreign currency per pula) 1/



Source: Botswana authorities.

1/ A rise in the index indicates an appreciation of the pula.

Figure IV. 2. Botswana: Exchange Rate Index, January 1990-December 2003  
(U.S. dollars per national currency, 1990=100)



Source: International Monetary Fund, Economic Data Sharing System.

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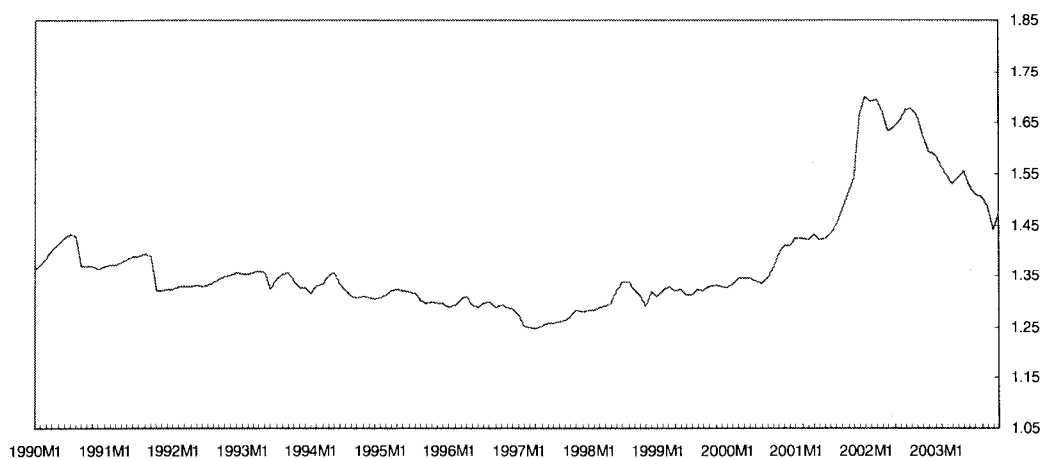
pula, which led to market speculation that the pula was effectively linked to the rand (Figure IV.3). Fourth, from the second half of 2000, the policy of de facto rand targeting was abandoned because the rand plummeted against the SDR currencies, and the basket mechanism was allowed to operate for the next two years. Fifth, as the rand reversed its downward movement against the SDR currencies and appreciated sharply, the Botswana authorities became increasingly concerned about the adverse impact of the rand's appreciation on external competitiveness, and the pula was depreciated against the U.S. dollar by 9.4 percent (7.5 percent against the basket) in February 2004.

79. The above discussion indicates that the various changes in exchange rate management were prompted, on the one hand, by concerns about the inflationary pressures arising from the sharp depreciation of the rand against the currencies in the SDR basket and, on the other hand, by the loss in external competitiveness due to the appreciation of the pula. From September 2000 to December 2001, the pula appreciated against the rand, which also meant an appreciation in effective terms (Figure IV.4). This concomitant appreciation in effective terms is due to the way in which the basket for the currency peg is calculated, which is based on the arithmetic average method; since this method gives decreasing weight to a depreciating currency, the weight of the rand in the basket peg fell to about one-half. However, the effective index is calculated as a geometric average of the exchange rate indices of the major trading partners, and the weight given to South Africa is three-fourths in Botswana's effective exchange rate. Thus, the appreciation of the pula against the rand led to a significant loss of competitiveness, with the REER of the pula appreciating by 11 percent from September 2000 to October 2001. Another indication of external competitiveness is provided by the internal terms of trade, which is the ratio of the price index of tradables to the index of nontradables. The internal terms of trade index fell during the same period,



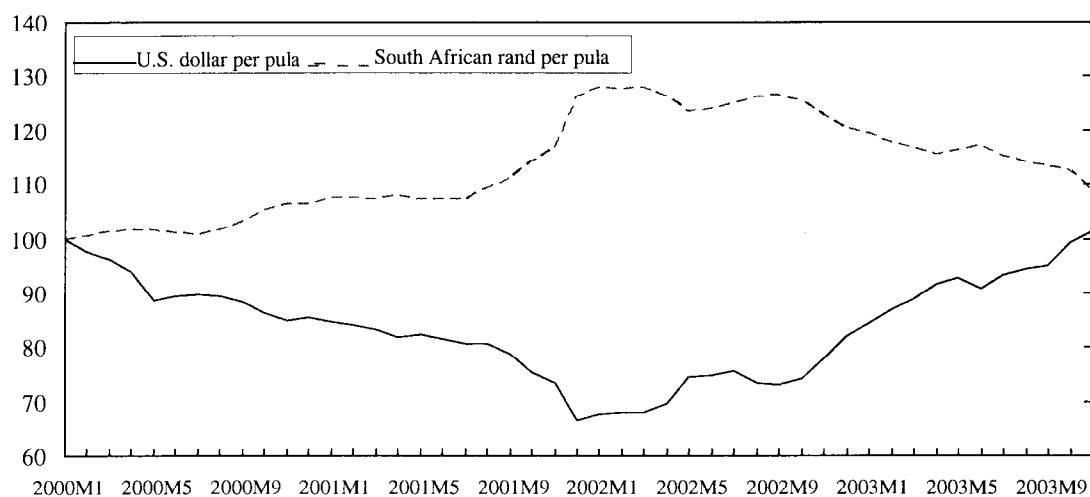
indicating a weakening of external competitiveness because of the reduction in the incentive to produce tradables and the promotion of the domestic consumption of tradables relative to nontradables (Figure IV.5). Yet another indication of the loss in external competitiveness is provided by the fact that output growth in the manufacturing sector slowed; South Africa is Botswana's major competitor in manufactures, and the pula appreciated by more than 20 percent against the rand during this period (Statistical Appendix, Table 34).

Figure IV.3. Botswana: Bilateral Exchange Rate, January 1990-December 2003  
(South African rand per pula)



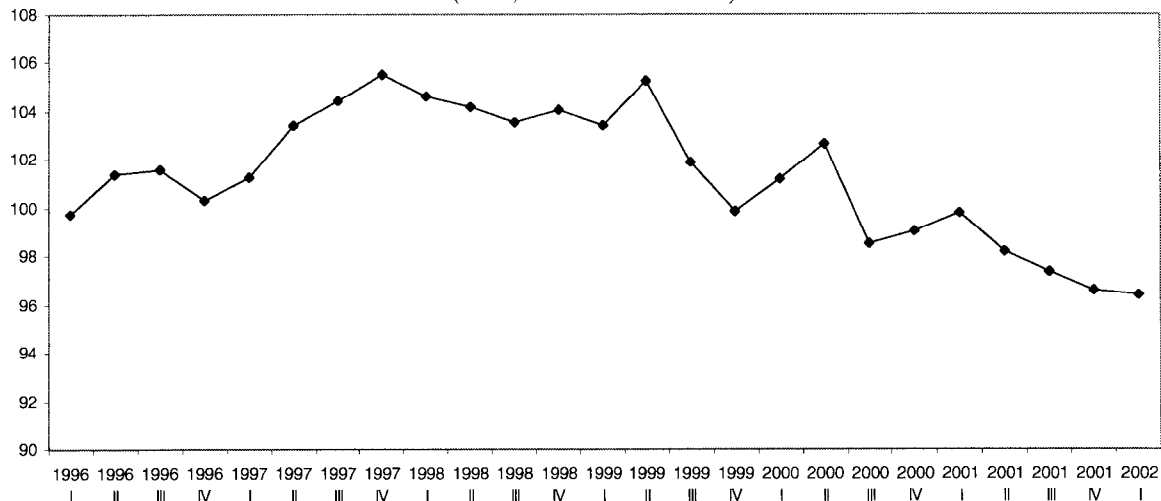
Source: International Monetary Fund, Economic Data Sharing System.

Figure IV.4 Botswana: Bilateral Exchange Rates, January 2000-December 2003  
(Index, January 2000=100)



Source: International Monetary Fund, Economic Data Sharing System.

Figure IV.5. Botswana: Internal Terms of Trade, 1996: Q1-2002: Q1 1/  
(Index, November 1996=100)



Source: International Monetary Fund, Economic Data Sharing System.

1/ The ratio of the price index of tradables to the price index of nontradables.

### C. Choice of the Exchange Rate Regime

80. Economists generally group the available options that a country has in determining the monetary linkage between its economy and the rest of the world around three polar regimes: (i) a flexible regime, where the country lets its currency float freely in the exchange markets against other currencies; (ii) a fixed regime, where the country fixes the price of its currency against a specific foreign currency or a basket of foreign currencies; and (iii) an intermediate regime, where the country lets its currency float to some extent but intervenes to limit those fluctuations according to some predetermined parameters, such as in the case of target zones, crawling bands, etc. Many other categories of exchange rate regimes may be derived from various combinations of these three main categories, ranging from the most flexible (a pure floating regime with no foreign exchange market intervention by the central bank) to the most fixed-rate commitment (dollarization or monetary union). As mentioned above, the Botswana authorities adopted various exchange rate options during the 1980s and 1990s, and more recently, they have been refining the monetary policy framework to focus on inflation modeling and control, which has implications for the exchange rate regime. The next few paragraphs discuss some of the exchange rate options that have been adopted by other countries, with a view to pointing out both the advantages and disadvantages that are particularly relevant in the context of the Botswana economy.

81. One of the intermediate exchange regimes is the fixed-but-adjustable exchange rate regime, which has recently been much criticized in the literature because it is particularly vulnerable to speculative attack. In the wake of the Asian financial crisis, there was a growing consensus that the intermediate exchange regimes were not sustainable because of

large-scale capital flows, which thus limited the options to either free-floating or firm-fixing regimes.<sup>40</sup> This proposition was also referred to as the “impossible trinity” in international monetary economics, which stated that an open economy could not achieve all three goals of exchange rate stability, monetary independence, and financial market integration simultaneously. It can achieve only two of the three goals at a given time: for example, the two goals of exchange rate stability and monetary independence can be attained only by giving up capital mobility. Alternatively, the two goals of exchange rate stability and capital mobility can be achieved only at the expense of giving up the autonomy of monetary policy. The third approach would be to have monetary independence and free capital mobility, but at the expense of exchange rate volatility.

82. In considering the impossible trinity proposition in an open economy, some economists would argue that the increasing globalization of financial markets—Botswana is no exception to this trend of a high degree of cross-border capital movements—has pushed countries toward the region where the choice should be narrowed to choosing either a free-floating or a firm-fixing regime. More specifically, Botswana’s external capital account is expected to register larger gross transactions, attributed both to increasing foreign direct and portfolio investment in the country—due, in turn, to the diversification and growth of the domestic market—and to increasing portfolio investment abroad, as more domestic residents seek investment opportunities abroad. With regard to domestic residents investing abroad, one recent noteworthy development has been the major international stock adjustments following the transfer of sizable pension funds from the public sector to private managers. When transferring the pension funds to the private managers, the authorities granted them permission to hold up to 70 percent of the total assets in foreign investments. Although there was an immediate sharp capital outflow, the asset managers are still holding domestic assets far above the required minimum levels because of the relatively high rates of returns on pula-denominated assets and the recent appreciation of the pula against the SDR. As market conditions change, these funds could be invested abroad for diversification purposes, and this outcome, as well as the other steps that the authorities have taken to increase the external capital account linkages, will no doubt impose constraints on the conduct of monetary policy. However, while recognizing that greater financial integration imposes constraints on monetary policy, it is still the case that even small, open economies, such as Botswana, can choose an intermediate solution between floating and fixed rates under perfect capital mobility, as long as there is a credible nominal anchor for the conduct of monetary policy.

#### **D. Nominal Anchors, Exchange Rate Rules, and External Competitiveness**

83. The importance of a nominal anchor is brought out most clearly in those situations where exchange rate policy is designed to maintain external competitiveness at a level

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<sup>40</sup> See, for example, Fischer (2001), Frankel (1999), Mussa and others (2000), Obstfeld and Rogoff (1995), and Williamson (2000).

consistent with a sustainable balance of payments position. Like the BoB, central banks in many emerging market countries have focused on the critical role of the real exchange rate in maintaining external competitiveness, and various approaches have been followed to ensure that the exchange rate does not deviate very far from its equilibrium level. Some central banks have even gone to the extent of adopting a real exchange rate rule, under which the nominal exchange rate is automatically adjusted in response to a differential between domestic and foreign price levels; such a rule seemingly provides a monetary framework that can prevent the emergence of large and sustained misalignments of relative prices and thereby avoid an external imbalance. By allowing the nominal exchange rate to adjust frequently and by relatively small amounts, the real exchange rate can be kept at an appropriate level without imposing undue adjustment costs on the economy, thus removing the issue of devaluation from the political arena. Furthermore, a real exchange rate rule will provide market participants with useful information on the likely evolution of relative prices, and thus prevent production decisions from being made based on incorrect expectations. However, real exchange rate rules may bring with them major disquieting implications for macroeconomic stability, even if they help to address the issue of external competitiveness. In particular, the adoption of a real exchange rate target, which means pursuing a real target with a nominal instrument, might leave a small open economy without a nominal anchor for the domestic price level, and shocks to domestic inflation might acquire a permanent character in some circumstances. This is particularly the case if the target real exchange rate is set at an overly depreciated level—and, needless to say, there is often a lot of uncertainty as to what is the equilibrium exchange rate, as evidenced by the prediction of different rates under different models. It would be desirable, nonetheless, to preserve some of the advantages of real exchange rate rules—specifically, the assurance provided by such rules to potential investors in the traded goods sector that the real exchange rate will not be allowed to get too far out of line—without sacrificing domestic price stability.

84. The issue of a competitive exchange rate versus domestic price stability bears particular emphasis in Botswana because, notwithstanding the significant progress that has been made in a number of areas, sizable risks to the economic outlook remain, not least of which is the lack of export diversification. Reflecting Botswana's heavy reliance on diamond exports, the external terms of trade have shown significant fluctuations. Furthermore, the trade balance has exhibited considerable variations not only because of the significant movements in diamond prices in major industrial country markets, but also because of the changes in the prices of key imported goods. Many risks are beyond Botswana's control—for example, diamond prices might decline, the South African rand could appreciate more against the major currencies, as it has done in the past, and there is the problem of weather-related production shocks. In such circumstances, external competitiveness and the need for export diversification continue to be the major challenges to which the Botswana authorities have indeed given a great deal of attention.

85. Since the economy is highly vulnerable to shocks, the authorities have taken steps to improve the diversification of the economy by strengthening infrastructure, increasing labor skills and productivity, and reducing public utility and transportation costs. The authorities

have worked on codes for foreign direct investment and companies. The Industrial Development Act will soon be sent to the cabinet for discussion, and the bill for the Companies Act will be going to the parliament for a second reading shortly. The quality of the communications infrastructure, which has been cited as a constraint by private investors, is being upgraded, including the plans to invest P 300 million to improve the telecommunications sector.<sup>41</sup>

86. The Botswana authorities recognize that they face many challenges in attracting private investment, including the sparsely populated country, small markets, limited financial development, and high costs of communication and transportation. The authorities' diversification strategy focuses on developing infrastructure, adding value to exports of raw materials, and promoting the textile, leather, jewelry, and other industries in which Botswana has a comparative advantage. The authorities are taking steps to overcome the shortcomings in the business environment to attain the level of investment needed to maintain growth at a high and sustainable level. With regard to the exchange rate regime and export diversification, there are some key linkages among monetary policy, labor productivity, and external competitiveness that have become increasingly important in the formulation of macroeconomic policy. One of these is the impact of the HIV/AIDS pandemic on the government budget, and the various direct and indirect ways in which HIV/AIDS has affected the country's unit labor costs.<sup>42</sup> In this regard, as the authorities contemplate the transition to alternative monetary frameworks (e.g., the strict or full-fledged inflation-targeting regime), such a transition would entail the confining of foreign exchange market interventions to smoothing the effects of temporary shocks, and the exchange rate objectives would be subordinated to the inflation target. This approach could lead to large swings in the real exchange rate for the pula, thereby highlighting the point that the ongoing structural reform efforts should ensure sufficient flexibility in the labor and product markets to dampen any adverse effects on external competitiveness.

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<sup>41</sup> In addition, the recent trade agreements should have a positive impact on export diversification over the next few years, both through better access for Botswana's exports to foreign markets and the added incentives for foreign direct investment. There are good prospects for a further opening of Botswana's export markets. Negotiations are being conducted for a proposed free trade agreement between the United States and the Southern African Customs Union, which comprises South Africa, Lesotho, Swaziland, Botswana, and Namibia. The proposed agreement seeks to build on and cement the benefits of the African Growth and Opportunity Act (AGOA), the preferential trade agreement between the United States and Africa, which was approved by the U.S. Congress in 2002. SACU representatives have also held discussions with MERCOSUR (the South American trading bloc), as well as with China and India, on prospective free trade agreements.

<sup>42</sup> In an highly open economy, not only is the exchange rate an important instrument for maintaining external competitiveness but there are important feedback effects from the monetary policy stance, inflation, and the exchange rate that have to be taken into account to ensure consistency with the central objective of monetary policy of maintaining low inflation.

