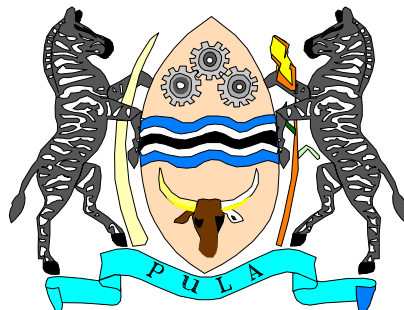




Republic of Botswana

Macroeconomic Outline and Policy Framework

for

NDP 10

Ministry of Finance and Development Planning

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MACROECONOMIC OUTLINE AND POLICY FRAMEWORK FOR NDP10

I. INTRODUCTION

1. A Macroeconomic Outline and Policy Framework paper such as this one provides an overview of the broad policy framework and strategy for the plan period. It forms the basis for the development of the macro chapters of the plan. It should also give guidance in the preparation of sectoral chapters, by providing an assessment of Botswana's prospects in general, by deriving forecasts of revenue, expenditure and manpower, as well as by making proposals on resource allocations among Ministries. An essential part of this Macroeconomic Framework is that of making a projection of the resources that will be available to Government for the implementation of NDP 10, which will cover the period 2008/09 – 2014/15 and the remainder of NDP 9 which runs until 2008/09. It will also provide a breakdown by Ministry of available resources.
2. The resource forecasts should guide the line Ministries when making proposals on national development programmes, projects and cost estimates in sectoral chapters of NDP 10. Ministries need to be aware that economic growth led by large increases in government spending will in future no longer be sustainable in view of the anticipated decline in diamond production and increased production costs.
3. Current forecasts are that opencast mining will be replaced by underground mining within the next 10 or 15 years. Eventually, of course, the major orebodies will be exhausted. Unless there are major new discoveries, therefore, government revenue from diamond mining will decline, at first slowly, and then rapidly. Mineral revenues, mostly from diamonds, were just under 50 percent of total government revenue in 2005/06. Adjustment to the loss of most of these revenues will require a combination of higher taxation on the rest of the economy, and lower government spending. Unfortunately, it is extremely unlikely that any other sector of the economy will provide as high a proportion of its output to government in tax revenue as diamond mining.
4. The private sector environment, therefore, needs to be further improved, so that there is a shift from government spending to that of enhancing the private sector as the main stimulus of economic growth. As a land-locked country with a very small population and market base, as well as relatively high transport costs for merchandise trade, Botswana also needs a shift in emphasis from exports of goods to exports of services, especially those that are labour intensive. Many service exports are less dependent on transport infrastructure in the form of road, rail and air transport. Service exports using the Internet have negligible transport costs, once the basic infrastructure has been created.
5. This Macroeconomic Outline and Policy Framework paper forms the second major step in the development of NDP 10. The first step involved extensive stakeholder

consultations aimed at identifying major issues necessary to be addressed during NDP 10. This resulted in the development of a Key Policy Paper (KPP) and Sectoral Key Issues Papers (SKIPs). Both the KPP and SKIPs helped focus the attention of the Macroeconomic Outline towards critical policies, programmes and strategic issues.

6. The above process informed the strategy and development policy thrust for NDP 10, discussed in Section II. Section III of the framework paper reviews NDP 9 in order to shed light on achievements made and deviations from the targets for that plan period. Section IV provides revenue projections, which in turn establish the maximum spending limits for recurrent and development spending in NDP 10. Section V presents projections of the maximum levels of the major categories of government spending, both the current and development implicit in the macroeconomic framework. Section VI provides alternative projections of government revenue and maximum levels of spending for optimistic and pessimistic scenarios.

II **NATIONAL DEVELOPMENT PLAN 10 THEME**

7. The proposed theme for NDP 10 is "Creating the conditions for accelerated private sector growth, in order to reach Vision 2016 targets".
8. This proposed theme is only slightly different from the theme for NDP 9: "Towards Realisation of Vision 2016: Sustainable and Diversified Development through Competitiveness in Global Markets". The basic purpose of NDP 10 is therefore little changed from that of NDP 9. For many years, the main thrust of economic policy in Botswana has been to diversify the economy, in order to reduce dependence on the mining sector in general, and diamonds in particular. This has required import substitution on the one hand, and the development of new exports, of both goods and services, on the other hand.
9. Diversification is necessary in order to reduce the risk of being dependent on a few major export commodities, and to reduce the very high dependence on imports that characterised Botswana at independence. A further reason for diversification is that the mining sector (especially diamonds) employs relatively few people. The rest of the economy is much more employment-intensive, in providing both formal sector jobs and opportunities for self-employment. Employment thus broadly defined is the most important way in which the benefits of revenue from diamond mining reach large numbers of people. It is therefore the most important way of reducing income poverty.
10. Botswana has already had some considerable success with economic diversification. Indeed, copper-nickel mining, and then diamond mining, were themselves a form of economic diversification initially, from when the economy depended heavily on exports of beef and migrant labour remittances. Since then, the revenue from diamond mining in particular has been used to build the infrastructure, and provide the education and training, to enable the economy to diversify.

11. One striking indicator of economic diversification is that Botswana has become significantly less dependent on imports. As a small economy with a small population, imports remain extremely vital. Nevertheless, the ratio of imports of goods and services to GDP has fallen very substantially. In the 1970s, it was just under 70 percent. In recent years, it has been under 35 percent. This is an indicator of a remarkable structural change. It also shows that the private sector in Botswana has been regionally competitive, in that producers of most tradable goods and services must compete without protection with imports from the rest of the Southern African Customs Union (SACU).
12. There has also been some success in export diversification. A recent survey of non-mining firms in Botswana showed that, in comparison with neighbouring countries, a smaller percentage of firms export, that exporters export a smaller percentage of their production, and that all firms sell unusually large amounts of their output to the Government (World Bank, 2007). This can be attributed in part to the enormously rapid growth of the economy, driven to a considerable extent by government spending its large diamond revenues. In these circumstances, the domestic market has provided very profitable opportunities, and within that market the biggest opportunities have been in selling to the Government.¹
13. Nevertheless, non-traditional merchandise exports (defined as total merchandise exports excluding diamonds, copper-nickel and beef) have largely maintained their share of total exports despite the extraordinarily rapid growth of diamond exports.² In addition, as noted in the review of NDP 9 in the next section, service exports are growing rapidly and have become larger than service imports in the last two years. The growth of service exports using electronic rather than overland physical transport makes economic sense. It avoids most of Botswana's comparative disadvantage from being landlocked.
14. There has, therefore, been some success with economic diversification. Nevertheless, there is a need for this to go further, and for it to be accelerated.
15. Recently, though, GDP growth in general, and growth of the private sector in particular, have been less than the growth target for Vision 2016. To reach the Vision target, GDP growth would have to be more than twice as fast, between now and 2016, than has been achieved in the last five years.
16. One way of accelerating growth would be to increase the rate of growth of government spending. To some extent this is already happening, according to the latest information. However, projections of GDP growth and government revenue indicate that if government spending rises from its present level of 31 percent of

¹ Although Tsa Badiri reports that only 17 percent of government tenders are won by local firms.

² The share of non-traditional exports in total exports declined in the last few years, but most of this can be attributed to the extraordinary rise in copper-nickel exports on the one hand, and the decline in vehicle exports on the other hand. Over the longer term, non-traditional exports (exclusive of vehicles) have averaged around 10 percent of the total, with annual fluctuations about that average. The import content of vehicle exports was always exceptionally large, so their net contribution to exports was relatively small.

GDP, to more than about 35 percent of GDP, this will cause the budget to move into deficit.

17. Secondly, projections of diamond production and revenue indicate a peak soon after the end of NDP 10, and a very large decline some years later. Such long-term projections are, however, subject to error, and should be treated with caution. If this decline in diamond revenue does occur, though, it will be much more difficult to adjust to if government spending has been allowed to increase by more than appears prudent. It will be even more difficult to adjust to if there has been a series of budget deficits. This would use up the Government's financial surpluses and move the Government into debt.
18. **The economic background for NDP 10 suggests strongly, therefore, that the emphasis of economic policy should shift, at the margin, further away from the historic dependence on the growth of government spending, and further towards private sector development.** Government spending will of course continue to grow, but the maximum for government spending of 40 percent of GDP may have to be revised downward.³
19. If diamond revenue does decline, it has been estimated (by the IMF) that government non-mineral revenue would be not more than 25 percent of GDP, and that government spending could not be sustained at more than about 25-30 percent of GDP. Even if the economy diversifies successfully, there is no chance that the non-diamond sectors will generate the extraordinary proportion of government revenue, as a proportion of output and profits, generated by diamond mining.
20. Botswana's membership of SACU has prevented widespread protection of local producers from competition within SACU. There have been, and still are, some subsidies, and some occupations and activities are reserved for citizens and citizen-owned companies. Broadly speaking, though, the private sector in Botswana has had to be competitive with imports from SACU, most importantly South Africa. Competition will get tougher, because the common external tariffs of SACU are being reduced, the SADC Free Trade Area is expected to become operative, and agreement to an Economic Partnership Agreement with the EU would expose local producers to additional competition from EU producers.
21. These developments increase the importance of removing every possible constraint on private sector growth, and the need for continued support of the private sector through productive investment in relevant infrastructure, and further education and training.

³ Official policy is that total government spending should not exceed 40 percent, but with the ratio falling in recent years, it appears that 40 percent has become something of a target. The Mid Term Review of NDP 9 related that the expenditure ceiling would need to be reviewed periodically in order to maintain a balanced budget in the medium term.

22. The implications for the economic strategy of NDP 10 are not very different from those of previous National Development Plans. There should be

- continued investment in infrastructure, with an emphasis on providing the needs of the private sector
- continued investment in education and training, with the same emphasis as above
- improving the business climate for private sector investment, including reversing the negative trend in constraints on the private sector (as shown by a worsening position in international comparisons)
- a shift in emphasis to support for service exports, many of which have less of a comparative disadvantage than most merchandise exports.

23. These are the underlying arguments behind the proposed theme for NDP 10: "Creating the conditions for accelerated private sector growth, in order to reach Vision 2016 targets". If the strategy can be implemented successfully, it will indeed drive the economy towards meeting the economic and the social goals of Vision 2016.

III **REVIEW OF THE FIRST HALF OF NDP 9**

Growth of GDP

24. The Base Case Scenario for growth of GDP during the NDP 9 period, 2003/04-2008/09, was for a growth rate averaging 5.5 percent per annum over the six years of the Plan. Actual growth of GDP during the first three years of NDP 9 averaged 3.8 percent per annum, according to the latest estimates.

25. However, growth averaged more than 6 percent in the last two years of NDP 8, so that the starting point for NDP 9 was higher than expected at the time that the Plan was written. Despite *growth* having been lower than forecast in the first three years of NDP 9, therefore, the *level* of GDP in 2005/06 was actually higher than that predicted in the Plan. This can be seen in the table below.⁴

Table 1. NDP 9 projections compared with actuals: GDP and GDP growth
(P billions, constant 1993/94 prices)

Year (a)	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
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⁴ All statistics taken from Bank and Botswana Annual Reports, and Central Statistics Office publications, except where different sources are specified.

NDP 9 projected GDP	19.4	20.5	21.8	22.9	24.1	25.3
NDP 9 projected growth	5.1%	5.9%	6.6%	4.9%	5.0%	5.4%
Actual GDP	20.9	22.8	22.6			
Actual growth	3.1%	9.2%	-0.8%			

Note: (a) GDP years ending in June, so that 2003/04 is from July 2003 until June 2004

Sources: NDP 9; Bank of Botswana Annual Report 2006

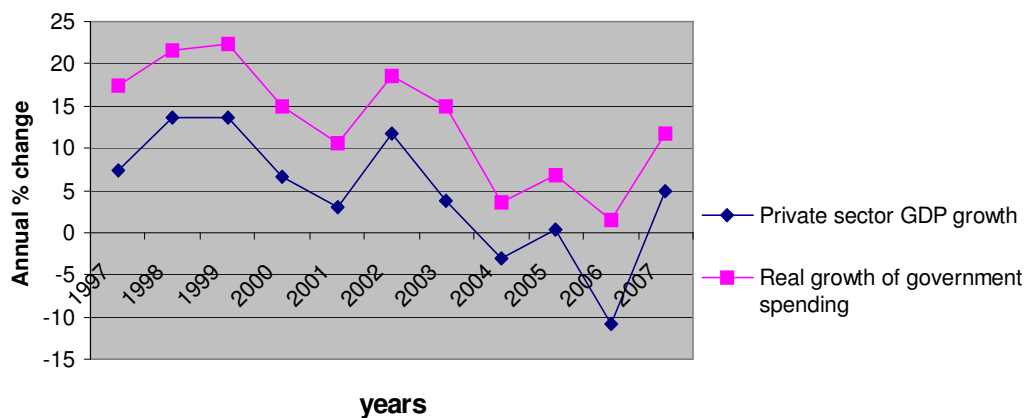
26. The negative growth recorded in 2005/06 may be slightly misleading. This occurred because of a sharp drop in GDP in the final quarter of 2005/06. It was followed by an even sharper increase in the first quarter of 2006/07, according to preliminary quarterly estimates of GDP. This unusual fluctuation appears to have been caused by changes in timing of some items, including mining and "net taxes" (an adjustment item). Whatever the reason, if these two quarters were to be averaged, as a crude way of adjusting to the fluctuation, then growth in 2005/06 would have been 2.5 percent, rather than - 0.8 percent. Although not strictly correct according to the published statistics, this seems a more plausible indication of the likely growth of GDP in 2005/06, and of the general growth trend.
27. If growth averages 3.8 percent per annum in the second half of NDP 9, as it did in the first half, the NDP 9 target for GDP in 2008/09 would not be reached. In order to reach this target, growth would have to average 4.0 percent per annum over the last three years of NDP 9. This is less than the average rate of growth in the first three years of NDP 9 (4.9 percent), so the target is within reach.
28. A breakdown of GDP growth during these three years is shown in the table below. GDP in **mining**, which is still approximately 40% of GDP, fluctuated quite sharply, but average annual growth over the three years was 4.7 percent, and this gives a reasonably accurate picture (using calendar years, the growth of mining GDP fluctuated much less).
29. The contribution of **General Government** to GDP grew fairly steadily, but at a declining rate. The average growth rate was sharply lower than it had been in the previous three years. During 2000/01 to 2002/03, General Government had grown at an average of 9.7 percent per annum in real terms, more than twice the recent rate.
30. Growth in the remainder of the economy, basically the **non-mining private and parastatal sector**, was disappointing.⁵ The average growth rate was only 3.4 percent per annum, and there was a steady decline in the rate of growth over the three years. Non-mining and non-Government GDP grew by only 1.8 percent in 2005/06.⁶

Table 2. Growth of GDP 2003/04 to 2005/06, by major sectors
(constant prices, percentages)

⁵ Hereafter, "non-mining private sector" should be taken to refer to "non-mining private and parastatal sector".

