BOTSWANA

A Case Study of Economic Policy Prudence and Growth

August 31, 1999
Botswana
A Case Study of Economic Policy Prudence and Growth

August 31, 1999
CURRENCY EQUIVALENTS  
(June 1, 1999)  
Currency Unit: Botswana Pula  
US$1 = 4.72 Pula  
100 Thebe = 1 Pula  

NATIONAL ACCOUNTS YEAR  
July 1 to June 30  

GOVERNMENT FISCAL YEAR  
April 1 to March 31  

ABBREVIATIONS AND ACRONYMS  

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Acronym</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIDS</td>
<td>Acquired Immune</td>
<td>Acquired Immune Deficiency Syndrome</td>
</tr>
<tr>
<td>CB</td>
<td>Commercial Bank</td>
<td></td>
</tr>
<tr>
<td>CPI</td>
<td>Consumer Price</td>
<td>Index</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
<td></td>
</tr>
<tr>
<td>GDFKF</td>
<td>Gross Domestic</td>
<td>Fixed Capital Formation</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic</td>
<td>Product</td>
</tr>
<tr>
<td>HIES</td>
<td>Household Income</td>
<td>and Expenditure Survey</td>
</tr>
<tr>
<td>HIV</td>
<td>Human Immune</td>
<td>deficiency Virus</td>
</tr>
<tr>
<td>IMF</td>
<td>International</td>
<td>Monetary Fund</td>
</tr>
<tr>
<td>LFS</td>
<td>Labor Force</td>
<td>Survey</td>
</tr>
<tr>
<td>NDP</td>
<td>National</td>
<td>Development Plan</td>
</tr>
<tr>
<td>RIDS</td>
<td>Rural Income</td>
<td>Distribution Study</td>
</tr>
<tr>
<td>SACU</td>
<td>Southern</td>
<td>African Customs Union</td>
</tr>
<tr>
<td>SDR</td>
<td>Special Drawing</td>
<td>Rights</td>
</tr>
<tr>
<td>SOE</td>
<td>State Owned</td>
<td>Enterprises</td>
</tr>
<tr>
<td>TFP</td>
<td>Total Factor</td>
<td>Productivity</td>
</tr>
<tr>
<td>UDI</td>
<td>Unilateral</td>
<td>Declaration of Independence</td>
</tr>
<tr>
<td>UNDP</td>
<td>United Nations</td>
<td>Development Program</td>
</tr>
</tbody>
</table>

Vice President  :  Callisto Madavo  
Country Director :  Pamela Cox  
Sector Manager   :  Philippe H. Le Houerou  
Task Team Leader :  James Sackey
# TABLE OF CONTENTS

EXECUTIVE SUMMARY ........................................................................................................ iii

Chapter I: The Growth Record ............................................................................................. 1
  A. Growth and Structural Transformation .................................................................. 1
  B. Management of Booms and Slumps through the Fiscal System ............................ 3
  C. Capital Investment ................................................................................................. 4
  D. Human Resource Development ............................................................................. 4
  E. Income Distribution and Unemployment ............................................................... 6
  F. Total Factor Productivity ....................................................................................... 7

Chapter II: Explaining Rapid Growth .................................................................................. 9
  A. Mining .................................................................................................................. 9
  B. Trade .................................................................................................................. 10
  C. Monetary Policy .................................................................................................. 11
  D. Foreign Exchange ............................................................................................... 13
  E. Fiscal Revenues ................................................................................................... 15
  F. Fiscal Expenditures ............................................................................................... 17
  G. Labor Market Policies ......................................................................................... 18
  H. State-Owned Enterprises ...................................................................................... 21

Chapter III: Conclusion ..................................................................................................... 23

Text Tables
  1.1 Botswana: Comparisons of Growth of Real Per Capita GDP (1966 to 1996). .... 2
  1.2 Botswana - Education Enrolments ....................................................................... 5
  1.3 Botswana - Health Services ................................................................................ 5
  1.4 Botswana - Gini Coefficients for Total Income .................................................. 6
  1.5 Input and Total Factor Productivity Growth, 1974/75 to 1993/94 ....................... 7

Text Figures
  1.1 Shares of GDP ..................................................................................................... 1
  1.2 Real GDP by Major Sector 1 ................................................................................ 2
  1.3 Mineral Sector Real GDP and Deflator ............................................................... 3
  1.4 Government Expenditure and Net Lending ......................................................... 3
  1.5 Foreign Exchange Reserves (Calendar Year End) ............................................... 4
  1.6 Domestic Capital Formation (Percent of GDP) .................................................. 5
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 Commercial Bank Interest Rates (Year Ending)</td>
<td>11</td>
</tr>
<tr>
<td>2.2 Credit Outstanding: Commercial Banks and Official</td>
<td>12</td>
</tr>
<tr>
<td>2.3 Inflation Rates, CPI (Annual Average)</td>
<td>12</td>
</tr>
<tr>
<td>2.4 Exchange Rates, 1976-1998, Month Ending</td>
<td>14</td>
</tr>
<tr>
<td>2.5 Real Exchange Rate Indices, January, 1976</td>
<td>15</td>
</tr>
<tr>
<td>2.6 Government Revenues, 1967/68-1972/73 (Percent of GDP)</td>
<td>16</td>
</tr>
<tr>
<td>2.7 Government Revenues, 1973/74-1996/97 (Percent of GDP)</td>
<td>16</td>
</tr>
<tr>
<td>2.8 Central Government Expenditure, 1995 (Percent of GDP)</td>
<td>17</td>
</tr>
<tr>
<td>2.9 Composition of Government Expenditure</td>
<td>18</td>
</tr>
<tr>
<td>2.10 Military Expenditures in Africa, Average (1990-95)</td>
<td>19</td>
</tr>
<tr>
<td>2.11 Minimum Wages (Average thebe per hour)</td>
<td>19</td>
</tr>
<tr>
<td>2.12 Average Monthly Earnings of Citizens: Manufacturing and Central Government</td>
<td>20</td>
</tr>
<tr>
<td>2.13 Employment of Formal Sector</td>
<td>20</td>
</tr>
<tr>
<td>2.14 State-owned Enterprises, Average (Early 1990s) (Percent of GDP)</td>
<td>21</td>
</tr>
</tbody>
</table>
Executive Summary

Botswana is one of a very small group of countries in the contemporary era, virtually the only African country that has sustained rapid economic growth over an extended period. Over the past three decades, Botswana's real per capita income grew by more than 7 percent per annum, which is comparable to rates of growth achieved by countries like Korea and Thailand. Remarkably, this growth facilitated by mineral wealth, led neither to isolated enclaves nor to profligate spending. Growth was accompanied by structural change, with the economy maintaining high growth rates even as the growth of minerals and of the government sector slackened. Other indicators, such as primary school enrolment and accumulation of foreign exchange reserves also point to a development success story. The Botswana experience is thus deserving of study by those who seek to understand what explains its economic success and what lessons can be drawn for other developing countries.

This review arrives at the conclusion that the role of Botswana's policy regime is central to an explanation of the country's growth performance. In the development of the mining sector, as in the orientation of external trade, monetary, fiscal and labor market policies, growth promoting policies have dominated. Mining policy established mutually profitable arrangements with foreign investors, and participation in one of the few successful international marketing arrangements. Trade policy kept the economy open to competition from imports and maintained access to markets for some important non-mineral exports. Money and banking policies, while not always optimal, generally provided stability to the macroeconomy and to the financial sector. Exchange rate policy accorded stability to the tradable sector and avoided the peril of an overvalued currency commonly encountered following mineral discoveries. Finally, fiscal policy, on the whole, has been disciplined.