87. In terms of external competitiveness, the HIV/AIDS pandemic has increased the labor costs of companies because of sick leave and disability pensions, medical care, pensions to surviving dependents, and, more generally, the loss of productivity.<sup>43</sup> These costs and the loss in labor productivity have resulted in higher unit labor costs, which measure labor compensation relative to labor productivity.<sup>44</sup> Unit labor costs in Botswana are expected to rise further in the medium term: a study by the Botswana task force on AIDS has estimated that the HIV/AIDS-related cost would increase from about 5 percent of the wage bill in 2004 to 7–8 percent in the medium term.<sup>45</sup>

88. In addition to the issue of external competitiveness, the exchange rate also has a role to play in satisfying the need for flexibility in Botswana's macroeconomic policy framework to cope with changes in the country's external terms of trade. Under a fixed exchange rate system, the value of the pula is pegged to the value of another currency or basket of currencies, while, under a flexible exchange rate regime, the value of the pula is allowed to adjust in response to supply-and-demand conditions in the foreign exchange market. When the exchange rate is flexible and Botswana's export prices decline, the pula will depreciate in the foreign exchange market, thereby helping to increase exports and economic activity, and partly offsetting the initial impact on output of the negative terms of trade shock. In contrast, the fixed exchange rate regime will require intervention in the foreign exchange market to keep the value of the pula from declining; however, when the BoB purchases foreign exchange to support the exchange rate peg, this reduces the amount of domestic credit available for businesses and consumers, which is equivalent in terms of its effects on output to a tightening of monetary policy. In this regard, the policy response under the fixed exchange rate adds to the negative terms of trade shock that caused the initial contraction in output. Since exchange rate flexibility allows the economy to adjust to exogenous terms of trade shocks with lower costs in terms of output fluctuations, this would appear to be an important consideration in the case of Botswana.

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<sup>43</sup> Botswana's HIV/AIDS prevalence rates, which are among the highest in the world, have more than doubled since 1992 and are now estimated at 35.4 percent of adults in the 15-49-years age group. According to census data, life expectancy declined from 65 years in 1991 to 56 years in 2001. See the subsection on the macroeconomic impact of HIV/AIDS in this paper for further details about losses in labor productivity, and declining population and economic growth rates.

<sup>44</sup> Unit labor costs can be defined as compensation per unit of real output, they are better indicator of the cost of doing business within a country than labor compensation alone. Since labor compensation growth is directly linked to growth in labor productivity, a workforce that is producing more output per person (i.e., generating higher productivity) will experience higher growth in real earnings. This growth in real earnings will not jeopardize a country's external competitiveness when matched by commensurate productivity gains. Growth in labor compensation that is not matched by productivity gains, conversely, will result in higher unit labor costs and deteriorating external competitiveness.

<sup>45</sup> See Joint United Nations Program on HIV/AIDS (1998).

89. However, the fact that a country with a fixed exchange rate regime will adjust to a negative terms of trade shock through a contraction in output, while a country with a flexible exchange rate will adjust through a currency depreciation that significantly offsets the shock's negative effects on output, does not necessarily mean that a flexible exchange rate is unambiguously the best choice. As mentioned above, the effectiveness of the flexible exchange rate in responding to terms of trade shocks is only one of several considerations that need to be weighed in choosing an exchange rate regime. The optimum currency area (OCA) literature has shown that the case for flexible exchange rates depends, among other things, on the evaluation of the microeconomic benefits to be gained from a fixed exchange rate in comparison to the costs of losing monetary policy as a tool for economic stabilization.<sup>46</sup> The OCA identifies a number of key factors that influence the choice of the exchange rate regime: the degree of labor mobility between countries; openness, or the degree of trade integration; the degree of wage and price flexibility; and the degree to which the two countries have similar economic structures and experience shocks. According to these criteria, Botswana is a highly open economy, with wage and price flexibility, and South Africa has a very large share of the imports into Botswana; however, the economic structures of the two countries are not similar, and, in particular, Botswana's export base is very different from that of South Africa, which means the countries are subjected to asymmetric external shocks. Because of the asymmetric shocks, Botswana will have to bear significant costs from the loss of monetary independence if it were to maintain a relatively fixed rate for the pula against the rand.

90. In addition to the considerations raised in the OCA literature, the financial crises that hit Mexico, Russia, and several Asian developing countries in the 1990s have reinforced what already appeared to be a growing consensus against fixed exchange rates. The experiences of these countries showed that fixed exchange rates not only limited the ability of real exchange rates to adjust to external shocks but also restricted the monetary authorities' ability to correct excessive growth of credit or to act as a lender of last resort. Fixed rates also tended to encourage excessive borrowing of foreign currency by reducing concerns about exchange rate risk and made worse the abrupt and disruptive reversals of investor confidence once exchange rate pegs were broken. Some countries, particularly those in which monetary policy has had low credibility, have felt it necessary to adopt fixed exchange rates to reduce inflationary expectations. However, Botswana's record of good macroeconomic management suggests that this argument for fixed exchange rates is not applicable in the present context.

### **E. Alternative Monetary Policy Frameworks**

91. The previous discussion has emphasized that, when there are large-scale capital flows or significant terms of trade shocks, a conflict can arise between the objectives of maintaining a stable nominal exchange rate and promoting domestic economic stability. In this

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<sup>46</sup> See Mundell (1961) and Frankel and Rose (1998).

connection, since a more flexible exchange rate regime in Botswana can facilitate simultaneously the pursuit of domestic stabilization objectives and open capital market objectives, the remainder of this subsection discusses several types of monetary policy frameworks that are consistent with the central objective of maintaining low inflation under a flexible exchange rate regime. Each of these options focuses on a different long-term nominal anchor, which is implied in the names attached to these frameworks: monetary targeting, nominal income targeting, and inflation targeting.

### **Monetary targeting**

92. Many central banks, including the BoB, have used monetary aggregates as indicators in their policy frameworks; however, some central banks although their numbers have declined—have used monetary aggregates as intermediate targets. To serve the role of an intermediate target variable, a monetary aggregate should meet a number of conditions, including three major ones. First, there should be a predictable relationship between money and nominal income growth because otherwise, even if the central bank hits the monetary target, there is no assurance that the ultimate target will be observed. Second, the relationship between adjustments in the monetary policy instruments—say, a short-term interest rate and the money supply—should be stable because otherwise it would be difficult to hit the intermediate target. Third, monetary growth should lead nominal income growth because, if the reverse were the case, other intermediate targets besides money would give a lower variability of nominal income. The experience from a number of countries has been that, while some monetary aggregates such as the monetary base or narrow money—might be sufficiently stable to use as an indicator variable for monetary policy, these aggregates are frequently not suitable for the more demanding role of an intermediate target variable, and this appears to be the case in Botswana. In particular, the relationship between money and nominal income might not be easy to predict on account of the recent and prospective changes in the financial sector. Also, the links from monetary policy instruments to inflation are not always easy to capture in the monetary-targeting framework, not least because of instability in the demand for money.

### **Nominal income targeting**

93. Before turning to inflation targeting and the conditions that would need to be addressed in a successful transition to that regime in Botswana, a few words about nominal income targeting as a projector of potential output might be appropriate. The main point to stress in this context is that the Botswana authorities are trying hard to diversify the economy so as to reduce the heavy reliance on diamond exports, which, together with the ongoing structural reforms in the financial and other sectors, might make it difficult to make the projection of potential output that is needed for inflation forecast targeting. In inflation targeting, monetary policy is adjusted in response to deviations of the forecast of inflation from the target, but the inflation forecast, in turn, requires an estimate of the level of potential output in order to measure excess demand pressures. However, when there is considerable uncertainty regarding the level of potential output, nominal income targeting has an



advantage over inflation targeting in that it is more robust, that is, serious estimation errors are less likely. This is because nominal income targeting requires only an estimate of the trend growth rate of potential output. If experience were to indicate that estimates of potential output are very uncertain, therefore, it might be better to adopt nominal income targeting as an interim monetary policy framework, until such time as potential output can be estimated with greater confidence.<sup>47</sup>

### **Inflation targeting**

94. Instead of using an intermediate target variable, the BoB could move toward direct inflation targeting, a framework that has been adopted in many emerging-market countries, including South Africa.<sup>48</sup> As with any other monetary framework, however, there are a number of issues that would need to be addressed, including meeting certain preconditions to effect a successful transition to inflation targeting. Masson and others (1997) identify several potential obstacles in the transition to inflation targeting, and at least three of these should be noted here. First, “fiscal dominance” should not prevent the monetary authorities from pursuing the objective of achieving a low inflation rate, because the fiscal authorities interfere in terms of their reliance on seigniorage revenues. Second, the banking system should be strong enough to enable the monetary authorities to pursue their inflation objectives without having to worry about the balance sheets or solvency of the commercial banks. Third, capital markets should not be so shallow that they constrain the implementation of monetary policy.

95. A first glance would indicate that Botswana appears to meet the first two of these preconditions. The fiscal authorities have not relied on seigniorage revenues because the inflation rate has been low, and, until recently, the country has been running substantial budget surpluses. With regard to the strength of the banking system—the second precondition—the banks have registered strong profits and do not have large nonperforming assets; in general, the banks measure up well in terms of various indicators of performance.<sup>49</sup>

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<sup>47</sup> The nominal income-targeting option faces a number of additional challenges, namely, the difficulty of communicating as operation to the public, measurement errors in GDP, and lags in data availability.

<sup>48</sup> Although there has been some ambiguity about the precise definition of an inflation-targeting policy regime, in part because certain institutional arrangements have differed from one inflation-targeting country to another, it is frequently described as an operational framework for monetary policy decisions in which the central bank makes an explicit commitment to conduct policy to meet a publicly announced numerical inflation target within a particular time frame. This framework focuses on “policy rules,” that is, specific formulas for adjusting the policy instrument in response to inflation (or more appropriately, to forecasts of inflation because monetary policy affects inflation with a considerable lag). The forecasts of inflation are frequently modeled to depend on the state of the economy, as measured by the gap between GDP and potential GDP.

<sup>49</sup> However, the existing regulatory and supervisory framework needs to be strengthened with regard to the nonbank financial institutions (NBFIs), which fall under the purview of the Ministry of Finance and Development Planning. In contrast to the BoB, the ministry has limited supervisory experience and capabilities, a situation to be addressed on an urgent basis, because of the rapid recent growth of the private pension funds,

(continued...)

With regard to the depth of capital markets—the third precondition—Botswana's markets may not be as large as those in many other countries, but they are growing rapidly, and the recent changes are going to give an added boost to their development. Notable among these changes are the sizable transfers of pension funds from the government to private managers, which are discussed in Section III of this paper. Furthermore, shallow capital markets would be a problem in the implementation of other monetary frameworks as well; as concern is thus not confined to inflation targeting per se, it needs to be addressed more generally in terms of financial development and the diversification of the economy.

96. Explicit inflation targeting has been adopted by a number of central banks in both industrial and emerging-market countries. The inflation target for the central bank helps to provide an anchor for inflation expectations in the economy, and the announcement of a clear path for the medium-term inflation outlook reduces the size of inflation "surprises" and their associated costs in terms of output fluctuations. An inflation-targeting regime can accommodate a goal of output stabilization by having wide inflation target bands, long inflation target horizons, and explicit exemptions for supply shocks. By focusing attention on an explicit goal, inflation targeting can help to make monetary policy more transparent and increase the public understanding of the central bank's strategy of setting and meeting the inflation target. Inflation-targeting regimes have emphasized the creation of institutions that foster good policy and the improvement of accountability, which is good in its own right and would be appropriate for any monetary framework. Although inflation targeting is a relatively new framework and the time series for evaluating its performance are not very long, the available evidence does suggest that inflation targeting performs well in achieving a balance between output variability and inflation variability.

97. That said, a look beneath the surface reveals some questions that will need to be addressed in choosing an inflation-targeting regime. In particular, in a full-fledged inflation-targeting (FFIT) framework, the inflation target prevails over any other monetary policy objective, which makes the criteria for the preconditions for a successful FFIT more stringent.<sup>50</sup> In this connection, it is not clear that monetary policy can control inflation perfectly, and whether it is feasible to say that inflation rates outside a specified tolerance interval will be ruled out, even in the event of unforeseen exogenous shocks, such as terms of trade and weather-related shocks, which can be quite important in the case of Botswana. A closer look at the requirements of the FFIT regime and the specific characteristics of the Botswana economy seems to indicate that, whereas Botswana meets some of these preconditions, it does not meet all of them; moreover, even those that it does meet should not be taken for granted.

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and also because the finance companies operating under the International Financial Services Center (IFSC) are expected to grow rapidly under the authorities' diversification program. See Section III of this paper for further details on the regulatory and supervisory framework.

<sup>50</sup> See, for example, Carare, Stone (2003), and Fajgenbaum and others (2000).

98. Inflation targeting requires a good understanding of the monetary transmission mechanism, which is the connection between changes in the monetary stance and their effect on the operating target and, ultimately, inflation. The stronger the transmission links, and the better they are understood, the more effective will be the changes in monetary instruments in attaining the inflation target. However, inflation forecasting will be challenging for Botswana because the country has a high degree of vulnerability to exogenous shocks: there are ongoing structural changes in the economy, not least in financial innovations and the increased integration with international financial markets; the links from monetary policy instruments to inflation are not always stable; and there are data issues, insofar as some requisite data are not available or there are questions with regards coverage and timeliness. Furthermore, a relatively well-developed financial system is necessary for the effective transmission of monetary policy in a FFIT framework. In this connection, it should be noted that interest rates in Botswana do not reflect appropriately the market liquidity conditions, in part because of the small low volume of transactions in the interbank market, as banks prefer to transact in repurchase agreements or reverse repurchase agreements with the central bank to meet their daily liquidity requirements. There is no price incentive for banks to look first to the interbank market to place or borrow funds overnight because central bank credit is offered at the same rate as the interbank rate.<sup>51</sup>

99. As was mentioned above, a strong fiscal position is needed to support the credibility of the FFIT framework. In this regard, it should be stressed that, although Botswana had been running budget surpluses for a prolonged period, deficits have emerged in the last three years, mainly on account of temporary factors, but increasingly because of developments in both revenue and expenditure, which are more structural in nature. On the expenditure side, HIV/AIDS-related expenditures have risen sharply since 2001/02 (April–March) and are expected to be a growing source of pressure on the budget over the medium term and beyond. On the revenue side, projections for Southern African Customs Union (SACU) receipts have a wider margin for error than before because of the tariff reductions expected from the recent or forthcoming trade agreements between SACU and other countries or regions, and also because of the new revenue-sharing formula for SACU receipts, which is due to go into effect in 2006. In addition, there are questions about other sources of government revenue, such as the income from the BoB, which has declined in recent years because of the drawing down of the central bank's reserves and is not expected to rise in relation to GDP in the medium term.<sup>52</sup> These developments suggest that, looking forward, the Botswana authorities would need to ensure that monetary policy is not dominated by fiscal concerns. The government should be able to meet the bulk of its financing requirements from financial markets, and

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<sup>51</sup> See Section III for further details on how the monetary transmission mechanism is affected when interest rates do not mirror liquidity conditions in the market.

<sup>52</sup> For details, see Section II, on “Fiscal Policy Challenges Under the Ninth National Development Plan. 2002/03–2007/08.”

government recourse to central bank credit should be limited to occasional and temporary financing of liquidity shortfalls.

100. In what has been called inflation targeting lite (ITL), a country announces an inflation objective, but it does not fully subordinate all other objectives of monetary policy to inflation. These countries do not adopt a FFIT because they do not meet all of the preconditions, particularly as regards a conflict between inflation and other objectives, a weak relationship between monetary instruments and inflation, and an institutional framework that might not be strong enough for a credible full commitment to an inflation target. In ITL, the BoB would aim for an inflation target, broadly defined, it would also give weight to other objectives in the loss function. In other words, although there would be an inflation target, but it would still be appropriate in the context of an open economy to specify other objectives, including the exchange rate or international reserve holdings. The exchange rate would be taken into account in the inflation-targeting framework not only to the extent that the inflation forecast, which is the intermediate target of monetary policy in this regime, is affected by the exchange rate, but also in that the BoB may need to adjust the monetary policy instruments to limit the impact of exchange rate changes on other objectives—say, for example, external competitiveness. This is not to say that, in ITL, the BoB should aim for an inflation target and at times switch to other objectives, but rather that the target range specified for the inflation target should be wide enough to leave some room for maneuver, or equivalently, the authorities' loss function would give weight to other objectives. Nonetheless, ITL could help the Botswana authorities to package many features of an eclectic approach to monetary management into a more formalized, disciplined, and transparent structure that bolsters accountability. In particular, it is important that the information be conveyed in a consistent manner and presented in a way that makes it readily understood by the public; this could entail, *inter alia*, regular media releases, press conferences, and publications of research by the staff and of speeches by the central bank management.

## **F. Conclusions**

101. This section focused on the choice of exchange rate regime and the implications of alternative monetary policy frameworks for Botswana. To this end, a number of considerations that have a bearing on the exchange rate regime and the monetary policy framework were examined, which showed the close links among international competitiveness, the appropriate exchange rate regime, and the choice of a monetary policy anchor. Most of the recent research in emerging-market economies, and especially that based on the experience of the 1990s, has suggested that, in the context of rapid international capital mobility, sustaining a fixed exchange rate in the face of terms of trade or international financial market shocks is very difficult. Furthermore, a forced abandonment of a fixed exchange rate under pressure has proved to be quite disruptive for some countries. Since Botswana has a narrow export base and relies heavily on just one commodity, the analysis provided some support for a flexible exchange rate regime, because it can function as a kind of automatic stabilizer, absorbing by means of its own movements the fluctuations in the terms of trade. However, commitment to nominal exchange rate stability can constrain

monetary policy and even induce procyclical monetary policy responses to exogenous shocks. In addition to discussing the suitability of a flexible exchange rate regime for Botswana, this section discussed in some detail the issue of a nominal anchor in an open economy and, in particular, the question of monetary targeting versus inflation targeting.