⁶ Using the latest available quarterly GDP figures, GDP growth exclusive of mining and general government was 5.8 percent (calendar 2006 over calendar 2005). As always, too much reliance should not be put on either the annual GDP growth figures for a single year, or for the first two quarters of 2006/07. Nevertheless, it remains probable that the growth trend is better than shown in Table 2.

Figure 1: Annual changes in government spending compared with changes in non-mining private sector GDP



	2003/04	2004/05	2005/06	3-year average
Mining	0.3	18.1	-4.4	4.7
General Government	5.1	4.6	4.0	4.6
Non-mining private and parastatal	5.0	3.3	1.8	3.4
Total GDP	3.1	9.2	-0.8	3.8

Source: Bank of Botswana Annual Report 2006

31. The slow and declining rate of growth of the private sector would be extremely worrying if it were to continue. Continued rapid growth of the mining sector is not expected, and the economy cannot depend on the growth of government. On the contrary, it is important that the Government's share of GDP should not increase significantly, especially as diamond revenue is expected to fall significantly in the years after NDP 10. Growth should depend, therefore, on growth of the private sector.

Causes of slow growth: government spending

32. An important cause of the slow and declining rate of growth of the private sector, in the first half of NDP 9, was that the rate of growth of government spending slowed down during this period. The main way in which diamond mining affects the rest of the economy is through government spending out of diamond correlation between growth of the private sector and the growth of government spending is illustrated in Figure 1 below.

33. There was a steady decline in the rate of growth of recurrent government spending, while development spending actually fell *in nominal terms* by 4.8 percent, averaged over the first three years of NDP 9 (see table below). This was a very sharp change in the rate of growth of government spending compared with the six years of NDP 8, when it averaged an annual *increase* of 17.2 percent.⁷

⁷ Statistics for government spending are for years ending March, statistics for GDP are for years ending June.

34. Adjusting for inflation, the real value of government spending fell by no less than 13.2% over the first three years of NDP 9.

Table 3: Annual growth of government spending in NDP 9: actual and projected
(percentages, derived from current prices)

Government spending	2003/04	2004/05	2005/06	3-year average	2006/07 revised estimates	2007/08 budget estimates
Recurrent	11.6	6.4	2.8	6.9	19.1	11.0
Development (a)	-18.9	8.3	-3.9	-4.8	59.6	29.7
Total spending	3.6	6.8	1.4	3.9	27.1	15.6

Note: (a) includes net lending; there were (relatively small) net repayments each year 2003/04 to 2005/06

Source: Bank of Botswana Annual Report 2006

35. The table above also shows the revised spending estimates for 2006/07, and the budget estimate for 2007/08. If these were to be realised, there would be a major stimulus to GDP growth. The stimulus would be twofold, through the contribution to GDP of government itself, and from the secondary effects of the income and spending created by this government spending in the rest of the economy.
36. However, such a surge in government spending is extremely unlikely. The table shows the stark contrast between recent growth figures for government spending, and the revised estimates presented in the 2007 Budget Speech for the budget year just finished (2006/07), and the one currently in progress (2007/08). Even if the growth rate of government spending reverses the current declining trend, as preliminary statistics for 2006/07 indicate, actual spending will almost certainly not be increased by as much as the estimates in the table suggest.
37. Various reasons have been given for underspending of government budgets in recent years. For recurrent expenditure, the reasons include difficulties with filling established posts (especially those requiring scarce skills), and procurement delays. For the development budget, the reasons for underspending include a lack of implementation capacity in some government ministries, the need for environmental impact assessments, and slow land allocation.

Changes in government spending by function, 2000/01 to 2005/06

38. As can be seen from the table below, total government expenditure and net lending grew at very much the same rate as the Consumer Price Index in the five years to 2005/06. Moreover, most of the major components also increased by the same order of magnitude as the Consumer Price Index.
39. The major exception was spending on health, which rose by more than 200 percent, compared with the overall rise in expenditure of 55 percent. To a considerable extent, this reflects the cost of coping with the HIV/AIDS epidemic. Within the total of health spending, recurrent spending rose by 80 percent, which was above average (but by less than development spending). In contrast, government development spending

in the health sector rose more than ten times. This reflected, in part, the building of new hospitals, and HIV/AIDS clinics, across the country. A slightly less striking exception to the trend was spending on Economic Services, which increased by only 29.1 percent (little more than half the rate of increase of total spending).

40. "Other community and social" expenditure grew significantly faster than the average. This was more than accounted for by recurrent expenditure which grew by 177 percent, while development expenditure in this category *fell* by 61 percent. Within "Other community and social", recurrent spending on conservation and wildlife rose by just over 200 percent, and on media and broadcasting by 116 percent. On the other hand, development spending in both these categories was lower in 2005/06 than it had been in 2000/01, in current price terms.
41. The only category of expenditure which was lower at the end of the five years than it had been at the beginning was "Food and social welfare". This is slightly misleading, as some of the spending in this category was shifted to the health budget.

Table 4: Changes in government spending by function, 2000/01 to 2005/06
(P million, current prices)

	2000/01	2005/06	Five-year % change
General Public Services	2298	3822	+66.3
Defence	998	1446	+44.9
Education	2866	4197	+46.5
Health	630	2056	+226.5
Food and social welfare	424	190	-55.3
Housing, urban and regional	732	1089	+48.7
Other community and social	345	601	+74.1
Economic services	2043	2637	+29.1
Unallocated expenditure (a)	1201	1890	+57.3
Total expenditure and net lending	11536	17928	+55.4
Memo item: CPI 2006 = 100 (March)	63.0	95.8	+52.1

(a) includes subventions to local authorities.

Causes of slow growth: investment

42. A further cause of the slowdown in GDP growth, in the first half of NDP 9, was a decline in real terms of investment as measured by Gross Fixed Capital Formation (GFCF). As a result, the share of GFCF in GDP fell from 22.2 percent in 2002/03, to 17.1 percent in 2005/06. The target for GFCF in Vision 2016 was that it should *increase*, to 40 percent of GDP. The decline in this ratio dates from 1998/99, when it was 28.2 percent.
43. All of the components of GFCF - construction, machinery and equipment, transport and equipment, and mineral prospecting - declined in real terms and as a share of GDP during this period. Foreign Direct Investment was too small to compensate for falling GFCF. FDI showed no discernible trend over the last four years.

Table 5. Decline of Gross Fixed Capital Formation (GFCF) in real terms
(P million, constant 1993/94 prices)

Year ending June	2003	2004	2005	2006	change 2003-06
GFCF (P million) (a)	4516	4177	4155	3888	-13.9%
GFCF as % of GDP	22.2	19.9	18.2	17.1	-5.1 % points
Foreign Direct Investment	1049	2017	1138	1473	+40.4
FDI as % of GDP	2.7	4.7	2.3	2.6	-0.1% points

(a) Gross Fixed Capital Formation (includes mineral prospecting)

44. A major reason for the decline in capital formation was the declining rate of growth of government spending. All government spending creates demand, and therefore an incentive to invest if that demand is increasing. In addition, the government development budget has a direct impact on capital formation, in particular on the construction industry through financing the building of schools, hospitals, roads, etc.

45. The table below shows that government development spending declined by no less than 34.8 percent in real terms between 2002/03 and 2005/06. During this period, the contribution of the construction industry to GDP hardly changed at all, and employment in the construction industry fell by “only” 14.2 percent.

Table 6. Decline of government development spending in real terms
(P million, constant 1993/94 prices)

Year ending June	2003	2004	2005	2006	% change 2003-06
Government development spending	2549	1935	1966	1661	-34.8
Construction employment	29023	28771	24364	24903	-14.2

46. This suggests that the growth of capital formation by the private and parastatal sector may have been positive, with the decline in Gross Fixed Capital Formation more than accounted for by the decline in government development spending.

47. However, statistics of public and private sector investment, deflated by the CPI, show that private sector investment fell by a total of 17.1 percent in the three years to June 2006. This figure is not strictly comparable with the table above, because in this case private sector investment includes increases in stocks. The overall picture, though, is not one of dynamic private sector investment.

48. It is possible that these negative trends, in investment and GDP growth, have been reversed. The most recent figures for imports, from end-2005 to June 2007, show that total imports began to increase much faster than previously (see table below). In addition, imports of "Machinery and Electrical Equipment" increased by no less than

63 percent over the same period, much faster even than total imports (up 36 percent).⁸ Although "Machinery and Electrical Equipment" is not all composed of capital goods, it is to some extent a proxy indicator for imports of capital equipment, and therefore for private sector investment.⁹

Table 7: Quarterly imports: increase on the same quarter in the previous year (current prices, percentages)

Calendar years	Imports of Machinery and Transport Equipment	Total imports
2006 Quarter 1	-14.3	-1.3
2006 Quarter 2	8.0	10.5
2006 Quarter 3	19.7	16.5
2006 Quarter 4	26.7	18.4
2007 Quarter 1	50.4	28.3
2007 Quarter 2	63.3	35.9

49. If this trend continues, it could be an important indicator that private sector investment is at last beginning to increase significantly. In turn, this may indicate that efforts to improve the investment climate are becoming effective. Alternatively, it could be a private sector response to the stimulus provided by an increased rate of growth of government spending.
50. The second major reason why Gross Fixed Capital Formation has declined, at least until 2005/06, is that the external perceptions of the investment climate for the private sector has not improved. Some aspects of the investment climate are good. Botswana has an extremely good record of GDP growth. For 30 years, it was the highest in the world. Recently it has slowed, but growth has remained positive, and greater than the rate of growth of population in almost all years. Increasing income per head creates growing spending power, and therefore an excellent stimulus for investment.
51. There are no exchange controls, and the Government has adequate financial resources to cope with exogenous shocks. The availability of accumulated financial surpluses also means that government spending can be sustained through short-term fluctuations in government revenue. There should not be any shortage of commercial bank credit for those regarded as being creditworthy customers, because the commercial banks have capital and liquidity in excess of the legal requirements.
52. Unfortunately, there are at any one time a range of other constraints on investment. The fact that some constraints are minor, or non-existent, does not reduce the importance of other constraints.

⁸ The rapid increase in the rate of growth of imports, although less than the growth rate of machinery imports, is itself a sign of a revival of GDP growth. Imports are normally closely correlated with GDP. For other positive signs, see the next section.

⁹ Some of the increase in imports must have been by Government, but government spending did not increase as fast as imports at this time.

53. One of the most important constraints is a combination of the shortage of skilled labour and the difficulty of getting work and residence permits for non-citizen employees. Further, skilled labour shortages are being made worse by the impact of HIV/AIDS, although the effects are mitigated by the provision of ARTs.¹⁰
54. Various estimates of the economic impact of AIDS have assumed that the major employers in Botswana will be able to recruit skilled labour from abroad to replace those skilled workers who are sick or who have died as a result of AIDS. This makes it particularly important for the recruitment of foreign skills to be made as straightforward as possible. As has been frequently pointed out, international research finds a strong correlation between the ease of importing skills and skilled labour, on the one hand, and successful rapid economic growth, on the other hand.
55. More generally, potential investors are aware of the World Bank's annual surveys of the investment climate in a large number of countries: *"Doing Business"*. Botswana's overall ranking in successive editions of *Doing Business* has got worse not better, falling from 44th place in 2005 to 48th place in 2006. Although the worsening of the overall ranking may in part be because of an increase in the number of countries surveyed, the impression created is negative for investors. In any case, there has been no absolute improvement in the indicators used by the World Bank.
56. There are still 11 procedures required in starting a business, and the average time taken remains at 108 days. The number of procedures in dealing with licences has actually increased, as has the time taken. The cost of registering a property as a percentage of the property value increased slightly between 2004 and 2006. Botswana's ranking on directors' liability got worse. There are still 24 different payments required in paying taxes, six documents required for every export, 26 procedures required for the enforcing of contracts.
57. A major effort will be required in the remainder of NDP 9, and during NDP 10, to reduce these constraints if private sector investment is to increase rather than decrease.

Signs of higher GDP growth in 2006/07 and 2007/08

The 2007 Budget Speech noted that problems of land availability, environmental impact assessment and design have been or are being resolved. The preliminary estimates of the

¹⁰ "HIV/AIDS has extensive effects on firms, through the impact on the workforce, investment and markets" (Econsult, 2006: 16). A World Bank survey of firms also found that, among the countries surveyed, "Botswana has the third highest absenteeism among workers due to HIV/AIDS (11 percent), and the second highest absenteeism among workers taking care of family members sick from HIV/AIDS (11 percent)" (World Bank, 2007 Vol 1: 36).

budget outturn for 2006/07 suggest that these reforms may have started to become effective.

Preliminary estimates of GDP for the first half of the national accounts year 2006/07 show growth in constant prices of 8.4 percent over the same period in the previous year. Too much should not, of course, be made of any one year's statistics, still less of preliminary estimates for half a year. Nevertheless, it would appear that GDP is responding, in part, to the recent increases in the growth of government spending.

58. Some other indicators are consistent with a recovery in economic growth.

59. Commercial bank lending to resident businesses increased by 21.0 percent in the calendar year 2006. This compared with a growth rate of 8.7 percent in the previous year.

60. Exports of goods and services also showed strong growth in calendar years 2005 and 2006 (30.0% and 17.3%, respectively). A large part of this was because of increased Pula receipts from exports of diamonds and copper-nickel. In particular, copper-nickel exports were up by 450 percent in the three years ending 2006. Over the same period, the copper price rose by 206 percent, and the nickel price by 144 percent. Non-traditional exports were up only slightly, by 33 percent in current prices, and by 2.8 percent when deflated by the Consumer Price Index.

61. Sharply higher base metal prices have increased the profitability of BCL, but the main impact of this is on reducing BCL's debt, including its emergency funding from the Government. By the end of this year, most of the debt will have been repaid, making it possible for BCL to start paying tax. The new Tati nickel mine also provides government revenue.

62. Exports of goods and services, excluding diamonds and copper-nickel, grew by an average of about 20 percent over 2005 and 2006. The potential for further growth of the service sector in general, and of service exports in particular, is discussed further below

63. Other indicators also improved recently. Non-mining electricity consumption grew by 10.6 percent in the year to April 2007, compared with less than 2 percent in the previous year, and business confidence increased as measured by the Bank of Botswana Business Expectations Survey.

