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From: The Secretary

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**\*Unless an objection from the authorities is received prior to the conclusion of the Board's consideration, the document will be published.**





# BOTSWANA

## STAFF REPORT FOR THE 2019 ARTICLE IV CONSULTATION

February 21, 2020

### KEY ISSUES

**Outlook and risks.** GDP growth is forecasted to pick up to 4.4 percent in 2020 and 5.6 percent in 2021 as the diamond industry recovers somewhat, and a new copper mine comes on stream. Growth will ease back to around 4 percent over the medium term. Risks to the outlook include faster-than-anticipated slowdown in key trading partners, shifts in consumer preferences to synthetic diamonds, and climate shocks.

**Fiscal policy.** The size and pace of the planned adjustment are consistent with Botswana's fiscal space, but the composition of the adjustment should protect efficient capital and social spending. Furthermore, given that buffers are being eroded, it is critical that consolidation starts as envisaged in FY2020, as it would help start addressing external imbalances and contribute to a gradual rebuilding of buffers over the medium term. Achieving the authorities' plans would require additional revenue and spending measures beyond those included in the staff's baseline. These measures need to be carefully calibrated to minimize the impact on competitiveness, growth, and the most vulnerable.

**Monetary and exchange rate policies.** The Bank of Botswana (BoB) accommodative monetary policy stance is appropriate. Looking forward, the BoB should use the flexibility afforded by its current exchange rate regime to facilitate the economy's adjustment to the persistent decline in mineral revenue and SACU transfers, and structural transformation. To strengthen the monetary transmission mechanism and deepen the domestic financial market, there is a need to develop the secondary market for government securities, leverage Fintech, facilitate the attachment of collateral, and improve credit information.

**Enhancing Botswana's fiscal framework.** Key reforms include: i) modifying the fiscal rule to allow Botswana to achieve its intergenerational equity objective and shelter the economy from the commodity cycle and revenue volatility; ii) greater revenue mobilization by broadening the tax base and advancing tax reform; iii) enhancing the efficiency of spending; iv) reforming parastatals and strengthening their monitoring and accountability, and v) revamping the debt management framework.

**Supply-side policies.** Further improve the business environment, foster competition and competitiveness, and reduce the government footprint in the economy. Strategic deficiencies in the Anti-Money Laundering/Combating the Financing of Terrorism framework (AML/CFT) should be addressed.

Approved By  
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**M. Goodman (SPR)**

Discussions for the 2019 Article IV consultation took place in Gaborone during November 13–27, 2019. The team comprised Mr. N'Diaye (head), Ms. Lagerborg, Messrs. Jardak and Peralta-Alva (all AFR). Ms. Mannathoko and Mr. Abdullahi (both OED) participated in the discussions. Ms. Li and Mr. Alsokhebr provided research and editorial assistance for the preparation of this report.

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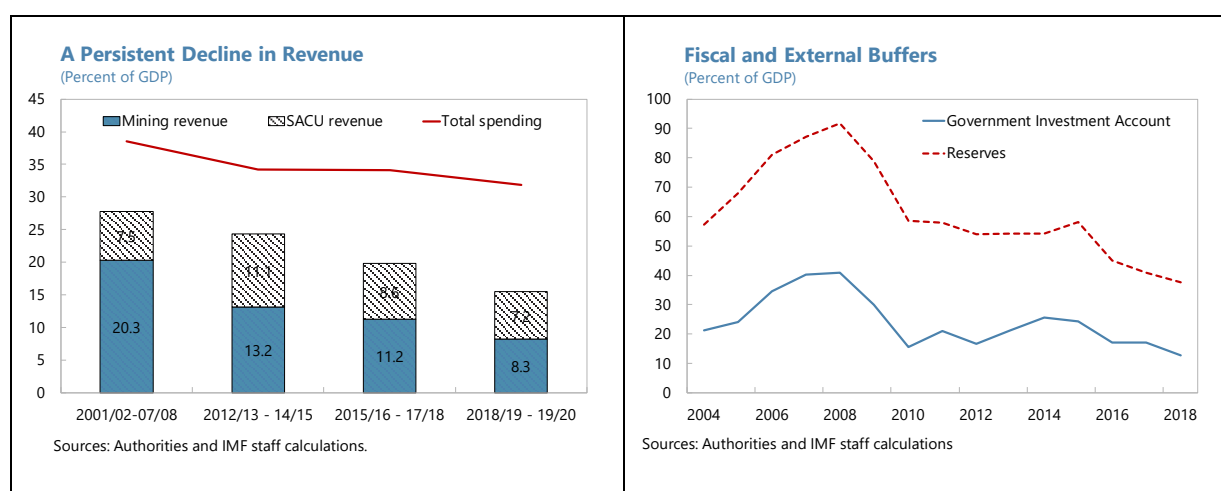
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## BACKGROUND

**1. A challenging environment has exposed the limits of Botswana's current growth model** (Figure 1). Since the global financial crisis, diamond proceeds have remained significantly below pre-crisis levels as global demand weakened. These pressures intensified in 2014 reflecting increased competition from synthetic diamonds and higher production costs as the diamond mines become deeper. The government's continued support to growth and employment through fiscal expansion (increases in public sector wages, employment and social spending, continued investments) lead to large fiscal deficits, a persistent drawdown in buffers, weakening the external position and, with the BoB seeking to maintain a stable REER to counter inflation, resulting in a moderate overvaluation of the exchange rate. At the same time, with limited progress on structural reform, growth potential has slowed, diversification has remained elusive, and non-mining exports market shares have fallen. Progress in reducing poverty and inequality has been modest and, unemployment increased to 20.7 percent, especially for youth and educated workforce.<sup>1</sup>



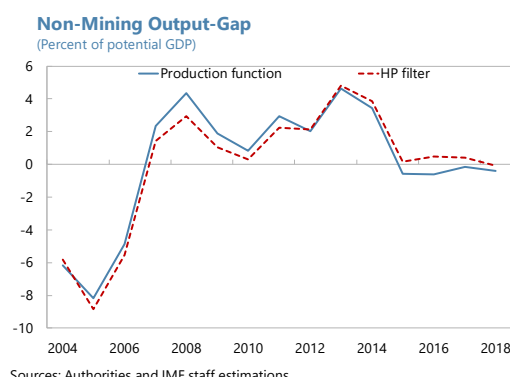
**2. Implementation of past staff advice has been mixed.** The pace of reforms has regained momentum recently, especially in relation to the business environment, but several recommendations of the last article IV, including on fiscal policy have been delayed (Annex I).

**3. The ruling Botswana Democratic Party (BDP) won a large majority in the parliament in the October 2019.** The BDP secured 67 percent of the vote (38 seats out 57 seats in the parliament). Mr. Masisi, the leader of the BDP, was sworn in as the 5<sup>th</sup> President of the Republic of Botswana.

<sup>1</sup> Botswana is one of the most unequal countries in the world. The Gini coefficient has increased from 0.495 in 2009/10 to 0.522 in 2015/16.

## MACROFINANCIAL DEVELOPMENTS

**4. GDP growth decelerated in 2019, while inflation remained subdued.** Growth slowed to an estimated 3.4 percent in 2019 (3.5 percent over the first three quarters), down from 4.5 percent in 2018. The slowdown reflects a temporary contraction in diamond activity and a severe drought. Accommodative fiscal policy, in particular through higher public wages and employment, helped maintain non-mining GDP growth close to its potential. Inflation remained subdued at 2.8 percent on average in 2019, as low imported inflation and stable administered prices outweighed higher food prices (Table 1, Figure 2).



**5. The fiscal position also deteriorated significantly.** After widening to 4.6 percent of GDP in FY2018 (up from 1.1 percent of GDP), the overall deficit is projected to increase further in FY2019 (5.8 percent of GDP). The deterioration reflects lower mining revenue and SACU transfers (-3.5 percent of GDP), continued underperformance of VAT, a larger-than-expected increase in the wage bill (both salaries and employment), and other one-off expenditures (e.g. drought relief package), which were partially offset by an under execution of capital spending. Despite this deterioration, gross public debt is expected to remain broadly stable at about 19 percent of GDP as the deficit will be mostly financed by exceptional capital gains from the Bank of Botswana (BoB) and a drawdown in buffers (Tables 3a–3b).<sup>2</sup>

**6. The expansionary fiscal stance and weak diamond proceeds weighed on the external position.** In 2019, diamond exports fell by 25 percent (7½ percent of 2018 GDP), mostly reflecting excess inventories in midstream industries and lower demand from Hong Kong SAR. As non-diamond imports remained broadly stable in relation to GDP, the current account surplus turned into a deficit, estimated at -4.3 percent of GDP (Table 2). Foreign exchange reserves dropped for a third consecutive year to about 10 months of imports (35 percent of GDP) at end-September, despite large positive valuation effects (about 3.6 percent of GDP). Overall, the external position is moderately weaker than the level consistent with fundamentals and desired policies (Annex II).

**7. Bank lending grew broadly in line with GDP amid improving liquidity and strong banks' balance sheets** (Tables 5–6, Figure 3). Credit grew by about 6.9 percent year on year at end-October 2019, but remained skewed toward households. This is mainly because higher public wages supported households' borrowing capacities, while uncertainty related to the general election delayed corporates' investment and associated demand for credit. Meanwhile, the NPL ratio stabilized at 5.2 percent in Q3, while capital adequacy ratios stood well above the statutory minimum capital of 15 percent. In addition, the health of the financial system has not been impacted

<sup>2</sup> Exceptional capital gains by the BoB were made from a reallocation of the Pula Fund assets (which included investments in the stock market) to the liquidity portfolio (which involved transforming shares into liquid assets and realizing capital gains in the process).

so far by the FATF decision in October 2018 to grey list Botswana because of strategic deficiencies in its AML/CFT framework.

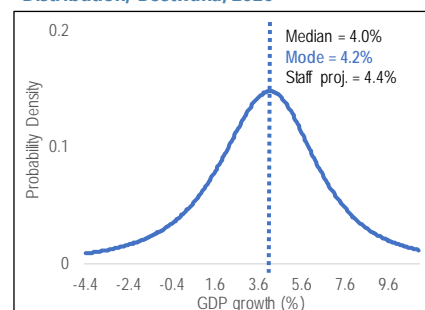
## OUTLOOK AND RISKS

**8. Growth is forecast to pick up in the near term and remain over the medium term below levels needed to achieve the authorities' development objectives.** GDP growth is projected to rebound to 4.4 percent in 2020 as diamond inventories and demand normalizes, the effects of the drought dissipate and increases in real wages kick in, and monetary policy remains accommodative, more than offsetting the drag from fiscal consolidation.<sup>3,4</sup> Growth is expected to pick up further in 2021, with the start of the Khoemacau copper mine, and to moderate to around 4 percent over the medium term. This growth level would be insufficient for Botswana to absorb the 30,000 new entrants into the job market every year (compared to approximately 22,000 jobs created annually over 2014-18). Inflation is expected to edge up slightly due to revisions of some administered prices but will remain in the bottom half of the BoB target band.

**9. Staff's baseline scenario assumes a gradual fiscal consolidation starting in 2020.** The fiscal deficit is expected to narrow to about 3 percent of GDP in 2020 helped by higher SACU transfers and gradually return to 0.5 percent of GDP by FY2024, amid increased efficiency gains and reprioritization of capital projects.<sup>5</sup> This, together with increased mining production over the medium term—as new copper mines come on stream and diamond output rises—will help strengthen the current account balance and rebuild external buffers.

**10. The outlook is subject to several downside risks, most of which would impact Botswana through lower mineral revenue or SACU transfers.** There are significant downside risks relating to trade policy uncertainty and global growth, especially a faster-than-anticipated slowdown in China, the United States and South Africa. In the near term, widespread and prolonged disruptions from the coronavirus could lower growth and mining revenue through slower tourism activity and demand for diamonds. Higher mining production could provide some upside, but this could be offset by climate shocks, which would also weigh on agricultural output and tourism. These climate shocks will continue to threaten the outlook over the medium to longer term (Box 1). In addition, shifts in consumer preferences toward synthetic diamonds could force a sharp adjustment in domestic spending with attendant effects on macroeconomic and social stability.

**Growth-at-Risk: Projected GDP Growth Distribution, Botswana, 2020**



Source: IMF staff calculations.

<sup>3</sup> Past episodes of turbulence in the diamond market were in general short-lived.

<sup>4</sup> The public wage bill and the minimum wages have increased by about 17 percent.

<sup>5</sup> SACU transfers for FY2020 are based on this year's announced amounts in South Africa's budget.



## POLICY DISCUSSIONS

*Discussions centered on i) calibrating macroeconomic policies to adjust to the persistent shock to mineral and SACU revenues, and navigate the uncertain outlook, ii) revamping the policy frameworks to increase resilience and efficiency, and iii) designing and implementing supply-side reforms to promote private sector activity and diversify the sources of growth.*

### A. Calibrating Macroeconomic Policies

#### Fiscal Policy Stance and Quality of the Fiscal Adjustment

**11. The authorities envisage to balance the fiscal position by FY2023 and reach a small surplus beyond that date.** The fiscal consolidation aims to gradually rebuild fiscal buffers and guard against future economic shocks. In the FY2020 budget, the adjustment would be achieved mostly through reprioritization of capital outlays, cuts in non-priority spending and increase in public service fees, and is expected to be supported by improvements in diamond and SACU revenue. Higher mining and SACU revenue, which account for 60 percent of Botswana's revenue, will help reduce the fiscal deficit in FY2020 by 2¾ percent of GDP. The envisaged reduction in the deficit is consistent with past performance as the fiscal effort will be about ½ percent of GDP. Over the medium term, more savings would be achieved through efficiency gains and control of the wage bill (mostly through partial attrition).

**12. The size and pace of the authorities' planned adjustment are broadly appropriate.** Botswana has low debt and gross financing needs, and reserves at 35 percent of GDP (250 percent of the ARA metric) but needs to rebuild buffers for intergenerational equity purposes. This means that Botswana has some fiscal space that allows a gradual consolidation in order to minimize the impact on competitiveness, growth, and the most vulnerable. However, it is critical that the planned consolidation be implemented starting in FY2020 as it would help address external imbalances and contribute to a gradual rebuilding of buffers over the medium term, consistent with intergenerational equity. Achieving the authorities' objective of a surplus by FY2024 would also allow Botswana to guard against cyclical shocks.<sup>6</sup>

**13. Additional revenue and expenditure measures beyond those currently planned by the authorities are needed and the composition of the planned fiscal adjustment should protect efficient capital and social spending.** Achieving the authorities' planned fiscal consolidation while maintaining the wage bill in relation to GDP at the current level would likely entail significant cuts in capital expenditure and social spending, which could be inconsistent with the authorities' transformation strategy. And while there is room for prioritizing quality public investment and enhancing spending efficiency, large and abrupt cuts would not be desirable given adverse effects on long-term growth. Moreover, enhancing spending efficiency typically requires public management reform, the benefits of which take time to materialize. Thus, additional revenue and

<sup>6</sup> See section on the fiscal framework for more details.

expenditure measures beyond those currently planned by the authorities (and included in staff's baseline) are needed. Specific measures that could help achieve the consolidation plans while minimizing the impact on growth (by protecting efficient public investment and competitiveness) and the most vulnerable include:

- On the expenditure side: i) introducing means testing of scholarships in tertiary education, ii) gradually eliminating the electricity and fuel subsidies, while minimizing the impact on the poor (for example through targeted cash transfers), and iii) freezing hiring by the public sector and better aligning wage increases with productivity.
- On the revenue side, the planned increase in public services fees should be progressive. Other measures should focus on broadening the tax base, including streamlining exemptions. Aligning the VAT rate to the regional average (14-15 percent, compared with 12 percent in Botswana), and increasing the progressivity of the personal income tax by adding brackets for higher income earners would provide immediate revenue. This could be supported over the medium term by increases in the level and coverage of property rates.<sup>7</sup>

### ***Authorities' Views***

**14. The authorities reiterated their commitment to achieving a small surplus over the medium term but are still working out how best to achieve it.** They agreed that social and capital spending should be preserved but saw significant scope to reduce public sector waste and enhance efficiency, including in special funds and parastatals. They saw also scope for greater prioritization of productive and soft infrastructure, especially given their objective to transform Botswana in a knowledge-based economy. In addition, the authorities pointed to improvements in planning and budgeting as potential sources of saving.

### **Monetary Policy Stance**

**15. The accommodative monetary policy stance is appropriate. After over a year of constant rates,** the cut in the BoB policy rate in August was in line with changes in global rates and consistent with the BoB's objective of maintaining a stable REER. It was made possible by the low core inflation and inflation expectations anchored within the CB target band. The lower policy rate will pass through to lending rates, providing a stimulus to economic activity. However, in lowering interest rates, the BoB's continued attention to the vulnerabilities in households' balance sheets (high share of unsecured loans) is critical. Macroprudential policies could be tightened, if necessary, by introducing regulatory limits on Debt-To-Income or introducing a limit on unsecured lending.

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<sup>7</sup> These revenue measures could bring about 3 percent of GDP while expenditure measures (excluding wage policy) could lead to additional savings of 1.2 percent of GDP.

## Authorities' Views

**16. The BoB considers that the risks related to households' balances sheets are manageable.** While acknowledging the high household indebtedness and the high exposure of banks to households, the BoB sees several mitigating factors. These include the fact that banks generally collect payments for unsecured loans directly from borrowers' paychecks; the concentration of unsecured loans is low; and Botswana still has room to deepen credit markets given its macroeconomic fundamentals and when compared with other countries at similar levels of development.

## Macroeconomic Policy Mix if Downside Risks Materialize

**17. Botswana has room to adjust macroeconomic policies to deal with shocks, but greater flexibility in the exchange rate would permit a more rapid adjustment to persistent shocks.** In the event downside risks to growth materialize, the size and pace of fiscal adjustment could be recalibrated as part of a credible medium-term consolidation plan. On the monetary side, the BoB stable REER objective will limit its ability to provide further support to growth and constrain the economy's response to the shock. In fact, the BoB may well need to maintain interest rates higher than they would otherwise, which would further weaken growth (as during the 2015 shock). Thus, the BoB needs to use the flexibility afforded by the current exchange rate framework to allow the Pula REER to respond to persistent shocks.<sup>8</sup>

## B. Fostering Economic Transformation

*There is an urgent need to advance structural reforms to lift medium-term growth and create the jobs to lower unemployment and absorb the new entrants into the labor market. Doing so will require enhancing macroeconomic policy frameworks and accelerating supply-side reforms.*

## Enhancing Macroeconomic Policy Frameworks

### Fiscal Policy Framework

**18. The current framework lacks operational guidance for fiscal policy and did not prevent a large and persistent decline in buffers.** Limits are specified on gross debt (40 percent of GDP), and the shares of FX and local currency debt (20 percent of GDP for each). At the same time, the Pula Fund is not governed by strict deposit or withdrawal rules. Instead, deposits are determined by the size of foreign exchange inflows and the fiscal surplus, while withdrawals finance fiscal deficits.<sup>9</sup> This

<sup>8</sup> This is possible because the exchange rate pass-through to inflation is incomplete (estimated to 0.46 percent).

<sup>9</sup> Foreign exchange reserves in excess of the amount required for daily foreign transactions kept in the Liquidity Portfolio (currently set at six months of imports) are transferred to the BoB's portion of the Pula Fund. If the Liquidity Portfolio declines below three months of imports, it receives a transfer from the Pula Fund.

framework likely encouraged an overreliance on buffers to finance fiscal deficits, delaying the needed fiscal adjustment.

**19. The authorities have proposed a new fiscal rule, but the proposal could inadvertently generate undesirable outcomes.** The rule, to be achieved by the end of the NDP 11, envisages that the recurrent budget be financed from non-mineral revenues (Sustainable Budget Index-like), and mineral revenues be used for investment in physical and human capital (60 percent) and be saved for future generations (40 percent). Achieving this target would be difficult given the current level of mineral and SACU revenue and would likely lead to high volatility in spending on physical and human capital, and therefore on GDP.

**20. Amendments to the proposed rule would better ensure intergenerational equity while allowing for countercyclical policy.** These would include:

- Setting an explicit long-run target for the return on assets, including both financial and non-financial (e.g. infrastructure or human capital). This target should be consistent with intergenerational equity, defined as providing future generations (once mineral resources are exhausted) with a return comparable to what current generations enjoy (equivalent to an annuity of 11 percent of GDP).
- In the short and medium term, complementing the existing ceiling on gross debt with a period-by-period floor on assets, based on the ARA metric and the size of buffers needed for smoothing cyclical fluctuations (about 18 percent of GDP).
- Defining an operational target (e.g. a ceiling on recurrent expenditure growth) that ensures consistency between short- and long-run objectives.