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Table 1. Botswana: GDP by Type of Expenditure at Current Prices, 1996/97-2003/04 1/A45

	1996/97	1997/98	1998/99	1999/00	2000/01	Est. 2001/02	Projection 2002/03	2003/04
(In millions of pula)								
Total consumption	10,025.7	11,589.1	13,515.8	15,365.7	17,180.4	19,860.2	19,115.7	24,010.4
General government	4,711.0	5,452.9	6,578.8	7,524.5	8,741.9	10,552.6	12,136.2	14,264.8
Central government	4,194.9	4,853.6	5,840.6	6,709.6	7,839.2	9,507.8	10,821.9	12,720.0
Local government	516.1	599.3	738.2	814.9	902.7	1,044.8	1,314.3	1,544.8
Private	5,314.7	6,136.1	6,936.9	7,841.2	8,438.5	9,307.6	6,979.5	9,745.6
Total investment	4,603.9	6,056.1	7,917.2	4,968.2	5,436.4	7,896.0	8,546.1	9,752.8
Gross fixed capital formation	4,275.9	5,170.1	6,263.3	6,751.1	6,898.1	7,743.3	7,746.1	8,952.8
Public	2,239.6	2,695.5	3,333.2	2,934.5	3,371.9	3,729.3	3,867.5	4,298.5
Private	2,036.3	2,474.6	2,930.1	3,816.6	3,526.2	4,014.0	3,878.6	4,654.3
Changes in stocks	328.0	885.9	1,653.8	-1,782.9	-1,461.7	152.7	800.0	800.0
Net exports of goods and services	3,110.6	2,517.4	90.9	4,896.1	6,773.8	4,243.5	7,265.0	4,447.0
Exports of goods and services	9,881.6	11,392.8	10,051.5	15,318.5	17,536.0	15,704.6	17,198.1	17,028.3
<i>Of which</i> : exports of goods	9,158.5	10,304.4	8,559.9	13,636.7	15,713.6	13,484.0	14,980.7	14,689.3
Imports of goods and services	-6,771.0	-8,875.4	-9,960.6	-10,422.4	-10,762.2	-11,461.1	-9,933.1	-12,581.3
<i>Of which</i> : imports of goods	-5,926.3	-7,761.6	-8,571.2	-8,865.7	-8,965.3	-9,503.9	-9,102.4	-9,389.7
Gross domestic savings 2/	7,714.5	8,573.5	8,008.0	9,577.2	11,491.0	12,139.9	15,811.0	14,199.8
Central government	770.6	1,451.8	1,806.9	1,452.8	1,719.1	3,045.8	2,711.7	3,014.0
Other	6,943.9	7,121.7	6,201.0	8,124.4	9,771.9	9,094.1	13,099.3	11,185.8
Resource gap	3,110.6	2,517.4	90.8	4,609.0	6,054.6	4,243.9	7,265.0	4,447.0
Total GDP	17,740.2	20,162.6	21,523.7	24,942.9	28,671.4	32,000.1	34,926.7	38,210.2
(In percent of GDP)								
Total consumption	56.5	57.5	62.8	61.6	59.9	62.1	54.7	62.8
General government	26.6	27.0	30.6	30.2	30.5	33.0	34.7	37.3
Central government	23.6	24.1	27.1	26.9	27.3	29.7	31.0	33.3
Local government	2.9	3.0	3.4	3.3	3.1	3.3	3.8	4.0
Private	30.0	30.4	32.2	31.4	29.4	29.1	20.0	25.5
Total investment	26.0	30.0	36.8	19.9	19.0	24.7	24.5	25.5
Gross fixed capital formation	24.1	25.6	29.1	27.1	24.1	24.2	22.2	23.4
Public	12.6	13.4	15.5	11.8	11.8	11.7	11.1	11.2
Private	11.5	12.3	13.6	15.3	12.3	12.5	11.1	12.2
Changes in stocks	1.8	4.4	7.7	-7.1	-5.1	0.5	2.3	2.1
Net exports of goods and services	17.5	12.5	0.4	19.6	23.6	13.3	20.8	11.6
Exports of goods and services	55.7	56.5	46.7	61.4	61.2	49.1	49.2	44.6
<i>Of which</i> : exports of goods	51.6	51.1	39.8	54.7	54.8	42.1	42.9	38.4
Imports of goods and services	-38.2	-44.0	-46.3	-41.8	-37.5	-35.8	-28.4	-32.9
<i>Of which</i> : imports of goods	-33.4	-38.5	-39.8	-35.5	-31.3	-29.7	-26.1	-24.6
Gross domestic savings 2/	43.5	42.5	37.2	38.4	40.1	37.9	45.3	37.2
Central government	4.3	7.2	8.4	5.8	6.0	9.5	7.8	7.9
Other	39.1	35.3	28.8	32.6	34.1	28.4	37.5	29.3
Resource gap	17.5	12.5	0.4	18.5	21.1	13.3	20.8	11.6

Sources: Central Statistics Office; and Fund staff estimates.

1/ National accounts year beginning July 1.

2/ GDP minus consumption.

Table 2. Botswana: GDP by Type of Expenditure at Constant 1993/94 Prices, 1996/97-2003/04 1/

	1996/97	1997/98	1998/99	1999/00	2000/01	Est. 2001/02	Projection 2002/03	2003/04
(In millions of pula)								
Consumption	7,676.2	8,257.8	8,742.5	9,281.2	9,704.5	10,586.3	9,750.9	12,128.7
Public	3,681.6	3,970.0	4,193.9	4,538.0	4,966.5	5,635.2	5,868.0	6,352.7
Private	3,994.6	4,287.8	4,548.6	4,743.2	4,738.0	4,951.1	3,882.9	5,776.1
Total investment	3,441.1	4,124.7	5,613.3	3,344.6	3,360.1	4,530.2	4,577.0	4,688.2
Gross fixed capital formation	3,185.7	3,723.3	4,393.4	4,463.1	4,194.3	4,450.8	4,569.3	4,701.0
<i>Of which</i> : general government	1,547.9	2,300.5	2,246.8	2,333.5	2,418.5	3,260.7	3,294.4	3,374.5
Changes in stocks	255.5	401.4	1,219.9	-1,118.5	-834.2	79.4	7.8	-12.8
Private gross investment excluding changes in stoc	777.1	835.5	886.1	937.2	941.6	1,269.5	1,282.6	1,313.7
Net exports of goods and services	1,869.1	1,111.5	-686.1	1,945.8	2,736.2	1,387.7	3,512.7	1,980.4
Exports of goods and services	6,985.5	7,405.6	5,951.9	8,320.3	8,823.1	7,517.6	8,315.4	7,583.4
Imports of goods and services	-5,116.4	-6,294.1	-6,638.0	-6,374.5	-6,086.9	-6,129.9	-4,802.7	-5,602.9
Gross domestic expenditure	11,117.2	12,382.5	14,356.0	12,625.7	13,064.8	15,116.6	14,327.9	16,816.9
GDP at constant prices	12,703.7	13,728.6	14,295.7	15,238.9	16,524.4	16,911.6	17,840.6	18,797.3
(Annual percentage change)								
Consumption	5.3	7.6	5.9	6.2	4.6	9.1	-7.9	24.4
Public	8.1	7.8	5.6	8.2	9.4	13.5	4.1	8.3
Private	2.9	7.3	6.1	4.3	-0.1	4.5	-21.6	48.8
Total investment	29.0	19.9	36.1	-40.4	0.5	34.8	1.0	2.4
Gross fixed capital formation	5.9	16.9	18.0	1.6	-6.0	6.1	2.7	2.9
<i>Of which</i> : general government	15.0	48.6	-2.3	3.9	3.6	34.8	1.0	2.4
Changes in stocks	-175.1	57.1	203.9	-191.7	-25.4	-109.5	-90.2	-264.8
Net exports of goods and services	3.6	-40.5	-161.7	-383.6	40.6	-49.3	153.1	-43.6
Exports of goods and services	12.6	6.0	-19.6	39.8	6.0	-14.8	10.6	-8.8
Imports of goods and services	16.2	23.0	5.5	-4.0	-4.5	0.7	-21.7	16.7
Gross domestic expenditure	11.7	11.4	15.9	-12.1	3.5	15.7	-5.2	17.4
GDP at constant prices	5.6	8.1	4.1	6.6	8.4	2.3	5.5	5.4

Sources: Central Statistics Office; and Fund staff estimates.

1/ National accounts year beginning July 1.



Table 3. Botswana: GDP by Type of Economic Activity at Current Prices, 1996/97-2003/04 1/

	1996/97	1997/98	1998/99	1999/00	2000/01	Est. 2001/02	Projection 2002/03	2003/04
(In millions of pula)								
Agriculture	602	689	654	665	755	792	852	891
Mining	6,908	7,665	6,693	8,389	10,086	11,238	11,140	12,019
Manufacturing	727	883	1,011	1,240	1,344	1,404	1,515	1,639
Water and electricity	320	371	458	568	689	750	791	876
Construction	1,017	1,154	1,360	1,424	1,563	1,738	1,879	2,056
Trade and hotels	1,784	2,018	2,339	2,735	3,193	3,651	4,091	4,532
Transport	575	667	814	935	1,093	1,229	1,410	1,569
Banking, insurance, and business services	1,775	2,079	2,410	2,761	3,202	3,644	3,965	4,288
General government	2,478	2,919	3,751	4,105	4,568	5,264	6,608	7,332
Social and personal services	682	746	870	994	1,107	1,249	1,458	1,670
Adjustments items	872	972	1,163	1,128	1,073	1,042	1,217	1,339
GDP at current prices	17,740	20,163	21,524	24,943	28,671	32,000	34,927	38,210
(In percent of total GDP)								
Agriculture	3.4	3.4	3.0	2.7	2.6	2.5	2.4	2.3
Mining	38.9	38.0	31.1	33.6	35.2	35.1	31.9	31.5
Manufacturing	5.0	5.0	5.2	5.0	4.7	4.4	4.3	4.3
Water and electricity	1.8	1.8	2.1	2.3	2.4	2.3	2.3	2.3
Construction	5.7	5.7	6.3	5.7	5.5	5.4	5.4	5.4
Trade and hotels	10.1	10.0	10.9	11.0	11.1	11.4	11.7	11.9
Transport	3.2	3.3	3.8	3.8	3.8	3.8	4.0	4.1
Banking, insurance, and business services	10.0	10.3	11.2	11.1	11.2	11.4	11.4	11.2
General government	14.0	14.5	17.4	16.5	15.9	16.5	18.9	19.2
Social and personal services	3.8	3.7	4.0	4.0	3.9	3.9	4.2	4.4
Adjustments items	4.0	4.2	4.9	4.5	3.7	3.3	3.5	3.5
GDP at current prices	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Sources: Central Statistics Office; and Fund staff estimates.

1/ National accounts year beginning July 1.

Table 4. Botswana: GDP by Type of Economic Activity at Constant 1993/94 Prices, 1996/97-2003/04 1/

	1996/97	1997/98	1998/99	1999/00	2000/01	Est. 2001/02	Projection 2002/03	2003/04
(In millions of pula)								
Agriculture	453	480	443	405	434	423	430	436
Mining	4,311	4,722	4,588	5,142	6,027	5,839	6,189	6,579
Manufacturing	594	626	661	684	681	683	710	738
Water and electricity	269	295	334	371	391	406	430	454
Construction	788	822	917	939	955	1,000	1,050	1,099
Trade and hotels	1,359	1,423	1,502	1,596	1,700	1,840	1,968	2,096
Transport	456	498	579	594	624	667	701	736
Banking, insurance, and business services	1,368	1,501	1,636	1,707	1,795	1,922	2,047	2,150
General government	2,009	2,196	2,333	2,474	2,641	2,861	2,976	3,095
Social and personal services	558	575	618	645	663	705	750	803
Adjustment items	539	592	684	681	614	567	590	612
GDP at constant prices	12,704	13,729	14,296	15,239	16,524	16,912	17,841	18,797
Of which : Nonmining private GDP	8,393	9,007	9,707	10,097	10,497	11,073	11,652	12,219
(Annual percentage change)								
Agriculture	-7.5	5.9	-7.6	-8.7	7.3	-2.5	1.5	1.5
Mining	5.8	9.5	-2.8	12.1	17.2	-3.1	6.0	6.3
Manufacturing	3.7	5.4	5.7	3.5	-0.4	0.2	4.0	4.0
Water and electricity	4.6	9.9	12.9	11.3	5.4	3.7	6.0	5.5
Construction	5.5	4.3	11.5	2.4	1.6	4.7	5.0	4.7
Trade and hotels	13.9	4.7	5.6	6.2	6.5	8.2	7.0	6.5
Transport	4.3	9.1	16.2	2.6	5.0	7.0	5.0	5.0
Banking, insurance, and business services	1.2	9.7	9.0	4.3	5.1	7.1	6.5	5.0
General government	8.3	9.3	6.3	6.0	6.7	8.3	4.0	4.0
Social and personal services	5.0	2.9	7.5	4.4	2.8	6.2	6.5	7.0
Adjustment items	3.8	9.9	15.5	-0.5	-9.9	-7.6	4.0	3.7
GDP at constant prices	5.6	8.1	4.1	6.6	8.4	2.3	5.5	5.4
Of which : Nonmining private GDP	5.5	7.3	7.8	4.0	4.0	5.5	5.2	4.9

Sources: Central Statistics Office; and Fund staff estimates.

1/ National accounts year beginning July 1.

Table 5. Botswana: Beef Sales, 1996/97-2003/04 1/

	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03
<hr/>							
Boneless beef sales by category							
	(In thousands of tons)						
Gross sales	19	21	18	20	25	16	...
	(In millions of pula)						
Gross sales	238	247	241	298	387	258	...
<hr/>							
Beef sales by country							
	(In thousands of tons)						
Total	19	21	18	20	25	16	...
United Kingdom	8	12	6.8	7.7	11.4	8.0	...
South Africa	3	5	1.5	1.7	3.2	1.6	...
Other	8	5	9.6	10.6	10.4	6.4	...
	(In millions of pula)						
Total	238	247	241	298	387	258	...
United Kingdom	127	138	135	114	176	129	...
South Africa	28	35	20	26	50	26	...
Other	84	74	86	158	161	103	...
<hr/>							
Memorandum item:							
	(In thousands)						
Total cattle processed	127	163	140	...	169	113	...

Source: Botswana Meat Commission.

1/ Year beginning October 1.

Table 6. Botswana: Mineral Production and Value, 1996-2003

	1996	1997	1998	1999	2000	2001	2002	2003 <sup>2/</sup>
<b>Diamonds</b>								
Volume (in millions of carats)	18	20	20	21	25	26	28.4	11.1
<b>Copper-nickel matte</b>								
Value (in millions of pula) 1/	736	759	456	558	801	665	859	328
Volume (in thousands of tons)	53	42	37	39	46	31	92	11
Unit value (in pula per ton)	13,793	18,021	12,343	14,308	17,413	21,452	9,337	29,818
<b>Coal</b>								
Value (in millions of pula) 1/	21	25	30	26	30	29	30	13
Volume (in thousands of tons)	765	775	924	945	947	930	953	341
Unit value (in pula per ton)	27	32	32	27	31	32	32	38
<b>Soda ash</b>								
Value (in millions of pula) 1/	52	132	137	106	122	186	210	73
Volume (in thousands of tons)	118	200	190	229	190	251	283	98
Unit value (in pula per ton)	442	658	720	463	639	741	741	745
<b>Salt</b>								
Value (in millions of pula) 1/	12	37	30	19	32	37	65	20
Volume (in thousands of tons)	108	185	140	168	185	179	315	95
Unit value (in pula per ton)	110	202	212	115	175	206	206	211

Source: Central Statistics Office.

1/ Estimated value of production.

2/ First 2 Quarters only

Table 7. Botswana: Agricultural Producer Prices, 1996/97-2003/2004 1/  
(Pula per tonne)

	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03
Sorghum	319	422	486	574	548	1,200	...
White maize	437	437	466	644	508	933	...
Pulses	737	797	783	876	2,832	3,908	...
Sunflower seeds	310	625	625	728	713	1,531	...
Shelled groundnuts	1,116	1,356	1,356	1,491	1,642	2,366	...

Source: Botswana Agricultural Marketing Board.

1/ Crop year beginning April 1.