Vision 2016 targets

64. The Vision 2016 targets, for GDP growth and the growth of GDP per head, have become increasingly difficult to attain. These targets were that GDP would grow at 8 percent per annum during the 20 years from 1996 to 2016, and that real GDP per head

(in other words average income and therefore spending power) would triple over the same 20 years.

65. In the first ten years of the Vision period (1996-2006), average annual growth of GDP was only 6.5 percent. This means that average growth in the next ten years will have to be above 9.5 percent to reach the Vision target for 2016. Each year that growth is less than the new target of 9.5 percent, the target growth rate for the remaining years to 2016 will be even higher.
66. In the first five years, from 1995/96 until 2000/01, real GDP growth was actually above the Vision 2016 target, averaging 8.7 percent. But in the most recent five years, ending in 2005/06, GDP growth averaged only 4.6 percent. The figures for growth of GDP per capita tell a similar story, as shown in the Table below.

Table 8: Revised growth targets for Vision 2016

Years ending	1996-2001	2001-06	2006-16
GDP: Vision target	8.0%	8.0%	8.0%
GDP: actual	8.7%	4.6%	9.5% (<i>new target</i>)
GDP/head: Vision target	6.0%	6.0%	6.0%
GDP/head: actual	5.4%	4.8%	6.9% (<i>new target</i>)

Note: the rate of growth of GDP per head fell more slowly than the rate of growth of GDP because the annual rate of growth of population slowed quite sharply, from 2.6% in 1997, to 0.7% in 2006 (population growth rates implicit in growth rates of GDP and GDP per head).

67. A further problem is that growth rates in Mining and Quarrying, and in General Government, were faster than growth in the rest of the economy. This is not sustainable. In addition, when diamond mining eventually goes underground, output will be less, and it will cost more to produce. Both these factors will reduce government revenue.
68. There are considerable uncertainties in the forecast date and forecast magnitude of the expected future decline in diamond revenue. The start of underground mining could be delayed. There have been technical advances in prospecting, recovery of diamonds from the orebody, and the treatment of tailings. This suggests that there could be further technical advances, which would postpone the fall in diamond revenue if realised.

Growth of formal sector employment

69. Formal sector employment grew more slowly than GDP in the first three years of NDP 9. Over this period, formal sector employment grew by a total of 4.6 percent. This was a slower rate of increase than in the previous three years, and was less than half the growth of GDP over the same period (11.6 percent). During the last three

years of NDP 8, formal sector employment increased by 8.5 percent, which was also less than the growth of GDP over the same three years (21.5 percent).

70. In part, the growth of formal sector employment has been lower because of increases in productivity, which have occurred despite the decline of Gross Fixed Capital Formation. Unfortunately, this has not been offset by the growth of employment in additional labour-intensive production (as appears to have happened in previous decades).
71. The table below shows that private and parastatal employment grew faster than Government employment over the first three years of NDP 9. Normally, it would be positive for private sector employment to grow faster than government employment, since this is more sustainable than the reverse.
72. However, most of the private and parastatal employment growth occurred in the year to March 2006, at the same time as there was a sharp fall in central and local government employment (of just under 10,000 jobs). This was caused in part by a shift of some government functions from central government to newly created parastatals, including the Botswana Unified Revenue Service and the Local Enterprise Authority, and to the private sector.

Table 9: Formal sector employment 2003-2006 (thousands)

March survey	2003	2004	2005	2006	Growth 2003-06
Private (a)	173.2	177.0	177.4	183.2	5.8
Government (b)	108.8	113.7	121.4	111.7	2.7
Total	282.0	290.7	298.7	294.9	4.6

Notes: (a) includes parastatal employment

(b) includes local government

73. As a result of this shift of jobs from government to the parastatal and private sectors, the underlying growth of private and parastatal sector employment was even less than the slow growth shown in the table above.
74. The slow rate of growth of formal sector employment continued in the six months to September 2006. The total grew by 0.7 percent, with government employment growing rather faster than employment in the private and parastatal sectors (1.1 percent and 0.6 percent, respectively).
75. Long-term trends in the rate of unemployment show a slightly more positive picture. The 2005/06 Labour Force Survey (LFS) has provided a preliminary estimate of unemployment at 17.6 percent. This continues a downward trend established since the 1995/96 Labour Force Survey and the 2001 Census. These sources include both formal and informal employment, including self-employment in agriculture, which can vary quite sharply depending on rainfall and other factors.

Table 10: Long-term trends in unemployment

1995/96 (LFS)	2001 (Census)	2005/06 (LFS)
21.5%	19.5%	17.6%

76. The trend shown in the table above is encouraging. However, the latest Labour Force Survey does not record the degree of underemployment. In addition, it shows much larger numbers employed in agriculture than in the two previous surveys. As noted in the Bank of Botswana Annual Report 2006 (page 59), agriculture employment may have been boosted by good rains in the year of the 2005/06 survey, and by immigration from Zimbabwe. These factors do not appear to provide a full explanation of the large differences in agriculture employment recorded in the various surveys, so that the long-term trend remains somewhat uncertain.
77. The decline in the unemployment rate appears to be inconsistent with the slow growth of formal sector employment in recent years, although the Labour Force Surveys cover both informal and formal sector employment. On the other hand, there has been rapid progress with the reduction of poverty levels, see Table 12 below.

Table 11: Changes in formal sector employment 2003-2006

March	2003	2006	Change (number)	Change (%)
PRIVATE AND PARASTATAL	173177	183184	10007	5.8
Agriculture	6464	5460	-1004	-15.5
Mining	7961	10502	2541	31.9
Manufacturing	30164	33598	3434	11.4
Electricity and water	2839	2411	-428	-15.1
Construction	29023	24903	-4120	-14.2
Commerce	54951	56736	1785	3.2
Transport and communications	10141	13257	3116	30.7
Finance and business services	18987	22865	3878	20.4
Community and personal services	5609	5413	-196	-3.5
Education	7039	8039	1000	14.2
GOVERNMENT	108812	111707	2895	2.7
Central government	86572	86555	-17	0.0
Local government	22240	25152	2912	13.1
TOTAL	281990	294891	12901	4.6

78. The sectoral breakdown of changes in formal sector employment in the first three years of NDP 9 showed some slightly unusual features. Employment in mining grew significantly, by 32 percent, having not grown at all in the previous three years. It was also encouraging that employment in manufacturing grew, by slightly more than mining in absolute numbers, although of course much less in percentage terms because of the much larger number of people employed in manufacturing than in mining.
79. Otherwise, the only really significant increases in employment were in services: transport and communications, and finance and business services. Against this, there was a sharp decline in construction employment, reflecting in part the decline in the Government's development spending, as already noted.

Changes in levels of poverty

80. Successive surveys of poverty show that the percentage of *households* with incomes below the Poverty Data Line has continued to fall. Similarly, the percentages of *individuals* with incomes below the Poverty Line, although higher than the equivalent percentages for households because poor households tend to be larger, have also continued to fall. Moreover, the rate of decline in absolute terms between 1985/86 and 1993/94 was maintained (and indeed accelerated slightly) in the following period, as measured by the 2002/03 survey.

Table 12: Successive poverty estimates 1985-86 to 2002-03

Year of survey	Percentage of households below the PDL	Percentage of individuals below the PDL
1985-86	49	59
1993-94	38	47
2002-03	22	30

Note: results were derived from the 1985/86 and 1993/94 Household Income and Expenditure Surveys (HIES) used the 1989 PDL; the 2002/03 survey used a new 2003 PDL.

81. Given the slower rate of growth of GDP in recent years, and the fact that formal sector employment has grown more slowly than GDP, the continuing fall in poverty as measured by these surveys is better than could have been expected.
82. An important reason for the sustained poverty reduction, despite weakening macroeconomic performance, is provision by Government of safety nets for those unable to earn an adequate income.
83. Safety net provision includes the availability of a universal non-contributory old age pension. In 2003, the monthly pension was P151.00 per month, while the Poverty Datum Line for 2002/03 was P100.80 per month. Provided that all those eligible for the old age pension did in fact receive it, the old age pension should have eliminated poverty among old people. Entitlement to the old age pension has been widely publicised, so that its coverage should be good. The old age pension has been raised to take account of inflation in most years.
84. Increasing numbers of people were paid the destitute allowance. However, the destitutes' allowance in 2003 was P 61, which was not enough to raise destitutes above the Poverty Datum Line.
85. In addition, the primary school feeding programme, the Vulnerable Group Feeding Programme, various drought relief programmes, and the provision of a monthly food basket to orphans, together alleviate much of the incidence of poverty. In this context, the percentage of children measured as underweight for age fell from about 15 percent in 1990, to about 6 percent in 2003.

86. These various safety nets must provide much of the explanation as to why poverty rates have continued to fall in recent years, despite the slow rates of GDP growth, and the even slower rates of growth of formal sector employment growth.
87. Although there are no official statistics, the informal sector has been growing visibly larger, and this must have contributed to the decline in poverty.

Achievement of Millennium Development Goals (MDGs)

88. The United Nations has set targets, the MDGs, for the achievement of various social and economic goals by 2015. These are aligned to the goals of Vision 2016.
89. *Eradicate extreme poverty and hunger.* As already noted in the previous section, the proportion of people living below the Poverty Datum Line continued to fall between 1993/94 and 2002/03, from 47 percent to 30 percent. This was a larger reduction measured by percentage points than had occurred in the previous eight years: 16 percentage points compared with 12 percentage points.
90. There was also progress in reducing hunger. The percentage of children under the age of five, who were underweight for age, was reduced from 12.4% in 2000 to the much lower figure of 4 percent in 2006.
91. *Universal primary education.* In 2004, the Net Enrolment Rate for the primary school age group, those between 7 and 13 years, was 98.5 percent. This high attendance rate was achieved despite education not being compulsory. One of the reasons for some children not attending primary school was that parents in some ethnic groups regard cultural education as more important than formal education in the school system.
92. *Promotion of gender equality and the empowerment of women.* Botswana's performance improved, or remained satisfactory, on several of the measures of gender equality and female empowerment. The ratio of girls to boys in primary and secondary education remained above 100 percent, as did the ratio of young literate females to males. There was also an improvement in the percentage of women employed in the non-agricultural sectors of the economy: from 38.4 percent in 1995, to 40.2 percent in 2000, and 42.4 percent in 2006. In contrast, the percentage of women in Parliament dropped to 11 percent in 2004, from 18 percent in 1999.
93. *Reduction of child mortality.* The impact of HIV/AIDS included a reversal of progress made previously on both infant and child mortality. Infant mortality increased from 74 per thousand live births in 2000, to 87 per thousand in 2005. Similarly, the mortality rate for children under five increased from 101 per thousand in 2000, to 120 per thousand in 2005. Both the 2005 statistics were better than the average for Sub-Saharan Africa, for which the figures were 96 per thousand and 163 per thousand, respectively. Botswana's income per head is much higher than the

average for Sub-Saharan Africa. This generated better than average African health statistics for many years.

94. *Improvement of maternal mortality rates.* "Maternal mortality ratio remains high as facility based estimates for 2005 and 2006 were 175 [maternal deaths] per 100,000 live births respectively. These are mainly due to haemorrhage and sepsis following unsafe abortions" [Ministry of Health SKIP, 2007]. The equivalent statistic in 1991 was 326 maternal deaths per 100,000 live births. The Government target is 150 maternal deaths per 100,000 live births by 2011. Clearly, some progress has been made, but it has again been made difficult by the high HIV/AIDS prevalence among women in the reproductive age group. This is so despite the further improvement in the (very high) proportion of births attended by skilled health personnel. The proportion was 94 percent in 1996, and 96.1 percent in 2003. The 2003 figure was down, but only slightly, on the 2000 figure (97 percent).
95. *Combat HIV/AIDS, malaria and other diseases.* HIV prevalence among pregnant women aged 15-49 decreased in 2005 to 33.4 percent, from 37.4 percent in 2003.¹¹ The equivalent figures imputed for the adult population (aged between 15 and 49) are 29 percent in 2002, 31 percent in 2003 and 28 percent in 2005.
96. This improvement occurred despite the fact that more of those suffering from HIV/AIDS were surviving, because of the free availability of ART therapy.
97. Prevalence among the 15-19 age groups has fallen from a peak of over 30 percent in 1995, to below 20 percent in 2005. This suggests that "among younger people at least, the extensive Information, Education and Communication (IEC) campaign has had the intended effects and that behavioural change is taking place as intended" [Econsult, 2006].
98. Statistics on the incidence of tuberculosis have been getting worse, because HIV/AIDS reduces resistance to this and other diseases. Again, however, there has been a slight improvement. Tuberculosis cases detected fell slightly.
99. Ensure environmental sustainability: Some progress was made during NDP 9 in passing environmental legislation and developing regulations and guidelines, including:
 - State of Environment Reporting (SOER)
 - the Environmental Impact Assessment (EIA) legislation came into force in May 2005, regulations have been drafted and are expected to come into force before the end of 2007/08

¹¹ Against this, there was no improvement between 2003 and 2005 in the HIV prevalence rate for adults, as estimated by UNAIDS/WHO in 2006. There was a marginal deterioration from 24.0 percent to 24.1 percent.

- production of natural resources accounts for livestock, minerals and water in order to mainstream environmental/economic instruments into the planning process
 - Ratification of several Multilateral Environmental Agreements (MEAs) including: a National Action Plan (NAP) under the United Nations Convention to Combat Desertification (UNCCD); a Biodiversity Strategy and Action Plan (BSAP), under the Convention on Biological Diversity (CBD); designation of the Okavango Delta as a Wetland of International Importance (Ramsar site), and the development of the Okavango Delta Management Plan (ODMP).
100. Some problems remain, including:
- absence of legislation for coordinated environmental management planning
 - absence of district environmental coordinators
 - inadequate institutional capacity at the Department of Environmental Affairs, which results in delays in reviewing and approving EIA reports
 - lack of capacity to develop natural resource accounts resulting in gaps in the accounts
 - lack of coordinated MEA reporting
 - absence of recycling of wastewater and waste materials in urban areas.
101. *Develop global partnership for development.* The three objectives listed under this MDG are
- to develop an environment conducive for beneficial trade and foreign direct investment
 - in cooperation with the private sector, to make available the benefits of new technologies, especially ICT
 - to reduce the specific problems faced by Botswana as a landlocked country.
102. Issues concerning trade and foreign direct investment have already been discussed in this paper. Although Botswana is ranked fourth in Africa and 50th globally for its national business environment, this paper has argued that an improved investment climate is urgently needed to achieve the objectives of NDP 10.
103. On technology, Botswana is ranked seventh in Africa, and 59th globally according to the Global Competitive Index 2004. Again, while this relative position appears moderately attractive, there is an urgent need to improve the ICT infrastructure if Botswana is to increase further those service exports which rely on improved access to the Internet.
104. The problems of landlockedness have also been discussed. On the one hand, Botswana should concentrate on exporting goods to the country's immediate neighbours, other than high-value/low-bulk goods for which transport costs to countries outside the region are so small that Botswana does not face a significant competitive disadvantage. On the other hand, Botswana should shift the emphasis

of economic policy from manufactured exports to service exports, specifically those which can be exported using the Internet, because of the negligible transport costs involved. This latter objective requires, as already noted, improved ICT infrastructure.

