BANK OF BOTSWANA

ANNUAL REPORT

2004

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BANK OF BOTSWANA

Governor's Office
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Private Bag 154
Gaborone
Botswana

Ref: RD 10/1/1

March 31, 2005

Honourable B. Gaolathe
Minister of Finance and Development Planning
Private Bag 008
Gaborone

Honourable Minister

In accordance with Section 57 (1) of the Bank of Botswana Act, 1996, I have the honour to submit, herewith, the *Annual Report* of the Bank of Botswana for 2004, which covers:

(i) a report on the operations and other activities of the Bank during 2004;

(ii) a copy of the Bank's annual accounts for the year ended December 31, 2004 certified by the external auditors and approved by the Board on March 22, 2005; and

(iii) a review of the economy in 2004, a theme chapter on *Improved Productivity – The Key To Sustained Growth and Higher Living Standards for All* and a statistical section.

Yours sincerely

Linah K. Mohohlo
GOVERNOR

Board Members

as at December 31, 2004

L. K. Mohohlo
Governor and Chairman of the Board

G. K. Cunliffe
Board Member

J. Sentsho
Board Member

S. S. G. Tumelo
Board Member

B. Moeletsi
Board Member

U. Corea
Board Member

Deputy Governors

O. A. Motshidisi

K. R. Jefferis

Board Members

as at December 31, 2004

L. K. Mohohlo
Governor and Chairman of the Board

S. S. G. Tumelo
Board Member

G. K. Cunliffe
Board Member

J. Sentsho
Board Member

B. Moeletsi
Board Member

U. Corea
Board Member

CONTENTS – PART A

Statutory Report on the Operations and Financial Statements of the Bank in 2004

CONTENTS – PART B

Figure, Charts, and Tables

Abbreviations Used in the Report

AGOA	Africa Growth Opportunity Act
ATM	Automated Teller Machine
BCI	Business Competitiveness Index
BoBCs	Bank of Botswana Certificates
BDC	Botswana Development Corperation
BEDIA	Botswana Export Development and Investment Agency
BIDPA	Botswana Institute for Development and Policy Analysis
BMC	Meat Commission
BNPC	Botswana National Productivity Centre
BOTEC	Botswana Technology Centre
BSB	Botswana Savings Bank
BSE	Botswana Stock Exchange
BURS	Botswana Unified Revenue Services
CSO	Central Statistics Office
CEDA	Citizen Entrepreneurial Development Agency
DCEC	Directorate on Corruption and Economic Crime
DPCF	Debt Participation Capital Funding
ECH	Electronic Clearing House
EFT	Electronic Funds Transfer
FAP	Financial Assistance Policy
FDI	Foreign Direct Investment
FIAS	Foreign Investment and Advisory Service
FTA	Free Trade Area
GC	Gini Coefficient
GCI	Growth Competitiveness Index
GDP	Gross Domestic Product
HIES	Household Income and Expenditure Survey
ICT	Information and Communications Technology
IFSC	International Financial Services Centre
IIP	International Investment Position
IMF	International Monetary Fund

KBL	Kgalagadi Breweries Limited
MDGs	Millennium Development Goals
MEI	Macroeconomic Environment Index
NDB	National Development Bank
NEER	Nominal Effective Exchange Rate
NPS	National Payment System
NRI	Network Readiness Index
NTBs	Non-Tariff Barriers
OCC	Olympia Capital Corporation Limited
OECD	Organisation for Economic Cooperation and Development
OPEC	Organisation of Petroleum Exporting Countries
PDSF	Public Debt Service Fund
PMS	Performance Management System
PMP	Privatisation Master Plan
PRI	Productive Resource Index
QPI	Quality and Public Institutions Index
REER	Real Effective Exchange Rate
REI	Rigidity Employment Index
RIIC	Rural Industries Innovation Centre
RTGS	Real Time Gross Settlement
SADC	Southern African Development Community
SDR	Special Drawing Right
SSA	Sub-Saharan Africa
VAT	Value Added Tax
TFP	Total Factor Productivity
TCI	Trade Competitiveness Index
TEI	Trade-Enabling Environment Index
TI	Technology Index
UN	United Nations
UNDP	United Nations Development Programme
WEF	World Economic Forum

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Part A

Statutory Report on the Operations and Financial Statements of The Bank, 2004

Bank of Botswana

Heads of Department

as at December 31, 2004

R. H. Nlebesi
Banking Department

E. T. Rakhudu
Administration Department
(Acting)

O. Mabusa
Banking Supervision Department

N. A. Mabe
Accounting Department

A. M. Motsomi
Research Department

O. Modisa
Financial Markets Department

J. Ghanie
Information Technology Department

STATUTORY REPORT ON THE OPERATIONS OF THE BANK IN 2004

1. AN OVERVIEW OF THE BANK

Objectives of the Bank

The Bank's primary objectives are to promote monetary stability, ensure an efficient payments system and a sound banking sector

1.1. The primary objective of the Bank, as stated in the Mission Statement, is to promote and maintain monetary stability. The Bank also ensures that the payments system is efficient and that the banking system is sound. These functions of the Bank support the broad national macroeconomic objectives, including the promotion of sustainable economic diversification. The Bank's main responsibilities, its organisational structure and the framework for its activities are described below.

Functions of the Bank

Primary responsibilities are prescribed by legislation

1.2 As prescribed by the Bank of Botswana Act (CAP 55:01) the major responsibilities of the Bank include the conduct of monetary policy; provision of banking services to the Government, banks and selected public sector organisations; regulation and supervision of banks and other financial institutions; issuance of currency; implementation of exchange rate policy; management of foreign exchange reserves; and provision of monetary and financial policy advice to the Government.

(a) Monetary Policy implementation is directed mainly at achieving the primary responsibility of the Bank, which is the promotion and maintenance of monetary stability. This requires the achievement of low and sustainable inflation, which contributes to the promotion and maintenance of domestic and external monetary and financial stability. This objective, together with fiscal, wage, trade and exchange rate policies, fosters macroeconomic stability, which is a crucial precondition for achieving sustained development, high rates of employment and rising standards of living for Batswana.

(b) Central Banking and Payment System Services are mainly provided for the Government, commercial banks and other selected institutions. The Bank also operates a clearing system for the banking sector.

(c) Issuance of Currency (banknotes and coin) of high quality is an essential ingredient of an efficient payments system as it fosters confidence in the legal tender which, in turn, facilitates transactions and economic activity in general.

(d) Supervision of Banks and Other Financial Institutions is conducted in accordance with the Banking Act (CAP 46:02) and other relevant statutes. The purpose of prudential regulation and supervision is to ensure the safety, solvency and efficient functioning of the banking system and the overall financial sector.

(e) Exchange Rate Policy is implemented on behalf of the Government in the overall context of sound macroeconomic management. The objective of the policy is to promote export competitiveness without compromising macroeconomic stability. The Bank buys and sells foreign exchange at rates determined in accordance with the exchange rate policy.

(f) Official Foreign Exchange Reserves are managed by the Bank on behalf of the Government. The Bank ensures their safety and return by diversifying the investments within a framework of acceptable risks.

(g) Economic Analysis and Policy Advice are covered in periodic reports, published research papers and statistical documents. Most of the materials are distributed to other institutions and the public. The Bank is also represented on a number of Government-led committees and task forces.

Structure of the Bank

Minister of Finance reports to Parliament on the Bank's operations

1.3 The Bank of Botswana falls under the purview of the Minister of Finance and Development Planning, who appoints members of the Board, except the ex-officio Chairman (Governor of the Bank), who is appointed by His Excellency the President. The Minister reports to Parliament on the Bank's operations and financial performance.

The Board

The Board has overall responsibility over the Bank's operations

1.4 Under the Bank of Botswana Act and the Bank's Bye-Laws, overall responsibility for the operations of the Bank is vested in the Board of the Bank. The Board is responsible for ensuring that the principal objectives of the Bank, as set out in the Act, are achieved. It also ensures that appropriate policies, management and administrative systems as well as financial controls are in place at all times in order for the Bank to achieve its objectives in an efficient and effective manner. Accordingly, the Board has a direct role in the strategic planning of the Bank, and in determining the broad policy framework. In this regard, the Board approves the annual budget, monitors the financial and operational performance, reviews reports of the external auditors and may call for any policy review.

The nine-member Board is required to meet at least once each quarter

1.5 The Board comprises nine members and is chaired by the Governor as required under the Bank of Botswana Act. As at the end of 2004, six members were in place and there were three vacancies. The Permanent Secretary of the Ministry of Finance and Development Planning is an ex-officio member; the other members are drawn from the public service (not more than two), the private sector and academia in their individual capacities.

1.6 The Board is required to meet at least once each quarter, although typically it meets more frequently. The Audit Committee of the Board is chaired by a non-executive Board member, and its main responsibility is to ensure that accounting policies, internal controls and financial practices are based on established rules and regulations. The Governor submits a report, after approval by the Board, on the operations and the audited financial statements of the Bank to the Minister of Finance and Development Planning within three months of the end of the Bank's financial year.[1]

The Governor

The Governor is the Bank's chief executive officer, supported by the Executive Committee

1.7 In addition to chairing the Board, the Governor is the chief executive officer of the Bank, and is responsible for the prompt and efficient implementation of the decisions

[1] The Bank's financial year coincides with the calendar year.

or resolutions of the Board. The Governor manages the Bank on a day-to-day basis, and represents the institution in its relations with the Government, domestic financial and other institutions as well as external organisations.

The Executive Committee

1.8 The Executive Committee, which is chaired by the Governor, comprises the Deputy Governors and Heads of Department; it may include co-opted senior staff. Its responsibility is to advise the Governor on the day-to-day management of the Bank as well as the development of the Bank's medium- and long-term plans.

Departments and Divisions

1.9 In order to carry out its functions and supporting activities, the Bank is organised into Departments and Divisions. At the end of 2004, the Bank's seven Departments comprised Administration, Accounting, Banking, Banking Supervision, Financial Markets, Information Technology and Research, while the three Divisions were the Board Secretariat, Security and Internal Audit. The Heads of Department report through the Deputy Governors to the Governor, as do the Heads of Security and the Board Secretariat. The Internal Audit Division reports directly to the Governor.

The Bank had seven Departments and three Divisions in 2004

Strategies

1.10 In pursuing its principal objectives of maintaining monetary stability as well as ensuring the soundness and efficiency of the financial system, the Bank regularly reviews and adapts its strategies to deal with the changing conditions prevailing in the financial sector. The Bank's activities are mainly in the following areas:

Maintaining monetary stability and a sound and efficient financial system are key objectives

Monetary Operations, Reserve Requirements and the Bank Rate

1.11 Monetary stability is mainly reflected in low and stable inflation. Since inflation is fundamentally influenced by monetary and credit factors, the Bank's anti-inflation strategy focuses on the control of banking system credit as an intermediate target. However, controlling inflation in a small open economy such as Botswana's, with trading partners that have often experienced volatile inflation is a major challenge.

1.12 In implementing monetary policy, the Bank uses indirect policy instruments, particularly open market operations and the Bank Rate. The Bank may also use banking regulations and moral suasion to achieve monetary policy objectives. However, the use of Bank of Botswana Certificates (BoBCs), in both the primary and secondary markets, to control the liquidity of the financial system and influence short-term interest rates, plays a prominent role in maintaining monetary stability.

1.13 In addition to the Secured Lending Facility (SLF), the Bank also uses Repurchase Agreements (Repos) to manage short-term and overnight liquidity fluctuations in the banking system.

1.14 The Bank incorporates data on fiscal and other policies of the Government in the design of a monetary policy framework and its implementation strategy in order to ensure macroeconomic stability. Therefore, whenever necessary, monetary policy

may need to be restrictive in order to counteract expansionary fiscal and wage policies that may erode monetary stability and, therefore, the nation's prospects for sustainable economic development. The broad framework of monetary policy is presented to the public in the annual *Monetary Policy Statement*.

Banking Services to the Government and Commercial Banks

1.15 The Bank serves as the banker to the Government, commercial banks as well as certain other institutions, and has provided a payment, clearing and settlement system for the financial sector. In this regard, the Bank has promoted, coordinated and successfully implemented a programme that enhances the efficiency and security of the payments system. It is also a lender of last resort to the financial institutions under its supervisory purview.

Implementing the Banking Act and Regulations

Supervision and regulation of financial institutions are necessary for confidence and stability

1.16 Through ongoing banking supervision and regulatory activities, the Bank seeks to achieve a sound and stable financial system. Accordingly, the Bank ensures that the mechanisms for sustaining the safety and soundness of licensed financial institutions are appropriate and that the institutions are managed in a prudent and safe manner. To that end, the Bank enforces prudential standards with respect to capital adequacy, liquidity, asset quality and corporate governance of the banks.

1.17 In addition to its focus on the safety and soundness of licensed financial institutions, the Bank is responsible for ensuring that banks maintain high professional standards in their operations in order to provide efficient customer service in a transparent manner. The Bank also has a surveillance responsibility with regard to breaches of the Banking Act by the public, especially in the form of activities that involve unauthorised deposit taking and use of banking names.

The Bank also has responsibility for anti-money laundering policy and regulation of international financial services

1.18 Under the provisions of the Banking Act, the Bank has specific responsibilities relating to money laundering. Accordingly, banks are required to adhere to 'know your customer' provisions when opening accounts, retain appropriate records, report suspicious activities and cooperate fully with law enforcement agencies in an effort to combat financial crimes and, in particular, money laundering.

1.19 The Bank is also responsible for the regulation and supervision of the International Financial Services Centre (IFSC) entities as well as the administration of the Collective Investment Undertakings (CIU) Act (CAP56:09).

1.20 The Bank monitors commercial bank compliance with primary reserve requirements and ensures that clearing and settlement activities are conducted safely and efficiently. As the volume and value of financial transactions managed by the financial system increases, and Botswana's linkages with international financial markets expand, the Bank has to guard against systemic risks that may arise. It is for this reason that the Bank continually collaborates with private sector institutions, international organisations and the Government in introducing improvements to the safety and efficiency of the payments system.

Implementing Exchange Rate Policy

1.21 The Bank acts as the Government's agent in implementing the exchange rate policy. Under the Bank of Botswana Act, the President, on the recommendation of the Minister of Finance and Development Planning, and after consultation with the Bank, sets the framework for the determination of the external value of the Pula. At present, the Pula is pegged to a basket of currencies comprising the South African rand and the Special Drawing Right (SDR - the unit of account of the International Monetary Fund). Based on the basket, the Bank calculates the exchange rate for each business day, and quotes the buying and selling rates for major international currencies to the banks. The Bank monitors the Pula exchange rate developments regularly with a view to advising the Government on maintaining export price competitiveness of domestically produced goods.

Managing Foreign Exchange Reserves

Foreign exchange reserves are managed to meet specific objectives

1.22 As Botswana's foreign exchange reserves have continued to grow, the Bank has subdivided the reserves into two portfolios to meet different objectives. A large proportion of the reserves is invested in long-term assets (Pula Fund) with a view to maximising long-term return, while the remainder comprises the Liquidity Portfolio, which is invested in money market instruments and short-term bonds.

Advice on Economic Policy, Provision of Statistics and Public Education

The Bank serves as advisor to Government

1.23 In addition to its responsibilities of formulating and implementing monetary policy, the Bank serves as economic and financial advisor to the Government on a wide range of issues. These include exchange rate policy, financial sector development, borrowing, taxation, industrial development and trade.

1.24 The Bank conducts annual briefings on economic trends and publishes economic and financial statistics and a research bulletin. The Bank has also formulated and is implementing a public education programme on banking and financial matters.

Meeting the Needs for Banknotes and Coin

The Bank is the sole supplier of notes and coin

1.25 The availability of a safe and convenient currency is essential for an efficient payments system. For this reason, the Bank routinely ensures that there is an adequate supply of high quality notes and coin in circulation by withdrawing soiled and damaged currency and replacing it with new notes and coin. The Bank maintains stringent standards in the design and production of both notes and coin to ensure their acceptance as a medium of exchange and to deter counterfeiting and other forms of debasement.

2. REPORT ON THE BANK'S OPERATIONS

Introduction

2.1 This section highlights key developments relating to the Bank's functions during 2004.

External Relations

The Bank continued to enjoy good relationships with regional and international organisations

2.2 The Bank continued to enjoy good relationships with regional and international organisations in 2004, during which period it attended and participated in seminars, workshops and conferences hosted by international institutions. Such conferences and seminars included the SADC Committee of Central Bank Governors, the Association of African Central Banks, the Bank for International Settlements, the International Monetary Fund (IMF) and the World Bank. The Bank enjoyed continued assistance from the IMF through long-term regional advisors, short-term technical assistance and staff placements. As usual, the Bank held annual economic briefings for a range of stakeholders, including the media, senior Government officials, representatives of the private and parastatal sectors and diplomats.

Management and Administration of the Bank

2.3 The Bank's authorised establishment was unchanged at 559 positions, with 535 occupied positions and 22 vacancies at the end of the year. Of the occupied positions, 14 were held by staff members on various long-term training programmes at local, regional and overseas universities. In addition, a large number of staff took part in various short term training programmes during the year.

Voluntary HIV/AIDS testing exercise for staff conducted successfully

2.4 The Staff Health Clinic continued to provide primary health care and to assist in the implementation of the HIV/AIDS in the Workplace programme, which focuses on promoting awareness of the HIV/AIDS infection and associated dangers, and developing a culture of tolerance and combating the stigma of HIV/AIDS. To this end, both educational and promotional activities were carried out, including a successful voluntary HIV/AIDS testing exercise for staff, conducted by Tebelopele Voluntary Counselling and Testing Centre. The challenge for the Bank is to continue to support those affected by HIV/AIDS in order for all to benefit from improved quality of life, thereby sustaining a respectable level of productivity.

The Bank produced a number of publications during the year

2.5 The Bank produced a number of publications during the year, including the 2003 *Annual Report*, the 2003 *Banking Supervision Annual Report*, the 2004 *Monetary Policy Statement (MPS)* and its Mid-Year Review, the *Research Bulletin* and the monthly *Botswana Financial Statistics.*

Public initiatives were sustained

2.6 The Bank undertook numerous public relations activities and maintained close relations with the media. It also undertook community service programmes through the Donations Advisory Group; financial and 'in-kind' donations were made to a number of deserving charities and non-governmental organisations. As part of its Public Education Programme, the Bank participated in the Botswana Confederation of Commerce Industry and Manpower and Botswana Annual Financial Trade Fairs and various school career fairs. The Bank also produced a third booklet in the *Tsa Madi* comic series and facilitated schools visits, radio broadcasts and TV magazine programmes.

2.7 On internal audit matters, 33 scheduled audits and three special audits were completed based on risk-based auditing, and the reports were rated according to the significance of the findings. The audits provide a means to continuously assess internal controls and improve ways of communicating findings while ensuring

that the Departments and Divisions achieve their objectives in the most efficient manner.

Monetary Policy Implementation

2.8 The Monetary Policy Committee met six times in 2004 and there was no change in interest rates, indicating maintenance of a tight policy stance. This stance was necessitated by the desire to attain the inflation objective of 4 – 7 percent, as announced in the 2004 *Monetary Policy Statement*, in a period during which there were upside risks to inflation as a result of the devaluation of the Pula in February 2004, substantial government salary increases, upward adjustment of some administered prices and rising international oil prices.

Restrictive monetary policy stance maintained

2.9 To enhance the capacity to undertake economic analysis in support of policy formulation, the Bank continued to work on developing an inflation model for Botswana, and considerable progress has been made with the assistance of an IMF-sponsored technical assistance mission comprising staff of the Czech National Bank. A near-term forecasting framework was finalised, while development of a core model for medium-term forecasting was initiated towards the end of the year. Work on a biannual business expectations survey progressed well with the first report produced towards the end of 2004; going forward, this should provide timely and substantive information on the real sector.

The Bank continued to work on developing an inflation model for Botswana

2.10 With respect to statistics, the implementation of the recommendations of the August 2003 IMF technical assistance mission on monetary statistics is continuing. A follow-up mission was hosted during the year and laid the groundwork for introducing an expanded depository corporations survey in 2005.

The implementation of the recommendations to improve monetary statistics continued

Reserve Management

2.11 The Management conducted a review of reserve management policies and guidelines and these were approved by the Board in November 2004. The principles underlying the Bank's reserve management policies were reaffirmed, but some adjustments were made to portfolio sizes and asset allocations.

Board approves reserve management policies and guidelines

Domestic Market Operations

2.12 In November 2004, the Bank introduced 14-day Bank of Botswana Certificates (BoBCs) to increase the efficiency of monetary policy implementation. The 14-day and 91-day BoBCs are auctioned on a weekly basis to market participants; the supply of the 91-day paper was gradually reduced, as the market participants accepted the new 14-day instrument, which is expected to play a progressively more important role in the Bank's monetary operations.

The Bank introduced 14-day Bank of Botswana Certificates

Banking, Currency and Payments System Issues

2.13 The National Clearance and Settlement System (NCSS) Regulations were finalised, as a result of which the NCSS Act came into force on March 1, 2005. Agreement was reached for the transfer of the electronic clearing house to the commercial banks; this was necessitated by the NCSS Act, which requires the separation of operational and supervisory responsibilities for clearing systems. Preparations

The National Clearance and Settlement System (NCSS) Regulations were finalised

continued for the implementation of the Real Time Gross Settlement (RTGS) system project in 2005.

The Bank experienced a problem of dye-stained banknotes

2.14 The Bank experienced a problem of dye-stained banknotes which were linked to robberies during the year. A series of measures were taken to ensure that dye-stained banknotes were removed from circulation.

2.15 Agreement has been reached on the transfer of the Letlole National Savings Certificates (LNSCs) scheme to the Botswana Savings Bank (BSB) early in 2005.

2.16 New P100 notes with improved security features were introduced towards the end of the year.

Banking Supervision

2.17 The financial condition of banks was assessed through regular bilateral and trilateral meetings, on-site examinations, risk profiling and 'early warning' management reports. There were no issues of supervisory concern with regard to banks' capital, profitability, liquidity and management.

Enterprise Banking Group (Pty) Limited was issued with a banking licence

2.18 Enterprise Banking Group (Pty) Limited was issued with a banking licence to operate in the International Financial Services Centre (IFSC). Enterprise will provide banking services to non-residents through its subsidiaries. As at December 31, 2004, there were three licensed offshore banks in the centre. Furthermore, nine companies were issued with Exemption Certificates in accordance with IFSC rules. Stanbic Investment Management Services (Pty) Limited (SIMS) was granted a licence to manage unit trusts under the CIU Act.

The total number of licensed and operating bureaux de change as at December 31, 2004 was 34.

2.19 The total number of licensed and operating bureaux de change as at December 31, 2004 was 34. On-site inspections were conducted on seven bureaux and, in general, they were found to be operating satisfactorily with no major issues of prudential concern. The new Bureaux de Change Regulations became effective during the year.

Agency Role

The Bank hosted visits by the international credit rating agencies

2.20 As agent of the Government in terms of Section 43 of the Bank of Botswana Act, the Bank hosted two annual review missions for Botswana's sovereign credit rating by the two international credit rating agencies (Standard and Poor's and Moody's Investors Service). The credit ratings, first assigned to Botswana by both agencies in 2001, were reconfirmed.

2.21 In addition, the Bank continued to act as agent for the Government in the administration of the Government Bond Programme. Debt Participation Capital Funding (DPCF) Limited, a special purpose investment company established in March 2004 to purchase from the Government the Public Service Debt Fund (PDSF) loan book, made 7 new listings.

Information Technology

Bankmaster core banking system replaced with Globus

2.22 The major IT project implemented during the year was the replacement of existing Bankmaster core banking system with Globus. Implementation work started in May 2004 and the system went live in February 2005. In addition, the SWIFT

system was successfully migrated to the SWIFTNet platform, which will be used to support the RTGS implementation.

2.23 A revamped Bank website was launched in June 2004, providing a much broader range of information about the Bank as well as economic and financial data. The website carries a range of news items and is one of the Bank's primary means of communicating with its stakeholders.

A revamped Bank website was launched

2.24 Protection of the Bank's network against viruses has been improved with the installation of a new anti-virus software engine. Software for filtering and blocking unwanted email messages, commonly referred to as junk mail or 'spam', was acquired and installed on the Bank's e-mail system. The Bank acquired and configured an alternative firewall to enhance protection against hackers.

A new anti-virus software engine was installed

Protective Services

2.25 The banking system in general, and the Bank of Botswana in particular, continued to experience attempted cheque frauds. Of particular concern to the Bank was the discovery of high quality forged Government cheques which criminals were attempting to use to withdraw large sums of money from Government accounts. The suspects were arrested and the cases are currently before the courts.

The Bank continued to experience attempted cheque frauds

In March 2004, a large number of counterfeit P100 banknotes were discovered. Investigations established that the production and circulation of the counterfeits was the work of a well organised group. After a vigorous public education drive, the problem was brought under control.

A large number of counterfeit P100 banknotes were discovered

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ANNUAL FINANCIAL STATEMENTS

2004

BANK OF BOTSWANA

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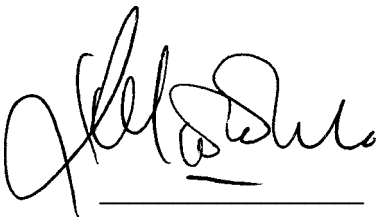
CONTENTS

The Annual Financial Statements set out on pages 29 to 47 were approved by the Board on March 22, 2005 and signed by:



Linah K. Mohohlo
Governor

Nozipho A. Mabe
Director, Accounting Department

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REPORT OF THE INDEPENDENT AUDITORS

TO THE MEMBERS OF THE BOARD OF BANK OF BOTSWANA

We have audited the accompanying financial statements of Bank of Botswana as set out on pages 29 to 47 for the year ended December 31, 2004. These financial statements are the responsibility of the Bank's Board. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with International Standards on Auditing. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by the Management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion:

(i) the Bank has kept proper books of account with which the financial statements are in agreement; and

(ii) the financial statements give a true and fair view of the state of the Bank's affairs as of December 31, 2004 and of the result of its operations, its changes in shareholder's funds, and cash flows for the year then ended, in accordance with International Financial Reporting Standards and in the manner required by the Bank of Botswana Act (CAP 55:01).

Deloitte & Touche
Certified Public Accountants

GABORONE
March 22, 2005

BALANCE SHEET

December 31, 2004

ASSETS	Notes	2004 P'000	2003 P'000
Property and Equipment	1	130 244	126 645
Foreign Exchange Reserves			
Liquidity Portfolio	2.1	3 727 352	3 910 508
Pula Fund	2.2	20 013 213	19 245 850
International Monetary Fund			
Reserve Tranche	3.1	134 084	197 373
Holdings of Special Drawing Rights	3.2	226 327	219 210
Administered Funds	3.4	99 219	144 031
Total Foreign Exchange Reserves		24 200 195	23 716 972
Government of Botswana Bonds	4	108 229	111 723
Advances to Banks	5	11 900	–
Other Assets	6	42 513	53 983
TOTAL ASSETS		24 493 081	24 009 323
LIABILITIES			
Notes and Coin in Circulation	7	910 858	817 995
Bank of Botswana Certificates	8	9 649 272	8 739 346
Deposits	9	1 684 555	1 599 776
Allocation of Special Drawing Rights (IMF)	3.3	28 584	28 379
Liabilities to Government (IMF Reserve Tranche)	10	134 084	197 373
Dividend to Government	11	97 025	188 750
Other Liabilities	12	26 370	26 774
Total Liabilities		12 530 748	11 598 393
SHAREHOLDER'S FUNDS			
Paid-up Capital	13	25 000	25 000
Government Investment Account			
Pula Fund and Liquidity Portfolio		8 936 740	9 680 966
Currency Revaluation Reserve		129 893	153 138
Market Revaluation Reserve		1 270 700	951 826
General Reserve	14	1 600 000	1 600 000
Total Shareholder's Funds		11 962 333	12 410 930
TOTAL LIABILITIES AND SHAREHOLDER'S FUNDS		24 493 081	24 009 323
FOREIGN EXCHANGE RESERVES IN US DOLLARS[1]		5 660 426	5 338 690
FOREIGN EXCHANGE RESERVES IN SDR[2]		3 700 210	3 642 927

Note: Bid (2003-mid) rates of exchange used at year-end

[1]	Pula/United States dollar	0.2339	0.2251
[2]	Pula/SDR	0.1529	0.1536

INCOME STATEMENT

Year ended December 31, 2004

	Notes	2004 P'000	2003 P'000
INCOME			
Interest – Foreign exchange reserves		634 184	719 686
Interest – Debt Participation Capital Funding Limited Loan	23	19 989	–
Interest – Government of Botswana Bonds		10 996	8 626
Net market gains on disposal of securities		439 742	21 284
Dividends		171 156	151 715
Commissions		4 625	5 159
Unrealised currency revaluation gains – Liquidity Portfolio	15	6 872	9 758
Other income		9 263	5 704
		1 296 827	921 932
EXPENSES			
Interest	16	1 174 385	1 237 173
Administration costs		164 868	131 751
Realised currency revaluation losses	15	341 837	1 778 989
Depreciation		11 604	11 488
Unrealised market revaluation losses – Liquidity Portfolio		8 844	20 459
		1 701 538	3 179 860
NET LOSS FOR THE YEAR		(404 711)	(2 257 928)
TRANSFER FROM CURRENCY REVALUATION RESERVE	15	338 065	1 766 708
NET LOSS BEFORE TRANSFER FROM GOVERNMENT INVESTMENT ACCOUNT		(66 646)	(491 220)
TRANSFER FROM GOVERNMENT INVESTMENT ACCOUNT		454 746	1 246 220
NET INCOME AVAILABLE FOR DISTRIBUTION		388 100	755 000
APPROPRIATIONS			
DIVIDEND TO GOVERNMENT FROM PULA FUND		(388 100)	(755 000)

CASH FLOW STATEMENT

Year ended December 31, 2004

	Notes	2004	2003
		P'000	P'000
OPERATING ACTIVITIES			
Cash generated by operations	18	871 845	1 063 542
INVESTING ACTIVITIES			
(Net foreign investments purchased)/Net proceeds from disposal of foreign investments		(81 584)	4 210 781
Loan to Debt Participation Capital Funding Limited		(800 000)	–
Loan Repayment by Debt Participation Capital Funding Limited		800 000	–
Purchase of Government of Botswana Bonds		–	(101 903)
Proceeds from disposal of property and equipment		404	215
Purchase of property and equipment	1	(16 107)	(11 628)
NET CASH (USED IN)/FROM INVESTING ACTIVITIES		(97 287)	4 097 465
FINANCING ACTIVITIES			
Dividend to Government	11	(479 825)	(823 475)
Government Withdrawals		(387 596)	(4 396 452)
NET CASH USED IN FINANCING ACTIVITIES		(867 421)	(5 219 927)
NET INCREASE IN CURRENCY IN CIRCULATION		(92 863)	(58 920)
CURRENCY IN CIRCULATION AT THE BEGINNING OF THE YEAR		(817 995)	(759 075)
CURRENCY IN CIRCULATION AT THE END OF THE YEAR		(910 858)	(817 995)

STATEMENT OF CHANGES IN SHAREHOLDER'S FUNDS

Year ended December 31, 2004

	Paid-up Share Capital	Currency Revaluation Reserve	Market Revaluation Reserve	General Reserve
	P'000	P'000	P'000	P'000
Balance at January 1, 2003	25 000	2 449 842	–	1 600 000
Unrealised currency losses for the year	–	(1 767 738)	–	–
Unrealised market gains for the year	–	–	1 573 082	–
Transfers to/(from) Government Investment Account:				
Unrealised market gains for the year	–	–	(621 256)	–
Unrealised currency losses for the year	–	1 237 742	–	–
Government withdrawals	–	–	–	–
Net (losses)/gains not recognised in the Income Statement for the year	–	(529 996)	951 826	–
Net loss for the year	–	–	–	–
Transfer from Currency Revaluation Reserve	–	(1 766 708)	–	–
Dividend to Government from Pula Fund	–	–	–	–
Transfers to/(from) the Income Statement for the year:				
Deficit of Government Pula Fund income over Pula Fund Dividend	–	–	–	–
To cover residual deficit	–	–	–	–
Balance at December 31, 2003 as previously stated	25 000	153 138	951 826	1 600 000
Prior year adjustments resulting from changes in accounting policies	–	(7 975)	(28 667)	–
Balance at December 31, 2003 as restated	25 000	145 163	923 159	1 600 000
Transfer to Income Statement of currency gains realised on repayment of loan by the IMF's Poverty Reduction & Growth Facility (PRGF) Administered Fund	–	(17 229)	–	–
Unrealised currency gains for the year	–	373 309	–	–
Net unrealised market gains for the year	–	–	427 730	–
Transfers to/(from) Government Investment Account:				
Unrealised market gains for the year	–	–	(80 189)	–
Unrealised currency gains for the year	–	(33 285)	–	–
Government withdrawals	–	–	–	–
Net gains/(losses) not recognised in the Income Statement for the year	–	322 795	347 541	–
Net loss for the year before realised currency gains on the IMF's PRGF Administered Fund loan repayment	–	–	–	–
Currency gains realised on loan repayment by the IMF's PRGF Administered Fund	–	–	–	–
Transfer from Currency Revaluation Reserve	–	(338 065)	–	–
Dividend to Government from Pula Fund	–	–	–	–
Transfers to/(from) the Income Statement for the year:				
Deficit of Government Pula Fund Income over Pula Fund Dividend	–	–	–	–
To cover residual deficit	–	–	–	–
Balance at December 31, 2004	25 000	129 893	1 270 700	1 600 000

1. The Government Investment Account, which represents the Government's share of the Pula Fund and the Liquidity Portfolio, was established on January 1, 1997.
2. The dividend to the Government of P388 100 000 for the year was made from the Government's capital investment in the Pula Fund.