Table 8. Botswana: Formal Sector Employment, 1996-2003 1/  
(Number of employees, unless otherwise indicated)

	1996	1997	1998	1999	2000	2001	2002	2003
Private and parastatal	131,100	139,700	153,100	157,800	160,100	168,626	169,519	174,483
<i>of which</i>								
Private	118,000	126,200	137,600	141,400	146,200	155,062	155,936	160,861
Parastatal	13,100	13,500	15,500	16,500	13,900	13,564	13,583	13,622
Agriculture	3,800	4,000	5,400	5,500	5,800	6,206	5,975	6,264
Mining and quarrying	8,600	8,600	8,300	8,200	7,800	6,962	7,508	7,968
Manufacturing	23,500	23,100	28,000	28,400	29,800	30,287	29,789	30,109
Electricity and water	2,600	2,700	2,700	3,700	2,900	2,752	3,064	2,865
Construction	19,400	25,100	27,500	28,400	27,200	28,785	28,895	29,750
Commerce	4,100	43,300	44,500	45,600	49,900	53,527	53,792	55,288
Transport and communications	8,400	8,500	9,800	10,200	10,100	9,854	10,136	10,277
Finance and business services	15,600	15,800	17,200	17,400	19,200	18,266	18,263	19,025
Community and personal services	3,700	3,900	4,200	4,400	4,300	5,249	5,327	5,796
Education	4,400	4,700	5,600	6,100	6,500	6,741	6,772	7,121
General government	95,700	101,900	104,000	104,500	106,400	105,156	110,205	110,900
Central government	77,900	83,100	84,900	85,700	85,400	83,077	86,958	87,700
Local government	17,800	18,800	19,100	18,800	21,000	22,079	23,247	23,200
Total	226,800	241,600	257,100	262,300	266,500	273,782	279,724	285,383
Memorandum item:								
Migrant workers employed in South African mines (in thousands)	11.9	12.7	13.1	...	...	...	...	...

Sources: Central Statistics Office.

1/ Data for September of each year.

Table 9. Botswana: Statutory Minimum Hourly Wage Rates, 1996-2003 1/

	1996	1997	1998	1999	2000	2001	2002	2003
(In thebe) 2/								
Manufacturing, service, and repair trades	145	159	175	190	205	225	240	260
Building, construction, exploration, and quarrying	145	159	175	190	205	225	240	260
Hotel, catering, and entertainment	145	159	175	190	205	225	240	240
Garages, motor trade, and road transport	145	159	175	190	205	225	225	260
Wholesale distributive trade	139	152	165	180	205	225	240	260
Retail distributive trade	131	143	155	170	185	205	215	230
Retail and wholesale nightwatchmen	123	135	150	165	180	200	210	210
Other nightwatchmen	123	135	150	165	180	200	210	220
(Annual growth rate, in percent)								
Manufacturing, service, and repair trades	7.4	9.7	10.1	8.6	7.9	9.8	6.7	8.3
Building, construction, exploration, and quarrying	7.4	9.7	10.1	8.6	7.9	9.8	6.7	8.3
Hotel, catering, and entertainment	7.4	9.7	10.1	8.6	7.9	9.8	6.7	0.0
Garages, motor trade, and road transport	7.4	9.7	10.1	8.6	7.9	9.8	0.0	15.6
Wholesale distributive trade	7.8	9.4	8.6	9.1	13.9	9.8	6.7	8.3
Retail distributive trade	8.3	9.2	8.4	9.7	8.8	10.8	4.9	7.0
Retail and wholesale nightwatchmen	8.8	9.8	11.1	10.0	9.1	11.1	5.0	0.0
Other nightwatchmen	8.8	9.8	11.1	10.0	9.1	11.1	5.0	4.8

Source: Central Statistics Office.

1/ Data for May.

2/ 100 thebe = 1 pula.

Table 10. Botswana: Average Monthly Cash Earnings by Sector, 1996-2001 1/

	1996	1997	1998	1999	2000	2001
(In pula)						
Private and parastatal	815	871	1,067	1,243	1,327	1,405
Agriculture	267	291	346	383	346	405
Mining and quarrying	1,238	1,354	1,950	2,249	2,470	2,786
Manufacturing	617	633	632	785	977	810
Electricity and water	1,371	1,857	2,043	3,166	3,330	3,194
Construction	656	794	754	776	749	847
Commerce	604	623	867	950	1,004	1,121
Transport and communications	1,251	1,255	1,725	2,318	2,553	2,631
Finance and business services	1,301	1,348	1,593	2,059	2,156	2,339
Community and personal services	808	912	1,249	1,445	1,748	1,488
Education	1,617	1,889	1,983	2,261	2,296	2,878
Local government	947	964	1,190	1,496	1,698	1,829
Central government	1,134	1,170	1,566	1,733	1,900	2,224
Total	923	969	1,251	1,428	1,546	1,701
(Annual percentage change)						
Private and parastatal	20.2	6.9	22.5	16.5	6.8	5.9
Agriculture	-3.3	9.0	18.9	10.7	-9.7	17.1
Mining and quarrying	5.8	9.4	44.0	15.3	9.8	12.8
Manufacturing	8.2	2.6	-0.2	24.2	24.5	-17.1
Electricity and water	4.6	35.4	10.0	55.0	5.2	-4.1
Construction	10.3	21.0	-5.0	2.9	-3.5	13.1
Commerce	6.9	3.1	39.2	9.6	5.7	11.7
Transport and communications	7.9	0.3	37.5	34.4	10.1	3.1
Finance and business services	4.1	3.6	18.2	29.3	4.7	8.5
Community and personal services	4.3	12.9	37.0	15.7	21.0	-14.9
Education	1.4	16.8	5.0	14.0	1.5	25.3
Local government	8.0	1.8	23.4	25.7	13.5	7.7
Central government	6.2	3.2	33.8	10.7	9.6	17.1
Total	7.1	5.0	29.1	14.1	8.3	10.0

Source: Central Statistics Office.

1/ Data are for March, except 1999, which are for September. Figures for 2001 are preliminary.



Table 11. Botswana: Consumer Price Index of Tradables and Nontradables, January 1999-October 2003  
(November 1996 = 100, unless otherwise indicated)

	All Items Index	Inflation (percent change)	Non- tradables Index	Inflation (percent change)	Domestic Tradables Index	Inflation (percent change)	Imported Tradables Index	Inflation (percent change)	All Tradables Index	Inflation (percent change)
Weights	100.00		29.24		23.79		46.97		70.76	
1999 Jan.	116.4	6.7	114.4	8.2	114.1	5.6	118.9	6.6	117.3	6.3
Feb.	117.5	7.4	114.7	8.3	115.5	6.5	120.2	7.2	118.6	7.0
Mar.	118.9	7.8	115.4	8.3	117.0	6.8	122.0	8.3	120.3	7.7
Apr.	119.7	7.2	115.7	6.4	117.7	5.6	123.3	8.4	121.4	7.5
May	120.1	7.0	115.9	6.7	118.5	5.9	123.5	7.8	121.8	7.1
Jun.	120.5	7.2	115.6	5.7	118.9	6.4	124.2	8.4	122.4	7.7
Jul.	120.7	6.9	115.9	5.7	119.0	5.8	124.6	8.3	122.7	7.5
Aug.	123.2	8.5	123.2	11.0	119.9	6.5	125.3	8.4	123.5	7.7
Sep.	124.0	9.1	124.5	11.9	120.2	6.7	126.3	9.2	124.2	8.4
Oct.	124.6	9.0	125.1	12.2	120.4	6.4	126.9	9.0	124.7	8.1
Nov.	124.7	8.5	125.1	12.1	120.8	6.2	126.9	7.8	124.8	7.3
Dec.	125.0	8.4	125.1	12.0	121.8	6.7	127.1	7.9	125.3	7.5
2000 Jan.	126.1	8.3	125.6	9.8	122.5	7.4	128.8	8.3	126.7	8.0
Feb.	127.0	8.1	126.2	10.0	123.1	6.6	129.2	7.5	127.2	7.2
Mar.	128.2	7.8	126.7	9.8	126.8	8.4	130.2	6.7	129.1	7.3
Apr.	129.8	8.4	127.1	9.8	127.3	8.2	133.1	8.0	131.2	8.0
May	130.6	8.7	128.5	10.9	127.6	7.7	133.8	8.4	131.7	8.1
Jun.	131.3	8.9	129.3	11.9	127.9	7.6	134.5	8.3	132.3	8.1
Jul.	133.2	10.4	134.3	15.8	128.1	7.6	135.2	8.5	132.8	8.2
Aug.	133.5	8.4	134.8	9.4	128.4	7.1	135.5	8.2	133.1	7.8
Sep.	133.9	8.0	136.0	9.3	128.6	7.0	135.4	7.2	133.1	7.1
Oct.	135.0	8.4	136.2	8.9	128.9	7.1	137.4	8.3	134.6	7.9
Nov.	135.3	8.5	136.3	9.0	129.2	6.9	137.9	8.7	135.0	8.1
Dec.	135.6	8.5	136.4	9.1	129.5	6.3	138.2	8.8	135.3	7.9
2001 Jan.	136.2	8.0	136.8	8.9	129.9	6.0	139.1	8.0	136.0	7.4
Feb.	136.4	7.4	138.8	9.4	130.6	6.1	139.2	7.8	136.3	7.2
Mar.	137.6	7.3	137.3	8.4	133.2	5.0	140.0	7.6	137.7	6.7
Apr.	138.2	6.5	137.6	8.3	133.9	5.2	140.7	5.7	138.4	5.5
May	140.1	7.3	143.2	11.4	134.6	5.5	141.3	5.6	139.1	5.6
Jun.	140.5	7.1	143.7	11.2	135.0	5.5	141.6	5.3	139.4	5.4
Jul.	141.1	5.9	143.9	7.2	135.3	5.7	142.5	5.4	140.0	5.5
Aug.	141.6	6.0	144.0	6.8	135.6	5.6	143.3	5.7	140.6	5.7
Sep.	142.1	6.1	145.1	6.7	135.8	5.6	143.7	6.1	140.9	5.9
Oct.	142.8	5.8	146.5	7.5	136.1	5.6	144.2	4.9	141.4	5.1
Nov.	143.2	5.8	146.8	7.7	136.9	6.0	144.5	4.8	141.9	5.1
Dec.	143.4	5.8	147.0	7.7	137.1	5.9	144.7	4.6	142.1	5.1
2002 Jan.	143.9	5.7	148.2	8.3	137.7	6.0	144.7	4.0	142.4	4.7
Feb.	144.1	5.7	148.4	8.4	138.5	6.0	144.6	3.8	142.5	4.6
Mar.	146.0	6.1	149.0	8.5	143.0	7.4	145.5	3.9	144.7	5.1
Apr.	147.8	6.9	153.0	11.2	145.0	8.3	145.9	3.7	145.7	5.2
May	148.2	5.8	153.1	7.0	145.6	8.2	146.3	3.5	146.2	5.1
Jun.	148.8	5.9	153.6	6.9	146.0	8.2	147.0	3.8	146.8	5.3
Jul.	153.6	8.9	156.3	8.6	152.6	12.8	152.0	6.7	152.4	8.9
Aug.	155.5	9.8	157.6	9.4	154.9	14.2	154.0	7.5	154.5	9.9
Sep.	156.5	10.1	158.5	9.2	155.9	14.8	154.9	7.8	155.4	10.3
Oct.	157.1	10.0	158.6	8.3	156.6	15.1	155.7	8.0	156.2	10.5
Nov.	159.1	11.1	163.7	11.5	157.7	15.2	156.3	8.2	157.0	10.6
Dec.	159.5	11.2	164.2	11.7	158.0	15.2	156.5	8.2	157.2	10.6
2003 Jan.	159.5	10.8	163.3	10.2	159.4	15.8	156.6	8.2	157.8	10.8
Feb.	160.9	11.6	164.0	10.5	160.6	16.0	158.4	9.5	159.4	11.9
Mar.	161.6	10.7	165.0	10.7	161.7	13.1	158.8	9.1	160.0	10.6
Apr.	163.8	10.8	166.1	8.6	163.7	12.9	161.8	10.9	162.7	11.7
May	164.8	11.2	166.6	8.8	165.0	13.3	163.0	11.4	163.9	12.0
Jun.	167.0	12.2	173.2	12.7	165.5	13.3	163.6	11.3	164.5	12.0
Jul.	166.9	8.7	173.3	10.9	165.4	8.4	163.3	7.5	164.2	7.8
Aug.	167.6	7.8	173.3	10.0	167.9	7.8	163.7	6.3	165.1	6.8
Sep.	168.0	7.4	173.7	9.6	167.9	7.7	163.9	5.8	165.6	6.5
Oct.	168.1	7.0	173.7	9.5	168.0	7.3	163.9	5.2	165.6	5.9

Source: Central Statistics Office.

Table 12. Botswana: Cost of Living Index, 1991-2003  
(November 1996=100, unless otherwise indicated)

	Food	Alcohol and Tobacco	Clothing and Footwear	Housing	Fuel and Power	Furniture etc.	Household Operation	Health, Personal Care	Transport, etc.	Leisure	Education	Other	All Items Index	Annual Inflation (percent change)
Weights	25.5	13.5	5.8	12.2	2.6	5.1	3.9	5.7	19.7	1.6	3.8	0.6	100	
1991 Dec.	55.8	60.8	52.9	56.7	80.1	57.8	60.3	52.2	57.4	66.4	55.1	57.9	57.5	12.6
1992 Dec.	66.8	69.6	65.1	66.7	83.5	65.8	71.4	58.0	66.0	76.8	60.1	68.5	67.0	16.5
1993 Dec.	72.9	75.4	74.5	75.0	89.7	72.0	76.7	86.6	75.6	80.7	76.4	73.1	75.5	12.7
1994 Dec.	80.7	81.9	83.7	83.3	94.2	78.4	84.8	90.6	85.0	89.5	81.6	85.0	82.9	9.8
1995 Dec.	89.7	91.7	91.9	90.4	93.8	93.3	93.0	94.5	94.1	95.2	91.0	93.3	91.8	10.8
1996 Dec.	100.7	100.3	101.1	100.0	103.5	101.6	100.4	100.4	100.5	99.6	100.0	100.6	100.6	9.6
1997 Dec.	109.9	111.2	109.7	103.5	105.4	110.4	110.0	104.7	108.1	103.2	105.2	106.7	108.4	7.8
1998 Dec.	116.0	122.5	113.5	110.2	106.3	116.0	118.2	107.7	113.2	107.4	123.9	119.7	115.3	6.4
1999 Dec.	122.1	134.9	117.4	126.0	118.5	123.7	129.2	116.8	123.2	109.8	141.0	128.6	125.0	8.4
2000 Dec.	127.1	146.9	120.6	145.5	145.2	134.4	141.9	120.7	142.2	111.3	143.2	134.5	135.6	8.5
2001 Dec.	132.3	158.9	125.7	158.7	149.5	136.7	153.2	123.8	149.0	116.0	147.6	139.3	143.4	5.7
2000 Jan.	122.7	134.9	117.8	126.2	125.4	124.1	129.4	117.5	126.9	110.2	141.8	128.7	126.1	8.3
Feb.	124.0	136.3	118.3	127.0	125.7	124.3	130.7	117.9	127.5	110.3	143.0	129.9	127.0	8.1
Mar.	125.0	140.8	118.6	127.7	125.9	124.6	133.3	117.9	127.6	110.8	143.0	133.4	128.2	7.8
Apr.	126.5	141.9	118.1	127.8	133.2	129.1	133.6	117.9	131.5	110.4	143.0	133.9	129.8	8.4
May	126.9	142.9	118.6	128.7	135.1	129.6	133.8	118.0	134.3	109.8	143.0	135.4	130.6	8.7
June	127.3	143.3	118.7	129.3	135.2	130.0	136.7	118.6	135.3	109.3	143.6	135.6	131.3	9.0
July	128.0	143.6	118.9	143.2	137.0	130.6	137.4	119.1	135.6	109.7	143.6	133.3	133.2	10.4
Aug.	127.9	144.1	119.1	144.1	137.8	131.9	137.7	119.7	135.6	110.9	143.2	134.0	133.5	8.4
Sep.	127.3	144.4	119.3	145.2	137.8	132.7	140.6	119.9	136.7	111.3	143.2	134.3	133.9	8.0
Oct.	127.4	145.4	119.5	145.3	145.8	133.0	141.1	120.5	141.0	111.3	143.2	134.3	135.0	8.3
Nov.	127.2	146.7	120.4	145.5	145.3	133.5	141.4	120.6	141.1	111.9	143.2	134.5	135.3	8.5
Dec.	127.1	146.9	120.6	145.5	145.2	134.4	141.9	120.7	142.2	111.3	143.2	134.5	135.6	8.5
2001 Jan.	127.5	147.0	120.8	143.0	145.6	134.5	142.4	120.7	144.0	111.5	145.4	134.5	136.2	8.0
Feb.	128.2	147.7	121.2	143.7	145.4	134.7	143.0	120.9	142.7	111.3	145.6	134.9	136.4	7.4
Mar.	128.4	153.8	122.0	144.6	144.9	134.7	143.6	120.9	142.4	112.4	147.6	137.6	137.6	7.4
Apr.	128.5	155.3	122.6	144.9	144.9	135.4	143.5	121.2	143.9	113.4	147.6	137.2	138.2	6.5
May	129.1	156.4	123.0	155.6	144.9	135.6	143.8	122.6	144.3	114.3	147.7	137.5	140.1	7.3
June	129.3	156.8	123.2	156.1	146.7	136.0	147.4	122.7	144.4	114.6	147.7	138.1	140.5	7.0
July	129.8	157.3	123.7	156.2	147.8	136.4	147.5	122.8	145.8	114.6	147.8	137.5	141.1	5.9
Aug.	130.1	157.5	124.5	156.4	148.9	136.7	148.1	123.1	146.8	115.5	147.6	138.1	141.5	6.0
Sep.	130.3	158.4	124.7	157.8	149.5	136.8	150.0	123.7	147.0	115.7	147.6	138.3	142.1	6.1
Oct.	131.4	158.2	125.0	157.9	149.7	137.0	151.1	123.7	148.7	116.0	147.6	138.5	142.8	5.8
Nov.	131.9	158.9	125.8	158.1	149.5	137.5	152.4	123.9	149.0	116.3	147.6	139.1	143.2	5.9
Dec.	132.3	158.9	125.7	158.7	149.5	136.7	153.2	123.8	149.0	116.0	147.6	139.3	143.4	5.7
2002 Jan.	132.9	159.2	125.9	159.0	149.5	137.5	153.8	124.1	148.2	117.5	158.2	139.4	143.9	5.7
Feb.	133.4	159.6	126.2	159.0	149.4	139.7	154.6	124.4	146.9	117.8	158.2	145.9	144.1	5.6
Mar.	135.0	165.1	126.5	160.3	149.4	139.5	155.1	124.4	148.5	118.1	158.5	151.8	146.0	6.1
Apr.	136.3	166.8	126.7	168.8	149.5	139.8	155.5	125.0	148.5	119.6	158.5	152.2	147.8	6.9
May	136.9	167.0	127.0	169.0	149.6	141.5	155.5	125.2	148.6	120.2	158.5	152.4	148.2	5.8
June	137.8	167.1	127.4	169.1	151.5	141.7	157.1	127.1	148.6	120.3	158.5	153.9	148.8	5.9
Jul	143.9	174.9	128.4	171.0	160.6	142.9	159.7	129.4	153.7	121.6	164.0	158.4	153.6	8.8
Aug	146.6	178.0	129.6	172.2	162.9	143.8	161.9	131.1	154.9	123.0	165.0	162.8	155.5	9.9
Sep	147.9	179.0	130.2	173.8	163.2	144.1	164.5	131.8	154.9	123.6	164.8	162.9	156.5	10.1
Oct	149.4	179.1	130.5	174.1	163.6	144.6	164.5	132.1	155.0	123.8	164.8	162.9	157.1	10.0
Nov	150.7	179.3	130.8	174.3	163.2	144.8	165.1	132.6	164.7	124.1	164.8	171.7	159.1	11.1
Dec	151.2	179.0	130.9	175.4	163.0	145.6	166.8	133.0	164.6	124.2	164.8	172.0	159.5	11.2
2003 Jan.	152.3	179.4	130.9	175.9	161.6	146.2	167.0	137.6	164.0	125.0	173.1	176.2	160.4	10.8
Feb.	153.5	180.2	130.8	176.3	161.8	146.7	167.5	137.9	168.0	126.1	173.1	173.4	161.8	11.6
Mar.	154.7	181.2	131.1	176.8	161.3	147.0	168.2	137.8	168.0	126.1	177.9	173.5	162.5	10.6
Apr.	157.3	183.4	132.2	177.0	160.9	147.6	168.9	140.7	172.6	127.1	177.9	176.8	164.7	10.8
May	158.7	184.7	132.9	178.2	162.3	147.7	170.4	141.0	173.4	127.0	177.7	176.9	165.7	11.2
Jun	159.6	184.7	134.8	191.9	161.2	147.9	170.4	141.3	174.5	126.5	177.7	178.6	167.9	12.2
Jul	159.6	184.7	134.9	192.2	158.8	148.3	170.7	141.5	173.3	126.5	177.7	179.1	167.8	8.6
Aug	160.1	187.1	134.8	192.2	158.9	148.9	171.7	141.6	173.4	126.4	177.7	180.0	168.5	7.8
Sep	160.3	188.3	135.2	193.0	158.7	149.4	173.0	141.7	166.9	126.5	177.7	178.8	167.9	7.3
Oct	159.7	188.7	135.4	193.0	158.4	150.0	172.9	141.6	168.3	126.5	177.7	178.8	168.1	7.0