The control of inflation:

- 105 The rate of inflation is one of the most sensitive indicators of the success or otherwise of macroeconomic policy. It also has the advantage of being available more immediately than other indicators.
107. Annual inflation reached a temporary peak of 12.2 percent in the middle of 2003, and the beginning of NDP 9. During the next twenty-four months, inflation was reduced to between 6 percent and 8 percent. It then rose again, reaching a peak of 14.2 percent in April 2006. Thereafter, inflation was steadily reduced, averaging about 6.4 percent in the second quarter of 2007, and rising only slightly in the third quarter.

Table 13: Average annualised inflation rates by quarter 2005-2007
(percentages)

	2005	2006	2007
January-March	7.3	13.2	7.0
April-June	6.5	13.4	6.4
July-September	9.3	11.0	
September-December	11.3	8.8	
Annual average	8.6	11.6	6.7 (a)

Note: (a) average for first six months only

108. Reasons for the increases in inflation in 2005 and 2006 included the devaluation of the Pula in May 2005, the introduction of school fees, and other administered price increases. There was a 7.5 percent devaluation in February 2004, and the Pula was again devalued by 12 percent in May 2005. The objective of the devaluation was to reverse the real appreciation of the Pula against the currencies of Botswana's principal trading partners that had occurred over the period from 2000 to 2004. In this, the devaluation was successful. Although inflation did rise initially, the authorities succeeded in bringing it quickly under control, through a combination of fiscal and monetary policy, and the net effect on the real effective exchange rate was as intended.
- 109 Restrictive fiscal and monetary policy contributed to the slow rate of growth of GDP. Nevertheless, it was absolutely necessary to gain as much benefit as possible from the devaluation, for the future growth of the economy. There is a risk after any devaluation that inflation will accelerate, and quickly erode the potential benefits from a depreciated real exchange rate. This was avoided.

Changes in bilateral real exchange rates

110. Prior to the devaluations of the Pula in 2004 and 2005, there was real exchange rate appreciation against several of the currencies of importance to Botswana's international trade, in particular the US dollar, the British pound and the Euro (see the table below). The appreciation of the Pula against other currencies was significant. In particular, appreciation against the US dollar has increased in importance because of the growth of textile exports to the USA under AGOA.
111. There is no way that Botswana can maintain constant real exchange rates against all trading currencies, if those currencies move against each other. Exchange rate policy must therefore be a compromise, with greater weight given to maintaining real exchange rates as constant as possible against those currencies which have the greatest importance for Botswana's foreign trade.
112. For many years, exchange rate movements between the South African rand and the US dollar were particularly large, which in turn created problems for exchange rate management in Botswana. For example, the cost of the US dollar in rand nearly doubled between 1999 and 2001, and nearly halved in the following two years. Since the end of 2003, the rand has been relatively stable against the US dollar, but as can be seen from the table below, the Pula appreciated in real terms against other important currencies. This is what made devaluation necessary. As already noted, it was essential to contain the inflationary pressure created by devaluation, and this was successfully achieved.
113. Following the devaluation, there was significant real depreciation against the US dollar, the British pound and the Euro (important export markets for Botswana).

Table 14: Changes in real exchange rate indices 2002/06 (September 2006 = 100)

End of	Change 2002-04	2004	2005	2006	Change 2004-06
Rand (a)	-12.2%	99.3	92.8	97.4	- 1.9%
US dollar	+39.2%	132.4	110.7	107.1	- 19.1%
Euro	+7.9%	120.3	116.8	102.5	- 14.8%
British pound	+14.5%	127.3	120.3	100.5	-21.1%

Note: (a) real exchange rate against the South African rand calculated using South African core inflation; the real exchange rate index using South African headline inflation depreciated from 99.9 to 96.2 from the end of 2004 to the end of 2006, or by 3.7% (see Bank of Botswana Annual Report 2006 Table 6.10).

114. Most crucially, the real exchange rate against the rand, after appreciating immediately after the devaluation, depreciated in the second half of 2006 to the point where it was very close to its previous level. The real exchange rate of the rand against the Pula is extremely important for Botswana. Some 70 percent of imports come from South Africa. Because Botswana is a member of the Southern African Customs Union, there are virtually no barriers to imports from

South Africa. Consequently, nearly all Botswana producers of tradable goods and services, have to compete with imports from South Africa. In addition, significant non-traditional exports are sold in South Africa, for which the real bilateral exchange rate against the rand is also crucial.

115. Because real exchange rates are fundamental to the growth of GDP in general, and to economic diversification in particular, it is important that macroeconomic policy has delivered constant or declining real exchange rates against Botswana's main trading partners.

International trade

116. The overall balance of payments was much stronger in the second half of NDP 9 than the original NDP 9 forecasts. As a result of this, and of the depreciation of the Pula, the foreign exchange reserves in Pula increased faster than had been forecast, in spite of the funding of the Public Officials Pension Fund (POPF).¹² However, their starting point was much less than had been forecast, so that the foreign exchange reserves in 2006 were almost exactly what had been forecast in NDP 9.

Table 15: Balance of payments overall balance, forecast and actual, 2004-06(Pula millions)

End of	2004	2005	2006
Overall balance: NDP 9 forecast (a)	414	201	1078
Overall balance: NDP 9 actual	-272	7036	10256
Forex reserves: NDP 9 forecast (a)	44410	45760	48000
Forex reserves: NDP 9 actual	24200	34610	47946

Note: (a) the NDP forecasts of the balance of payments and the foreign exchange reserves were for national accounts years ending in June. The actual balance of payments statistics are for calendar years, so there is a mismatch of dates. The overall picture is broadly correct.

117. The increase in the foreign exchange reserves in terms of the US dollar and the SDR was less than in Pula, but nevertheless substantial.¹³ The reserves in Pula increased from the end of 2003 to the end of 2006 by just over 100 percent (to P 48.0 billion). The reserves increased by just under 50 percent in US dollars (to US \$8.0 billion), and by 46 percent in SDRs.
118. The foreign exchange reserves measured in US dollars fluctuated much less than their Pula value. For example, between the end of 2001 and the end of 2003, the Pula value of the foreign exchange reserves fell by 42.4 percent, while the US dollar value of the foreign exchange reserves fell by only 9.5 percent.

¹² A substantial proportion of foreign assets were switched from the official foreign exchange reserves to privately held foreign assets as a result of Government funding of the POPF.

¹³ The SDR is a weighted average of the US\$, the UK pound, the yen and the Euro.

119. It is important to note that an increase in the value of the Pula against the US dollar, for example, does not directly affect the US dollars held in the foreign exchange reserves. It is just that those dollars are then worth less in Pula, as recorded in the official statistics of the foreign exchange reserves.
120. The buying power of the foreign exchange reserves, in terms of what they can purchase as imports, depends mainly on the exchange rates of the reserve currencies against the South African rand, in which most imports are denominated. It does not necessarily follow, therefore, that a decline in the Pula value of the reserves reduces their buying power. The objective of foreign exchange reserve management is to maintain the purchasing power of the reserves in SDR terms.
121. The import cover provided by the foreign exchange reserves fluctuated sharply between 2000 and 2006. The sharp decline in import cover between 2001 and 2004 was caused by an appreciation of the Pula against those major foreign currencies in which the foreign exchange reserves are held, a market downturn which reduced the value of foreign assets, and funding of the POPF.
122. The Pula appreciation in 2001-04 was subsequently corrected, and this, together with the large balance of payments surpluses in 2005 and 2006, resulted in a recovery of the import cover provided by the foreign exchange reserves.

Table 16: Fluctuations in import cover provided by the foreign exchange reserves

	2001	2002	2003	2004	2005	2006
Import cover (months)	39.7	26.3	20.7	16.9	22.1	30.2
Change in import cover (%)	+15.5	-33.7	-21.3	-18.2	+30.7	+36.6
Change in US\$ per Pula (%)	-23.2	27.7	23.1	3.8	-22.3	-8.6

123. *Merchandise exports*

The trade surplus grew substantially, as shown in the table below, because exports grew considerably faster than imports. In part, this was because the nickel price increased by 144 percent, and because of a tripling of copper prices. This, combined with the depreciation of the Pula against the US dollar (the currency in which exports of copper and nickel are sold), and increased nickel production, resulted in the Pula value (in current prices) of copper-nickel exports increasing by 450 percent over three years. In turn, this meant that the share of copper-nickel exports increased from 4.6 percent of total merchandise exports in 2003, to 14.4 percent of the total in 2006.

Table 17: Exports, imports and the trade balance: 2003-06 (Pula billions, current prices)

Calendar years	2003	2004	2005	2006	% change 2003-06
Merchandise exports	15.0	17.3	22.6	26.6	+77.3%
Merchandise imports	10.5	13.4	14.4	15.1	+43.8%
Trade balance	4.4	3.9	8.2	11.4	+159.1%
<i>Trade balance (NDP 9 forecast)</i>		1.5	1.5	2.6	+73%

124. The index of diamond prices rose only modestly (by 12.7 percent) over these three years, but Pula depreciation and increased production resulted in a 68 percent increase in the Pula value of diamond exports. Because diamond exports still dominate, the increase in diamond exports accounted for almost exactly half of the total increase in export receipts between 2003 and 2006. Nevertheless, the dominance of diamonds was reduced, with the share of diamond export receipts in the total decreasing from 78.2 percent to 74.2 percent.
125. Botswana began to export gold in 2005, but the value was small in relation to other exports, being only 0.8 percent of total exports in 2006.
126. The table below shows the changes in Botswana's main export commodities, in constant price terms, in the first three years of NDP 9. The current price export values have been converted to constant prices using the consumer price index, which converts export earnings into the domestic purchasing power of exporters.

Table 18: Real domestic purchasing power of merchandise exports, 2003-06
(P millions, constant 2006 prices)

	2003	2006	Change (%)
Diamonds	15820	20577	+30.1
Copper-nickel	939	3991	+325.0
Beef	351	379	+8.0
Soda ash	311	483	+55.3
Textiles	307	955	+211.1
Vehicles	599	187	-68.8
Gold	0	215	-
Other	1903	935	-50.9
TOTAL	20230	27722	+37.0

Note: Pula receipts deflated by the Consumer Price Index

127. Apart from the extraordinary increase in the value of copper-nickel exports, already mentioned, there was also a large increase in Pula receipts from textile exports, in real terms. This resulted from the introduction of privileged access to the US market under AGOA and from keeping the real exchange rate of the Pula against the US dollar competitive.
128. On the other hand, there was a collapse in vehicle exports in 2006, and it is reported that future prospects are not good.¹⁴ It is also of concern that "other" merchandise exports not only failed to grow, but halved in constant price terms.

¹⁴ But note that vehicle exports have exceptionally high import content.

Diversification, in the form of a wider range of products being exported, would show up in this "other" item.

129. *Service exports*

There was strong growth in service exports. The services account of the balance of payments moved into surplus in 2005 for the first time, and the surplus grew sharply in 2006 (from P 165 million to P 612 million). In the context of the balance of payments current account surplus of P 11,926 million, the services surplus was quite small. The potential for further growth of service exports is, however, considerable.

130. The international services account had always been in deficit historically, mainly because of the high cost of foreign transport for imports and exports, especially imports (the transport cost of diamond exports is negligible).
131. Recently, spending by visitors to Botswana has increased sufficiently to offset the transport deficit. Further, "other" services such as communications, insurance, legal services, property rents, etc., also moved into surplus. This represents a combination of import substitution (that is, increased production of these services in Botswana displacing previous payments to overseas suppliers), and growth of service exports [Bank of Botswana Annual Report: p 70].
132. As already noted, import substitution in both goods and services has successfully reduced Botswana's dependence on imports.
133. In strategic and financial terms, import substitution over a wide range of goods and services is as valuable as export diversification (provided of course that import substitution is not a result of protection, which would make it likely that producers are inefficient).
134. The measurement of service exports has become more difficult since the abolition of exchange controls, so that the statistics in the table below are not as reliable as those for merchandise exports, which can be observed and recorded at the borders. However, the positive picture of service exports is clear and consistent. So it appears probable that service exports are indeed growing, and growing quite strongly.

Table 19: Service exports 2003-06 (P millions, current prices)

Calendar years	2003	2004	2005	2006	2003-06 % growth
Transport	342	390	434	474	+38.6%
Travel	2261	2578	2871	3136	+38.7%
Other	581	544	1191	914	+57.3%
Total services	3184	3512	4496	4524	+42.1%

135. The recent growth in service exports has been from a relatively low base. However, their rapid growth means that they are now significantly larger than non-traditional exports of goods. Pula receipts from service exports in 2006 were P 4.5 billion. This was 60 percent higher than the P 2.7 billion receipts in 2006 from non-traditional exports (defined as merchandise exports exclusive of diamonds, copper-nickel and beef).
136. Another indicator of the growing importance of service exports is that their share of total imports of goods and services combined increased from 10 percent in 1990, to 20 percent in 2003 [World Bank, 2006]. The share of services in Botswana's total international trade stayed at 20 percent between 2003 and 2006. This was the period of extremely rapid growth in base metal prices, so service exports were also increasing extremely fast.
137. It is equally significant that service exports are growing much faster than non-traditional merchandise exports. In the three years to 2006, service exports grew by 42 percent, while non-traditional merchandise exports grew by only 15 percent, in current price terms. Taking out the effect of inflation, using the Consumer Price Index, the Pula value of non-traditional merchandise exports actually fell by 11 percent. Service exports, on the other hand, grew by a total of 10 percent in constant price terms over the three years (see the table below).