Illustrative simulations (see Appendix I) show that under such a rule, continuation of the fiscal consolidation envisioned in staff's baseline, which achieves a surplus of 0.8 percent of GDP starting in 2026, would leave the economy with sufficient financial assets to guard against shocks (cyclical fluctuations in mineral and SACU proceeds) and achieve intergenerational equity (Figure 4). The simulations also indicate that the long-run target could be achieved through different investment strategies (e.g. higher investment in infrastructure or human capital and less financial assets) with attendant effects on the ability to smooth shocks.

**21. Improving spending efficiency would facilitate fiscal adjustment and buy-in for tax reform.** Enhancing the efficiency of spending, including for parastatals, will in the short term reduce the impact of fiscal consolidation on growth. Over the long term, it will maximize the returns on capital and social spending, especially if combined with structural reforms to boost private sector development and exports. Priorities include further strengthening public investment management, better targeting of social spending, and moving to performance-based budgeting to enhance accountability in the medium term.

**22. Rationalizing and enhancing the governance of parastatals would help improve the efficiency and effectiveness of the public sector and contain contingent liabilities.**<sup>10</sup> The lack of a regulatory governance framework for parastatals could result in a misalignment between parastatals' strategies and their line ministries' objectives. Furthermore, persistent delays in the timely publication of audited financial statements complicates financial oversight. Thus, it is critical to empower the Public Enterprises Evaluation and Privatization Agency (e.g. legal authority to enforce compliance), merge parastatals with overlapping mandates, enhance financial transparency, and strengthen the governance framework. In particular, there is a need for greater accountability, professionalization of the boards of parastatals, and appointing CEOs and board members based on competencies and expertise. The staff also encourage the authorities to set clear timelines for the restructuring of key loss-making enterprises, notably Air Botswana, the Botswana Meat Commission, and the National Development Bank, and proceed with their privatization plans.

### ***Domestic Revenue Mobilization***

**23. Mobilizing additional domestic revenue would help Botswana reduce its dependence on mineral revenue and SACU transfers and preserve capital and social spending.** These two revenue sources account for more than 60 percent of total fiscal revenue, making the fiscal position highly vulnerable to external shocks. At the same time, tax revenues are significantly below their potential as the domestic tax base has been eroded by multiple tax exemptions.<sup>11</sup> Moreover, the authorities' efforts to strengthen tax administration have stalled with several tax bills intended to simplify regulation and enhance compliance still being drafted. Thus, there is a need to broaden the tax base (e.g. streamlining VAT exemptions, increasing the level and coverage of property rates) and strengthen tax administration. The potential effects of revenue measures on vulnerable groups should be offset by expanding targeted cash transfers or other social protection programs. Finally, tax reform should avoid discouraging foreign investment (e.g. the recent large increase in transfer duties for foreigners).<sup>12</sup>

### ***Debt Management***

**24. There is a need to revamp the medium-term debt management strategy (MTDMS).** The overreliance on buffers to finance the deficit and the reduction in the share of external borrowing came at a cost of a rapid decline in buffers. The authorities should use the opportunity provided by the preparation of a new MTDMS to base their financing decisions on the levels of external and fiscal buffers, the financial opportunity cost of issuing debt against drawing down buffers (e.g. comparing returns on assets against the cost of issuing debt, including in domestic and foreign markets), a dynamic forward-looking strategy based on budget forecast, and on-lending and redemptions. Furthermore, the debt management strategy should be part of a broader strategy to deepen

<sup>10</sup> The parastatals' debt-to-GDP ratio stood at 4.5 percent of GDP at end-March 2019, half of which is held by Botswana Power Corporation.

<sup>11</sup> For example, removing the VAT exemptions fuel, sugar and private education and health services would increase VAT receipts by 0.3 percent of GDP (see 2018 Article IV).

<sup>12</sup> See 2018 Article IV for a detailed discussion of fiscal incidence and inequality.

Botswana's financial markets. Doing so would help accelerate structural transformation by providing domestic investment instruments to institutional and retail investors and enhance liquidity in the bond market.

### ***Authorities' Views***

**25. The authorities welcomed staff's suggestions of alternative fiscal frameworks.** They underscored the difficult trade-off not only between financial and non-financial assets but also within non-financial assets between human and physical capital and requested technical assistance for the calibration of the fiscal rule. They agreed on the scope for greater revenue mobilization and stressed the need for analyzing the reasons behind the decline in tax efficiency rates. Finally, they saw merit in revamping their assets and liability management framework, in particular through greater domestic borrowing on medium-to-long-term maturities to finance the deficit.

### ***The Exchange Rate***

**26. The current monetary policy objective of maintaining a stable real exchange rate against the currencies in the basket has been successful in achieving price stability but slowed economic adjustment.** While this policy has helped stem short-term appreciation pressures and accumulate buffers during episodes of temporarily high diamonds proceeds, the absence of an adjustment of the REER in the face of persistent decline in mineral revenue and SACU receipts has slowed economic adjustment.

**27. Going forward, the exchange rate will need to facilitate Botswana's economic transformation.** This is because of several reasons. First, the exchange rate is moderately overvalued relative to levels consistent with fundamentals and desired policies (Annex II). And while the planned fiscal adjustment would help bring it broadly in line, the ensuing real depreciation should be allowed to play out. Second, the current external environment is fraught with downside risks (e.g. elevated trade tensions and faster-than-anticipated slowdown in China), which would likely entail depreciation pressure if they were to materialize. Keeping the real exchange rate constant in the event downside risks materialize would require maintaining real interest rates higher than they would otherwise, limiting the countercyclical role of monetary policy. And finally, over the medium to longer term, broad-based structural reforms to increase productivity in the economy will require changes to relative prices as capital and labor are reallocated from one sector to another, that will entail changes in the equilibrium exchange rate.

### ***Authorities' Views***

**28. The authorities broadly concurred with staff's assessment that the exchange rate is moderately overvalued relative to medium-term fundamentals and desired policies.** They saw scope to allow for greater flexibility within the BoB's existing exchange rate framework in order to correct the misalignment and help the economy adjust to shocks. They agreed on the need to assess the role of the exchange rate in facilitating structural transformation, nurturing competitiveness, and fostering an export-led economy.

### ***The Monetary Transmission Mechanism***

**29. The staff supports the BoB's efforts to revamp its monetary operations framework in order to enhance policy transmission and deepen domestic financial markets.** The BoB recently introduced the 7-day BoBC as the main instrument for conducting monetary operations to replace the 14-day BoBC and removed the ceiling on the issuance of BoBCs. These, together with the adoption of reserves averaging, will help enhance liquidity management. The desired effect could be strengthened by consolidating banks' current accounts and reserve requirement accounts into a single account and introducing standing facilities. Staff support the ongoing discussions on replacing the Bank rate to enhance the signaling effects of policy actions on market rates (Box 2).

### ***Financial Stability***

**30. While financial stability risks appear low in the short term, there are vulnerabilities related to over-reliance on wholesale funding and concentration in banks' lending portfolio.** These vulnerabilities could exacerbate the potential adverse effects of higher government debt issuance (to finance fiscal deficits) on overall liquidity. Thus, it is important to continue to closely monitor the liquidity situation in the financial system, strengthen the liquidity framework, including by introducing Emergency Liquidity Assistance, and finalize the banking act to enhance the crisis resolution framework. Furthermore, while not constituting an immediate risk to financial stability, the high household indebtedness and share of unsecured lending could reduce private consumption and growth over the medium term. These effects could amplify the adverse effects of fiscal consolidation on growth. Introducing macroprudential limits to contain household indebtedness and expediting credit reporting reform would reduce this risk. This should be supported by land reform (especially communal lands and land registry) and encouraging banks to implement programs to gradually reduce the share of unsecured loans.

### ***Supply Side Reforms***

**31. Increased competition would boost productivity and promote private sector activity.** Past policies that aimed to support private sector activity (e.g. subsidies and taxes, tariff and non-tariff barriers, such as local content requirements, cluster programs, spatial development programs) were not as effective as envisaged because they were mainly designed to shield local producers from international competition with no clear link to any performance criteria and targeted low sophistication products with weak export potential. This, together with the government's large economic footprint, reduced domestic firms' ability to compete on global markets and shift to higher productivity activity (Box 3). At the same time, the combination of low productivity and high labor costs weigh on the country's competitiveness. Lastly, the weakening business environment, skills mismatches, and lack of technological readiness have impeded the development of a modern export sector.

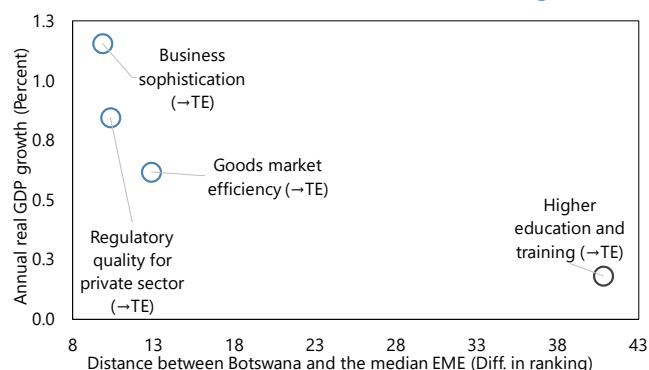


### 32. Substantial gains could come from investment and productivity-enhancing policies.

The authorities have recently passed several regulations to ease doing business (e.g. e-registration) and facilitated the granting of visas and work permits.<sup>13</sup> These efforts could be complemented by:

- *Streamlining the regulatory framework and reducing the cost of doing business*, including by advancing the e-Government agenda.
- *Reducing the government footprint by rightsizing the wage bill and better aligning wages to productivity, reforming parastatals, and increasing the contestability of markets, especially in network services to improve connectivity and affordability.*
- *Further enhancing human capital and reducing skills mismatches by improving the efficiency and quality of basic education through reallocation/prioritization of spending, addressing the fragmented education budget between ministries, implementing pre-primary and Early Childhood Care and Education, expanding the training of teachers and increasing the role and quality of vocational training.*<sup>14</sup> Furthermore, it would be important to develop capabilities and skills for the future, especially promoting digital literacy, adaptability, and life-long learning as well as attracting FDIs and high-skilled foreign workers to fast-track technology transfer. This, together with greater affordability and availability of ICT infrastructure, would contribute to transforming Botswana into a knowledge-based economy (Box 4).
- *Integrating into regional and global value chains, including in the context of the AfCFTA.* This requires: strengthening export and investment promotion institutions (including by clarifying their mandates, Box 5), upgrading trade-supporting infrastructure, promoting cross-border investments (including domestic firms' investment abroad), better coordinating investment and trade policies at the regional level, and targeting products with complementarities with other countries in the region. Public R&D could help build capacities and improve productivity along the value chain (as is done for vaccines).

**Growth Effects of Structural Reforms Through TFP**



Sources: WEF Global Competitiveness Index 2017/18, Worldwide Governance Indicators - D. Kaufmann (Natural Resource Governance Institute and Brookings Institution) and A. Kraay (World Bank) 2019, and IMF staff estimates.

### 33. Deepening the domestic financial sector would support Botswana's development goals.

Despite sizable savings, the financial sector's contribution to Botswana's development remains below its peers. While this may be partly due to low demand for credit, supply may also be constrained by

<sup>13</sup> The authorities are planning to introduce e-visa services next year.

<sup>14</sup> In a recent Public Expenditure Review of basic education, the World Bank and the United Nations recommend to "shift the emphasis from providing more teachers to improving provision of much needed school infrastructure and ensuring availability of teaching and learning materials in the classrooms".



gaps in the availability of collateral, information asymmetry, and the high share of volatile deposits (corporate and institutional). At the same time, Botswana's financial markets are very shallow relative to emerging markets and advanced economies, which hampers an efficient allocation of savings in the economy. Priority should be given to reforming the land registry and establishing a collateral registry for movable assets, enhancing credit information, and assessing the efficiency of public development banks. In addition, Fintech offers significant opportunities for Botswana to make strides in deepening its domestic financial market. Capitalizing on these opportunities will require significant investment in digital networks and skills upgrading.

### ***Authorities' Views***

**34. The authorities lamented the lack of progress in advancing diversification.** They shared staff concerns about delays in reforms implementation as well as the need to strengthen coordination, governance and accountability to achieve better outcomes.<sup>15</sup>

### **Other Issues**

**35. Statistics.** Data provision is broadly adequate for surveillance. The authorities have continued to improve statistics, with support from AFRITAC South and IMF (Annex V). The staff welcomes recent improvements in external statistics and urges the authorities to move to GFSM 2014, to improve the classification of current and capital expenditures, and to accelerate the collection of financial accounts of extra-budgetary entities, including SOEs.

**36. AML/CFT.** The grey listing has not led to a loss of correspondent banking relationships for domestic banks. However, it has reportedly contributed to delays in outward investment by asset managers and shifts in the management strategy of assets abroad with attendant effects on costs. Thus, efforts to address the remaining deficiencies identified in the 2017 AML/CFT Mutual Evaluation Report, including implementing a sound and effective risk-based approach to supervision for offsite surveillance and on-site activities for the BoB and NBFIRA, should continue.<sup>16</sup> This may require more dedicated human resources.

**37. Governance.** Botswana's economic success hinged in part on strong governance. In this context, the staff supports recent initiatives related to asset declaration by public officials and customer due diligence (Freedom of Information), which should allow better tracking of illicit transactions and asset recovery and help stem corruption. However, while governance standards remain high overall, further improvements could be made in the areas of fiscal governance (revenue mobilization and spending efficiency, timely publication of budget documents, increased financial transparency and monitoring of parastatals), the regulatory framework (ease of doing business, trade

<sup>15</sup> Options for advancing the diversification agenda were discussed at a conference during February 6-7 co-hosted by the Bank of Botswana, the Fund, and key development partners, drawing on the experience of countries who had successfully transformed their economies.

<sup>16</sup> The authorities are developing customized risk-based models and tools for AML/CFT supervision with the support of the IMF. A first pilot exercise was conducted by BoB and NBFIRA to test the implementation of the tools.

facilitation), and rule of law (contract enforcement). Better governance could help raise the efficiency of public investment, with significant growth payoffs.

## STAFF APPRAISAL

**38. The economy faces significant challenges and uncertainty.** Persistently lower mineral revenues and SACU proceeds, and delays in the needed fiscal adjustment, including the large increase in the wage bill, have contributed to a moderately overvalued exchange rate and eroded buffers and savings for future generations with reserves falling from \$8.3 billion in 2014 to \$6.6 billion in 2019. Growth is expected to pick up in 2020-21 (4.4 percent and 5.6 percent respectively) but remain around 4 percent over the medium term, a level that is insufficient to reduce unemployment and reach high-income status. In addition, the outlook is subject to significant downside risks, most of which will affect Botswana through diamond and SACU revenue. Several sectors could also be affected by climate change.

**39. The staff supports the authorities' objective to return to a fiscal surplus over the medium term in line with their track record of fiscal discipline.** Botswana still has some fiscal space that allows a gradual adjustment to the persistent drop in mineral and SACU revenue, but it is critical that fiscal consolidation starts in FY2020 in order to rebuild buffers. While acknowledging the scope for efficiency gains, such reforms might only bear fruits over the medium term. Thus, achieving the authorities' objective requires additional revenue and expenditure measures beyond those currently being considered by the Government. Recent changes in the composition of expenditure (e.g. increases in the wage bill at the expense of capital investment) emphasize the need to carefully calibrate priorities going forward, to minimize the impact on competitiveness and growth, while preserving efficient capital investment and protecting the most vulnerable.

**40. The accommodative monetary policy stance is appropriate.** The recent policy rate cut is consistent with the objective of maintaining a stable REER. In lowering interest rates however, the BoB's continued attention to the vulnerabilities in households' balance sheets will be critical. In the event downside risks materialize, the monetary policy stance could be loosened further if greater exchange rate flexibility is allowed within the existing framework.

**41. Achieving a sustained acceleration in growth and job creation will require a fundamental change in the growth model.** Within a more constrained fiscal environment, the growth model will need to move from a mining and government-led model to a private sector and export-driven one. In turn, this entails revamping the macroeconomic policy frameworks to increase the resilience of the economy and its capacity to deal with external shocks and accelerating the implementation of supply-side reforms.

**42. The fiscal framework should be strengthened.** Fiscal reforms include i) defining a medium-term anchor and modifying the fiscal rule (by setting a long-run target for returns on assets and imposing a floor on assets, and defining an operational target such as a ceiling on recurrent expenditure growth) to allow Botswana to achieve its intergenerational equity objective and shelter the economy from the commodity cycle and revenue volatility; ii) greater revenue

mobilization through broadening the tax base and advancing tax reform; iii) public financial management reforms to enhance the efficiency of spending; iv) reforming parastatals and other extra-budgetary entities including by enforcing compliance to best governance practices and strengthening their monitoring and accountability, and v) revamping the debt management framework.

**43. Greater flexibility within the current exchange rate regime will help the economy adjust to the persistent decline in mineral and trade resources and foster structural transformation.** Moreover, recent reforms to strengthen the monetary transmission mechanism and deepen the domestic financial market should continue, including by further developing the secondary market for government securities, leveraging Fintech, facilitating the attachment of collateral, and improving credit information.

**44. Supply-side policies should focus on further improving the business environment, redesigning industrial policies with a view to fostering competition and competitiveness, and reducing the government footprint in the economy.** Furthermore, transitioning to a knowledge-based economy and high-income status will require prioritizing investment in human capital, upgrading digital skills and deepening information and communications technology penetration, as well as promoting integration in regional and global value chains. Strategic deficiencies in the AML/CFT framework should also be addressed.

**45. Staff recommends that the next Article IV consultation with Botswana be held on the standard 12-month cycle.**

### Box 1. Climate Change in Botswana

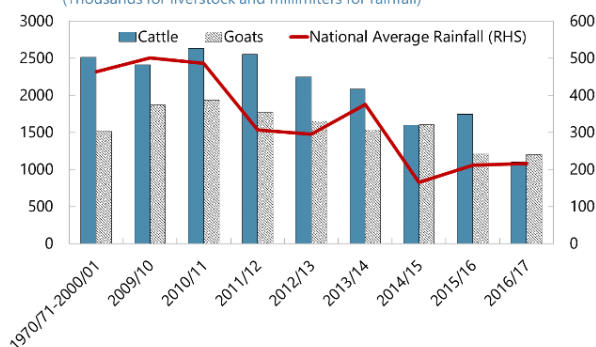
**In recent years, more prevalent droughts have challenged economic development.** Botswana declared 2018/19 a “severe drought year”. The unevenly distributed rains, heat waves, and dry spells have led to lower hectareage planted, crop failure, and falling livestock population. The limited water availability has impacted mining activity and exacerbated tensions between human and wildlife.

**Long-term projections suggest that Botswana will be one of the most exposed sub-Saharan countries to climate change.** Botswana ranks in the top-3 countries in sub-Saharan Africa in terms of expected average temperature increase, ranging over 2.9-3.8 degrees Celsius by 2100. In three out of the four IPCC emissions scenarios (RCP 4.5, 6.0 and 8.5), Botswana also ranks in the top 2 countries in sub-Saharan Africa in terms of expected average decrease in annual rainfall (4.7-9.5 millimeters). The extreme climate is expected to reduce domestic water available, with Botswana’s Limpopo catchment expected to decline by 26 percent (36 percent) and cause maize yield to decline by over 20 percent (35 percent) by 2100, under stringent GHG emission mitigation scenarios of global warming contained to 1.5 degrees (2.0 degrees) Celsius, according to analysis from the Adaptation at Scale in Semi-Arid Regions (ASSAR) project. While deeply affected by the extreme weather, Botswana produces only 1 percent of the region’s emissions that account for 2 percent of global total.

**The authorities are adapting to climate change.** Botswana has developed an automatic mechanism to support the agriculture sector which delivers subsidized animal feeds, vaccines, and drugs. Additional measures and initiatives by the government include a Climate Change Policy, Climate Change Strategy and Action Plan, Climate Smart Agriculture (CSA) program, and Global Environmental Facility (GEF). Going forward, advancing economic diversification, making infrastructure more resilient to climate shocks, increasing access to financing and cost-effective insurance, and enhancing social safety nets and policy buffers will help reduce Botswana’s vulnerability to climate shocks.