Source: Central Statistical Office.

Table 13. Botswana: Central Government Operations, 1997/98-2003/04 1/

	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03 Prel.	2003/04 Proj.
(In millions of pula)							
Total revenue and grants	8,281.3	7,677.6	11,963.1	14,115.1	12,707.9	14,311.1	17,107.0
Total revenue	8,169.2	7,539.9	11,837.1	14,050.5	12,648.8	14,226.7	16,907.0
Tax revenue	6,767.3	5,639.5	9,937.8	12,077.6	10,581.8	12,259.9	14,732.0
Mineral revenue	4,681.1	3,186.6	6,687.3	8,367.8	6,995.8	7,502.7	8,140.0
Trade and excise taxes 3/	1,186.1	1,261.3	1,931.2	2,188.4	1,731.9	1,569.7	2,258.0
General sales tax	327.9	400.5	483.7	523.8	519.7	1,245.1	1,700.0
Other	572.3	791.1	835.6	997.6	1,334.4	1,942.4	2,634.0
Nontax revenue	1,401.8	1,900.4	1,899.3	1,973.0	2,067.0	1,966.8	2,175.0
Interest	251.7	208.6	166.3	205.2	189.1	224.8	170.0
Property income	984.2	1,252.9	1,232.2	1,194.7	1,170.2	1,292.4	791.0
Other	165.9	438.9	500.8	573.1	707.7	674.4	1,214.0
Grants	112.1	137.7	126.1	64.5	59.2	84.4	200.0
Total expenditure and lending	7,303.5	8,957.1	10,427.5	11,536.5	13,669.9	15,703.3	17,384.4
Current expenditure	4,826.0	6,157.0	7,047.9	8,383.1	9,934.9	11,581.0	13,801.4
Wages and salaries	1,686.4	2,153.2	2,418.7	2,743.3	3,923.9	3,946.5	4,132.4
Interest	86.2	92.8	92.5	83.1	94.1	81.1	107.0
Other	3,156.0	4,019.3	4,536.7	5,556.7	5,916.9	7,553.4	9,562.0
Capital expenditure	2,695.5	2,934.5	3,451.0	3,134.6	3,698.0	3,823.3	4,000.0
Net lending	-218.0	-134.4	-71.4	18.8	37.1	299.0	-417.0
Primary balance (deficit -)	1,064.0	-1,186.7	1,628.1	2,661.6	-867.9	-1,311.1	-170.4
Overall balance (deficit -)	977.7	-1,279.5	1,535.6	2,578.6	-962.0	-1,392.2	-277.4
Financing	-977.7	1,279.5	-1,535.6	-2,578.6	962.0	1,352.4	277.4
Foreign (net)	86.2	27.9	-35.2	-177.5	-183.6	-250.0	-264.8
Drawing	234.4	194.1	130.1	12.5	60.1	23.5	-10.0
Amortization	-148.2	-166.2	-165.3	-190.0	-243.8	273.5	-254.8
Domestic	-1,063.9	1,251.6	-1,500.4	-2,401.1	1,169.0	1,602.4	542.1
(in percent of GDP)							
Total revenue and grants	42.3	36.2	49.7	50.9	40.8	41.9	46.1
Total revenue	41.8	35.6	49.1	50.7	40.6	41.6	45.5
Tax revenue	34.6	26.6	41.3	43.5	34.0	35.9	39.7
Mineral revenue	23.9	15.0	27.8	30.2	22.4	21.9	21.9
Trade and excise taxes 3/	6.1	6.0	8.0	7.9	5.6	4.6	6.1
General sales tax	1.7	1.9	2.0	1.9	1.7	3.6	4.6
Other	2.9	3.7	3.5	3.6	4.3	5.7	7.1
Nontax revenue	7.2	9.0	7.9	7.1	6.6	5.8	5.9
Interest	1.3	1.0	0.7	0.7	0.6	0.7	0.5
Property income	5.0	5.9	5.1	4.3	3.8	3.8	2.1
Other	0.8	2.1	2.1	2.1	2.3	2.0	3.3
Grants	0.6	0.7	0.5	0.2	0.2	0.2	0.5
Total expenditure and lending	37.3	42.3	43.3	41.6	43.9	45.9	46.8
Current expenditure	24.7	29.1	29.3	30.2	31.9	33.9	37.2
Wages and salaries	8.6	10.2	10.0	9.9	12.6	11.5	11.1
Interest	0.4	0.4	0.4	0.3	0.3	0.2	0.3
Other	16.1	19.0	18.8	20.0	19.0	22.1	25.7
Capital expenditure	13.8	13.9	14.3	11.3	11.9	11.2	10.8
Net lending	-1.1	-0.6	-0.3	0.1	0.1	0.9	-1.1
Primary balance (deficit -)	5.4	-5.6	6.8	9.6	-2.8	-3.8	-0.5
Overall balance (deficit -)	5.0	-6.0	6.4	9.3	-3.1	-4.1	-0.7
Memorandum item:							
GDP (fiscal year; in millions of pula)	19,557.0	21,183.4	24,088.1	27,739.3	31,167.9	34,195.0	37,389.3

Sources: Ministry of Finance and Development Planning; and Fund staff estimates.

1/ Fiscal year beginning April 1.

2/ Trade and excise taxes are received from the revenue pool of the Southern African Customs Union (SACU).

Table 14. Botswana: Components of Central Government Revenue, 1997/98-2003/04 1/  
(In millions of pula)

	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03 Prel.	2003/04 Proj.
Tax revenue	6,767.3	5,639.5	9,937.8	12,077.6	10,581.8	12,259.9	14,732.0
Mineral revenue	4,681.1	3,186.6	6,687.3	8,367.8	6,995.8	7,502.7	8,140.0
Trade and excise taxes 2/	1,186.1	1,261.3	1,931.2	2,188.4	1,731.9	1,569.7	2,119.8
General sales tax/VAT 3/	327.9	400.5	483.7	523.8	519.7	1,287.5	1,700.0
Nonmineral income tax	537.3	739.3	780.2	925.3	1,247.9	2,255.9	2,634.0
Export duties	0.4	0.1	0.1	0.1	0.1	0.1	0.1
Taxes on property	7.3	11.2	11.5	15.9	16.3	6.0	16.5
Motor vehicle tax	17.9	25.9	27.4	40.2	51.1	55.6	59.3
Business and professional licenses	8.2	11.6	13.8	13.8	15.7	14.8	20.0
Nontax revenue	1,401.8	1,900.4	1,899.3	1,973.0	2,067.0	1,966.8	2,138.7
Interest	251.7	208.6	166.3	205.2	189.1	224.8	170.2
Property income	984.2	1,252.9	1,232.2	1,194.7	1,170.2	1,292.4	790.6
Fees, charges, and reimbursements	133.5	378.0	447.9	508.1	601.1	878.2	1,031.1
Sale of fixed assets and land	32.5	60.8	52.8	65.0	106.6	55.4	146.8
Grants	112.1	137.7	126.1	64.5	59.2	31.0	200.0
Recurrent	1.6	1.3	0.0	0.0	0.0	0.0	0.0
Development	110.5	136.4	126.0	64.5	59.2	31.0	200.0
Total revenue and grants	8,281.3	7,677.6	11,963.1	14,115.1	12,707.9	14,311.1	17,107.0

Source: Ministry of Finance and Development Planning.

1/ Fiscal year beginning April 1.

2/ Trade and excise taxes are received from the revenue pool of the Southern African Customs Union (SACU).

3/ Value-added tax was introduced in July 2002.

Table 15. Botswana: Economic Classification of Central Government Expenditure, 1997/98-2003/04 1/

	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03 Prel.	2003/04 Proj.
(In millions of pula)							
Total expenditure and net lending	7,303.5	8,957.1	10,427.5	11,536.5	13,669.9	15,703.3	17,384.4
Current expenditure	4,826.0	6,157.0	7,047.9	8,383.1	9,934.9	11,581.0	13,801.4
Expenditure on goods and services	4,740.4	6,064.5	6,955.4	8,124.7	8,010.9	8,300.0	13,694.4
Wages and salaries	1,686.4	2,153.2	2,418.7	2,631.6	2,735.7	2,743.3	4,132.4
Other purchases of goods and services 2/	3,054.0	3,911.3	4,536.7	5,493.1	5,275.2	5,556.7	9,562.0
Interest payments	86.2	92.8	92.6	83.1	83.0	83.1	107.0
Capital expenditure and net lending	2,478.0	2,800.0	3,269.6	3,435.3	2,815.1	3,033.4	3,585.8
Capital expenditure	2,696.0	2,935.0	3,451.0	3,134.6	3,698.0	3,823.3	4,000.0
Net lending	-218.0	-134.0	-181.4	-148.8	-89.5	-101.2	-417.0
Gross lending	68.0	42.0	110.0	168.0	120.0	120.0	150.0
Repayment	-286.0	-176.0	-291.4	-316.8	-209.5	-221.2	-567.0
(Percent share of total expenditure)							
Total expenditure and net lending	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Current expenditure	66.1	68.7	67.6	72.7	72.7	73.7	79.4
Expenditure on goods and services	64.9	67.7	66.7	70.4	58.6	52.9	78.8
Wages and salaries	23.1	24.0	23.2	22.8	20.0	17.5	23.8
Other purchases of goods and services 2/	41.8	43.7	43.5	47.6	38.6	35.4	55.0
Interest payments	1.2	1.0	0.9	0.7	0.6	0.5	0.6
Capital expenditure and net lending	33.9	31.3	31.4	29.8	20.6	19.3	20.6
Capital expenditure	36.9	32.8	33.1	27.2	27.1	24.3	23.0
Net lending	-3.0	-1.5	-1.7	-1.3	-0.7	-0.6	-2.4
Gross lending	0.9	0.5	1.1	1.5	0.9	0.8	0.9
Repayment	-3.9	-2.0	-2.8	-2.7	-1.5	-1.4	-3.3

Sources: Ministry of Finance and Development Planning; and Fund staff estimates.

1/ Fiscal year beginning April 1.

2/ Includes subsidies and transfers from 1997/98 onward.

Table 16. Botswana: Functional Classification of Central Government Expenditure, 1997/98-2003/04 1/

	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03 Prel.	2003/04 Proj.
(In millions of pula)							
General public services	2,027.9	2,485.4	2,941.1	3,296.0	3,704.9	4,418.9	5,318.9
General administration	1,082.2	1,230.0	1,553.7	1,612.1	1,770.7	2,194.8	2,968.2
Public order and safety	319.9	443.6	612.4	685.7	628.9	773.0	846.0
Defense	625.8	811.8	775.0	998.2	1,305.3	1,451.1	1,504.7
Social services	3,044.0	4,005.0	4,508.1	5,032.8	5,875.9	6,889.3	7,742.7
Education	1,786.2	2,275.7	2,458.0	2,872.1	3,409.2	3,596.8	4,496.6
Health	411.2	468.4	542.6	629.9	803.0	1,102.7	1,447.3
Housing and urban and regional development	555.0	669.7	743.3	761.9	827.2	1,218.2	1,098.6
Other community and social services	131.4	270.4	401.0	345.1	373.2	621.4	596.8
Economic services	1,796.6	1,854.2	2,099.4	2,052.5	2,751.5	3,134.5	2,907.3
Agriculture, forestry, and fishing	379.2	440.0	451.0	481.7	569.8	688.4	627.4
Mining	58.5	201.2	124.2	74.5	394.0	101.5	178.9
Roads, other transport, and communications	321.8	390.9	535.5	580.2	695.1	742.1	646.1
Electricity and water supply	704.3	451.1	645.8	576.0	668.5	993.8	959.1
Commerce, industry, and other	332.8	371.0	342.9	340.1	424.1	608.7	495.8
Unallocated	653.0	746.9	950.3	1,136.4	1,300.6	961.6	1,832.5
Total	7,521.5	9,091.5	10,498.9	11,517.7	13,632.9	15,404.3	17,801.4
(Percent share of total expenditure)							
General public services	10.4	11.7	12.2	11.9	11.9	12.9	14.3
General administration	5.5	5.8	6.5	5.8	5.7	6.4	8.0
Public order and safety	1.6	2.1	2.5	2.5	2.0	2.3	2.3
Defense	3.2	3.8	3.2	3.6	4.2	4.2	4.1
Social services	15.6	18.9	18.7	18.1	18.9	20.1	20.8
Education	9.1	10.7	10.2	10.3	10.9	10.5	12.1
Health	2.1	2.2	2.3	2.3	2.6	3.2	3.9
Housing and urban and regional development	2.8	3.2	3.1	2.7	2.7	3.6	3.0
Other community and social services	0.7	1.3	1.7	1.2	1.2	1.8	1.6
Economic services	9.2	8.8	8.7	7.4	8.8	9.2	7.8
Agriculture, forestry, and fishing	1.9	2.1	1.9	1.7	1.8	2.0	1.7
Mining	0.3	0.9	0.5	0.3	1.3	0.3	0.5
Roads, other transport, and communications	1.6	1.8	2.2	2.1	2.2	2.2	1.7
Electricity and water supply	3.6	2.1	2.7	2.1	2.1	2.9	2.6
Commerce, industry, and other	1.7	1.8	1.4	1.2	1.4	1.8	1.3
Unallocated	3.3	3.5	3.9	4.1	4.2	2.8	4.9
Total	38.5	42.9	43.6	41.4	43.7	45.0	47.9

Source: Ministry of Finance and Development Planning; and Fund staff estimates.

1/ Fiscal year beginning April 1.

Table 17. Botswana: Summary of Operations of Nonfinancial Public Enterprises, 1998-2003 1/

	1998	1999	2000	2001	2002	2003
(In millions of pula)						
Operating revenue	1,481	1,557	1,611	1,774	...	...
Net profit/loss	316	379	433	423	...	...
Long term debt outstanding	1,813	2,208	2,094	2,125	...	...
Equity	52,552	3,097	4,393	4,937	...	...
Capital employed	4,825	5,915	6,105	7,402	...	...
Fixed assets	3,554	5,269	5,531	...	...	...
(In percent, period average)						
Return on capital employed	12	7.1	3.3	5.7	...	...
Return on equity	9.2	8.9	3.5	9	...	...
Net profit to sales	17	20.7	17.6	24	...	...
Debt to equity	29.1	38.2	35.4	43	...	...
Memorandum item:						
Operating revenue (in percent of GDP)	7.6	7.4	6.7	5.5	...	...