Table 20: Growth of service exports, and of non-traditional merchandise exports, 2003-06
(percentages, constant 2006 prices)

	Percentage change 2003-06
Transport	+7.1
Travel	+7.1
Other services	+21.5
Total service exports	+9.8
Non-traditional merchandise exports	-11.0

138. Within the total, "other" service exports grew by 22 percent in real terms, suggesting that there may have been some growth in new types of service exports. It also suggests that the future for service exports may be more promising than the future for non-traditional merchandise exports. This is consistent with Botswana's position as a landlocked country. With the exception of exports to the Johannesburg area, the cost of transporting goods exports to the rest of South Africa, and to the ports, imposes a serious disadvantage on Botswana. The cost of overland transport is several times higher than the cost of transport by sea.
139. Some service exports also suffer from a transport disadvantage, most notably tourism. Visitors to Botswana, other than from neighbouring countries, face heavy costs in getting to the country. Nevertheless, tourist arrivals appear to be increasing. Total arrivals in Botswana barely increased from 2002 to 2005, but

arrivals by purpose of entry show that those on holiday increased by a total of 59 percent over those three years.

140. On the other hand, the export of services via e-mail and the Internet eliminates all of Botswana's disadvantage from being landlocked, because the transport cost is essentially zero provided the basic infrastructure is put in place.

Budget performance

141. The forecasts in NDP 9 (in the base case scenario) were for the budget to be in modest surplus throughout the period. In turn, this was based on forecasts that total revenue and total expenditure would increase by similar percentages: 50.1 percent and 49.3 percent, respectively, over the six-year period.
142. Budget outturn statistics are available ahead of GDP statistics. Using preliminary figures for the 2006/07 budget outturn, the NDP 9 forecasts can be compared with the budget outturn for the first four years of NDP 9.

Table 21: Outturn of the budget balance compared with NDP 9 forecasts 2003/04 to 2006/07

Year ending March	2004	2005	2006	2007
NDP 9 base case (P million)	+102	+136	+162	+137
Actual outturn (P million)	-78	+575	+4634	+7593
Outturn as % of GDP	-0.2%	+1.2%	+8.1%	+12.0% (a)

Note: (a) approximation, based on assuming inflation at 6% and real growth at 5% to estimate 2006/07 nominal GDP

143. In the first two years of NDP 9, the budget was roughly in balance, as forecast. Thereafter, the budget moved into substantial and increasing surplus, through a combination of large increases in government revenue and a declining rate of growth in government spending. The reasons for the latter have already been discussed.
144. By the 2005/06 fiscal year, the budget surplus was already 8 percent of GDP. Preliminary estimates indicate that the rate of growth of total government spending recovered sharply in 2006/07, but this was also a particularly good year for government revenue. As a result, it is likely that the budget surplus was of the order of 12 percent of GDP in the budget year 2006/07.
145. One consequence of the budget surpluses in the two most recent years is that government balances at the Bank of Botswana increased sharply. In the calendar year 2006, the central government's net claims on the Bank of Botswana increased from P 13.2 billion to P 21.2 billion. This last figure is slightly larger (108 percent) than total government spending in the budget year 2006/07.
146. This provides a reserve against possible crises. Botswana remains very dependent on a small number of revenue sources, which can be volatile.

Contingencies, such as drought and foot and mouth disease, can require emergency expenditure.

147. At the end of 2004, the net claims of central government on the Bank of Botswana were only 55 percent of government spending in 2004/05, compared with the figure of 108% at the end of 2006.
148. This illustrates clearly the fluctuations that can occur. Many of the fluctuations have causes which are outside the control of the Government, although not all of them are. Most notably, the Government has control over its own spending.

Government revenue and grants

149. Total government revenue and grants increased by 68.5 percent in the three years to March 2007. In constant price terms, the increase was 30.8 percent. This was faster than the real growth of GDP (21.3 percent), so that total government revenue and grants increased as a percentage of GDP, from 38.0 percent to 39.5 percent.
150. However, a part of this improvement in the ratio of government revenue to GDP was because of an additional payment of P 2.1 billion from a large surplus in the SACU revenue pool (Bank of Botswana Annual Report 2006: 63). Without this windfall, the increase in receipts from customs and excise would have been only 33.0 percent, and the increase in total revenue only 55.5 percent in the three years ending in 2006/07.

Table 22: Government revenue 2003/04 to 2006/07 (P million, current prices)

Year ended March	2004	2005	2006	2007	% change 2004-07
Customs and excise	2246	3227	3930	5087	+126.5
Mineral revenue	8163	8682	11045	13863	+69.8
Non-mineral income taxes	2079	2082	3003	3848	+85.1
Sales tax/VAT	1573	2116	1979	2246	+42.8
Other taxes	85	138	173	185	+117.6
Sub-total tax revenue	14146	16245	20130	25229	+78.3
Interest and other property income	1177	336	1009	657	-44.2
Other non-tax income	812	1029	1015	954	+17.5
Sub-total: non-tax revenue	1990	1364	2024	1611	-19.0
Grants	61	348	113	448	634.4
TOTAL revenue and grants	16197	17957	22267	27287	+68.5
Memo item: revenue/GDP (a)	38.0	36.2	39.0	42.6 (b)	

Note: (a) GDP years ending June

(b) based on an estimate of GDP in 2006/07 in current prices, assuming real growth of 5% and inflation of 7%; the ratio in the table is not sensitive to changes in these assumptions.

151. Making the same adjustment, the ratio of total government revenue to GDP in 2006/07, would be only 39.4 percent rather than the 42.6 percent shown in the table. In fact, in the ten years since 1997/98, the ratio of government revenue and grants to GDP has averaged 38.4 percent, and has fluctuated narrowly about the average in all but one year. It fell to 32.3 percent in 1998/99, but recovered in the following year to 42.4 percent, mostly because of large fluctuations in mineral revenue (probably caused by timing differences).

152. The table below shows ratios of non-mineral government revenue to non-mining private sector output (GDP less mining and less general government), in order to remove the large impact of the fluctuations in diamond revenue and diamond output. Again, there appears to be no consistent trend. The ratio fluctuated narrowly about the 10-year average of 40.0 percent.¹⁵

Table 23: Ratio of non-mineral revenue to GDP (exclusive of mining and general government, 2003/04 to 2006/07 (percentages)

Years ending March and June	2004	2005	2006	2007 (a)
Ratio of non-mining revenue to non-mining GDP (%)	39.7	41.6	40.2	42.4

Note: (a) based on an estimate of GDP in 2006/07 in current prices, assuming real growth of 5% and inflation of 7%; the ratio in the table is not sensitive to changes in these assumptions.

Real interest rates:

153. The table below shows that the real cost of borrowing, as represented by the commercial banks' prime lending rate, has varied quite sharply in the last six years. This has happened when the rate of inflation has fallen over a relatively

¹⁵ The table has been adjusted to remove the effect of the windfall from SACU revenue in 2006/07.

short period, and the Bank of Botswana has not reacted by reducing nominal interest rates, or at least not until after a significant lag.

Table 24: Real prime lending rate 2001-06 (percentages)

End of year	2001	2002	2003	2004	2005	2006	2007 (June)
Prime lending rate	15.8	16.8	15.8	15.8	16.0	16.5	16.5
Inflation rate	5.6	10.7	6.3	7.9	11.3	8.5	6.4
Real prime lending rate	9.6	5.5	8.9	7.3	4.2	7.4	9.5

154. It is not possible to be certain one way or the other how quickly nominal interest rates should be reduced, when the rate of inflation falls. There is always a risk that inflation will rise again, requiring higher nominal interest rates, and policy is made more difficult by the fact that the economy reacts to changes in interest rates with quite a significant time lag. In addition, it is the future real cost of borrowing which is significant for borrowers, as this is what affects the expectation of profit using borrowed money. The current real interest rate is simply a proxy for the future rate, in the absence of better information.
155. Nevertheless, the high level of the real cost of borrowing in some recent years must have had a negative impact on the growth of GDP. There is no ideal real cost of borrowing, but a real prime lending rate above (say) 5 percent probably dampens private sector growth, particularly as many borrowers pay more than this. Of course, this may have been necessary in order to reduce inflation. High inflation would have eliminated the benefits of devaluation, as well as causing other problems.
156. It may be, therefore, that it will be possible to reduce the nominal prime lending rate during the remainder of NDP 9, given that inflation has continued to decline in 2007, and the real cost of borrowing has risen (reaching 9.5 percent in mid-2007). This will only be possible, however, if inflation does not rise again. There are various upside risks, for example further increases in the global price of oil and the prospect of increases in administered prices. In particular, shortages of electricity supply in South Africa could result in sharp increases in the cost of imported electricity.

Summary and conclusion:

157. The overall picture of the economy's performance, in the first half of NDP 9, is that growth was slower than planned, and that the growth rate was declining. However, early indications are that the growth rate picked up in 2006/07. The recovery was driven in part by an increase in the growth rate of government expenditure, which had also been declining in the most recent period.
158. Investment, as measured by Gross Fixed Capital Formation, declined in real terms. Far from moving towards the Vision 2016 target, that it would reach 40

percent of GDP, its share of GDP fell from 22 percent to 17 percent. There was no indication in the statistics of any recovery in either Foreign Direct Investment, or domestic investment by the private sector. A major reason for low rates of investment is that there has been no improvement in the various constraints on "doing business" in Botswana, as measured by the World Bank.

159. There was considerable growth in merchandise exports, but this was mostly because of high base metal prices and the impact of Pula depreciation on diamond export receipts and mineral revenue for the Government. Neither of these has any immediate impact on the economy. Other merchandise exports declined, falling by half from 2003 to 2006.
160. On the other hand, service exports grew rapidly. Although the statistics for service exports are much less reliable than those for merchandise exports, the indications are strong and consistent enough to believe that rapid growth really did take place. There was particularly rapid growth in the unspecified category "other", so that the growth was not just in tourism. The growth of service exports using the Internet is consistent with Botswana's being a landlocked country.
161. Merchandise exports, other than diamonds and those going to the Johannesburg area, face a large competitive disadvantage because of the cost of transport. The export of services using the Internet, mostly by e-mail, has negligible transport costs, so that Botswana is not at any significant disadvantage from being landlocked for such exports. However, the growth of this sector is seriously handicapped by inadequate infrastructure.
162. The major issues for the remainder of NDP 9, and for NDP 10, are therefore twofold. To what extent can Botswana continue to generate growth by increasing government spending (given the expected decline in diamond revenues towards the end of NDP 10 or shortly afterwards)? And what can the Government do to reverse the decline in private sector investment?

IV. PROJECTIONS OF GOVERNMENT'S REVENUE AND SPENDING LIMITS FOR NDP 10

Government spending: strategic issues:

163. The strategy for government spending in NDP 10 depends mainly on four major issues.
164. The first is how the composition of government spending can best contribute to economic growth, given the foreseeable levelling off and eventual decline of diamond revenues.
165. The second issue is what resources are expected to be available. This requires a projection of the growth of GDP, from which can be derived projections for the

growth of government revenue. This then determines what total resources will be available for government spending.

166. The third issue concerns whether the budget should, taking one year with another, be in surplus, deficit or balanced. In recent years, the overall strategy has been for the budget to be balanced. It has been assumed in the fiscal projections that this will continue.
167. The fourth issue is how the total of government spending should be divided between recurrent and development spending, and between functions. In other words, the Government will indicate its own priorities through decisions on how the total revenue available should be spent.

Projections of government revenue in NDP 10 (base case):

168. The Ministry of Finance and Development Planning (MFDP) commissioned a new macroeconomic model to be developed for NDP 10, as the old Membot model used for previous Plans had become obsolete. Unfortunately, the building of this model was delayed, so that it was not available for the writing of this first draft of the Macroeconomic Framework for NDP 10.
169. Instead, for the purpose of this draft, some simple projections have been made on a spreadsheet, using a few basic assumptions. The projections presented here are for a "base case", using what are currently regarded as the most likely assumptions for growth of the non-mining private sector. Variations on the base case, an optimistic and a pessimistic scenario using higher and lower assumptions regarding growth, are presented in the following sections.
170. The forecasts in the final version of this macroeconomic framework paper will be adjusted when the macroeconomic model becomes available. For the purposes of this draft, there follows a brief description of the simplified model used at this stage.

171. *Mineral revenue*

Debswana has provided forecasts of diamond production (in carats) to 2014. The growth of mining GDP is taken to be the same as the growth of diamond production.¹⁶ The spreadsheet assumes that production in 2015 is the same as in 2014, which is roughly consistent with a graph of future diamond revenue also provided by Debswana.

172. Diamond output is projected to grow during the period of NDP 10. The forecast decline in diamond output begins just after the end of NDP 10. This decline will occur when open pit mining is no longer possible. Underground mining produces

¹⁶ The Ministry of Energy and Water Resources has been asked for forecasts of non-diamond mineral output. When received, these forecasts will be used to refine the revenue projections.

less ore, at much higher cost, and requires heavy capital expenditure beforehand, all of which would reduce government revenue substantially.

173. Even if economic diversification occurs successfully, there is no possibility that other forms of economic activity will generate as high a proportion of their output as government revenue, compared with diamonds. This must be taken into account in order to avoid a difficult adjustment programme during NDP 11.

174. Currently, diamonds are approximately 80% of mineral exports. No separate estimate has been provided of other mineral exports, in the absence of information, so that non-diamond mineral production is assumed to increase in the same way as diamond production.

175. *Non-mineral revenue*

A crucial issue is projecting at what rate the private sector will grow. As noted in the review of NDP 9, growth of GDP slowed during the three years to 2005/06, but recovered according to preliminary estimates in 2006/07. One of the main reasons for this declining rate of growth was that the rate of growth of government spending fell. Equally, the current recovery of GDP growth is in part because of a recovery in the growth of government spending.

176. The projection of non-mineral revenue is based on an estimate of the growth of the non-mining private sector. The non-mining private sector is taken here to be GDP less general government, less mining GDP.¹⁷

177. The growth of the non-mining private sector is assumed to be 6% per year in real terms from 2006/07 onwards. This is higher than it has been recently, but takes account of the recent upsurge. It also takes account of the desire of the government to increase the ratio of government spending to GDP above its level of 31% in 2005/06.

178. The growth of that part of GDP called "general government" is also assumed to be 6% in real terms. The average rate of growth of "general government" was just over 7% in the last ten years. "General government" is currently 16.6% of GDP (in 2005/06), which is just over half the ratio of government spending to GDP.

179. The average rate of growth of government spending during the last ten years (up to 2005/06) in real terms was only 4.6%. However, this includes the most recent five years when the average rate of growth was only 0.4%. In the previous five years it was 8.9%.

¹⁷ This is a rough approximation. It will be refined when forecasts of non-diamond output are available. Taxes are also derived from the "general government" category of GDP, but it has been projected to grow at the same rate as the non-mining private sector, so this does not affect the projections of government revenue.