#### Rainfall and Livestock Population

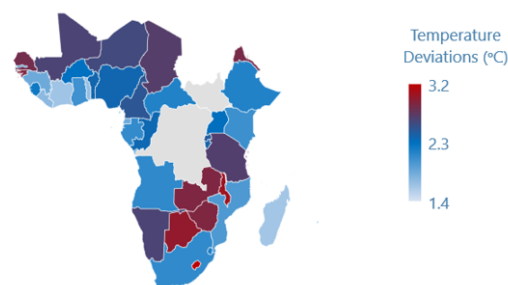
(Thousands for livestock and millimeters for rainfall)



Source: Statistics Botswana.

Note: Livestock statistics in 2001, 2014 and 2017 include traditional sector only.

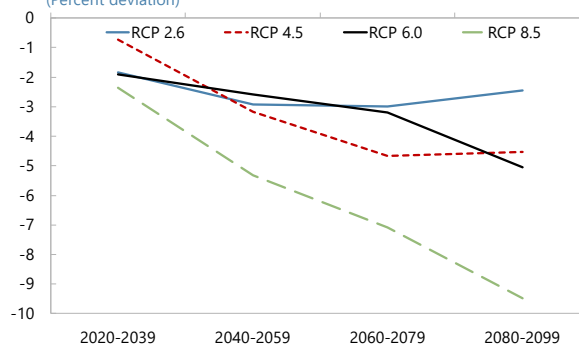
#### Proj. Average Temperature Change by 2100, RCP 4.5



Source: The World Bank Climate Change Knowledge Portal.

#### Botswana: Average Annual Precipitation Projections

(Percent deviation)



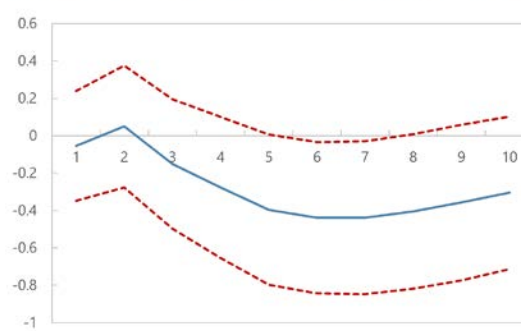
Source: The World Bank Climate Change Knowledge Portal.

## Box 2. Monetary Policy and Monetary Transmission in Botswana

**Botswana's monetary policy is currently implemented in the context of a crawling peg.** The rate of the crawl is determined based on estimated inflation differentials. Given the lack of substitutability of domestic and foreign assets, the BoB has room to target domestic objectives through short-term interest rates.

**The policy rate pass-through to lending rates is high.** Using an auto-regressive distributed lag model, a 1 percent increase in the policy rate increases lending rates by 0.87 percent in the long term. The lending rates are also found to be significantly driven by asset quality; a 1 percent increase in the NPL ratio increases lending rates by 0.39 percent. The speed of adjustment to equilibrium is relatively fast (2 quarters). In the absence of a developed yield curve, the high pass-through to lending is most likely due to the direct signaling effect of the prime rate which serves as a reference for loan pricing.<sup>1</sup> The pass-through to deposit rates is lower (within 0.6-0.7 percent depending on the category of deposits), which is most likely hindered by the excess liquidity that prevailed in the system and the increased concentration of funding on wholesale deposits, which also depend on foreign yields.

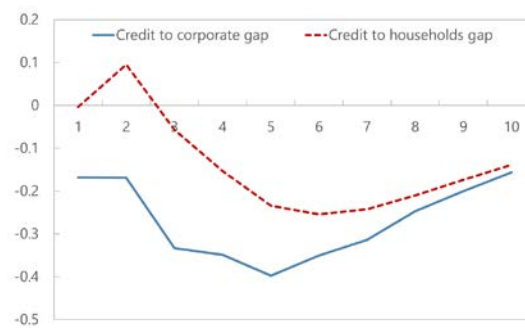
Response of the Credit Gap to one S.D of the Real Lending rate



Sources: Staff estimations

**An increase in real lending rates reduces credit to the private sector.** Based on a VAR model including real lending rates, credit gap and the NPL ratio, the impulse response function shows that higher lending rates adversely affect asset quality and reduce credit to the economy. It takes 3 quarters for the effects to materialize and they become significant in the second year. The effects also vary across borrowers; they are more immediate and stronger for the corporate sector than for households. This may suggest that banks prefer to continue lending to households either because they perceive them as less risky or because lending rates are higher for households.

Response to one S.D of the Real Lending rate



Sources: Staff estimations

**Efforts to strengthen liquidity management and deepen financial markets could strengthen further monetary transmission.** In particular, it is important to further develop the interbank market, enhancing liquidity forecasts for a better liquidity management, increasing bonds issuance especially for medium-term maturities and simplifying the interest rate structure in line with past technical recommendations could enhance price discovery and the signaling effect of monetary policy.

<sup>1</sup> In Practice, banks are free to determine the rate they propose to customers, as long as the rate is interpreted as spread to the prime rate.

### Box 3. Illustrative Effects of Delayed Fiscal Adjustment to a Persistent Terms of Trade Shock

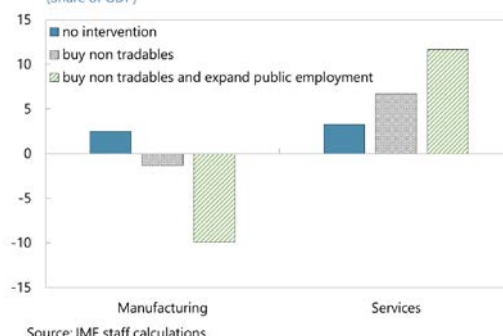
**The box illustrates the effects of expansionary fiscal policy and maintaining a stable real exchange rate in the face of a persistent negative terms of trade shock.** This has been accompanied by a substantial reduction in buffers and, more recently, a moderately overvalued exchange rate. To assess the dynamic effects on income distribution and the macroeconomy of these policies, a multi-sector general equilibrium, heterogeneous agent model, calibrated to Botswana, was deployed (technical details are in Appendix II). The experiment consists of simulating the effects of a permanent decline in government diamond proceeds of 4 percent of GDP and analyzing the medium-term impact under different fiscal policies:

- Scenario 1. Tax rates and government expenditure policies remain at the pre-shock levels.
- Scenario 2. The government increases non-tradable spending while maintaining tax rates. The added expenditure is financed through a reduction in buffers.
- Scenario 3. The government expands both non-tradable spending and the wage bill (employment and wages) and finances it through buffers.

**A sustained fiscal expansion in response to the permanent shock to diamond revenue could delay structural transformation and lower potential GDP.**

- Sustained increases in public spending on non tradables and the wage bill cause the real exchange rate to appreciate relative to the case without intervention. Since productivity growth potential of manufacturing is larger than that of services, the shift towards more services driven by the real appreciation, results in a misallocation of resources and lower growth potential.
- Increasing the wage bill (scenario 3) significantly amplifies the misallocation effect (by crowding out private employment, especially for the skilled labor force). The share of manufacturing in GDP falls by almost 10 percent, while the share of services increases by 11 percent. The drop in GDP is 4 times larger than in the case without intervention (compared to 1.5 times in scenario 2).

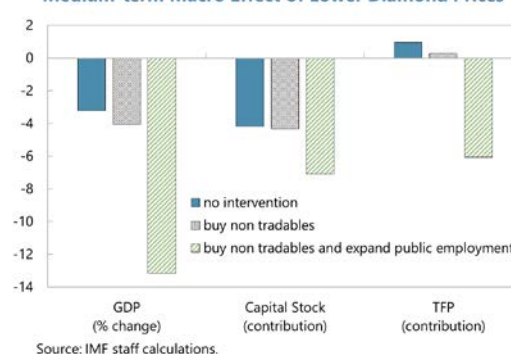
Medium-term Sectoral Effect of Lower Diamond Prices  
(Share of GDP)



**The fiscal intervention (expansion) marginally reduces inequality but reduces aggregate welfare.**

Since the profitability of capital falls following the diamond shock, and relatively higher income individuals rely more heavily on capital as a source of income, the incomes of the upper ends of the distribution fall more than others, thereby reducing inequality. The expansion of the public sector wage bill and the higher wages in the non-tradable sector (labor intensive sector) lower the income of capital even further. Relative to the case without intervention, inequality falls by about 1 point (remaining close to the case prior to the shock). A better alternative would be to intervene only through targeted cash transfers (scenario 1 with cash transfers).

Medium-term Macro Effect of Lower Diamond Prices





### Box 4. Transitioning to a Knowledge-Based Economy

The transformation rests on three integral pillars are entailed to achieve the transformation: knowledge production, knowledge dissemination, and knowledge capitalization.

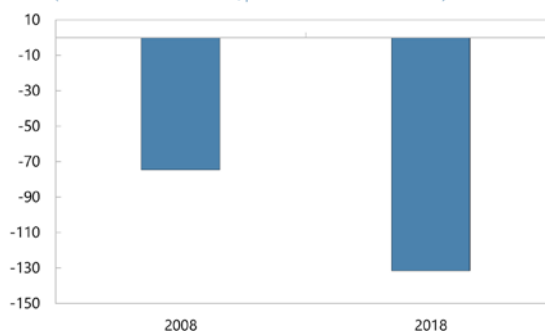
**Knowledge production.** The knowledge-based economy is defined as production and services based on knowledge intensive activities<sup>1</sup>. Higher education is essential to produce the knowledge base. Tertiary education in Botswana has experienced a significant improvement, from 8.2 percent in 2006/07 to 18.2 percent in 2017/18<sup>2</sup>. Nonetheless, the progress does not keep up with the rapid development in upper middle-income countries. Compared to 2008, the distance of Botswana's tertiary enrollment from upper middle-income countries has widened, leaving Botswana less competitive in creating the knowledge base necessary for the transformation.

**Knowledge dissemination.** Botswana also needs higher-quality digital infrastructure to facilitate the information transmission. The country has so far achieved a broad internet coverage with affordable prices. About 50 percent of the population are internet users, and 80 percent of the population are covered by at least a 3G mobile network<sup>3</sup>. However, the quality of internet may not be able to support the high data volume in a knowledge-based economy. The internet speed in Botswana has stagnated for almost a decade, which becomes a bottleneck for a widespread digital adoption, particularly in the business sector that demands high digital capacity.

**Knowledge capitalization.** Promoting a knowledge-based economy requires investment in education, financing, and strategic planning, with engagement of the private sector.

#### Tertiary Enrollment

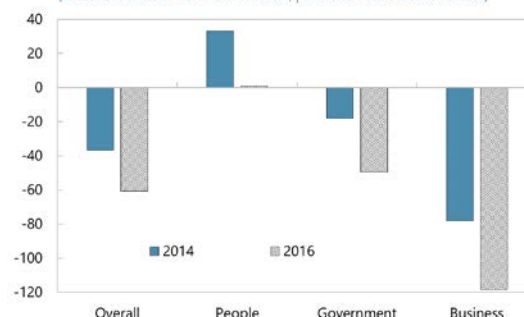
(Distance from UMI median, percent of standard deviation)



Sources: World Bank World Development Indicators and IMF staff calculations.

#### Digital Adoption Index

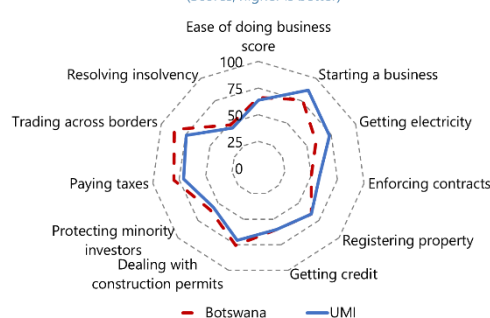
(Distance of score from UMI median, percent of standard deviation)



Sources: World Bank and IMF staff calculations.

#### Business Environment

(Scores, higher is better)



Sources: World Bank Doing Business 2020 and IMF staff calculations.

<sup>1</sup> Powell, W. W., & Snellman, K. (2004). The knowledge economy. *Annual Review of Sociology*, Vol 30:1, p. 199-220.

<sup>2</sup> Statistics Botswana: Tertiary Education Statistics 2018.

<sup>3</sup> International Telecom munion Union 2018.

### Box 5. Accelerating Convergence: Lessons from Selected Countries' Experiences

**Export diversification and sophistication are key to accelerate convergence.** A plethora of studies (Chang, 2007a, 2007b; Hausmann et al, 2007 and more recently Cherif et al., 2018) found that countries get richer by producing a more diverse range of technologically dynamic and sophisticated goods and services, commonly described as “productive” economic transformation.

**Countries followed different approaches to export diversification.** Commodity exporters have in general focused on vertical diversification (both upstream and downstream) in relation to their comparative advantage (e.g. the salmon industry in Chile), and in some cases, diversified horizontally (e.g. electronics in Malaysia). Other countries concentrated their efforts on quality upgrade, relying on FDI-driven models to fast track the development of capabilities through transfer of skills and technology (e.g. Costa Rica in semi-conductors and medical devices). Finally, greater integration in regional and global value chains played a big role for many countries (e.g. European countries).

**In addition to horizontal policies, many countries often used targeted industrial policies to support economic diversification, though with mixed success.** While acknowledging the difficulty to draw conclusions from successes and failures (because of selection bias), Rodrick (2004), and Cherif and Hasanov (2019) tried to set principles for a “good/true” industrial policy. In particular, they emphasized the need to:

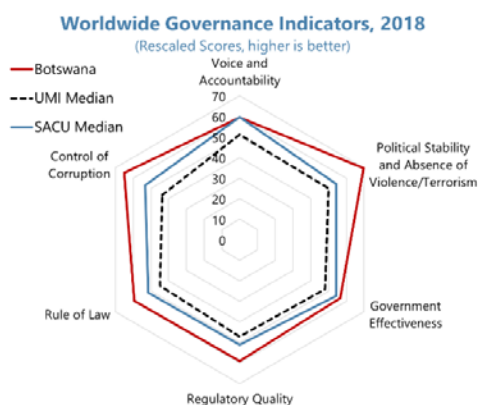
- Start by fixing government failures and macroeconomic policies (especially exchange rate overvaluation) that hamper export competitiveness;
- Focus on export orientation rather than import substitution and avoid raising barriers to competition;
- Enforce accountability by setting clear performance criteria, sunset clauses, clearly defining responsibilities, and regularly monitoring and accepting failures (accepting the cost of closing firms if they fail).

**Well-designed, high-skilled and sufficiently empowered dedicated public institutions could be a useful tool to overcome coordination failures.** Spar (1998) shows the critical role that CINDE, the export and investment promotion agency played in the negotiation with INTEL by improving the reactivity of the government to the investor’s needs. Similarly, Fundación Chile and the Rubber Malaysian Board played a key role in R&D support and technology diffusion, quality control services, and export promotion assistance (Lebdioui, 2019).

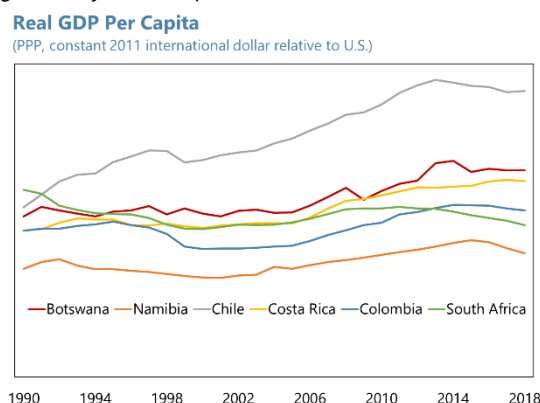


## Figure 1. Botswana: Improved Living Standards, but High Inequality and Persistent Unemployment

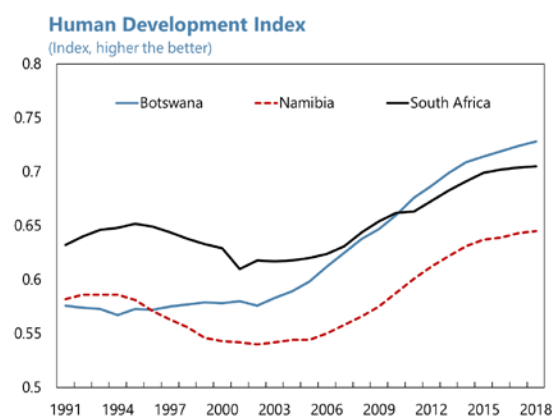
Botswana has a track record of sound governance...



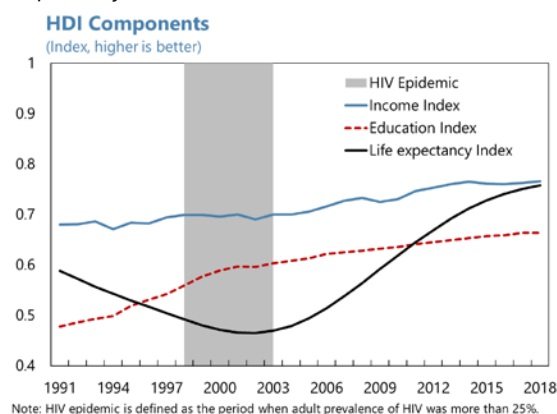
...and the income level of Botswana has increased significantly over the past decades...



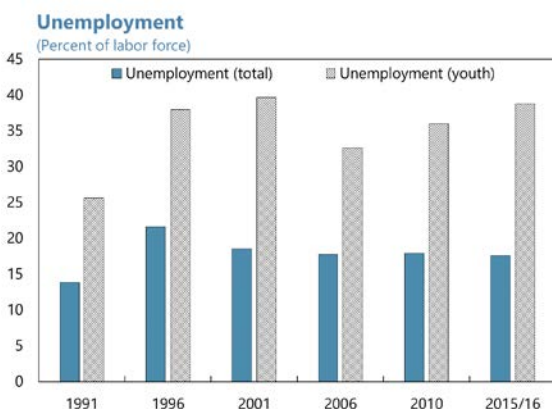
...resulting in improvements in living standards ...



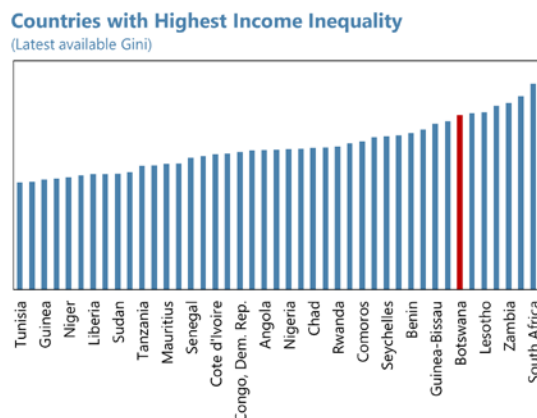
... in all major dimensions including education and life expectancy.



Yet, unemployment, especially in youth, is persistently high...



...and income inequality remains one of the highest in the world.



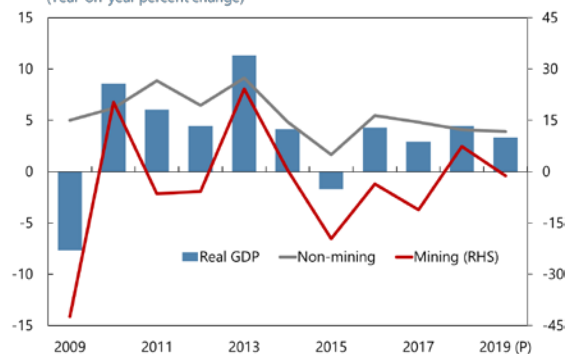
Sources: Statistics Botswana, Worldwide Governance Indicators - D. Kaufmann (Natural Resource Governance Institute and Brookings Institution) and A. Kraay (World Bank) 2019, World Bank World Development Indicators, United Nation Human Development Index, and IMF staff calculations.