The wide range of growth promoting policies contributed in a substantial interaction term. Minerals policy generated the rents which initiated the growth, but Government's long term development planning was crucial in channeling funds into investments that promoted both growth and human development, and in maintaining a modicum of fiscal discipline. Given the fiscal discipline, it was possible for the independent central bank to accumulate substantial foreign exchange reserves, and pursue a disciplined monetary policy. This combination of fiscal and monetary discipline, in turn, made it possible for trade policy to keep the economy open, and for exchange rate policy to encourage the emergence of non-traditional exports and import-competing production.

Not all of the policies promoted growth and human development. The shortcomings of current labor market policies, the slow pace of reform of state-owned enterprises, and the large-size and unstable growth of Government are all serious. Furthermore, Botswana has to deal with two key challenges for the future: the high poverty and unemployment rates relative to its resource base, and the rapid increase in the prevalence of HIV/AIDS which may have a substantial implication for progress in developing its human capital and improving productivity.
Botswana: A Case Study of Economic Policy Prudence and Growth

Chapter I

The Growth Record

Botswana is one of a very small group of countries in the contemporary era that has sustained rapid economic growth over an extended period. With its current population standing at 1.5 million people, it is one of a few small countries, and is virtually the only African country, to be listed among the rapid growers. Other indicators, such as primary school enrolment, and accumulation of foreign exchange reserves also point to a development success story and suggest the Botswana experience is deserving of study by those who seek to understand what explains its economic success.

The purpose of this review is to help the interested observer understand the Botswana experience. Chapter I begins with a review of the record to date. It includes not only growth of per capita GDP, but also several measures of human and social development. This review of both the accomplishments and the disappointments provides a setting to evaluate the country’s past economic policies. Chapter II analyzes the key economic policies that underpin this record in an effort to assess whether Botswana’s growth performance is really exceptional. The conclusions are summarized in Chapter III.

A. Growth and Structural Transformation

Botswana’s real GDP per capita growth over the past 30 years (1966-1996) is compared with several other small countries and the larger fast growing economies of the world in Table 1.1. It is particularly noticeable that, over the full thirty year period, there is no country with a faster growth rate of GDP per capita. While some countries have had higher growth rates than Botswana over the most recent decade, not even the Asian tigers of Korea, Thailand, and Singapore exceed Botswana’s rate for three decades.

The growth of Botswana’s economy was accompanied by a dramatic transformation of the structure of economic activity. Figure 1.1 shows the distribution of nominal GDP at five year intervals. At independence, agriculture was the largest single sector. But the mining sector, which was negligible at independence, grew much more rapidly with the development of diamonds, copper nickel, coal, and later, soda ash, making it the largest sector by the end of the 1980s.\(^1\)

\(^1\) For 1967/68 the mining sector was defined to include mineral exploration and development. The cost of materials purchased, together with wages and capital consumption exceeded operating income, resulting in a negative value added, and therefore a negative share of GDP.
Table 1.1: Botswana: Comparisons of Growth of Real Per Capita GDP (1966 to 1996)

<table>
<thead>
<tr>
<th>Country</th>
<th>Population 1996 (000)</th>
<th>Real GDP per capita (US$)</th>
<th>Growth Rates to 1996 b</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>10 Year</td>
</tr>
<tr>
<td><strong>Small Countries</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Botswana d/</td>
<td>1,490</td>
<td>3,296</td>
<td>4.9</td>
</tr>
<tr>
<td>Barbados</td>
<td>260</td>
<td>7,679</td>
<td>0.4</td>
</tr>
<tr>
<td>Dominica a/c</td>
<td>70</td>
<td>3,338</td>
<td>4.0</td>
</tr>
<tr>
<td>Fiji d</td>
<td>800</td>
<td>2,658</td>
<td>1.6</td>
</tr>
<tr>
<td>Guyana a/c</td>
<td>830</td>
<td>850</td>
<td>0.9</td>
</tr>
<tr>
<td>Kuwait a/c</td>
<td>1,690</td>
<td>18,334</td>
<td>4.5</td>
</tr>
<tr>
<td>Lesotho a/</td>
<td>2,050</td>
<td>420</td>
<td>4.9</td>
</tr>
<tr>
<td>Mauritius c</td>
<td>1,130</td>
<td>3,811</td>
<td>4.5</td>
</tr>
<tr>
<td>St. Vincent &amp; Grenadines c</td>
<td>110</td>
<td>2,496</td>
<td>4.0</td>
</tr>
<tr>
<td>Singapore</td>
<td>3,040</td>
<td>30,942</td>
<td>7.0</td>
</tr>
<tr>
<td>Swaziland</td>
<td>940</td>
<td>1,324</td>
<td>2.0</td>
</tr>
<tr>
<td>Trinidad &amp; Tobago</td>
<td>1,310</td>
<td>4,177</td>
<td>-0.8</td>
</tr>
<tr>
<td><strong>Larger Fast Growers</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chile</td>
<td>14,420</td>
<td>4,800</td>
<td>6.2</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>6,190</td>
<td>24,898</td>
<td>4.6</td>
</tr>
<tr>
<td>Indonesia</td>
<td>198,340</td>
<td>1,146</td>
<td>5.2</td>
</tr>
<tr>
<td>Ireland</td>
<td>3,520</td>
<td>19,526</td>
<td>5.8</td>
</tr>
<tr>
<td>Korea</td>
<td>45,540</td>
<td>10,641</td>
<td>7.2</td>
</tr>
<tr>
<td>Malaysia</td>
<td>21,170</td>
<td>4,690</td>
<td>5.6</td>
</tr>
<tr>
<td>Thailand</td>
<td>60,000</td>
<td>3,007</td>
<td>8.0</td>
</tr>
</tbody>
</table>

Source: IMF, *International Financial Statistics*

Notes: a/ Latest population is for 1995
b/ Refer to the most recent 10, 20, 30 years up to 1996, in % per annum
c/ US$ GDP per capita (US$GDP/P), calculated using latest available current price GDP, converted at average exchange rate for 1996.
d/ Botswana GDP data are averaged over adjoining national account years ending June 30, to yield calendar year.
f/ Guyana constant price GDP series to 1993 only.
g/ Kuwait GDP in US$ is for 1995, at 1996 exchange rate.

Figure 1.2: Real GDP by Major Sector 1

But the growth of the economy was not simply a story of a mining enclave attached to a stagnating traditional economy. This may be seen more clearly in Figure 1.2, where the levels of the mining sector, the government sector and the rest of the economy are shown in constant 1985/86 prices. It is clear that the rest of the economy experienced considerable real growth, and that real growth has been sustained even as the growth of the minerals sector and the government sector have slackened.
B. Management of Booms and Slumps through the Fiscal System

It is not unusual for an economy heavily dependent on one mineral export to experience booms and dramatic slumps. Botswana's mineral sector has indeed exhibited such a pattern. (Figure 1.3). Rapid growth occurred in the early 1980s as a major new diamond mine came on stream, but the world recession led to a drop in the implicit sectoral deflator (mostly diamonds and copper nickel). As the world economy boomed in the late 1980s the implicit deflator rose dramatically, again to be followed by a flat period and another boom in the 1990s. More recently in 1998, the available information indicates that diamond sales have dropped by about 25 percent in dollar terms, and copper nickel by more.

In light of this, the government attempted to pursue a conscious policy of managing booms and slumps. A major element of this approach was the National Development Plan (NDP). Currently in its eighth iteration, each Plan focussed on the tasks facing government and the resources available to finance those tasks. The NDPs have included not only an overview of the economy, but also reviewed key policies and activities of government. Most importantly, they set targets for public expenditures which were consistent with expected government revenues and the capacity of the economy.