Government Investment Account P'000	Accumulated Profit P'000	Total P'000	
15 940 124	–	20 014 966	**Balance at January 1, 2003**
–	–	(1 767 738)	Unrealised currency losses for the year
–	–	1 573 082	Unrealised market gains for the year
			Transfers to/(from) Government Investment Account:
621 256	–	–	Unrealised market gains for the year
(1 237 742)	–	–	Unrealised currency losses for the year
(4 396 452)	–	(4 396 452)	Government withdrawals
(5 012 938)	–	(4 591 108)	**Net (losses)/gains not recognised in the Income Statement for the year**
–	(2 257 928)	(2 257 928)	Net loss for the year
–	1 766 708	–	Transfer from Currency Revaluation Reserve
–	(755 000)	(755 000)	Dividend to Government from Pula Fund
			Transfers to/(from) the Income Statement for the year:
(494 888)	494 888	–	Deficit of Government Pula Fund income over Pula Fund Dividend
(751 332)	751 332	–	To cover residual deficit
9 680 966	–	12 410 930	**Balance at December 31, 2003 as previously stated**
(15 358)	–	(52 000)	Prior year adjustments resulting from changes in accounting policies
9 665 608	–	12 358 930	**Balance at December 31, 2003 as restated**
–	–	(17 229)	Transfer to Income Statement of currency gains realised on repayment of loan by the IMF's Poverty Reduction & Growth Facility (PRGF) Administered Fund
–	–	373 309	Unrealised currency gains for the year
–	–	427 730	Net unrealised market gains for the year
			Transfers to/(from) Government Investment Account:
80 189	–	–	Unrealised market gains for the year
33 285	–	–	Unrealised currency gains for the year
(387 596)	–	(387 596)	Government withdrawals
(274 122)	–	396 214	**Net gains/(losses) not recognised in the Income Statement for the year**
–	(421 940)	(421 940)	Net loss for the year before realised currency gains on the IMF's PRGF Administered Fund loan repayment
–	17 229	17 229	Currency gains realised on loan repayment by the IMF's PRGF Administered Fund
–	338 065	–	Transfer from Currency Revaluation Reserve
–	(388 100)	(388 100)	Dividend to Government from Pula Fund
			Transfers to/(from) the Income Statement for the year:
(94 210)	94 210	–	Deficit of Government Pula Fund Income over Pula Fund Dividend
(360 536)	360 536	–	To cover residual deficit
8 936 740	–	11 962 333	**Balance at December 31, 2004**

ACCOUNTING POLICIES

December 31, 2004

BASIS OF PRESENTATION OF FINANCIAL STATEMENTS

The financial statements are prepared on the historical cost basis as modified to include the revaluation of investments in domestic and foreign assets, liabilities, and the result of the activities of the Pula Fund. The financial statements comply with International Financial Reporting Standards.

CHANGES IN ACCOUNTING POLICIES

In terms of International Accounting Standard No. 39 'Financial Instruments: Recognition and Measurement', investments held at year end are required to be valued at bid market prices and liabilities held, at offer/ask market prices. In accordance with this standard, resultant market values were translated using the bid rates of exchange, for assets held, and the offer/ask exchange rates for liabilities held. Up until December 31, 2003, all investments and liabilities were valued at middle market prices, and the resultant market values were translated to Pula using the middle rates of exchange at the balance sheet date, as required in terms of International Accounting Standard No. 21 'Effects of Changes in Foreign Exchange Rates'. The effect on the Currency Revaluation Reserve, the Market Revaluation Reserve and the Government Investment Account as at December 31, 2003 as a result of the changes in accounting policies referred to above is as follows:

	P'000
Currency Revaluation Reserve:	
Increase in Pula Fund unrealised currency losses	(10 652)
Increase in International Monetary Fund (IMF) reserves unrealised currency losses	(1 239)
	(11 891)
Transfer to Government Investment Account	3 916
Net decrease at December 31, 2003	(7 975)
Market Revaluation Reserve:	
Decrease in unrealised market gains	(40 109)
Transfer to Government Investment Account	11 442
Net decrease at December 31, 2003	(28 667)
Government Investment Account:	
Transfer to Currency Revaluation Reserve	(3 916)
Transfer to Market Revaluation Reserve	(11 442)
Decrease at December 31, 2003	(15 358)

The cumulative impact of the changes in accounting policies on the income statement as at December 31, 2003 of P413 000 was adjusted during the current year.

The bid rates of exchange for the Pula/United States dollar and the Pula/SDR as at December 31, 2003 were 0.2254 and 0.1538, respectively.

ACCOUNTING POLICIES (continued)

FINANCIAL INSTRUMENTS

General

Financial instruments carried on the balance sheet include all assets and liabilities, including derivative instruments, but exclude property and equipment, and notes and coin in circulation.

Short-term Investments (Liquidity Portfolio)

The Bank has designated the Liquidity Portfolio as a fund in which money market instruments and bonds are invested to facilitate payments for regular transactions.

Securities invested in this portfolio are initially recognised at cost and are subsequently remeasured at market value based on bid prices. All related realised and unrealised gains and losses are taken to the income statement.

All purchases and sales of investment securities in the portfolio are recognised at trade date, which is the date the Bank commits to purchase or sell the investments. All other purchases and sales are recognised as derivative forward transactions until settlement.

Long-term Investments (Pula Fund)

This is a long-term fund intended to maximise returns and is invested in foreign financial instruments with a long-term duration. These investments, which may be sold in response to needs for liquidity, changes in interest rates, exchange rates, etc. are classified as available-for-sale. These securities are initially recognised at cost (which includes transaction costs) and are subsequently remeasured at market value, based on bid prices.

Unrealised gains and losses arising from changes in the market value of the instruments classified as available-for-sale are recognised in the Currency Revaluation Reserve or the Market Revaluation Reserve as may be appropriate. When these instruments are disposed of or impaired, the related accumulated market value adjustments are included in the income statement as gains and losses from investment securities.

All purchases and sales of investment securities in the fund are recognised at trade date, which is the date that the Bank commits to purchase or sell the investments. All other purchases and sales are recognised as derivative forward transactions until settlement.

Derivative Instruments

Derivative financial instruments are recognised in the balance sheet at cost (including transaction costs) and are subsequently remeasured at market value, based on bid prices for assets held or liabilities to be issued, and ask/offer prices for assets to be acquired or liabilities held. The treatment of market value movements in derivative instruments depends on whether they are designated as part of the Pula Fund or the Liquidity Portfolio.

FOREIGN CURRENCY ACTIVITIES

During the year ended December 31, 2004, transactions denominated in foreign currencies were translated to Pula using the middle rates of exchange at the transaction date. With effect from December 31, 2004, transactions denominated in foreign currencies will be translated using bid and offer rates of exchange, as described in the Changes in Accounting Policies note above.

ACCOUNTING POLICIES (continued)

All monetary assets and liabilities denominated in foreign currencies are translated to Pula using the bid and offer rates of exchange, respectively, at the close of the financial year. All exchange gains/losses realised on disposal of instruments and unrealised exchange gains/losses on the short-term investments are taken to the income statement. However, all those gains and losses relating to disposals whose proceeds are reinvested in foreign assets, and unrealised gains/losses on short-term investments, are appropriated to the Currency Revaluation Reserve.

BANK OF BOTSWANA CERTIFICATES

As one of its tools for maintaining monetary stability in the economy, the Bank of Botswana issues its own paper, Bank of Botswana Certificates (BoBCs), to absorb excess liquidity in the market and thereby to influence the rate of monetary growth, and also interest rates. BoBCs are issued at a discount to counterparties.

The Bank's liability in respect of BoBCs is stated at market value, based on offer prices, with movements in matured and unmatured discount recognised in the income statement.

GOVERNMENT OF BOTSWANA BONDS

The Bank acquired Government of Botswana Bonds for purposes of facilitating orderly trading in the local bond market. The bonds, which may be sold in response to needs to intervene in the market, are classified as available-for-sale securities.

The bonds are initially recognised at cost and are subsequently remeasured at market value, based on bid prices. All unrealised gains and losses arising from changes in the market value are recognised in the Market Revaluation Reserve. When these instruments are disposed of or impaired, the related accumulated market value adjustments are included in the income statement as gains and losses from Government of Botswana Bonds.

All regular purchases and sales of bonds are recognised at trade date, which is the date that the Bank commits itself to purchase or sell the bonds.

SECURED LENDING FACILITY

Under the Secured Lending Facility (SLF), the Bank provides emergency and intermittent funding to solvent financial institutions, intended to bridge overnight liquidity shortages. The advances are secured by Government of Botswana Bonds and Bank of Botswana Certificates (BoBCs), valued at market prices on the date of the transaction. The Bank has the right to call for additional collateral, should the value of the security decline during the tenure of the facility. Interest earned on the advances is credited to the income statement while advances outstanding as at the balance sheet date are recorded under the heading 'Advances to Banks'.

REPURCHASE AND REVERSE REPURCHASE AGREEMENTS

This facility is one of the mechanisms designed to deal with short-term liquidity fluctuations in the domestic money market. It is available to solvent institutions licensed and supervised by the Bank.

Securities purchased under agreement to resell (Repurchase Agreement) are recorded as funds receivable under the heading 'Advances to Banks'.

ACCOUNTING POLICIES (continued)

Only high quality, marketable and freely transferable paper with a minimum amount of risk is acceptable as security at the discretion of the Bank. Government and Government guaranteed securities of any maturity and other eligible paper with a remaining life of 184 days or less are also acceptable as security.

Securities sold under agreement to repurchase (Reverse Repurchase Agreement) are disclosed as deposits received.

The term of the repurchase agreement and reverse repurchase agreement varies from overnight to one month, depending on the liquidity conditions in the domestic market.

Interest earned by the Bank on repurchase agreements is credited to the income statement while interest paid by the Bank on reverse repurchase agreements is charged to the income statement.

ASSETS, LIABILITIES AND PROVISIONS RECOGNITION

Assets

Assets are recognised when the Bank obtains control of a resource as a result of past events, and from which future economic benefits are expected to flow to the Bank.

Contingent Assets

The Bank discloses a contingent asset arising from past events where, it is highly likely that economic benefits will flow from it, but this will only be confirmed by the occurrence or non-occurrence of one or more uncertain future events outside the control of the Bank.

Liabilities and Provisions

The Bank recognises liabilities (including provisions) when:

(i) it has a present legal obligation resulting from past events;

(ii) it is probable that an outflow of resources embodying economic benefits will be required to settle this obligation; and

(iii) a reliable estimate of the amount of the obligation can be made.

Derecognition of Assets and Liabilities

The Bank derecognises a financial asset when it loses control over the contractual rights that comprise the asset and transfers substantially all the risks and benefits associated with the asset. This arises when the rights are realised, expire or are surrendered. A financial liability is derecognised when it is legally discharged.

INCOME AND EXPENSE RECOGNITION

Interest income and expense and dividend income are recognised in the income statement on an accrual basis.

ACCOUNTING POLICIES (continued)

Offsetting Financial Instruments

The Bank offsets financial assets and liabilities and reports the net balance in the balance sheet where:

(i) there is a legally enforceable right to set off;

(ii) there is an intention to settle on a net basis or to realise the asset and settle the liability simultaneously;

(iii) the maturity date for the financial assets and liability is the same; and

(iv) the financial asset and liability is denominated in the same currency.

In view of the fact that the Bank values its foreign exchange investments on a portfolio basis, assets and liabilities within each portfolio have been set off.

General Reserve

Under Section 7(1) of the Bank of Botswana Act, (CAP 55:01), the Bank of Botswana is required to establish and maintain a General Reserve sufficient to ensure the sustainability of future operations of the Bank. The Bank may transfer to the General Reserve funds from other reserves, which it maintains, for the purposes of maintaining the required level of the General Reserve.

Currency Revaluation Reserve

Any changes in the valuation, in terms of Pula, of the Bank's assets and liabilities in holdings of Special Drawing Rights and foreign currencies as a result of any change in the values of exchange rates of Special Drawing Rights or foreign currencies are transferred to the Currency Revaluation Reserve.

The proportion directly attributable to the Government Investment Account is transferred to such investment account.

Market Revaluation Reserve

Any changes in the value of the Bank's long-term investments held in foreign currencies as a result of any change in the market values of such investments are transferred to the Market Revaluation Reserve.

The proportion directly attributable to the Government Investment Account is transferred to such investment account.

Property and Equipment and Depreciation

Property and equipment are stated at cost less related accumulated depreciation.

No depreciation is provided on land. All other property and equipment are depreciated on a straight line basis at the following annual rates:-

	Percent
Buildings	2.50
Furniture, fixtures and equipment	20–50
Computer hardware	33.33
Computer software	100.00
Motor vehicles – Commercial	25.00
– Bullion Truck	5.00

ACCOUNTING POLICIES (continued)

RETIREMENT BENEFITS

Pension benefits are provided for employees through the Bank of Botswana Defined Contribution Staff Pension Fund, which is governed in terms of the Pension and Provident Funds Act (CAP 27:03). Contributions are at the rate of 21.5 percent of pensionable emoluments of which pensionable employees of the Bank pay 4 percent. Other than the contributions made, the Bank has no further commitments or obligations to this Fund.

FINANCE LEASES

The Bank classifies leases of land, property and equipment where it assumes substantially all the benefits and risks of ownership as finance leases. Finance leases are capitalised at the estimated net present value of the underlying lease payments. The Bank allocates each lease payment between the liability and finance charges to achieve a constant periodic rate of interest on the finance balances outstanding for each period. The interest element of the finance charges is charged to the income statement over the lease period. The land, property and equipment acquired under finance leases are depreciated over the useful lives of the assets, on the basis consistent with similar property and equipment.

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

December 31, 2004

1. PROPERTY AND EQUIPMENT

	Free-hold Land P'000	Lease-hold Land P'000	Buildings P'000	Capital Works in Progress P'000	Other Assets P'000	Total P'000
Cost or Valuation						
Balance at the beginning of the year	607	3 486	129 556	1 347	64 873	199 869
Additions	–	–	–	5 499	10 608	16 107
Disposals	–	–	(1 128)	–	(7 249)	(8 377)
Transfers	–	–	261	(261)	–	–
Balance at the end of the year	607	3 486	128 689	6 585	68 232	207 599
Accumulated Depreciation						
Balance at the beginning of the year	–	–	27 789	–	45 435	73 224
Charge for the year	–	–	3 231	–	8 373	11 604
Disposals	–	–	(331)	–	(7 142)	(7 473)
Balance at the end of the year	–	–	30 689	–	46 666	77 355
Net book value at December 31, 2004	607	3 486	98 000	6 585	21 566	130 244
Net book value at December 31, 2003	607	3 486	101 767	1 347	19 438	126 645

2. FOREIGN EXCHANGE RESERVES

	2004 P'000	2003 P'000
2.1 Liquidity Portfolio		
Bonds	2 059 241	1 166 785
Amounts due from Pula Fund	417 235	782 254
Net Payables	–	(720)
Cash and Cash Equivalents	1 250 876	1 962 189
	3 727 352	3 910 508
2.2 Pula Fund		
Equities	8 445 392	8 356 889
Bonds	11 068 919	10 008 682
Amounts due to Liquidity Portfolio	(417 235)	(782 254)
Net Payables	(70 566)	(42 466)
Cash and Cash Equivalents	986 703	1 704 999
	20 013 213	19 245 850

NOTES TO THE ANNUAL FINANCIAL STATEMENTS (continued)

Pula Fund Balance Sheet	**2004 P'000**	**2003 P'000**
Capital Employed		
Government	8 892 951	9 506 781
Bank of Botswana	11 120 262	9 739 069
	20 013 213	19 245 850
Employment of Capital		
Investments	20 013 213	19 245 850
Investments expressed in US dollars ('000)	4 681 091	4 332 241
Investments expressed in SDR ('000)	3 060 020	2 956 163
Pula Fund Income Statement		
Income		
Interest and dividends	665 291	685 904
Realised market gains	446 027	–
Sundry income	19	49
	1 111 337	685 953
Expenses		
Realised currency revaluation losses	(356 836)	(1 177 036)
Net realised market losses	–	(11 878)
Administration charges	(60 211)	(53 668)
	(417 047)	(1 242 582)
Net Income/(Loss) for the year	694 290	(556 629)
Transfer from Currency Revaluation Reserve	356 836	1 177 036
Net income before transfer from Government Investment Account	1 051 126	620 407
Transfer from Government Investment Account	94 210	494 888
Net income available for distribution	1 145 336	1 115 295
Appropriations		
Dividend to Government	(388 100)	(755 000)
Bank of Botswana's share of net income	757 236	360 295

NOTES TO THE ANNUAL FINANCIAL STATEMENTS (continued)

	2004 P'000	2003 P'000
3. INTERNATIONAL MONETARY FUND (IMF)		
3.1 Reserve Tranche		
This asset represents the difference between Botswana's Quota in the IMF and IMF Holdings of Pula. Botswana's Quota is its membership subscription, of which at least 25 percent was paid for in foreign currencies and the balance in Pula. The holdings of Pula by the IMF, which initially were equal to 75 percent of the quota, have changed from time to time as a result of the use of Pula by the IMF in its lendings to member countries.		
Quota (SDR 63 000 000)	412 034	410 156
Less IMF Holdings of Pula	(277 950)	(212 783)
Reserve Position in IMF	134 084	197 373
The IMF Holdings of Pula are represented by a Non-Interest Bearing Note of P165 324 035 (2003 – P165 324 035) issued by the Government of Botswana in favour of the IMF, maintenance of value currency adjustments and the amount in current account held at the Bank (included in other deposits in Note 9).		
3.2 Holdings of Special Drawing Rights	226 327	219 210
The balance on the account represents the value of Special Drawing Rights allocated and purchased less utilisation to date.		
3.3 Allocation of Special Drawing Rights (IMF)		
This is the liability of the Bank to the IMF in respect of the allocation of SDRs to Botswana.	28 584	28 379
3.4 Administered Funds		
(i) Poverty Reduction & Growth Facility (PRGF) Trust	–	45 275
The amount representing the equivalent of SDR6 893 680 (and interest accrued thereon) lent on July 1, 1993 to the Poverty Reduction & Growth Facility (formerly Enhanced Structural Adjustment Facility Trust), a fund administered in trust by the IMF, which was repaid in March 2004.		
(ii) Poverty Reduction & Growth Facility/Heavily Indebted Poor Countries (PRGF/HIPC) Trust	99 219	98 756
The amount represents SDR 15 065 760 (and interest accrued thereon) lent on August 31, 2002, to the Poverty Reduction & Growth Facility/Heavily Indebted Poor Countries Trust Fund, a fund administered in trust by the IMF.		
	99 219	144 031

NOTES TO THE ANNUAL FINANCIAL STATEMENTS (continued)

	2004 P'000	2003 P'000
4. GOVERNMENT OF BOTSWANA BONDS		
(i) Purchased on May 26, 2003, maturing on June 1, 2005, bearing interest at the rate of 10.75 percent, receivable semi-annually in arrears:		
Market value	19 935	20 125
Interest accrued	179	179
	20 114	20 304
(ii) Purchased on March 31, 2003, maturing on March 1, 2008, bearing interest at the rate of 10.25 percent, receivable semi-annually in arrears:		
Market value	85 166	88 471
Interest accrued	2 949	2 948
	88 115	91 419
	108 229	111 723
5. ADVANCES TO BANKS		
Secured Lending Facility	11 900	–
6. OTHER ASSETS		
Staff Loans and Advances	37 743	30 022
Uncleared Effects	–	16 496
Prepayments	1 059	2 244
Other	3 711	5 221
	42 513	53 983
7. NOTES AND COIN IN CIRCULATION		
Notes	854 062	766 382
Coin	56 796	51 613
	910 858	817 995
Notes and coin in circulation held by the Bank as cash in hand at the end of the financial year have been netted off against the liability for notes and coin in circulation to reflect the net liability to the public.		
8. BANK OF BOTSWANA CERTIFICATES		
Face Value	9 755 220	8 870 460
Unmatured Discount	(105 948)	(131 114)
Market Value	9 649 272	8 739 346
Bank of Botswana Certificates are issued at various short-term maturity dates and discount rates.		

NOTES TO THE ANNUAL FINANCIAL STATEMENTS (continued)

	2004 P'000	2003 P'000
9. DEPOSITS		
Government	481 230	848 503
Bankers	350 977	520 347
Other	852 348	230 926
	1 684 555	1 599 776

These represent current accounts lodged by Government, commercial banks, parastatal bodies and others, which are repayable on demand and are interest free.

The Government balance includes P2 043 479 (2003 – P2 139 258) in respect of the Letlole National Savings Certificate Scheme, which was launched by the Bank on behalf of the Government in 1999 as a means of encouraging savings.

This is analysed as follows:

Issues of National Savings Certificates	5 551	4 769
Redemptions	(3 517)	(2 623)
Net issues	2 034	2 146
Amounts awaiting collection from/ (by) agents	9	(7)
Amount due to Government on behalf of the Scheme	2 043	2 139

10. LIABILITIES TO GOVERNMENT (IMF RESERVE TRANCHE)	134 084	197 373

This balance represents the Bank's liability to the Government in respect of the Reserve Tranche position in the IMF (Note 3.1)

11. DIVIDEND TO GOVERNMENT

Balance due at the beginning of the year	188 750	257 225
Dividend to Government from Pula Fund	388 100	755 000
Paid during the year	(479 825)	(823 475)
Balance due at the end of the year	97 025	188 750

The final instalment of the pre-set dividend of P97 025 000 unpaid at December 31, 2004 was provided for in accordance with Section 6 of the Bank of Botswana Act (CAP 55:01), which requires that all profits of the Bank be distributed to the shareholder, the Government.

12. OTHER LIABILITIES

Accounts payable	1 076	1 875
Other creditors and accruals	25 294	24 899
	26 370	26 774

NOTES TO THE ANNUAL FINANCIAL STATEMENTS (continued)

	2004 P'000	2003 P'000
13. CAPITAL		
Authorised and paid-up capital	25 000	25 000
The paid-up capital is the amount subscribed by the Government in accordance with Section 5 of the Bank of Botswana Act (CAP 55:01).		
14. GENERAL RESERVE	1 600 000	1 600 000
In the opinion of the Board, the General Reserve, taken together with other reserves which the Bank maintains, is sufficient to ensure the sustainability of future operations of the Bank.		
15. CURRENCY REVALUATION (LOSSES)/GAINS TAKEN TO INCOME STATEMENT		
Total realised losses	(341 837)	(1 778 989)
Unrealised gains – Liquidity Portfolio	6 872	9 758
Total taken to income statement	(334 965)	(1 769 231)
Appropriated to Currency Revaluation Reserve:		
Realised and reinvested in foreign assets	344 937	1 776 466
Unrealised – Liquidity Portfolio	(6 872)	(9 758)
	338 065	1 766 708
Net credited/(charged) to income statement	3 100	(2 523)
16. INTEREST EXPENSE		
Bank of Botswana Certificates (BoBCs)	1 123 103	1 182 199
Debswana Tax Holding Account	38 703	39 161
Reverse Repurchase Agreements	12 359	15 624
National Savings Certificates	220	189
	1 174 385	1 237 173
17. CASH FLOW STATEMENT		
This has been prepared under International Accounting Standard No. 7 – Cash Flow Statements (Revised 1992). The definition of cash in the Standard is not wholly appropriate to the Bank. Due to its role in the creation and withdrawal of currency in circulation, the Bank has no cash balances on its balance sheet (also see Note 7). However, it has the ability to create cash when needed.		

NOTES TO THE ANNUAL FINANCIAL STATEMENTS (continued)

	2004 P'000	2003 P'000
18. CASH GENERATED BY OPERATIONS		
Net loss for the year	(404 711)	(2 257 928)
Adjustments for:		
Unrealised exchange losses	338 065	1 766 708
Depreciation of property and equipment	11 604	11 391
Loss on disposal of property and equipment	500	15
Operating cash flows before movements in working capital	(54 542)	(479 814)
Increase in Deposits – banks and other	452 052	174 735
(Decrease)/Increase in Deposits – Government	(367 273)	244 277
Increase in Bank of Botswana Certificates	909 926	1 075 889
(Increase)/Decrease in other assets	(497)	1 720
(Decrease)/Increase in other liabilities	(67 821)	46 735
Cash generated by operations	871 845	1 063 542
19. CAPITAL COMMITMENTS		
Approved and contracted for	6 451	1 609
Approved but not contracted for	31 958	38 631
	38 409	40 240

These capital commitments will be funded from internal resources.

20. GOVERNMENT OF BOTSWANA BOND AGENCY

In accordance with Sections 45 and 46 of the Bank of Botswana Act (CAP 55:01), the Bank acts as agent of the Government for the issuance and management of the Government Bonds. An analysis of the three bonds issued is provided below:

GOVERNMENT OF BOTSWANA BONDS ISSUED AS AT DECEMBER 31, 2004 (P'000)

Bond Detail	BW 001	BW 002	BW 003	
Date of Issue	May 26, 2003	March 31 and December 1, 2003	May 6 and November 3, 2003	Total Since Inception
Date of Maturity	June 1, 2005	March 1, 2008	October 31, 2015	
Interest Rate (per annum)	10.75 percent	10.25 percent	10.25 percent	
Nominal Value	750 000	850 000	900 000	2 500 000
Net Discount	(30 401)	(21 029)	(32 571)	(84 001)
Net Proceeds	719 599	828 971	867 429	2 415 999
Interest Paid	120 938	112 750	117 875	351 563
Interest Accrued	6 719	29 042	15 375	51 136

Net proceeds realised from the issue of the bonds were invested in the Government Investment Account.

NOTES TO THE ANNUAL FINANCIAL STATEMENTS (continued)

Interest is payable on all bonds on a semi-annual basis in arrears. Total cumulative interest payments of P351 563 000 made to December 31, 2004 (2003 – P91 563 000) were funded from the Government's current account maintained with the Bank.

21. COMPARATIVES

Where necessary, comparative figures have been restated to conform with changes in presentation in the current year. The adjustments required as a result of the changes in accounting policies are reflected in the Statement of Accounting Policies and the Statement of Changes in Shareholder's Funds.

22. RISK MANAGEMENT POLICIES IN RESPECT OF FINANCIAL INSTRUMENTS

The risk management policies of the Bank regarding financial instruments are dealt with in regular reviews of the Bank's reserve management policies. The main risk areas are market, currency, credit and interest rates. The Bank invests in investment grade currencies (AA/Aa2) and above. Interest rate risk is managed by using modified duration, while credit risk is controlled by dealing with the best quality institutions or counterparties, as determined by international rating agencies.

23. RELATED PARTY TRANSACTIONS

The Bank provides several services to its shareholder, the Government, and to other Government-owned institutions. The main services during the year to December 31, 2004 were:

(i) provision of banking services, including holding of the principal accounts of the Government;

(ii) management of the Notes and Coin issue, including printing and minting of notes and coin, respectively; and

(iii) being the Government's agent in issuing of bonds.

The aggregate balances in Government and other public sector accounts are disclosed in Notes 9 to 11.

No charge is made to the Government for provision of these services, except for commissions charged on domestic foreign exchange transactions, which are included in 'Commissions' in the income statement.

During the year, the Bank lent P800 000 000 to Debt Participation Capital Funding Limited, which was fully guaranteed by the Government and was repaid in full during the same year. The Bank earned interest on the loan at the interest rate of 14.25 percent per annum. The interest income earned has been appropriately disclosed in the income statement.

The Bank also earns interest on its holding of the Government of Botswana Bonds, which is included in the income statement. Unrealised market value movements in the bonds have been included in the Market Revaluation Reserve.

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Part B

The Botswana Economy in 2004 and Theme Chapter

Bank of Botswana

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CHAPTER 1

THE BOTSWANA ECONOMY IN 2004

1. OUTPUT, EMPLOYMENT AND PRICES

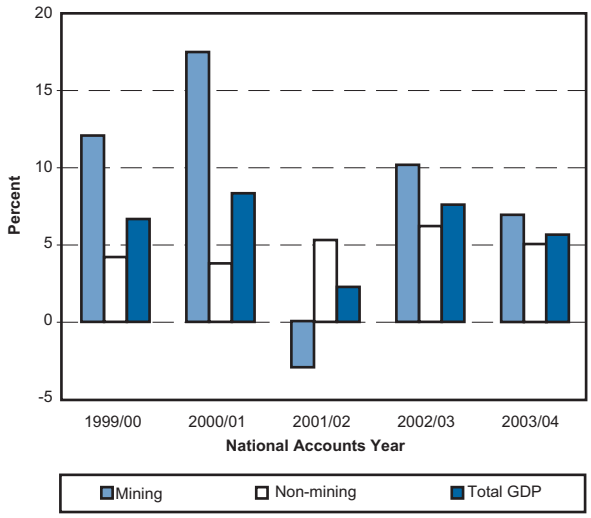
(a) National Income Accounts[1]

1.1 In 2003/04 real gross domestic product (GDP) grew by a provisional 5.7 percent, lower than the revised 7.8 percent growth in 2002/03 (Chart 1.1). Reduced growth rates were experienced in most economic sectors. The slowdown in mining growth to 6.9 percent, compared to the robust increase of 10.3 percent in 2002/03, had a significant impact on the overall growth rate. Despite the loss of momentum, mining was still the fastest growing sector and, with a 36 percent share in total output, was the major contributor to GDP during the year.

1.2 The growth of the non-mining sector slowed to 5.1 percent in 2003/04, from 6.4 percent in the previous year. When government is excluded, the growth rate for the non-mining private sector was 5.2 percent, down from 7.3 percent in 2002/03.

1.3 As a result of the increasing significance and volatility of the adjustment items, which impacts significantly on GDP growth, it is illuminating to consider the performance of value added at factor cost separately, as it is not clouded by the effects of the (sometimes large) fluctuations in the adjustment items.[2] At real factor cost, value added rose by 5 percent in 2003/04 compared with 5.6 percent in 2002/03. In the non-mining private sector, real value added at factor cost rose by 3.5 percent in 2003/04, up from 2.8 percent in the previous year.

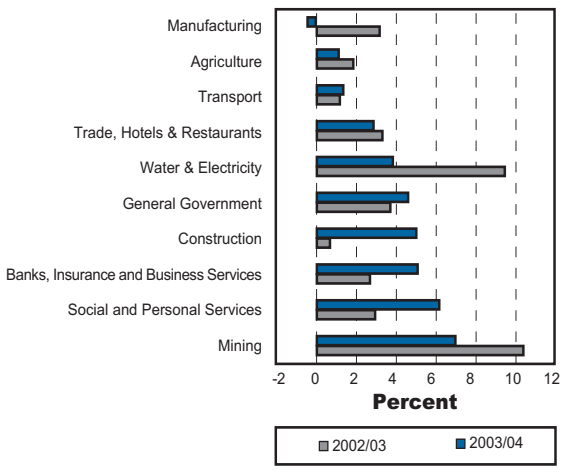
CHART 1.1: GROWTH IN REAL GROSS DOMESTIC PRODUCT



Source: Central Statistics Office

1.4 A sectoral breakdown of GDP growth in 2003/04, which shows sources of the slowdown in output during the year, is given in Chart 1.2. One of the significant dampening influences on GDP growth was manufacturing, whose output contracted marginally by 0.5 percent, reversing the modest growth of 3.1 percent in the previous

CHART 1.2: ECONOMIC GROWTH BY SECTOR



Source: Central Statistics Office

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1 The national income accounting year runs from July each year to June the following year.