Source: Bank of Botswana.

1/ Includes the Botswana Agricultural Marketing Board, the Botswana Livestock Development Corporation, the Botswana Housing Corporation, the Botswana Meat Commission, the Botswana Power Corporation, the Botswana Telecommunications Corporation, and the Botswana Water Utilities Corporation. Data cover fiscal-year April-March, except for the Botswana Livestock Development Corporation, for which data cover fiscal-year January-December, and the Botswana Meat Commission, for which data cover fiscal-year October-September.

Table 18. Botswana: Monetary Survey, 1996-2003

	1996	1997	1998	1999	2000	2001	2002	2003 Aug.
(In millions of pula, end of period)								
Net foreign assets	18,657.7	22,321.2	27,747.3	30,051.3	35,110.5	43,074.8	31,247.3	26,829.0
Bank of Botswana	18,355.6	21,636.5	26,502.4	28,866.8	33,900.4	41,211.5	29,984.1	25,779.5
Commercial banks	302.1	684.6	1,245.0	1,184.5	1,210.1	1,863.3	1,263.2	1,049.5
Net domestic credit	-5,463.5	-13,498.5	-16,128.3	-15,961.6	-19,204.6	-22,319.8	-9,869.5	-4,681.2
Net claims on the government	-7,259.4	-15,395.9	-19,086.6	-20,137.5	-24,130.3	-27,778.5	-16,490.6	-11,759.9
Bank of Botswana	-7,220.6	-15,362.3	-19,071.6	-20,086.1	-24,026.2	-27,718.6	-16,433.0	-11,547.7
Commercial banks	-38.9	-33.6	-15.0	-51.4	-104.2	-59.8	-57.6	-212.2
Claims on nongovernment	1,796.0	1,897.3	2,958.3	4,175.9	4,925.7	5,458.6	6,621.1	7,078.7
Claims on parastatals	70.5	61.4	266.7	527.6	458.1	479.9	462.0	479.2
Claims on the private sector	1,725.5	1,835.9	2,691.6	3,648.2	4,467.7	4,978.8	6,159.1	6,599.5
Other items (net)	-10,004.4	-4,719.1	-5,897.5	-6,861.5	-8,577.4	-11,138.2	-11,870.2	-11,000.0
<i>Of which</i>								
Valuation adjustment 1/	-3,496.8	-832.4	-3,719.4	-8,799.6	-11,304.0	-15,972.5	-11,143.6	-8,131.0
Money plus quasi money	3,189.9	4,103.5	5,721.6	7,228.2	7,328.5	9,616.7	9,507.6	10,707.9
Money	950.9	1,037.8	1,513.0	1,774.6	1,896.6	2,350.7	2,524.0	2,800.9
Quasi money 2/	2,239.0	3,065.7	4,208.6	5,453.7	5,431.9	7,266.0	6,983.6	7,907.0
Memorandum items:								
Broad money (M3)	6,005.6	7,411.7	8,967.8	11,458.4	11,040.9	14,764.4	17,171.0	20,902.1
<i>Of which</i>								
Bank of Botswana certificates	2,815.7	3,308.2	3,246.2	4,230.2	3,712.4	5,147.7	7,663.5	10,194.2
Broad money (M4)								
<i>Of which</i>								
Foreign currency accounts	296.2	481.8	939.4	1,095.6	1,186.2	1,978.2	1,537.5	1,361.1
(Annual change as a percent of beginning-of-year money stock)								
Net foreign assets 3/	52.8	19.6	24.3	8.3	16.8	22.7	-27.5	-14.1
Net domestic credit	-16.0	-147.1	-19.5	1.0	-20.3	-16.2	55.8	52.6
Claims on the government (net)	-11.9	-112.1	-24.0	-5.5	-19.8	-15.1	40.6	28.7
Claims on the private sector	2.6	6.4	46.6	35.5	22.5	11.4	23.7	7.2
Money plus quasi-money	18.8	28.6	39.4	26.3	1.4	31.2	-1.1	12.6

Sources: Bank of Botswana; and Fund staff estimates.

1/ Equivalent to the revaluation profit (loss) for the year reported on the books of the Bank of Botswana.

2/ Includes private deposits at the Bank of Botswana but excludes holdings of Bank of Botswana certificates.

3/ Excludes the effect of foreign assets valuation adjustments.



Table 19. Botswana: Summary Accounts of Bank of Botswana, 1996-2003 1/  
(In millions of pula; end of period)

	1996	1997	1998	1999	2000	2001	2002	2003 Aug.
Foreign assets	19,191.7	21,730.4	26,611.8	28,990.7	34,033.9	41,340.9	30,108.6	26,046.6
Pula Fund	6,053.6	17,654.1	23,561.9	24,453.7	28,711.6	32,175.9	24,473.5	19,701.0
Liquidity portfolio	12,783.9	3,721.3	2,545.2	4,074.9	4,833.4	8,533.8	5,035.5	5,668.2
Matched assets/liability portfolio	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fund accounts	238.6	243.1	378.2	323.7	335.1	472.3	417.4	410.3
Holding of SDRs	150.4	156.1	203.4	178.3	208.8	276.7	242.5	238.4
Reserve position	97.3	90.3	173.0	143.6	124.0	194.9	185.5	171.9
Valuation Adjustment	7.0	2.8	0.3	0.0	0.0	0.6	-0.3	0.0
Loans and advances to financial institutions	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fixed assets	98.5	100.0	108.0	122.0	131.1	129.3	126.6	127.9
Other assets	17.1	11.9	18.5	16.4	22.6	29.6	55.6	139.2
Assets = liabilities	19,191.7	21,730.4	26,611.8	28,990.7	34,033.9	41,340.9	30,108.6	26,046.6
Reserve money	453.3	572.1	707.3	807.9	857.3	969.5	1,049.7	1,233.2
Currency in circulation	355.8	417.1	497.7	606.8	606.5	701.1	759.1	780.0
Currency outside banks	247.1	275.7	352.7	403.7	426.9	481.4	469.7	599.8
Pula currency in banks	108.7	141.4	145.0	203.1	179.6	219.7	289.4	180.2
Bankers' deposits	97.5	155.0	209.6	201.1	250.8	268.4	290.6	453.2
Private sector time deposits	46.7	62.7	25.7	171.9	183.4	183.8	285.9	437.2
Bank of Botswana certificates outstanding	2,815.7	3,308.2	3,246.2	4,230.2	3,712.4	5,147.7	7,663.4	10,015.1
Bankers	1,847.1	2,424.2	2,257.8	2,809.0	2,483.8	3,845.2	5,238.7	6,667.2
Others	968.6	883.9	988.4	1,421.2	1,228.6	1,302.5	2,424.7	3,347.9
Government deposits	11,664.2	15,364.0	18,954.8	19,899.4	24,218.5	27,880.6	16,544.3	11,335.5
Capital and reserves	2,378.8	1,866.0	3,201.6	3,387.3	4,353.7	6,629.7	4,074.8	2,784.4
Paid-up capital	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
General reserve	1,600.0	1,600.0	1,600.0	1,600.0	1,600.0	1,600.0	1,600.0	1,600.0
Revaluation reserve	753.8	241.0	1,576.6	1,762.3	2,728.7	5,004.7	2,449.8	1,159.4
Other liabilities	1,833.0	557.5	476.2	494.1	708.6	529.6	490.3	241.2

Source: Bank of Botswana.

1/ Effective January 1997, in accordance with the new Bank of Botswana Act, the balance sheet was reclassified, resulting in adjustments in the Pula Fund and government deposits, with corresponding adjustments in the liquidity portfolio and revaluation reserves.

Table 20. Botswana: Summary Accounts of Commercial Banks, 1996-2003  
(In millions of pula: end of period)

	1996	1997	1998	1999	2000	2001	2002	2003 Aug.
Commercial bank reserves	176.7	270.9	330.5	353.2	229.0	262.6	344.9	416.8
Cash	108.8	141.4	145.0	203.2	179.5	219.7	323.1	202.0
Balances at Bank of Botswana	67.9	129.5	185.5	150.0	49.5	42.9	21.8	214.8
Foreign assets	453.8	805.1	1,416.5	1,345.6	1,434.9	2,230.9	1,514.7	1,603.5
Claims on monetary authorities	1,192.4	1,571.9	1,322.2	1,717.7	1,197.1	1,874.1	1,622.4	2,312.3
Credit to domestic economy	1,698.2	1,838.5	2,742.0	4,061.0	4,804.8	5,395.2	6,523.2	7,059.3
Claims on local governments	1.7	1.9	14.5	14.9	2.4	0.7	0.0	0.8
Claims on parastatals	70.5	61.4	266.7	527.6	458.1	479.9	462.0	459.0
Claims on private sector	1,626.0	1,775.1	2,460.9	3,518.4	4,344.3	4,914.6	6,061.2	6,599.5
<i>Of which</i>								
Claims on households	849.5	943.0	1,389.5	1,995.0	2,429.6	2,947.9	3,560.8	3,750.0
Other assets	1,076.6	1,205.6	1,721.7	1,640.8	1,715.5	1,349.7	1,177.8	1,368.1
Fixed assets	110.6	113.2	129.4	158.6	166.6	175.5	194.9	192.4
Others 1/	966.0	1,092.4	1,592.3	1,482.2	1,548.9	1,174.3	982.9	1,175.7
Assets = liabilities	4,597.6	5,692.0	7,533.0	9,118.3	9,381.3	11,112.6	11,183.0	12,760.0
Time and savings deposits	703.8	762.1	1,160.3	1,370.9	1,469.6	1,869.3	2,305.1	2,406.4
Demand deposits of the public	2,192.4	3,003.1	4,182.9	5,281.8	5,248.5	7,082.2	6,697.7	7,603.3
Liabilities to other banks	151.7	120.4	171.6	161.1	224.8	367.7	170.8	400.7
Liabilities to Bank of Botswana	0.0	2.4	0.0	0.0	0.0	0.0	64.0	0.0
Government deposits	40.4	35.5	29.4	66.1	106.5	60.5	57.6	212.2
Capital and reserves	401.8	463.9	567.9	732.1	842.7	1,041.7	1,102.1	1,205.1
Other liabilities	1,107.7	1,304.5	1,420.9	1,506.3	1,489.1	691.2	785.8	932.1

Source: Bank of Botswana.

1/ Comprises other investments, balances due from domestic banks, bills purchased and discounted, Bank of Botswana certificates, and other unclassified assets.

Table 21. Botswana: Selected Financial Ratios and Aggregates of Commercial Banks, 1996-2003  
(In millions of pula, unless otherwise indicated; end of period)

	1996	1997	1998	1999	2000	2001	2002	2003 Aug.
Liquid assets 1/								
Required	263	330	449	528	581	676	812	874
Actual	1,409	1,853	1,771	1,070	1,609	2,613	1,622	2,312
Excess	1,146	1,523	1,322	1,542	1,028	1,937	810	1,438
Ratio of actual to required	5.4	5.6	3.9	2.0	2.8	3.9	2.0	2.6
Primary reserves 2/								
Required	95	107	146	172	189	220	264	271
Actual	68	237	332	322	238	263	286	362
Excess	-27	130	186	150	49	43	22	92
Ratio of actual to required	0.7	2.2	2.3	1.9	1.3	1.2	1.1	1.3
Deposit liabilities	2,972	3,841	5,424	6,757	6,912	9,234	8,983	10,222
Credit	1,799	1,900	2,965	4,191	4,933	5,462	6,628	7,080
Ratio of credit to deposit liabilities	0.6	0.5	0.5	0.6	0.7	0.6	0.7	0.7

Source: Bank of Botswana.

1/ Required liquid assets are 10 percent of commercial banks' daily average deposit balances. Eligible liquid assets include cash, current account balance with the Bank of Botswana (BoB) in excess of the primary required reserve, balances due from domestic banks, foreign notes and coins, BoB certificates, and private sector bills eligible for discount at the BoB.

2/ Primary required reserves, consisting of current account balances with the BoB, are 3.25 percent of average daily deposit balances.

Table 22. Botswana: Selected Interest Rates, 1996-2003  
(In percent; end of period)

	1996	1997	1998	1999	2000	2001	2002	2003
Bank of Botswana								
Lending rate (bank rate)	13.0	12.5	12.5	13.3	14.3	14.3	15.3	14.3
Public Debt Service Fund 1/								
Financial parastatals	12.1	12.1	12.1	12.1	13.8	13.8	13.8	13.8
Nonfinancial parastatals	14.6	14.6	14.6	14.6	16.3	16.3	16.3	16.3
Commercial banks								
Deposit rates								
Savings accounts	7.7	7.6	7.1	7.3	8.7	8.4	8.4	10.0
Call deposits	9.1	9.3	9.1	8.7	9.7	9.5	10.0	10.0
31-day notice	8.8	8.8	8.1	8.5	8.5	9.3	10.0	9.9
88-day notice	9.6	9.6	8.5	9.2	10.2	9.8	10.2	10.0
Fixed deposits								
6 months	10.0	9.8	9.0	9.8	10.3	10.4	10.8	10.8
12 months	10.3	9.9	9.1	10.4	10.7	10.6	11.0	10.9
Prime lending rate	14.5	14.0	14.0	14.8	15.8	15.8	16.8	16.8
Botswana Building Society								
Deposit rates								
Indefinite period paid-up shares	10.0	10.0	9.0	8.5	10.0	10.0	10.0	12.0
Subscription shares	9.0	9.5	8.0	7.0	8.5	8.5	8.5	8.5
Fixed-time deposits								
Ordinary savings accounts	2.0	2.5	2.0	2.0	2.5	2.5	2.5	3.0
Special savings accounts	8.0	8.0	7.0	7.0	7.5	7.5	7.5	7.5
Lending rates								
Mortgage loans 2/	14.5	14.5	14.0	14.0	14.5	14.5	14.5	15.0
Short-term loans 3/	17.5	17.5	17.0	17.0	17.0	17.0	17.0	17.0
Botswana Savings Bank								
Ordinary savings accounts	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Special savings accounts	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5

Source: Bank of Botswana.

1/ In 1991, a two-tier rate structure was introduced, with the lower rate applying to financial parastatals and the higher rate to nonfinancial parastatals.

2/ Loans over P 50,000 are charged an additional percentage point.

3/ Interest rates on short-term loans vary according to the security offered by the borrower.

Table 23. Botswana: Distribution of Commercial Bank Credit by Economic Activity, 1997-2003

	1997	1998	1999	2000	2001	2002	2003 Sept.
(In millions of pula; end of period)							
Agriculture	34	29	19	30	51	44	55
Mining	16	59	182	280	39	128	121
Manufacturing	147	192	220	200	264	330	393
Construction	54	135	83	100	131	209	206
Electricity and water	8	16	112	35	42	56	59
Transport and communications	90	145	208	146	181	118	146
Trade	189	261	212	493	390	579	694
Business services	292	387	526	593	801	984	945
Finance	6	2	12	21	37	25	18
Other business	58	78	80	147	98	127	171
Financial parastatals	61	267	528	458	480	462	460
Local government	2	14	15	2	1	0	0
Central government	0	0	0	0	0	0	0
Households	943	1,380	1,995	2,430	2,948	3,561	3,949
Total	1,900	2,965	4,192	4,933	5,462	6,628	7,228
(In percent of total)							
Agriculture	1.8	1.0	0.5	0.6	0.9	0.7	0.8
Mining	0.8	2.0	4.3	5.7	0.7	1.9	1.7
Manufacturing	7.7	6.5	5.2	4.0	4.8	5.0	5.4
Construction	2.8	4.6	2.0	2.0	2.4	3.2	2.9
Electricity and water	0.4	0.5	2.7	0.7	0.8	0.8	0.8
Transport and communications	4.7	4.9	5.0	3.0	3.3	1.8	2.0
Trade	9.9	8.8	5.1	10.0	7.1	8.7	9.6
Business services	15.4	13.1	12.5	12.0	14.7	14.8	13.1
Finance	0.3	0.1	0.3	0.4	0.7	0.4	0.2
Other business	3.1	2.6	1.9	3.0	1.8	1.9	2.4
Financial parastatals	3.2	9.0	12.6	9.3	8.8	7.0	6.4
Local government	0.1	0.5	0.4	0.0	0.0	0.0	0.0
Central government	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Households	49.6	46.5	47.6	49.3	54.0	53.7	54.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Bank of Botswana.

Table 24. Botswana: Sources of Commercial Bank Deposits, 1997-2003

	1997	1998	1999	2000	2001	2002	2003 Sep.
(In millions of pula; end of period)							
Government	295	339	346	470	669	602	996
Central	36	29	66	106	61	58	165
Local	259	310	280	364	609	544	832
Parastatals	500	685	855	617	823	780	729
Private enterprises	2,176	3,371	3,926	3,425	5,571	6,999	7,313
Households	871	1,030	1,629	2,401	2,171	2,492	2,868
Total	3,842	5,424	6,757	6,912	9,233	8,983	10,035
(In percent of total)							
Government	7.7	6.3	5.1	6.8	7.2	6.7	9.9
Central	0.9	0.5	1.0	1.5	0.7	0.6	1.6
Local	6.7	5.7	4.1	5.3	6.6	6.1	8.3
Parastatals	13.0	12.6	12.7	8.9	8.9	8.7	7.3
Private enterprises	56.6	62.1	58.1	49.5	60.3	77.9	72.9
Households	22.7	19.0	24.1	34.7	23.5	27.7	28.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Bank of Botswana.