This approach was intended to rule out government as a source of instability in the economy. The success of the strategy may be gauged by looking at the generally steady growth of nominal government expenditure and net lending in Figure 1.4. The figure shows that for the most part Government was not the source of instability in the economy.

---

2 The net lending was mostly in the form of long-term loans to state owned enterprises. See Chapter II below for further discussion.
Implicit in the strategy was the use of government savings, largely in the form of foreign exchange reserves, as a shock-absorber. It is clear in Figure 1.5 that this was particularly important in the early 1980s, when a weakness in the diamond market resulted in no sales of diamonds for about half a year, forcing the country to dip into its foreign exchange reserves. On the plus-side, the rapid improvement in the diamond market in the later part of the 1980s and again in the mid-1990s accelerated the growth of the reserves.

C. Capital Investment

A major portion of Botswana's rapidly growing income was invested. In the early years, a greater share of investment was financed by donors and by direct foreign investors to build basic infrastructure and to initiate major mining projects, especially diamonds and copper-nickel (Figure 1.6). After the initial surge of investment, capital formation slowed. While the investments have since tended to exhibit a cyclical pattern, the average level has been similar to some of the rapidly-growing countries of Asia such as Malaysia and Thailand.

D. Human Resource Development

Botswana's record in human development is equally impressive -- with one important exception, HIV infection. Major emphasis has been placed on providing basic education and primary health care throughout the country. Primary school enrolment has gone from 66,100 in 1966 to 319,100 in 1995, representing an average compound growth rate of 5.4 percent per annum (Table 1.2). Further, in recent decades the gender balance has consistently involved
greater than 50 percent female enrolment. Meanwhile, secondary school and university enrolment, from a much lower base, both grew at double digit growth rates.

### Table 1.2: Botswana - Education Enrolments

<table>
<thead>
<tr>
<th>Year</th>
<th>Primary enrolment</th>
<th>Primary gross enrolment rate (%)</th>
<th>Secondary enrolment</th>
<th>Secondary gross enrolment rate (%)</th>
<th>University enrolment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1965</td>
<td>66.1</td>
<td>…</td>
<td>1.3</td>
<td>…</td>
<td>0.083</td>
</tr>
<tr>
<td>1970</td>
<td>83.0</td>
<td>63.0</td>
<td>3.9</td>
<td>7.5</td>
<td>0.140</td>
</tr>
<tr>
<td>1975</td>
<td>116.3</td>
<td>71.0</td>
<td>12.1</td>
<td>15.4</td>
<td>0.465</td>
</tr>
<tr>
<td>1980</td>
<td>171.9</td>
<td>91.2</td>
<td>18.3</td>
<td>18.8</td>
<td>0.928</td>
</tr>
<tr>
<td>1985</td>
<td>223.6</td>
<td>105.2</td>
<td>32.2</td>
<td>29.0</td>
<td>1.773</td>
</tr>
<tr>
<td>1990</td>
<td>283.5</td>
<td>114.6</td>
<td>56.9</td>
<td>42.5</td>
<td>3.677</td>
</tr>
<tr>
<td>1995</td>
<td>319.1</td>
<td>112.2</td>
<td>104.7</td>
<td>63.5</td>
<td>5.501</td>
</tr>
<tr>
<td>1995*</td>
<td>Africa Average</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source of enrolment figure - National Development Plan, various years.
Source for Botswana and Sub Saharan Africa gross enrolment rates - UNESCO statistics.
a/ excluding Nigeria and South Africa

In health care, virtually all urban residents and 83 percent of rural residents are within 15 km. of a primary care facility. One result of this has been a dramatic fall in infant mortality -- from 100 per 1000 live births in 1971 to 45 in 1991. Before accounting for the impact of HIV/AIDS, life expectancy at birth had risen from less than 50 years at independence to the upper 60s in the early 1990s. This was due in large part to a strategy which, since the mid-1970s, has emphasized the widespread provision of primary health care, rather than hospitals and doctors for the few. This is evident in Table 1.3, where since 1980 the expansion of nurses (mostly in primary care clinics) exceeds that of doctors and hospital beds.

### Table 1.3: Botswana - Health Services

<table>
<thead>
<tr>
<th>Year</th>
<th>Doctors per 100,000</th>
<th>Nurses per 100,000</th>
<th>Hospital beds</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>15</td>
<td>124</td>
<td>2060</td>
</tr>
<tr>
<td>1985</td>
<td>17</td>
<td>156</td>
<td>2554</td>
</tr>
<tr>
<td>1990</td>
<td>18</td>
<td>216</td>
<td>3211</td>
</tr>
<tr>
<td>1994</td>
<td>24</td>
<td>217</td>
<td>3245</td>
</tr>
<tr>
<td>1992</td>
<td>24</td>
<td>217</td>
<td>3245</td>
</tr>
<tr>
<td>Africa Average</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source for Botswana data: NDP 8 (Table 2.5), for sub-Sahara Africa—Better Health in Africa, 1994.

The exception to the success story in health has been the spread of HIV/AIDS. A substantial portion of the sexually active population -- about one-quarter -- is now HIV positive. Recent reports indicate that, by 2000, AIDS will be responsible for 64 percent of the deaths of children under five in Botswana (New York Times, July 22, 1999). Despite over a decade of active advertising campaigns and the widespread cheap/free distribution of condoms,

---

3 NDP 8, published in 1997, cites the incidence as 23% of the sexually active population ages 15-49. (p. 402). Press reports since then put the number even higher.
heterosexual transmission of HIV has accelerated throughout the country. The impact of this on the population's morbidity and death rate is not yet fully estimated, but it will certainly reverse much of the success just noted.

E. Income Distribution and Unemployment

The National Development Plans have long proclaimed social justice as one of Botswana's four planning objectives. To the extent that this involves reducing income inequality, the success has been modest. Income inequality in Botswana, by international standards, is high but not exceptionally high. One measure of income inequality is the Gini coefficient, which ranges from zero (perfect equality) to one (complete inequality). Typically, a coefficient of 0.5 or greater is considered high. Comprehensive data have been collected on three occasions in Botswana -- 1974/75 for the rural population only (the Rural Income Distribution Survey, RIDS), and in 1985/86 and again in 1993/94 for the entire population (the Household Income and Expenditure Survey, HIES). The results, summarized in Table 1.4, show that while the income distribution in the rural areas has become more equal over time, there has been no change for the urban population. For the nation as a whole, the Gini index of inequality barely declined from 1985/86 to 1993/94, and remained in excess of 0.5. Thus, despite the limitation of the Gini index, it appears that the rapid growth of real per capita GDP has scarcely touched the relative distribution of income. The poor are clearly better off than before, but so are the rich.

<table>
<thead>
<tr>
<th></th>
<th>RIDS, 1974/75</th>
<th>HIES, 1985/86</th>
<th>HIES, 1993/94</th>
</tr>
</thead>
<tbody>
<tr>
<td>National</td>
<td>-</td>
<td>0.56</td>
<td>0.54</td>
</tr>
<tr>
<td>Urban</td>
<td>-</td>
<td>0.54</td>
<td>0.54</td>
</tr>
<tr>
<td>Rural</td>
<td>0.52</td>
<td>0.48</td>
<td>0.43</td>
</tr>
</tbody>
</table>

Source: Bank of Botswana, Annual Report 1995, p.54

It is estimated that 47 percent of Botswana’s population were living in income poverty in 1993/94. (Income poverty refers to the inability to command the level of income or expenditure needed to attain a minimum standard of living as defined by Botswana’s poverty line). While poverty is higher and more severe in the rural areas than in the urban, it appears rooted in the social disadvantages that are common among the poor, and thus remains a major challenge facing society.