2 These are taxes on imports and on products/productions and would include Southern African Customs Union (SACU) payments and value added tax proceeds, among others.

year. Sub-sectoral data suggest that this poor performance was due mainly to a substantial contraction in production of textiles and a slight reduction in the output of beverages. The recorded contraction of textiles output is, however, inconsistent with the significant growth in textile exports by value (which cannot be attributed solely to price increases, suggesting that volume effects may have played a role) and regular reports (and acknowledgement in the 2005 *Budget Speech*) that textiles exported under the United States African Growth and Opportunity Act (AGOA) increased sharply between 2003 and 2004.[3] Meat and meat products also performed relatively poorly, recording growth of 1.4 percent compared with nearly 7 percent in 2002/03, a result mainly of lower livestock throughput at the Botswana Meat Commission (BMC). Other manufactures, which might have benefited from the healthy increase in output of the construction and government sectors, were nonetheless only marginally up by 0.3 percent.

1.5 A sharp fall in the expansion of water distribution, despite a 6.6 percent increase in the consumer base, was the main explanation for the much slower output growth of water and electricity sector, down to 3.9 percent from 9.5 percent in 2002/03. The slower increase in water output was, however, partially offset by the rapid expansion in electricity generation, which was backed by fairly strong demand from the domestic and government sectors.

1.6 The trade, hotels and restaurants sector grew at 2.9 percent, down from 3.3 percent in 2002/03, largely reflecting the weak performance of the hotels and restaurants sub-sector. The sub-sector was adversely affected by a slowdown in tourism, which experienced both fewer arrivals and lower spending by tourists, partly due to the appreciation of the Pula against the US dollar (an important transacting currency). Growth in the trade sector picked up somewhat, rising from 1.9 to 3.2 percent, consistent with faster growth in consumer spending indicated elsewhere in the national accounts.

1.7 Agricultural production rose by 1.1 percent, down from an expansion of 1.9 percent in 2002/03. Growth was adversely affected by the stagnant livestock sub-sector, which was recovering from the effects of the drought of the previous year. However, a 7.9 percent increase in arable output (which reversed the 3.6 percent decline registered in 2002/03) and a modest increase in output of 'other agriculture' of 2.7 percent ensured that the sector's overall output growth remained marginally positive. Arable agriculture benefited from improved rainfall during the year.

1.8 Among the sectors that expanded more rapidly than in the previous year were social and personal services, banking, insurance and business services, construction, general government, and transport and communications. The construction sector posted the strongest gain in output growth, expanding by 4.9 percent, compared to 0.6 percent in 2002/03, although this is somewhat inconsistent with the recorded contraction in the sector's level of employment.

1.9 For banks, insurance and business services, the growth in value added of 5 percent was almost double the 2.6 percent recorded in 2002/03. Nevertheless, with interest rates remaining high, lending by banks grew more slowly than in the previous year. Reflecting this, and cost containment measures, output of the banking sub-sector rose by 6.4 percent, against 9.9 percent growth in 2003. The growth of over 11 percent in the insurance sub-sector was more robust than the previous year's 6.3 percent. The improved performance of the sub-sector resulted from a steady increase in premium income and a turnaround in global and domestic investment markets performance, while the Pula devaluation in February 2004 enhanced the local currency value of returns on offshore investments, particularly dollar-denominated portfolios.

[3] The inconsistencies may be partly explained by differences in period coverages (national accounts versus calendar year figures), as well as differences in the completeness of firm coverage in data collection surveys undertaken by various CSO Units.

However, there was a further 1.7 percent decline of the real estate and business services sub-sector.

1.10 The performance of the transport, posts and telecommunications sector was mixed, with the road and rail components activity below that of the previous year, while air transport expanded sufficiently to offset the fall in road and rail output. Posts and telecommunications reversed the previous year's decline and grew marginally by 0.4 percent. Overall, the sector grew by 1.2 percent, against 0.9 percent in 2002/03. Despite the modest growth, this sector recorded the fastest growth in employment in 2004.

1.11 The value added for general government increased by 4.6 percent in 2003/04 from 3.7 percent in 2002/03. This reflects both the increase in salaries associated with the implementation of the new unitary pay structure in April 2004 and increases in staffing, as well as depreciation associated with past increases in development spending by the Government. Value added for social and personal services also increased faster, by 6.2 percent from 2.8 percent the previous year.

1.12 Both private and government final consumption expenditure increased more rapidly in 2003/04 than in 2002/03, by 7.7 percent and 9.3 percent, in real terms, respectively. Gross fixed investment, grew at a respectable rate of 6.6 percent, to reach 25 percent of GDP, higher than the 1.5 percent growth achieved in 2002/03. As a result, gross domestic expenditure rose by 9.4 percent in real terms compared with 8.9 percent in the previous year. Import growth rebounded in 2003/04, although the expansion was modest, about 1.3 percent. While exports declined in real terms for the third consecutive year, the contraction of 4.5 percent was less than in the two preceding years.

(b) Economic Outlook for 2004/05 and 2005/06

1.13 According to the 2005 *Budget Speech*, GDP is forecast to grow by 4–5 percent in 2004/05 and 2005/06, reflecting slower growth across all sectors. Preliminary indications suggest that these projected growth rates may well be exceeded.[4] In the first half of 2004/05, mining production is estimated to have increased more rapidly than it did in the corresponding period a year earlier, with diamond production up by 14 percent, soda ash by 35 percent and coal by 20 percent. Reflecting this growth, value added in mining is estimated to have risen by 8 percent in the first quarter of 2004/05, i.e., July-September 2004. Following a difficult year for Debswana in 2004, characterised by widespread equipment failure and the disruptive strike and rains early in the year, diamond production is expected to increase more rapidly in 2005 as a result of the normalisation of the situation and continued efforts at efficiency improvements. Output from the new Mupane Gold Mine should also contribute to the growth of the sector. Provisional estimates for the first quarter of 2004/05 indicate that higher GDP growth is anticipated from construction (with growth of 31 percent), transport and communications (16 percent) and government (6 percent). While these numbers only cover the first quarter, they do indicate that perhaps the final actual GDP growth rate for the year could be somewhere higher than the projected growth rate.

1.14 The expected strong growth of the construction sector and, to a lesser extent, government sector should contribute to the growth of manufacturing, although this is not evident yet from the 2004/05 first quarter GDP data. Moreover, the rapid increase in government personal emoluments payments in both 2004/05 (due to the introduction of the unitary pay structure) and in 2005/06 (implying a further expansion of the civil service given a freeze on salaries in that year) should have a beneficial effect on the output of several sectors – the government sector itself through higher spending

[4] Although there is uncertainty on the quality of the data and, therefore, the reasonableness of the estimated growth rates.

on salaries, retail, hotels and restaurants and social and personal services through higher consumer spending, and banks, insurance and business services through increased demand for credit. The more than 12 percent increase in budgeted development spending for 2005/06 should also boost the contribution of government, manufacturing and construction sectors to GDP.

1.15 On the downside, arable agriculture will be adversely affected by the drought conditions that have prevailed throughout the country in the recent past.[5] Although livestock conditions in early 2005 were fair to good, a deterioration is expected given drought conditions in much of the country. This would affect not only output growth of the livestock farming sub-sector, but also the BMC throughput and, consequently, manufacturing output. The water restrictions in Gaborone and areas serviced from the Gaborone Dam may adversely impact on construction activity. Banks may increasingly find it difficult to improve on interest margins given the increased number and scope of fixed income investments instruments (in particular bonds) that have intensified the competition for deposits.

(c) Employment

1.16 Formal sector employment growth continued to be sluggish in the year to March 2004.[6] During this period, employment rose by 3.1 percent, an improvement on the 2.6 percent recorded in the previous period with an increase from 282 000 to 291 000. Of the 9 000 new jobs created, over half (56.1 percent) were in general government, compared with just over a third created in the preceding year. Within government, central government employment rose by 5.4 percent, while local government employment rose much more slowly, by 1 percent, in 2004.

1.17 Employment growth in the private and parastatal sector was lower, at 2.2 percent in 2004, compared with 2.8 percent in 2003 due to a slowing of the rate of growth of private sector employment for the third consecutive year and a contraction in parastatal employment for the second year running. Employment growth slowed in these sectors as a result of a reduction in employment levels in several sub-sectors, including community and personal services (24 percent), agriculture (13.4 percent), commerce (6.2 percent), electricity and water (3.4 percent) and construction (0.9 percent). As indicated earlier, the drop in the construction sector's employment level is not consistent with the sector's fairly rapid output growth, and no convincing explanation for this has been found.

1.18 Within the private sector, employment in the transport and communication sector grew at a very rapid rate of 29.6 percent (which seems inconsistent with the 1.2 percent growth of output), followed by education (19.4 percent), finance and business services (10.9 percent), mining with (9 percent) and, unexpectedly, manufacturing (8.6 percent). The recorded rise in manufacturing employment was not consistent with the recorded fall in output. The apparent mismatch between employment and output growth in several economic sectors (construction, transport and communications, and manufacturing) and, in the case of manufacturing, between output data and trade data, indicates that attention needs to be paid to issues of data quality, including consistency and comparability.

1.19 In line with a slowdown in the rate of output growth, employment in the non-mining private sector (i.e., excluding government and mining) increased at a rate of 2.3 percent, the slowest

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5 Normal to above normal rainfall was received in some isolated areas, but most parts of the country had deficient rains through to January 2005. With the delayed rains, ploughing and planting started late with the result that the acreage ploughed/planted was smaller than that of the previous year, while yields are expected to be lower because of the smaller acreage planted and loss of soil moisture.

6 To maintain consistency with previous *Annual Reports*, the data reported here is for March 2004. The figures used in the Government's *Annual Economic Report* of 2005 are for September 2004.

since 2000. As a result of slower growth of employment in the private and parastatal sector, its share in total employment declined to 60.9 percent from 61.4 percent in the previous year, while that of government rose from 38.6 percent in 2003 to 39.1 percent in 2004.

1.20 Prospects for employment growth in 2005 will depend on improvement in the pace of economic activity and on the Government budget. The sluggish rate of employment expansion that has been evident in the past several years may well continue in 2005 given a projected slowdown in economic activity in 2004/05. However, as the earlier discussion indicated, the rate of GDP growth may well be higher than was forecast in the *Budget Speech*. On budget outcomes, recent public sector reforms, such as performance management contracts, should contribute to efficient and effective implementation of projects such that the intended benefits of government spending can permeate to where they are needed most. Therefore, new employment opportunities are expected to occur in government, mining, construction, manufacturing and retail, hotels and restaurants.

(d) Inflation

1.21 World economic activity strengthened in 2004 and global inflation rose, partly due to pressure from higher oil prices. Some of the major central banks reacted by tightening monetary policy in an attempt to pre-empt inflationary pressures and to sustain expectations of low inflation. Inflation in the major industrial countries rose in 2004, from 1.7 percent in 2003 to 2.6 percent, and was significantly influenced by the rise in international oil prices. In South Africa, after rising slightly in the first half, inflation resumed its downward trend in the second half of 2004, largely due to the strengthening of the rand, and remained within that country's 3–6 percent target range. In Botswana, domestic demand pressures eased considerably as growth in both credit and government expenditure was below the ranges considered to be consistent with the inflation objective. However, despite subdued demand, inflation prospects were negatively influenced by higher costs arising from the 7.5 percent devaluation of the Pula in February 2004 and substantial increases in some administered prices, including fuel.

1.22 As a result of the devaluation and the increases in administered prices, annual inflation maintained an upward trend in 2004, rising from 6.4 percent in December 2003 to 7.8 percent in December 2004. It is estimated that the 7.5 percent devaluation contributed about 2 percentage points to inflation during 2004, mostly as a result of higher Pula-denominated import prices.[7] The decline in South African inflation in the second half of the year helped mitigate somewhat the impact on domestic prices. Overall, inflation, excluding items with administered prices[8] is estimated to have been between 5.5 percent and 6 percent in 2004, well within the 4–7 percent objective.

1.23 Core inflation[9], as measured by the 16 percent trimmed mean, closely tracked headline inflation during 2004, and was a reflection of the absence

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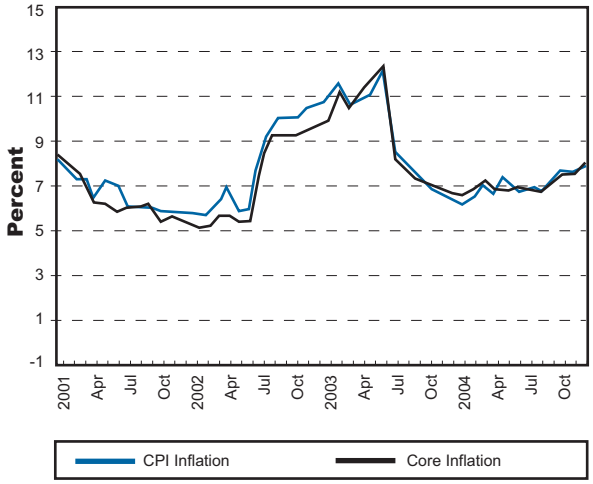
7 This is based on an assumption that without the devaluation and other exceptional items, such as the increase in fuel prices, the rate of increase in prices of imports would have been the same or lower (especially given lower South African inflation) in 2004 compared to 2003.

8 About 16 percent of items in the consumer price index basket have prices that are administratively set by the Government and various parastatals outside the normal free market price determination. It is recognised, however, that these price adjustments are influenced to some degree by general price developments. The cost adjustments are justified as a way of catching up with market prices, a response to higher input costs and a move towards cost recovery, while fuel price adjustments are done in response to international oil price developments. However, these price changes are not directly influenced by monetary policy, hence it will not normally respond to them, except to the extent that they are expected to influence 'free' prices, especially through second round effects.

9 The Bank's preferred measure of core inflation is based on an approach using the trimmed mean. This approach removes the most extreme price changes, regardless of their source. The core inflation rate is currently calculated by the Bank from data published by the Central Statistics Office.

of extreme price changes in any of the categories of goods and services in the CPI basket. Consequently, core inflation was 8 percent in December 2004, from 6.9 percent in June 2004 and 6.5 percent in December 2003.

CHART 1.3: BOTSWANA INFLATION



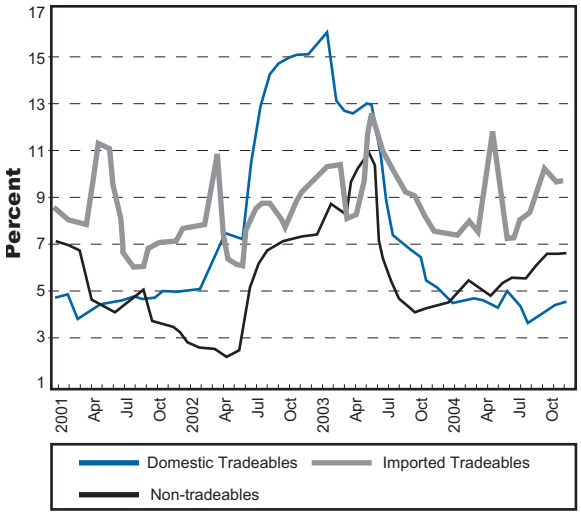
Source: Central Statistics Office

1.24 Price changes by tradeability also trended upwards in 2004. The annual rate of change in the cost of tradeables rose to 6.9 percent in December 2004 from 6.3 percent in June and 5.7 percent in December 2003. This was mainly attributable to the 7.5 percent devaluation of the Pula in February 2004. Within tradeables, inflation for imported tradeables accelerated to 7.6 percent in December 2004, from 6.5 percent in June 2004 and 5.5 percent in December 2003, while inflation for domestic tradeables slowed to 5.6 percent in December 2004, from 5.9 percent in June 2004 and 6.1 percent in December 2003. For non-tradeables, the annual rate of price change rose to 10.2 percent from 7.7 percent in June 2004 and 8.2 percent in December 2003.

(e) Inflation Outlook

1.25 Global economic activity is expected to slow moderately in 2005, with forecast GDP growth of 4.3 percent compared to an estimated 5 percent in 2004. The sharp rise in oil prices, which contributed to a weakening of global demand expansion towards the end of 2004, is

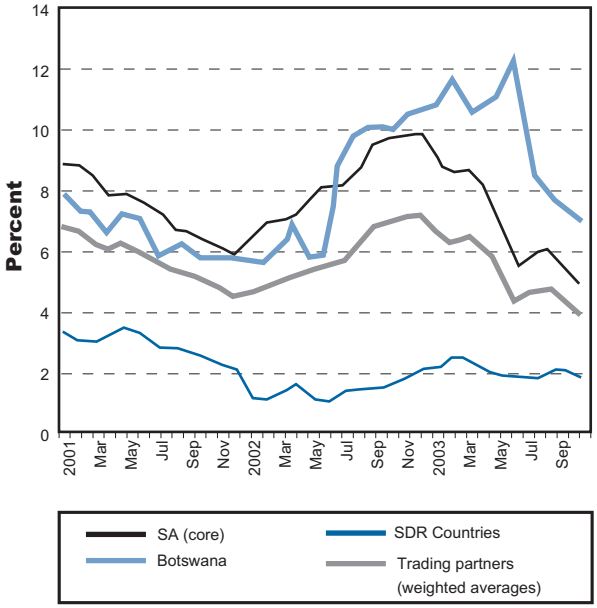
CHART 1.4: CPI INFLATION BY TRADEABILITY



Source: Central Statistics Office

expected to have a similar effect in 2005. However, after increasing to record levels in 2004, oil prices had eased by year-end, in part due to the Organisation of Petroleum Exporting Countries' (OPEC) commitment to keeping prices at sustainable levels through output expansion, but remain high. Despite these upward pressures on prices, global inflation is generally under control due to productivity growth and continued strong competition in international goods markets. Labour market

CHART 1.5: INTERNATIONAL INFLATION



Sources: Central Statistics Office, Reuters and Bank of Botswana

pressures are also subdued and pre-emptive monetary policy tightening in some countries is having the desired effect. In the circumstances, average inflation in SDR countries is forecast to decline from 2.6 percent in 2004 to about 2 percent in 2005. Inflation in South Africa, which is one of the more important external influences on inflation in Botswana, is expected to remain within the South African Reserve Bank's target range over the medium-term. However, the country could raise interest rates in response to accelerating credit growth, a widening current account deficit and any further significant weakening of the rand.

1.26 Domestic demand, as reflected in growth rates for commercial bank credit and government expenditure remained subdued in 2004. In 2005, it is expected that domestic demand pressures will continue to be restrained, in particular due to the budgeted moderate growth in government expenditure, which in turn will help sustain current levels of credit growth considered to be consistent with the inflation objective. In addition, it is anticipated that the absence of a salary increase for civil servants will moderate household borrowing which, in 2004, contributed significantly to overall credit growth.

2. PUBLIC FINANCE

(a) Budgetary Performance – 2003/04 and 2004/05

2.1 The 2005 *Budget Speech* stressed the need to effectively deal with the HIV/AIDS pandemic, to create more job opportunities in the face of high unemployment, and the importance of both maintaining the existing public infrastructure and expanding its availability in an effort to improve service delivery and stimulate economic activity. The theme of the *Budget Speech* was 'Meeting the Millennium Development Goals (MDGs) and Vision 2016 Through a Self-Reliant Approach to Development'.[10] This theme recognised the congruency between the MDGs and the development ideals of Vision 2016, and the importance of moving away from heavy dependence on Government to a spirit of self-reliance at both the individual and corporate levels.

(i) The 2003/04 Final Budget[11]

2.2 Although the deficit for 2003/04 was somewhat larger than expected, the budget was broadly balanced. A deficit of P78 million was recorded, compared with the revised estimate of P24 million, but was much smaller than the final outturn of a P1.4 billion deficit for 2002/03 (Table 1.1). The slippage in the deficit compared to expectations was explained by lower than anticipated revenues for non-mineral income tax and value added tax (VAT). Overall revenues and grants rose by 13 percent to P16.2 billion in 2003/04, from P14.3 billion in 2002/03. Total expenditure and net lending increased by 3.6 percent to P16.3 billion, from P15.7 billion in 2002/03. However, the P229 million dividends paid to Government by various parastatals, and the partial proceeds from the sale of the PDSF loan portfolio and proceeds from the sale of some of the Government's shares in Anglo American Corporation, contributed to the near balancing of the budget.[12]

(ii) The 2004/05 Revised Budget

2.3 The revised 2004/05 Budget deteriorated from the originally projected near balance (with a

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10 In 2000, the Heads of State and Government embraced the United Nations Millennium Declaration committing themselves to take measures to eradicate extreme poverty and hunger; achieve universal primary education; promote gender equality and empowerment; reduce child mortality; improve maternal health; combat HIV/AIDS, malaria and other diseases; ensure environmental sustainability; and develop a global partnership for development by the year 2015.

11 The Government financial year runs from April to March.

12 In terms of the 2001 Government Finance Statistics (GFS) Manual, proceeds from the sale of Government shares in Anglo American Corporation do not constitute revenue but financing. However, they are treated here as revenue because Government accounts are not yet prepared in terms of the guidelines in this manual, although the guidelines will be adopted in due course.

small surplus of P69 million) to a large deficit of P1.4 billion (Table 1.1). The turnaround was due to a combination of lower revised revenues from all sources compared with the original estimates, against a 3.6 percent rise in total expenditure and net lending. Compared with the final revenue outturn for 2003/04, the revised total revenue and grants grew at 6.8 percent, an increase which was nevertheless slower than the 15 percent rise in total expenditure, within which recurrent expenditure rose more rapidly due to the sizeable adjustment in personal emoluments.

2.4 The large deficit was justified in terms of the need to avoid a disruptive cut in government spending on ongoing projects from the previous fiscal year as well as the need by Government to provide a stabilising role when economic activity was slowing.

(b) 2005/06 Budget Proposals

(i) Budget Balance and Revenue.

2.5 In 2005/06, the Minister proposed to reverse the 2004/05 deficit and balance the budget with a modest surplus of P112 million, arising from total revenue of P20.6 billion and total expenditure of P20.5 billion.

(ii) Revenue.

2.6 Total revenue and grants are budgeted to increase by 18.9 percent in 2005/06, compared to the revised 2004/05 outturn of P20.6 billion. The expected rapid increase in total revenue is based on projected increases in mineral revenues (28.7 percent), non-mineral income tax revenues (25.7 percent) and fees and charges (45.5 percent), while slower rates of growth are expected for VAT (5 percent) and customs and excise (3.5 percent).

2.7 However, it may be difficult to achieve such large increases in both mineral and non-mineral income tax revenues, even allowing for the proceeds from the implementation of the new agreement between the Government and De Beers in the case of mineral revenues, and a more rapid pace of economic activity coupled with better tax collection in the case of non-mineral income tax revenue. Nevertheless, the decision

TABLE 1.1: THE GOVERNMENT BUDGET: 2003/04 – 2005/06 (P MILLION)

	2003/04			2004/05		2005/06
	Budget	Revised	Final	Budget	Revised	Budget
Revenue	17 539	16 182	16 197	18 209	17 294	20 566
Mineral	8 140	6 721	8 163	8 070	7 713	9 926
Non-mineral	9 399	9 461	8 034	10 139	9 581	10 640
Expenditure	17 333	16 207	16 276	18 140	18 720	20 454
Recurrent	13 319	13 258	12 935	14 571	14 625	15 720
Of which:						
Salaries[1]	4 132	3 941	4 142	4 776	4 776	5 436
Development	4 431	4 000	4 256	3 610	4 327	4 858
Net lending	–417	–1 051	–916	–40	–232	–124
Balance	206	–24	–78	69	–1426	112

1. Wages, salaries and related staff costs

Source: Financial Statements, Tables and Estimates of the Consolidated Development Fund Revenues 2005/06, MFDP.

to draw down dividends from profitable parastatals at the rate of 25 percent of their profits should boost other property income. The large increase in fees and charges, while perhaps expected to result from effective implementation of cost recovery measures, may also be optimistic.

(iii) Expenditure

2.8 The proposed total expenditure including net lending of P20.5 billion is about 40 percent of GDP, with recurrent and development spending of P15.7 billion and P4.9 billion, respectively. When net lending is excluded, recurrent and development spending is budgeted to grow by 8.6 percent over the 2004/05 revised estimates, to P19 billion, with development spending rising at a faster rate of 12.3 percent than recurrent expenditure (7.5 percent). Most of the development budget will be allocated to ongoing projects and the maintenance of existing infrastructure. In particular, a substantial portion of the budget will finance the HIV/AIDS programme, upgrading of hospitals, primary and secondary schools programme, village water supply and sewerage, urban land servicing, roads improvement and support for the BCL copper-nickel mine.

(c) Fiscal Legislation

2.9 No new taxes or revision of tax rates were proposed; instead Government will conduct an in-depth review of the Income Tax Act, No. 12 of 1995 in 2005, and a Bill is expected to be presented to Parliament in 2006.[13]

2.10 Insufficient tax compliance was highlighted as a major challenge for the newly established Botswana Unified Revenue Service (BURS) despite some improvement in compliance over the past three years. Tax non-compliance was significant in the case of VAT with under-reporting of output taxes and overstatement of input taxes. To address the problems, income tax audits will be intensified and penalties imposed for misreporting of tax returns. However, BURS is credited with having reduced income tax arrears from P430 million as at 31 March 2002 to P180 million as at 31 December 2004.

(d) Policy Reviews

2.11 In light of the economic and other changes that have occurred in the past decade or so, Government reviewed the National Policy on Incomes, Employment, Prices and Profits of 1990 in order to align it with current circumstances. Based on the review, it is expected that a report on strategies for strengthening the institutional mechanisms required for effective implementation of the policy would be presented to Parliament in 2005/06.

2.12 For the non-banking financial institutions, the Government commenced a review of the existing regulatory framework with a view to explore the possibility of establishing an appropriate financial regulatory authority in order to ensure the continued stability of the financial system as a whole. The review process includes reappraisals of current legislation that may inhibit the development of the financial sector. Among the existing legislation under review are the Building Societies Act of 1961 and the Botswana Stock Exchange Act of 1994, both of which are expected to be amended in 2005/2006.

2.13 With regard to improving economic efficiency, the Government is expected to approve the draft Privatisation Master Plan (PMP) during the first quarter of 2005. The plan is a road map for an orderly implementation of the privatisation processes under various approaches. The current initiatives under consideration include a possible merging of the Botswana Savings Bank (BSB) and the National Development Bank (NDB) or their privatisation, ways and means of privatising Air Botswana and the start of privatising the Botswana Telecommunications Corporation in 2005/06.

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13 The Act has been subject to several amendments since 1995, to ensure that the tax legislation remained relevant and up-to-date.

2.14 Economic efficiency is also expected to benefit from the toll roads study, which will become available in March 2005, to be implemented in 2005/06, while the Private-Public Partnership initiative will be introduced in the first half of 2005.

2.15 International trade and foreign direct investment and the overall improvement of the business climate are expected to benefit from the Government's intention to adopt a foreign direct investment strategy, a competition policy and to refine the draft foreign direct investment law. Correspondingly, various legislation and regulations are being reviewed and improved including the Industrial Development Act, the Copyright and Neighbouring Rights Act, the Micro-lending regulations, and regulations of the new Companies Act. In this regard, the planned establishment of a joint venture between the Government and De Beers to sort and market diamonds will stimulate foreign direct investment and improve business activity.

2.16 Public sector reforms are continuing with the implementation of the Performance Management System (PMS), which aims at maintaining a productive civil service and cultivating a culture of effectiveness and efficiency in government.

2.17 Combating poverty has been one of the Government's main priorities. In its efforts to fight poverty, the Government has established a position of Poverty Reduction Advisor with the help of the UNDP, and the post takes effect in the first half of 2005.

3. Exchange Rates, Balance of Payments and International Investment Position

(a) Exchange Rates

3.1 Botswana's exchange rate policy is aimed at maintaining the country's external competitiveness as measured by the real

Table 1.2: Pula Exchange Rates Against Selected Currencies

Nominal Exchange Rates (Foreign currency per Pula)			
As at end of	**2003**	**2004**	**Percentage Change**
SA rand	1.4875	1.3233	–11.0
US dollar	0.2251	0.2336	3.8
Pound Sterling	0.1265	0.1211	–4.3
Japanese yen	24.06	23.96	–0.4
SDR	0.1536	0.1527	–0.6
Euro	0.1791	0.1714	–4.3
Nominal Effective Exchange Rate (Index, Nov. 1996 = 100)	**101.7**	**94.1**	**–7.5**
Real Pula Exchange Rate Indices (November 1996=100)			
SA rand[1]	130.3	120.9	–7.2
SA rand[2]	119.3	109.2	–8.4
US dollar	117.1	126.8	8.3
SDR	118.3	123.5	4.4
Real Effective Exchange Rate[1]	**118.4**	**113.6**	**4.1**

1. Calculated using core inflation. Core inflation is the all-items consumer price index excluding mortgage interest costs and prices of various volatile food items.
2. Calculated using headline inflation.

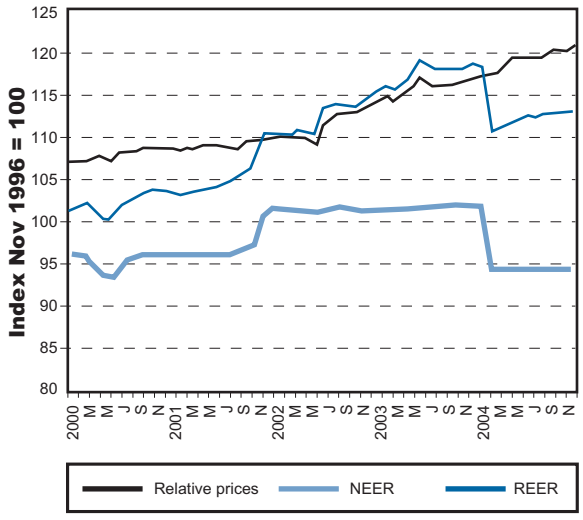
Source: Bank of Botswana

effective exchange rate (REER) of the Pula. The objective is achieved primarily by maintaining a stable trade-weighted nominal effective exchange rate (NEER) of the Pula against a basket of currencies including the SDR and the rand, but also by monetary policy aiming to keep Botswana's rate of inflation similar to or better than inflation in the country's trading countries.

3.2 The rand strength was attributable to several factors, including strong commodity prices, a positive but narrowing interest rate differential with the rest of the world, and continued positive sentiment towards the South African economy. The weakening of the US dollar was mainly a result of the burgeoning budget and the current account deficits in that country.

3.3 During 2004, the Pula depreciated in nominal terms against most major international currencies as a result of the combined effects of the 7.5 percent devaluation in February 2004 and operation of the Pula basket. The exception was the US dollar, which was generally weak in the international financial markets, and against which the Pula appreciated. The Pula appreciation against the US dollar was in line with the significant 17 percent appreciation of the South African rand against the dollar during the year.

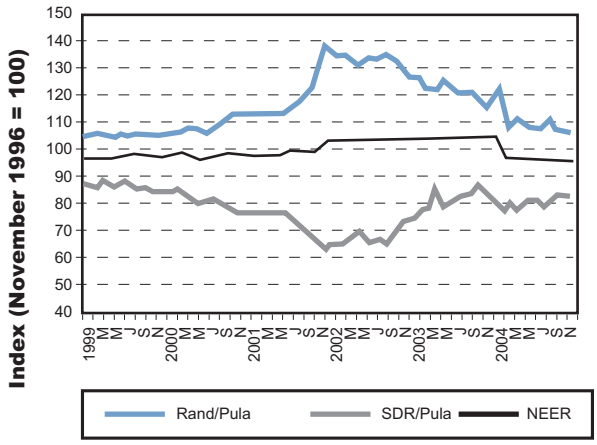
CHART 1.6: NOMINAL AND REAL EFFECTIVE EXCHANGE RATES AND RELATIVE PRICES



Source: Bank of Botswana

3.4 Over the past several years, the REER of the Pula has appreciated (Chart 1.6) on account of both a modest appreciation of the nominal effective exchange rate (NEER) and higher inflation in Botswana than the average level of inflation in Botswana's trading partners. The appreciation of the REER potentially signals a weakening of the competitive position of Botswana's exporters and domestic producers competing with imports; this would be particularly the case when productivity levels in Botswana are low relative to competitors. In response, the nominal exchange rate of the Pula was devalued by 7.5 percent in February 2004. By the end of December, however, the REER, which initially fell by the same 7.5 percent devaluation, was only 4.1 percent lower because of the subsequent higher inflation in Botswana than the trading partners.

CHART 1.7: NEER AND NOMINAL EXCHANGE RATE INDICES AGAINST SELECTED CURRENCIES



Source: Bank of Botswana

3.5 Against individual currencies, the Pula appreciated in real terms by 8.3 percent against the US dollar but depreciated by 8.4 percent (using core inflation) against the South African rand during 2004.

(b) Overview of the Balance of Payments

3.6 The balance of payments estimates for both 2002 and 2003 have been revised following the

completion of the 2003 balance of payments survey and the availability of updated merchandise trade data for the two years.[14] As a result of the revisions, the trade surplus rose for both 2002 and 2003 compared to previous estimates. However, for 2003, despite the higher trade surplus, the favourable balance on current account was revised downwards, due principally to an increase of P2 088 million in the income account deficit. For 2004, preliminary estimates indicate yet another significant current account surplus of P3 985 million; despite the continuing large net outflows in the financial account, the overall surplus for the year is estimated at P575 million.