Table 25. Botswana: Auctions of Bank of Botswana Certificates,  
January 2001-October 2003 1/

	Allotted (Millions of pula)	Reserved for Bank of Botswana (Millions of pula)	Stop-Out Price Range 2/ (In pula)	Effective Interest Rate (In percent)
<b>2001</b>				
January	476.2	23.8	91.9	13.5
February	434.4	75.6	91.9	13.4
March	174.5	225.5	99.1	12.8
April	424.4	0.0	96.825 - 99.605	12.79 - 13.05
May	672.1	339.9	96.950 - 97.055	13.04 - 13.23
June	1,568.9	1,440.1	96.795 - 99.535	12.92 - 13.18
July	1,214.0	0.0	99.155 - 99.315	12.65 - 12.69
August	1,116.8	443.2	96.955 - 97.050	13.07 - 13.21
September	2,000.8	789.2	96.985 - 99.375	12.79 - 13.06
October	2,075.2	47.7	96.810 - 97.010	12.83 - 12.95
November	1,623.5	576.5	97.045 - 97.260	12.78 - 12.83
December	1,032.1	617.9	97.035 - 97.045	12.78 - 12.83
<b>2002</b>				
January	1,576.8	371.0	97.005 - 97.035	12.82 - 12.83
February	2,225.2	414.8	97.030 - 97.035	12.83 - 12.85
March	1,256.3	553.7	97.030 - 97.040	12.81 - 12.85
April	1,885.4	844.6	97.035 - 97.060	12.83 - 12.86
May	2,485.8	289.2	97.035 - 97.040	12.81 - 12.83
June	1,859.4	830.6	97.0	12.8
July	2,069.9	1,250.1	97.035 - 97.040	12.81 - 12.83
August	2,376.1	913.9	97.0	12.8
September	2,698.4	2,841.6	96.965 - 97.040	12.81 - 12.86
October	2,674.9	925.1	96.835 - 97.025	12.88 - 13.77
November	2,619.8	1,075.4	96.720 - 96.825	13.82 - 14.31
December	2,746.7	983.8	96.720 - 96.790	14.31 - 14.32
<b>2003</b>				
January	2,868.2	0.0	96.7	14.3
February	2,490.3	58.8	96.7	14.3
March	2,059.2	800.9	96.720 - 96.725	14.29 - 14.31
April	4,343.0	1,213.3	96.725 - 96.730	14.27 - 14.29
May	1,921.3	62.1	96.7	14.3
June	2,608.3	817.2	96.700 - 96.740	14.22 - 14.27
July	3,951.7	0.0	96.725 - 96.740	14.22 - 14.29
August	3,297.9	0.0	96.725 - 96.735	14.24 - 14.29
September	3,265.2	532.5	96.760 - 96.790	14.03 - 14.15
October	3,258.3	337.1	96.760 - 96.875	13.58 - 14.12

Source: Bank of Botswana.

1/ In any month with more than one auction, the stop-out price and interest rates are arithmetic averages.

2/ The stop-out price is the price below which no bid for Bank of Botswana certificates will be entertained by the Bank of Botswana.

Table 26. Botswana: Value of Outstanding Bank of Botswana Certificates,  
January 2001-September 2003 1/  
(In millions of pula; end of period)

	Commercial Banks	Other Financial Institutions	Other Private Sector	Total
2001				
January	2,715	479	994	4,187
February	2,648	430	1,218	4,296
March	2,923	510	807	4,240
April	2,757	419	1,025	4,201
May	2,948	364	947	4,258
June	3,575	379	1,042	4,996
July	3,512	359	1,370	5,242
August	3,401	452	1,360	5,213
September	3,683	488	757	4,928
October	3,581	612	920	5,112
November	3,539	646	966	5,151
December	3,845	645	658	5,148
2002				
January	3,445	689	904	5,038
February	3,906	703	1,076	5,686
March	3,204	830	609	4,644
April	4,257	861	804	5,923
May	4,146	942	667	5,755
June	4,311	1,087	704	6,103
July	4,399	1,086	590	6,075
August	4,634	1,174	533	6,342
September	5,329	1,266	431	7,027
October	5,762	1,493	735	7,989
November	5,612	1,698	674	7,984
December	5,239	1,819	605	7,663
2003				
January	5,632	1,932	428	7,992
February	5,779	1,938	351	8,068
March	5,461	2,024	240	7,726
April	6,805	2,834	169	9,807
May	5,991	1,881	1,010	8,882
June	5,754	1,956	887	8,597
July	6,032	2,220	864	9,117
August	6,667	2,249	1,099	10,015
September	6,607	2,087	1,155	9,850

Sources: Bank of Botswana, *Annual Report*, and *Financial Statistics*.

1/ Total market value, excluding interest.



Table 27. Botswana: Balance of Payments, 1998-2003 1/  
(In millions of U.S. dollars, unless otherwise indicated)

	1998	1999	2000	2001	2002	2003 3/ Est.
Current account balance	204.7	619.0	546.7	600.7	616.7	812.7
Trade balance	78.0	785.6	904.5	713.8	763.3	997.7
Exports, f.o.b.	2,072.8	2,661.3	2,682.1	2,325.7	2,375.5	3,037.8
Of which						
Diamonds	1,479.8	2,121.8	2,235.7	1,937.1	1,977.6	2,482.4
Vehicles and parts	227.0	144.0	144.0	144.0	145.0	145.0
Imports, f.o.b.	-1,994.8	-1,875.7	-1,777.7	-1,611.9	-1,612.2	-2,040.1
Of which						
Food, beverages and tobacco	-296.9	-305.6	-293.6	-253.9	-316.1	-333.8
Chemical and rubber products	-200.7	-203.6	-203.0	-187.5	-216.1	-246.5
Metal and metal products	-228.0	-189.9	-151.1	-140.0	-136.7	-184.1
Machinery and electrical equipment	-480.5	-463.7	-463.0	-357.5	-380.0	-470.0
Vehicle and transport equipment	-368.1	-297.4	-258.4	-221.1	-285.9	-290.6
Services	-235.2	-156.1	-223.2	-173.7	-188.7	-232.3
Transportation	-164.9	-162.4	-174.4	-154.8	-153.7	-193.8
Travel	72.2	87.4	24.5	26.0	17.6	29.6
Other services	-142.6	-81.1	-73.4	-44.9	-52.6	-68.1
Income	120.3	-262.6	-352.2	-137.8	-276.0	-340.2
Compensation of employees	-15.0	-26.4	-36.8	-36.8	-38.6	-58.5
Investment income	135.3	-236.2	-315.3	-101.0	-237.4	-288.3
Of which						
Earnings on reserves	531.3	348.0	281.8	285.0	265.4	246.3
Current transfers	241.6	252.1	217.6	198.4	227.7	331.0
Of which						
Southern African Customs Union (SACU)	253.0	252.0	253.0	254.0	255.0	255.0
Capital and financial account	-171.6	-223.4	-164.2	-506.2	-510.9	-656.4
Capital account	32.0	20.6	38.2	5.8	15.7	21.1
Financial account	-203.6	-244.1	-202.4	-512.0	-526.6	-677.5
Direct investment	92.3	35.2	55.0	-350.7	30.5	42.7
Portfolio investment	-52.0	-35.0	-43.1	-62.6	-414.4	-529.8
Other investment	-244.0	-244.3	-214.3	-98.7	-142.7	-183.6
Of which						
Net government long-term borrowing	22.4	-25.7	-32.4	-16.5	-23.2	-23.8
Other net private long-term borrowing	27.5	1.8	2.0	2.0	2.1	3.0
Short-term borrowing	20.3	46.5	46.1	76.0	71.4	93.2
Net errors and omissions 2/	232.7	-107.0	-312.1	-496.8	-529.5	98.7
Reserve assets (increase -) 2/	-265.8	-288.5	-70.4	402.4	423.7	-254.9
Memorandum items:						
Current account balance (in percent of GDP)	4.1	12.3	10.4	11.5	11.6	11.0
Trade balance (in percent of GDP)	1.6	15.6	17.2	13.7	14.4	13.5
End-of-year gross official reserves	5,940.7	6,229.2	6,299.6	5,897.3	5,473.5	5,728.5
(in months of imports of goods and services)	28.2	31.1	32.5	33.0	30.6	25.2
Exchange rates						
U.S. dollars per pula (period average)	0.2	0.2	0.2	0.2	0.2	0.2
U.S. dollars per pula (end of period)	0.2	0.2	0.2	0.1	0.2	0.2

Sources: Botswana authorities; and Fund staff estimates and projections.

1/ Based on pula-denominated estimates converted at period-average exchange rate.

2/ Includes valuation adjustment.

3/ 2003 figures are preliminary.

Table 28. Botswana: Value of Principal Exports and Imports, 1998-2003

	1998	1999	2000	2001	2002	2003 1/ Est.
(In millions of U.S. dollars)						
Total exports, f.o.b.	2,073	2,661	2,682	2,326	2,375	3,038
Diamonds	1,480	2,122	2,236	1,937	1,978	2,482
Nondiamond	593	539	446	389	398	555
Meat	74	59	55	73	44	53
Copper nickel	73	88	108	70	76	154
Textiles	72	54	48	33	47	60
Soda ash	40	43	41	36	42	47
Other	334	297	195	176	187	240
Total imports, c.i.f.	2,265	2,200	2,085	1,816	1,933	2,393
Food, beverages, and tobacco	297	306	294	254	316	334
Wood and paper products	155	177	161	160	137	210
Textile and footwear	136	129	121	85	88	112
Chemical and rubber products	201	204	203	188	216	247
Fuel	103	107	103	122	138	167
Metal and metal products	228	190	151	140	137	184
Machinery and electrical equipment	480	464	463	357	380	470
Vehicle and transport equipment	368	297	258	221	286	291
Other goods	296	327	332	289	235	380
(In percent of total)						
Diamonds	71.4	79.7	83.4	83.3	83.2	81.7
Nondiamond	28.6	20.3	16.6	16.7	16.8	18.3
Meat	3.6	2.2	2.0	3.2	1.9	1.8
Copper nickel	3.5	3.3	4.0	3.0	3.2	5.1
Textiles	3.5	2.0	1.8	1.4	2.0	2.0
Soda ash	1.9	1.6	1.5	1.5	1.8	1.6
Other	16.1	11.2	7.3	7.6	7.9	7.9
Total exports, f.o.b.	100.0	100.0	100.0	100.0	100.0	100.0
Food, beverages, and tobacco	13.1	13.9	14.1	14.0	16.4	13.9
Wood and paper products	6.9	8.1	7.7	8.8	7.1	8.8
Textile and footwear	6.0	5.9	5.8	4.7	4.5	4.7
Chemical and rubber products	8.9	9.3	9.7	10.3	11.2	10.3
Fuel	4.6	4.9	4.9	6.7	7.2	7.0
Metal and metal products	10.1	8.6	7.2	7.7	7.1	7.7
Machinery and electrical equipment	21.2	21.1	22.2	19.7	19.7	19.6
Vehicle and transport equipment	16.3	13.5	12.4	12.2	14.8	12.1
Other goods	13.1	14.8	15.9	15.9	12.1	15.9
Total imports, c.i.f.	100.0	100.0	100.0	100.0	100.0	100.0

Source: Botswana authorities.

1/ 2003 figures are preliminary.

Table 29. Botswana: External Trade Indices, 1997/98-2001/02

	1997/98	1998/99	1999/00	2000/01	2001/02 1/
Values (in millions of pula)					
Exports of goods	10,304.4	8,559.9	12,426.3	13,649.4	13,519.0
Exports of services	1,088.4	1,491.7	1,681.8	1,657.1	2,083.5
Total exports (goods and services)	11,392.8	10,051.6	14,108.1	15,306.5	15,602.5
Imports of goods	-7,761.6	-8,571.2	-8,774.4	-9,046.6	-9,369.9
Imports of services	-1,113.7	-1,389.4	-2,188.7	-2,793.2	-3,093.4
Total imports (goods and services)	-8,875.3	-9,960.6	-10,963.1	-11,839.8	-12,463.3
Volume (1993/94 prices, millions of pula)					
Exports of goods	6,632.3	4,958.7	6,662.2	7,342.0	6,756.8
Exports of services	772.5	993.6	1,031.8	1,143.0	1,051.9
Total exports (goods and services)	7,404.8	5,952.3	7,694.0	8,485.0	7,808.7
Imports of goods	-5,458.4	-5,655.5	-5,321.9	-5,776.0	-5,497.8
Imports of services	-835.0	-981.4	-1,391.1	-1,509.0	-1,436.3
Total imports (goods and services)	-6,293.4	-6,636.9	-6,713.0	-7,285.0	-6,934.1
Price indices (1993/94=100)					
Exports of goods	155.4	172.6	186.5	185.9	200.1
Exports of services	140.9	150.1	163.0	145.0	198.1
Total exports (goods and services)	153.9	168.9	183.4	180.4	199.8
Imports of goods	142.2	151.6	164.9	156.6	170.4
Imports of services	133.4	141.6	157.3	185.1	215.4
Total imports (goods and services)	141.0	150.1	163.3	162.5	179.7

Source: National accounts

1/ Preliminary.

Table 30. Botswana: Direction of Trade, 1998-2002

	1998	1999	2000	2001	2002
(In millions of pula)					
Exports, f.o.b.	8,693	12,228	13,835	14,306	14,983
Southern African Customs Union (SACU)	1,494	1,271	927	924	968
Zimbabwe	249	291	541	374	391
Other Africa	111	137	126	108	113
United Kingdom	4,830	8,130	9,644	12,283	12,864
Other Europe	1,870	2,221	2,417	452	473
United States	90	86	82	35	37
All other	48	91	98	130	136
Imports, c.i.f.	9,804	10,164	10,613	10,557	10,169
SACU	7,402	7,784	7,846	8,193	7,892
Zimbabwe	375	397	367	335	323
Other Africa	54	27	35	35	34
United Kingdom	321	272	442	468	451
Other Europe	644	664	1,307	833	802
Korea, Republic of	457	264	22	22	21
United States	135	188	174	190	183
All other	418	569	421	480	462
(In percent of total)					
Exports, f.o.b.	100.0	100.0	100.0	100.0	100.0
Southern African Customs Union (SACU)	17.2	10.4	6.7	6.5	6.5
Zimbabwe	2.9	2.4	3.9	2.6	2.6
Other Africa	1.3	1.1	0.9	0.8	0.8
United Kingdom	55.6	66.5	69.7	85.9	85.9
Other Europe	21.5	18.2	17.5	3.2	3.2
United States	1.0	0.7	0.6	0.2	0.2
All other	0.6	0.7	0.7	0.9	0.9
Imports, c.i.f.	100.0	100.0	100.0	100.0	100.0
SACU	75.5	76.6	73.9	77.6	77.6
Zimbabwe	3.8	3.9	3.5	3.2	3.2
Other Africa	0.5	0.3	0.3	0.3	0.3
United Kingdom	3.3	2.7	4.2	4.4	4.4
Other Europe	6.6	6.5	12.3	7.9	7.9
Korea, Republic of	4.7	2.6	0.2	0.2	0.2
United States	1.4	1.8	1.6	1.8	1.8
All other	4.3	5.6	4.0	4.5	4.5

Source: Customs and Excise Department.

Table 31. Botswana: Public Sector External Debt, 1998-2002

	1998	1999	2000	2001	2002
(In millions of U.S. dollars; end of period)					
Total external public debt 1/	441.5	523.1	452.3	347.4	352.1
Bilateral loans	130.2	132.7	129.2	124.5	123.3
United States	21.2	23.7	20.2	15.5	14.3
United Kingdom	24.0	24.0	24.0	24.0	24.0
China	16.0	16.0	16.0	16.0	16.0
France	1.0	1.0	1.0	1.0	1.0
Belgium	1.0	1.0	1.0	1.0	1.0
Kuwait	14.0	14.0	14.0	14.0	14.0
Germany	1.0	1.0	1.0	1.0	1.0
Nigeria	7.0	7.0	7.0	7.0	7.0
Japan	39.0	39.0	39.0	39.0	39.0
Saudi Arabia	6.0	6.0	6.0	6.0	6.0
Multilateral loans	331.6	325.2	287.6	220.9	215.1
African Development Bank 2/	188.5	183.5	78.9	64.4	119.8
African Development Fund	0.0	0.0	83.3	60.1	...
Arab Bank for Economic Development in Africa	18.7	20.2	17.8	13.7	14.2
European Economic Community	0.0	0.0	0.0	0.0	0.0
European Investment Bank	66.9	72.8	63.7	48.9	55.6
International Bank for Reconstruction and Development	29.3	26.0	17.5	13.5	4.4
International Development Association	9.0	10.1	8.6	6.6	7.1
International Fund for Agriculture Development	0.0	0.0	0.0	0.0	0.0
Nordic Development Fund	0.0	0.0	0.0	0.0	0.0
Nordic Investment Bank	13.4	6.9	13.3	10.2	11.9
Organization of Petroleum Exporting Countries	5.7	5.7	4.4	3.4	2.2
UN Capital Development Fund	0.0	0.0	0.0	0.0	0.0
Commercial banks	0.0	0.0	0.0	0.0	0.0
Export credits	6.4	6.2	18.6	14.3	13.7
Memorandum items:					
Total external public debt					
(in percent of GDP)	9.4	10.4	9.0	8.0	5.8
(in percent of exports of goods and services)	19.7	17.3	15.8	15.6	11.4

Sources: Ministry of Finance and Development Planning; and Fund staff estimates.