**Figure 2. Botswana: Macroeconomic Developments**

*GDP growth decelerated mostly driven due to lower mining activity.*

**Real GDP Growth**

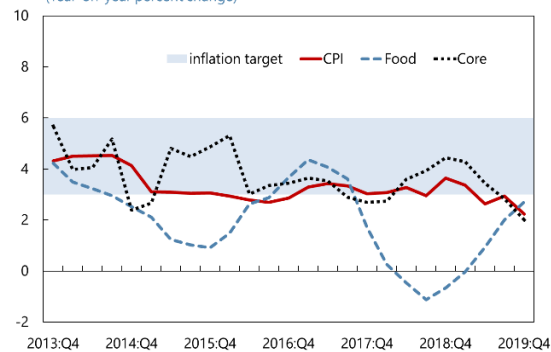
(Year-on-year percent change)



*Headline and core inflation remain subdued.*

**Consumer Price Inflation**

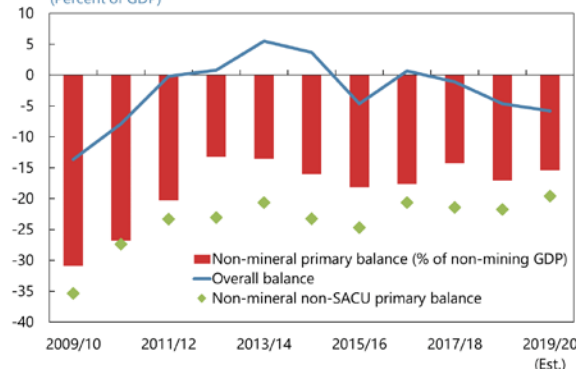
(Year-on-year percent change)



*The fiscal deficit deterioration in the run up to the election ...*

**Fiscal Balance**

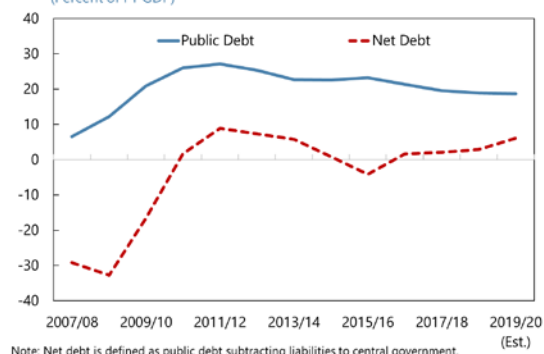
(Percent of GDP)



*... did not increase public debt as the was financed through a drawdown of buffers...*

**Public Debt**

(Percent of FY GDP)

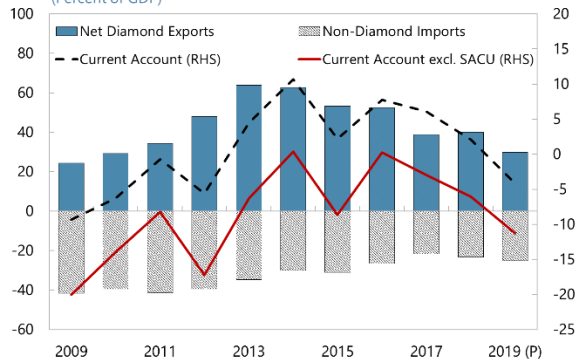


Note: Net debt is defined as public debt subtracting liabilities to central government.

*... but together with lower diamond exports and SACU transfers, weakened the current account balance...*

**Current Account and Diamond Trade**

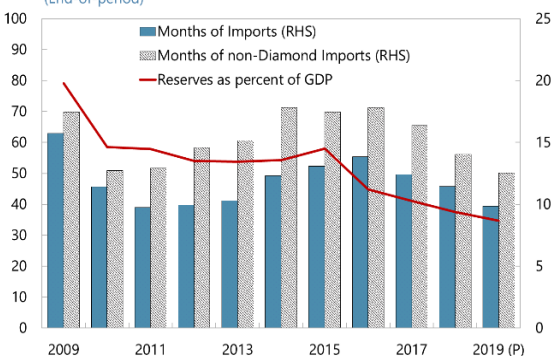
(Percent of GDP)



*And contributed to continued erosion of reserves.*

**Foreign Reserve Coverage**

(End-of-period)

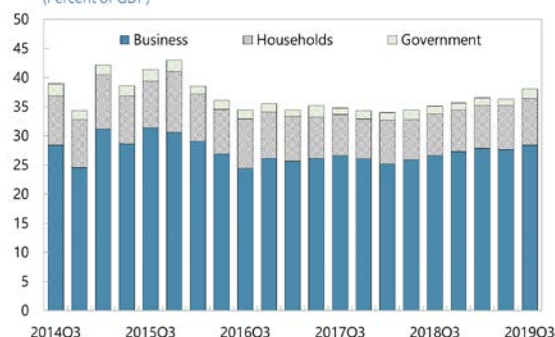


Sources: Bank of Botswana, Statistics Botswana, and IMF staff calculations.

**Figure 3. Botswana: Macro-financial Linkages**

*Despite improved liquidity ...*

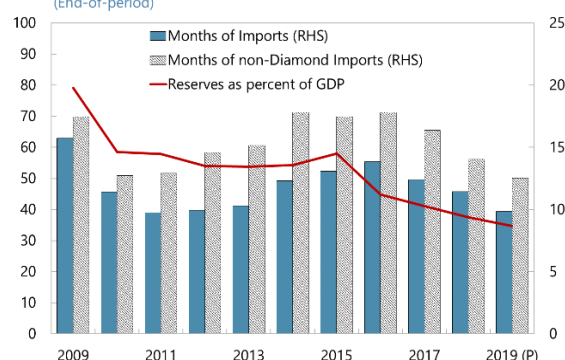
#### Deposit to GDP (Percent of GDP)



Note: Commercial Bank Deposit only.

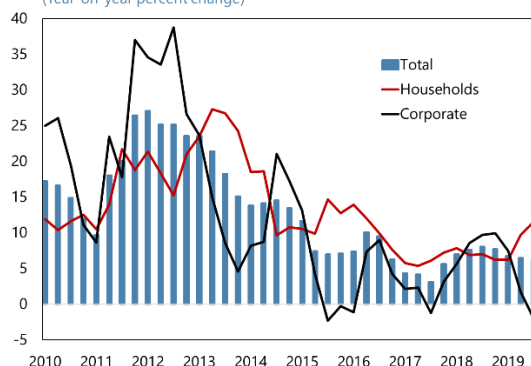
*... and high capital adequacy ratios ...*

#### Foreign Reserve Coverage (End-of-period)



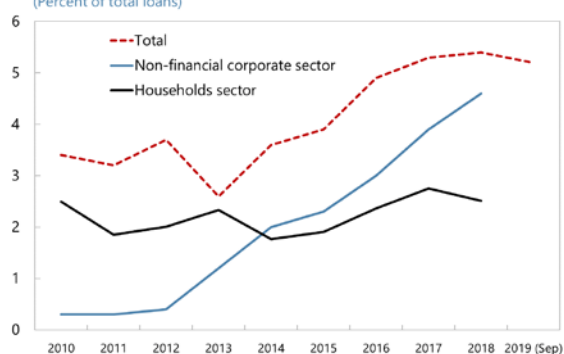
*the recovery in credit growth moderated in recent months, especially for the corporate sector ...*

#### Credit Growth (Year-on-year percent change)



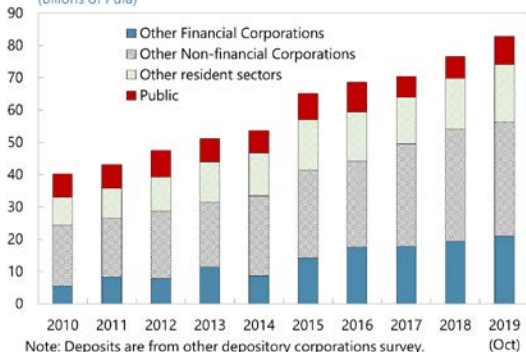
*... amid rising NPLs...*

#### Nonperforming Loans (Percent of total loans)



*... persistent vulnerabilities in banks' balance sheets stemming mainly from a heavy reliance on volatile corporate deposits ...*

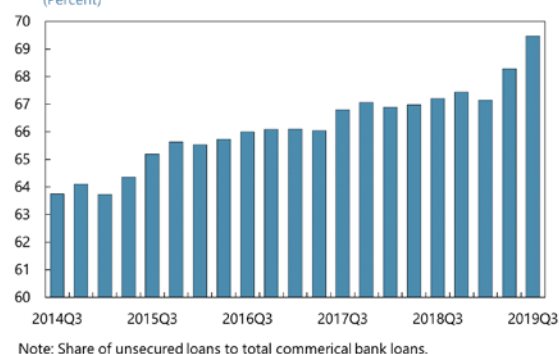
#### Deposit Concentration (Billions of Pula)



Note: Deposits are from other depository corporations survey.

*... and an increasing share of unsecured loans to households.*

#### Household Debt (Percent)

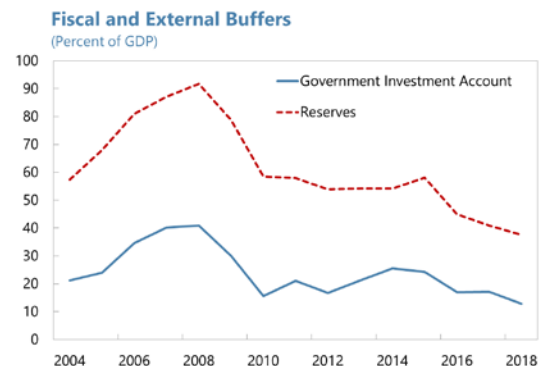


Note: Share of unsecured loans to total commercial bank loans.

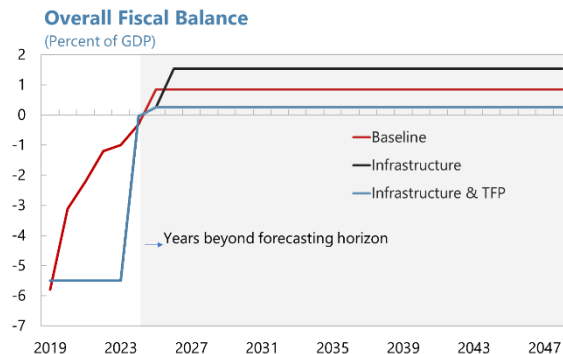
Sources: Bank of Botswana and IMF staff calculations.

## Figure 4. Botswana: Fiscal Rules for Intergenerational Equity and Smoothing Fluctuations

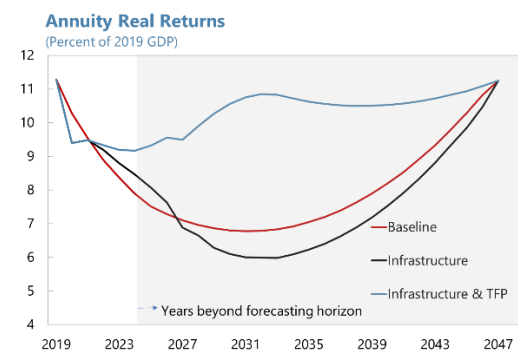
Botswana's debt has remained low while buffers and savings for future generations are eroding.



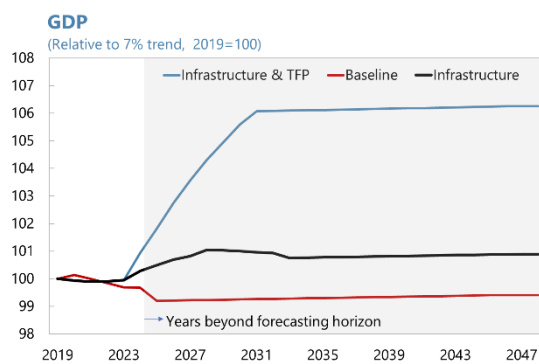
Different investment strategies in the transition period require different long run surpluses ...



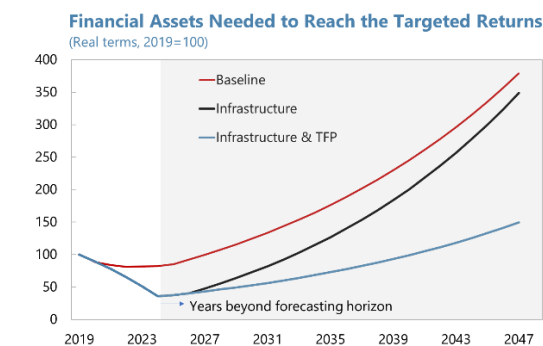
... to achieve intergenerational equity...



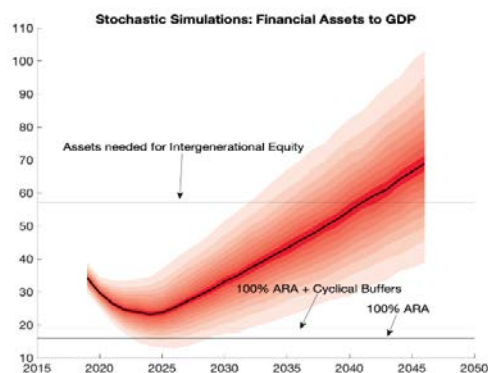
... and growth outcomes.



... through a different combination of savings in financial assets ...



Strategies with more investment in non-financial assets reduces the country's capacity to deal with shocks.



Sources: Bank of Botswana and IMF staff calculations.

**Table 1. Botswana: Selected Economic and Social Indicators, 2014–2025**

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
					Prel.	Projections						
	(Annual percent change, unless otherwise indicated) <sup>1</sup>											
National income and prices												
Real GDP	4.1	-1.7	4.3	2.9	4.5	3.4	4.4	5.6	3.8	3.9	3.9	3.9
Mineral <sup>2</sup>	0.5	-19.6	-3.5	-11.1	7.4	-1.1	7.1	26.0	5.1	4.0	2.7	0.4
Nonmineral	4.9	1.7	5.5	4.8	4.1	3.9	4.1	3.3	3.6	3.9	4.1	4.4
GDP per capita (US dollars)	7,498	6,539	6,958	7,584	7,994	...	...	...	...	...	...	...
Consumer prices (average)	4.4	3.1	2.8	3.3	3.2	2.8	3.5	3.5	4.0	4.0	4.0	4.0
Diamond production (millions of carats)	24.7	20.8	20.9	22.9	24.4	24.0	25.8	25.3	26.0	26.8	27.5	27.5
Money and banking												
Monetary Base	-8.5	18.6	3.7	-13.7	17.5	9.4	7.7	7.0	7.8	8.0	8.3	8.5
Broad money (M2)	4.6	19.9	5.4	2.7	8.3	9.4	7.7	7.0	7.8	8.0	8.3	8.5
Credit to the private sector	13.7	9.0	9.0	5.3	6.6	5.6	7.9	7.3	8.1	8.3	8.3	9.1
	(Percent of GDP, unless otherwise indicated)											
Investment and savings												
Gross investment (including change in inventories)	28.2	32.6	28.6	28.2	29.4	34.5	30.8	32.3	31.9	30.8	30.9	31.0
Public	8.2	8.8	8.5	8.2	8.0	6.6	5.6	5.0	4.8	4.6	4.4	4.2
Private	20.0	23.8	20.0	20.0	21.4	27.9	25.2	27.2	27.1	26.2	26.5	26.7
Gross savings	42.6	39.5	34.6	36.4	31.5	30.2	28.7	31.5	31.8	31.2	31.7	31.9
Public	19.8	16.1	16.2	15.2	12.1	9.2	10.2	10.8	11.1	10.7	11.1	11.5
Private	22.8	23.4	18.4	21.2	19.5	21.0	18.6	20.7	20.7	20.5	20.6	20.5
Central government finances <sup>3</sup>												
Total revenue and grants	38.3	31.2	33.2	30.9	27.7	25.5	28.2	27.0	26.8	25.9	26.3	26.1
Total expenditure and net lending	34.7	35.8	32.5	32.0	32.3	31.3	31.3	29.2	28.1	27.5	26.8	26.0
Overall balance (deficit –)	3.7	-4.6	0.6	-1.1	-4.6	-5.8	-3.1	-2.3	-1.3	-1.6	-0.5	0.1
Non-mineral primary balance <sup>4</sup>	-16.1	-18.1	-17.6	-14.3	-17.1	-15.4	-13.5	-12.8	-12.1	-11.2	-10.3	-9.3
Total central government debt	22.6	23.2	21.3	18.1	18.9	18.7	16.7	16.7	16.0	15.5	14.5	13.3
External sector												
Exports of goods and services, f.o.b. (% change)	8.2	-24.1	14.0	-15.7	9.8	-20.0	25.0	6.0	4.5	7.6	4.5	3.1
o/w diamonds	10.4	-28.4	24.6	-17.6	6.8	-24.9	31.3	-0.6	2.5	6.6	4.2	2.0
Imports of goods and services, f.o.b. (% change)	-2.1	-10.0	-14.6	-10.0	16.6	-3.8	14.4	1.6	1.1	5.6	3.6	3.3
Current account balance	10.7	2.2	7.8	6.1	2.1	-4.3	-2.1	-0.8	-0.1	0.4	0.8	1.0
Overall Balance	3.7	-5.4	-2.3	1.8	2.0	-7.7	-1.9	-0.9	0.0	0.9	1.3	1.4
Nominal effective exchange rate (2010=100)	94.8	94.9	95.1	95.4	95.5	...	...	...	...	...	...	...
Real effective exchange rate (2010=100)	104.3	105.2	104.8	105.0	105.1	...	...	...	...	...	...	...
Terms of trade (2005=100)	165.7	197.6	176.1	160.1	147.2	134.7	132.5	132.5	132.4	132.4	132.3	132.3
External public debt <sup>5</sup>	17.2	18.4	14.3	11.6	11.9	11.0	10.0	8.9	8.1	7.4	6.7	6.0
o/w public and publicly guaranteed	4.8	5.3	4.7	4.4	4.2	4.0	3.7	3.3	3.1	2.8	2.6	2.4
	(Millions of U.S. dollars, unless otherwise indicated)											
Gross official reserves (end of period)	8,323	7,546	7,189	7,502	6,657	6,557	6,182	5,986	5,994	6,365	6,673	7,032
Months of imports of goods and services <sup>6</sup>	12.3	13.1	13.9	12.4	11.4	9.9	9.4	9.0	8.5	8.5	8.6	8.8
Months of non-diamond imports <sup>6</sup>	17.8	17.5	17.8	16.4	14.0	12.5	11.9	11.4	10.8	10.8	10.9	11.0
Percent of GDP	54.3	58.0	44.9	41.1	37.5	35.3	32.2	29.0	27.7	28.3	28.4	28.3

Sources: Botswana authorities and IMF staff estimates and projections.

<sup>1</sup> Calendar year, unless otherwise indicated.<sup>2</sup> Projections are based on diamond production due to lack of information on the breakdown of mining value added by mineral.<sup>3</sup> Year beginning April 1.<sup>4</sup> The non-mineral primary balance is computed as the difference between non-mineral revenue and expenditure (excluding interest receipts and interest payments), divided by non-mineral GDP.<sup>5</sup> Includes central government-guaranteed debt.<sup>6</sup> Based on imports of goods and services for the following year.