TABLE 1.3: BALANCE OF PAYMENTS: 2000–2004 (P MILLION)

	2000	2001	2002*	2003*	2004#
Current Account Balance	2 782	3 491	1 244	2 288	3 985
of which					
Visible Trade Balance	4 603	4 149	4 447	4 441	2 939
Services Balance	–1 136	–1 010	182	–46	–85
Income Balance	–1 792	–801	–4 418	3 543	–1 323
Net current Transfers	1 108	1 153	1 368	1 436	2 455
Financial Account Balance	–1 021	–2 976	–1 375	–1 875	–3 609
Capital Account Balance	194	34	4	111	22
Net Errors and Omissions	–15	474	462	272	177
Overall Balance	1 941	1 024	336	797	575

* Revised # Provisional

Source: Bank of Botswana

(i) Merchandise Trade

3.7 Exports are estimated to have risen by 10.8 percent to P16 268 million in 2004 from P14 970 million in 2003. Of the total goods exports, diamonds increased by 12.1 percent following the record diamond production in 2004 together with price increases for rough diamonds, which offset the general strengthening of the Pula against the US dollar. Copper/nickel prices continued to rise in 2004 contributing to the 21 percent gain in exports from P1 229 million in 2003 to P1 377 million in 2004, while for soda ash the rise was 4.9 percent. Despite the supply shortfalls from farmers, beef exports by the Botswana Meat Commission (BMC) increased by 9.1 percent.

3.8 For the period up to October 2004, textiles and automotive product exports increased by 54 percent and 10.2 percent, respectively. The rise in textile exports was consistent with

TABLE 1.4: MAJOR EXPORTS (P MILLION)

	2002	2003	2004
Diamonds	12 478.5	11 707.3	13 133.1
Copper/nickel	523.0	1 229.4	1 376.8
Beef	276.6	260.2	284.0
Soda Ash	268.0	229.6	250.8

Source: Bank of Botswana, CSO

[14] There have been technical problems hampering the production of trade statistics by the Central Statistics Office (CSO) and previous balance of payments estimates for 2002 and 2003 were prepared, to a large extent, using trade data to the first quarter of 2002. This applies particularly to measures of imports and related activities (e.g. freight on imports) as well as several categories of exports (such as vehicles and textiles) where the Bank of Botswana does not collect data directly.

anecdotal reports that Botswana companies have begun to benefit from concessions offered by the United States under AGOA, as well as increases in exports to South Africa.

3.9 Imports of goods are estimated to have risen by 26.6 percent in 2004 to P13 330 million. The apparently large increase could, however, partly be due to data deficiencies in 2003, which necessitated some adjustments.[15]

(ii) Current Account

3.10 In both 2002 and 2003, there were large changes in the income account, which resulted in a lower, although still significant, surplus on the current account. Among the factors influencing the income account were the change in the ownership and restructuring of BCL, following which large payments of interest, which had led to an income account deficit of P4 418 million in 2002, were eliminated. In 2003, the deficit of P3 543 million was mainly due to retained earnings from certain companies. However, the estimated 2004 deficit is much smaller, at only P1 323 million. In general, the fluctuations in the income account are mostly explained by the volatility of the major debit components (profits and dividends payments abroad), which are dependent on the year to year variations in the companies' performances.

3.11 The services component of the current account also tends to show large variations. After declining from P1 010 million in 2001 to P127 million in 2002, and further (to P46 million) in 2003, the deficit was P86 million in 2004. The progressive decline in the deficit partly reflected the increased production of domestic services, including those related to exports, but could also be due to data collection deficiencies.

3.12 During the 2002–2004 period, the surpluses on the merchandise trade and current transfers have been fairly stable. Trade surpluses of P4 477 million, P4 441 million and P2 939 million in 2002, 2003 and 2004 together with increasing net current transfers, tended to offset the large income deficits.

(iii) Capital and Financial Accounts

3.13 The capital account continued to record modest surpluses during the 2002–2004 period. The net outflow of P1 875 million shown for the financial account in 2003 is P1 600 million less than the original estimate. The revision mainly reflected an imputed amount of P1 725 million, which is the counterpart to the increased retained earnings in the income account. For 2002 and 2003 the impact of retained earnings have in part offset large portfolio investment outflows. However, this effect is not present in the preliminary estimates for 2004 which show net outflows on the financial account of P3 609 million.

3.14 In 2004, portfolio investment outflows of P1 930 million were lower than in both 2002 and 2003. A major explanation for the reduced amount was that externalisation of overseas investment associated with the funding of the public officers pension scheme had nearly run its course by 2004. 'Other investments', which comprises transactions related to loans, trade credits, currency and deposits and SACU flows, had a net outflow of P433 million.

(iv) Foreign Exchange Reserves

3.15 Foreign exchange reserves were P24.2 billion at the end of December 2004, an increase of P0.5 billion (2.1 percent) from P23.7 billion in December 2003, equivalent to 17 months of imports of goods and services. Measured in US dollar and SDR terms, the reserves increased by 6 percent and 1.6 percent, respectively.

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15 Following the technical problems that have hampered the production of trade statistics by the Central Statistics Office (CSO), a critical review of the data has shown inexplicable movements in a number of individual items, e.g., food and beverages and machinery and vehicle equipment, which when used without any smoothing have had an effect of aggravating 'errors and omissions' for the estimates.

(c) International Investment Position and Foreign Investment

(i) International Investment Position (IIP)

3.16 Comprehensive data on stocks of external financial assets and liabilities are available up to the end of 2003. For 2004 the data are derived from flows related to the 2003 stocks (excluding valuation changes). Moreover, the 2004 stocks are up to December 2004 for reserve assets and portfolio investment assets. Botswana's total foreign assets increased by P4 867 million from P39 215 million in 2003 to P44 082 million in 2004. The bulk of the increase was in portfolio investment assets (P1 930 million). During the period, foreign liabilities increased by P913 million, from P10 933 million in 2003 to P11 846 million in 2004. The increase was mainly in 'other investments' and especially loans (to both public companies and the private sector).

(ii) Industry and Country Classification of Investment

3.17 Tables 1.5 and 1.6 below show Botswana's stock of foreign liabilities at the end of 2003 by industry and country owed. The figures are based on the results of the 2003 balance of payments survey.

3.18 In 2003, the bulk (61.3 percent) of foreign direct investment was in mining, a decline from 71.3 percent in 2002 due to the change in ownership structure of BCL.[16] The other large recipients of FDI were the wholesale and retail industry (13.9 percent) and the financial sector (12.8 percent).

3.19 By the end of 2003, the principal source of the stock of FDI was Europe (57 percent). South Africa, which was previously a dominant source mainly due to the accumulated interest debt by BCL reduced its share to 39 percent of the total at the end of 2003.

3.20 Government's external debt continued to be the major component of 'other investment' accounting for 41.6 percent of these liabilities in 2003. The stock of this debt is classified under 'public administration' in Table 1.5. The share of mining was 30 percent while construction's share was 15 percent due to a long-term loan to one company in 2003 compared to an insignificant proportion in 2002.

4. Money and Capital Markets

(a) Monetary Policy and Liquidity Management

4.1 The primary objective of monetary policy in Botswana is to foster stability in the value of the Pula by maintaining a low and predictable inflation. Low and stable inflation, among others, is necessary for the maintenance of export competitiveness. In 2004, the Bank set and announced in its Monetary Policy Statement an inflation objective of 4 – 7 percent, a moderate change from the 4 – 6 percent inflation objective for 2003. The widening of the range in 2004 was intended to accommodate the anticipated increase in inflation arising from the devaluation of the Pula in February 2004, but was based as before on the forecast inflation for trading partner countries, which provided the lower end of the range. Moreover, the wider range permitted a general return to stable low inflation without placing undue strain on the growth of output and employment by not attempting to counter the full inflationary fallout of the devaluation in too short a period of time.

4.2 The devaluation of the Pula and a series of upward adjustments in administered prices generated a rise in inflation during 2004. Consequently, while inflation was within the objective range of 4–7 percent for most of the year, it exceeded and remained above the upper limit of the range in the fourth quarter. Domestic demand pressures were, however, moderate partly due to a lower rate of fiscal expansion

16 Anglo American sold all its shares in BCL to Lion Ore in 2002. The transaction entailed payment of accrued debt service obligations as well as transfer of BCL's liabilities to Anglo American to the Botswana Government. This has led to a decline in the dominance of mining sector in total FDI liabilities.

TABLE 1.5: LEVELS OF FOREIGN INVESTMENT IN BOTSWANA BY INDUSTRY (P MILLION AS AT 31 DECEMBER 2003)

	Foreign direct Investment			Other Investment		
Industry	*Equity*	*Non Equity*[1]	*Total*	*Equity*	*Non equity*	*Total*
Mining	3 672	1 551	5 223	18	1 598	1 711
Manufacturing	131	164	295	3	0	3
Finance	718	155	873	43	149	192
Retail and Wholesale	779	47	826		189	189
Electricity, Gas and Water	27	0	27		200	200
Real Estate and Business Services	91	3	94	2	75	77
Transport, Storage and Communication	48	106	154		34	34
Construction	1	9	10	2	831	833
Hospitality	134	5	154		0	0
Public Administration					2 193	2 193
Other	1	0	1		1	1
Total	**5 602**	**2 041**	**7 643**	**68**	**5 270**	**5 338**

1. This covers the borrowing and lending of funds, including debt securities and suppliers' credits, between parent companies and their subsidiaries.

Source: Bank of Botswana

TABLE 1.6: LEVELS OF FOREIGN INVESTMENT IN BOTSWANA BY COUNTRY (P MILLION AS AT 31 DECEMBER 2003)

	Foreign direct Investment			Other Investment		
Country	***Equity***	***Non Equity***	***Total***	***Equity***	***Non equity***	***Total***
North and Central America	**38**	**1**	**39**		**88**	**88**
of which						
United States of America	18	…	18	…	88	88
Europe	**4 205**	**172**	**4 380**	**2**	**1 164**	**1 166**
of which						
United Kingdom	516	21	537	…	831	831
Netherlands	31	4	34	…	…	…
Luxembourg	3 595	14	3 609	…	…	…
Other Europe	65	29	94	2	60	62
Asia Pacific	…	…	…	…	**542**	**542**
Africa	**1 269**	**1 866**	**3 135**	**63**	**1 736**	**1 799**
of which						
South Africa	1 224	1 830	3 054	60	1 663	1 723
Middle East	**87**	…	**87**	…	**57**	**57**
Other	**1**	**2**	**3**	**3**	**1 683**	**1 686**
Total	**5 602**	**2 041**	**7 643**	**68**	**5 270**	**5 338**

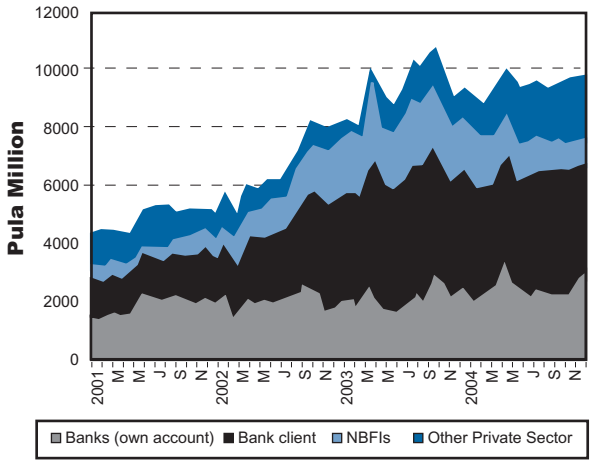
Source: Bank of Botswana

and restrictive monetary policy, both of which resulted in reduced private sector credit demand. Growth rates for both Government expenditure and credit to the private sector fell within the ranges considered to be supportive of the inflation objective. While global inflation was influenced by improved economic activity and international oil prices, the trend was generally benign. Nevertheless, the Bank Rate was left unchanged at 14.25 percent for the whole of 2004 in the light of the continuing high domestic inflation during the remainder of 2004, due to oil price increases, and the upward adjustment of administered prices.

4.3 The Bank's open market operations, aimed at managing excess liquidity in the domestic banking system, were conducted during the year to ensure that short-term interest rates, particularly yields on Bank of Botswana Certificates (BoBCs), were consistent with its monetary policy stance. As a result, the nominal three-month BoBC rate moved in a narrow range of between 12.58 percent and 12.99 percent for most of the year. A 14-day BoBC was introduced in November 2004, with weekly auctions, under the existing competitive price auction format. Its introduction was intended to enhance liquidity absorption in the short-end of the domestic money market. The 91-day (3-month) BoBC continued to be auctioned, although in smaller quantities.

4.4 Outstanding BoBCs rose year-on-year, by 10 percent, to P9 755 million in December 2004, from P8 871 million in December the previous year (Table 1.7). The smaller rate of increase in 2004 contrasted with a 19 percent rise in 2003. The market value of BoBCs held by the non-bank private sector rose marginally by 3 percent, while holdings by commercial banks increased by a considerable 30 percent. Within the non-bank private sector, holdings by commercial banks' clients declined by 1 percent, and were 38 percent of the total holdings of BoBCs outstanding while the share of non-bank financial institutions declined by 48 percent. In contrast, other private sector increased their holdings by 130 percent but accounted for 21 percent of the total outstanding. On May 1, 2004, the Bank adopted a multiple price auction method for selling BoBCs and also ceased to participate in the secondary market for the paper as part of its ongoing reform of monetary operations.[17] Following the Bank's withdrawal from the secondary market, trading among counter-parties increased significantly to P4 742 million, from P2 072 million in 2003.

CHART 1.8: OUTSTANDING BANK OF BOTSWANA CERTIFICATES (BOBCS)



Source: Bank of Botswana

4.5 Government bonds worth P2.5 billion had been issued in 2003, with maturities of 2 years, 5 years and 12 years, and yields at auction of 13 percent, 12.65 percent and 11.5 percent, respectively. Secondary market activity in these bonds in 2004 activity amounted to P1 152 million with the yield curve continuing to be downward sloping. At the end of 2004, the yields on 2-year and 5-year bonds were 11.5 percent and 10.75 percent, respectively, for the 12-year bond it was 9.85 percent.

17 The multiple price auction method is where each bidder pays the price they offered; thus there is no single fixed price to be paid by all bidders, as under the previous 'Dutch auction' system.

TABLE 1.7: STRUCTURE OF BANK OF BOTSWANA CERTIFICATE HOLDINGS

	P million		Year on year percentage change	Share of total (percent)	
	2003	2004		2003	2004
Commercial Banks	2 288.5	29 84.8	30.4	25.8	30.6
Banks' Clients	3 758.8	37 13.8	–1.2	42.4	38.1
Other Financial Institutions	1 933.7	10 15.3	–47.5	21.8	10.4
Other Private Sector	889.5	20 41.3	129.5	10.0	20.9
Total	**8 870.5**	**97 55.2**	**10**		

Source: Bank of Botswana

TABLE 1.8: NOMINAL YIELDS TO MATURITY ON BOBCS AND GOVERNMENT BONDS (PERCENT)

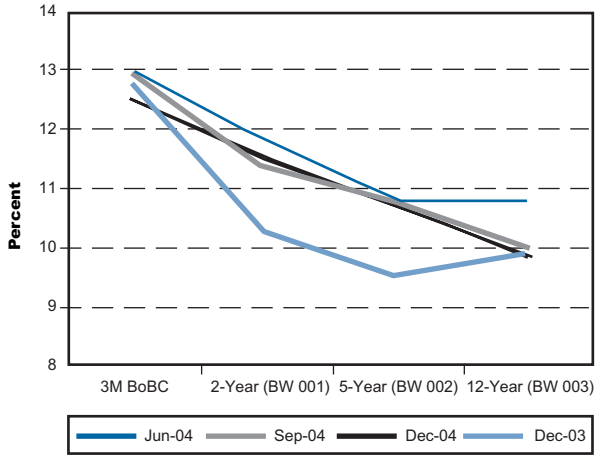
Instrument	End of				
	2003	March	June	September	December
3-Month BoBCs at auction date	12.74	12.92	12.99	12.99	12.53
BW001 (2 years)	10.25	10.3	11.75	11.35	11.50
BW002 (5 years)	9.50	9.75	10.75	10.75	10.75
BW003 (12 years)	9.90	9.65	10.75	10.00	9.85

Source: Bank of Botswana

(b) Interest Rates

4.6 Short-term nominal interest rates were relatively stable during 2004, consistent with the unchanged Bank Rate of 14.25 percent the whole year. The nominal three-month BoBC rate fluctuated in a range of 12.50 percent and 12.99 percent between January and December 2004, with lower rates occurring in the first quarter of the year. Commercial banks held the cost of borrowing constant by maintaining the prime-lending rate at 15.75 percent during the year, while the average 88-day deposit rate was mostly steady around 9.17–9.20 band. As a result, the spread between lending rates and deposit rates increased marginally, with a slight fall in deposit rates while the prime lending rate remained stable.

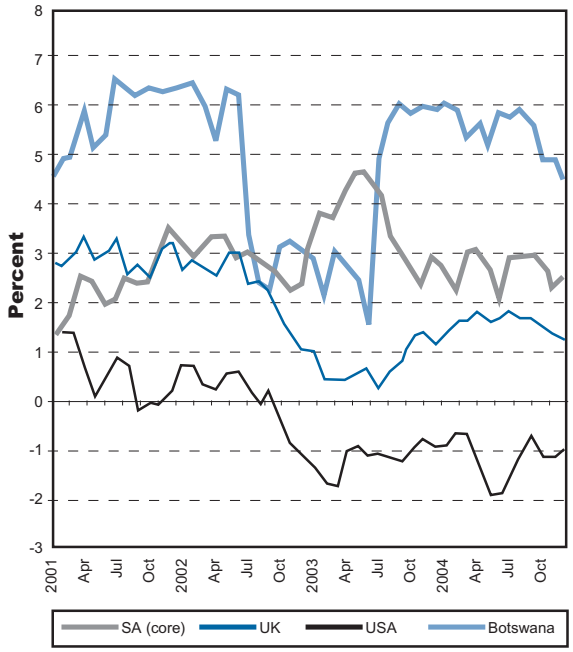
CHART 1.9: YIELD TO MATURITY ON BOBCS AND GOVERNMENT BONDS



Source: Bank of Botswana

4.7 Money market real interest rates were less volatile during 2004. The twelve-month average was 5.5 percent compared to 4.1 percent in 2003. This was a result of the generally stable inflation and the fact that the Bank Rate was unchanged during most of the year. The real three-month BoBC rate ranged between 4.4 percent and 6.1 percent. As at the end of December 2004, the real commercial bank prime lending rate was 7.4 percent, compared to 8.8 percent in December 2003.

CHART 1.10: REAL INTEREST RATES: INTERNATIONAL COMPARISONS



Source: Bank of Botswana

(c) Banking System

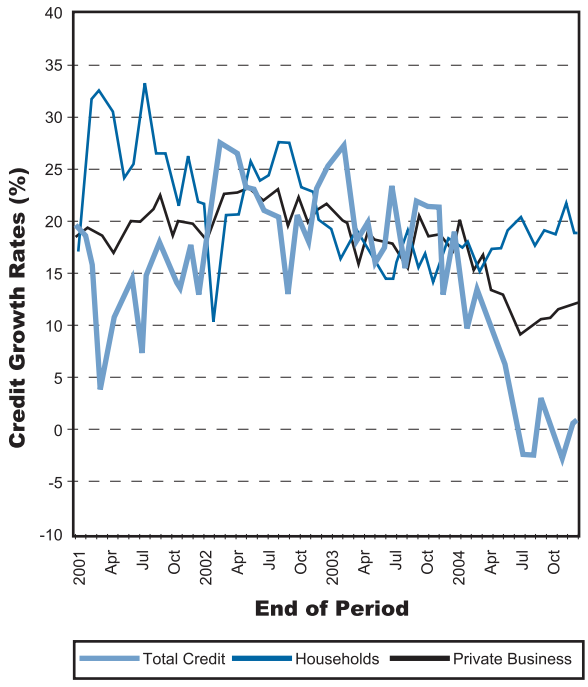
(i) Domestic Credit

4.8 The annual growth rate of commercial bank credit decelerated from 14.2 percent in December 2003 to 11.8 percent in December 2004.[18] The decrease in the annual credit growth rate was mainly due to a much lower rate of increase in private business borrowing of 0.2 percent in 2004, compared to 14.2 percent in 2003, while household borrowing rose at a faster rate of 18.6 percent. The slowing growth in credit to businesses since 2003, to a significant extent, reflects the reduction in Government expenditure, particularly on development projects upon which business activity considerably hinges. Overall, the rate of credit expansion of 11.8 percent in December 2004 was below the range of 12–15 percent, and consistent with the desired inflation objective.

(ii) Monetary Aggregates

4.9 Broad money supply (M4) rose by 10.9 percent (year-on-year) in 2004 compared to growth of 13.8 percent in 2003. The influences on monetary growth during the year was the expansionary effect of the 10.6 percent reduction in Government deposits at the Bank of Botswana, the 11.8 percent rise in private sector credit and the 1.1 percent rise in net foreign assets. By component, the increase in M4 was a result of a 3.2 percent increase in non-bank holdings of BoBCs, and an 8.3 percent expansion in call, savings, notice and time deposits. Demand deposits also increased by 54.6 percent compared to 10.2 percent during the same period in the previous year, while foreign currency deposits in Pula terms increased by 7.3 percent in 2004 primarily due to the continued appreciation of the Pula against major international currencies, despite its earlier depreciation. Currency outside banks grew by 19.5 percent in 2004, compared to an increase of 13.4 percent in 2003.

CHART 1.11: ANNUAL GROWTH RATES OF CREDIT



Source: Bank of Botswana

18 The growth rate was computed after an adjustment to take into account the merger, in April 2004, of Stanbic bank with Investec bank, which led to the loans by the latter being reclassified from merchant to the commercial bank category.

(iii) Bank of Botswana

4.10 Total assets/liabilities of the Bank of Botswana increased by 2 percent to P24 493 million in 2004, following decreases of 20.3 percent and 13.3 percent in 2003 and 2002, respectively. The decline in the balance sheet in 2002 and 2003 was mainly attributable to reductions in government deposits at the Bank of Botswana due to the transfer of funds to the Public Officers Pension Fund, as well as unrealised currency revaluation losses and foreign exchange outflows. In 2004 the foreign exchange reserves increased by 0.6 percent, of which the long-term investment portfolio, the Pula Fund, increased by 4 percent during the year, compared to the 21.4 percent decline of 2003. On the other hand, the Liquidity Portfolio fell by 5.6 percent compared to a 19.5 percent fall of 2003.

(iv) Commercial Banks

4.11 Total assets of commercial banks rose by 14.5 percent to P14 842 million in the year to December 2004, compared to moderately higher growth of 15.9 percent in 2003. Contributing to the increase in total assets were outstanding loans and advances as well as holdings of BoBCs, which expanded by 16.7 percent and 25.4 percent, respectively, in 2004.

4.12 On the liabilities side, total private sector deposits at commercial banks increased by 9.8 percent to P11 443 million, in the year to December 2004, compared to a growth rate of 17.9 percent in 2003. Of the total deposits, 12.3 percent was held in foreign currency accounts compared to 14.6 percent in 2003. In the same period, commercial banks' capital and reserves increased moderately by 3.7 percent to P1 395 million in 2004, compared to a growth rate of 22.1 percent in 2003.

(v) Merchant Banks

4.13 Total assets/liabilities are exclusively for ABC (Pty) Ltd, following the takeover of the only other merchant bank, Investec Bank by Stanbic Bank in April 2004. As a result, total assets/liabilities for merchant banks decreased by 31.1 percent during 2004, to P735 million, compared to an increase of 26 percent in 2003. The takeover led to a reduction in all components of the assets for this category of institutions. Balances due from domestic banks and loans and advances recorded sharp decreases of 58 percent and 31 percent, from P143.7 million to P60.2 million, and from P503.9 million to P350.1 million, respectively. The merchant bank's holdings of BoBCs also dipped by 17 percent in 2004, compared to 35 percent in 2003. With respect to liabilities, total deposits, mostly held in notice and time accounts, decreased by 35.2 percent, from P870.6 million in 2003 to P563.9 million in 2004 also reflecting the takeover of Investec bank.

(d) Non-Bank Financial Institutions

4.14 The total assets/liabilities of the Botswana Building Society (BBS) rose by 13.8 percent in 2003, compared to the 7.9 percent recorded in 2002. Mortgage loans increased substantially, by 25.6 percent to P450 million, from an increase of 7.2 percent in the previous year. The Botswana Development Corporation (BDC) increased its assets by 34.4 percent in the year to June 2004 to P1 539 million, in contrast to a growth rate of 5 percent in June 2003.

4.15 Trading on the Botswana Stock Exchange (BSE) was less active in 2004 than in the previous year. The domestic company share index generally experienced an upward trend, gaining 390 points (15.6 percent) to end the year at 2 889. Market capitalization also grew, by 15.2 percent, to reach P10 876 million in December 2004. On the other hand, the increase in the foreign companies index slowed to a rise of 11.9 percent, from 13.5 percent in the previous year. Trading value fell substantially in 2004 to settle at P203 million, from P400 million in 2003.

4.16 The number of domestic companies listed on the BSE dropped to 18 by December 2004, from 19 in 2003. Domestic companies listed on the Venture Capital Board of the BSE are Turnstar

and Afrotourism limited. Two more foreign companies, AFDiamonds and Diamonex, were listed on the Venture Capital Board bringing their number to 3 in 2004. While these are technically foreign companies, given that their primary listings are in London and Australia, their business activities are located in Botswana. The bond market was very active in 2004, achieving a record of 15 new corporate bond listings with maturities ranging between 1 and 20 years. The Debt Participation Capital Funding (DPCF) Limited, a special purpose investment company established in March 2004 to purchase from Government the Public Service Debt Fund (PDSF) loan book made 7 new listings. BDC and Kgalagadi Breweries Limited (KBL) also listed one bond each for the first time while the rest were additional listings from commercial banks and the BBS.

(e) Credit Rating

4.17 Moody's Investors Service and Standard and Poor's Sovereigns conducted the annual credit rating assessments of Botswana's creditworthiness in 2004. Moody's Investors Service sovereign credit ratings for Botswana as assigned in 2001, A2 for long term foreign currency debt, Prime-1(P-1) for short term foreign currency debt and A1 for domestic currency debt and stable outlook remained unchanged. Standard and Poor's Sovereigns assigned Botswana ratings of A/A-1 for long-term debt and A+/A-1 for short-term debt as well as a stable outlook. The investment-grade ratings for Botswana reflect the unusually low public debt and very strong liquidity, which derive from a commitment to prudent fiscal and monetary policy. However, concern was expressed at the spending pressures exerted on the Government by costs related to HIV/AIDS care and treatment, as well as absence of strong evidence of active diversification efforts as indicated by lack of significant expansion in the non-mining sector.

(f) Other Financial Sector Developments

4.18 During 2004, the Bank achieved considerable progress in the reform and modernisation of the National Payments System (NPS) programme. The most significant improvements included:

(a) full automation of cheque clearing house through establishment of the Electronic Clearing House (ECH);

(b) 'Paper-to-Follow' (which refers to a situation where electronic data is exchanged and used as the basis for clearing, while the paper pertaining to the electronic data is exchanged at a later date) was successfully implemented as part of the electronic code line clearing initiative;

(c) finalisation of the National Clearance and Settlement Systems (NCSS) Act Regulations;

(d) initiation of preparations for a significant increase in Government's utilisation of the Electronic Funds Transfer (EFT) system in respect of Government payments other than civil servants' salaries;

(e) undertaking of logistical arrangements for the implementation of the Real Time Gross Settlement (RTGS) system. The system will address the processing, transmission and settlement of high-value, time-critical payments while also providing an interface to the ECH and Bank of Botswana's electronic banking systems.

4.19 The International Financial Services Centre (IFSC) Certification Committee considered and approved eleven project proposals, which were referred to the Bank for regulatory approval in 2004. Out of the eleven companies, nine were granted an exemption certificate while one, Enterprise Banking Group (Pty) Ltd obtained a banking licence, and the approvals brought the number of companies operating in the IFSC to 30.

4.20 During 2004, the Letlole National Savings

Certificates (LNSCs) registered a decline in sales. The value of all purchases was P0.8 million during 2004 compared to P1 million sold in 2003. On the other hand, redemptions for the year amounted to P0.9 million, against P0.7 million in the previous year. As a result, the net outstanding NSCs fell by P0.1 million compared to P0.3 million in 2003.

4.21 Banks continued to introduce new banking products in response to market competition and efforts to improve service delivery. The number of ATMs installed increased by 3.9 percent, but there were no additional branches opened. The banks continued to invest in new technologies in order to improve their efficiency and service to their clients. The new technologies included 'cheque imaging', through which customers receive statements with images of the cheques they have issued and a messaging service that allows customers to monitor transactions going through their accounts as the transactions go through. The main advantage of the latter, which uses the text message feature of cellular phone technology and e-mail as media of communication, is that it enables customers to prevent and report any unauthorized transactions immediately.

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Chapter 2

Improved Productivity – The Key to Sustained Growth and Higher Living Standards for All

1. Introduction

1.1 The theme topic of the 2004 Bank of Botswana *Annual Report* is 'Improved Productivity – the Key to Sustained Growth and Higher Living Standards for All'. The choice of this topic is motivated by the importance of continued increases in productivity to underpin economic growth.

1.2 The importance of rising productivity has been recognised in major economic policy objectives of the Botswana government. In particular, the second pillar of *Vision 2016* is 'A prosperous, productive and innovative nation', an objective which is being implemented in the development strategies set out in *National Development Plan 9* (NDP 9). Official policy documents frequently refer to the need to improve productivity in the public service, the importance of skills development, the use of science and technology in production and the adverse impact of HIV/AIDS on productivity. The establishment of the Botswana National Productivity Centre (BNPC), more than a decade ago, was in recognition of the critical role of productivity in promoting both output growth and international competitiveness.

1.3 A very significant dimension of productivity enhancement is its contribution to the national economic diversification efforts. However, as subsequent sections of this chapter illustrate, there is little compelling evidence that the productivity-enhancing policy pronouncements and initiatives have been translated into noticeable improvements in productivity. While economic growth has been maintained, with accompanying increases in per capita incomes, it appears that this has been mainly through an increase in production inputs, rather than their more efficient use. Efficient use of factors of production across sectors appears to be hampered by a number of structural rigidities in the economy.[1]

1.4 Major economic policy decisions cannot be divorced from consideration of productivity enhancement. For example, there are two areas that are of direct interest to the Bank of Botswana. First, monetary policy and the objective of low and stable inflation. Productivity growth affects the potential output of the economy and, in turn, the rate at which the economy can expand without causing inflationary pressures at a given rate of expenditure increase. The positive feedback of a benign inflationary environment includes a reduction in investment risks associated with high inflation, a possible rise in investment and increase in productivity. The second issue is the exchange rate. There have been suggestions that a devaluation of the Pula is necessary to improve the competitiveness of the country's producers. However, it should be noted that the arguments in favour of a Pula devaluation imply an admission that productivity in Botswana is not high enough to justify the domestic costs of production (wages, rentals, etc). Therefore, in the absence of enhanced productivity, a devaluation is likely to offer only a temporary respite and soon, subsequent knock-on effects will lead to production cost readjustments towards their original, uncompetitive levels. It is for this reason that the Bank has argued[2] that if the fundamental cause of the lack of export competitiveness is low productivity, then policy response should focus on the fundamental issues of productivity growth and the adjustment of the

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1 Generally, however, there is a lack of relevant data to investigate sectoral trends in detail.

2 See the press release 'BIDPA Commentary on Exchange Rate Policy', 16 September 2003. Here it was stated that '…it will be up to other policy measures [i.e. other than the exchange rate policy], such as those to improve productivity, to ensure that Botswana's international competitiveness improves.'

exchange rate should only be resorted to only in certain circumstances in combination with other complementary policies.

1.5 *Vision 2016* is explicit that the achievement of its agenda requires the introduction of 'a new culture of hard work and discipline' (page 6). It also recognises that the new culture will also be one in which 'effort is rewarded and the necessary skills are available', and if these conditions are not currently met then it would not be surprising if productivity suffers. In this regard, it is important to recognise that productivity is frequently low because of constraints that it may not be possible to remove at the level of the individual. More often than not, addressing productivity constraints is a policy issue, not least because these constraints are often the unintended consequences of other policies and regulations. For instance, among the most obvious constraints to production are those that impede the smooth functioning of the labour market, although their effects may be significantly offset by improving the productivity of other inputs to production, including both land and capital. There is also the question of the appropriate balance between government and the private sector where there is a risk that, through endeavouring to provide quality services, the government starts to compete for the very resources that the private sector needs to use such services to the best advantage.