1/ Government and government-guaranteed disbursed outstanding debt, with original maturity of one year and more.

2/ African Development Bank/Fund for 1999 and 2002.

Table 32. Botswana: External Debt-Service Payments and Disbursements, 1996-2002

	1996	1997	1998	1999	2000	2001	2002
(In millions of U.S. dollars)							
Central government							
Disbursed outstanding debt	481.2	533.9	556.3	530.5	498.1	481.6	458.4
Disbursements	20.3	63.1	55.8	42.0	22.2	19.4	17.9
Principal repayments	34.3	39.8	35.3	36.0	33.3	34.4	31.7
Interest payments	27.7	28.9	32.0	33.4	31.8	29.9	28.9
Other charges	1.4	0.9	0.2	0.1	0.0	0.0	0.0
Total debt service	63.4	69.5	67.5	69.4	65.1	64.3	60.6
Public corporations							
Disbursed outstanding debt	62.5	51.0	69.7	32.1	23.9	19.0	17.6
Disbursements	6.1	1.4	23.8	1.1	1.0	0.9	0.8
Principal repayments	5.3	4.0	0.0	12.3	5.0	3.4	2.8
Interest payments	2.1	5.6	4.6	6.3	2.9	2.2	1.7
Other charges	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total debt service	7.5	9.6	4.6	18.6	7.8	5.6	4.5
Public and publicly guaranteed							
Disbursed outstanding debt	543.7	584.9	626.0	562.6	522.1	500.6	476.0
Disbursements	26.4	64.4	79.6	43.1	23.1	20.3	18.7
Principal repayments	39.6	43.7	35.3	48.3	38.2	37.8	34.5
Interest payments	29.9	34.5	36.6	39.7	34.7	32.0	30.6
Other charges	1.5	0.9	0.2	0.1	0.0	0.0	0.0
Total debt service	70.9	79.2	72.1	88.1	73.0	69.8	65.1
(In percent of exports of goods and services)							
Memorandum items:							
Debt-service ratios	3.0	2.6	3.0	2.9	2.4	2.6	2.4
Central government	2.7	2.3	2.8	2.3	2.2	2.4	2.2
Public corporations	0.3	0.3	0.2	0.6	0.3	0.2	0.2

Sources: Ministry of Finance and Development Planning; and Fund staff estimates.

Table 33. Botswana: Average Terms of New Public Sector External Borrowing, 1996-2002

	1996	1997	1998	1999	2000	2001	2002
Interest rate (in percent a year)	2.1	2.3	2.3	2.3	2.3	2.3	2.3
Maturity (in years)	14.1	14.5	14.5	14.5	14.5	14.5	14.5
Grace period (in years)	4.7	4.7	4.7	4.7	4.7	4.7	4.7
Grant element (in percent)	38.4	40.7	40.7	40.7	40.7	40.7	40.7

Source: Ministry of Finance and Development Planning.

Table 34. Botswana: Developments in the Exchange Rate of the Pula, 1990-2003  
(Index, 1995=100, unless otherwise indicated; period average)

	Effective Exchange Rate		Bilateral Exchange Rates 1/		
	Real	Nominal	South African rand	U.S. dollar	Zimbabwe dollar
1990	99.06	115.21	1.39	0.54	1.32
1991	95.13	111.52	1.37	0.49	1.79
1992	96.29	108.06	1.35	0.47	2.42
1993	99.87	105.88	1.35	0.41	2.68
1994	98.92	101.84	1.32	0.37	3.04
1995	100.00	100.00	1.31	0.36	3.13
1996	98.47	95.05	1.29	0.30	3.01
1997	96.08	91.56	1.26	0.27	3.32
1998	96.95	91.32	1.31	0.24	5.60
1999	98.50	89.96	1.32	0.22	8.28
2000	102.28	90.10	1.36	0.20	8.71
2001	107.13	92.90	1.47	0.17	9.42
2002	116.00	99.81	1.66	0.16	8.73
1997 I	94.91	91.40	1.26	0.28	3.08
1997 II	95.58	91.24	1.25	0.28	3.17
1997 III	96.37	91.47	1.26	0.27	3.20
1997 IV	97.45	92.21	1.28	0.27	3.80
1998 I	98.62	92.42	1.28	0.26	4.51
1998 II	99.30	92.52	1.30	0.25	4.39
1998 III	95.17	90.46	1.33	0.21	5.01
1998 IV	94.69	89.98	1.31	0.23	8.27
1999 I	96.12	89.81	1.32	0.22	8.41
1999 II	97.36	89.69	1.32	0.21	8.19
1999 III	99.29	89.94	1.32	0.22	8.26
1999 IV	101.25	90.50	1.33	0.22	8.27
2000 I	101.86	90.26	1.34	0.21	8.08
2000 II	100.96	89.29	1.34	0.20	7.48
2000 III	101.64	89.41	1.35	0.19	8.99
2000 IV	104.61	91.52	1.41	0.19	10.13
2001 I	105.01	91.98	1.42	0.18	10.02
2001 II	105.29	91.75	1.43	0.18	9.77
2001 III	106.88	92.44	1.45	0.17	9.52
2001 IV	111.33	95.55	1.58	0.15	8.53
2002 I	115.38	99.86	1.69	0.15	8.09
2002 II	114.27	99.39	1.65	0.16	8.69
2002 III	117.54	100.33	1.67	0.16	8.82
2002 IV	116.80	99.66	1.64	0.17	9.30
2003 I	117.73	99.11	1.56	0.19	15.00
2003 II	119.98	99.31	1.54	0.20	164.30
2003 III	109.59	103.38	1.51	0.20	168.79

Source: IMF, *International Financial Statistics*.

1/ Foreign currency per Botswana pula. Increase in value indicates an appreciation of the pula.



Table 35. Botswana: Summary of the Tax System, 2003

Tax	Nature of Tax	Exemptions and Deductions	Rates
I. Taxes on Income and Profits			
I.1 Company tax			
I.1.1 Company tax	<p>A tax on company profits earned in Botswana during the tax year (July 1–June 30). Profits of the Botswana Meat Commission are determined according to a special formula equivalent to a turnover tax. There is a 15 percent withholding tax on dividends. Since the introduction of a two-tier system of company tax in 1990/91, distributions to resident and nonresident shareholders are treated alike. The net dividend is tax exempt in the hands of the shareholders. To avoid multiple deduction of tax on dividends, dividends paid to an associated company are not subject to withholding tax. Income accruing to resident companies from abroad is deemed to accrue from a source in Botswana.</p>	<p>Except for farming, mining, and prospecting, losses can be carried forward for five tax years. The cost of buildings can be written off on a straight-line basis over 40 years. However, for industrial buildings, there is an initial allowance of 25 percent and the remaining 75 percent can be written off on a straight-line basis over 30 years.</p> <p>Accelerated allowances are available for capital expenditures in farming and mining enterprises.</p> <p>For plant and machinery, expenditure can be written off on a straight-line basis over periods varying from 4 to 10 years.</p>	<p>Since 1990/91, a two-tier system operates in respect of resident companies, consisting of a basic tax rate and an additional company tax (ACT) against which the 15 percent withholding tax (WHT) on dividends is set off. Where ACT for a tax year exceeds the WHT, the excess is payable in that tax year but can be carried forward to the next year as a setoff against the WHT. The rate of tax on nonresident companies is 25 percent. Manufacturing companies qualify for a basic company tax rate of 5 percent and an additional tax rate of 10 percent. Nonmanufacturing firms pay a basic company tax rate of 15 percent and an additional tax rate of 10 percent.</p>

Table 35. Botswana: Summary of the Tax System, 2003

Tax	Nature of Tax	Exemptions and Deductions	Rates
1.2. Withholding tax on certain income of nonresident individuals and companies	Interest, royalties, management fees, consultancy fees, and entertainers' fees are subject to withholding tax.	Exemption or a lower rate is available under double-taxation agreements.	Companies in Botswana's International Financial Services Centre also have a preferential 15 percent rate of tax. There are special tax and royalty arrangements for mining companies. Diamond-mining companies are taxed in terms of special agreements. Non-diamond-mining companies are taxed in terms of arrangements set out in the 12 <sup>th</sup> Schedule of the Income Tax Act, whereby the tax rate rises as profitability rises but it shall not be less than the normal tax rate (25 percent) for resident companies. Mining agreements concluded before July 1999 are not affected unless a company concerned opts for the formula specified in the 12 <sup>th</sup> Schedule.
			A 3 percent withholding tax applies on the gross amount of payments made to construction companies, but there is an exemption for payments to small contractors and construction contracts valued at less than P 2 million.
1.2. Withholding tax on certain income of nonresident individuals and companies	Interest, royalties, management fees, consultancy fees, and entertainers' fees are subject to withholding tax.	Exemption or a lower rate is available under double-taxation agreements.	A 15 percent rate of withholding tax is applicable for payments other than in respect of entertainment fees for which a rate of 10 percent applies. These rates apply to the gross payment and are a final tax on the nonresidents concerned.

Table 35. Botswana: Summary of the Tax System, 2003

Tax	Nature of Tax	Exemptions and Deductions	Rates
1.3. Capital gains	A tax on realization on or after July 1, 1982 of gains on business assets; on shares in, or debentures of, a company; and on residential property.	<p>Gains on a principal private residence owned by an individual, and shares and debentures of a public company. For immovable property acquired before July 1, 1982, the cost of acquisition is inflated by 10 percent p.a. for the period from date of acquisition to July 1, 1982, but a resulting loss is not allowed. In the case of immovable property, the cost of acquisition is inflated by the difference between the national cost of living index at the time of acquisition, or July 1982, whichever is later, and the national cost of living index for the month in which disposal took place. In the case of movable property, 50 percent of the net gain is deducted. Disposal value on transfer of property in the course of a merger or reconstruction of resident companies is taken to be the cost price, if the beneficial ownership and interest of shareholders remain unchanged as a result of the merger or reconstruction. Similarly, the disposal value of property in the case of transfer on account of merging or reconstruction of resident companies with the sole object of listing in the Botswana Stock Exchange is also taken to be the cost price of the property.</p>	<p>For companies, chargeable gains are included in taxable income.</p> <p>For any other person, the net gain is not included with income from other sources. Instead it is taxed under a separate table, which has a zero-rate band of P 12,500; for amounts over P 100,000, a rate of 25 percent applies.</p>

Table 35. Botswana: Summary of the Tax System, 2003

Tax	Nature of Tax	Exemptions and Deductions	Rates
1.4. Personal income tax	<p>A tax on income from domestic sources received by residents and nonresidents. There is a pay-as-you-earn (PAYE) system for employment income, and employees with no other source of income need not file tax returns. Noncash benefits related to employment are also subject to PAYE (see description of company income tax, above, for other withholding taxes applicable to individuals). Husband and wife are taxed as separate individuals. Income from investment or business outside Botswana is deemed to have accrued from a source in Botswana. However, foreign investment income of residents who are not citizens is excluded.</p>	<p>Losses from one source cannot be set off against other income, except that, on election, a farmer (but not a farming company) may offset farming losses against other income in the same tax year. Losses can be carried forward for setoff against future farming profits. Both corporate and noncorporate taxpayers can carry back farming losses to the preceding two years. Farmers can get immediate deduction for the cost of capital works. They may also elect to average income over a three-year period. Resident individuals are entitled to an allowance for contributions to approved pension funds or to approved retirement annuity funds or schemes, not exceeding 15 percent of earned income. This is the only allowance for personal expenditure. Donations exceeding P 1,000 by any person to an approved educational institution or sports body is also deductible, subject to maximum of 20 percent of aggregate chargeable income in a tax year.</p>	<p>The tax table for resident individuals has a zero rate on income up to P 25,000; thereafter, the rates increase from 5 percent to a top rate of 25 percent on income above P 100,000. For nonresident individuals, the tax table has an initial rate of 5 percent on income up to P 43,750, rising to a top rate of 25 percent on income above P 100,000. This also applies to trusts and deceased estates. The investment income of unapproved pension funds is taxed at 7.5 percent.</p>
3. Taxes on Property			
3.1. Local rates	<p>A tax on the market value of properties in urban centers.</p>	<p>Government buildings used for nonprofit public services, and buildings used for religious or cultural activities.</p>	<p>The tax is determined per town and is different for unimproved real property.</p>

Table 35. Botswana: Summary of the Tax System, 2003

Tax	Nature of Tax	Exemptions and Deductions	Rates
3.2. Capital transfers	A tax on the value of gifts or inheritance in any year, assessed on the recipient. The tax year is July-June.	Gifts or inheritances between spouses; gifts received in any year not exceeding P 5,000; household chattels of deceased persons not exceeding P 15,000; and livestock included in income for income tax purposes. Donations for purpose of education and maintenance of a child below 21 years of age; basic exemption of P 100,000 from the total value of property being transferred on death (if there is more than one beneficiary, exemption is in proportion to the share of the beneficiary and aggregate exemption shall not exceed P 100,000).	The tax rate rises from 2 percent on the first P 100,000 of taxable value received by an individual to a maximum of 5 percent on taxable values in excess of P 500,000. A 12.5 percent rate applies to both resident and nonresident companies.
3.3. Transfer duty	A tax on the transfer of real property, payable by the purchaser.	Value up to P 200,000 exempt for citizens, including any company in which citizens own more than one-half of the shares.	Rate for citizens is 5 percent of the value over P 200,000 whether the property is agricultural land or nonagricultural property. Noncitizens pay 30 percent on agricultural land and 5 percent on other property. Where the transfer is subject to value-added tax (VAT), the 5 percent duty is waived and in the case of transfer of agricultural land to a noncitizen 10 percentage points of the transfer duty are waived.

Table 35. Botswana: Summary of the Tax System, 2003

Tax	Nature of Tax	Exemptions and Deductions	Rates
4. Taxes on Goods and Services			
4.1. Value-added tax (VAT)	Tax is levied on goods and services, both imported and locally produced. Persons with annual turnover exceeding P 250,000 are required to register for VAT. Voluntary registration by persons with a turnover below P 250,000 may be allowed. Auctioneers are required to register regardless of their turnover level.	Education services, public medical services, prescription drugs, rental of residential accommodation, imports by a registered person operate a VAT manufacturing warehouse or an enterprise in the International Financial Services Centre, and imports, which are allowed privileges in terms of the Customs and Excise Duty Act.	There is an ad valorem rate of 10 percent, which is applicable to all standard-rated supplies. Zero-rated goods and services are specified in Schedule 1 of the VAT Act. The main zero-rated supplies are maize and sorghum meal, petrol, diesel, paraffin, and exports.
4.2. Selective excise duties	Specified duties are payable by the importer or manufacturer of selected items, such as alcoholic and nonalcoholic beverages, tobacco, fuels and motor vehicles.	Exported goods.	Rates are those set by the Southern African Customs Union (SACU), with proceeds pooled under the customs agreement. Rates vary and are both ad valorem and specific.
4.3. Motor vehicle licences fees	Specific rates apply that vary according to type or weight, or both, of vehicle.	Public transport vehicles pay lower annual license fees, based on passenger capacity.	Annual vehicle license fees: Motorcycles: P 50 (P 60 with sidecar) Motor vehicles: P 60 to P 1,730, according to weight. Trailers: P 30 to P 1,150, according to weight. All tractors: P 100. Renewal of public service vehicle licenses: P 100.

5. Taxes on Goods and Services

Table 35. Botswana: Summary of the Tax System, 2003

Tax	Nature of Tax	Exemptions and Deductions	Rates
5.1. Customs	<p>A tax on all goods imported into Botswana from outside the SACU area. A three-column tariff schedule based on the Harmonized Commodity Description and Coding System, with general and preferential rates, is used. Preferential treatment is given to goods from the European Union and Southern African Development Community (SADC) countries. The taxes go into the SACU revenue pool. Botswana's share is calculated according to a fixed formula.</p>	<p>There are free trade agreements with Malawi and Zimbabwe.</p>	<p>Both specific and ad valorem rates are used. Ad valorem rates charged on the import value of the goods, and vary from 0 percent to 40 percent. Duties collected by the SACU countries are paid into the SACU revenue pool. Botswana's share (BS) of this pool is calculated as follows:</p> $BS = \frac{1.42 (A + B + C) H}{DEFG}$ <p>Where:</p> <p><math>H</math> = the all duty rate DEFG</p> <p><math>A</math> = c.i.f. value of Botswana's imports</p> <p><math>B</math> = value of Botswana's production and consumption of excisable goods;</p> <p><math>C</math> = excise duty actually paid on B;</p> <p><math>D</math> = c.i.f. value of customs area imports;</p> <p><math>E</math> = customs duties actually paid on D;</p> <p><math>F</math> = value of excisable goods produced and consumed in the customs area;</p> <p><math>G</math> = excise duty actually paid on F; and</p> <p><math>H</math> = total customs and excise duty pool</p>
5.2. Export taxes	<p>A tax on exported livestock and livestock products, and on game products.</p>	None.	Low specific rates.