180. The assumed rate of growth of "general government" does not directly affect the projections, because it is assumed that general government pays no tax. The rate of growth of government revenue, and therefore the feasible rate of growth of government spending, is the main product of the projections.

181. *Growth of total GDP*

The growth of GDP for the next eight years, in real terms, is then simply the sum of the forecasts for general government, mining GDP, and the non-mining private sector as defined above.

182. The components of GDP as above, and total GDP, are then estimated in current price terms. Future inflation is projected to be 7% in 2008, and 6% thereafter.

183. *Revenue projections: mineral revenue*

Mineral revenue is projected by taking the estimate for diamond exports in current prices, and assuming that the ratio of government's mineral revenue will be roughly the same as it has averaged in recent years, namely 60% (the three-year moving average for 2005/07 is actually 60.4%). The most recent actual figure is 74%, but this is unlikely to be repeated.

184. It may be that some adjustment should be made for the probable increased costs of mining, which will lower the share of government in mineral revenue. This has not been done, because the decline in diamond output is forecast to happen after the end of NDP 10. This assumption is supported by the graph for "diamond income for distribution" provided by Debswana, which shows a rising trend until 2015, and a levelling off in 2016.

185. *Revenue projections: non-mineral revenue*

GDP exclusive of mining and general government has been compared with non-mineral government revenue. The ratio has been fairly consistent at around 40% in recent years. In other words, there is no apparent trend in the proportion of tax paid by the non-mining private sector. The ratio is derived by projecting forward a five-year moving average, which is 40.5% approximately throughout the next eight years. This ratio is then applied to the forecasts of GDP exclusive of mining and general government, to give a projection of non-mineral government revenue.¹⁸

Projections of total government revenue, and government spending:

186. Total government revenue is projected by taking the sum of the forecasts of mineral and non-mineral revenue as above. The resulting growth rates are shown in the table below. The growth rates of mineral revenue fluctuate substantially, mainly because of differences in the timing of receipts of diamond revenue. It is

¹⁸ The future establishment of the SADC Customs Union creates some uncertainty about these projections.

therefore the trend values rather than annual fluctuations that should be considered. For example, mineral revenue increased at an exceptional rate in 2006/07, and an offsetting decrease is projected in 2007/08.

187. Government spending should not take account of annual fluctuations in revenue, but aim to generate a balanced budget over the longer term. The Government has more than adequate cash balances to cope with temporary shortfalls in mineral revenue, as noted in the review of NDP 9 in this paper.¹⁹
188. Overall, total government revenue, in current price terms, is projected to increase at an average of just over 10 percent in the second half of NDP 9, and at the higher rate of 11.4 percent in the six years of NDP 10. The average growth rate of non-mineral revenue, derived from the growth of the private sector, is projected to decline slightly in NDP 10.

Table 25: Actual and projected rates of growth of government revenue (base case) second half of NDP 9, and NDP 10 (annual % rates of change, current prices, forecasts in italics)

Year ending March	2007	2008	2009	<i>NDP 9 2nd half (average)</i>	NDP 10 (average)
Mineral revenue	25.5	-14.8	9.0	6.6	10.3
Non-mineral revenue	21.5	7.5	14.0	14.3	12.4
Total revenue	28.3	-7.8	11.6	10.7	11.4

189. The upper limits to future government spending are then derived by assuming that the rate of increase can be higher than the rate of increase in revenue in the next two years, because of the budget surplus of P 6.6 billion 2006/07. Once the surplus has been eliminated, it is assumed that the budget is on average approximately balanced, or slightly in deficit, during NDP 10.
190. It should be emphasised that the numbers projected here for government spending are upper limits. Spending proposals will only be included in NDP 10 if they can be shown to be justified economically, and of course if they are in line with government policies for each sector. Botswana has a history of not spending money simply because it is available, but accumulating financial surpluses until they can be spent productively.
191. It is then projected that development spending should increase faster than recurrent spending. Having fallen by 3.2% in 2005/06, development spending rose by 5.6% in 2006/07, in current prices. Government's objective is to increase the share of development spending in the total. Development spending is therefore projected to increase by 14.0 percent until the end of NDP 10 (all of

¹⁹ The Government could borrow if cash balances were exhausted. Most governments do this. So far, the Botswana Government has not needed to borrow to finance budget deficits. Current policy is to maintain cash balances, by balancing the budget in the medium term.

these calculations, and the numbers in the following two tables, are in current prices).

Table 26: Projections of government spending to 2014/15 (base case) (current prices, forecasts in italics)

Year ending March	2006	2007	2008	2009	2010	2015 (a)
Recurrent spending (Pmn)	14155	15969	<i>18388</i>	<i>21177</i>	<i>24128</i>	<i>43879</i>
Annual growth (%)	2.8	12.8	<i>13.9</i>	<i>13.9</i>	<i>13.9</i>	<i>12.9 (b)</i>
Development spending (Pmn)	3784	3997	<i>4557</i>	<i>5195</i>	<i>5922</i>	<i>11402</i>
Annual growth (%)	-3.2	5.6	<i>14.0</i>	<i>14.0</i>	<i>14.0</i>	<i>14.0 (b)</i>
Total spending (Pmn) (c)	17632	19694	<i>22845</i>	<i>26272</i>	<i>29950</i>	<i>62446</i>
Annual growth (%)	1.4	11.7	<i>16.0</i>	<i>15.0</i>	<i>14.0</i>	<i>13.2 (b)</i>

Note: (a) spending in fiscal year 2014/15

(b) average rate of growth from 2009/10 to 2014/15

(c) total includes net repayments of government lending

192. It is assumed here that these increased rates of growth, of both recurrent and development spending, are possible. A similar acceleration was recorded in 2006/07. It could of course be that the capacity of the government to increase its spending has been reached, but it is assumed here that further acceleration is possible.

193. Using these projections of government revenue and expenditure, the budget would be in deficit by an average of approximately P 0.5 billion a year during NDP 10. The cumulative deficit would be less than 30 percent of the cumulative surplus in the second half of NDP 9.

194. Over those nine years (the second half of NDP 9 and the six years of NDP 10), the budget would be in cumulative surplus. A cumulative balanced budget over NDP 10, taken on its own, would require a slightly lower rate of growth of government spending.

Table 27: Budget outturn, second half of NDP 9, and NDP 10 (base case)
(P millions, current prices, projections in italics)

Year ending March	2007	2008	2009	NDP 9 2 nd half (average)	NDP 10 (average)
Revenue	27287	<i>25169</i>	<i>28097</i>	<i>26518</i>	<i>41031</i>
Expenditure	19694	<i>22845</i>	<i>26272</i>	<i>22937</i>	<i>41544</i>
Surplus/deficit	+7593	<i>+2324</i>	<i>+1825</i>	<i>+3580</i>	<i>-513</i>
Spending/GDP (%)	29.9	<i>31.5</i>	<i>32.6</i>	<i>31.3</i>	<i>35.0</i>

195. The projections in the above table would result in government spending as a percentage of GDP settling at about 35%. This is approximately halfway between the current level and the 40% that was proposed as a sustainable maximum in the Mid-term Review of NDP 9. A higher rate of growth of

government spending would generate budget deficits. It would also make it more difficult to adjust to the expected fall in diamond revenue when diamond mining goes underground.

V. PROPOSED PUBLIC EXPENDITURE PROGRAMME

Government spending by function 2000/01 to 2005/06:

196. Government expenditure in the six years ending in 2005/06 is presented in the table below, by function. The average rates of growth have been calculated from the slope of a line fitted to expenditures in each function. This avoids distortions created by the choice of base and final year.

Total government spending

Table 28: Total government expenditures and net lending by function, 2000/01 to 2005/06
(P million, current prices)

Year ending March	2001	2002	2003	2004	2005	2006	Growth trend (a)
General Public Services	2298	2400	2816	3480	3209	3822	10.9
Defence	998	1305	1447	1503	1464	1446	6.6
Education	2866	3407	3549	3932	4145	4197	7.7
Health, food and social welfare (b)	1054	1266	1505	2018	2092	2246	17.3
Housing, Urban and Regional Development	732	793	1144	498	872	1089	4.2
Other Community and Social Services	345	368	549	561	593	601	12.8
Economic Services	2043	2678	3053	2392	2635	2637	2.9
Unallocated Expenditure	1201	1414	1647	1892	2097	1890	10.8
Total Expenditures and Net Lending	11536	13632	15710	16276	17106	17928	8.7

Notes: (a) trend rate of growth, derived from the slope of a line fitted to the actual values

(b) "Health" and "Food and Social Welfare Programmes" amalgamated in all tables in this Section

197. Overall, the table above shows that the trend rate of increase of total government expenditure and net lending, in current prices, was 8.7 percent in the six years ending in 2005/06. During the same six years, the trend rate of increase of consumer prices was 8.8 percent. In terms of the consumer buying power of the income created by government expenditure, therefore, the real value of government expenditure did not increase over those six years.

198. The highest trend rate of increase in spending was in "Health, food and social welfare", mainly reflecting the increased cost to the Government of the various programmes for combating HIV/AIDS. If this category is taken out of the above table, the trend rate of increase of the remainder of government expenditure and net lending was only 7 percent. This was less than the rate of increase of consumer prices, suggesting that spending fell in real terms.

199. The two functions with lower than average rates of increase were "Housing, urban and regional development" (4.2 percent) and "Economic services" (2.9 percent). The main reason for the low rate of increase in spending on economic services was a very large fall in development spending on roads in 2005/06. The Government has planned to restore the previous levels of spending in the following two years. The other categories of spending increased at rates which did not deviate substantially from the average.
200. The different rates of increase of the different categories of government spending presumably reflect two factors. The first is the relative priority which the Government gives to each category of spending, and the second is the capacity of the various ministries to spend the budget allocations provided. It is not possible to distinguish between these two factors, but future allocation should presumably represent the same forces at work. Those categories of spending with the highest priority should continue to get above-average allocations, while the budget should not allocate resources to ministries which cannot spend them.

201. *Recurrent government spending*

The following tables distinguish between recurrent and development spending in order to get a clearer picture of past trends.

202. Total recurrent expenditure grew substantially faster (at 11.0 percent a year) than the trend rate of increase of consumer prices (8.8 percent). To some extent this reflects real increases in the salaries of public sector employees.
203. It may also reflect the general shift in the nature of government spending as the economy matures. At independence, Botswana had virtually no infrastructure. There was therefore a heavy emphasis on development spending in general, and construction in particular.

Table 29: Recurrent government expenditure by function, 2000/01 to 2005/06 (P million, current prices)

Year ending March	2001	2002	2003	2004	2005	2006	Growth trend (a)
General Public Services	1787	2063	2440	3051	2741	3426	13.2
Defence	749	882	1071	1138	1101	1238	9.7
Education	2373	2856	3076	3358	3677	3801	9.6
Health, food and social welfare	839	1037	954	1044	972	1013	2.4
Housing, Urban and Regional Development	464	467	503	615	722	785	12.5
Other Community and Social Services	195	251	473	501	502	543	23.0
Economic Services	896	1082	1429	1337	1677	1460	11.1
Unallocated Expenditure	1080	1308	1636	1892	2097	1890	13.3
Total Recurrent Expenditure	8383	9946	11581	12935	13489	14155	11.0

(a) trend rate of growth, derived from the slope of a line fitted to the actual values

204. As the large backlog in infrastructure has been reduced, the emphasis has shifted from building additional infrastructure to the maintenance of existing infrastructure. For example, the Ministry of Works and Transport has made clear in its Sectoral Key Issues Paper (SKIP) that its spending would shift in this way, from building new roads to maintain existing roads. Indeed, this should have happened sooner as it is acknowledged that there is a backlog of maintenance.

205. Recurrent expenditure varies much less from year-to-year than development expenditure, as is to be expected. Public sector employees continue to be paid, and to require similar levels of spending on offices, transport, etc., from year to year. For the same reasons, the trend growth rates of the different categories of government spending vary relatively little about the overall average.

206. The most striking deviation from the average in the table above is the relatively low rate of increase of recurrent spending on health, food and social welfare. In other words, as will be seen below, the very large trend rate of increase in spending on this category was entirely attributable to the building of new health facilities. Presumably, as these facilities are completed, the emphasis will shift to recurrent expenditure.

207. *Government development spending*

Unlike recurrent expenditure, the variations in development expenditure are very marked. There are large variations from year to year in individual categories. On the other hand, apart from the exceptionally large increase in development spending on health, there were only minor differences in the trend growth rates of the other categories.

Table 30: Government development expenditure by function, 2000/01 to 2005/06 (P million, current prices)

Year ending March	2001	2002	2003	2004	2005	2006	Growth rate (a)
General Public Services	511	336	376	430	468	396	-0.4
Defence	249	423	376	364	363	208	-3.9
Education	499	551	473	574	468	397	-4.0
Health, food and social welfare	214	229	552	974	1119	1233	49.5
Housing, Urban and Regional Development	298	360	681	430	167	310	-7.0
Other Community and Social Services	150	123	76	60	91	58	-15.3
Economic Services	1211	1670	1665	1423	1233	1181	-3.4
Unallocated	2	6	1	0	0	0	-
Total development expenditure	3135	3698	4200	4256	3910	3783	3.3

(a) trend rate of growth, derived from the slope of a line fitted to the actual values

208. Overall, the trend rate of growth of total development expenditure was only 3.3 percent in nominal terms, from 2000/01 to 2005/06, which was less than the trend rate of growth of consumer prices. Moreover, as can be seen from the table, development expenditure fell *in nominal terms* in the most recent two years.

209. The major exception was in the health sector. Development spending on "Hospitals, clinics and other services" increased by a factor of more than 10 in the five years to 2005/06, a trend rate of growth of 74.5 percent. The trend rate of growth of recurrent spending in the same category was also above average, but "only" 12.8 percent.

210. Remarkably, not everything that was planned for the health sector was implemented: "Although some notable achievements were made, major constraints in both human and material resources hampered implementation of some of the planned activities, which will result in a number of activities being carried over to NDP 10" [Ministry of Health, Sectoral Key Issues Paper, p 4].

211. There are some positive achievements to show for the large increase in spending on health. For example, HIV prevalence fell for the first time, from 37.4% in 2003 to 32.4% in 2006. The biggest fall was among young people. Uptake of Prevention of Mother to Child Transmission of HIV (PMTCT) increased, resulting in 89 percent of HIV positive women receiving therapy, and 94% of babies being born HIV negative. By 2007, 89,504 patients were on ARVs (about 10 percent privately), out of an estimated total of 110,000 people that would need ARVs by 2009. The orphan population remained stable at approximately 52,000 for the past 3 years.