A contributing factor to income inequality and poverty in Botswana is the high level of unemployment. The most recent Labor Force Survey (LFS), which includes data for the first quarter of 1996/97, shows unemployment estimated at 21 percent, similar to that attained by the 1994 Household Income and Expenditure Survey (HIES). Compared to the estimates obtained from the LFS of 1984/85, unemployment increased by 5 percentage points during the period.

---

* More recently, maternal transmission of HIV has become serious.
* The UNDP, in its *Botswana Human Development Report, 1998*, estimates that the adjustment for AIDS has dropped life expectancy at birth to 52 years from 67 years.
* The others are: sustained development, rapid economic growth, and economic independence.
* Note that the HEIS does not cover the use of government provided health services, education services, water, or other infrastructure. Taking these into account would reduce reported inequality.
This suggests that during the intervening period, the number of new employment outlets fell below the number of new entrants into the labor market. The LFS also does not take into consideration discouraged workers (those willing and able to work, but who have given up looking for work because they do not believe they will find one). If these are taken into account, it is estimated that the unemployment rate would be 35 percent for 1996/97, compared to 25 percent in 1984/85. Unemployment is higher for women than men in all settlement types.

Of much concern is the source of new employment in recent years which has predominantly been in the public sector. From March 1997 to March 1998, it is estimated that formal sector employment rose by 5.4 percent, of which about 57 percent constituted general government employment and the rest by the private and parastatal sectors. Similarly, between 1971 and 1996, the number of civil servants rose from 9,645 to 71,100 (an average growth of 8 percent, greater than GDP growth of about 6 percent during the same period). The public sector remains a major employer (accounting for 43 percent of total formal sector employment) and efforts to promote private sector employment have not been very successful. Much of private sector employment is in large, often foreign-owned companies, many of which depend to a large extent on supplying goods and services to government or people whose salaries are paid by government. Outside of the mining sector, few Botswana firms compete in export markets. In spite of generous government support for enterprise development, the 1993/94 HIES shows that self-employment remains relatively uncommon, compared to other African countries.

**F. Total Factor Productivity**

It is clear from the foregoing that the rapid growth of real GDP has been associated with growth of inputs of labor and capital, and improvements in the health and education of the labor force (often referred to as human capital). However, it is not immediately evident what has happened to the relationship between inputs and outputs, namely productivity. The best overall measure is total factor productivity (TFP) growth. This distinguishes growth of output that is attributable to increases in inputs, from growth that is attributable to increases in productivity.

Calculation of TFP is by no means an exact science, but the Botswana data do permit it for the period 1974/75 to 1994/95 (Table 1.5). They reveal a TFP growth for Botswana over the two decades running at 2.2 percent, which is similar to that calculated for the very fast growing

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Real output</td>
<td>8.5</td>
<td>9.4</td>
<td>7.6</td>
</tr>
<tr>
<td>Capital stock</td>
<td>7.3</td>
<td>6.2</td>
<td>8.5</td>
</tr>
<tr>
<td>Skilled labor</td>
<td>7.7</td>
<td>6.9</td>
<td>8.5</td>
</tr>
<tr>
<td>Unskilled labor</td>
<td>1.2</td>
<td>0.9</td>
<td>1.6</td>
</tr>
<tr>
<td>TFP</td>
<td>2.2</td>
<td>4.0</td>
<td>0.5</td>
</tr>
</tbody>
</table>

* Refer to National Account Years
Source: Leith (1997a)
countries over somewhat longer periods. However, when the data are broken into the earlier and the later decades, they reveal a marked change. TFP growth drops from a rate of 4 percent for the earlier decade to 0.5 percent for the later decade. Hence, the rapid growth of output masked a substantial fall in productivity growth, and raises serious concern about future economic growth. Analysis into the inter-relationships between growth and structural transformation revealed that the falling productivity of investment in protected sectors of the Botswana economy has been a major contributory factor to the decline in total factor productivity. The future growth of Botswana’s economy will thus depend critically on how the policies pursued in the past can be altered to meet changing circumstances.

---

8 A. Young (1995) reports TFP growth for Hong Kong 1961-91 of 2.3 percent per annum, and Taiwan, 1966-90 of 2.1 percent. Young’s numbers are considerably more detailed, however.
Chapter II

Explaining Rapid Growth

Why did Botswana prosper? In its simplest form, the answer is that growth-promoting policies were followed. Not all policies were always growth-promoting, but overall they certainly were. Among the most important policy areas were the following: mining; international trade; exchange rate; money; fiscal; labor market; and state-owned enterprises. In this section, each of these policy areas is reviewed.

A. Mining

In the years leading up to Botswana's independence in 1966, there was an active mining exploration program by several international companies. Their efforts paid off when, shortly after independence, a substantial diamond deposit was discovered. This was followed by other major mining projects, including a large copper-nickel mine, and an even larger diamond mine.

With the discovery of significant mineral deposits, Botswana faced the task of devising a minerals taxation policy. Fortunately, Botswana recognized that the value of any deposit was subject to considerable uncertainty. In such circumstances, determining an appropriate royalty rate attributable to the deposit would be difficult. Rather than relying solely on a high fixed royalty rate, Botswana focussed on obtaining for the nation a significant share of the profits from the mining operation. This was accomplished by requiring, in addition to a modest royalty rate, that the government be provided, at no charge, with a portion of the equity in the mining operation. This yielded government a significant share of the returns in highly profitable operations such as diamonds, and very little return on marginal operations. Mineral revenues quickly became government's principal revenue source (Figure 2.7).

In addition to the question of the distribution of the return from the mineral deposits between the nation and the foreign investors, there was also the question of exercising Botswana's market power in the world market for diamonds. With a substantial share of actual plus potential world gem diamond production, there was clearly some market power to be exercised. Botswana bought into a strategy aimed at capturing a share of those rents by willingly participating in the Central Selling Organization. This ensured long-term profitable access to a highly successful cartel, with considerable mineral rents.

In other minerals, the country has not been as fortunate. The large copper-nickel deposit, developed in the 1970s, suffered major technical and economic problems. Frequently it was unable to service its debt, requiring repeated re-financing of its operations. While it continues to operate, at current metals prices it is unlikely that the mine will last many more years, even after most of the capital investment has been written off.

\[1\] For more details on mineral policy and background on the diamond and copper-nickel developments, see Harvey and Lewis (1990) and Gaolathe (1997).
B. Trade

Botswana has been a member of the Southern African Customs Union (SACU) from its very beginning, early in the twentieth century. Shortly after independence, Botswana, Lesotho, and Swaziland renegotiated the long-standing customs union with South Africa. The amended agreement which came into force in 1969, and subsequent inclusion of a stabilization principle in 1976, yielded the smaller members an increased share of the customs union’s revenue. Under the new arrangement, revenue accrued to each of the smaller members as a function of that member’s own imports from all sources. This meant that, as Botswana’s imports grew rapidly with the development of new mines, and later from rapid overall economic growth, government revenues from the customs union also grew rapidly.

While the Botswana government receives considerable revenue from the customs union arrangement, this revenue is effectively a tax on the consumers of Botswana, for they pay protected prices on imports from all sources. Offsetting this is a price-raising effect on the modest volume of Botswana’s exports to customs union partners, mostly beef to South Africa, which is a transfer to the Botswana producers. The net effect of the three has been quantified for 1987, yielding a net cost to Botswana at that time of about 1.25 percent of GDP (Leith 1992). In the years since, the average common external tariff rate has declined, while the compensation rate has remained constant and Botswana’s net exports to the customs union have grown. Hence, it is conceivable that Botswana is now collecting a modest net return.