1.6 Nevertheless, there is a role for individuals in productivity improvement. In fact, the potential benefits of various initiatives to improve productivity can only be realised if the challenge is accepted by all concerned and reflected in adopting positive attitudes to making tangible improvements at the work place by staff at all levels in an organisation. The need for improved individual work performance is perhaps most crucial within government itself and associated institutions where efficiency is less easy to measure against a financial yardstick. However, it also applies to the private sector, which frequently seems to deal with problems of inefficiency by calling for ever-increasing levels of support from government.

1.7 The importance of worker efficiency is particularly important for Botswana for the reason that the country's main resource is its workforce. Whereas it is often the case that in other economies investors may be attracted by the size of the market or reserves of untapped natural resources, the situation is significantly different in Botswana, where potential investors would tend to be attracted by the quality of the country's man-made resources: the institutions, the infrastructure and the labour force.

1.8 Improved productivity is closely associated with technological progress. As will be demonstrated in the next section, sustained productivity growth is only feasible in the context of continuing advances in technological innovation through adoption of new organisational processes, adaptation of new technologies of production and use of new equipment. However, it is worth stressing from the outset that emphasis on technological progress does not imply a narrow focus on support for the development and adoption of the most advanced technologies. Sometimes this may be what is called for, and there are certain instances when less developed economies can adopt the newest technologies. It is, nevertheless, equally the case that investment in these technologies is frequently both expensive and risky, while much can be achieved through a range of more modest adaptations together with the necessary accompanying changes to work processes.

1.9 While the importance of productivity for improving economic performance may be generally accepted, the linkage with more general welfare issues is much less well understood and more controversial. If the emphasis of economic policy is to both encourage productivity increases and allocate rewards accordingly, it follows that those who, for one reason or another, are unable to raise their productivity will benefit less. Therefore, it is up to those who argue for primacy to be given

to the goal of economic efficiency to provide a convincing answer to the question of how this objective would translate into an improvement in the living standards for all.

1.10 To address these issues, the next section presents the analytical and theoretical link between growth in productivity and technological progress. This is followed by an examination of recent productivity trends in Botswana, a commentary on selected important policy concerns that may have a bearing on productivity levels, and an assessment of the extent to which an efficient economy is best placed to provide improved living standards across the population.

2. PRODUCTIVITY AND ECONOMIC GROWTH

2.1 'Economic growth' refers to the expansion of output of goods and services, and the accompanying increases in income and expenditure. The achievement of economic growth is a major objective of economic policy, as it is the foundation for improvements in the welfare of individuals. An understanding of the circumstances within which this objective can be achieved is, therefore, a major concern for policy makers, and a source of considerable debate. While avoiding the more technical details, this section outlines a basic analytical framework that identifies the key theoretical reasons for the close relationship between growth, productivity and technological development.

2.2 The most basic measure of productivity is labour productivity *(P_L)*. This is output (Y) divided by the total input of labour[3] (L):

$$P_L = Y/L \qquad (1)$$

This relationship can be reformulated to demonstrate that total output (Y) depends on labour productivity (P_L) and total labour input (L):

$$Y = L \, x \, P_L \qquad (2)$$

From this formulation it can be demonstrated that output changes as a result of either variations in an input or productivity from that input. It also points to a common misconception, which is that productivity refers to working harder. This may be the case in respect of some productivity measures but, fundamentally, productivity is higher if more output is produced for the same level of input and vice versa. In the context of equation (2), working harder refers to an increase in labour input rather than productivity. This distinction is important because while there is clearly a limit on how much extra work can be done, it is always possible to work more effectively.

2.3 Another implication of this framework is that there is a clear connection between labour productivity and living standards. If Y is the output of the whole economy or national income, usually measured by gross domestic product (GDP), and L is taken as the total population, then in equation (1) labour productivity is the equivalent of per capita income, i.e., GDP per capita, which is a standard welfare indicator. Increases in labour productivity (P_L) can result from a combination of four distinct sources:

(a) labour itself becomes more efficient (its quality improves);

(b) the supply of other inputs to production (including supplies of land, and capital, the other basic factors of production) increase in quantity;

(c) the supply of non-labour inputs to production increase in quality; or

(d) there are improvements in the way the existing quantum and quality of inputs work together.

While increasing the supply of other factors, (b)

[3] The most standard measure of L is in terms of hours worked, but this can vary depending on the context of the calculation and the availability of usable data. Other possible measures include the number of people employed, the total labour force or, even, the entire population.

above, (referred to as 'deepening' of these factors) in relation to a fixed quantum and quality of labour can boost labour productivity, the extent of the improvement is limited as there is only so much additional land or machinery that a fixed amount of labour can use. Beyond a certain level of additional non-labour inputs to the production process, each incremental unit of the inputs produces less output per unit than the previous dosage, a phenomenon known as the law of diminishing returns. Nevertheless, in general, sustained increases in output per unit of labour are ultimately from technological progress, either in labour itself (a), other factors of production (c), or how they are combined (d), which is also known as total (or multi) factor productivity (TFP).

Proximate and Fundamental Sources of Output Growth

2.4 There is a general agreement that technological progress is the basis for production growth, particularly that it is through the improvements in technology – either development of better equipment or processes of production – that sustainable output expansion is achieved. This causal relationship is easily discerned from the history of economic development, which indicates that productivity booms have typically been associated with the emergence of prominent new technologies. Most recently, production increases have benefited from a new generation of information and communications technology (ICT) while earlier examples include the telegraph (sometimes described as the 'Victorian Internet') which was later followed by the telephone, the steam engines that brought about railway transport, electricity as a source of power, mass produced synthetic rubber and plastic, the transistor (and later the microchip), the internal combustion and jet engines.

2.5 There are, nevertheless, significant differences of opinion regarding the specific factors that have been important in promoting productivity over time. The allocation of observed increases in output among the potential sources of growth listed above and, in particular, between productivity of the various inputs and TFP is known as *growth accounting* and is far from straightforward, due especially to dificulties with using the available data which are often either unreliable or difficult to match with the required categories. Problems arise especially in respect of inter-country comparisons, which is a typical objective of productivity calculations, as this further increases data problems. The next section of this chapter includes a growth accounting exercise using Botswana data, which also illustrates some of the technical problems indicated.

2.6 Even without data difficulties, growth accounting only identifies the *proximate* rather than the *fundamental* causes of growth; consequently, it is not possible to ascertain how growth is attributable to larger quantities of inputs and factors that directly influence their productivity. This implies the need to explain the conditions under which the changes in productivity of the various factors have occurred and, in particular, the role of policy and socio-economic institutions in promoting growth. In trying to answer these questions, considerable research has been undertaken, but little consensus has emerged that can act as a guide to policy makers.[4]

The Role of Capital Accumulation

2.7 The simplest model of growth focuses on the role of physical capital (*K*); i.e. buildings, machinery and equipment) as the other main input in the production process apart from labour:

$$Y = f(L, K) \qquad (3)$$

The model also allows for augmentation of

[4] For a more detailed review of this field, which emphasises the extent to which there remain wide areas of disagreement see, for example, Easterly, W. (2002) *The Elusive Quest for Growth: Economists Adventures and Misadventures in the Tropics.*

labour with additional human capital, which refers to increased skills in the labour force and is generally associated with improved levels of education and training.

2.8 With this focus on capital accumulation (either physical or human) as the source of growth, the consequent policy emphasis in this model is on the need for investment in such capital: i.e. building up the capital stock. It is readily apparent how this approach has underpinned major thrusts of policy in Botswana. The design of the development budget, in the context of the government's investment programme, is central to the six-year national development plans (NDPs) within which, in principle at least, mineral revenues are reserved for investment purposes. Consistent with the need to boost investment, there have been high levels of public spending on education and training; and, more recently, growth targets of Vision 2016 are explicitly linked to a need for sustained high levels of investment, estimated at 'about 41 percent of gross domestic product'.[5]

2.9 There is little doubt that such an emphasis on investment can provide a good basis for economic growth. Advanced economies invariably have a high capital to output ratio, and it has been argued that the rapid advances of the 'tiger' economies of south-east Asia were based mainly on exceptional rates of investment rather than improving the quality of capital or increasing productivity. However, most studies indicate that capital accumulation is not by itself able to account for much of the growth in many countries. This is especially true in respect of factors that determine rapid growth rates. For example, Tahari *et al* (2004) argue that slow growth in Africa is in large part due to it being too much driven by capital accumulation and that countries aspiring to higher growth rates (which is what is relevant to Botswana) should give more emphasis to investing in better quality capital, improvements in productivity and effective utilisation of productive capacity.[6]

2.10 There may also be an important distinction to be drawn between investment by governments and the private sector. This is a potentially important distinction, given the differing roles and objectives between the public and private sectors. There may be some presumption that, compared to government, private sector investment is more directly focused on achieving tangible returns and that such investment is more likely to result in growth of productivity and output. Artadi and Sala-i-Martin (2003; see footnote 33) emphasise the potential inefficiencies of government spending and its frequent predominance in national investment as a potential explanation of low growth rates in Africa.

2.11 However, it is also not always easy to demonstrate a strong connection between private investment and higher growth. One possibility may be that in the earlier stages of development, economies need a push forward in capital accumulation that is independent of potential financial returns and that government is the better vehicle for attaining the objective. Such arguments have certainly been applied in relation to Botswana. Another reason is that private investment is not a sufficient condition for growth if the broader set of conditions in the economy are not supportive of productivity increases; in particular, if market incentives are distorted to an extent that the link between financial rewards and efficiency and productivity is broken.[7] The importance of the institutional environment in influencing productivity and growth is discussed further below.

2.12 As for human capital, it is clear that enhanced skill levels play a crucial role in improving labour productivity, especially in ensuring the

5 *Vision 2016,* page 7.

6 Tahari A. *et al,* (2004) *Sources of Growth in Sub-Saharan Africa* IMF Working Paper 04/176.

7 For instance, if the cost of capital is held down through artificially low interest rates and/or subsidies, investment may be plentiful but it is perhaps not surprising that it often yields a correspondingly low return.

effective adoption and use of new technologies.[8] However, identifying an appropriate measure is more problematic. Researchers have mostly focused on the volume of formal education as a measure of investment in human capital with increases identified by growth in the numbers receiving higher education (i.e. secondary schooling and beyond). Unfortunately, the volume *per se* does not throw light on the quality of education, its relevance in acquiring work-related skills or the contribution from other, non-formal sources of learning. This dimension of human capital is important, as there are indications that such factors may have a greater impact on growth and productivity than simply increasing the total quantity of education (see for example Barro, 2001).[9]

There is also the question of broader conditions, such as the prospects of worthwhile jobs that provide incentives to acquire knowledge and in turn affect the return on investing in education.

2.13 The health of the labour force is an important component of human capital. The impact of high rates of HIV/AIDS infection is a dramatic example of how the benefits of education and skills training are quickly eroded if a substantial part of the labour force is either sick or their efforts are diverted into caring for others.

2.14 The impact of improvements to productivity that are not picked up in the data on capital accumulation can be measured through an augmented version of the previous equation (3):

$$Y = Af(L, K) \qquad (4)$$

In equation (4) A is usually interpreted as a productivity index and used as a measure of TFP. As will be seen in the next section, such an interpretation can be useful. But it should be recognized that A is not directly measured but a residual (i.e. the part of income (Y) that is not explained by labour input (L) and Capital (K)) and, as such, includes the various measurement errors that can arise.[10]

2.15 Moreover, even if such errors are properly taken into account the interpretation of the productivity index (A) remains highly problematic. Many suggestions have been made as to the crucial elements that result in, or undermine, economic conditions that promote high levels of and rapid growth in productivity. Some are briefly reviewed below, including some of the important results from the relevant research.

Research and Development, Innovation and Growth

2.16 Given the general agreement that technological progress is one of the basic determinants of sustained productivity, it follows that significant research has aimed at a more detailed understanding of the causal relationship involved. Progress towards 'knowledge-based' economies is monitored carefully (see, for example the Organisation for Economic Cooperation and Development's (OECD) 'Science, Technology and Industry Scorecard')[11] and there are widespread, even if not always well founded, concerns among developing countries that they will get left behind by the emergence of an ever-widening 'digital divide' that is tending to worsen the gap between the rich and poor countries. The most recent country-specific *Human Development Report* for Botswana prepared by the United Nations Development Programme (UNDP) focuses on factors that influence success in harnessing science and technology; and it has also been indicated that this will be the focus at the planned second university. The country's commitment to science and technology is spearheaded by the Ministry of Communications, Science and Technology, which was created in 2002, while other

8 Conversely, the choice of technology should take proper account of the skills that are available in the labour force.

9 Barro, R. J. (2001) 'Human Capital and Growth' *American Economic Review – Papers and Proceedings.*

10 As a simple example, if the measures of K and L have not been adequately adjusted for quality improvements then A will include changes in factor specific productivity.

11 www.oecd.org

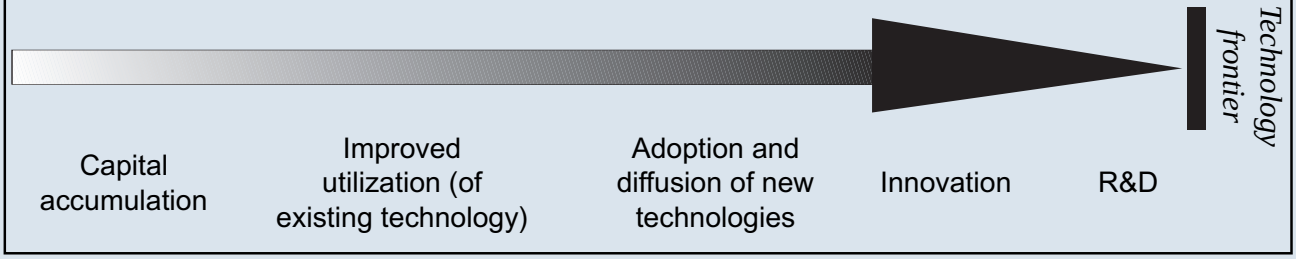
organisations such as the Botswana Technology Centre (BOTEC), the Rural Industries Innovation Centre (RIIC) and the research arm of the Ministry of Agriculture have been in existence for many years.

2.17 Major questions with respect to new technology includes the extent to which it results from activities directly aimed at technical development, i.e. research and development (R&D), or from less formal processes of innovation; and the channels through which technology is diffused, including the important issue of how technologies can most benefit developing countries. A further important consideration is the extent to which government intervention, through funding, other incentives or more direct intervention, can add to, or detract from the benefits of R&D.

2.18 As defined by the OECD, R&D comprises 'creative work undertaken on a systematic basis in order to increase the stock of knowledge and the use of this stock of knowledge to devise new applications'. There is little doubt that such activities do matter in the sense that without systematic activity relating to new technologies, substantial advances are unlikely to occur, at least not on a reliable basis (it has been pointed out that even discoveries that have been made by 'chance' often occur within the structured research environment). But this does not mean that all R&D-related activties will have an appreciable impact, or that R&D is always necessary for an economy to advance technologically. Figure 2.1 indicates the stages of technical progress and it is clear that there are several steps between basic capital accumulation and R&D at the technology frontier. In turn, this relationship suggests that there is much to be gained from devoting resources to the intermediate stages during which improved utilisation of existing technology, innovation and adoption and diffusion of new technologies can be implemented.

2.19 The usual focus in this respect is the extent to which developing countries can benefit directly from undertaking their own R&D activities although it is not clear that there is a dividing line between developed and less developed economies. One noteworthy conclusion from recent research is that expenditure on R&D only has a positive impact on growth in economies that are both advanced and large, while more general innovation (measured for example by registration of patents but in practice involving a much wider range of activities) is of benefit to both developed and developing economies.[12] Innovation focuses on all aspects of new ways of doing things, and is not the same as invention at the technology frontier. The capacity of countries to benefit from technologies developed either domestically or elsewhere depends on the absorptive capacity in the wider economy, which in turn is intimately related to the extent to which relevant human capital has been successfully developed.

FIGURE 2.1: THE STAGES OF TECHNOLOGICAL PROGRESS



2.20 The type of R&D may also be important, including its source of funding and institutional setting. The key question here is the importance of government involvement. While there appears

[12] Ulku, H. (2004) R&D, *Innovation and Economic Growth: an Empirical Analysis*, IMF Working Paper 04/185.

to be a strong case for government support of R&D given the likelihood of under-investment in this area by the private sector due to the problems caused by positive externalities, research suggests that there is little evidence that government-sponsored R&D has an appreciable impact on economic growth in practice. This finding could be due to a variety of factors, including the necessarily broader range of objectives pursued by governments and a bias towards more basic research in government funded R&D, as opposed to product development and, therefore, more difficult to relate to measured output.[13]

2.21 While there may be a direct and clear link between technology and economic growth (in the sense that, as already noted, productivity booms are typically associated with identifiable technological advances) the effect of specific new technologies is very uncertain. Many R&D initiatives are abandoned before their practical application, and even for those that, with hindsight, proved pivotal in boosting productivity, the process of adoption and diffusion was irregular and generally lengthy. As a general rule there is a substantial lag between invention and discernible gains in productivity. As one example, it took several years for the recent advances in ICTs to make a clear difference to productivity levels in the advanced economies.

2.22 Such lags may reflect a variety of factors, including the significant risks of investing in untried techniques. But it is also likely to be due to the fact that technologies are usually not adopted in isolation, but require complementary developments in skills, production process and organisational structures. Moreover, the complementary changes require further investment. According to some estimates the cost of adopting new computer systems can be up to ten times the cost of the hardware.[14] Crucially, precisely because of the large uncertainties that are involved in use of new technologies, it also requires a high degree of flexibility in the rest of the economy to allow the required complementary developments to take place unhindered.

Pro-Growth Economic Policies

2.23 Linking growth to particular policies has obvious attractions for direct linkages to policy advice, and has been a major focus of research at institutions such as the World Bank. There is a general consensus that bad policies are harmful for growth, with lists of such policies typically including high levels of government spending, fiscal deficits and public debt, very high inflation, protectionist trade policies and misaligned exchange rates. However it is less clear which policies are particularly harmful (if only because bad policies often occur together making their individual effects hard to disentangle), and to recognize a policy as potentially harmful does not imply agreement about how and when these effects occur. For example, it is generally agreed that inflation should be 'low and stable' to support growth policies, but how low remains less clear.[15]

2.24 One area of particular controversy is the extent to which an economy's openness (that is to free trade in goods and services and unhindered financial flows) is good for growth, where there has to some extent been a backlash in recent years from the simple view that the more open is an economy the better. The most relevant concerns relate to the question of capital flows where moving quickly to full openness has caused difficulties in several instances while not obviously providing immediate benefits.

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13 Guellec, D. & de la Potterie, B. (2004) 'From R&D to Productivity Growth: Do the Institutional Settings and Source of Funds of R&D Matter?' *Oxford Bulletin of Economics and Statistics* July 2004 Vol 66(3)

14 Hall, B. (2004) *Innovation and Diffusion* NBER Working Paper 10212

15 For example, Khan and Senhadji (2001; *IMF Staff Paper 48/1*) find a negative relationship between inflation and economic growth in developing countries only for inflation rates over 11 percent. For developed countries, the inflation-growth trade-off applies for inflation rates over three percent.

2.25 Moreover, once differences between countries in productivity growth and technological change are acknowledged as being significant, economic models no longer point to unambiguous benefits of free trade.[16] However, there seems to be no credible evidence that restrictive trade policies can systematically boost growth. As well as denying the benefits of specialisation in the production of goods and services, policies that restrict trade also severely constrain one of the major potential mechanisms through which technologies can be transferred while, at the same time, protected producers have little incentive to operate efficiently or innovate. For these basic reasons, claims that protection of local producers from external competition is somehow in the 'national interest' should generally be viewed with scepticism.[17]

2.26 It is generally the case that policies that promote free trade are unlikely, by themselves, to be sufficient, a panacea that invariably results in rapid growth. In particular, the potential benefits of free international trade are unlikely to be unlocked if there is not similarly free trade within the domestic economy, including trade in the inputs to production. If domestic markets are not functioning efficiently then the potential for effective interaction with world markets will be severely reduced. Economists base the arguments for free trade on countries focusing on producing in areas where they possess 'comparative advantage'. However, this can only be achieved when inputs are rewarded in line with their contribution to production and in line with international prices – another instance of the direct link between productivity and growth.

The Importance of Structures and Institutions

2.27 The role of institutions as the fundamental source of economic growth has been the focus of recent research, with the general view that good policies appear not on a random basis, but are encouraged and nurtured by appropriate legal and political arrangements. In recent years there has emerged considerable agreement that institutional weakness is a major cause of the problems of low growth faced by sub-Saharan Africa. However, there is much less agreement on the factors leading to such institutional weakness. Various reasons, including geography, ethnic frictions and the legacies of colonialism, have been put forward.

2.28 A focus on institutions has clear practical applications. The concern that the growth potential of poor countries remains mired in inadequate political, legal, and regulatory frameworks can be directly linked to the increased insistence from international donors that aid programmes are linked to effective commitment to 'good governance'.[18]

2.29 At the same time, institutional reform is an evolutionary process and appropriate institutions may come in a variety of forms depending on the circumstances. Recognising this variety, it is helpful to try and identify the essential functions that institutions should embrace. Following Snowden (2004), these may be seen as including:

(a) market *creating* institutions, such as property rights and contract enforcement, for

16 For example, countries which specialise in sectors that have slow rates of technological progress may experience lower growth rates. See, Snowden, B. (2004) 'Explaining the Great Divergence' (interview with Daron Acemoglu) *World Economics* 5(2).

17 Particular scepticism should be reserved for claims that such competition is somehow 'unfair'. The whole point of engaging in trade (whether between or within countries) is to take advantage of lower prices. Although concerns are often raised about so-called 'dumping' this refers to selling at prices below the cost of production, which is unlikely to often be in the producers' interest and, therefore, is unlikely to be a common occurrence.

18 See Burnside C. & Dollar, D. (2000), 'Aid, Policies and Growth' *American Economic Review* vol 90. This reflects the current widespread consensus that, to be effective, aid should go beyond supplying funds for investment and be part of a package of sound policies and institutions. However, the extent to which this prescription has been followed by donors in practice remains questionable as other considerations can intervene in aid allocation.

example as provided by security forces and the judicial system;

(b) market *regulating* institutions, especially for areas where market 'failures' are a threat as in financial services and the regulation of monopoly suppliers;

(c) market *stabilising* institutions (monetary, fiscal and financial authorities);

(d) market *legitimising* institutions (democracy and social protection).

2.30 It is worth emphasising that the stress on the importance of markets does not imply a commitment to 'market fundamentalism', i.e. an insistence on a purely *laisser faire* approach to economic development. While mainstream economics emphasises the remarkable potential for market mechanisms to support and drive development, there is a recognition of serious instances of market failure, which may require corrective policy intervention, including, in some instances, replacing markets with more direct means of resource allocation. A fundamentalist approach would give little, if any, weight to institutions beyond those that create markets.

2.31 Similarly, the reference to democracy does not imply a particular democratic model, or deny that there are countries with less than fully democratic credentials that have achieved remarkable growth over sustained periods. At the same time, the justification of democracy does not stand or fall on arguments for improved economic efficiency. However, the emphasis on the need to legitimise the distribution of economic wealth and resources has a natural affinity with embracing democratic institutions; in addition, a functioning participatory democracy is a sign of high levels of social cohesion and trust. Overall, research has indicated that the dominance of institutions whose purpose is crudely exploitative is usually harmful to prospects for growth.

2.32 One of the effects of the recent emphasis on institutions is to downplay the role of geography as a major determinant of growth. Clearly geography has some impact, as factors such as climate, location and availability of natural resources must affect development prospects. Technologies developed in advanced economies, which are concentrated in temperate climate zones, may not easily be adapted to the needs of countries in the tropics. However, the more optimistic argument is that such difficulties can be largely overcome if appropriate institutions have been able to develop. Here, Botswana has been used as a prominent case study. Acemoglu *et al* (2003) argue that the country's developmental success had been founded in large part on quality political and social institutions with origins in the pre-independence period and which did not suffer from colonial interference.[19] In contrast, bad institutions can undermine the potential of countries that appear to be geographically advantaged, which may go a long way towards explaining the so-called 'resource curse' where countries have frequently struggled to convert rich natural resource endowments into sustained increases in living standards.[20]

2.33 Closely related to the soundness of policy and institutions is the impact of corruption on growth. It is not difficult to see how the prevalence of corrupt practices will be harmful for growth, as incentives for efficiency and productivity are quickly undermined. Low growth is also a stimulus for further corruption leading to a vicious circle that is particularly difficult to reverse as, invariably, those responsible for policy, both its design and implementation, are often involved. On a more

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19 See Acemoglu, D. Johnson, S. & Robinson, J. (2003) 'An African Success Story: Botswana?' in Rodrik, D. (ed) *In Search of Prosperity: Analytic Narratives on Economic Growth.* Princeton University Press.

20 In such economies there may be a substantial colonial legacy of mainly exploitative institutions, while the large 'rental' component (revenues far above the costs of production) typically associated with natural resource extraction further weakens the need for clear connections betweens rewards, efficiency and productivity. The effective collection of these rentals as government revenue and their subsequent effective use has been a major reason for the relative success of Botswana.

positive note, countries that reduce the extent of corruption can rapidly restore growth prospects.

Measures of Growth Potential

2.34 Many of the results of research on the importance of sound policies and institutions, geography and technology can be seen in the various indices that are produced to assess aspects of comparative economic performance. For example, the three component sub-indices of the 'Growth Readiness Index' produced by the World Economic Forum (WEF) are the technology index, the public institutions index and the macroeconomic environment index. In turn, each sub-index includes various detailed measures, many relating directly to issues raised in the preceding paragraphs. Geography, in the form of reliance on natural resources and whether a country is land-locked, is included in the trade readiness index of the UN Economic Commission for Africa. Technology has its own index, as does corruption with the annual corruption perceptions index of Transparency International (TI) being among the most well known of all.

2.35 Such indices are useful to an extent, but considering Botswana immediately signposts a potential puzzle. The country typically scores very well over a wide range of these indices, to the extent that ratings are generally ahead of others in Africa and overlap those elsewhere. For 2003 it had the highest rank for any African country in the growth readiness index (although it lost this position in 2004). This is despite obvious natural disadvantages, such as the country's landlocked status, and is due typically to the high ratings given for institutions. For several years the country has also fared well in the Corruption Perceptions Index, consistently being labelled not only the least corrupt country in Africa but also faring well in worldwide comparisons. This raises the obvious question of whether the assessed readiness for growth has been adequately matched by performance. These issues of performance and trends in productivity are, therefore, discussed in the subsequent sections.

3. ISSUES IN MEASURING PRODUCTIVITY

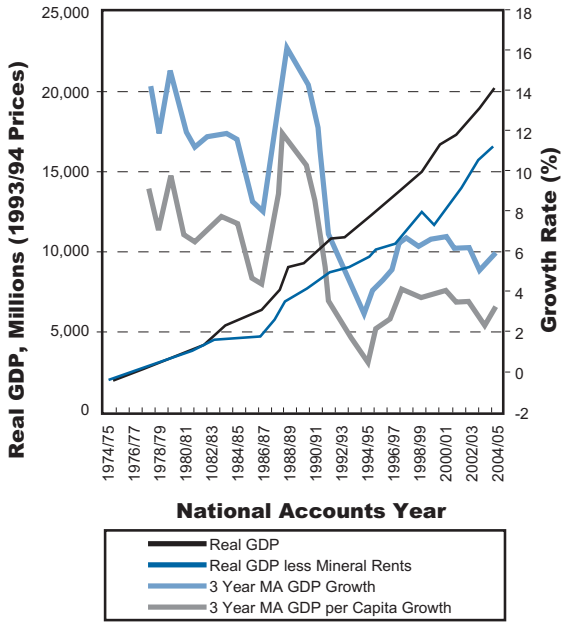
Introduction

3.1 This section discusses productivity trends in Botswana over a thirty-year period and draws policy implications of changes in productivity. Productivity growth is measured using the standard growth accounting method, while the effect of changes in productivity and factor inputs on output are analysed. While similar exercises were carried out in the Bank of Botswana's 1993 and 1995 Annual Reports, new data have become available that allow for an updating of that work. Moreover, unlike previous work, this Section further makes use of comparative statistics on different aspects of competitiveness to judge how well the economy has been performing *vis-à-vis* a selected number of regional and other economies, and how such performance has been facilitated by productivity improvements or inhibited by low productivity. Where deficiencies are identified some solutions are suggested.

3.2 Central to development planning in Botswana has been the objective to achieve a sustainable level of economic growth as the means to raising the nation's standard of living and reducing poverty. Overall real output grew at an average annual rate of 8.6 percent over the three decades spanning 1974/75 to 2004/05[21] (Chart 2.1). However, this masks a decelerating trend in the rate of output expansion over this period. The economic growth rate halved from an average 12 percent per annum in the first decade to 6 percent in the third decade, resulting in a much lower increase in income per person of 3 percent per annum compared with a 7 percent annual increase in the first decade. Furthermore, short-to medium-term prospects for output growth are not as robust as in the past, which, by extension, means that GDP per capita is likely to grow more slowly in the near future than in the past.

[21] GDP data for national accounts years 2003/04 and 2004/05, which run from July each year to June the following year, were extrapolated using average growth rates for the three years immediately preceding each of the years.

Chart 2.1: Real GDP, Real GDP Less Mineral Rents, and Growth Rates of GDP and GDP per Capita (3-Year Moving Averages)



Sources: Central Statistics Office and Bank of Botswana

3.3 While the 6 percent output growth is still respectable by international standards, it has generated insufficient employment opportunities. Formal sector employment increased at an average annual rate of 2.6 percent between 1994/95 and 2004/05, while the unemployment rate rose to 20 percent in 2001 from 14 percent in 1991. The most recent Household Income and Expenditure Survey (HIES) results (not yet published) show an even higher unemployment rate, and that (for certain age groups) unemployment is highest among secondary school leavers. These statistics suggest that a high rate of growth is required to reduce unemployment in any meaningful way, but alone is unlikely to solve all welfare problems.

3.4 To stretch this point a little further, the 6 percent output growth looks even more inadequate when put against the country's ambitious aspirations expressed in the *Vision 2016* document. To illustrate the point, *Vision 2016* identifies one of its objectives as the tripling of income per capita by 2016 from its 1996 level. For this to be achieved, the average annual growth rate of output must be 7.9 percent, of the labour force 2.9 percent, and labour productivity 3.9 percent, while investment would have to average 41 percent of GDP. These compare with the actual growth rate of the labour force of 2.4 percent per annum between 1991 and 2001, and over the last ten years, a 3.3 percent a year growth of labour productivity, and an investment rate of 26 percent of annual GDP per year. Judged against this background, both actual output and income per capita growth rates are inadequate for the achievement of the *Vision 2016* objective of increasing income per capita threefold from what it was in 1996. Thus, the challenge remains to raise the level of GDP growth in order to sustain reasonable increases in per capita income. Identification of factors that account for changes in output and the strategies for reversing the deceleration in output growth constitute the focus of the next subsections.

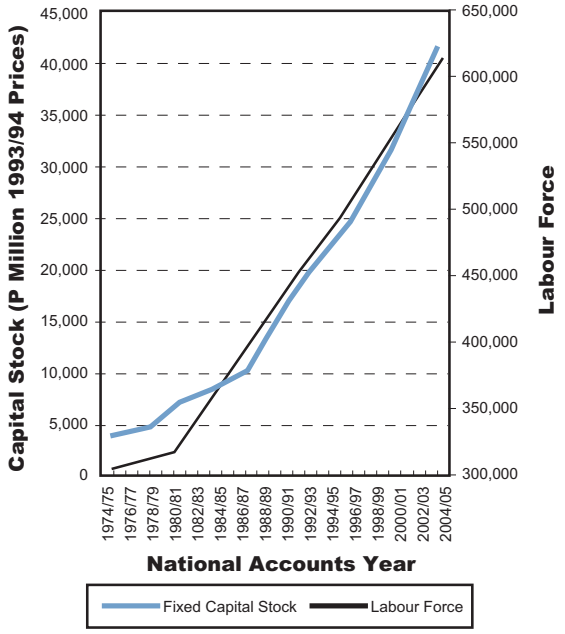
Sources of Growth

3.5 As discussed in Section 2, the proximate sources of output growth are factor (capital and labour) accumulation, factor quality improvements and the efficiency with which factor inputs are combined to produce output. Further, changes in output may be ascribed to changes in the sectoral composition of output, such as when production shifts towards high productivity growth sectors and away from low productivity growth sectors. In subsequent subsections, each of these sources of growth is investigated in the context of Botswana's economic growth record.