212. Exclusive of development spending on health, food and social welfare, the total of all the other categories *decreased* at a trend rate of 3.9 percent, in nominal

terms, and therefore at more than 12 percent a year in real terms. There were no particularly significant variations.

213. Overall, with the exception of development spending on health, it would appear that the constraints, on using budget allocations for development projects, have been operative across all sectors. To some extent, the priority given to development spending on health may have kept down other forms of development spending, by making demands on limited resources for implementation.

Proposed government spending by function

Recurrent expenditure:

214. The actual rate of growth of recurrent spending in 2006/07 was 12.8 percent. This was above the trend rate of growth in the previous six years, and sharply higher than the rate of growth in 2005/06. It is partly on this basis that projections for recurrent expenditure are for it to continue to increase faster than recently, at 13.9 percent in the remaining two years of NDP 9, and at a trend rate of 13.1 percent in NDP 10.
215. This rate of growth is limited by the assumption that there should be a shift to development expenditure, which has a higher projected rate of growth (14.0 percent). It would be in line with government policy for development expenditure to increase even faster. However, the projected rate of increase of development expenditure is already much higher than what has been achieved since 2001/02 and 2002/03. In the following four years, ending in 2006/07, the average decline, *in current prices*, was just over 1 percent a year.
216. The projected rate of increase for NDP 10 is, therefore, very much higher than the average in those four years. It was 8 percentage points higher even than the rate of increase in the most recent year, when the rate of growth of development spending did recover substantially. If development spending can increase at 14.0 percent annually in current price terms during NDP 10, which would imply something like a real rate of increase each year of 7 percent, it would be a considerable physical achievement.
217. As suggested above, the projections for allocations of this spending by Government function do not vary much, based on the fact that the trend rates of growth of different functions in the previous six years were similar. Apart from a low trend rate of growth of recurrent spending on "Health, food and social welfare" (2.4 percent), most of the other categories of recurrent spending were not more than two percentage points either side of the trend rate of growth of 11.1 percent for total recurrent spending. The exception was the relatively small category "Other community and social services", which grew at 23.0 percent annually.

218. As already noted, there was an exceptionally large increase in development spending on health. It is likely that recurrent costs associated with these new facilities will require a much faster rate of increase of recurrent spending on health than in recent years. It is projected, therefore, that recurrent spending on health will increase at approximately the same rate as total recurrent spending. It might have been thought that a higher rate of increase of recurrent spending on health would be necessary because of rising costs associated with prevention and treatment of HIV/AIDS. However, estimates of total HIV/AIDS costs indicate that they will be slightly lower in real terms in 2015 than in 2011 [MDG Report 2007, Table 3.17].
219. As with all the projections, the projected rates of growth may have to be changed when detailed spending proposals are received from spending ministries. **The numbers presented here are merely indicative, to provide a starting point for discussion. They do not represent commitments by the Government.** In order to receive budget allocations, whether in line with these projections or not, ministries will have to present economically sound proposals, including indications of how they will lead to increased productivity.
220. For the categories other than health, initial projections assumed the same trend rate of growth as in the six years to 2005/06. This generated a smaller total than the projections for total recurrent expenditure (because of the different weights of the different categories of spending). So each category of spending was increased by factors increasing from 10 percent to 12 percent, to generate total recurrent spending approximately equal to the original projections.

Table 31: Projected recurrent government expenditure by function for NDP 10 (base case)
(P million, current prices)

Year ending March	2010	2011	2012	2013	2014	2015	Growth trend (a)
General Public Services	5096	5857	6655	7554	8569	9711	13.9
Defence	1927	2148	2392	2634	2898	3185	10.4
Education	5856	6521	7257	7983	8774	9636	10.3
Health, food and social welfare	2170	2485	2843	3216	3635	4105	13.4
Housing, Urban and Regional Development	810	925	1057	1193	1346	1518	13.2
Other Community and Social Services	1419	1774	2215	2735	3373	4157	23.7
Economic Services	2672	3016	3403	3794	4227	4706	11.8
Unallocated	3018	3474	3996	4544	5163	5862	14.0
Total Recurrent Expenditure	22967	26200	29819	33653	37985	42880	13.1

(a) trend rate of growth, derived from the slope of a line fitted to the numbers in the table

221. The trend rates of growth in the above table are slightly greater than the trend rates in the table of recurrent expenditure from 2000/01 to 2005/06, reflecting the overall increase in recurrent expenditure proposed for NDP 10. Otherwise, their

relative distribution about the trend rate of increase in total recurrent expenditure is the same as in the earlier period, with the exception that recurrent expenditure on health is expected to be higher, as previously explained.

222. An alternative scenario would be to project that all categories of government recurrent expenditure increase at the same rate throughout NDP 10. Again, as previously explained, it is assumed that the variations in actual growth rates in NDP 9 reflect a combination of government priorities and institutional capacity to spend budget allocations. The latter constraint is probably less important in recurrent spending than in the implementation of development budgets.

Development expenditure:

223. As can be seen from Table 30 above, development expenditure varies sharply from year to year, in almost every category. Although the Table shows trend growth rates, these are much less meaningful than the equivalent for recurrent expenditure, where changes from year to year are relatively consistent. For example, annual changes in development spending in education from year to year varied between minus 25 percent and plus 22 percent, with apparently random variations from year to year. With such variations, a trend rate of growth is effectively meaningless.
224. In projecting numbers for development spending during NDP 10, therefore, the trend growth rates from the previous period have not been used. Instead, the share of development expenditure in each category for the five years 2000/01 to 2005/06 has been calculated. For example, development spending in education over the five years totaled 11.0 percent of total development spending over the same period. For NDP 10, the projections for development spending in education have been calculated as 11.0 percent of the total projected development spending, in each year.
225. This would seem to be a more reliable indication of priorities in development spending than taking a trend rate of growth from earlier years, and applying it to future years. The same process has been applied to each category of government development spending.
226. The table below shows, therefore, that the trend rate of growth for each category was the same as for total development spending, namely 14.0 percent.

Table 32: Projected government development expenditure by function for NDP 10 (base case)
(P million, current prices)

Year ending March	2010	2011	2012	2013	2014	2015	Growth trend (a)
General Public Services	651	743	847	965	1100	1254	14.0
Defence	509	581	662	755	860	981	14.0
Education	764	871	993	1132	1290	1471	14.0
Health, food and social welfare	1113	1269	1447	1649	1880	2144	14.0
Housing, Urban and Regional Development	580	662	754	860	980	1117	14.0
Other Community and Social Services	142	162	185	211	240	274	14.0
Economic Services	2161	2464	2809	3202	3651	4162	14.0
Unallocated	-	-	-	-	-	-	-
Total Recurrent Expenditure	5922	6751	7696	8773	10002	11402	14.0

(a) trend rate of growth, derived from the slope of a line fitted to the values

227. As with projections of recurrent spending, the numbers in the table are merely indications of the maximum resources that are projected to be available for development spending in each category.
228. In turn, these projections are based on projections of available government revenue, and the assumption that the recent increase in development spending can be sustained and indeed improved upon.
229. Even in 2006/07, when development spending increased by 5.6 percent in current price terms, this represented a decline in real terms. Only 71.5 percent was spent of the 2006/07 budget for development spending. It is by no means certain that the constraints on development spending have been reduced by enough for this improvement in implementation capacity to continue to the extent projected.
230. It is also important to repeat that the projections in the table are not Government commitments to provide those funds to the relevant ministries. Proposals for funding through the development budget will have to be justified economically and socially, as well as showing how they will contribute to economic growth and increased productivity.

Prospects for a higher rate of growth than projected

231. The projections for both recurrent and development spending are, as already explained, based on revenue that would be generated from an assumed rate of growth of the non-mining private sector of 6.0 percent in NDP 10. The contribution of general government GDP is assumed to grow at the same rate, based on the apparent correlation between changes in government spending and changes in non-mining GDP growth illustrated in Figure 1.

232. It would not appear to be feasible to expect a higher rate of growth of non-mining sector GDP based on additional government spending, as this would generate budget deficits. A significantly higher rate of growth of the non-mining private sector would appear only to be possible if private sector investment increases.
233. As shown in Section III above, Gross Fixed Capital Formation has declined in real terms in recent years, moving further away from the target of 40 percent of GDP in Vision 2016. Further, balance of payments statistics show no evidence of an increase in Foreign Direct Investment. On the contrary, in 2006 it was less than half the level that it reached in 2002.
234. There are some reasons for being optimistic about future inflows of foreign direct investment. The current high level of base metal prices has generated increased interest in prospecting for copper, nickel and other base metals. The expansion of coal mining for electricity generation at Morupule is definite, but negotiations for the much larger project to export electricity from Mmamabula have not yet been concluded. More definite projections may be available for future drafts of this macroeconomic framework paper.
235. On the other hand, as noted in Section III, current indications are that the Government has not yet reduced or removed enough of the constraints on private sector investment to make a positive difference to private sector investment in other (non-mining) sectors of the economy.
236. It is unfortunately much more difficult to remove regulatory constraints on investment, than to spend money on new projects. Each regulation was introduced for a reason, and is therefore defended by those responsible for overseeing it. Further, every regulation creates vested interests in its being maintained. And even if one regulation is made easier to negotiate, or completely removed, other regulations may continue to make investment unattractive.
237. The argument of this macroeconomic framework paper is that the higher rates of growth of GDP necessary to reach the Vision 2016 targets are unlikely to be achieved without higher than projected growth of the non-mining private sector. In turn, this higher growth requires that the investment climate be improved. Because of the difficulties described above, significant improvement in the investment climate will require exceptional commitment to make it a priority.
238. Past growth of the non-mining private sector was generated mainly by the rapid growth of the mining sector, in particular the growth of diamond mining, and by the spending of the government's share of diamond mining profits. The growth of government spending created a rapidly growing market for the non-mining private sector. This source of growth is now much less powerful. This means that higher rates of growth must come more from exporting than previously.

239. As already argued, Botswana's landlocked status makes exporting of goods with high transport costs relatively uncompetitive, except where it is possible to sell to the country's immediate neighbours. In the case of South Africa, this means selling to that part of South Africa which is relatively close. Apart from the Johannesburg area, exporting to the rest of South Africa faces almost as heavy a comparative disadvantage as transporting goods to the South African ports for sale to the rest of the world.
240. The building of a bridge at Kazangula would greatly improve the possibilities in exporting to Zambia, where the economy is currently growing satisfactorily. And a reversal of the decline of the Zimbabwean economy would also open up possibilities for export growth. Unfortunately, neither of these possibilities is yet in prospect for NDP 10.
241. Another possibility, as also argued in Section III, is that service exports could grow even faster than has been recently achieved. In particular, service exports using electronic means of transport (basically e-mail) avoid much of the comparative disadvantage of being landlocked. Further, such exports avoid many of the constraints imposed on international trade in goods by importing countries.
242. This makes it particularly urgent to improve Botswana's access to the Internet, which is currently badly overloaded, and therefore frustratingly slow.²⁰ This requires funding. It also requires that the Government gives priority to negotiations with neighbouring countries for the laying of the relevant cables. Alternatively, it requires funding for satellite communications.

VI. VARIATIONS ON THE BASE CASE: OPTIMISTIC AND PESSIMISTIC SCENARIOS

Optimistic scenario: 8 percent growth of the non-mining private sector

243. The projections of revenue, and therefore of possible levels of spending, in the previous section were for a "Base Case" assuming 6 percent growth of the non-mining private sector. It is possible that the non-mining private sector might grow faster.
244. This could occur if inflows of Foreign Direct Investment were to increase, or if domestic investment were to increase. Both possibilities would become more likely if the investment climate could be improved.
245. Government spending could remove significant constraints on non-mining private sector growth, for example investment in improved access to the Internet.

²⁰ It has been reported that some companies, and some skilled IT people, have left Botswana out of frustration at the inadequate IT infrastructure.

Another possibility is that privatisation of the major utilities could result in reduced costs and better service.

246. The projections in the spreadsheet were recalculated for an optimistic scenario, assuming an 8 percent rate of growth during NDP 10 in the non-mining private sector. If the ratio of non-mining tax revenue to non-mining private sector GDP remains the same, this would make more tax revenue available to the Government.
247. The higher rates of growth of revenue are shown in the table below. The improvement in the rate of growth of total revenue is less than the improvement for non-mineral revenue, because mineral revenue would be the same in both scenarios. Overall, the average rate of increase of government revenue in NDP 10 would increase to 12.7 percent in this optimistic scenario, compared with 11.4 percent in the base case.

Table 33: Growth of government revenue, 2006/07 to 2014/15 (optimistic case)
(annual % rates of change, current prices, forecasts in italics)

Year ending March	2007	2008	2009	NDP 9 2 nd half (average)	NDP 10 (average)
Mineral revenue	25.5	-14.8	9.0	6.6	10.3
Non-mineral revenue	21.5	11.2	16.0	16.2	12.4
Total revenue	23.6	-2.5	12.8	11.3	12.7

248. Projections of higher spending growth, made possible by the higher revenue from a higher rate of growth in the non-mining private sector, are shown in the following table. Development spending is projected to grow at 16.0 percent during the final two years of NDP 9, and throughout NDP 10. This compares with a projected growth rate of 14.0 percent in the base case. It assumes, therefore, not only that additional government revenue is available for a higher level of development spending, but that capacity exists in the spending ministries to spend additional revenue productively.

Table 34: Projections of government spending to 2014/15 (optimistic case)
(forecasts in italics)

Year ending March	2006	2007	2008	2009	2010	2015
Recurrent spending (P mn)	14155	15969	18505	21450	24866	47218 (a)
Annual growth (%)	2.8	12.8	15.9	15.9	15.9	14.1 (b)
Development spending (P mn)	3784	3997	4637	5378	6239	13104 (a)
Annual growth (%)	-3.2	5.6	16.0	16.0	16.0	16.0 (b)
Total spending (P mn) (c)	17632	19694	23042	26729	31005	60222
Annual growth (%)	1.4	11.7	17.0	16.0	16.0	14.5

Note: (a) spending in fiscal year 2014/15

(b) average rate of growth from 2009/10 to 2014/15

(c) total includes net repayments of government lending

249. The rate of increase of recurrent spending is projected to be lower than the rate of increase of development spending. This may prove to be overoptimistic, because of the recurrent spending obligations created by additional development spending. In the 10 years to 2006/07, the average rate of growth of development spending (in current prices) was only 1.3 percent, while the average rate of growth of recurrent spending over the same period was 12.7 percent. This suggests that the projected rate of growth of development spending in the optimistic scenario would require a higher rate of growth of recurrent spending than projected, other things being equal.
250. To achieve such high rates of growth of development spending, without generating budget deficits would require considerable restraint in the growth of recurrent spending. Alternatively, budget deficits might be avoided if there were a different mix of development spending, with lower future recurrent spending requirements than in the past.
251. As before, total spending is projected to be slightly higher than total revenue, generating a small budget deficit, on average, in NDP 10. The cumulative deficit would be about 20 percent of the cumulative surplus in the second half of NDP 9, using these projections. Over the next nine years, therefore, the cumulative budget would be comfortably in surplus. These projections are shown in the following table.