Other effects of the customs union are also important. In the 1990s there has been rapid growth of non-traditional exports from Botswana into the South African market, albeit from a small base. Botswana also has transit rights through the territory of the customs union for goods in transit to other destinations. In 1968 this effectively meant transit rights through South Africa and South African controlled Southwest Africa. On occasion these rights were not honored, but with Namibian independence in 1990, and the building of a paved road to Namibia, Botswana gained an alternative route to the sea.

As a member of the customs union, Botswana is not free to set its own import tariffs to protect domestic producers. The common external tariff is in fact the South African tariff. This has meant that Botswana has not been free to grant protection to a multitude of import-substitution industries, the way many developing countries did.

Government policy also played a crucial role in securing access to markets for a key export -- beef. Under the special provisions of the Lome Convention, signed in 1975, Botswana’s beef exports have been able to enter the European Union market with a rebate of 90 percent of the EU import levy, thereby obtaining a net price nearly equal to the internal European price. While beef exports are now modest relative to diamonds, the widespread ownership of cattle in the country has meant that the benefits of this provision have been spread over a large part of the population. There are ongoing negotiations which may change the benefits of this provision, as the current Lome agreement expires.

---

2 Formerly called Southwest Africa, Namibia was included in the territory of the customs union during its administration by South Africa. When Namibia was granted independence in 1990 it became a full-fledged member.

3 There is a special provision for granting temporary “infant industry protection” of specific new industries against imports from all sources (including elsewhere within the SACU), but it has been used only in a few cases, and generally with disappointing results.

4 For more details on Botswana’s trade policies, see Leith (1997b).
C. Monetary Policy

Botswana’s financial sector in 1966 was basic. Although Botswana had been a British protectorate, money in circulation was the South African Rand. Most of the banking services were provided by agencies which opened a few hours each week. These, and the very few permanent commercial bank branches, were branches of South African banks. With the prospect of growing revenues from minerals, Botswana decided to address the question of whether or not it should have its own currency. Together with Lesotho and Swaziland, negotiations for a monetary agreement with South Africa commenced in 1973. Botswana broke off these negotiations in 1974, and began preparations for a central bank and its own currency issue. A white paper was issued in 1975, and the new currency, the Pula, was launched in August 1976.

Launching a new currency created the need to establish policy in four areas: money; the exchange rate; exchange control; and licensing and regulation of financial institutions; to be followed eventually by a fifth, management of the foreign exchange reserves. Initially, since the central bank did not yet exist, monetary policy was managed by the Ministry of Finance and Development Planning. The basic strategy was set out in a government white paper: to regulate interest rates “with a view to satisfying domestic business and general economic requirements”.

As the newly formed central bank developed its own ability to evaluate monetary policy options, the formulation of monetary policy evolved into a joint process between the central bank and the Ministry of Finance and Development Planning.

Figure 2.1: Commercial Bank Interest Rates (Year Ending)

![Commercial Bank Interest Rates (Year Ending)](image)

For several years the approach to monetary policy was to change the regulated rates in response to changing circumstances. But in the first half of the 1980s, circumstances began to change rapidly. Substantial balance of payments surpluses, largely attributable to a major new diamond mine, were not fully sterilized by offsetting increases in government balances and a significant liquidity overhang emerged. From 1982 onwards, excess liquidity in the financial system began to grow rapidly. There ensued a lengthy process of learning how to achieve monetary stability in the face of growing excess liquidity. Although the regulated commercial bank lending rates were very low in real terms, the banks faced limited lending outlets in their traditional customer base, which were not expanding nearly fast enough to absorb the growing deposits. Institutional arrangements to adjust the regulated commercial bank (CB) interest rates were not designed to deal with the rapidly changing circumstances, with the result that real interest rates were often negative for extended periods (see Figure 2.1)

5 For more details, see Hudson (1978) and Hermans (1996).
Eventually, in 1986 the prime lending rate of the commercial banks was deregulated, in the hopes that this might assist in achieving monetary stability. Inflation was declining in 1988, largely because inflation in the principal supplier of imports, South Africa, was declining. In the face of ongoing excess liquidity, the prime commercial bank lending rate fell below the inflation rate. Thus began a five-year period during which the CE real prime lending interest rate was negative or zero. With negative real interest rates, the volume of commercial bank loans accelerated dramatically (see Figure 2.2). But the excess liquidity continued to increase by more. Semi-deregulation was not achieving monetary stability.

Part of the problem lay outside the jurisdiction of the central bank. Government had long had its own window for loans to state-owned enterprises. The original purpose was to invest funds to ensure that government would have adequate funds in the future to handle debt repayment and to offset revenue shortfalls. The loans were made to state owned enterprises and local governments to finance major capital investments. The term of the loans was set at twenty-five years, but the rate, for the full term of the loan, was set at a level which was normally significantly less than the commercial banks' prime lending rate. The volume of funds disbursed in this manner was substantial. By 1986 the volume of loans outstanding at the official window exceeded the total outstanding commercial bank loans, and has since remained in that position (see Figure 2.2). In other words, government became the dominant player in extending credit to the economy, and at negative real interest rates.

The absence of a money market made it difficult for the central bank to absorb the emerging excess liquidity. This was dealt with in 1991 when the central bank established a system of regular auctions of interest yielding short-term deposit certificates. The sale of these certificates absorbed the substantial accumulation of excess liquidity, and created a benchmark short-term interest rate for the domestic economy.

Botswana’s ability to deliver price stability has always been influenced by South Africa, its principal trading partner (see Figure 2.3). Prior to 1981, the inflation rate in Botswana as measured by the CPI followed that of South Africa reasonably closely. Botswana tightened both monetary and fiscal policy in 1981-82, associated with the diamond market downturn. The real prime interest
Botswana: A Case Study of Economic Policy Prudence and Growth

rate was then marginally positive for a few years and Botswana's inflation rate was brought below that of South Africa. It remained below South Africa for several years, in spite of the fact that the real prime rate became significantly negative. This was possible, in part, because Botswana was able to finance a substantial volume of imports to keep the excess demand from spilling over into the domestic economy, and in part because a few of the items in the Botswana CPI basket were regulated. Nevertheless, with the combination of negative real prime interest rates for the private sector, and the lending boom from government to state-owned enterprises, there was rapid growth of credit in the late 1980s and early 1990s (Figure 2.2). This led to Botswana's inflation exceeding South Africa's. These inflationary pressures took some time to dissipate, and it was not until 1997 that the inflation rates came together again.

Beyond monetary policy, the central bank carried a second important responsibility: supervision of the commercial banks. The problems which follow from lax licensing and regulation of commercial banks have been illustrated in Asia and Russia during 1997 and 1998. Botswana has so far been able to avoid such catastrophes by virtue of applying strict rules for the licensing and supervision of commercial banks.

There were two commercial banks already operating in the country when Botswana withdrew from the South African monetary area. These two had a long history of conservative banking in the region, and there was little immediate risk that they would become reckless in their lending, thus putting depositors' funds at risk. Nevertheless, a strict approach to bank licensing and supervision was taken from the start. Stringent requirements on capital adequacy and restrictions on practices such as lending to own directors were put in place.

Eventually additional commercial banks were licensed. The importance of strict banking supervision became evident on two occasions. One was when the still solvent subsidiary of a large international bank was left up in the air with the collapse of the parent bank. The other occurred when another foreign owned bank breached its capital adequacy requirements in its Botswana operations. In both cases the central bank stepped in, forcing the shareholders to arrange for an orderly sale of going concerns to another institution.

D. Foreign Exchange

Having created an independent currency in 1976, Botswana was not only faced with internal monetary matters, but had to address foreign exchange issues such as exchange controls, the exchange rate, and management of foreign exchange reserves.