3.6 The basic factor inputs, capital and labour, have grown significantly over the three decades to 2004/05 (Chart 2.2), with the capital stock increasing at an average annual rate of 8.9 percent and the labour force at 2.3 percent per annum on average. As a result of the capital stock increasing more rapidly than the labour force, the capital intensity of production increased. The rate of capital stock expansion was highest during the period 1984/85–1994/95, reflecting the coming on stream of the Jwaneng diamond mine in 1982, the second largest (in terms of

carats recovered) of the four Debswana mines, and the launching of the Financial Assistance Policy (FAP) in 1982 through which capital grants were provided to eligible businesses for investment in capital items. It also reflected growth in the transport sector, in particular the acquisition of four aircraft by Air Botswana and the purchase of thirty locomotives by Botswana Railways (BR) between 1986 and 1991, as well as the establishment of BR headquarters in Mahalapye in 1994.

CHART 2.2: LABOUR FORCE AND CAPITAL STOCK



Sources: Central Statistics Office and Bank of Botswana

3.7 It is important that businesses make reasonable returns on their investment for the investment rate to be sustained. Similarly, labour requires adequate compensation in order for employees to continue to offer their services. As reported in the 1995 Bank of Botswana Annual Report, the rapid accumulation of the capital stock in the 1984/85–1994/95 decade did not initially translate into a rising share of factor income attributable to capital.[22] It did subsequently, however, rise sharply between1992/93 and 1996/97, to a high of 61 percent (Table 2.1), which is likely to be at least partly due to the slowing of employment growth during this period.

TABLE 2.1: PERCENTAGE SHARES OF FACTOR PAYMENTS TO CAPITAL, SKILLED LABOUR AND UNSKILLED LABOUR: 1985/86, 1992/93 AND 1996/97

	1985/86	1992/93	1996/97
Capital	48.6	45.2	61.3
Skilled Labour	35.1	38.8	24.7
Unskilled Labour	16.3	16.0	14.0

Source: Calculated from Botswana Social Accounting Matrices

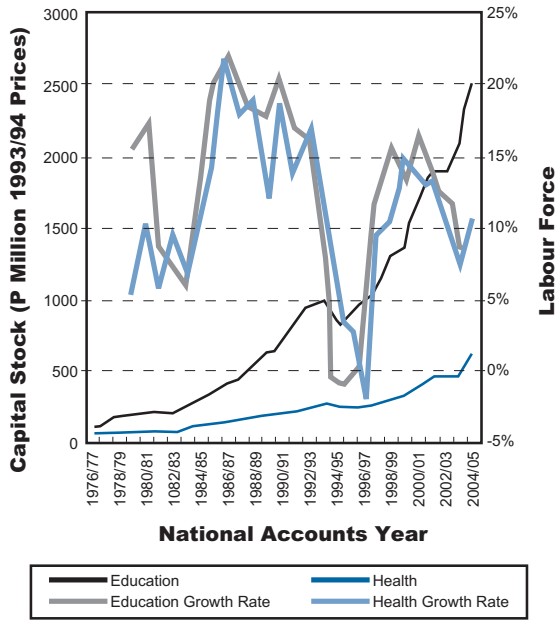
3.8 As a result of substantial spending on education (more below), the share of factor income due to skilled labour rose from 35 percent in 1985/86 to 39 percent in 1992/93, but dropped to 25 percent in 1996/97 – a substantial fall that is not easily explained, and may reflect data deficiencies.

3.9 Improvements in the quality of the labour force largely reflects heavy investment by Government on education and health infrastructure and substantial spending on recurring expenses, in order to improve both access and the quality of education and health care services in the country. As Chart 2.3 shows, over the three decades since 1974/75, real spending on education and health grew at average annual rates of 12 percent and 11 percent, respectively.

3.10 Such investments have the potential to impact positively on social indicators, such as educational enrolments, infant and maternal mortality and life expectancy. Indeed, there have been improvements in each of these social indicators, until recently where in the health area the spread of HIV/AIDS has reduced, and in some cases reversed earlier gains. For example, life expectancy rose from 55.5 years in 1971 to 65.3 years in 1991, but by 2001 had fallen to 55.7 years, similar to its level in the early seventies, largely reflecting the effect of HIV/AIDS (CSO, 2001 Population and Housing

22 This was calculated as net operating surplus plus depreciation as a percent of factor income.

CHART 2.3: REAL RECURRENT EXPENDITURE ON HEALTH AND EDUCATION AND 3-YEAR MOVING AVERAGE GROWTH RATES



Sources: Ministry of Finance and Development Planning and Bank of Botswana

Census Results). These compare with the UNDP figures for life expectancy of 53.2 years and 44.4 years in 1970–75 and 1995–2000, respectively. Infant and under-five mortality rates have more than halved over the same period, from 99 to 46 per 1000 live births and 142 to 59 per 1000 live births, respectively (UNDP, 2001, Human Development Report). Educational enrolments and progression rates at all levels have increased. This has been particularly so at the primary level where the enrolment rate rose from 42 percent of the age group enrolled in 1970 to 98 percent in 1997. These statistics say little about the quality of human capital, but evidence from Table 2.2, on total factor productivity-related quality improvements, suggests that the quality of labour has improved.

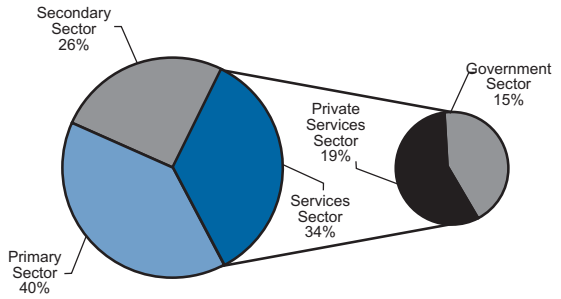
Profile of Sectoral Value Added Shifts

3.11 Important shifts in sectoral value added occurred over the 28-year period to 2002/03, namely away from the secondary sector towards the services sector, in line with international trends.[23] The share of GDP attributable to the services sector grew to 48 percent in 2002/03 from 35 percent in 1974/75, while the share of the primary sector remained unchanged at 40 percent and that of the secondary sector declined from 25 percent to 12 percent of GDP. Within the services sector, the more dynamic sub-sectors were the banks, insurance and business services; and trade, hotels and restaurants, both of which contributed significantly to the growth of the output share of the *private* services sector. The private sector accounted for 64 percent of the output share of the services sector in 2002/03, with government accounting for the remaining 36 percent. It is interesting to note that the share of the private sector in the output of the services sector rose consistently, from 56 percent in 1974/75 to 64 percent in 2002/03. Although the share of government in services output declined from 44 percent to 36 percent over this period, this does not mean that government is any less important in terms of impacting on output growth. With a 17 percent share in total GDP in 2002/03, a figure that has remained fairly constant for several years, government is the second largest economic sector, after mining, and thus can have important implications for output growth. This is not only through growth of its own output, but also the output of other sectors, given Government's potential to draw significant resources away from, or facilitate growth of, the private sector.

3.12 The output share of the secondary sector fell from 25 percent of GDP in 1974/75 to 12 percent in 2002/03, due to declines in the shares of construction and manufacturing (Chart 2.6). Contrary to some international trends, the primary sector maintained its share at 40 percent both at the beginning and end of the period, as the share of mining rose from 14 percent in 1974/

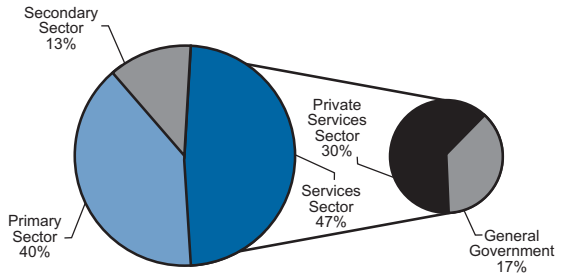
[23] The secondary sector consists of economic activities that involve a significant amount of physical processing, i.e., manufacturing, construction and water and electricity. The services sector comprises distributive activities and service providers, i.e., transport; government; trade, hotels and restaurants; banks, insurance and business services; and social and personal services. The primary sector comprises extractive activities, i.e., mining and agriculture.

CHART 2.4: SECTORAL SHARE IN GDP: 1974/75



Sources: Central Statistics Office and Bank of Botswana

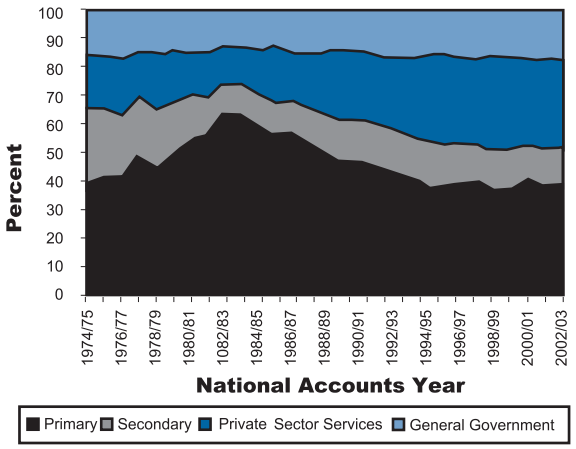
CHART 2.5: SECTORAL SHARE IN GDP: 2002/03



Source: Central Statistics Office and Bank of Botswana

75 to 38 percent in 2002/03, peaking at 57 percent in 1983/84 while that of agriculture declined from 26 percent to 3 percent.

CHART 2.6: SECTORAL SHARE IN GDP



Sources: Central Statistics Office and Bank of Botswana

Intensity in Factor Input Use

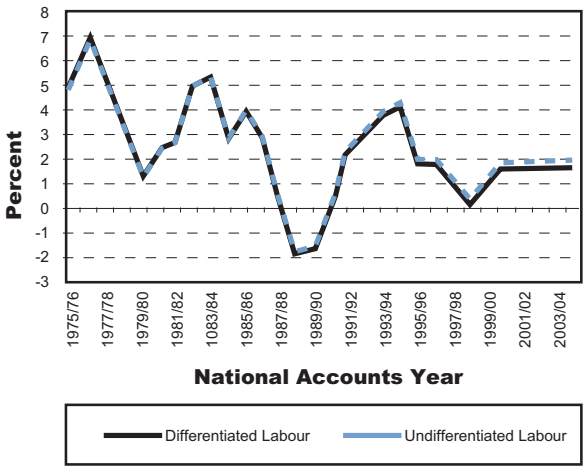
3.13 Given its high share in GDP, the services sector commands a similarly high share of compensation to labour, about 67 percent in 2000/01, while the private services sector contributed 43 percent of compensation to labour. The share of the primary sector in labour income in 2000/01 was 13 percent, down from 23 percent in 1974/75, while that of the secondary sector was 20 percent, down from 27 percent in 1974/75.

3.14 Capital intensity is highest in the water and electricity sector while the banks, insurance and business services sector also has a fair amount of capital intensity. Overall, the banks, insurance and business services; trade, hotels and restaurants; and mining, were the most dynamic in terms of generating growth, and this dynamism has partly been spurred by the high capital intensity, at least in the bank, insurance and business services sector.

Total Factor Productivity

3.15 The preceding sections examined the evolution of factor inputs and output over a 30-year period. This section examines the relationship between factor inputs and output, i.e., productivity. As highlighted in Section 2, productivity can be measured in any number of ways, but typically the focus has been on the measurement of the narrower concept of labour productivity. However, a more encompassing measure is total factor productivity (TFP), which recognises that output growth arises not only from mere factor accumulation, but also from all other inputs, the efficiency with which inputs are transformed into output plus a host of other factors. It is an indirect measure of productivity as it is determined as a residual after accounting for productivity due to measured input growth. Thus, TFP is here calculated as the difference between the output growth rate and the weighted average rate of growth of the inputs. The results of the calculations are shown in Table 2.2 and Chart 2.7.

CHART 2.7: TOTAL FACTOR PRODUCTIVITY GROWTH



Sources: Central Statistics Office and Bank of Botswana

3.16 The output measure used in the TFP calculation is computed by deducting government mineral revenue from overall GDP in recognition of the fact that part of the GDP is not attributable to changes in factor inputs, but to mineral rents.[24] Without this adjustment, the resulting TFP growth estimates would be distorted and misleading inferences could be drawn. The difference between overall real GDP and the GDP adjusted for mineral rents has been widening since the mid-1980s, and has grown even bigger since 2000/01 (Chart 2.1). Labour and capital inputs are often taken as homogeneous, ignoring the qualitative changes that are embodied in, for example, highly educated labour and newer technologies and which impact output growth differently. In this exercise, labour is differentiated with respect to skills, while data limitations have not permitted similar differentiation with respect to the health status of labour and capital stocks of different vintages. Therefore, the measure of TFP used here includes growth arising from improvements to the quality of the capital stock, while labour is split into skilled and unskilled components. Appendix A provides a fuller description of all variables used in the computation of TFP and the sources of the data.

3.17 The TFP estimates presented in Tables 2.2 and 2.3[25] suggest a mixture of good and bad experiences and outcomes. Output less mineral rents grew at a respectable annual rate of 8 percent over the entire 30-year period (Table 2.2), making it the second most rapid growth after that of Equatorial Guinea (Table 2.3). This is even more spectacular considering that the effect of mineral rents has been factored out of the Botswana calculations. Consistent with TFP results for some developing countries, growth in Botswana has been driven mainly by factor accumulation, in particular physical capital. Growing at 4.6 percent annually during the 30-year period, capital inputs contributed 57 percent of the annual growth rate of output for that period. On the other hand, the labour force (differentiated) expanded at a rate of 1.2 percent a year and accounted for 15.3 percent of output growth over the same period. With a combined factor input contribution to output growth of 72.3 percent, the balance, 27.7 percent, is the portion of output growth attributable to TFP growth. As shall be seen below, this level of contribution is fairly low by international standards.

3.18 Another positive outcome is that, at 2.2 percent, the Botswana TFP growth estimate (calculated using differentiated labour) is very healthy when compared to TFP estimates for comparator countries (mostly regional, SADC or African versus non African, all selected on the basis of data availability), reflecting especially good performance in the early part of the 30-year period. Table 2.3 shows that the growth rate of TFP for the entire period is higher than for most other countries, equal to that of Singapore and second only to that of Equatorial Guinea. Considering the unadjusted (for quality improvements) rate of growth of TFP of 2.3 percent, only Equatorial Guinea has a higher TFP growth than Botswana. However, in terms of TFP contribution[26] to output growth, Botswana

[24] Mineral rents are the return above the cost of production to the nation from mining and selling minerals, especially diamonds.

[25] The TFP numbers in this Table should be interpreted with caution in view of the different periods covered and differing methodologies and data adjustment processes.

fares poorly, coming in at 5th position with a contribution to the rate of output growth of 28 percent, which is lower than Malaysia's 44 percent, Singapore's 43 percent, Equatorial Guinea's 42 percent and Thailand's 39 percent. This suggests ample room for improving Botswana's TFP rate of growth and efforts should be directed at raising it. This is not to deny that Botswana's TFP growth is comparatively high on a global scale, but rather to recognise that it is low in relation to the rate of economic expansion. To illustrate the importance of boosting TFP growth, Table 2.3 shows that countries with negative TFP growth rates have among the lowest rates of increase in GDP despite having reasonably high growth rates of physical inputs, suggesting that factor accumulation while a necessary condition for growth, is by no means a sufficient one and that TFP has a fundamental role to play in the determination of output changes. As mentioned earlier, to date, output increases in Botswana have largely been driven by factor accumulation and sooner or later the limits of this approach will become evident. Therefore efforts should be directed at promoting factors that influence TFP growth in order to ensure that an appropriate rate of output growth (in terms of the associated employment opportunities and per capita income growth) is maintained. This is important for addressing issues of poverty and improvement in living standards.

3.19 The importance of differentiating the labour force can be seen from observing the differential between the TFP growth rate calculated using the total labour force (2.3 percent) and using differentiated labour (2.2 percent), which, over the 30-year period, averaged 0.1 percent. This difference reflects the qualitative improvements in the educational status of the labour force. Chart 2.7 picks up this effect, which is noticeable in the post-1991/92 period, pointing to a positive effect on output growth of human capital development. However, in the earlier periods, 1975/76–1980/81, the differential is suggesting perhaps that quality improvements are incremental and their impact occurs with a lag. During this period, skilled labour increased at a rate of nearly 4 percent per annum compared to a drastically reduced rate of unskilled labour growth of 0.8 percent, which led to a drop in the share of unskilled labour to 38 percent in 2004/05 from nearly 50 percent in 1982/83. However, in the earlier periods, 1975/76–1980/81, the differential is hardly noticeable and may be explained by the slow build-up of skills and knowledge in the first six years of the review period during which skilled labour grew by 0.1 percent annually on average. But even after a pick-up in growth of this labour component to 4 percent in the following ten years, the impact on TFP was not discernible partly because unskilled labour was also growing relatively faster at 2.8 percent, but also reflecting that quality improvements are incremental and impact TFP with a lag.

3.20 The more worrying outcome is the trend decline in both TFP and factor input growth rates, which, in turn, has contributed to the trend decline in the growth rate of output. The rate of increase of TFP fell from an average 3.9 percent per annum (for both differentiated and undifferentiated labour) during 1974/75–1984/85 to 1.5 percent and 1.7 percent a year, respectively, during 1984/85–1994/95, while at the same time capital and labour inputs increased at higher rate. The conclusion is that the slowdown in TFP growth was responsible for the fall in the rate of economic expansion between the two periods. In the following decade the rates of growth of both the TFP and physical inputs decelerated, resulting in a stronger decline in output growth. The continued decline in the TFP growth rate may be indicative of a near exhaustion of higher return projects for public investment, especially in more recent years, as many of these have already been implemented, while the experience of the CEDA Venture Capital Fund with little active interest in its funding could be indicative of a similar situation in the private sector.

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26 Calculated as the percentage share of TFP in output growth.

3.21 It should be noted that part of the explanation for the decline in TFP growth rates could be due to the way in which the calculation is carried out, using the total labour force rather than the actual labour employed in production (for which data is not available). Using total labour available rather than labour employed will tend to bias productivity for *employed* factors of production estimation downwards. Furthermore, if unemployment has been rising, as it has been in Botswana, the downward bias may get progressively greater, hence possibly explaining part of the downward productivity trend. Nevertheless, to the extent that the data refers to the productivity with which available factors of production are utilised, the downward trend is representative.

3.22 To complement the discussion on TFP estimates, labour productivity (real output per worker) growth rates were calculated for the period 1982–2003 and are presented in the last row of Table 2.2. The results are somewhat consistent with those emerging from TFP growth estimates. On average, labour productivity grew by 2.1 percent a year between 1982 and 2003. This compares favourably with labour productivity (real output per hour worked) growth for the USA of 1.4 percent calculated over the period 1973–95 (Steindel C. and Stiroh K.J., 2001, see footnote 4, Table 2.3). Labour productivity growth was very strong (5.9 percent p.a.) in the ten-year period ending 1984/85, dropped to nearly zero in the following decade, but rose in the decade to 2004/05.

4. Enhancing and Maintaining Productivity Growth: The Case of Botswana

4.1 The preceding section reported on TFP and output computations for Botswana and comparable data for other countries. The analysis of TFP growth estimates has yielded three major

TABLE 2.2: TOTAL FACTOR PRODUCTIVITY GROWTH, 1974/75 TO 2004/05

	Average Share Calculated from 1985/86 1992/93 1996/97 SAMs	Average Annual Growth Rate			
		1974/75 to 1984/85	1984/85 to 1994/95	1994/95 to 2004/05	1974/75 to 2004/05
Real Output Less Mineral Rents	1.000	9.6	8.4	6.0	8.0
Capital Stock[1]	0.517	5.0	5.3	3.4	4.6
Labour Force[1]: of which	0.483	0.8	1.5	1.2	1.1
Skilled	0.328	0.6	1.3	1.2	1.0
Unskilled	0.155	0.2	0.3	0.1	0.2
Total Inputs (capital and labour)[1]					
Uniform labour		5.7	6.8	4.6	5.7
Differentiated labour		5.8	6.9	4.8	5.8
Total Factor Productivity Growth					
Undifferentiated Labour Force		3.9	1.7	1.4	2.3
Differentiated Labour Force		3.9	1.5	1.2	2.2
Input Quality Improvements[2]		0.0	0.2	0.2	0.1
Labour Productivity Growth[3]		5.9	0.5	3.3	2.1

1. Annual growth rates are weighted by the average shares of capital and labour and factor income (calculated using data from the social accounting matrices (SAMs) for the years 1985/86, 1992/93 and 1996/97). The sub-components may not add up to the whole due to rounding.
2. Refers to the difference between undifferentiated and differentiated labour force and shows TFP growth due to improvements in the quality of labour.
3. Defined as real output per worker. The period covered starts in 1982 and ends in 2003.

Source:Appendix A

TABLE 2.3: SOURCES OF REAL GDP GROWTH FOR SELECTED COUNTRIES AND COUNTRY GROUPINGS

		Contribution of:		
	Real GDP Growth (Percent)	Physical Capital (percent)	Labour (Percent)	TFP (Percent)
Botswana[1]	7.5	3.8	1.7	2.0
Botswana[2]	8.4	…	…	3.5
Botswana[3]	8.0	4.6	1.2 (1.1)	2.2 (2.3)
Equatorial Guinea[1]	11.6	5.0	2.0	4.6
Namibia[1]	1.9	1.5	1.5	–1.1
South Africa[1]	3.1	1.5	1.4	0.1
Zimbabwe[1]	2.6	1.6	1.8	–0.7
Sub-Saharan Africa[1]	3.2	1.8	1.5	0.0
Middle-income countries[1]	5.0	2.6	1.5	0.9
Oil-producing countries[1]	4.6	2.4	1.5	0.6
Low-income countries[1]	2.7	1.5	1.5	–0.3
Non Sub-Saharan Countries				
Indonesia[2]	4.7	…	…	1.2
Malaysia[2]	4.5	…	…	2.0
Singapore[2]	5.1	…	…	2.2
Thailand[2]	5.2	…	…	2.0
United States[4]	3.0	…	…	0.4

1. Estimates from Tahari, A. et al, *Sources of Growth in sub-Saharan Africa* (SSA), IMF Working Paper No. WP/04/176, 2004. The TFP estimates for Botswana have not been adjusted for mineral rents and therefore are not directly comparable with the adjusted Bank of Botswana estimates. The data cover the period 1960–2002
2. Estimates from Matovu J and Yuguda L., 'Sources of Economic Growth', in IMF, Botswana Selected Issues and Statistical Appendix, 1999. The estimates have been adjusted for mineral rents by excluding the mining sector from the calculations. Data cover the period 1978–1996.
3. Bank of Botswana estimates calculated for the period 1975–2005. The labour and TFP growth estimates in parentheses have not been adjusted for quality improvements and are, therefore, comparable to the TFP results from Tahari et al.
4. Estimates cited in Steindel C. and Stiroh K. J., 2001, Productivity: What Is It, and Why Do We Care About It?, Federal Reserve Bank of New York. Estimates are for the period 1973–1995 and from the US Bureau of Labour Statistics (2000).
5. '…' means not available.

Source: Tahari, A., et al, 2004, *Sources of Growth in Sub-Saharan Africa*, IMF Working Paper No. WP/04/176; Matovu J and Yuguda L., 1999, 'Sources of Economic Growth', in IMF, Botswana Selected Issues and Statistical Appendix; CSO, National Income Accounts Reports (various issues), and US Bureau of Labour Statistics, 2000, *Multifactor Productivity Trends,* 1998, USDL 00–267, September 21.

conclusions. First, that output growth in Botswana has not only been rapid but higher than that in most of the countries reviewed. Nevertheless, the rate of output expansion has trended downwards over the 30-year review period, suggesting a significant slowdown in TFP growth, initially, from the mid-1980s to mid-1990s, and a subsequent downward trend

into the decade up to 2004/05. Moreover, there was also a deceleration in the rate of increase in physical inputs (capital and labour) during the decade to 2004/05. Second, output expansion was driven mainly by factor input accumulation, especially capital and, to a lesser extent, TFP. Third, although TFP increase in Botswana is in absolute terms, healthier than in most countries, its contribution to the rise in output is low compared to other countries. Furthermore, the downward trend in TFP growth is cause for concern, a development which needs to be reversed in order to provide a higher sustainable rate of output expansion. What follows is an explanation of the possible causes of the slowdown in output increase and how a rise in TFP can be achieved.

4.2 Empirical research[27] has identified several factors that explain why countries may fail to sustain rapid growth, as indicated below. Section 2 refers to various indices that are used for assessing some aspects of comparative economic performance. The indices indicate the relative importance of factors that contribute to economic growth, including sound policies and institutions, geography and technology. Four such indices – the World Economic Forum's growth competitiveness index (GCI), business competitiveness index (BCI), the networked readiness index (NRI), and the United Nations Economic Commission for Africa's trade competitiveness index as well as various indicators of the ease or difficulty of doing business with the World Bank are considered. After reviewing these indices, this section assesses Botswana's performance *vis-à-vis* other countries. This is followed by a critical analysis of the extent to which Botswana's growth and productivity have been influenced by fundamental factors. The country rankings for each of the indices are in Tables A.2 to A.5. In general, Botswana scores well on a range of indices and is typically ranked ahead of many African countries, but ranked lower than many developed countries.

Growth Competitiveness Index (GCI) Rankings

4.3 The GCI measures the potential for countries to achieve sustained economic growth over the medium and long-term. It provides an overall score for the impact of institutions, policies and technology on the growth process. First, the GCI recognises that appropriate decision-making by economic agents cannot take place in a macroeconomic environment that is unstable; second, it is based on the premise that since the private sector interacts with public institutions in the conduct of its business, inefficient public institutions can retard the expansion of the private sector which may, in turn, slow economic growth; third, it assigns a key role to technology for the attainment of sustained long-run output expansion since new ideas embodied in improved technologies overcome the law of diminishing returns unlike physical inputs. The three main components of GCI are: the Macroeconomic Environment Index (MEI), the Quality of Public Institutions Index (QPI) and the Technology Index (TI); the three are further disaggregated into several indicators as shown in Table A.2.

4.4 Table A.2 shows the rankings of 102 countries based on their respective growth competitiveness. With an overall ranking of 36, Botswana is ahead of all the other Sub-Saharian Africa (SSA) countries, but outperformed by all the non-SSA countries. Botswana's high ranking was mainly a result of a good rating on the public institutions index, especially the contracts and law sub-index in which the country's ranking was 16. The soundness of public institutions is

[27] IMF, 2000, *Policies for Faster Growth and Poverty Reduction in Sub-Saharan Africa and the Role of the IMF*, IMF Issues Brief No 00/09; Basu A. et al, *Promoting Growth in Sub-Saharan Africa: Learning What Works*, IMF Economic Issues No 23, 2000; Ernesto Hernández-Catá, 2000, *Raising Growth and Investment in Sub-Saharan Africa: What Can Be Done?*, IMF Policy Discussion Paper 00/4; and Beaugrand, P., *And Schumpeter Said, 'This is How Thou Shalt Grow': The Further Quest for Economic Growth in Poor Countries*, IMF Working Paper No WP/04/40.

also confirmed by other indices in Table A.4 that were partly the result of a ranking of 17 on the government waste sub-index, an outcome which implies that spending on unproductive activities has not been substantial, and that macroeconomic conditions are stable. However, Botswana scored less well on the technology index, with a ranking of 80 on the innovation sub-index. This outcome should not be a surprise due to the country's stage of development and technological achievement. The converse of the low technology index is that Botswana fared relatively well on the technology transfer sub-index – with a ranking of 24 due to the role played by technology transfer through foreign direct investment which, although falling as a proportion of gross domestic product in recent years (FIAS, 2003)[28], has contributed significantly to economic development.

Business Competitive Index (BCI) Rankings

4.5 The BCI focuses on the level of corporate entities with reference to productivity and competitiveness, which in the aggregate contributes to the country's overall competitiveness. This factor is critical to economic development as an indispensable complement to macroeconomic stability. The BCI is a composite measure of two factors, namely, the sophistication of business competition and the quality of the microeconomic environment in which businesses operate.

4.6 Botswana ranks number 54 out of 102 countries on the BCI, falling behind Mauritius and South Africa. This suggests the need for efforts to be made to improve the microeconomic environment and the aspects of public institutions that have a bearing on the relevant factors. Possible areas requiring attention include promoting increased business access to more highly skilled labour, better product and labour market information, a more efficient provision of public services, provision of improved infrastructure, low cost utilities and enhancement of competition, which can be facilitated by freer trade and the existence and effective implementation of competition laws and policies. Improvements in these areas should encourage companies to adopt efficiency enhancing business strategies that will deliver more goods and services of higher quality.

Networked Readiness Index (NRI) Rankings

4.7 Introduced in 2001–2002, the NRI is defined as the degree of preparation of a nation or community (comprising individuals, businesses and government) to participate in and benefit from information communication technology (ICT) developments. The index has three components – the Environment Component Index, the Readiness Component Index and the Usage Component Index. These are further disaggregated into sub-components as shown in Table A.3.

4.8 The Table shows that with an NRI ranking of 55 out of 102 countries, Botswana is ahead of other African countries such as Namibia and Zimbabwe, but lags behind Mauritius and South Africa and is a long way off from the rating of the USA which has the highest NRI rank, followed by Singapore and Finland in second and third place, respectively. The ranking benefited from a fairly good ranking (position 28) of the political, legal and regulatory sub-index, but was weighed down by the poor performance on the readiness and usage component indices. However, within the sub-index, there are differences in the ability to participate in the usage of ICT among the three stakeholders. Government appears to have integrated ICT in its operations better than individuals or businesses, while in terms of usage, businesses are better placed than individuals or the Government to use and apply ICTs.

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[28] Foreign Investment Advisory Service, 2003, *Further Improving the Regulatory and Procedural Framework for Encouraging Private Investment.*

Trade Competitiveness Index (TCI) Rankings

4.9 The TCI is a composite index that measures the overall competitiveness of a country's trade. It comprises three sub-indices, namely, the Trade-enabling Environment Index (TEI), the Productive Resources Index (PRI) and the Infrastructure Index (II). These, in turn, consist of 8 components, which are made up of 31 indicators.

4.10 The TEI captures strengths and weaknesses of the macroeconomic and political environment, as well as policies that are conducive to trade, including the stability of the exchange rate; level of inflation; the competitiveness of interest rates; real effective exchange rates; the effect of tariffs on export promotion; the effectiveness of institutions especially the judicial systems or degree of prevalence of corruption which creates difficulties in attracting capital for production and export; the complexity of bureaucratic and stringent licensing requirements which discourage investors from exploiting available economic resources and potential; as well as the adverse and/or unstable macroeconomic conditions that may not be conducive to trade and growth. The PRI comprises the availability of direct productive inputs in a country, especially human resources (in terms of size, skill level and health status of the labour force); the existence of other natural resources (arable land and renewable water resources) and geographical factors that affect a country's productive base (being landlocked for rexample). It, therefore, measures a country's potential to move up the 'value chain' or 'quality ladder' of products. The II provides a measure of the degree of infrastructure development necessary for the facilitation of economic activities and domestic and international trade in goods and services.

4.11 The TCI is available for five groups of periods and for selected countries as shown in Table A.4. The Table indicates that out of 30 countries, Botswana's overall trade competitiveness ranking improved dramatically from 22 in 1980–84 to 8 in the most recent period (1997–2001), mainly on account of extremely good performance of the infrastructure index (II), the ranking of which improved from 20 in the 1980s to 4 in 1997–2001. This was a result of the expansion in telecommunications (a steady increase in fixed telephones and exponential growth of the mobile phone market since 1999) and a good transport network. In 1997–2001, countries that fared better than Botswana are Mauritius, South Africa, Namibia, Uganda, Gabon, Egypt and Morocco in that order.

4.12 In terms of the TEI, Botswana's rank was 7, behind Mauritius, South Africa, Namibia, Morocco, Tunisia and the Gambia, while on the PRI the ranking was 26, only 4 positions away from the least trade competitive country. Its low performance in the PRI rank reflected two factors. First, the weak performance in the Geography Index (where its rank was 30 due to its landlocked position), which more than offset the relatively good performance in the Labour Force Index for which the rank was 8. Second, Botswana relies heavily on mineral resources that are excluded from the PRI calculations. But in the II the country is ranked 4th, ahead of Mauritius, South Africa and Namibia.

Factors Affecting the Ease or Difficulty of Doing Business

4.13 Cumbersome and/or excessive business regulation matters, as it stifles productive activity and distorts governments from focussing on the definition and protection of property rights against violations by citizens and the state. Business thrives and productive and sustainable jobs are created where property rights are clearly defined and protected and governments do not heavily regulate every aspect of business activity. Excessive regulation erodes the flexibility required by businesses to adjust to new market conditions and to take advantage of emerging opportunities for growth, thus delaying or slowing the start of new business ventures that create wealth and new jobs. It also pushes businesses to operate in the informal economy. Cumbersome regulation is generally associated with more inefficiency in public institutions –

long delays in processing of business applications, higher cost of doing business which may create unemployment and less productivity and investment. Evidence (*Doing Business,* 2004) suggests that countries that regulate most tend to be poor and yet these have the least enforcement capacity and the fewest checks and balances in government to ensure that regulatory discretion does not lead to corrupt practices. However, it is also recognised that there is no single model of business regulation. Instead, governments should aim for optimal regulation – that which is absolutely necessary – and use technology to automate relevant regulatory processing in order to reduce the burden on businesses. However, this requires high levels of human capital in public administration.