Table 35: Budget outturn, second half of NDP 9, and NDP 10 (optimistic case)
(P millions, current prices, projections in bold italics)

Year ending March	2007	2008	2009	NDP 9 2nd half (average)	NDP 10 (average)
Revenue	26287	<i>25624</i>	<i>28901</i>	<i>26.9</i>	<i>44068</i>
Expenditure	19694	<i>23042</i>	<i>26729</i>	<i>23.1</i>	<i>44449</i>
Surplus/deficit	+6593	<i>+2582</i>	<i>+2172</i>	<i>+3782</i>	<i>-381</i>
Spending/GDP (%)	<i>29.6</i>	<i>31.1</i>	<i>32.2</i>	<i>31.0</i>	<i>34.7</i>

252. The table below shows a comparison between the base case and the optimistic case. Higher growth of the non-mining private sector, as assumed in the optimistic case, is projected to generate additional government revenue, which would make possible government spending some seven percent higher on average than in the base case. Using the same projections, GDP would grow in real terms by 6.3 percent in the optimistic scenario, compared with 5.4 percent in the base case.
253. Even in the optimistic scenario, therefore, real GDP growth would be considerably below the level required to reach the Vision 2016 target. The non-mining private sector would have to grow at more than 12 percent in real terms during the rest of NDP nine and throughout NDP 10, and general government by more than 10 percent, in order to reach the Vision target for GDP in 2016. As

argued above in Section II, this is unlikely to be achieved and becomes harder to achieve with each year's growth at less than the required rate.

Table 36: Optimistic case and base case compared

Annual averages for NDP 10	NDP 10 base case	NDP 10 optimistic case	Variation (P mn)	Variation (%)
Revenue (P mn)	41031	44068	+3037	+7.4
Expenditure (P mn)	41544	44449	+2905	+7.0
Surplus/deficit (P mn)	-513	-381	+132	+25.7
Spending/GDP (%)	35.0	34.7	-	-0.3

Pessimistic scenario: 4 percent growth of the non-mining private sector

254. In the pessimistic case, it is assumed that the non-mining private sector and general government grow at 4.0 percent in the second half of NDP 9, and throughout NDP 10 (compared with 6 percent in the base case). This results in lower rates of growth of non-mineral and total revenue. By coincidence, the projections for the average rate of growth of total revenue during NDP 10 are the same as the projections for mineral revenue, as shown in the table below.
255. There are a number of reasons why the growth of non-mining GDP might be lower than in the base case. Crucially, if private sector investment does not increase, whether from Foreign Direct Investment or from domestic investment, then non-mining private sector growth will be negatively affected.
256. There are several possible reasons. The most likely is that investment will not increase if the investment climate is not improved. Other likely explanations could be that government spending is not directed towards the needs of the private sector. If infrastructure, education and training, for example, are not adapted to private sector needs, non-mining private sector growth will be lower than might otherwise be possible.

Table 37: Growth of government revenue, 2006/07 to 2014/15 (pessimistic case)
(annual % rates of change, current prices, forecasts in italics)

Year ending March	2007	2008	2009	NDP 9 2 nd half (average)	NDP 10 (average)
Mineral revenue	25.5	-14.8	9.0	6.6	10.3
Non-mineral revenue	12.8	11.3	10.2	11.4	10.3
Total revenue	23.6	-6.0	10.5	9.4	10.3

257. The projections for government spending in the pessimistic case are shown in the table below. As with the other projections, the rate of growth of development spending is higher than the rate of growth of recurrent spending, but both are below the growth rates in the base case. Crucially, development spending is

projected to grow at only 12.5 percent compared with the 14.0 percent projected in the base case.

Table 38: Projections of government spending to 2014/15 (pessimistic case)
(current prices, forecasts in italics)

Year ending March	2006	2007	2008	2009	2010	2015
Recurrent spending (P mn)	14155	15969	<i>18055</i>	<i>20411</i>	<i>22823</i>	<i>39920 (a)</i>
Annual growth (%)	2.8	12.8	<i>13.1</i>	<i>13.1</i>	<i>11.8</i>	<i>11.8 (b)</i>
Development spending (P mn)	3784	3997	<i>4497</i>	<i>5059</i>	<i>5691</i>	<i>10255 (a)</i>
Annual growth (%)	-3.2	5.6	<i>12.5</i>	<i>12.5</i>	<i>12.5</i>	<i>12.5 (b)</i>
Total spending (P mn) (c)	17632	19694	<i>22451</i>	<i>25370</i>	<i>28414</i>	<i>56085 (a)</i>
Annual growth (%)	1.4	11.7	<i>14.0</i>	<i>13.0</i>	<i>12.0</i>	<i>12.0 (b)</i>

Note: (a) spending in fiscal year 2014/15

(b) average rate of growth from 2009/10 to 2014/15

(c) total includes net repayments of government lending

258. These projections show, as in the other cases, that the budget surplus in 2006/07 is gradually reduced during the remainder of NDP 9. In NDP 10, the budget is on average marginally in deficit. The cumulative deficit in NDP 10 is projected to be only about 6 percent of the cumulative surplus projected for the second half of NDP 9. As in the other cases, some part at least of accumulated surpluses is projected to be retained against contingencies.

Table 39: Budget outturn, second half of NDP 9, and NDP 10 (pessimistic case)
(P millions, current prices, projections in italics)

Year ending March	2007	2008	2009	NDP 9 2 nd half (average)	NDP 10 (average)
Revenue	26287	<i>24722</i>	<i>27320</i>	<i>26110</i>	<i>38316</i>
Expenditure	19694	<i>22451</i>	<i>25370</i>	<i>22505</i>	<i>38431</i>
Surplus/deficit	6593	<i>2271</i>	<i>1950</i>	<i>3605</i>	<i>-115</i>
Spending/GDP (%)	30.3	<i>31.7</i>	<i>32.7</i>	<i>32.0</i>	<i>35.2</i>

Government spending by ministry

259. The breakdown of recurrent spending by ministry, and other government institutions, is shown in the table below for the five years ending 2005/06. The variations in rates of growth from year to year for individual ministries varied a great deal, so that average rates of growth are not a reliable indicator of trends.

Table 40: Recurrent spending by ministry and institution, 2001/02 to 2005/06

Year ending March	2002	2003	2004	2005	2006	Share (a) %
Parliament	26.7	25.3	32.6	40.2	150.3	0.24
State President	1703.7	1676.9	1749.3	1925.3	8510.6	13.32
MFDP	882.5	943.6	634.6	445.0	3523.9	5.52
Labour and Home Affairs	303.5	322.9	366.9	387.4	1643.8	2.57
Agriculture	505.1	503.2	542.5	574.3	2598.9	4.07
Education	3000.0	3282.9	3541.3	3640.1	16264.5	25.46
Trade and Industry	205.0	77.3	101.8	110.5	669.1	1.05
Local Government	2094.6	2305.4	2494.5	2337.1	10926.0	17.10
Works and Transport	682.1	785.3	834.6	878.9	3901.2	6.11
Minerals, Energy and Water	363.5	381.5	421.7	396.2	1834.8	2.87
Health	794.4	870.9	970.3	1013.5	4363.0	6.83
Administration of Justice	41.6	44.9	49.6	54.3	225.7	0.35
Attorney General's Chambers	26.9	25.4	30.4	37.2	139.6	0.22
Auditor General	12.0	12.6	15.0	14.7	65.0	0.10
Foreign Affairs (b)	164.2	134.2	146.9	152.2	702.7	1.10
Independent Electoral Commission	10.6	37.6	28.4	13.8	110.7	0.17
Office of the Ombudsman	3.9	3.8	3.9	4.3	18.5	0.03
Lands and Housing	156.9	176.8	192.5	206.6	875.0	1.37
MCST (c)	1.5	281.9	294.8	351.1	929.3	1.45
Environment, Wildlife, Tourism	1.5	161.2	209.8	220.1	592.5	0.93
Industrial Court	0.0	0.0	3.4	4.2	7.6	0.03
SUB TOTAL	10980.3	12053.5	12664.8	12806.9	58052.7	90.87
Public Debt	312.1	367.0	481.6	1245.3	2725.6	4.27
Pensions, Gratuities, etc. (d)	453.3	592.8	344.2	868.6	2496.1	3.91
Salaries – Specified Officers (e)	6.8	7.2	8.0	9.9	38.5	0.06
Miscellaneous	102.0	88.5	163.6	151.4	573.6	0.90
SUB TOTAL	874.2	1055.6	997.4	2275.2	5833.9	9.13
GRANDTOTAL	11854.6	13109.1	13662.2	15082.1	63886.6	100.00

Notes: (a) Share is the total expenditure of each ministry as a percentage of total spending, aggregated over the five years shown. In the case of the Industrial Court, the share is aggregated over the last three years as there was no budget allocation in the first two years.

(b) Foreign Affairs and International Co-operation

(c) Ministry of Communications, Science and Technology

(d) Pensions, Gratuities and Compensations

(e) Salaries and Allowances - Specified Officers

As with the breakdown of government development spending by function, therefore, projections for NDP 10 are based on total spending for each ministry over the five years taken as a percentage of total spending over the same period. As before, it is assumed that this shows a combination of government priorities and capacity to spend funds allocated by the budget.

Table 41: Projections of recurrent spending by ministry and institution, NDP 10

Year ending March	2010	2011	2012	2013	2014	2015
Parliament	54	62	70	79	89	101
State President	3,060	3,490	3,972	4,483	5060	5712
MFDP	1,267	1,445	1,645	1,856	2095	2365
Labour and Home Affairs	591	674	767	866	977	1103
Agriculture	934	1,066	1,213	1,369	1545	1744
Education	5,847	6,670	7,591	8,567	9670	10917
Trade and Industry	241	274	312	352	398	449
Local Government	3,928	4,481	5,100	5,755	6496	7333
Works and Transport	1,402	1,600	1,821	2,055	2320	2618
Minerals, Energy and Water	660	752	856	967	1091	1232
Health	1,568	1,789	2,036	2,298	2594	2928
Administration of Justice	81	93	105	119	134	151
Attorney General's Chambers	50	57	65	74	83	94
Auditor General	23	27	30	34	39	44
Foreign Affairs (a)	253	288	328	370	418	472
Independent Electoral Comm'n	40	45	52	58	66	74
Office of the Ombudsman	7	8	9	10	11	12
Lands and Housing	315	359	408	461	520	587
MCST (b)	334	381	434	490	553	624
Environment, Wildlife, Tourism	213	243	277	312	352	398
Industrial Court	3	3	4	4	5	5
SUB TOTAL	20,870	23,808	27,096	30,580	34516	38964
Public Debt	980	1,118	1,272	1,436	1621	1829
Pensions, Gratuities, etc. (c)	897	1,024	1,165	1,315	1484	1675
Salaries – Specified Officers (d)	14	16	18	20	23	26
Miscellaneous	206	235	268	302	341	385
SUB TOTAL	2,097	2,392	2,723	3,073	3469	3916
GRANDTOTAL	22,967	26,200	29,819	33,653	37985	42880

Notes: (a) Foreign Affairs and International Co-operation

(b) Ministry of Communications, Science and Technology

(c) Pensions, Gratuities and Compensations

(d) Salaries and Allowances - Specified Officers

In the absence of further information, it is assumed as a first approximation that the same factors will persist for NDP 10. The table does not represent a commitment by Government to fund each ministry with the amounts indicated. Expenditures in NDP 10 will have to be justified as contributing to the Government's various objectives, as was made clear in the section above on the breakdown of spending in NDP 10 by function.

Conclusions from the revenue and expenditure projections

260. This draft has concentrated more on hard core macroeconomic framework and less so on the information provided by the NDP 10 KPP and individual SKIPS. This was deliberately meant to redirect line Ministry's and Parastatals thinking towards the reality of Botswana's macroeconomic environment and thus aid them to make informed decisions about what to include as part of their sectoral chapters. An update of the projections will also be made once the GAMS model currently being developed is fully functional

261. The projections in this Macroeconomic Framework paper show that there is some scope for reviving economic growth by increasing the rate of growth of government spending. Indeed, there are several indications that this is already happening, following the declining rates of growth of government spending in the first three years of NDP 9. However, projections of government revenue show that government spending cannot be increased further without generating unsustainable budget deficits.
261. Government spending can be increased from the current level of about 31 percent of GDP, to about 35 percent of GDP, without producing more than quite small budget deficits in NDP 10. According to the projections, these deficits would be smaller in total than the budget surpluses of the last two years, and projected for the remaining two years of NDP 9. These conclusions are much the same for the base case, on the one hand, and for the pessimistic and optimistic cases, on the other hand: trying to increase GDP growth by higher levels of government spending would push the budget into deficits in each scenario.
262. A further constraint, on levels government spending as a percentage of GDP above 35 percent, is the prospect of falling government revenue from diamonds when diamond mining moves underground. Even if revenue from diamond mining were to be sustained at current levels, the share of diamond mining in GDP will decline as the rest of the economy grows. The rest of the economy does not generate as high a percentage of revenue for government as does diamond mining. This means that government spending as a percentage of GDP will have to be reduced to some extent, even if the fall in government revenue from diamond mining is postponed.

VII. SUMMARY

263. The analysis and projections of this Macroeconomic Framework paper indicate that higher rates of growth of GDP, than those projected, will have to come from increased private sector investment, rather than from higher rates of growth of government spending. More rapid growth of GDP is necessary if the targets of Vision 2016 and the Millennium Development Goals are to be reached. In particular, increased private sector investment and private sector output are the most powerful way to reduce income poverty.
264. A further implication of the analysis is that private sector growth will, at the margin, have to shift from an emphasis on supplying the government, to supplying the rest of the domestic market and to finding export markets. In turn, this implies a shift in emphasis towards service exports, because of the high transport costs of exporting goods other than to Botswana's immediately neighbouring markets. The emphasis of government spending during NDP 10 should, therefore, shift to supporting private sector development, and the

emphasis of policy should be towards removing the remaining constraints on private sector investment.

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