Table 2. Botswana: Balance of Payments, 2014–2025

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
					Prel.				Projections			
	(millions of U.S. dollars, unless otherwise indicated)											
Current account balance	1,735	318	1,214	1,060	394	-797	-411	-160	-21	88	194	244
Trade balance	743	-686	1,467	842	487	-835	-269	2	181	355	439	423
Exports, f.o.b.	8,522	6,300	7,368	5,985	6,589	5,133	6,534	6,907	7,203	7,758	8,100	8,327
Diamonds	7,282	5,215	6,498	5,353	5,714	4,290	5,631	5,600	5,739	6,117	6,372	6,499
Other raw materials	586	466	328	98	110	85	93	449	581	671	695	712
Other	655	619	543	535	764	758	810	859	883	970	1,032	1,116
Imports, f.o.b	-7,780	-6,986	-5,901	-5,144	-6,102	-5,968	-6,803	-6,905	-7,022	-7,403	-7,660	-7,904
Diamonds	-2,896	-2,495	-1,736	-1,386	-1,766	-1,287	-1,689	-1,680	-1,754	-1,835	-1,912	-1,919
Other	-4,884	-4,491	-4,166	-3,758	-4,336	-4,681	-5,114	-5,225	-5,268	-5,568	-5,749	-5,985
Services	-246	-207	-168	-141	-139	-62	-115	-61	33	33	43	55
Transportation	-265	-243	-226	-164	-192	-196	-206	-192	-187	-193	-200	-209
Travel	252	277	265	316	351	366	386	408	439	461	489	517
Other services	-233	-241	-207	-293	-298	-232	-295	-277	-219	-236	-246	-253
Income	-472	-455	-1,271	-1,281	-1,415	-1,154	-1,517	-1,614	-1,692	-1,828	-1,885	-1,923
Current transfers	1,711	1,667	1,186	1,641	1,461	1,254	1,490	1,512	1,457	1,528	1,596	1,689
SACU receipts	1,679	1,561	1,174	1,577	1,525	1,318	1,555	1,579	1,523	1,597	1,665	1,760
Capital and financial account	-619	-878	-792	-1,086	-21	-635	35	-36	29	109	115	115
Direct investment	404	196	-48	178	108	217	309	314	392	503	522	550
Portfolio investment	-599	-1,095	-174	-730	526	-836	-173	0	0	0	0	0
Other investment	-424	21	-570	-535	-656	-18	-102	-351	-365	-396	-409	-437
Assets	-756	-84	-465	-517	-645	-406	-522	-508	-483	-512	-532	-552
Liabilities	332	104	-105	-19	-11	389	420	157	117	115	123	115
Net government long-term borrowing	40	19	-110	-77	-95	-105	-122	-121	-108	-110	-110	-108
Other net private long-term borrowing	259	54	151	206	142	441	487	223	169	166	173	160
Short-term borrowing	33	31	28	28	27	27	27	28	28	29	30	31
Net errors and omissions	-519	-217	-779	338	-1,218	0	0	0	0	0	0	0
Overall Balance	597	-777	-357	313	373	-1,431	-376	-196	8	198	309	359
	(Percent of GDP, unless otherwise indicated)											
Current account	10.7	2.2	7.8	6.1	2.1	-4.3	-2.1	-0.8	-0.1	0.4	0.8	1.0
Trade balance	4.6	-4.7	9.4	4.8	2.6	-4.5	-1.4	0.0	0.8	1.6	1.8	1.7
Exports of goods	52.4	43.6	47.1	34.4	35.3	27.5	33.3	32.9	33.3	33.9	33.9	33.2
Of which: diamonds	44.8	36.1	41.5	30.8	30.6	23.0	28.7	26.7	26.6	26.7	26.7	25.9
Imports of goods	47.8	48.4	37.7	29.6	32.7	32.0	34.6	32.9	32.5	32.4	32.1	31.5
Of which: diamonds	17.8	17.3	11.1	8.0	9.5	6.9	8.6	8.0	8.1	8.0	8.0	7.7
Services balance	-1.5	-1.4	-1.1	-0.8	-0.7	-0.3	-0.6	-0.3	0.2	0.1	0.2	0.2
Income and transfers balance	7.6	8.4	-0.5	2.1	0.2	0.5	-0.1	-0.5	-1.1	-1.3	-1.2	-0.9
Financial account	-3.8	-6.1	-5.1	-6.3	-0.1	-3.4	0.2	-0.2	0.1	0.5	0.5	0.5
Direct investment	2.5	1.4	-0.3	1.0	0.6	1.2	1.6	1.5	1.8	2.2	2.2	2.2
Portfolio investment	-3.7	-7.6	-1.1	-4.2	2.8	-4.5	-0.9	0.0	0.0	0.0	0.0	0.0
Other investment	-2.6	0.1	-3.6	-3.1	-3.5	-0.1	-0.5	-1.7	-1.7	-1.7	-1.7	-1.7
Net errors and omissions	-3.2	-1.5	-5.0	1.9	-6.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Overall Balance (increase reserves +)	3.7	-5.4	-2.3	1.8	2.0	-7.7	-1.9	-0.9	0.0	0.9	1.3	1.4
	(Annual percentage change, unless otherwise indicated)											
Export volumes	4.2	-13.8	17.3	-8.5	4.0	-17.8	27.0	4.1	4.7	4.1	2.9	1.0
Import volumes	0.6	4.2	-10.2	-22.8	11.1	1.1	11.7	-0.1	-0.3	2.9	0.7	-0.8
Terms of trade	8.6	19.2	-10.9	-9.1	-8.0	-8.5	-1.6	0.0	0.0	0.0	0.0	0.0
End-of-year reserves (US\$ millions)	8,323	7,546	7,189	7,502	6,657	6,557	6,182	5,986	5,994	6,365	6,673	7,032
Months of imports of goods and services <sup>1</sup>	12.3	13.1	13.9	12.4	11.4	9.9	9.4	9.0	8.5	8.5	8.6	8.8
Months of non-diamond imports <sup>2</sup>	17.8	17.5	17.8	16.4	14.0	12.5	11.9	11.4	10.8	10.8	10.9	11.0
Source: Bank of Botswana; IMF staff estimates.												
<sup>1</sup> Based on imports of goods and services for the following year.												
<sup>2</sup> BOP data have been revised starting in 2012. A change in the information sytem may explain the large drop in import prices in 2017.												

Source: Bank of Botswana; IMF staff estimates.

<sup>1</sup> Based on imports of goods and services for the following year.<sup>2</sup> BOP data have been revised starting in 2012. A change in the information system may explain the large drop in import prices in 2017.

**Table 3a. Botswana: Central Government Operations, 2014/15–2025/26<sup>1</sup>**  
(Billions of pula)

	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
					Prel.	Projections						
	(Billions of pula, unless otherwise indicated)											
Total revenue and grants	55.9	47.4	57.4	56.4	53.5	52.2	62.8	66.4	71.7	74.6	81.9	88.5
Total revenue	55.5	47.3	57.2	56.0	53.4	51.9	62.5	66.1	71.4	74.3	81.6	88.1
Tax revenue	37.6	34.9	35.6	39.9	37.8	39.0	46.5	48.9	52.1	55.6	60.7	66.0
Income taxes	15.9	13.1	16.8	13.8	15.1	16.9	19.2	20.5	22.2	23.1	25.6	27.8
Mineral	7.5	4.5	7.2	5.6	5.2	4.0	5.0	5.3	5.8	5.3	6.1	6.4
Nonmineral	8.4	8.7	9.6	8.2	9.9	12.9	14.2	15.2	16.4	17.7	19.5	21.4
Taxes on goods and services <sup>2</sup>	5.7	5.5	6.6	7.8	7.4	7.5	8.4	9.6	10.6	11.6	12.6	13.7
Customs Union receipts <sup>3</sup>	15.7	15.8	11.8	17.9	14.8	14.0	18.2	18.1	18.6	20.1	21.7	23.6
Other	0.3	0.4	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.9
Nontax revenue	17.9	12.4	21.7	16.2	15.6	12.9	16.0	17.2	19.3	18.7	20.9	22.2
Mineral royalties and dividends	14.0	10.0	15.3	13.1	13.3	10.3	13.0	13.7	15.1	14.1	16.0	16.8
Grants	0.4	0.1	0.2	0.4	0.1	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Total expenditure and net lending	50.6	54.4	56.3	58.4	62.4	64.1	69.7	72.0	75.2	79.3	83.6	88.2
Current expenditure	37.6	40.4	41.2	43.6	47.3	51.7	57.7	59.9	62.6	66.2	70.1	74.2
Wages and salaries	16.6	18.5	19.2	21.1	22.1	25.9	28.5	30.0	31.6	34.0	36.6	39.4
Interest	0.7	0.8	0.9	1.0	1.1	1.0	1.4	1.2	1.1	1.1	1.1	1.1
Other	20.3	21.0	21.1	21.5	24.1	24.8	27.7	28.7	29.9	31.1	32.3	33.6
Of which: grants and subsidies	10.6	11.3	11.3	12.2	13.3	14.7	16.2	16.8	17.5	18.2	18.9	19.7
Capital expenditure	13.1	12.8	15.2	14.7	15.5	12.4	12.0	12.2	12.6	13.1	13.6	14.1
Net lending	-0.1	1.2	-0.1	0.1	-0.4	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Primary balance (deficit -)	3.3	-7.3	-1.4	-2.6	-8.7	-11.9	-6.6	-6.0	-4.6	-6.0	-3.2	-1.5
Overall balance (A)	5.3	-7.0	1.1	-2.0	-8.9	-11.9	-6.9	-5.6	-3.5	-4.7	-1.7	0.2
Financing (B)	-5.3	7.0	-1.1	2.0	8.9	11.9	6.9	5.6	3.5	4.7	1.7	-0.2
Foreign (net)	-0.5	-1.3	-1.2	-0.7	-1.1	-0.9	-1.2	-1.2	-1.1	-1.2	-1.2	-1.2
Drawing	0.3	0.1	0.2	0.5	0.4	0.7	0.4	0.5	0.5	0.5	0.5	0.5
Amortization	-0.8	-1.4	-1.4	-1.3	-1.4	-1.5	-1.6	-1.6	-1.6	-1.6	-1.7	-1.7
IMF transactions (net) <sup>4</sup>	0.0	0.0	0.0	0.1	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Domestic (net)	-4.8	8.3	0.0	2.7	10.0	12.7	8.1	6.8	4.6	5.9	2.9	1.0
Issuance	1.9	2.1	3.8	4.0	4.0	4.6	3.6	6.2	4.0	6.0	5.0	5.0
Amortization	-1.5	-3.0	-3.7	-2.3	-3.4	-2.0	-4.6	-2.0	-2.0	-3.8	-4.1	-4.1
Change in cash balance (- increase)	-4.5	9.7	3.5	0.9	13.4	6.1	9.0	2.6	2.6	3.7	2.0	0.1
Other domestic financing	-0.8	-0.5	-3.6	0.1	-4.1	4.1	0.0	0.0	0.0	0.0	0.0	0.0
Memorandum items:												
Non-mineral primary balance <sup>5</sup>	-18.2	-21.8	-23.9	-21.3	-27.1	-26.1	-24.6	-25.1	-25.5	-25.5	-25.3	-24.7
Excluding SACU revenue	-33.9	-37.6	-35.6	-39.2	-41.9	-40.1	-42.8	-43.1	-44.1	-45.6	-47.0	-48.4

Sources: Ministry of Finance and Economic Development; and IMF staff estimates and projections.

<sup>1</sup> Fiscal year begins on April 1.

<sup>2</sup> Refers to sales tax and VAT.

<sup>3</sup> SACU receipts consist of external trade and excises on imported goods as well as a development component derived from excise taxes.

<sup>4</sup> These transactions reflect Botswana's SDR allocation and contribution to the IMF's General Resource Account (GRA).

<sup>5</sup> The non-mineral primary balance is computed as the difference between non-mineral revenue and expenditure (excluding interest payments and receipts, which are roughly proxied by BoB transfers and interest).



**Table 3b. Botswana: Central Government Operations, 2014/15–2025/26<sup>1</sup>**  
(Percent of GDP)

	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
	Prel.					Projections						
	(Percent of GDP, unless otherwise indicated)											
Total revenue and grants	38.3	31.2	33.2	30.9	27.7	25.5	28.2	27.0	26.8	25.9	26.3	26.1
Total revenue	38.1	31.1	33.1	30.7	27.7	25.4	28.0	26.8	26.7	25.7	26.2	26.0
Tax revenue	25.8	22.9	20.6	21.8	19.6	19.0	20.9	19.8	19.5	19.3	19.5	19.4
Income taxes	10.9	8.6	9.7	7.5	7.8	8.3	8.6	8.3	8.3	8.0	8.2	8.2
Mineral	5.1	2.9	4.2	3.1	2.7	2.0	2.2	2.2	2.2	1.9	2.0	1.9
Nonmineral	5.7	5.7	5.5	4.5	5.1	6.3	6.4	6.2	6.1	6.1	6.2	6.3
Taxes on goods and services <sup>2</sup>	3.9	3.6	3.8	4.3	3.8	3.7	3.8	3.9	4.0	4.0	4.0	4.0
Customs Union receipts <sup>3</sup>	10.8	10.4	6.8	9.8	7.7	6.8	8.2	7.3	7.0	7.0	7.0	7.0
Other	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Nontax revenue	12.3	8.1	12.5	8.8	8.1	6.3	7.2	7.0	7.2	6.5	6.7	6.5
Mineral royalties and dividends	9.6	6.6	8.8	7.2	6.9	5.0	5.8	5.6	5.6	4.9	5.1	4.9
Grants	0.3	0.1	0.1	0.2	0.0	0.2	0.1	0.1	0.1	0.1	0.1	0.1
Total expenditure and net lending	34.7	35.8	32.5	32.0	32.3	31.3	31.3	29.2	28.1	27.5	26.8	26.0
Current expenditure	25.8	26.6	23.8	23.8	24.5	25.3	25.9	24.3	23.4	23.0	22.5	21.9
Wages and salaries	11.4	12.2	11.1	11.5	11.4	12.7	12.8	12.2	11.8	11.8	11.7	11.6
Interest	0.5	0.5	0.5	0.5	0.6	0.5	0.6	0.5	0.4	0.4	0.4	0.3
Other	13.9	13.8	12.2	11.8	12.5	12.1	12.4	11.7	11.2	10.8	10.4	9.9
Of which: grants and subsidies	7.3	7.4	6.5	6.7	6.9	7.2	7.3	6.8	6.5	6.3	6.1	5.8
Capital expenditure	9.0	8.4	8.8	8.1	8.0	6.1	5.4	4.9	4.7	4.5	4.4	4.2
Net lending	-0.1	0.8	0.0	0.0	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Primary balance (deficit -)	2.3	-4.8	-0.8	-1.4	-4.5	-5.8	-3.0	-2.4	-1.7	-2.1	-1.0	-0.4
Overall balance (A)	3.7	-4.6	0.6	-1.1	-4.6	-5.8	-3.1	-2.3	-1.3	-1.6	-0.5	0.1
Financing (B)	-3.7	4.6	-0.6	1.1	4.6	5.8	3.1	2.3	1.3	1.6	0.5	-0.1
Foreign (net)	-0.3	-0.9	-0.7	-0.4	-0.6	-0.4	-0.5	-0.5	-0.4	-0.4	-0.4	-0.4
Domestic (net)	-3.3	5.5	0.0	1.5	5.2	6.2	3.6	2.7	1.7	2.0	0.9	0.3
Memorandum item:												
Non-mineral primary balance <sup>4</sup>	-12.5	-14.3	-13.8	-11.7	-14.1	-12.8	-11.0	-10.2	-9.6	-8.8	-8.1	-7.3
Excluding SACU revenue	-23.2	-24.7	-20.6	-21.4	-21.7	-19.6	-19.2	-17.5	-16.5	-15.8	-15.1	-14.3
GDP (fiscal year; billions of pula)	145.9	152.2	172.9	182.7	192.9	204.7	222.9	246.3	267.2	288.5	312.0	339.3

Sources: Ministry of Finance and Economic Development; and IMF staff estimates and projections.

<sup>1</sup> Fiscal year begins on April 1.

<sup>2</sup> Refers to sales tax and VAT.

<sup>3</sup> SACU receipts consist of external trade and excises on imported goods as well as a development component derived from excise taxes.

<sup>4</sup> The primary balance is computed as the difference between non-mineral revenue and expenditure (excluding interest payments and receipts, which are roughly proxied by BoB transfers and interest).



**Table 3c. Botswana: Central Government Operations, 2014/15–2025/26<sup>1</sup>**  
(Percent of non-mineral GDP)

	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
					Prel.	Projections						
	(Percent of non-mineral GDP, unless otherwise indicated)											
Total revenue and grants	49.3	39.5	42.3	37.9	33.6	30.8	34.4	34.0	34.0	32.8	33.3	33.1
Total revenue	48.9	39.4	42.2	37.7	33.6	30.6	34.2	33.8	33.9	32.7	33.1	33.0
Tax revenue	33.2	29.0	26.2	26.8	23.8	23.0	25.5	25.0	24.7	24.4	24.6	24.7
Income taxes	14.0	10.9	12.4	9.3	9.5	10.0	10.5	10.5	10.6	10.1	10.4	10.4
Mineral	6.6	3.7	5.3	3.7	3.3	2.4	2.7	2.7	2.8	2.4	2.5	2.4
Nonmineral	7.4	7.2	7.1	5.5	6.2	7.6	7.8	7.8	7.8	7.8	7.9	8.0
Taxes on goods and services <sup>2</sup>	5.0	4.6	4.9	5.2	4.6	4.4	4.6	4.9	5.0	5.1	5.1	5.1
Customs Union receipts <sup>3</sup>	13.8	13.2	8.7	12.0	9.3	8.2	10.0	9.3	8.8	8.8	8.8	8.8
Other	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Nontax revenue	15.8	10.3	16.0	10.9	9.8	7.6	8.8	8.8	9.2	8.2	8.5	8.3
Mineral royalties and dividends	12.4	8.3	11.3	8.8	8.4	6.0	7.1	7.0	7.2	6.2	6.5	6.3
Grants	0.3	0.1	0.1	0.2	0.0	0.2	0.2	0.2	0.1	0.1	0.1	0.1
Total expenditure and net lending	44.6	45.3	41.5	39.2	39.2	37.8	38.1	36.8	35.7	34.8	33.9	33.0
Current expenditure	33.1	33.6	30.3	29.3	29.7	30.5	31.6	30.6	29.7	29.1	28.5	27.7
Wages and salaries	14.6	15.4	14.2	14.2	13.9	15.3	15.6	15.3	15.0	15.0	14.9	14.7
Interest	0.6	0.7	0.6	0.7	0.7	0.6	0.8	0.6	0.5	0.5	0.5	0.4
Other	17.9	17.5	15.5	14.4	15.2	14.6	15.2	14.7	14.2	13.7	13.1	12.6
Of which: grants and subsidies	9.3	9.4	8.3	8.2	8.4	8.6	8.9	8.6	8.3	8.0	7.7	7.4
Capital expenditure	11.5	10.6	11.2	9.9	9.7	7.3	6.6	6.2	6.0	5.8	5.5	5.3
Net lending	-0.1	1.0	0.0	0.1	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Primary balance (deficit -)	2.9	-6.1	-1.0	-1.8	-5.4	-7.0	-3.6	-3.1	-2.2	-2.6	-1.3	-0.6
Overall balance	4.7	-5.8	0.8	-1.3	-5.6	-7.0	-3.8	-2.9	-1.7	-2.1	-0.7	0.1
Memorandum items:												
Non-mineral primary balance <sup>4</sup>	-16.1	-18.1	-17.6	-14.3	-17.1	-15.4	-13.5	-12.8	-12.1	-11.2	-10.3	-9.3
Excluding SACU revenue	-29.9	-31.3	-26.3	-26.3	-26.4	-23.7	-23.5	-22.1	-21.0	-20.0	-19.1	-18.1
Non-mineral GDP (fiscal year; billions of pu	113.5	120.1	135.7	148.8	159.0	169.7	182.6	195.5	210.7	227.5	246.3	267.3

Sources: Ministry of Finance and Economic Development; and IMF staff estimates and projections.

<sup>1</sup> Fiscal year begins on April 1.

<sup>2</sup> Refers to sales tax and VAT.

<sup>3</sup> SACU receipts consist of external trade and excises on imported goods as well as a development component derived from excises.

<sup>4</sup> The non-mineral primary balance is computed as the difference between non-mineral revenue and expenditure (excluding interest payments and receipts, which are roughly proxied by BoB transfers and interest).