4.14 Table A.5 gives a snapshot of the business climate in the listed countries. It identifies specific regulations and policies in these countries that encourage or discourage investment, productivity and growth and use several indicators to judge the ease or difficulty of operating a business, including starting a business, hiring and firing workers, registering property, getting credit, protecting investors, enforcing contracts and closing a business. An analysis and comparison of Botswana's indices *vis-à-vis* that of other countries is presented below.

4.15 **Starting a Business**: This is intended to measure the ease or difficulty of incorporating and registering a new business. In 2004, it took 11 steps to establish a business in Botswana over 108 days on average and at a cost of 11 percent of income per capita. This compares with 2 steps in Australia over 2 days and at a cost of 2 percent of income per capita. Not only is Botswana uncompetitive against the best (Australia, in terms of the number of procedures and the time it takes to complete them), it is also uncompetitive against all the countries in Table A.4. Furthermore, although the number of business start up procedures for Botswana is the same as the average for Sub-Saharan Africa countries, the duration is much longer in Botswana, about 1.7 times higher and 4.3 times that of the OECD average. However, the cost of starting up a business in Botswana is dwarfed by the regional average of 224 percent of per capita income, but closer to the OECD average of 8 percent. Finally, as in Australia and several other countries in Table A.4, there is no minimum capital required to obtain a registration number in Botswana. This compares with a regional average capital requirement that is 254 percent of per capita income and an OECD average of 44 percent.

4.16 **Hiring and Firing Workers**: Indicators under this heading measure the flexibility with which the labour laws meet the needs of the market, particularly, how difficult it is to hire a new worker, how rigid the regulations are on increasing or reducing the number of working hours, and how difficult and costly it is to dismiss a redundant worker. Each of these indices is assigned a value in the range of 0 to 100, with higher values indicating more rigid regulations and lower values indicating the opposite. The sub-indices are averaged into an overall Rigidity of Employment Index (REI), also with a value ranging from 0 to 100.

4.17 For Botswana, the REI is 20, which implies a good amount of flexibility in the labour laws. In particular, there are no restrictions on hiring workers while the regulation of working hours is very flexible. At 40, the difficulty of firing index is the highest of the three sub-indices and indicates that firing procedures are fairly stringent. However, even at this level, Botswana's REI is not only lower than the REI for neighbouring countries, it is well under half of the average for SSA and 1.7 times lower than the OECD average of 34. Considered against the leaders on the list, Singapore and Hong Kong (China) with a zero REI, Botswana's REI could be improved, in particular by addressing the firing laws. With 19 weeks worth of wages payable on termination of employment, it is cheaper to fire a worker in Botswana than in many of the listed SSA countries, Finland or the UK. Firing costs in Botswana are less than one

third of the average cost for SSA countries and half of the OECD average cost, but are still higher than those for Singapore and Hong Kong (China).

4.18 **Registering Property:** Securing rights to property strengthens incentives to invest, while complex procedures to register property are associated with less perceived security of property rights, more informality and corruption. The number of procedures legally necessary to transfer a property title from the seller to the buyer and the associated time and cost (expressed as a percentage of the property value) measure the ease with which firms can secure rights to property. The fewer the procedures, the shorter the time and the cheaper it is to transfer title and the greater is the facilitation of property ownership and incentives to invest, as property can be used as collateral to get funding for starting or expanding a business.

4.19 In 2004, it took 69 days on average to complete 4 property registration procedures at a cost of 5 percent of the property value in Botswana. Best practice in this area is in Norway where it takes one day to complete one procedure at a cost of 3 percent of the property value. In Saudi Arabia registration is free. It is cheaper and takes fewer procedures to register property in Botswana than in neighbouring countries and SSA as a whole, while the OECD average costs and number of procedures is comparable to those of Botswana. However, the duration is nearly twice as much as that of the OECD average, but three-fifths of the average for SSA countries.

4.20 **Getting Credit**: *Doing Business* reports that worldwide, the difficulty in obtaining credit is consistently rated by firms as one of the greatest barriers to operation and growth. Their analyses show that broader sharing of credit information and stronger legal rights of creditors in disputes arising out of bankruptcy facilitate more lending because creditors are assured that they will be able to recoup the amounts loaned out. The five indicators developed for this aspect of business activity are split into two sets, with one set measuring the coverage, scope, and quality of accessibility of credit information through public and private credit registries (these are institutions or firms that gather and disseminate information on credit histories of individuals and firms, which helps creditors to assess risk and allocate credit more efficiently). The second set of indicators measures how collateral and bankruptcy laws are designed to facilitate access to credit and ranges from 0 to 10, with higher values indicating that those laws are better designed to expand access to credit.

4.21 In terms of availability of credit information, Botswana scores 5 out of 6, which compares with the SSA and OECD averages of 2 and 5, respectively. With a score of 9 out of 10 for the design of collateral and bankruptcy laws, the country performs much better than SSA or OECD with averages of 5 and 6, respectively. It is outperformed by Singapore, Hong Kong (China) and the UK.

4.22 **Protecting Investors**: The degree to which investors are protected is measured by the disclosure index, which captures seven ways through which ownership and financial information is disclosed. The index ranges from 0 to 7, with higher values indicating more disclosure. Botswana scored 5 out of 7, which is more than twice the SSA average and nearly the same as the OECD average.

4.23 **Enforcing Contracts**: Three indicators measure the ease or difficulty of enforcing contracts; these include the number of procedures legally required from the time a lawsuit is filed with the courts to the time when actual payment is made, the associated time taken, and the cost (for court, attorneys and related fees and payments) expressed as a percentage of the value of the debt.

4.24 In Botswana, the cost of enforcing commercial contracts is a quarter of the debt value, as against 43 percent in SSA, 11 percent in the OECD and best practice of less than 5 percent of the disputed amount in Norway and New Zealand; the contracts are enforced in less than five months

in Botswana against best practice of 7 days in Tunisia, while in SSA and OECD countries it takes 14 months and over 7 months, respectively; and at 26, the number of procedures in Botswana is high relative to an average of 19 for the OECD, but lower than the SSA average of 35.

4.25 **Closing a Business:** Three indicators measure the efficiency with which a non-viable business is closed. These are the time and cost of resolving bankruptcy, as well as the recovery rate (measuring the efficiency of foreclosure or bankruptcy procedures) expressed in cents on the US dollars which claimants are able to recover from the insolvent firm. In 2004, it took over 2 years on average to resolve a bankruptcy in Botswana at a cost of 18 percent of the value of the estate. This compares with an average of 3.6 years for SSA and 1.7 years for the OECD countries. It was cheaper to resolve a bankruptcy in Botswana compared to the region, but more expensive relative to the costs in the OECD. The recovery rate was just over half, compared with 17 cents for SSA and 72 cents for the OECD.

4.26 The conclusion from the analysis above is that Botswana has scored very well in respect of some indices and performed equally badly on others. On the positive side, Botswana scored relatively high on macroeconomic environment, some aspect of political, legal and regulatory framework, infrastructure (telecommunications and roads), provision of credit information and bankruptcy laws, protection of investors, enforcement of commercial contracts and the cost of resolution of bankruptcies. Its major weaknesses can be summed up in terms of a microeconomic (business) environment that is not fully conducive to business operations, as reflected in a number of factors. The country lags behind in technological innovation; there is inadequate preparedness to use and benefit from ICTs; trade competitiveness is relatively weak due to inadequate availability of productive inputs; there remain many and lengthy administrative procedures pertaining to enforcement of contracts, property registration and new business start ups; the laws relating to firing workers are relatively stringent, and the coverage of credit histories of potential investors by bureaux are inadequate.

4.27 What this assessment implies is that there is a need to focus reforms not only on the macroeconomic environment and the efficiency of public institutions but also on the broader aspects of competitiveness in order to enhance the country's growth prospects. This conclusion is derived from the fact that progress has already been made in macroeconomic and institutional reforms while there is need to focus on identified weaknesses. Moreover, in terms of constraints to doing business in Botswana, reforms would need to be selective given that the country excels in some areas. The major areas of concern are the administrative and bureaucratic delays, which have the potential to hold back private sector investment and the associated employment and growth of incomes, while also delaying technology transfer that come with FDI and the associated potential technical progress facilitated by imported newer technologies. Further, it was noted earlier that, generally, the nation is not ready to fully exploit the benefits of ICTs. This is an important area on which to focus reform efforts given the key role-played by technological advances in productivity improvement.

Assessment of Fundamental Sources of Growth in Botswana

Improvements in Institutional Effectiveness, Governance and Elimination of Corruption

4.28 Increasing the pace of capital accumulation in an economy will matter little for the achievement of sustained economic growth if individuals and companies do not have meaningful property rights, reliable courts that can enforce contracts, and availability of other basic market institutions. It has been shown in the previous sections that in Botswana securing property rights is relatively cheap, investors' rights are well protected and commercial contracts are enforced in a relatively short period of time. The

major issue is that of efficiency and effectiveness of public agencies. Furthermore, Botswana has taken an important step by setting-up a Directorate on Corruption and Economic Crime (DCEC), although its establishment does not suggest the existence of rampant corruption. Botswana is well known to excel on measures of corruption at a global level. On occasion, however, significant cases of alleged corrupt practices do emerge leading to the establishment of judicial commissions of enquiry such as that on state land allocations in Gaborone in 2004. The success of the DCEC has been ambiguous, however, and perceptions (although these may not be borne out of any concrete evidence) about the absence of its full independence, lack of impartiality and ineffectiveness have yet to be firmly dealt with.

Soundness and Efficiency of the Legal Framework

4.29 The FIAS study, conducted for the Botswana Government in 2003, concluded that, while fair and transparent, the legal system in Botswana needs to significantly improve its efficiency and effectiveness at the implementation level. Evidence from the study suggests that many administrative processes and documentation are manually driven and could be automated to improve their efficiency and accuracy. Examples of such systems are the processing of land and of company registration and lawsuits in court. Automation would require the upgrading of skills in the public service and a change of mindset so that staff approach work with the right attitude. This finding is consistent with the outcome of the analysis of indicators of ease or difficulty of doing business, in particular, the many procedures involved that inevitably cause delays in processing paperwork. Automation of many of the processes would reduce the compliance burden on businesses but would need to be accompanied by appropriate staff training. Improved efficiency would raise civil service productivity, act as an incentive to businesses to increase investment and improve the country's economic prospects.

Transparency and Accountability in Public Sector Resource Management

4.30 Botswana has made a start in this regard in improving transparency and accountability. Accountability has been infused in the public sector by introducing performance contracts for senior civil servants and a performance-based appraisal system for the rest of the employees. Moreover, ministries and government departments are now more transparent in their operations and regularly report progress in the media on their activities against set measurable targets. It is still too early to judge the success of these reforms given that they were introduced recently and their effectiveness is recognised as being pro-growth.

Removal of Labour and Product Market Rigidities

4.31 Labour and product market rigidities can impede output growth. The aim of reforms should be to create flexibility in these markets. As seen above, the labour market in Botswana is not as heavily regulated as markets in other countries, except with respect to firing redundant workers where there exists a fair amount of rigidity, while the product markets operate on market-oriented principles, except in cases of administered prices for fuel products and those set by monopoly parastatals.

Increased Investment in Human Capital

4.32 Continued human capital formation is key to improving service delivery in all aspects of economic performance and service delivery, especially in the field of education and health care. It was noted earlier that in Botswana, government spending in these areas has been substantial. Going forward, however, the key concern is to ensure that such spending is translated into sound human capital development, which will raise the capability to use technology for improvements of productivity. Furthermore, there will be a need to continually develop appropriate responses to the HIV/AIDS epidemic, which has the potential

not only to reduce the labour force through deaths but also to militate against productivity improvements through absenteeism related to illness, the need to care for the young and other dependents as well as attending to bereavements.

Openness to International Trade

4.33 Research has shown that careful timing and speedy removal of obstacles to trade, particularly, tariffs and non-tariff barriers (NTBs) could potentially improve economic performance. Freer trade contributes to higher economic growth by challenging domestic producers to produce competitively for both local and international markets. For its part, Botswana is implementing provisions of the Southern African Development Community (SADC) Trade Protocol which seeks to free intra-regional trade through the lowering of import duties and simplification of tariff structures. This is done in the context of a free trade area (FTA) agreement expected to be launched in 2008. The Protocol envisages that at least 85 percent of intra-SADC trade should be tariff free by that year, while NTBs should have been eliminated. Opening up of trade is expected through the negotiations on FTAs between SACU, of which Botswana is a member, and other countries (USA) and regional organisations (the Southern Common Market[29] (MERCOSUR)). Freeing up trade is important for Botswana in view of the fact that it did not feature on the list of the top 5 most trade competitive countries in Africa despite its good performance on many aspects of economic performance. The development of the resource base and further improvements in infrastructure would contribute greatly to facilitating Botswana's trade with the rest of the world.

Maintenance of Macroeconomic Stability

4.34 An appropriate macroeconomic environment is characterised by, among others, low fiscal deficits as a proportion of GDP. This parameter reduces the risk of unsustainable fiscal deficits which would result in arrears, higher inflation, or higher future taxes. Large government debt or fiscal deficits are inimical to private investors business confidence. Fiscal deficits and large debts can be contained through improving the efficiency of the tax system and reduction of unnecessary expenditures. Lower fiscal deficits permit government to reduce its borrowing from the financial system, thereby providing greater scope for bank financing of the private sector. Fortunately, the Botswana Government is not a major borrower from the banking system, as a result the possibility of crowding out the private sector borrowing is currently not a problem. In fact, to the extent that the Government has borrowed domestically – through issuance of bonds in 2003 – it has done so in an effort to develop the local capital market.

4.35 Botswana's tax system is fairly streamlined, with one of the lowest marginal tax rates in the region and is reasonably efficient. These attributes notwithstanding, the recent FIAS study has concluded that the two-tier company tax system is complex and should be simplified for the benefit of investors and for improvement in administrative efficiency and effectiveness. Although sound in principle, the proposal may have problems in its practical application. The recent establishment of an operationally independent Botswana Unified Revenue Services Authority, which will deal with tax-related issues, is expected to boost administrative efficiency and effectiveness.

4.36 Another aspect of a proper macroeconomic environment is the maintenance of low and stable inflation. High inflation raises the cost of borrowing and reduces the rate of capital investment and output growth by adversely affecting business planning and expectations. In an environment of high inflation there is uncertainty regarding the return on capital as investors cannot accurately forecast costs and profits. Large and rapidly growing fiscal deficits complicate monetary policy management to the

[29] MERCOSUR comprises Argentina, Brazil, Paraguay and Uruguay.

extent that the large and continuing fiscal deficits generate inflationary pressures. Growth of Government expenditure is one of the two indicators of demand pressures that is closely monitored in the current monetary policy framework of the Bank of Botswana. Fortunately, Government expenditure growth has in recent years complemented anti-inflation monetary policy.

Maintenance of a Realistic Exchange Rate

4.37 An overvalued exchange rate discourages production for exports while import substitutes which become cheap relative to domestically produced goods limit the degree of economic diversification and, therefore, the country's ability to withstand external supply shocks. Botswana's exchange rate policy aims at supporting the competitiveness of domestic producers by ensuring relative stability of the value of the Pula over the long term. As measured by the real effective exchange rate (REER), export competitiveness has been eroded in recent years. It is, however, worth noting that the exchange rate is by no means the prime instrument for achieving competitiveness. Productivity improvement, which is a function of business management and other factors previously cited, is important as well. Furthermore, it is impossible to set the exchange rate to suit the needs of all users of foreign exchange, which is why hedging has historically formed part of managing foreign currency denominated transactions.

Improvements in Infrastructure and Privatisation of State-Owned Enterprises

4.38 Research has shown that major private investment cannot take off unless there is an adequate provision of quality essential public goods and services. As previously stated, Botswana has scored well on the infrastructure index, but this was mainly a result of good telecommunications and road networks. However, the country has performed less well in other areas, such as energy and water resources development. In some of these areas, government intervention through state owned enterprises may no longer be justified and privatisation could be a serious option in view of the need to improve efficiency and encourage innovation and dynamism in the private sector, while ensuring that sufficient competition is introduced. Under appropriate regulatory systems it would be beneficial for productivity to transfer a public monopoly to a private monopoly. However, there are diverse views with regard to employment generation through privatisation. While the Government has, in principle, embraced privatisation, its implementation has been slow. A privatisation master plan, which provides a framework for the privatisation process, has been prepared, while in-depth studies of potential candidates for privatisation are ongoing. However, none of the identified institutions have been privatised to date. Furthermore, a competition policy is being developed to address, among others, competition issues in general and uncompetitive practices that might emerge as state-owned enterprises are opened up to private sector participation. A careful consideration of the privatisation policy is a necessity considering the smallness of the domestic market, which makes it potentially vulnerable to the emergence of collusion in pricing among newly privatised oligopolies that can work against competition. In the past, such collusive tendencies have been alluded to in relation to banks and major construction companies.

Strong Financial System

4.39 The financial system of a country facilitates economic activity by providing efficient financial intermediation. Successful intermediation requires the existence of a broad range of financial intermediaries with appropriate instruments capable of adequately serving the financial needs of different economic agents. An inefficient and ineffective financial system could retard economic growth. Attempts at reforming the financial sector are often directed at initiating or strengthening policies

that enhance savings mobilisation and their effective use by deficit sectors as well as the development of appropriate market-oriented tools for controlling inflation. The framework necessary for the attainment of this objective involves deepening and broadening financial markets, more effective regulation, and supervision of banks and non-bank financial institutions, timely dealing with the problem of potential insolvency of banks, fostering of financial sector competition and strengthening the legal framework for banking activities.

4.40 While statutorily an agent of the Government, the Bank of Botswana is operationally independent with respect to the setting of monetary policy, except on a consultative basis. Over the years, the Bank has increasingly become more transparent in terms of its conduct of monetary policy. It has, since 1998, issued *monetary policy statements* each year and from 2002, included an explicit inflation objective for the year ahead. The regulatory and supervisory oversight of the banking system provided by the Bank is adequate, banks are sound, while the Bank successfully handled the exit of failing banks in the past (see 2001 Bank of Botswana *Annual Report*). Recently, the 2003 Bank's *Annual Report* concludes that '…the regulatory environment in Botswana has become more competition-friendly'(p107). There is an overwhelming presence of foreign capital in the banking system and competition is fairly healthy, although this may, at first sight, seem counter-intuitive considering the high concentration levels and profitability in the banking system. However, there is no overarching regulatory and supervisory authority for non-bank financial institutions; work is in progress for the creation of such an authority.

Need for Increasing the Ratio of Private Investment to GDP

4.41 This ratio can be increased by the combined effect of all the preceding factors that relate to sound policies, effective institutions, a suitable microeconomic environment, the existence of good infrastructure, well developed human resources, an increase in the capability to use and apply technology at the individual, business and government levels, the existence of healthy competition and good governance. Some of the specific issues that would need to be dealt with in order to raise investment are addressed below.

4.42 A survey of senior managers of firms conducted by FIAS revealed that the lack of access to land and delays in issuing work and residence permits were among the main concerns to investors. The other areas of concern include tender regulations, competition law, labour regulations, business licensing and tax administration. All of these factors ultimately have a bearing on economic efficiency, productivity, output growth and human welfare. Access to land needs to be improved by eliminating the legal obstacles that cause artificial shortage of serviced land in some areas.

4.43 A further observation in the FIAS report is the need for clarity in government functions and removal of overlapping responsibilities among various agencies as well as simplification of procedures for the benefit of both investors and executing agencies. Inefficiencies in these government functions ultimately have an adverse bearing on economic efficiency, productivity, output growth and, therefore, human welfare.

4.44 A major policy challenge is the declining ratio of FDI to GDP in recent years, while local entrepreneurship is not developing rapidly enough to substitute for the slowdown in FDI. In this respect, the FIAS study made several recommendations on ways to attract FDI and address identified deficiencies in Government's administrative and bureaucratic functions. It concludes that Botswana must maintain its open and liberal policy towards FDI while paying sufficient attention to the development of local entrepreneurship and fostering appropriate linkages between the two. The inadequacy of FDI suggests that the Botswana Export Development and Investment Agency (BEDIA) needs to enhance its efforts to attract investment.

However, the institution responsible for promoting local entrepreneurship development, the Citizen Entrepreneurial Development Agency (CEDA) offers subsidised financial support at the lower end of the scale of support and investment finance at market-related interest rates at the upper end through a venture capital fund.[30] It also provides training and mentoring services. Although this effort is a commendable support to business growth, it remains to be seen how well the programme will assist in bringing about sustainable and high quality business ventures capable of exporting. The 2005 Budget Speech noted that through its training and mentoring programmes CEDA has trained 600 potential investors to date on entrepreneurial development, basic accounting and sector specific issues. However, challenges remain facing CEDA projects, eg., management problems, lack of basic infrastructure and unfavourable credit terms from suppliers.

5. Productivity, Sustained Growth and Higher Living Standards for All

5.1 So far, this review has mainly dealt with the need to raise productivity in order to increase output on a sustainable basis. This section examines, in more detail, how such output growth translates into rising prosperity as measured by household incomes. The analysis is done in the context of recent data on household income growth and employment trends in Botswana.

5.2 For purposes of perspective, it should be stressed that there is little dispute about the need for sustainable output growth since higher living standards cannot be achieved purely through redistribution of existing income and wealth and policies that seek to improve the 'quality of life'. Therefore, it is important to investigate the extent to which an economic system, which stresses efficient production, and the rewards of innovation and productivity, can both promote output growth and be relied upon to secure rising prosperity across the population, or whether significant additional policy interventions are also needed.

5.3 In this regard, it should be recognised that the objective of economic efficiency is not synonymous with concerns for equity and social justice. In fact, the two cannot be expected to coincide: the former is based on rewarding contribution, the latter on allocation according to need. It would only be through coincidence that contribution and need could be matched, and attempts to combine them to any significant extent would itself result in inefficiency as well as result in policy and administrative confusion.

5.4 That is why the use of minimum wages as major tool for poverty reduction creates practical problems of trying to combine the two objectives of efficiency and equity. Wages are paid to individual workers based on their contribution at the work place, but whether this covers their needs and, therefore, their level of poverty, is determined by other factors, particularly the size and/or incomes from other members of the workers' households, and it is hard to imagine a structure for wages that can successfully take these specific situations into account.[31]

5.5 However, this observation does not imply that the objectives of efficiency and equity are inexorably in conflict to the extent that pursuing one necessitates significant compromises on the other. One of the main purposes of this review is to emphasise the great potential of economic efficiency to support the broader social objectives, and that Botswana is a good example of efforts to attain the two objectives in practice.

5.6 In this context, it should be recalled that Section

[30] Limits are as follows: Small Micro Scale Projects – P500 to P150 000 at 5 percent interest rate per annum; Medium Scale Projects – P150 001 to P2 000 000 at 7.5 percent interest rate per annum and Large Scale (Venture Capital Fund) Projects – over P2 000 000, promoters pay 25 percent of total project cost as equity and pay market related interest rates.

[31] This is not to say that there is no justification for minimum wages, but that their use as a tool of poverty reduction is severely limited.

2 discussed the institutional basis for growth which included the dimension of market legitimising institutions; these in turn, covered explicit reference to the need for the provision of social protection. Therefore, the task of laying down the foundation for productivity and growth, should take into account the needs of those who lose out and that this approach is an essential ingredient for a pro-growth economic environment.

Economic Growth, Poverty and Inequality

5.7 In Section 2, it was indicated that there is a direct link between productivity and living standards in that per capita GDP (*Y/L*), or average income for the whole population, is mathematically identical to average labour productivity. But, while per capita GDP is one of the most widely used summary indicators of welfare, it is not difficult to see its limitations. On the one hand, the measure of labour force is the whole population which includes large numbers who are not in the workforce, especially the elderly, the young, the sick and the unemployed. On the other hand, not all of GDP is distributed directly to the households in the form of incomes. In Botswana, for example, employment income comprises only about one-third of GDP, while consumption spending by government has mostly been of similar magnitude to that of households. Therefore, it is easy to appreciate the concern that the income received by households may have little in common with trends in what may be a rather notionally related average, such as per capita GDP.

5.8 Such concerns become even more serious in the context of growth that is based on technical innovation, as the inevitable accompaniment of technical progress is the redundancy of existing skills and technologies. There can be no denying that dynamic development is a process where there are both winners and losers, and resistance to change by the latter is understandable. This is especially the case since job losses due to changing technologies are less likely to be transitory as the job-specific skills of the affected workers are no longer in high demand. Even if such displaced workers are able to find alternative employment, there is a strong likelihood that such alternatives would attract lower levels of remuneration.

5.9 This factor points immediately to the need for credible mechanisms of support for those who do not immediately benefit from technology driven economic growth in order to ameliorate their prospects in the short term. However, it is also apparent that the focus of such support should be to facilitate adjustments to new patterns of employment based on utilising new technologies to the best advantage rather than the protection of unproductive jobs. Even if there are legitimate concerns about the impact of technology on employment, most economists would not argue for policies that stand in the way of innovation, as these are likely to worsen unemployment and social welfare.[32] Moreover, while the fear that advances in technology lead to permanent job losses remains common, it is not supported by evidence. In fact, experience suggests that there is a case for technology that is directly 'labour saving' since immediate job losses are, over time, offset by the wider impact of lower costs and prices which increase opportunities for poorer households and the accompanying stimulus to demand that provides new employment prospects. There is evidence to suggest that unemployment tends to be more persistent when the labour market is constrained by regulations that, however well intentioned, aim to 'protect' jobs and slow down innovation.

5.10 However, there is a legitimate concern regarding the extent to which growth is typically accompanied by widening inequality in income,

32 See Humphrey, T. (2004) 'Ricardo versus Wicksell on Job Losses and Technological Change' *Economic Quarterly*, Federal Reserve Bank of Richmond Vol 90/04. This debate has recently resurfaced in the context over the concerns of 'outsourcing' of jobs in the United States. But it is of wider relevance, including in Botswana where there is on-going debate over whether additional efforts should be made to encourage processing of natural resources within the country.

which implies that the number of 'winners' will tend to be relatively small compared to 'losers'. This concern is commonly reflected in the common assertion that 'the rich get richer while the poor get poorer'. There is little hard evidence to support such a claim, and certainly not as a general trend. Rather, research indicates that:

(a) poverty reduction is closely related to sustained economic growth in the long run. In other words, growth is not anti-poor;

(b) the benefits of growth can, and frequently do, take considerable time to filter throughout the population;

(c) the impact of growth on inequality is largely dependent on country-specific circumstances. Growth can foster both increased inequality and its reduction.

5.11 In Africa, there are cases where over the past thirty years or so the poor have become poorer and inequalities have increased (see Artadi and Sala-i-Martin, 2003).[33] However, this finding relates mainly to countries that have generally had very low growth rates. It cannot, therefore, be assumed that in countries with higher growth rates due to the adoption of policies that have transformed institutions and mechanisms for income distribution, that the same degree of income inequality would prevail.[34]

Income Growth, Poverty and Inequality in Botswana

5.12 Nevertheless, in the case of Botswana, which has achieved high growth rates, there is widespread belief that income inequalities are high and rising. However, this perception is not supported by available evidence, the most recent of which is from the 2002/03 *HIES* as indicated below.

5.13 First, average household disposable income, between 1993/94 (when the previous HIES was conducted) and 2002/03, grew by 139 percent, or approximately 14 percent in real terms once inflation is taken into account. This rate compares with an increase of 164 percent in GDP per capita (31 percent in real terms).[35] This results may initially suggest that growth in household incomes has lagged significantly behind that of per capita GDP. However, account also needs to be taken of household sizes, which fell by about 11 percent on average over the same period. Once this is allowed for, the growth in household incomes was 167 percent (27 percent in real terms), which is very close to growth in per capita GDP. This finding provides support to the claim that, within a relatively short period, GDP growth is reflected in a rise in incomes. The breakdown of the income growth is discussed in more detail below.

5.14 Information on trends in income inequality is given in Table 2.4 for the 1985/86 – 2002/03 period using data from the three surveys conducted in Botswana.[36] The Table shows the gini coefficient (GC), which is a standard summary statistic for measuring inequality. The GC varies between zero and one, with a lower value indicating greater equality. Only data for the national and urban categories are shown for all three periods as the division between rural and urban villages was introduced only in 1993/94.

5.15 At the national level there has been no clear movement in overall inequality. The GC has moved in both directions, and most recently

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33 Artadi, E. & Sala-I-Martin, X. (2003) *The Economic Tragedy of the XXth Century: Growth in Africa* NBER Working Paper 9865 for detailed calculations of patterns of income inequality in Africa.

34 This is not to claim that rapidly widening inequalities would automatically be averted at higher average growth rates. As noted, this will be determined by country-specific circumstances. But, given the nature of institutions that form the foundations for growth on a sustained basis, it may be hoped that the most egregious cases could generally be avoided.

35 To make real comparisons household incomes and per capita GDP are deflated by the change in the consumer price index and the GDP deflator, respectively.

36 There was also an earlier Rural Income Distribution Survey (RIDS) conducted in 1974/75.

TABLE 2.4: TRENDS IN INCOME INEQUALITY, 1985/86 – 2002/03 (GINI COEFFICIENT)

	1985/86	1993/94	2002/03
National	0.56	0.54	0.57
Cities & Towns	0.54	0.54	0.50
Urban Villages		0.45	0.52
Rural		0.41	0.51

1. The gini coefficients are calculated on a per capita rather than a household basis.

Source: Central Statistics Office

upwards, suggesting an increase in inequality. But this has not been to any significant degree and certainly not enough to support any claims about dramatic increases in inequality, especially as it is in the context of high GDP growth rates. In terms of international comparison, while a GC of about 0.4 or below is normal for most developed countries, a level of about 0.55 is high, but not exceptionally so, for developing countries.[37]

5.16 There have been more significant changes to the GCs for the various sub categories. While urban inequality has decreased, it has increased in both urban village and rural areas. To help interpret these trends, Table 2.5 gives more information on the growth in average incomes, broken down according to the type of settlement (urban, urban village, and rural). Both household and per capita incomes are shown as well as two measures of average income: the mean and the median. To the extent that the median income has grown faster (slower) than the mean this is an indicator of income growth being more concentrated in lower (higher) income households.

5.17 Taking the information from Tables 2.4 and 2.5 together, the following picture emerges for the three settlement types:

- *Urban:* real income levels are up by 18 percent on a per capita basis and more for the median than the mean. This is consistent with well functioning urban economy where rapid expansion has substantially benefited most households.

TABLE 2.5: REAL INCOME GROWTH,[1] 1993/94 – 2002/03 (PERCENT)

		Household		Per capita	
	H'hold Size	Mean Income	Median Income	Mean Income	Median Income
National	–10.6	13.6	20.4	27.1	34.8
Cities & Towns	–6.7	10.3	13.0	18.1	21.1
Urban Village	–8.6	32.8	16.5	45.3	27.4
Rural	–14.6	2.4	–15.0	19.8	–0.6

1. Real income is calculated by adjusting for the change in the national Consumer Price Index between December 1993 and December 2002.

Source: Bank of Botswana

- *Urban Villages:* Average per capita incomes have risen sharply by 45 percent. While the median income has gone up by a lot less than the mean, it is still higher than the increase in the urban areas. This points to more positive reasons for increased inequality, reflecting a transition to a more modern economy where, as seen in the income figures, the benefits are spreading quite widely. However, growing inequality may reflect a more pervasive lack of income earning opportunities than in the urban areas.

37 See, for example the 2004 UNDP *Human Development Report*, where Table 14 in the Human Development Indicators section includes GCs for a wide range of countries. For instance, this shows that the average GC for the four other SACU members is 0.64. However, care must be taken in making comparisons, as the basis of calculation may differ between countries. (The same table gives a value for Botswana of 0.63, substantially higher than reported above, and the source for which is not known.)

- *Rural:* Lower rates of income growth have been partly offset by the more rapid decline in average household size. But while mean real incomes have increased at a healthy rate (20 percent) the median income has fallen by one percent. This suggests the emergence of a significant rural underclass which has yet to benefit from the recent expansion of the economy and which risks getting left further behind. This is the negative side of increasing national inequality.