Exchange controls between the Rand Monetary Area and the rest of the world were firmly in place at the time Botswana withdrew to establish its own currency. Given the uncertainties associated with the creation of a new currency, and the already existing ambience of exchange controls, Botswana chose to continue those controls, with the exchange control net applied between Botswana and the rest of the world. Surrender requirements on foreign exchange earnings were employed, enabling the creation of large stocks of foreign exchange earnings. However, exchange controls and restrictions were liberalized over time. Given the very substantial foreign exchange reserves which accumulated over the years, and an exchange

---

7 Most prominent among these was the rental rate on housing provided by the state-owned enterprise. See discussion below.
8 For more details on the evolution of monetary control in Botswana, see Majaha-Jartby (1998).
9 Responsibility for their operation was switched from their South African headquarters to their British parents.
rate policy which focussed on maintaining Botswana's competitive position (see below), exchange controls evolved into an instrument held in reserve to deal with capital account disturbances rather than with the restriction of current account payments. In 1995, Botswana was accorded IMF Article VIII status, precluding the use of exchange controls to restrict current account payments without IMF approval. In February, 1999 all remaining foreign exchange controls were abolished.

Exchange rate policy involved deciding on various related questions. The first was whether to adopt a fixed or a flexible exchange rate. In 1976 the South African Rand was pegged to the US Dollar, and fixed exchange rates were still widely used by many countries. Botswana chose to continue with a fixed exchange rate pegged to the U.S Dollar. Having chosen a fixed exchange rate, the authorities had the ongoing task of deciding on the appropriate level. Over the years the currency has generally been set at a level below what would have been indicated by a flow equilibrium. As a result, there has been a substantial accumulation of foreign exchange reserves, now amounting to over two years worth of current account payments. This was a deliberate strategy, designed to avoid the well-known “Dutch Disease” effect of a strong currency crowding out all but the most robust export activities. The principal reason for this approach was that non-diamond export activities are substantially more employment intensive than diamond mining and such a strategy avoided crowding out employment-generating activities.

At the time the Pula was created many currencies were still pegged. As long as major currencies did not change pegs against each other, it mattered little what currency one was pegged to. However, when the Rand was floated in 1979, a problem for Botswana emerged. The Pula, pegged to the US Dollar, was extremely vulnerable to changes in the Rand/Dollar exchange rate. Figure 2.4: Exchange Rates, 1976-1998, Month Ending

In the years after the Rand was floated, it started to slide against the US Dollar (Figure 2.4). As the Rand slid against the Dollar, the Rand/Pula exchange rate rose, putting potential Botswana producers at a competitive disadvantage vis-a-vis South Africa.

Movement of the Rand/Dollar exchange rate posed a serious dilemma for Botswana. The authorities could choose to have the Pula follow the US Dollar, or the South African Rand, or some combination of the two. But, given the movement of the Rand/Dollar exchange rate, it was not possible for the Pula to remain stable against both the Rand and the Dollar. It is clear from (Figure 2.4) that, on balance, the choice was to focus mostly on the Rand. In various stages the Pula peg was changed from the original peg against the US Dollar, to a peg against a basket of regional currencies and the SDR, with a relatively heavy weight on Rand.
The competitive position of Botswana vis-a-vis Rand- or US Dollar-based producers, however, requires a look at the real exchange rate indices in Figure 2.5. In the early period, with a fixed exchange rate against the US Dollar, but with close trade links to South Africa and its higher inflation rate, the Pula appreciated dramatically against the Dollar in real terms. Then, in the 1980s, as anti-apartheid sanctions were introduced, the fall of the Rand against the Dollar which was only partially matched in nominal terms by the Dollar/Pula exchange rate, meant that the Pula depreciated in real terms against the Dollar/Pula exchange rate, and appreciated in real terms against the Rand. This forced the authorities to address the question of the real exchange rate of the Pula against the Rand. In the years since the mid 1980s, it is clear from Figure 2.5 that the policy choice has been to place a heavier weight on the real competitive position of the Pula against the Rand than the US Dollar. On occasions such as 1988 and 1996, this meant that the rapid depreciation of the Rand created a competitive windfall for Botswana vis-a-vis US Dollar based producers, and a capital loss for US Dollar based foreign investors in Botswana.

A further task fell to the central bank: management of the foreign exchange reserves. This became increasingly important as the size of the reserves grew. The function evolved from one of managing cash flow, ensuring that adequate foreign exchange was available to meet the various demands, to one of handling substantial investment assets worth more than two times annual current account payments. With the co-operation of the World Bank, a strategy for investing the reserves was devised in 1988 (World Bank, 1989). Commercial fund managers were engaged, and assigned performance benchmarks based on international indexes, against which they were judged. At the same time, as the expertise in fund management developed within the central bank, a larger volume of the reserves was assigned to internal management.

E. Fiscal Revenues

At independence the Botswana government had to rely on recurrent grants from Britain to cover its regular operating budget. Much was made of the achievement in the 1972/73 fiscal year when the operating budget generated a surplus without the assistance of Britain’s direct budgetary support. Nevertheless, after 1972/73 a significant portion of government's capital expenditure continued to be financed by foreign aid grants from various international donor agencies.

---

10 Of course, if a dollar based foreign investor were producing a good or service which depended on the health of the domestic economy, the two effects would tend to offset each other.

11 For more detail see Mohohlo, (1997).
Botswana: A Case Study of Economic Policy Prudence and Growth

Figure 2.6: Government Revenues, 1967/68-1972/73 (Percent of GDP)

Assistance was forthcoming as a well articulated and managed development planning process made Botswana an attractive destination for many international bilateral and multilateral donor agencies (Figure 2.6). More recently, as the economy has grown, Botswana has become ineligible for many donor agency grants and this source of revenue has declined in both relative and absolute terms.

Figure 2.7: Government Revenues, 1973/74-1996/97 (percent of GDP)

After the transition to fiscal independence, three major revenue sources dominated, as may be seen in Figure 2.7. First and foremost, the rapid mining development generated considerable revenue for government. This was augmented in important ways. The customs union arrangement, which had been renegotiated in 1968, generated revenue for government on imports, both from within the customs union and from outside. As a result, the import surge from mining and infrastructure development brought additional revenues to government.

Overall then, these three revenue sources (customs union, minerals, and foreign exchange reserves), provided 85% of budgeted government revenues in the late 1990s. It is noteworthy that the diversified sources of revenue make Botswana less vulnerable than many SACU member states to forthcoming changes in SACU's revenue sharing formula. Furthermore, none of these sources appeared to fall directly on the citizens, and all were denominated in foreign exchange. Finally, the total government revenues were large relative to the economy as a whole. From the early 1980s on, in most years total government revenue amounted to over 40% of GDP, and for some years even more than 50% of GDP.
F. Fiscal Expenditures

Given its revenue situation, Botswana's democratic government was faced with enormous demands to spend. Caving in to those demands could readily have put pressure on the capacity of the economy, and turned rapid growth into an inflationary spiral. Those demands were countered by two important influences. First, the experience in the early 1980s when a world-wide recession led to a sharp drop in the demand for diamonds and a major export shortfall made both officials and politicians cautious about spending commitments. For several months during this period, Botswana did not sell any diamonds at all, adversely affecting both government mineral revenues (see Figure 2.7) and foreign exchange reserves (see Figure 1.5).