**Table 4. Botswana: Monetary Survey, 2014–2025**

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
	Projections											
	(Billions of pula, end of period, unless otherwise indicated)											
Net foreign assets	83.3	91.0	82.2	80.9	80.1	65.4	64.3	63.8	65.3	69.2	74.8	81.2
Bank of Botswana	77.7	83.4	75.3	72.2	70.0	54.6	52.3	50.1	50.2	52.6	56.6	61.3
Assets	79.1	84.9	76.8	73.6	71.4	56.0	53.8	51.5	51.6	54.0	58.0	62.7
Liabilities	-1.4	-1.5	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4
Commercial banks	5.6	7.7	6.9	8.8	10.2	10.9	12.0	13.7	15.2	16.6	18.2	19.9
Assets	7.8	9.9	9.5	11.5	13.3	14.0	15.2	16.8	18.3	19.8	21.4	23.1
Liabilities	-2.2	-2.2	-2.6	-2.7	-3.1	-3.1	-3.1	-3.1	-3.1	-3.1	-3.1	-3.1
Net domestic assets	-31.0	-28.3	-15.4	-12.3	-6.3	15.9	23.4	30.2	36.2	40.6	44.3	48.3
Net domestic credit	8.6	13.9	23.6	26.9	32.9	48.2	62.4	74.3	85.1	97.1	107.6	117.4
Net claims on the government	-37.0	-35.2	-29.3	-28.6	-26.3	-14.3	-5.0	2.1	7.2	12.7	16.4	17.9
Bank of Botswana	-38.9	-37.1	-32.5	-32.9	-29.7	-21.8	-13.5	-9.3	-6.8	-3.3	-0.9	-0.3
Commercial banks	2.0	1.9	3.2	4.3	3.4	7.6	8.5	11.4	13.9	16.1	17.3	18.1
Claims on parastatals	1.7	1.3	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Claims on nongovernment	43.8	47.9	52.1	54.9	58.5	61.8	66.7	71.5	77.2	83.6	90.5	98.8
Claims on the private sector	45.2	49.3	53.7	56.5	60.2	63.6	68.7	73.7	79.6	86.2	93.3	101.9
Other financial institutions	-1.4	-1.3	-1.6	-1.7	-1.8	-1.9	-2.0	-2.2	-2.4	-2.6	-2.8	-3.0
Other items (net)	-39.5	-42.2	-39.1	-39.2	-39.2	-32.4	-39.0	-44.1	-49.0	-56.5	-63.3	-69.1
Monetary Base	11.8	14.0	14.5	12.5	14.7	16.1	17.3	18.6	20.0	21.6	23.4	25.4
Broad money (M2)	55.8	66.9	70.5	72.5	78.5	85.9	92.5	99.0	106.7	115.2	124.7	135.4
Money	13.2	13.7	15.9	17.3	17.3	18.9	20.4	21.8	23.5	25.4	27.5	29.8
Currency	1.7	1.7	1.8	1.9	1.8	2.2	2.5	2.9	3.4	3.9	4.2	4.5
Current deposits	11.5	12.0	14.1	15.4	15.5	16.8	17.9	18.9	20.2	21.5	23.3	25.3
Quasi-money	42.6	53.2	54.7	55.1	61.2	67.0	72.1	77.2	83.1	89.8	97.2	105.5
Memorandum items:												
Nominal GDP (bn pula)	146	146	171	180	190	201	217	241	262	283	306	330
Nominal non-mineral GDP (bn pula)	113	120	136	149	159	170	183	195	211	228	246	267
Velocity (GDP to M2)	2.6	2.2	2.4	2.5	2.4	2.3	2.3	2.4	2.5	2.5	2.5	2.4
Velocity (non-mineral GDP to M2)	2.0	1.8	1.9	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Money Multiplier	4.7	4.8	4.9	5.8	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
Base Money (annual % change)	-8.5	18.6	3.7	-13.7	17.5	9.4	7.7	7.0	7.8	8.0	8.3	8.5
Broad Money (annual % change)	4.6	19.9	5.4	2.7	8.3	9.4	7.7	7.0	7.8	8.0	8.3	8.5
Credit to the private sector (annual % change)	13.7	9.0	9.0	5.3	6.6	5.6	7.9	7.3	8.1	8.3	8.3	9.1
Private sector credit to GDP	31.0	33.7	31.5	31.4	31.6	31.7	31.7	30.6	30.4	30.5	30.5	30.9
Private sector credit to non-mineral GDP	39.8	41.0	39.6	38.0	37.9	37.5	37.6	37.7	37.8	37.9	37.9	38.1

Sources: Bank of Botswana and IMF staff estimates and projections.

**Table 5. Botswana: Financial Soundness Indicators, 2014–2019**

	2014	2015	2016	2017	2018	Mar-19	Jun-19	Sep-19
	cent, unless otherwise indicated							
<b>Banking indicators</b>								
<b>Capital adequacy</b>								
Capital to assets	9.1	8.5	8.4	8.8	9.4	9.7	9.6	11.7
Regulatory capital to risk-weighted assets	18.6	20.0	19.2	21.9	17.9	18.8	18.8	18.5
Regulatory tier I capital to risk-weighted assets	13.1	14.1	13.2	15.0	13.2	14.1	14.1	12.8
Nonperforming loans net of provisions to capital	14.4	13.0	17.4	18.0	22.1	16.8	13.2	13.1
<b>Asset quality</b>								
Large exposure to capital	191.8	170.0	147.7	90.2	112.8	109.2	101.7	93.5
Nonperforming loans to total gross loans	3.5	3.7	4.9	5.3	5.4	5.2	5.0	5.2
Bank provisions to nonperforming loans	48.4	54.7	57.1	...	...	...	...	...
<b>Earnings and profitability</b>								
Trading income to total income	3.4	4.7	2.6	3.1	3.6	4.4	4.5	4.6
Return on assets	2.8	2.0	2.3	1.9	2.8	2.6	1.2	1.7
Return on equity	25.2	17.5	20.2	16.3	23.3	21.4	10.1	14.3
Interest margin to gross income	59.6	57.5	61.4	61.6	57.2	58.6	57.2	56.6
Noninterest expenses to gross income	55.5	61.1	57.1	59.9	58.5	59.1	58.9	58.3
Personnel expenses to noninterest expenses	43.9	40.6	43.2	44.5	44.4	45.2	86.9	46.5
<b>Liquidity</b>								
Liquid assets to total assets	30.2	15.4	16.3	13.4	6.1	5.6	5.5	5.1
Liquid assets to short-term liabilities	36.2	18.5	20.0	16.4	7.2	6.9	7.3	6.3
Customer deposits to total (non-interbank) loans	113.6	119.8	121.6	117.3	118.8	122.8	118.8	123.3
<b>Exposure to foreign exchange risk</b>								
Net open position in foreign exchange to capital	-55.7	-59.4	0.0	-66.0	-63.5	-65.7	-64.8	-71.9
Foreign currency-denominated loans to total loans	7.3	6.7	7.5	7.0	7.8	7.1	6.9	5.5
Foreign currency-denominated liabilities to total liabilities	13.1	13.0	14.6	13.9	14.3	14.0	13.9	13.4

Sources: Bank of Botswana and IMF staff calculations.

## Annex I. Track Record of Economic Policies and Reforms

Objectives	Actions/measures	Latest Developments
Maintain economic stability and preserve buffers amidst volatile diamond and SACU revenue		
Preserve macroeconomic stability	<b>Gradual fiscal consolidation</b> while preserving capital and social spending.	<b>Limited progress.</b> The fiscal stance was expansionary, given negative shocks facing the economy during 2019, and the election cycle, but consolidation is expected to resume in FY2020.
Mobilize domestic revenue	<b>Tax administration.</b> Pass and implement the pending bills (Tax Administration act, VAT and Income Tax bills). <b>Tax base.</b> Reduce VAT exemptions and offset the impact on poverty by providing cash transfers, increase property taxes and coverage, and repeal exemptions to capital income tax.	<b>Limited progress.</b> Most actions have been postponed to after the general election. Some amendments to the Income Tax Act related to Transfer Pricing Rules and Thin Capitalization provisions were introduced. <b>Limited progress.</b> More exemptions have been granted on transfers duty for citizens while increasing them from 5 to 30 percent for non-citizens.
Improve efficiency of public spending	<b>Better target social spending and reduce subsidies.</b> Extend the coverage of the social registry and introduce means-testing (e.g. for scholarships in tertiary education). <b>PFM reforms.</b> Improve forecasting capacities, strengthen the medium-term expenditure framework (MTEF), implement the new charts of accounts, appropriately classify recurrent and capital expenditures, better integrate the MTEF in the budget process, and move to performance-based budgeting. Strengthen public investment management.  <b>Budget transparency.</b> Publish online budget documents in a timely manner. Integrate special funds into the budget approval process.	<b>Limited progress.</b> Despite generous spending on direct transfers, and a relatively good coverage (90 percent of the lowest quintile has access to social assistance), the targeting is not as efficient as compared to other countries. The 2020 budget speech has put high priority on some key aspects of this going forward.  <b>Partial progress.</b> Some efforts are being deployed to migrate to GFSM 2014 and implement the new charts of accounts. Budget documents and execution are published although with some delay. The authorities upgraded the Development Projects Management System (DPMS) and it went live on September 2018.  <b>Some progress</b> the budget speech and budget tables were published online for FY2020.
Preserve financial stability	<b>Macroprudential function.</b> Assign a clear macroprudential mandate to the BoB, fill data gaps.  <b>Supervision.</b> Establish crisis resolution framework, Strengthen risk-based supervision of nonbanks financial institutions.	<b>Partial progress.</b> The Financial Stability Committee has been established and is meeting on regular basis. The BoB started collecting and monitoring data on households' indebtedness and the real estate market. A financial stability report has been published. However, the banking law (including the crisis the resolution framework) has yet to be finalized.  <b>Limited progress.</b> The main issue remains with non-bank risk-based supervision and the amendment if the banking law to include the resolution framework. Basel III liquidity requirements will take time.

Enable an Export-Oriented and Job-Creating Private Sector		
Improve cost-effectiveness and quality of public services	<p><b>Public wages and employment.</b> Align wages with productivity. Initiate a civil service reform.</p> <p><b>Parastatals.</b> Rationalize parastatals, Privatize the ones with large losses. Improve oversight.</p> <p><b>Cost of doing business.</b> Advance the e-government agenda. Adopt electronic filing for all companies. Streamline requirements for licensing, and reforms to improve creditors' rights.</p>	<p><b>Limited progress.</b> Both the public sector recruitments, wages continued to increase.</p> <p><b>Limited progress.</b> Privatization of BMC has been initiated by the number of parastatals continued to increase. Audited financial statements are still not readily available.</p> <p><b>Partial progress.</b> Some regulations have been passed to ease doing business, mainly to streamline and simplify the licensing system. A Unique Identification Number is embedded in the Online Business Registration System and deadlines on the registration services have been in June 2019.</p>
Loosen labor market rigidities and strengthen skills	<p><b>Labor market.</b> Unify the graduates' registry with the jobseeker database and open it to the private sector to reduce skills mismatches.</p> <p><b>Education.</b> Overcoming coordination problems related to the different ministries involved in vocational training. Improve spending efficiency in education.</p>	<p><b>Partial progress.</b> There is a directive to unify the registry, but little progress has been done.</p> <p><b>Partial progress.</b> A public expenditure review for basic education has been finalized.</p>
Implement market-friendly sectoral reforms.	<p><b>Beef.</b> Remove the Botswana Meat Commission (BMC)'s export monopoly and privatize it. Align prices paid to high quality producers on international prices. Liberalize imports of beef.</p> <p><b>Tourism.</b> Address supply-related restrictions (e.g. air access, specialized workforce). Eliminate bureaucratic rigidities (e.g. visas and work permits).</p>	<p><b>Partial progress.</b> BMC privatization process has been initiated.</p> <p><b>Partial progress.</b> Visas and work permits process has reportedly been eased. Air access has been granted to a non- African company.</p>
Deepen financial development and foster inclusion	<p><b>Credit and monetary transmission.</b> Strengthen the creditor database and collateral registry for assets. Increase the volume and frequency of government bonds issuance.</p> <p><b>Payment system.</b> Improve electronic connectivity in the financial system and strengthen the clearing house to facilitate advanced transactions. Strengthen the regulation on the national payment system. Allow inter-operability across networks and with bank accounts.</p>	<p><b>Partial progress.</b> The credit information sharing legislation is being finalized. The World Bank has produced a report and has also submitted the layman's draft of the Secured Transactions on Movable Property legislation. Drafting instructions were sent to Attorney General, which once enacted, will allow for the establishment of a Collateral Registry.</p>

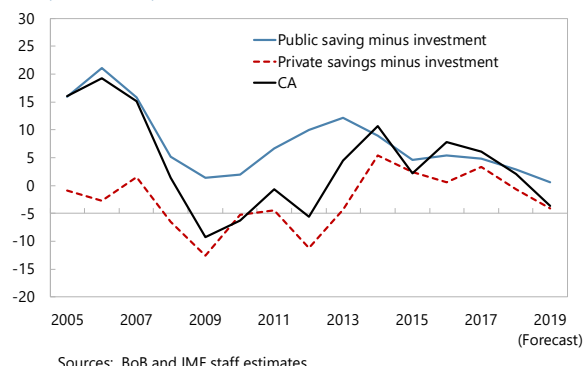
## Annex II. External Stability Assessment

*Botswana's external position is moderately weaker than implied by medium-term fundamentals and desired policies in 2019. Implementing the planned fiscal consolidation, advancing structural reforms to strengthen competitiveness and promote diversification, and allowing the real exchange rate basket to reflect changes in fundamentals will help close the current account gap.*

### Introduction

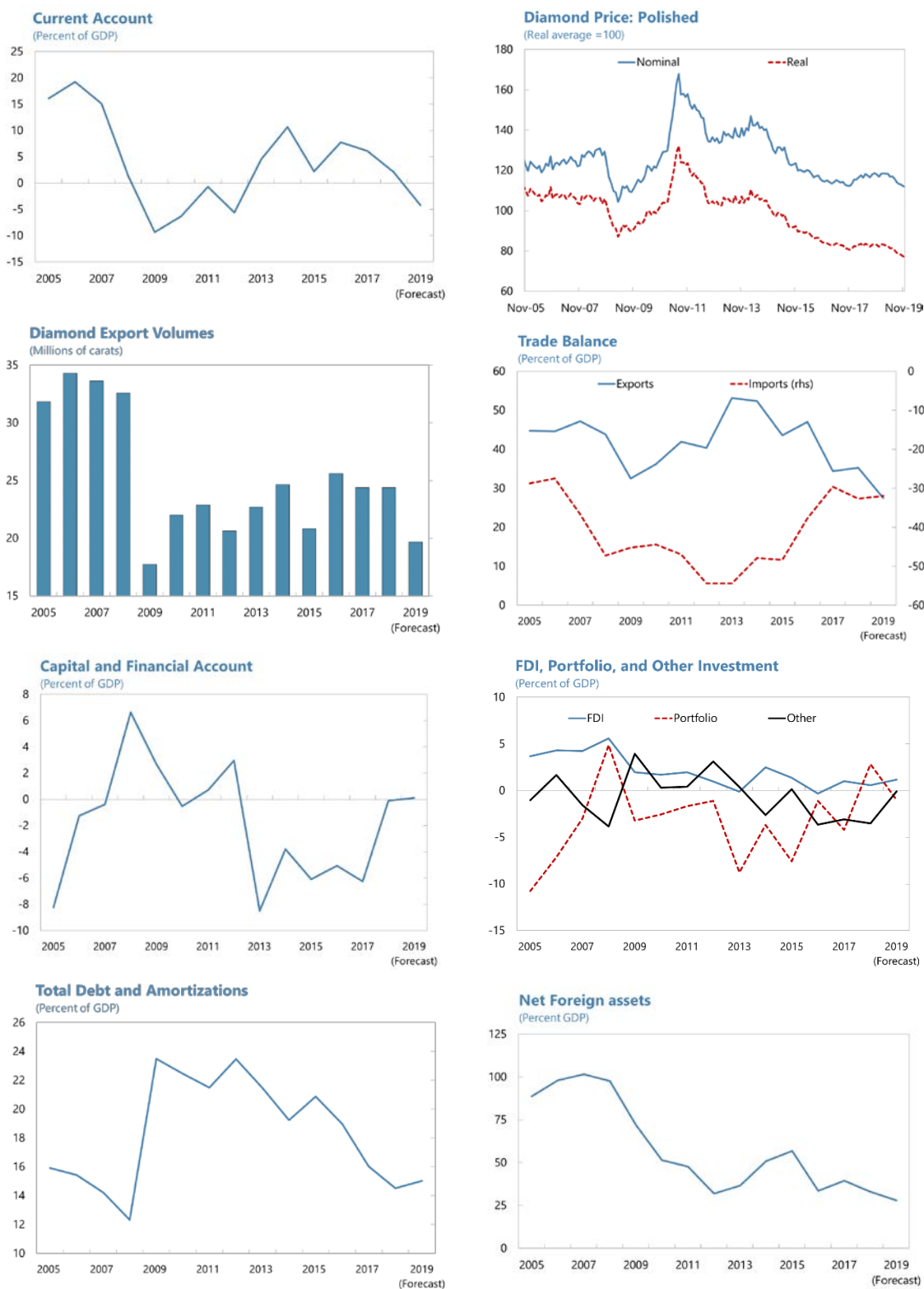
**1. Botswana's current account balance has deteriorated since 2014.** After reaching a sizeable surplus of 10.7 percent of GDP in 2014, the current account narrowed to 2.1 percent of GDP in 2018 amid lower demand for diamonds and fiscal expansion. Movements in the current account balance have historically reflected primarily changes in public savings-investment gaps. The current account balance is expected to deteriorate further in 2019 to -4.3 percent of GDP, driven in part by one-off factors, before improving to about 1 percent of GDP over the medium term as diamond production recovers and fiscal consolidation advances.

**Savings and Investment**  
(Percent of GDP)



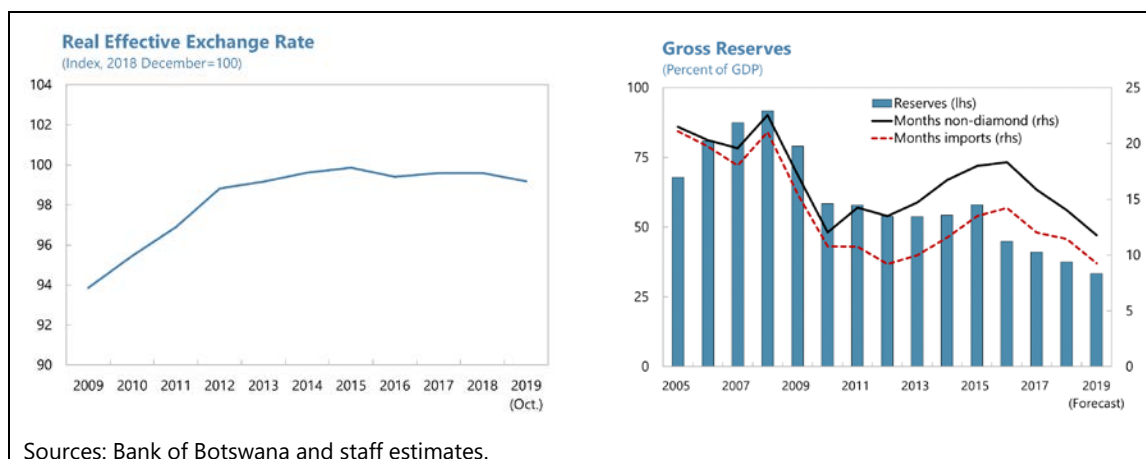
**2. The financial account has been volatile, mostly owing to swings in portfolio investment, while foreign direct investment (FDI) remained mostly stable and positive amid steady investments in the mining sector (which on average account for about 80 percent of FDI inflows)** (Figure A2.1). Gross external financing requirements have gradually decreased over the past five years to about 2.9 percent of GDP. Net foreign assets (NFA) have nevertheless continuously deteriorated, and stood at 32.9 percent of GDP, about half their 2009 level, reflecting the drawdown of buffers to finance the fiscal expansion. NFA are expected to recover over the medium term as the current account surplus improves and foreign investment in the diamond sector continues.

Figure A2.1. Botswana: Key External Sector Indicators



Sources: Bank of Botswana, Bloomberg, and IMF staff estimates.

**3. Botswana's real effective exchange rate (REER) has remained broadly stable despite substantial variations in diamond prices.** The relative stability of the REER can be attributed to the relatively low capital mobility combined with the BoB's policy of adjusting the nominal value of the pula in line with expected inflation differentials with major trading partners and basket weights (the basket comprises the SDR and the South African rand, with a 45 percent weight for the latter).



**4. Botswana's international reserves are expected to decline further in 2019, with improvements foreseen only over the medium term.** Reserves reached US\$6.6 billion by the end of 2018 (US\$0.9 billion lower than the previous year), equivalent to 37 percent of GDP or 11 months of imports the following years.<sup>1,2</sup> The worsening of the current account expected for 2019 will also result in a further reduction to 35 percent of GDP in reserves, with the losses partially contained by stock market buoyancy and the corresponding high returns on reserves investments. Under the baseline projections, the import coverage is expected to increase in the medium to long term, as diamond production increases and the government improves its fiscal balances.

## Current Account and Exchange Rate Assessment

**5. The assessment of Botswana's external position employs the External Balance Assessment (EBA)-lite models for the CA and REER.**<sup>3</sup> The estimations assume that both the CA and REER are endogenous variables simultaneously determined as a function of domestic and external variables including fundamentals, policy variables, and cyclical conditions (these methodologies assess the CA and REER in a multilateral-consistent manner, as each country's variables are measured relative to a weighted-average of other countries' values).<sup>4</sup> Improvements in

<sup>1</sup> The authorities concurred with the assessment that reserves exceeded their adequate level.

<sup>2</sup> The authorities preferred measure of reserve coverage takes the ratio to current year imports of goods and services excluding diamond imports for re-exporting purposes.