5.18 Table 2.6 provides estimates of poverty based on the HIES. In 2002/03 the proportion of the population classified as poor was just over 30 percent. This compares to 47 percent in 1993/94 and 59 percent in 1985/86. That living standards have increased across the population is further supported by evidence on living conditions in the 2001 census, which records significant improvements in areas such as housing, sanitation and access to modern energy. The most dramatic falls in poverty were in the towns and cities where, after virtually no change since 1985/86, the rate fell from 29 percent to 10 percent between 1993/94 and 2002/03. This provides further support to the view that a well functioning market economy including widespread access to employment opportunities is the most effective means of poverty reduction. It is of course a matter of opinion whether this rate of poverty reduction has been sufficiently rapid, but it would be hard to point to a country with a better record and, furthermore, such a rate of progress is close to what is required to meet the ambitious targets for poverty reduction in *Vision 2016*.[38]

TABLE 2.6: POVERTY IN BOTSWANA (PERCENT OF POPULATION)

	1985/86	1993/94	2002/03
National	59	47	30
Cities & Towns	30	29	10
Urban Villages	58	46	25
Rural	68	55	45

Source: Central Statistics Office

Employment Trends

5.19 It seems clear that one of the priorities should be for growth to be generated in such a way that it also increases employment opportunities across the population. If more people are contributing to output and gaining directly from their participation in economic activity, then this immediately reduces the potential burden of welfare support programmes, lessens resistance to job losses through innovation, and eases the task of maintaining faith in the legitimacy of the market system. However, a pro-employment growth-oriented policy is not necessarily in favour of labour intensive activities. It implies adaptation to changing market conditions and flexibility in labour mobility which can be facilitated by training and re-training programmes.

5.20 The challenge of job creation in Botswana is generally recognised. According to the 2001 *Population and Housing Census,* unemployment was nearly 20 percent, sharply up from 14 percent at the time of the previous census. Subsequent indicators suggest that it has continued to rise with the 2002/03 HIES estimating a national unemployment rate of 24 percent.

5.21 Obviously such high levels of unemployment are not desirable. However, the aggregate unemployment rate tells only part of the story. While rising unemployment is usually taken as a sign that growth in Botswana has been unbalanced with too little diversification into sectors where jobs could be created in larger numbers, there is also evidence that the increase was due in large part to continuing dynamic development with the potential rewards of the modern economy leading to the erosion of previous employment patterns.

[38] Which aims to halve poverty levels by 2006 and eradicate it by 2016

TABLE 2.7: ECONOMICALLY ACTIVE POPULATION 1991 – 2001 ('000)

	1991	2001	Change (%)	Annual growth (%)
Employee	275.7	370.5	34.3	3.0
Self-Employed	28.6	54.7	90.8	6.7
Family Business	7.9	6.4	–18.8	–2.1
Lands and Cattle Posts	67.6	17.6	–73.9	–12.6
Seeking Work	60.4	109.5	81.4	6.1
Total	440.3	558.7	26.9	2.4
Unemployment Rate (%)	13.7	19.6		

Source: Central Statistics Office

5.22 Table 2.7 shows in more detail the changing patterns of employment in Botswana between two censuses and points to more positive aspects. Most importantly in this respect, the numbers of new jobs being created at 121 000, including self-employed, was very similar to, slightly greater even, than the increase of 118 000 in the labour force. The entire increase in unemployment was due to the dramatic decline in the numbers working in more traditional occupations, particularly traditional agriculture. There is no reason to believe that opportunities in these sectors have declined, at least not significantly, as farmers frequently complain that they cannot find enough workers. Rather, people have chosen not to work in the subsistence sectors, where low levels of productivity are matched by low incomes. This puts a different perspective on the resulting unemployment. At an earlier stage of development in Botswana, it was assumed that unemployment would not be a serious problem as jobless people would return to subsistence agriculture; while minimum wages were set deliberately in relation to rural incomes in order to discourage migration to towns and cities. However, this model clearly no longer applies as urbanisation has become more permanent. The challenge is to create conditions which ensure that the increase in unemployment resulting from rapid economic transformation is only temporary.

5.23 Table 2.7 also emphasises the potential importance of self-employment, which grew by an average of nearly seven percent per annum, nearly twice as fast as that in paid employment. The importance of the small business sector for employment creation is a feature of many economies, and it is important that any constraints are removed that may impede realising its employment creation potential. This is not to say that self-employment offers highly remunerative jobs: many, such as the various street vendors, are clearly in the low-income category. But as the figures for urban incomes illustrate, this can still have a significant impact on improving the livelihoods of poorer households.

TABLE 2.8: UNEMPLOYMENT BY SETTLEMENT TYPE, 2002/03 (PERCENT)

	Male	Female	Total
National	21.4	26.3	23.8
Cities and Towns	15.5	21.6	18.5
Urban Villages	28.9	30.3	29.6
Rural	20.3	26.7	23.1

Source: Central Statistics Office

5.24 Table 2.8 gives estimates from the HIES of unemployment by settlement and gender. The data appear to be generally consistent with the trends in income discussed above. The lowest unemployment is in the urban areas. This is attributable to a well functioning urban market economy, and was associated with greater equality in incomes related to which is the continuing rural to urban migration. Rural unemployment is very close to the national average and may reflect the continuing reliance on subsistence farming by the remaining rural population, which may have mitigated unemployment but has not resulted in significant increases in income levels. Unemployment is highest in the urban villages, suggesting that there is only a partial spread of the modern economy to these areas together with an increased reluctance (especially among the

young – the unemployment in urban villages in the 20–24 age group was 56 percent) to take up traditional subsistence activities.

5.25 For employment opportunities to be increased, it is important that people have realistic expectations concerning remuneration. Acquiring additional skills may not automatically enhance earning potential, especially for new job seekers compared with those that are changing jobs. The latter have a work track record of relevant skills that are reflected in their remuneration levels in previous employment. The possibility that overly high expectations about wages can contribute to unemployment should not be ignored especially in relation to those entering the job market for the first time where formal educational qualifications are only an imperfect indicator of capacity to produce in a work environment. This may be relevant to Botswana in the context of the rapidly increasing numbers passing through higher-level education. This can raise expectations of immediate access to good jobs to an unrealistic degree. Again this is a problem that reflects the pace of adjustment in the economy, where its small size makes fluctuations in the size and composition of the labour force more difficult to absorb (and adds further to the difficulties in effective manpower planning) as well as, perhaps, practical problems associated with the rapid expansion of tertiary education, which may have in some cases compromised the quality or the relevance of courses.

5.26 It is also important for other inputs to production to be readily available. It will be recalled from Section 2 that of the four sources of increased labour productivity, only one was directly due to labour itself; the others were either due to other inputs or the way they operate together. Except in special cases, labour working by itself, even when highly skilled, can achieve very little. This is the main reason why much labour intensive production is not very remunerative: it is typically not very productive, even if the work involved is self evidently 'hard'. Productive potential and, hence, productive employment, entails working effectively with other inputs.

5.27 Improving accessibility to other inputs has many dimensions. It is one reason why the role of the financial sector in providing funds in the necessary form to suit the needs of business is so important. Also the potential of small businesses may not be fully unlocked if there is not easy access to other inputs, such as land and machinery, in sufficiently small quantities and reasonable prices and with adequate security (i.e. backed by properly enforceable contracts). Improving access does not, however, entail charging artificially low prices; prices must properly reflect the costs of supply. Although in some instances subsidies may appear justified, it must never be forgotten that subsidies must be financed, which requires a transfer of resources from elsewhere (through additional taxation or reductions in other spending), and the impact of this must also be considered.

The Limits of Redistribution

5.28 It is realistic to assume that there will always be a significant number of people requiring assistance over and above what they receive through employment and other sources of personal income. Such support normally takes the form of social safety nets. In Botswana, the assistance is promoted in the form of old age pensions, orphan care allowances, destitute allowances and drought relief schemes. Government's spending on the safety net has been increased by the demographic trends that have accompanied the dynamic development of the economy. In particular, increased urbanisation has weakened the extended family system which has, in the past, provided informal networks of social support. At the same time, as incomes have risen the standards expected of welfare provision have correspondingly risen, often beyond the scope of intra-family transfers. Moreover, the socially disruptive impact of the HIV/AIDS epidemic has increased the Government's burden further.

5.29 The major burden of funding such social welfare programmes is borne by the financially better off sections of the economy in the form of progressive taxation. In Botswana's case low-income earners are not subject to direct taxation, while those with higher incomes are taxed at a maximum rate of income tax of 25 percent.

5.30 With the assistance of mineral revenue, Botswana has been able to implement ambitious spending programmes without resorting to a relatively high rate of taxation. For this reason, the challenges are to ensure that support is well targeted and that those with ability to pay for public services do so. It is against this background that the introduction of cost recovery measures, while inevitably unpopular, are expected to increase the resources that would be available to those most in need of assistance.

6. CONCLUSION

6.1 This review demonstrates that productivity is an important input to economic growth, which supports development and a rise in living standards. To improve output growth, productivity has to increase for all the factors of production, including labour and physical capital. An important feature of productivity growth is innovation and technological improvements that induce enhanced contribution to production and output by both capital and labour. However, apart from technology, national policies, institutions and attitudes play an important role in productivity improvements. While increases in productivity contribute to higher incomes and faster growth, most of the income and increase in living standards accrue to the section of the population that is directly involved in productive activity with those who are not benefiting less. Despite this, achieving high rates of growth ultimately leads to overall improvements in living standards even if accomplished by direct allocation of resources to those who are less well off.

6.2 For Botswana, overall output growth has been relatively high but has declined in the more recent past, with a significant deceleration, from an average of twelve percent per annum between 1975 and 1985 to six percent in the last ten years. The measures used in this review show that while most of the growth in output has been attributable to an increase in capital and to a lesser extent, a rise in the contribution of labour, there has also been notable contribution from growth in productivity. The faster growth in capital compared to labour has resulted in a rise in capital intensity of production as well as a faster increase in the income share of capital compared to the income share of labour. The increase in productivity reflects the impact of technology improvements on capital, which also, together with enhanced skills generated by higher investment in education and health, contributed to the rise in productivity of the labour force.

6.3 The growth in productivity is also associated with shifts in sectoral contributions to output, notably the shift away from the secondary sector (e.g., manufacturing, construction and water and electricity) towards private sector services, in particular, banking, insurance and business services.[39] The importance of this shift is also reflected in factor use as indicated by the rise in capital intensity and labour income for the services sector. The review also indicates that while the growth in productivity is relatively high on a global scale it is, nevertheless, significantly lower in relation to the rate of output expansion, suggesting that there is considerable scope for improvement to support even higher rates of economic growth. This highlights the fact that although factor accumulation is a necessary condition for growth, it is not sufficient, and that an increase in factor productivity plays a fundamental role in the determination of output growth. Moreover, it is worrisome that there has been a trend decline

[39] The primary sector comprising mining and agriculture has largely maintained its share because of the importance of the former while the share of agriculture has rapidly declined.

in factor productivity as well as in the growth rates of inputs (capital and labour), all of which contributed to a slowing of overall output growth in the more recent period.

6.4 It has also been shown in this review that policies, institutions and attitudes are important influences on productivity. For Botswana, there are important areas of policy and institutions that are mostly conducive to increases in productivity and improvement in living standards, while some regulatory processes constrain speedy decisions on investment. Broadly, macroeconomic policies, in terms of both the focus and record have been less of a restraining factor for productivity growth although there may be differing views as to the appropriate balance and levels, for example, with respect to monetary policy, the exchange rate and fiscal expansion. Nevertheless, to the extent that there is consistency and transparency in policy promulgation, there is a clear basis for decisions by economic agents. This is one of the reasons for the country's high scores, relative to other developing countries in international rankings on measures that incorporate factors related to political and economic governance and the degree of corruption.

6.5 The environment is, however, less conducive with respect to microeconomic factors, including competitiveness across industries, the level of skills, infrastructural support, public sector services and the flow of information. This might explain the decline in productivity and overall growth in the recent years, in the absence of large public investment projects, which are less influenced by the above-indicated microeconomic factors. There is, therefore, a need for improvement in these areas in order to add to the positive influence of a largely favourable macroeconomic environment so as to facilitate sustenance of higher productivity and competitiveness. It is apparent from this review that more value could, at the margin, be added by an increased focus on the microeconomic factors that constrain investment growth, higher market competition and technology transfer.

6.6 The theme chapter further highlights the fact that economic growth underpins improvements in living standards. In this respect, there are legitimate concerns about how the wealth derived from high rates of economic growth is distributed. This leads to considerations for a social safety net to support those who are unable, either permanently or temporarily, to participate effectively in the productive economy. This is particularly so where growth is accompanied by widening inequality in incomes. In the case of Botswana it is evident that the relatively high rate of economic growth has provided benefits across the population and is the primary factor in reducing the incidence of poverty from 59 percent in 1985/86 and 47 percent in 1993/94 to 30 percent in 2002/03. Although at the national level inequality in incomes has not changed much since the mid-1980s, there has been a notable decrease for urban areas while inequality has increased in both the urban villages and the rural areas, indicating an absence of income earning opportunities in these areas, beyond the traditional activities. In particular, the level of unemployment is higher in the urban villages and the rural areas where people increasingly choose not to work in the more traditional occupations, despite the presence of opportunities, particularly for the low skill jobs.

6.7 Overall, it is apparent that improvements in productivity can generate higher rates of growth and increase in living standards. In particular, enhanced level of skills, health, technology, efficiency of public institutions and policies that promote investment and market competition enlarge and sustain employment opportunities, in terms of both employability of individuals and the range of productive entities. This is important because there is a limit to redistribution in the form of social safety nets or handouts while higher earning capacity raises the living standards of those engaged in productive activity and at the same time increases scope for helping the less well off.

APPENDIX A: DATA SOURCES AND GROWTH ACCOUNTING METHODOLOGY

1. A number of macroeconomic aggregates – physical capital, skilled and unskilled labour and GDP excluding mineral rents were calculated for purposes of computing total or multifactor productivity (TFP or MFP) using the standard growth accounting method that is typically applied in empirical work on TFP estimation (Table A.1).

2. The output measure used in the calculation of TFP was total GDP excluding government mineral revenue (an approximation of mineral rents), the latter deflated using the GDP deflator. GDP and its deflator were sourced from the national income accounts compiled by the CSO, while mineral revenue was from the *Financial Statements, Tables and Estimates of Consolidated and Development Fund Revenues* from the Cash Flow Unit, Ministry of Finance and Development Planning.

3. The capital stock (real) was from the national income accounts compiled by the CSO and is calculated using the perpetual inventory method (PIM), which computes additions to the stock through gross fixed capital formation and deductions through depreciation.

4. The labour inputs were computed from the labour force using the population censuses of 1971, 1981, 1991 and 2001.[40] The intervening years were interpolated using annual intercensal growth rates. The growth rate for the decade to 2001 was assumed to apply to the years 2002 to 2005. Whereas similar work done in 1995 ignored the 1971 census data for the reason that there was under-enumeration and hence used 1964 census results, this Report uses the 1971 labour force count adjusted for under-enumeration, where the adjustment factor comes through an adjusted population count as reported on page 8 of the 1981 *Population and Housing Census Analytical Report.* In the final analysis, the results are not very different from those reported in the 1995 Bank of Botswana *Annual Report*.

5. The unskilled proportion of the population at each census was taken as a proxy for the unskilled proportion of the labour force. Those who never attended school and who did not complete more than primary school were classed as unskilled, and the remainder treated as skilled.

6. The factor shares were from the CSO, Social Accounting Matrices, 1985/86, 1992/93 and 1996/97. In calculating the factor shares, the mineral revenues noted at paragraph 2 were deducted from the net operating surplus of the mining sector.

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[40] The total labour force (not the actual labour employed) was taken as a proxy for labour inputs. This means that all the available labour at the national level was included in the labour input measure. Quite apart from the data limitations that would have accompanied use of disaggregated data, this methodology is consistent with previous growth accounting work on Botswana and elsewhere. While the use of this measure has the potential to lead to lower TFP growth when unemployment is rising, the use of a labour input measure that includes only the actual workforce would result in an overstatement of TFP growth when employment is increasing.

TABLE A.1: FACTOR INPUTS AND OUTPUT: 1974/75 TO 2004/05 (1993/94 PRICES)

National Accounts Year	GDP (P million)	GDP less Mineral Rents (P million)	Capital Stock (P million)	Labour Force (persons)[1]	Skilled Labour (persons)[1]	Unskilled Labour (persons)[1]
1974/75	1 760	1 696	3 323	309 474	154 669	154 796
1975/76	2 083	1 920	3 618	310 464	154 886	155 570
1976/77	2 169	2 062	3 808	311 458	155 103	156 347
1977/78	2 594	2 443	4 147	312 454	155 320	157 129
1978/79	2 852	2 657	4 649	313 454	155 537	157 915
1979/80	3 256	2 932	5 380	314 457	155 755	158 704
1980/81	3 584	3 172	6 133	315 475	156 025	159 450
1981/82	3 876	3 550	6 762	326 233	162 235	163 962
1982/83	4 491	4 110	7 163	337 357	168 692	168 603
1983/84	4 976	4 287	7 546	348 861	175 406	173 374
1984/85	5 300	4 206	8 298	360 757	182 387	178 281
1985/86	5 708	4 337	8 771	373 059	189 646	183 326
1986/87	6 200	4 339	9 443	385 780	197 194	188 514
1987/88	7 123	5 176	10 638	398 936	205 042	193 849
1988/89	8 791	6 539	12 428	412 539	213 203	199 335
1989/90	9 201	6 956	14 471	426 607	221 688	204 976
1990/91	10 010	7 356	16 415	441 203	230 461	210 742
1991/92	10 634	8 237	17 976	451 748	238 988	212 344
1992/93	10 612	8 440	19 423	462 545	247 831	213 957
1993/94	11 041	8 763	20 690	473 599	257 000	215 584
1994/95	11 398	9 214	21 898	484 918	266 509	217 222
1995/96	12 029	9 835	23 173	496 508	276 370	218 873
1996/97	12 704	10 097	24 587	508 374	286 596	220 536
1997/98	13 729	10 541	26 424	520 525	297 200	222 212
1998/99	14 296	12 179	28 801	532 965	308 196	223 901
1999/00	15 239	11 153	30 982	545 703	319 600	225 603
2000/01	16 555	11 717	32 884	558 745	331 425	227 317
2001/02	16 906	13 201	34 907	572 099	343 688	229 045
2002/03	18 038	14 314	37 036	585 772	356 404	230 786
2003/04	18 863	15 318	39 296	599 772	369 591	232 540
2004/05	19 920	16 236	41 693	614 107	383 266	234 307

1. Skilled and unskilled labour may not add up to total labour force due to rounding.

TABLE A.2: GROWTH COMPETITIVENESS INDEX (GCI) RANKINGS FOR SELECTED COUNTRIES: 2003

Country Index & Ranking[1]	Botswana	Mauritius	Namibia	South Africa	Zimbabwe	Hong Kong	Singapore	Finland	UK	USA
Growth Competitiveness Index (GCI)	36	46	52	42	97	24	6	1	15	2
Macroeconomic Environment Index (MEI)	30	57	53	40	102	15	1	2	12	14
Macroeconomic Stability Subindex	23	64	49	41	101	8	2	7	54	52
Government Waste Subindex	17	58	48	37	100	9	1	2	12	16
Country Credit Rating	38	46	57	40	100	26	17	11	5	3
Public Institutions Index (PII)	26	44	48	43	90	10	6	2	12	17
Contracts and Law Subindex	16	36	45	40	93	12	7	1	10	17
Corruption Subindex	36	57	55	48	84	9	5	4	12	24
Technology Index (TI)	59	49	62	40	75	37	12	2	16	1
Innovation Subindex	80	73	76	58	87	34	15	3	13	1
ICT Subindex	65	40	64	44	80	8	6	2	16	5
TechnologyTransfer Subindex	24	48	33	3	41	…	…	…	…	…
Business Competitiveness Index (BCI)	54	44	55	27	78	19	8	1	6	2
Company Operations & Strategy	67	35	64	28	70	22	12	4	8	2
Quality of National Business Environment	50	46	52	28	81	15	4	1	6	2

1. The main goal of the GCI is to analyse the potential for countries to achieve sustained economic growth over the medium and long term. It summarises the set of institutions, policies and structures that drive the growth process. The GCI consists of three main components, viz: the Macroeconomic Environment Index (MEI), the Quality of Public Institutions Index (QPI) and the Technology Index (TI). All three are further disaggregated into several indicators as shown in the Table. The rankings have been computed for 102 countries. The lower the ranking the greater is the growth potential, while the opposite is true for higher rankings.

Source: World Economic Forum, Global Competitiveness Report, 2004.

TABLE A.3: THE NETWORKED READINESS INDEX (NRI) RANKINGS FOR SELECTED COUNTRIES: 2003–2004

Country Index & Ranking	Botswana	Mauritius	Namibia	South Africa	Zimbabwe	Hong Kong SAR	Singapore	Finland	UK	USA
Networked Readiness Index[1]	55	43	59	37	95	18	2	3	15	1
Environment Component Index	43	48	37	33	97	11	2	3	14	1
Market Environment Subindex	52	53	71	45	80	23	1	3	13	2
Political & Regulatory Environment Subindex	28	54	44	23	100	2	5	1	9	8
Infrastructure Environment Subindex	53	44	23	43	95	16	5	15	19	2
Readiness Component Index	68	41	73	46	91	28	4	1	10	3
Individual Readiness Subindex	74	55	77	67	70	24	22	4	7	5
Business Readiness Subindex	73	49	67	33	82	31	4	1	14	3
Government Readiness Subindex	54	20	74	44	101	27	1	2	10	3
Usage Component Index	60	37	79	33	93	15	2	9	21	1
Individual Usage Subindex	67	41	68	57	78	22	18	10	21	8
Business Usage Subindex	54	61	63	24	70	14	2	11	20	1
Government Usage Subindex	58	25	83	27	100	4	1	8	18	2

Notes: Introduced in 2001–2002, the Networked Readiness Index (NRI) is defined as the'degree of preparation of a nation or community (disaggregated into individuals, businesses and government or the so-called stakeholders), to participate in and benefit from ICT developments' (Dutta, S. et al, 2004). The NRI has three components – environment, readiness and usage – which, in turn, have three sub-indices each as shown in the Table. The macroeconomic and regulatory environment provides the setting in which the three key stakeholders operate. Readiness refers to the degree of capability (emanating from ICT usage skills at the individual level, access and affordability of ICT for corporations and integration of ICT in government operations) of stakeholders to use and benefit from ICT. Usage refers to the actual use and application of ICTs. The rankings have been calculated for 102 countries. The lower the ranking the higher the capability of a country to use and benefit from ICTs and vice versa.

The environment component of the NRI measures the degree of conduciveness of the environment that a country provides for the development and use of ICTs. Its sub-component, the market, evaluates the presence of appropriate human capital and ancillary businesses to support a knowledge-based economy. The political and regulatory sub-index assesses the pulse and impact of a country's political, legal, and regulatory frameworks on the development and use of ICTs. Quality infrastructure is a pre-condition for the adoption and use of ICT. In terms of readiness sub-indices, readiness and usage are closely connected and at the individual level can be interpreted to encompass literacy rates, form and points of access to the Internet and the extent of connectivity of individuals. At the level of businesses, this involves measuring firm's willingness to utilise ICT and invest in the creation of ICT skills of their workers. From a government's perspective, its readiness is reflected in its policy priorities, application of ICTs in its internal process and in the provision of online services. Usage of ICT at the individual level is assessed by the use of connectivity-enhancing technologies such as telephone and the Internet; examples of usage of ICT at the level of businesses is the level of e-commerce between businesses and between businesses and consumers; while at the level of the government it is assessed by the volume of transactions that businesses have with government and services available online.

Source: Dutta, S. et al, 2004, The Global Information Technology Report, 2003–2004: Towards an Equitable Information Society, World Economic Forum, infoDev and INSEAD.

TABLE A.4: TRADE COMPETITIVENESS RANKINGS FOR SELECTED AFRICAN COUNTRIES: 1980–2001

Years	1980–1984	1985–1989	1990–1994	1995–1999	1997–2001
Country, Ranking and Index					
Botswana					
Overall Trade Competitiveness Index (TCI)	22	8	7	8	8
Trade-enabling Environment Index (TEI)	7	3	3	7	7
Productive Resource Index (PRI)	27	26	25	26	26
Infrastructure Index (II)	20	16	3	4	4
Mauritius					
Overall Trade Competitiveness Index (TCI)	1	2	2	1	1
Trade-enabling Environment Index (TEI)	1	4	2	3	1
Productive Resource Index (PRI)	3	3	3	1	2
Infrastructure Index (II)	2	2	4	2	1
Namibia					
Overall Trade Competitiveness Index (TCI)	6	3	3	3	3
Trade-enabling Environment Index (TEI)	5	1	4	2	3
Productive Resource Index (PRI)	11	12	7	10	15
Infrastructure Index (II)	11	9	2	3	3
South Africa					
Overall Trade Competitiveness Index (TCI)	2	1	1	2	2
Trade-enabling Environment Index (TEI)	3	2	1	1	2
Productive Resource Index (PRI)	4	4	4	5	5
Infrastructure Index (II)	1	1	1	1	2
Zimbabwe					
Overall Trade Competitiveness Index (TCI)	20	18	12	19	23
Trade-enabling Environment Index (TEI)	15	13	7	12	22
Productive Resource Index (PRI)	23	22	22	24	25
Infrastructure Index (II)	12	13	7	14	14

Notes: The trade competitiveness rankings were computed for 30 African countries. The overall Trade Competitiveness Index (TCI) is a composite index that measures the overall competitiveness of a country's trade. It comprises three sub-indices, namely, the Trade-enabling Environment Index (TEI), the Productive Resources Index (PRI) and the Infrastructure Index (II). These, in turn, consist of 8 components, themselves made up of 31 indicators in total.

The TEI has two components – the Macroeconomic Environment Index (MEI) and the Institutional Quality Index (IQI). Indicators that make up the MEI are the average tariff rate, real GDP per capita growth, consumer price inflation, lending interest rates, real effective exchange rate, and the ratio of domestic credit to the private sector to GDP. Corruption, rule of law, government stability, bureaucratic quality, and democratic accountability constitute the IQI.

The PRI also consists of two components – the Labour Force Index (LFI) and the Geography Index (GI). The indicators for the LFI are the labour force as percentage of the total population, the percentage of adult illiteracy rate, school enrolments at primary, secondary and tertiary levels, percent of urban population, and life expectancy. The GI takes as its measures the landlockedness of a country, arable land use, and actual renewable water resources.

The II has four components – the Telecommunications Index (TI) (with three indicators – fixed line and mobile phone subscribers, telephone mainlines, and the average cost of local calls); the Energy Index (EI) (computed from electricity production and consumption data); Transport Network Index (TNI) (total road network and tarred roads); and Access to Information Index (AII) (measures access to personal computers, radios and television sets).

Source: United Nations Economic Commission for Africa, Economic Report on Africa 2004.

TABLE A.5: INDICATORS OF EASE OR DIFFICULTY OF DOING BUSINESS IN SELECTED COUNTRIES: 2004

Country Index & Ranking	Botswana	Namibia	South Africa	Zimbabwe	Hong Kong, China	Singapore	Finland	UK	USA	Sub-Saharan Africa	OECD Average
Starting a Business											
Number of Procedures	11	10	9	10	5	7	3	6	5	11	6
Duration (days)	108	85	38	96	11	8	14	18	5	64	25
Cost (% GNI per capita)	11.3	19.3	9.1	304.7	3.4	1.2	1.2	0.9	0.6	223.8	8
Minimum Capital (% GNI per capita)	0	0	0.	53	0	0	29.3	0.	0	254.1	44.1
Hiring and Firing Workers						0					
Rigidity of Employment Index	20	33	52	24	0	0	44	20	3	56	34.4
Difficulty of Hiring Sub-index	0	0	56	11	0	0	33	11	0	53.2	26.2
Rigidity of Hours Sub-index	20	60	40	40	0	0	60	40	0	64.2	50
Difficulty of Firing Sub-index	40	40	60	20	0	0	40	10	10	50.6	26.8
Firing Costs (weeks worth of wages)	19	26	38	29	13	4	24	25	8	59.5	40.4
Registering Property											
Number of Procedures	4	9	6	4	3	3	3	2	4	6	4
Time (days)	69	28	20	30	56	9	14	21	12	114	34
Cost (% of property per capita)	5	9.7	11.3	18.1	2	1.5	4	4.1	0.5	13.2	4.9
Getting Credit											
Cost to Create Collateral (% of income per capita)	2	28.3	2.3	2.4	0.2	0.3	0.8	0.1	0.1	41.8	5.2
Legal Rights Index	9	…	6	7	10	10	6	10	7	4.6	6.3
Credit Information Index	5	5	5	0	4	4	4	6	6	2.1	5
Public Credit Reg. Cover (borrowers/1000 adults)	0	0	0	0	0	0	0	0	0	1.1	76.2
Private Bureau Coverage (borrowers/1000 adults)	309	353	636	0	615	335	148	1000	1000	39.4	577.2
Protecting Investors											
Disclosure Index	5	1	6	6	6	5	5	7	7	2.1	5.6
Enforcing Contracts											
Number of Procedures	26	31	26	33	16	23	27	14	17	35	19
Time (days)	154	270	277	350	211	69	240	288	250	434	229
Cost (% of debt)	24.8	28.3	11.5	19.1	12.9	9	7.2	15.7	7.5	43	10.8
Closing a Business											
Time (years)	2.2	1	2	2.2	1.1	0.8	0.9	1	3	3.6	1.7
Cost (% of estate)	18	4	18	18	8	1	1	6	8	20.5	6.8
Recovery Rate (cents on the dollar)	50.9	53.7	31.8	9.2	82.3	91.3	90.2	85.8	68.2	17.1	72.1

Notes: The indicators for starting a business are the number of procedures required to set up a business, the time (in calendar days) it takes to register it, the associated cost of each procedure (expressed as a percent of income per capita), and the minimum capital required to obtain a business registration number (expressed as a percent of income per capita).

The regulation of hiring and firing workers is measured by an overall indicator – the rigidity of employment index – which is an average of three sub-indices, namely, the difficulty of hiring, rigidity of hours, and difficulty of firing. All three sub-indices take values between 0 and 100, with higher values indicating more rigid regulations. Each one of them also has several components (see source for detailed explanation). The cost of firing a redundant worker is calculated on the basis of weeks worth of salary in severance, advance notification and penalties that must be paid to dismiss a worker.

The efficiency and effectiveness with which property registration is carried out is measured by the number of procedures legally required to register or transfer a property title from the seller to the buyer, time spent completing the procedures and the costs (e.g., legal fees, transfer taxes, stamp duties, etc.) associated with the registration process (expressed as a percentage of the property value).

Five indicators are used to measure the degree of credit information sharing and the legal rights of borrowers and lenders, namely, the cost to create and register collateral, index of credit information availability (which measures the scope, quality and accessibility of credit information through public and private registries and is assigned values from 0–6, with higher values indicating more credit information from public and private registries and lower values the opposite), coverage of public and private credit registries (these are firms or institutions providing the number and credit histories of individuals or firms on their records per 1000 adult population size), and the legal rights index, which measures the degree to which collateral and bankruptcy laws facilitate lending, and ranges from 0–10, with higher values indicating that the laws are better designed to expand access to credit.

The degree of protection of investors is measured by the disclosure index which captures seven ways through which ownership and financial information is disclosed, i.e., information on family, indirect ownership, beneficial ownership, voting agreements between shareholders, use of audit committees that review and certify financial data, legal requirements that external auditors be appointed and public availability of ownership and financial information to current and potential investors. The index ranges from 0 to 7, with higher values indicating more disclosure.

Three indicators measure the ease or difficulty of enforcing contractors, viz: the number of procedures legally required from the time of filing a lawsuit to the time when payment is made, the associated time taken and the cost (in court, attorney and other fees and payments) expressed as a percentage of the value of the debt.

Three indicators measure the efficiency with which a non-viable business is closed. These are the costs and time required to resolve bankruptcy, and the recovery rate (measuring the efficiency of foreclosure procedures) expressed in per dollar claimants recover from the insolvent firm.

Source: Doing Business, World Bank website: http://rru.worldbank.org/DoingBusiness; Simeon Djankov, et al., February 2002, 'The Regulation of Entry' in Quarterly Journal of Economics, 117, pp.1–37; Juan Botero, et al., November 2004, 'The Regulation of Labor', Quarterly Journal of Economics; Simeon Djankov, et al., forthcoming, 'Property', ongoing research project; Rafael La Porta, et al., 1998, 'Law and Finance' in Journal of Political Economy, 106, pp. 1113–55; Simeon Djankov, et al., forthcoming, 'Corporate Theft' an ongoing research project; Simeon Djankov, et al., May 2003, 'Courts' in Quarterly Journal of Economics, 118, pp.453–517; and Simeon Djankov, et al., forthcoming, 'Efficiency in Bankruptcy', an ongoing research project.

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