Second, Botswana's system of multi-year planning of expenditures, noted earlier, served to keep total expenditures within bounds. This institution was a carry-over from the days when the bulk of the budget was financed by donor agencies. Initially, the emphasis was on raising the funds from donors to cover government's operations and to put infrastructure in place. The planning process later evolved into a relatively sophisticated exercise that continues to this day. Major policy issues facing the spending ministries and state-owned enterprises are articulated in planning documents and matched with desired recurrent and capital expenditures over the projected plan period (5 or 6 years). Feasible paths of expenditure are projected by the Ministry of Finance and Development Planning, with an important element being the sustainability of recurrent expenditures. Even if the capital budget is affordable in the plan period, it is trimmed if the ongoing costs cannot be covered with confidence. Priorities are then set in an extensive consultative process, which includes a series of meetings of all ministers and senior officials, and culminates in adoption of the plan by parliament. This is supplemented by annual reviews of projects underway, and an extensive mid-plan review of the overall picture.

The discipline of the national development planning process was reinforced by a system of financial control and accountability. Supplementary expenditures not authorized in the budget were not permitted without a formal process of approval. Similarly, additional capital projects not included in the plan could only be added via a formal process. As a result, government has generally been successful in maintaining macroeconomic balance. While rapid growth in official government lending and a high ratio of government expenditure to GDP (Figure 2.8) have generated some concern, continuous increases in diamond revenues enabled government to produce budget surpluses every year between 1983 and 1997.

---

12 The data are drawn from World Bank, World Development Indicators, 1998, Table 4.12. The very high number for Lesotho arises because the denominator is GDP, which in Lesotho's case excludes mineworkers' remittances which in turn are spent, generating revenue for the government under the SACU.
In addition to monitoring levels of overall government expenditures, it is also important to observe the changing composition of government expenditure. The functional breakdown of government expenditure does not extend back into the 1970s, but from the early 1980s onwards the data are available, as seen in Figure 2.9. A large portion of government expenditure was spent on "economic services", consisting mostly of basic infrastructure, including electricity, water, roads, and government services to the mining and agriculture sectors. These expenditures were clearly growth-promoting, for without such infrastructure and services, very little modern sector development would have taken place. The category "general public services", including government transport, buildings, police and the courts may have contained some waste, but did not take on an ever-expanding share of government expenditure as so often happened elsewhere. Importantly for the overall growth of the economy, education expenditure grew dramatically. Health, while not nearly as large as education, focussed on the provision of primary health care throughout the country, rather than on tertiary care for the urban elite.

The magnitude of the military expenditure is also notable. In the 1970s, Botswana was ill-equipped to stand up to the hostile regimes which surrounded it with South Africa, South African controlled Namibia, and the UDI regime in Rhodesia. This led to the establishment of the Botswana Defense Force. In the 1980s, as the confrontation with South Africa became more serious, Botswana suffered several cross-border incursions, and Botswana's investment in its military escalated. The result was that, in the first half of the 1990s, Botswana's military expenditure, as a proportion of GDP became one of the highest reported in Africa (Figure 2.10). While immediate threats have receded, military expenditure remains high as a proportion of the national budget. In the 1999/2000 budget, defense was allocated 8 percent of total expenditure, ranking it as the fourth largest expenditure item.
G. Labor Market Policies

The national planning process, referred to earlier, was important not only for fiscal discipline but for setting out basic objectives to be followed in formulating policies. These were articulated at an early stage as: (i) rapid economic growth; (ii) social justice; (iii) economic independence; and (iv) sustained production. These objectives were repeated, with only a minor change, on the occasion of all subsequent national development plans. Given the structure of Botswana's labor market, attaining both rapid economic growth and improved social justice has presented challenges. An excess supply of unskilled workers, especially in the traditional sector, has threatened achievement of the goals for social justice, while a serious shortage of skilled labor for the modern sector has jeopardized the objective of rapid economic growth.

A dual approach was followed to reconcile these objectives. A minimum wage for unskilled workers was established to achieve fairness. To avoid the job destruction effects of excessive minimum wages observed elsewhere, the level was to be set “equal the average rural income of farmers with an allowance for any differential in the overall costs of urban living.” In the rest of the modern sector, government's concern with the potential for a bidding war for limited skilled labor led to a policy position whereby “wage and salary levels in the private and parastatal sectors should generally conform to, and on no account significantly exceed, those paid by Government to comparable grades of public employees.” Government would review its wages and salaries regularly, and make adjustments on the basis of general economic conditions, increases in the cost of living, and increases in labor productivity.

Figure 2.11: Minimum Wages (Average thebe per hour)

Minimum wages were set starting in 1974. Different minima were set for different sectors, initially based on the linkage with the rural sector (Figure 2.11). Taking a simple average of those rates, the pattern over time may be seen in nominal minimum wages which were regularly adjusted more or less in line with inflation. As a result, the minimum wage has followed the original concept of matching rural incomes, thus maintaining a modicum of social harmony while avoiding job-destroying increases in real minimum wages.

To guide the setting of wages and salaries for the formal sector, a committee was created which included employer and employee representatives, plus heavy representation from government. It made recommendations to cabinet, usually annually, with the decision announced in the budget speech to Parliament. Government and the state-owned enterprises were obliged to

---

13 See National Development Plan 1973-78. The reference to sustained production was later changed to “sustained development”.
14 National Development Plan, 1973-78, p5
15 National Development Plan, 1973-78, p5
follow the recommended nominal adjustment, and the private sector was expected to follow suit16. The Government’s concern that the private sector would bid labor away from it, proved unfounded. During the late 1980s and early 1990s, in fact, the government sector generally outbid the private sector for workers. This was particularly notable in one of the key sectors of potential non-traditional employment growth, manufacturing, where government’s salaries and wages grew more rapidly, depressing the ratio of average monthly earnings in manufacturing relative to government (Figure 2.12)17.

The effect of more rapid growth of government sector wages on the balance between private and public sector employment was initially masked by the fact that a large part of the employment boom from 1988 to 1991 was in the construction sector, much of it financed by government, but which was almost entirely private sector activity. As that leveled off and then declined in the 1990s, the effect became clear. Government and parastatal employment (excluding the military) grew much faster than the private sector, dropping the private sector’s share of formal sector employment from a peak of 65 percent in 1991 to a plateau of 57 percent (Figure 2.13).

Shortage of skilled labor was dealt with by allocating new graduates to the various sectors of the economy in rough proportion to perceived shortages, with the structure of wages and salaries determined largely by the public service. In addition, the public sector, including state-owned enterprises, invested heavily in training. The remaining shortages were met largely by employing expatriates on term contracts. This meant that lack of available skilled labor did not become a constraint on the overall growth of the economy. However, with the economy growing very rapidly, the shortages of skilled labor continued, exacerbated by the fact that there were no signals from the labor market concerning what skills commanded a premium. Thus, incentives to acquire the skills to meet the shortages were absent.

16 After 1990 the application to the private sector was dropped.
17 It should be noted that changes in earnings may be due to other effects such as changes in composition of either government or manufacturing. However, no data on wage rates are available.
In the 1990s the phenomenon of youth unemployment began to emerge. The ranks of junior and senior secondary school graduates grew much faster than demand for labor with those qualifications. Unemployment stood at 41 percent for the 15-24 age group, compared to the total unemployment rate of 21 percent reported for the labor force as a whole. At the same time, the structure of wages and salaries remained heavily influenced by the public service, and constrained by the “fairness” requirement. This segment of the labor market proved very slow to adjust to the rapidly changing circumstances.

**H. State-Owned Enterprises**

At independence Botswana's modern sector was virtually non-existent. There was no electricity system, no telephone system, no pipe-borne water or sewage. The housing stock consisted almost entirely of the traditional rondavels. There was one 5 km. stretch of paved road, and no public transportation service. All the facilities for a modern economy had to be constructed from scratch. In keeping with the approach taken in many countries, Botswana chose to rely on the state to provide essential services for the modern sector. State-owned enterprises were created for some functions, and other activities were simply carried out by government departments, and later launched as state-owned enterprises.