<sup>3</sup> EBA-lite is an extension of EBA methodologies, uses annual data for 190 countries for the 1995–2016 period and incorporates fundamentals for low and middle-income countries. See further details of the EBA methodology in IMF (2019).

<sup>4</sup> Since the CA and ER are measured relative to other countries, they not only reflect a country's own characteristics but also external conditions within a simultaneously determined general equilibrium system. This also implicitly



BOP data have enhanced the reliability of EBA-lite methods as the size of errors and omissions has been reduced by about one half.<sup>5</sup>

**6. The EBA-lite suggests a moderate overvaluation of the Pula** (see table below). The CA-EBA lite approach estimates the CA gap to be equivalent to -2.4 percent of GDP, with a CA norm of -0.3 percent of GDP in 2019.<sup>6</sup> Since the estimated elasticity of the trade balance to changes in the REER is -0.25, this methodology suggests that the REER would need to depreciate by 9 percent for the CA surplus to be reduced to the fitted value of the regression (see table below). From the perspective of the EBA-lite REER approach, the REER would need to depreciate by almost 20 percent to reach the fitted value of the regression.<sup>7</sup> Staff gives more weight to the CA-EBA lite approach as the one-offs driving some of the imbalances in 2019 can be more directly assessed than in the REER approach (which explains the larger overvaluation suggested by the latter approach).

Results from CA-EBA-Lite Estimation	
<b>CA-Actual</b>	-4.3%
Cyclical Contributions (from model)	-0.9%
<b>Cyclically adjusted CA</b>	-2.2%
<b>CA-Norm</b>	-1.3%
<b>Cyclically adjusted CA Norm</b>	-0.3%
<b>Multilaterally Consistent Cyclically adjusted CA Norm</b>	0.2%
<b>CA-Gap</b>	-2.4%
of/which Policy gap	0.66%
Elasticity	-0.25
<b>REER Gap</b>	9%
CA-Fitted	-2.1%
Residual	-2.2%
Natural Disasters and Conflicts	-1.5%
Sources: Bank of Botswana and staff estimates	

recognizes that developments in a small economy would mostly influence its own CA and REER, unlike those in a large country.

<sup>5</sup> A recent technical assistance mission from the IMF's Statistics Department focused on enhancing BOP data compilation including: (i) the under coverage of dividends paid to foreign investors, profits deposited in intercompany accounts by companies in the diamond industry, and dividends received by the government from its share investment abroad; (ii) the omission of imports and exports of services by companies in the diamond industry; and (iii) the overstatement of exports of travel and construction services for other private entities.

<sup>6</sup> Staff made a conservative adjustment to the Cyclically adjusted CA Norm of +1.2 percent, given that diamond exports fell unexpectedly by more than 6 percent of GDP in 2019, while they are expected in 2020 and forward to be only 2 percent of GDP lower than in 2018.

<sup>7</sup> About 90 percent of Botswana's exports correspond to diamond sold at international prices. Although the exchange rate could affect the level of non-diamond imports, it has no bearing on Botswana's output or sales of diamonds which are demand determined and sensitive to economic developments in the US and China. Thus, the large current account surplus is more a structural characteristic of the economy and is weakly dependent on the exchange rate. Moreover, the non-diamond current account deficit would be about 10 percent of GDP, suggesting that the Pula could be overvalued.

## Reserve Adequacy

**7. The IMF methodology to estimate reserves adequacy provides a rigorous way to assess the appropriate level of reserves.** Traditional metrics of adequacy—such as months of imports, cover of short-term debt plus debt service, or percent of broad money—though attractive for their simplicity, are rather arbitrary as they only focus on one aspect of vulnerability and may provide conflicting signals. Since a balance of payments crisis can arise from various sources, the IMF’s metric for market access countries employs a risk-weighted measure of diverse sources of risk (see table below).<sup>8</sup>

**8. The IMF’s metric encompasses four specific vulnerabilities:** (i) export earnings to capture potential losses from terms of trade shocks; (ii) short term debt at remaining maturity (short term debt plus debt service) to reflect rollover risk; (iii) portfolio investments plus medium and long-term debt to account for drains from non-residents’ investment; and (iv) broad money as a proxy for residents’ capital flight. The weights for the risks in the metric are computed as the financial outflows at the tenth percentile of the estimated annual distributions of percentage changes of each of the items discussed above during periods of exchange market pressures.<sup>9</sup> Separate distributions are estimated for countries with fixed exchange rates or capital controls.<sup>10</sup> The weights for countries with a fixed exchange rate (assumed for Botswana) are:<sup>11</sup>

	Short-term Debt	Other Liabilities	Broad Money	Exports
Weights	30%	20%	10%	10%

<sup>8</sup> See further details in IMF (2011, 2013 and 2014). A separate methodology is used for non-market access countries but is not relevant for Botswana which is an upper middle-income country with little external debt and an investment grade rating.

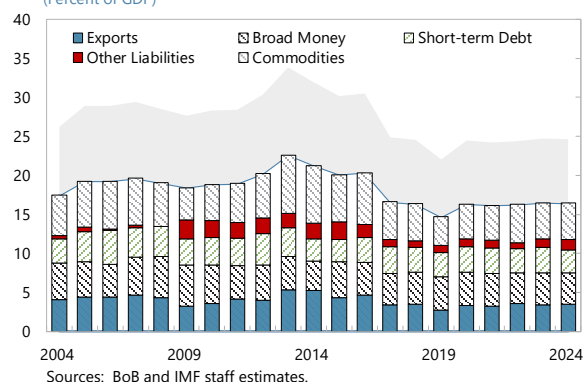
<sup>9</sup> As in Eichengreen et. al. (1997), an exchange market pressure (EMP) index is constructed as the weighted average of reserve losses, exchange rate depreciation, and increases in interest rates. An episode of EMP occurs when the index deviates more than 1.5 times standard deviations from its average.

<sup>10</sup> Additional buffers are suggested for countries with commodity exports that exceed 50 percent of total exports. Botswana’s commodity exports account for 80 percent of exports of goods and services (90 percent of goods exports). However, the IMF’s methodology for commodity exporters relies on futures’ prices which are unavailable for diamonds. Nonetheless, considering the decrease in diamond exports and the market weakness and depressed diamond price, staff considers that a weight of 25 percent for exports could be appropriately used to reflect volatility in diamond prices.

<sup>11</sup> Botswana’s pula is pegged to a basket of currencies that comprises the South Africa’s rand and the SDR (with a 45 percent weight for the former). While not exactly a fixed exchange rate regime, its operational details are closer to it than to a flexible exchange rate regime. Using the weights for flexible exchange rates would, by design, yield a lower level of adequate reserves compared to the weights for fixed exchange regimes.

**9. Botswana has a comfortable reserve position.** According to the IMF’s metric, reserves of 14 to 16 percent of GDP, amounting to 100–150 percent of the ARA metric, would be adequate, compared to the estimated level for 2019 of 35 percent of GDP. However, this assessment doesn’t fully consider Botswana’s high dependence on commodity exports. Indeed, using a weight of 25 percent for exports (instead of 10 percent) to reflect the country’s dependence on volatile diamond receipts, the adequacy range would increase to 18–25 percent of GDP. Moreover, for the past twenty years the level of reserves has far exceeded the upper bound of the adequacy range.

**Composition Metric**  
(Percent of GDP)



**10. Foreign reserves are under the control of the Bank of Botswana**—with about two-thirds kept in a sovereign wealth fund (the Pula Fund) and one-third in a “liquidity” portfolio (used as a short-term liquidity buffer).<sup>12</sup> Within the Pula Fund, one-third is owned by the BoB and two-thirds by the government (kept separately in a “government investment account” held at the BoB in domestic currency).

<sup>12</sup> The liquidity portfolio covers six months of non-diamond imports. Its most recent level is by itself adequate according to the IMF’s metric.

## References

International Monetary Fund. 2013. "The External Balance Approach." IMF policy paper.

\_\_\_\_\_. 2011. "Assessing Reserve Adequacy." IMF policy paper.

\_\_\_\_\_. 2013. "Assessing Reserve Adequacy—Further Considerations." IMF policy paper.

\_\_\_\_\_. 2014. "Assessing Reserve Adequacy—Specific Proposals." IMF policy paper.

\_\_\_\_\_. 2019. "The revised EBA-Lite Methodology." IMF policy paper.

## Annex III. Risk Assessment Matrix<sup>1</sup>

Source of risks	Likelihood / Horizon	Expected impact if realized	Possible Policy Response
<b>Global Risks</b>			
<b>Rising protectionism and retreat from multilateralism.</b> Could lower global growth through adverse confidence effects and financial market volatility.	<b>High / ST, MT</b>	<b>High / ST, MT</b>  Negative impact on global growth would lead to lower demand for diamonds and other commodities (e.g. copper). This could be compounded by lower SACU revenue, and weaken external and fiscal balances, lower buffers. Overall, growth would fall, and unemployment would rise.	Botswana has some fiscal space to counter the effects of such shocks. Fiscal policy could be eased in the near term, but it should be part of a credible medium-term consolidation plan. Easy fiscal policy could be supported by looser monetary conditions if greater exchange rate flexibility is allowed. At the same time, reforms to boost productivity and unleash private sector development with a view of reducing the dependence on mining.
<b>Weaker-than-expected global growth.</b> · US: Waning confidence, rising leverage, and policy uncertainty, leading to weaker investment. · In China: Reduced external demand disrupt supply chains, depresses confidence and investment, and trigger tighter financial conditions. · Large stressed emerging economies: Policy missteps, idiosyncratic shocks and/or contagion prevent expected stabilization or recovery in stressed economies (e.g. South Africa).	<b>Low / ST, MT</b>  <b>High / ST, MT</b>  <b>High / ST</b>		
<b>Coronavirus outbreak</b> causes widespread and prolonged disruptions to economic activity and global spillovers through tourism, supply chains, containment costs, and confidence effects on financial markets and investment.	<b>Medium / ST</b>	<b>Medium / ST</b>  Negative impact on global growth and/or lower demand for diamonds could have adverse effects on the country's external position and weaken growth.	
<b>Higher frequency and severity of natural disasters</b> cause severe economic damage to smaller economies susceptible to disruptions.	<b>Medium / ST, MT, LT</b>	<b>Medium / ST, MT, LT</b>  More frequent/severe droughts in Southern Africa could disrupt water provision and reduce crop production, tourism activity, weaken strategic sectors (e.g. mining), and have debilitating effects on the poor. This would also lead to higher fiscal deficits, lower growth, and higher unemployment.	Accelerate relief measures in the ST and implement climate change mitigation/adaptation measures in the MT/LT. Adapt spatial development strategies to long-term climate challenges and constraints. Enhance regional coordination to mitigate climate change shocks.
<b>Domestic Risks</b>			
<b>Delays in implementing the fiscal consolidation as well as key fiscal and structural reforms in Botswana</b> due to political economy constraints, capacity limitations or lack of focus on medium-term outcomes.	<b>Low / ST, MT</b>	<b>High / MT</b>  Protracted high fiscal deficits. Increase in public debt and/or erosion of buffers would jeopardize fiscal sustainability and threaten macroeconomic and external stability as well as social stability.	Strengthen fiscal framework including by defining a long-term anchor and operational guidance for fiscal policy. Implementing a growth friendly fiscal consolidation, that improves the efficiency of spending and preserves productive capital and social spending. These measures should be accompanied by a greater use of the flexibility afforded by the current exchange rate regime and structural reforms to advance diversification and raise productivity.

1/ The Risk Assessment Matrix (RAM) shows events that could materially alter the baseline path (the scenario most likely to materialize in the view of IMF staff). The relative likelihood is the staff's subjective assessment of the risks surrounding the baseline ("low" is meant to indicate a probability below 10 percent, "medium" a probability between 10 and 30 percent, and "high" a probability between 30 and 50 percent). The RAM reflects staff views on the source of risks and overall level of concern as of the time of discussions with the authorities. Non-mutually exclusive risks may interact and materialize jointly. "Short term (ST)" and "medium term (MT)" are meant to indicate that the risk could materialize within 1 year and 3 years, respectively.

## Annex IV. Debt Sustainability Analysis

*Botswana's public debt ratio remains low and is projected to decline over the medium-term as fiscal consolidation advances and output recovers. The large deficit in FY2019 will increase financing needs but is expected to be financed mostly through a drawdown of buffers and exceptional capital gains from the central bank, limiting the effect on public debt. Based on standard stress tests, the country's level of risk of debt distress remains low.*

### Public Debt Sustainability

1. **Public debt remains low despite high deficits in the past few years.** Preliminary estimates indicate that following a slight increase in debt in FY2018, Botswana's gross public debt (including domestic and external guarantees) is likely to stabilize in FY2019 at around 19 percent of GDP, despite a large deficit expected at 5.8 percent of GDP (Table A4.1).<sup>1</sup> In recent years, the widening of the deficit had little impact on public debt it was mainly financed through a drawdown of buffers (as well as exceptional gains from the BoB in FY 2019). As a result, the Pula Fund assets have narrowed to 25 percent of GDP in 2018, down from 31 percent of GDP in 2017. The composition of public debt remained unchanged and dominated by external debt, mostly multilateral. Vulnerabilities associated to the high share of external debt (about two-third of total debt) are mitigated by the fact that most of the external borrowing is multilateral with long maturities and that 60 percent of fiscal revenue are in foreign currency, offering a natural hedge against currency depreciation.
2. **The medium-term baseline macroeconomic scenario envisages a gradual fiscal consolidation starting in 2020/21, consistent with the authorities track record of fiscal discipline.** Given available fiscal space and to smooth the impact on growth, we expect the primary deficit to decline gradually to -0.5 percent of GDP in FY2024. The deficit is assumed to continue to be financed mostly by withdrawal of deposits and medium and long-term domestic debt, in line with the authorities' past debt management strategy. As a result, public debt and gross financing needs are projected to follow a downward path, reaching 14.6 percent of GDP and 2.8 percent of GDP respectively in FY2024. Should the deficit be financed entirely through debt (including FY2019), the debt level would reach about 23 percent of GDP in FY2024, well below the 40 percent of GDP statutory limit.
3. **Figure A4.1 shows three alternative scenarios which yield sustainable debt levels:**
  - **Historical values.** The first scenario shows the behavior of public debt if the main macro variables are assumed to remain at their historical 10-year averages. Dynamic simulations show that under such a scenario the debt-to-GDP ratio would remain broadly in line with staff's baseline scenario with public debt reaching 16.6 percent of GDP over the medium term.

<sup>1</sup> Public debt is defined as central government debt only. Botswana doesn't produce consolidated debt data for the overall public sector (including local governments, extra-budgetary funds, and parastatals).

- **Constant primary balance.** The second scenario assumes no change in fiscal policy stance, holding the primary fiscal balance constant at its FY2018 level. In such a scenario, gross financing needs would exceed 9 percent of GDP and public debt would follow a rapid upward trend, reaching 33.8 percent of GDP in FY2024—a level still low compared with other countries at similar levels of development or with crisis levels. Thus, while on both the debt levels and gross financing needs, Botswana would continue to be classified as a lower scrutiny country, proceeding with fiscal consolidation is required for fiscal sustainability and intergenerational equity.
- **Contingent liabilities shock.** Finally, the third scenario envisages that a large share of contingent liabilities related to SOEs' debt is called. In particular, the scenario assumes that SOEs would default on 50 percent of their total debt with banks (or about 2.2 percent of GDP) in FY2018. The scenario also assumes a one standard-deviation shock to growth, with associated deterioration of the primary balance (as in the standard contingent liability shock scenario in the MAC DSA template), and a slight increase in interest rates. The simulations indicate that under such a scenario the debt-to-GDP ratio would rise to about 19.3 percent of GDP in FY2021 and decline thereafter. Gross financing needs would reach 7.1 percent of GDP in FY2020 but will be manageable given the large buffers.

## External Debt Sustainability

**4. Botswana's external debt is low.** It has hovered around 4 billion dollars (25 percent of GDP) during the last decade; it decreased as a ratio to GDP in recent years, driven in part by lower public sector debt (Table A4.2). During 2013–2018, the stock of public external debt decreased from 18 to 12 percent of GDP. Private sector external debt accounted for about one-third of total external debt in 2013 and increased its share reaching 50 percent of GDP in 2018. Private sector external debt is mostly loans between fellow enterprises. More than 80 percent of total external debt has long and medium-term maturities.

**5. Botswana's external debt is projected to gradually decrease over time.** The external debt-to-GDP ratio is foreseen to start decreasing after 2020, driven by continued decreases in public external debt, and stable private debt to GDP ratios. Gross external financing needs (GEFN) are projected to remain below 8 percent of GDP.

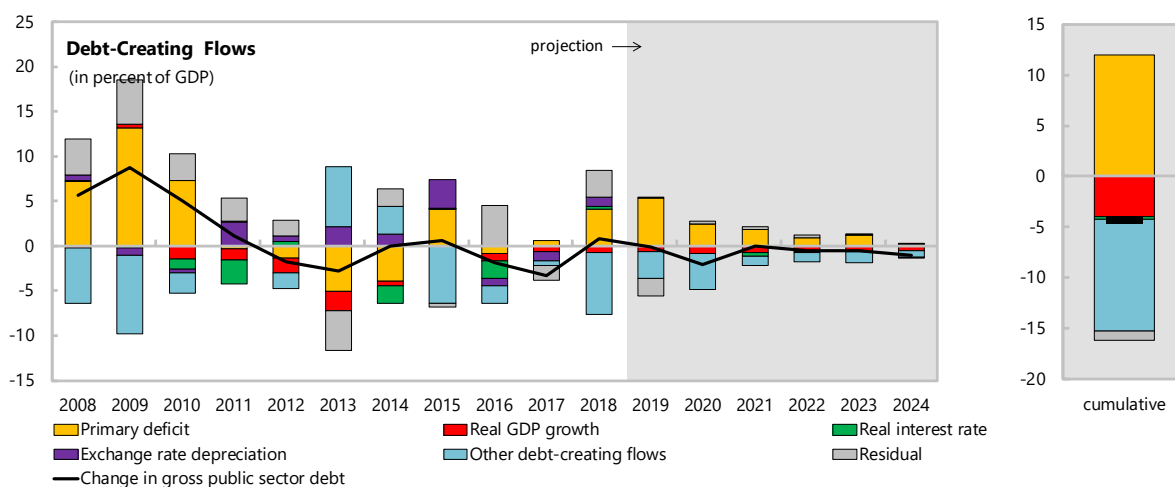
**6. Sensitivity tests suggest the external debt is vulnerable to current account shocks, but would remain below 38 percent of GDP under standard shock scenarios.** If the non-interest current account deficit widened by a (½ standard deviation shock) during 2019–23, the external debt would increase to about 38 percent of GDP by 2024. The impact of real interest rate shocks is small due to the sizeable share of fixed-rate debt. The impact of exchange rate depreciation on external debt is manageable with a 30 percent exchange rate depreciation increasing external debt to about 31 percent of GDP.

**Table A4.1. Botswana: Public Sector Debt Sustainability Analysis (DSA) – Baseline Scenario**  
(In percent of GDP, unless otherwise indicated)

<b>Debt, Economic and Market Indicators</b> <sup>1/</sup>										
	Actual			Projections						
	2008-2016 <sup>2/</sup>	2017	2018	2019	2020	2021	2022	2023	2024	
Nominal gross public debt	22.4	18.1	18.9	18.7	16.7	16.6	16.1	15.6	14.6	<b>As of January 10, 2020</b>
Public gross financing needs	4.7	3.1	7.1	7.5	5.9	3.7	2.8	3.8	2.8	Sovereign Spreads
Net public debt										EMBIG (bp) 3/ 338
Real GDP growth (in percent)	3.8	3.3	4.2	3.6	4.7	5.1	3.8	3.9	3.9	5Y CDS (bp) N/A
Inflation (GDP deflator, in percent)	6.9	2.6	1.2	2.0	3.5	5.2	4.8	3.8	4.1	
Nominal GDP growth (in percent)	10.9	5.6	5.6	6.1	8.9	10.5	8.5	8.0	8.1	
Effective interest rate (in percent) <sup>4/</sup>	3.1	2.7	3.3	2.8	3.8	3.3	3.7	4.1	4.7	
										Ratings Foreign Local
										Moody's A2 A2
										S&Ps A- A-
										Fitch n.a. n.a.