**Figure 2.14: State-Owned Enterprises, Average (Early 1990s)**

(Percent of GDP)

Unlike many countries, the number and size of the state-owned enterprises (SOEs) sector did not grow excessively in Botswana. Comparable data on the size of the SOE sector for African countries are limited, but the available data for the early 1990s show that Botswana’s SOE sector was not exceptionally large, accounting for about 6 percent of GDP (Figure 2.14). This is about half the share of GDP by SOEs found in neighboring Zimbabwe, Tanzania, and Zambia. Only Ghana has a similar share, but this was after many years of scaling back the SOE sector under a structural adjustment program. Furthermore, employment in Botswana’s SOE sector has not ballooned, with the parastatals’ share of modern sector employment marginally lower since the latter half of the 1980s (Figure 2.13).

The performance of SOEs has varied by subsector, with each evolving in its own way. The lumpy nature and substantial size of investments required for electricity, telephone, and water meant a heavy reliance on capital loans from external agencies in the early years, particularly the World Bank. Attached to each of the World Bank loans was a covenant requiring pricing to achieve a specified real return on revalued assets. This effectively prevented these SOEs from becoming a drain on the public purse. The covenants with the World Bank did not,

---

18 See Bank of Botswana, Annual Report 1995, p. 66. These data were collected by the 1994 Household and Income Expenditure Survey. Since the primary purpose of the survey was not to measure unemployment, the data should be taken with some caution.
19 The comparability of data may be a problem in this area also. In some countries the state is a major shareholder, but the enterprise does not function as a classic “state-owned enterprise”, while in others, with a minority shareholding, the state may have effectively taken over the direction of the enterprises.
however, guarantee that all public utilities were effectively managed. The telephone company had chronic shortages of lines for new customers. The postal service, which was not financed by the World Bank, showed itself incapable of keeping pace with the demand for new post office boxes.

State-owned institutions became significant players in the financial sector. Their total outstanding loans and investments amounted to about 5.5 percent of GDP at the end of March 1997, compared with the commercial banks' loans and advances equivalent to 9.3 percent of GDP. To this, one might add government's own loan window to SOEs. Although not a formal institution, total loans outstanding from this source stood at an additional 11.4 percent of GDP. In other words, government itself had become a larger lender than the commercial banks and, when combined with state-owned financial institutions, became almost twice as big a lender as the commercial banks.

The initiatives in the financial sector were undoubtedly critical in the early stages of development. The only other financial institutions were the commercial banks. The state-owned institutions were willing to invest in projects, and for longer terms than the traditionally conservative commercial banks were willing to do, as the latter have a predisposition to protect depositors' and shareholders' interests, not the interests of project proponents. The management of state-owned financial institutions saw their primary duty as channeling loan funds at their disposal into their target constituency. Such a strategy was politically popular among those who might otherwise not have obtained loans due to, say, the risky nature of their enterprises. However, when arrears inevitably began to mount, and defaults became serious, state-owned financial institutions were in a much more difficult position to take appropriate remedial action than private financial institutions would have been. The performance of some of the state-owned institutions became so bad that the government was forced to intervene in some cases. The national development bank had to be bailed out, restructured, and external management brought in and the co-operative bank had to be closed.

The performance of the housing corporation, in contrast to the traditional public utilities, became a serious problem. It failed to meet the growing demand for urban housing, frequently ran substantial deficits in spite of low interest loans from government, and in the early 1990s was at the center of one of the few cases of serious public sector corruption. Numerous reports and special commissions identified the many problems facing the housing corporation, and made rational recommendations to solve them. But the central problem was that decisions to adjust rental rates were made by cabinet. Inevitably, in the absence of any agent of restraint, cabinet failed to keep rental rates in line with costs.

The role of the SOEs in Botswana's growth is thus mixed. Without the key part played in ensuring the availability of essential services in the first decade or two of independence, very little of the subsequent growth would have been possible. Yet, with the maturation of the economy, such strategic parts became less and less necessary. But institutions, once created, tended to take on a life of their own, developed constituencies of their own, and thus persisted, even after they had evolved from being growth promoting to growth retarding. In this context, the Government has initiated a privatization program in recent years, although with little substantive results so far.

---

20 Since some of the loans were to state owned financial institutions, to eliminate double counting, the figure cited omits those loans. If one takes the entire outstanding loans, the amount would be 13.8% of GDP at the end of fiscal 1997.
Chapter III
Conclusion

What conclusions may be drawn from Botswana’s experience? Three points stand out. First and foremost, Botswana’s record is indeed exceptional. As documented in Chapter I, the record of three decades of rapid economic growth has few parallels in modern economic history. While a number of countries have achieved rapid economic growth for a decade or two, few have been able to sustain it for three decades. What is also exceptional is the fact that the initiating source of the growth was mineral wealth, for even fewer countries have been able to transform mineral wealth into sustained economic growth.

The growth of real incomes has been spread throughout the economy. While relative income inequality has not been reduced, it has not worsened and, with real per capita GDP growth rates averaging nearly 8 percent over the past three decades, the poor may be better off than before. Furthermore, economic growth has been accompanied by significant progress in human development. The population is now reasonably well educated and, with the important exception of HIV infection rates, is healthy. Unfortunately, the scourge of HIV has dropped life expectancy by nearly 30 percent since 1990 and threatens to turn back much of the progress in human development. Growth of formal sector employment has kept pace with real GDP growth and has outstripped growth in the population. As a result, unemployment rates are relatively low by sub-Saharan Africa standards, although youth unemployment has recently emerged as a serious problem.

Second, the growth record is explained primarily by the economic policies which Botswana has pursued. In each of the major policy areas, growth promoting policies have dominated. Minerals policy established mutually profitable arrangements with foreign investors, and participation in one of the few successful international marketing arrangements. Trade policy kept the economy open to competition from imports, and maintained access to markets for some important non-mineral exports. Money and banking policies, while not always optimal, generally provided stability to the macroeconomy and to the financial sector. Exchange rate policy accorded stability to the tradable sector and avoided the peril of an overvalued currency commonly encountered following mineral discoveries.

Fiscal policy, on the whole, has been disciplined. To a large extent this is attributable to the institution of the national development plans. The multi-year planning of government expenditures kept expenditure from growing as fast as government revenues over the long term. The resultant accumulation of substantial government savings and foreign exchange reserves has provided an important cushion to enable the country to ride out downturns in the diamond market, while the careful management of those reserves has generated a significant return to the nation.

Labor market policies avoided both the extremes of an exorbitant real minimum wage and a bidding war for scarce talent. Government promoted private sector income-earning opportunities by establishing a favorable investment climate, providing education and training services to enhance productivity, and built social and economic infrastructure to encourage the efficient utilization of resources.
State-owned enterprises played an essential role in kick-starting the modern economy. Further, they did not become employers of first resort. Yet, with changing circumstances, and changing technologies, there is no fundamental justification for the dominant role of many. The objective to phase out redundant institutions or transform them into growth promoting organizations remains one of the key policy challenges.

Third, the reliance on a wide range of growth promoting policies contributed a substantial interaction term. Botswana did not have a single silver (or diamond) bullet that explains its economic record. Rather, it was the whole range of policies which, working together, proved growth promoting. Minerals policy generated the rents which initiated the growth, but government's long term development planning was crucial in channeling funds into investments that promoted both growth and human development, and in maintaining a modicum of fiscal discipline. Given the fiscal discipline, it was possible for the independent central bank to accumulate substantial foreign exchange reserves, and pursue a disciplined monetary policy. This combination of fiscal and monetary discipline, in turn, made it possible for trade policy to keep the economy open, and exchange rate policy to encourage the emergence of non-traditional exports and import-competing production.
References


Our Mission: to fight poverty with passion and professionalism for lasting results.