<b>Contribution to Changes in Public Debt</b>											
	Actual			Projections							
	2008-2016	2017	2018	2019	2020	2021	2022	2023	2024	cumulative	debt-stabilizing
Change in gross public sector debt	1.6	-3.3	0.8	-0.1	-2.1	0.0	-0.5	-0.5	-1.0	-4.2	primary
Identified debt-creating flows	-0.4	-1.6	-2.2	1.9	-2.4	-0.3	-0.8	-0.6	-1.0	-3.3	balance <sup>9/</sup>
Primary deficit	2.2	0.6	4.1	5.3	2.5	1.8	0.9	1.2	0.2	11.9	-1.2
Primary (noninterest) revenue and grants	35.9	30.9	27.7	25.5	28.2	26.9	26.8	25.8	26.3	159.5	
Primary (noninterest) expenditure	38.1	31.4	31.8	30.8	30.6	28.8	27.7	27.1	26.4	171.4	
Automatic debt dynamics <sup>5/</sup>	-0.7	-1.7	0.6	-0.5	-0.8	-1.1	-0.8	-0.6	-0.5	-4.3	
Interest rate/growth differential <sup>6/</sup>	-1.6	-0.7	-0.4	-0.5	-0.8	-1.1	-0.8	-0.6	-0.5	-4.3	
Of which: real interest rate	-0.8	0.0	0.4	0.1	0.0	-0.3	-0.2	0.0	0.1	-0.3	
Of which: real GDP growth	-0.8	-0.7	-0.7	-0.6	-0.8	-0.8	-0.6	-0.6	-0.6	-4.0	
Exchange rate depreciation <sup>7/</sup>	1.0	-1.0	1.0	...	...	...	...	...	...	...	
Other identified debt-creating flows	-1.9	-0.5	-7.0	-3.0	-4.1	-1.0	-1.0	-1.3	-0.7	-11.0	
Privatization/Drawdown of Deposits (negative)	-1.9	-0.5	-7.0	-3.0	-4.1	-1.0	-1.0	-1.3	-0.7	-11.0	
Contingent liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Other (specify, e.g. bank recapitalization)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Residual, including asset changes <sup>8/</sup>	2.0	-1.7	3.0	-2.0	0.3	0.3	0.3	0.1	0.0	-1.0	



Source: IMF staff.

1/ Public sector is defined as general government.

2/ Based on available data.

3/ Long-term bond spread over U.S. bonds.

4/ Defined as interest payments divided by debt stock (excluding guarantees) at the end of previous year.

5/ Derived as  $[(r - \pi(1+g) - g + ae(1+r))/(1+g+\pi+g\pi)]$  times previous period debt ratio, with  $r$  = interest rate;  $\pi$  = growth rate of GDP deflator;  $g$  = real GDP growth rate;  $a$  = share of foreign-currency denominated debt; and  $e$  = nominal exchange rate depreciation (measured by increase in local currency value of U.S. dollar).

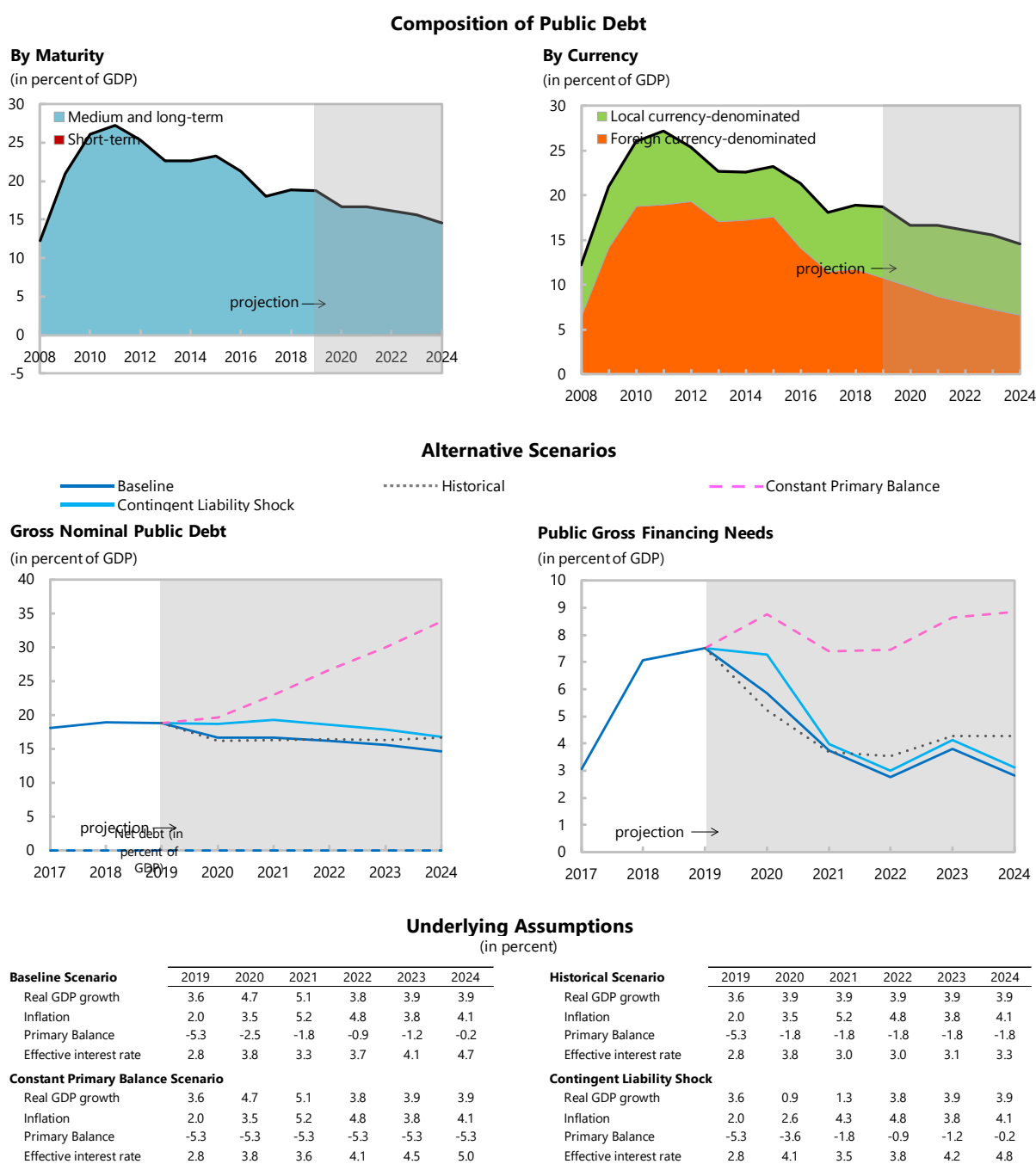
6/ The real interest rate contribution is derived from the numerator in footnote 5 as  $r - \pi(1+g)$  and the real growth contribution as  $-g$ .

7/ The exchange rate contribution is derived from the numerator in footnote 5 as  $ae(1+r)$ .

8/ Includes asset changes and interest revenues (if any). For projections, includes exchange rate changes during the projection period.

9/ Assumes that key variables (real GDP growth, real interest rate, and other identified debt-creating flows) remain at the level of the last projection year.



**Figure A4.1. Botswana: Public DSA – Composition of Public Debt and Alternative Scenarios**

Source: International Monetary Fund, country desk data, and staff estimates.

**Table A4.2. Botswana: External Debt Sustainability Framework, 2014–2024**

(In percent of GDP, unless otherwise indicated)

	Actual					Projections							Debt-stabilizing non-interest current account 6/ -1.6
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024		
Baseline: External debt	22.8	24.2	31.7	24.3	23.4								
Change in external debt	-5.2	1.4	7.5	-7.4	-0.9								
Identified external debt-creating flows (4+8+9)	-19.2	-8.3	-10.4	-14.5	-1.5								
Current account deficit, excluding interest payments	-13.1	-4.5	-10.4	-9.5	-3.8								
Deficit in balance of goods and services	-3.0	6.2	-8.3	-4.0	-1.9								
Exports	58.5	49.9	52.5	39.9	40.8								
Imports	55.4	56.1	44.2	35.8	38.9								
Net non-debt creating capital inflows (negative)	-6.2	-8.9	-0.8	-5.2	2.2								
Automatic debt dynamics 1/	0.1	5.2	0.8	0.2	0.1								
Contribution from nominal interest rate	2.5	2.3	2.7	3.4	1.7								
Contribution from real GDP growth	-1.1	0.4	-1.0	-0.8	-1.0								
Contribution from price and exchange rate changes 2/	-1.2	2.4	-0.9	-2.3	-0.6								
Residual, incl. change in gross foreign assets (2-3) 3/	14.0	9.6	17.9	7.1	0.6								
External debt-to-exports ratio (in percent)	39.0	48.5	60.4	61.0	57.5								
Gross external financing need (in billions of US dollars) 4/	-0.8	0.3	-0.4	0.1	0.5								
in percent of GDP	-5.1	1.8	-2.8	0.3	2.6	10-Year	10-Year						
Scenario with key variables at their historical averages 5/													
Key Macroeconomic Assumptions Underlying Baseline						Historical Average	Standard Deviation						
Real GDP growth (in percent)	4.1	-1.7	4.3	2.9	4.5	3.7	5.2	3.5	4.3	5.6	3.8	3.9	
GDP deflator in US dollars (change in percent)	4.7	-9.6	3.9	7.9	2.5	2.2	9.6	-3.8	1.7	0.8	-0.5	2.0	
Nominal external interest rate (in percent)	9.6	9.1	12.1	11.8	7.4	8.1	2.8	8.2	7.6	8.0	7.9	7.8	
Growth of exports (US dollar terms, in percent)	8.2	-24.1	14.0	-15.7	9.8	6.2	21.2	-20.0	24.8	6.8	4.5	6.8	
Growth of imports (US dollar terms, in percent)	-2.1	-10.0	-14.6	-10.0	16.6	3.7	15.4	-3.9	13.3	2.3	1.1	6.2	
Current account balance, excluding interest payments	13.1	4.5	10.4	9.5	3.8	3.8	6.3	-2.3	0.2	1.5	2.1	2.4	
Net non-debt creating capital inflows	6.2	8.9	0.8	5.2	-2.2	4.0	3.5	2.2	1.6	1.5	1.8	2.2	

1/ Derived as  $[r - g - r(1+g) + ea(1+r)] / (1+g+r+gr)$  times previous period debt stock, with  $r$  = nominal effective interest rate on external debt; $r$  = change in domestic GDP deflator in US dollar terms,  $g$  = real GDP growth rate,  $e$  = nominal appreciation, and  $a$  = share of domestic-currency denominated debt in total external debt.2/ The contribution from price and exchange rate changes is defined as  $[-r(1+g) + ea(1+r)] / (1+g+r+gr)$  times previous period debt stock.

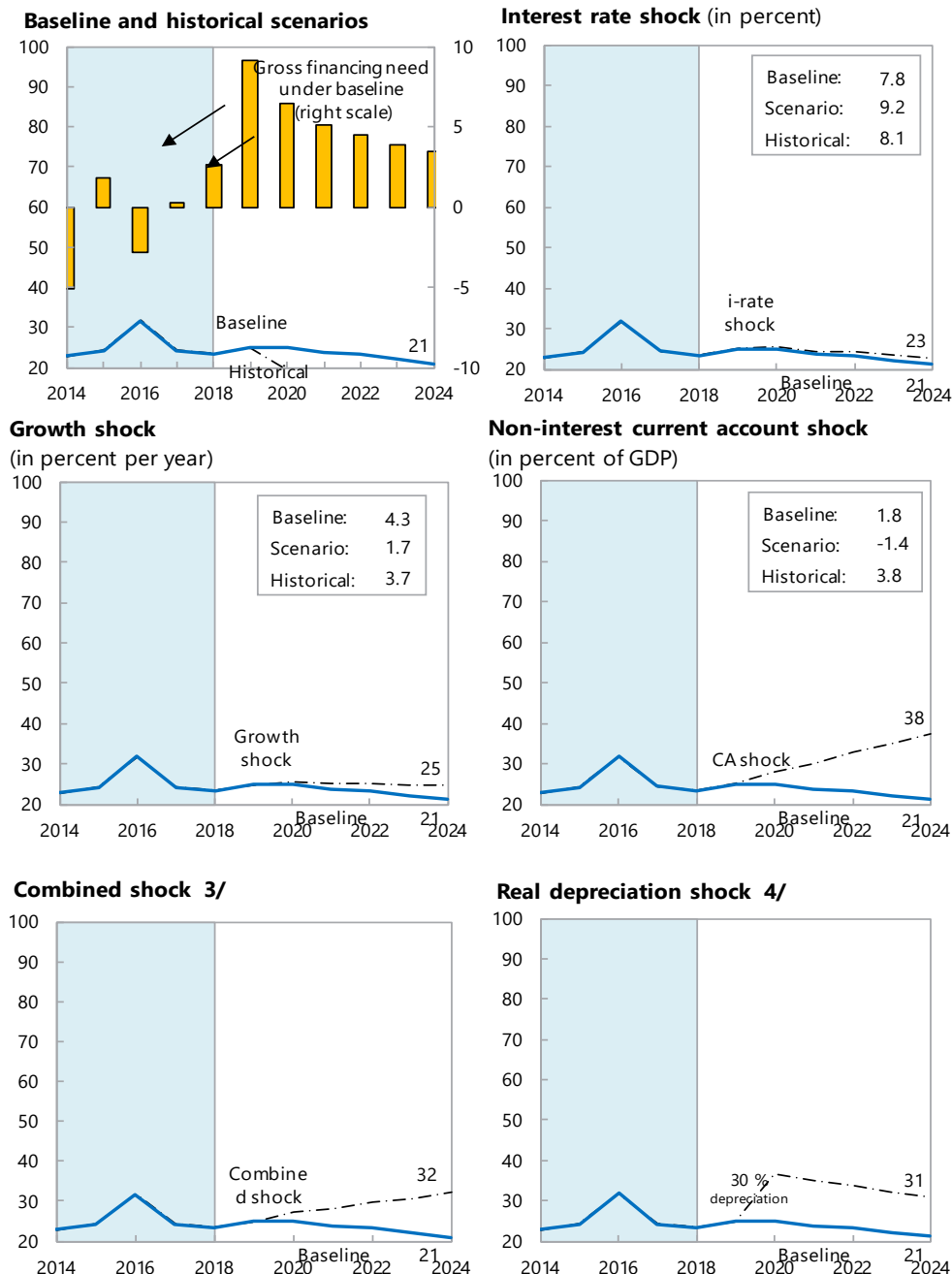
3/ For projection, line includes the impact of price and exchange rate changes.

4/ Defined as current account deficit, plus amortization on medium- and long-term debt, plus short-term debt at end of previous period.

5/ The key variables include real GDP growth; nominal interest rate; dollar deflator growth; and both non-interest current account and non-debt inflows in percent of GDP.

6/ Long-run, constant balance that stabilizes the debt ratio assuming that key variables (real GDP growth, nominal interest rate, dollar deflator growth, and non-debt inflows in percent of GDP) remain at their levels of the last projection year.

Source: International Monetary Fund, country desk data, and staff estimates.

**Figure A4.2. Botswana: External Debt Sustainability: Bound Tests <sup>1/ 2/</sup>**

Sources: International Monetary Fund, Country desk data, and staff estimates.

1/ Shaded areas represent actual data. Individual shocks are permanent one-half standard deviation shocks. Figures in the boxes represent average projections for the respective variables in the baseline and scenario being presented. Ten-year historical average for the variable is also shown.

2/ For historical scenarios, the historical averages are calculated over the ten-year period, and the information is used to project debt dynamics five years ahead.

3/ Permanent 1/4 standard deviation shocks applied to real interest rate, growth rate, and current account balance.

4/ One-time real depreciation of 30 percent occurs in 2019.

## Annex V. Summary of Capacity Development Strategy (FY2020–22)

### Background

- 1. In recent years, Botswana has maintained relatively robust economic growth, thanks to prudent macroeconomic policies, strong institutions, and good governance.**

However, given the volatility and exhaustibility of diamond proceeds (in addition to volatile SACU revenues), and the government's objective to transition to a high-income country by 2036, there is a pressing need to enhance resilience and raise growth potential. Doing so will require diversifying fiscal revenues, increasing spending efficiency, revamping the macroeconomic policy frameworks, fostering economic diversification, and promoting private sector activity, including through further financial deepening.

### Capacity Development Assessment

- 2. Cooperation between the Fund and Botswana on technical assistance (TA) and training has been strong, spanning a wide range of areas.** These include monetary policy and operations, financial supervision and regulation, central bank operations, public financial management, domestic revenue mobilization, expenditure management, debt management, legal frameworks (financial and fiscal law reform), AML/CFT financial sector supervision, and macroeconomic statistics. The authorities attach significant value to Fund TA, have showed ownership of the reform process in many areas, and have followed up on TA recommendations, albeit with delays. Implementation of recommendations has in general improved, especially on financial sector, liquidity management and BOP statistics. Progress in the areas of taxation, public financial management, and national accounts and fiscal statistics has been more mixed, with a slow pace owing to limited resources (staffing shortages and limited absorption capacity), and insufficient coordination among key agencies.

### Capacity Development Priorities

- 3. The TA priorities listed below are consistent with the country's macroeconomic priorities.** The Fund has already delivered some assistance on the items below and further assistance is expected to be forthcoming. The authorities have made additional TA requests in FY2019 in the areas of tax administration, international taxation, PFM, and financial law (AML/CFT, drafting/updating the Bank of Botswana Act, Banking Act, national payments law, currency legislation, and deposit protection scheme). The Article IV discussions identified other areas where TA is needed, in particular the design and calibration of a new fiscal rule as well as the reassessment of the monetary policy and exchange rate policy frameworks. At the same time, there is a need for strong involvement and prioritization of human and financial resources by the authorities in the areas of TA provisioning.

Surveillance Priorities	CD Objectives
Enhancing revenue mobilization	<ul style="list-style-type: none"> <li>- Assist on VAT and Excise tax gap analysis.</li> <li>- Support design and implementation of income tax reform.</li> <li>- Provide training in taxation of specific sectors and international taxation.</li> <li>- Support the authorities in updating the tax legal frameworks.</li> </ul>
Increasing spending efficiency	<ul style="list-style-type: none"> <li>- Strengthen public investment management</li> <li>- Build the fiscal risks framework and strengthen financial oversight of parastatals.</li> </ul>
Strengthening the fiscal framework	<ul style="list-style-type: none"> <li>- Assist the authorities in designing and calibrating a new fiscal rule.</li> <li>- Strengthen the debt management framework</li> </ul>
Strengthening supervision of the financial sector and bolstering financial stability	<ul style="list-style-type: none"> <li>- Assist Bank of Botswana implement Basel III.</li> <li>- Provide assistance to upgrade the regulatory framework, including the resolution framework (deposit insurance mechanism) and the national payment system.</li> <li>- Assist NBFIRA in moving toward risk-based supervision of non-banks financial institutions.</li> <li>- Address deficiencies in the AML/CFT supervisory framework for the financial sector.</li> <li>- Conduct a financial stability assessment</li> </ul>
Modernize monetary policy	<ul style="list-style-type: none"> <li>- Modernize the liquidity management framework.</li> <li>- Strengthen forecasting capacities.</li> </ul>
Improve the quality of statistics	<ul style="list-style-type: none"> <li>- Complete the migration to GFSM 2014 and extend the coverage to general Government.</li> <li>- Enhance the compilation of national accounts and migrate to 2008 SNA.</li> <li>- Compile a producer price index.</li> <li>- Expand coverage of monetary and financial statistics to include other financial corporations (e.g. pension funds and insurance corporations).</li> <li>- Improve the BOP and IIP data in conformity with BPM6 requirements.</li> </ul>

## Appendix I. Revamping Botswana's Fiscal Rule Framework-Methodology

### Background

1. **Botswana's current fiscal rule framework consists of a gross debt ceiling of 40 percent of GDP (with equal 20-20 shares on external and domestic debt).** In recent years, in particular since the global financial crisis, Botswana has seen a structural decline in fiscal (mineral and SACU) revenues, deteriorating fiscal balances (due, in part, also to a growing expenditure bill), and a resulting sharp decline in reserve buffers, while public debt has remained stable. Moreover, volatile revenues associated with commodity cycles and SACU proceeds, pose additional challenges for fiscal policy. Together, these challenges call for revamping Botswana's fiscal rule framework.
2. **A well-designed fiscal rule should enable Botswana to sustain buffers for intergenerational equity purposes and smooth commodity cycles.** NDP 11 proposes a new operational fiscal rule whereby the recurrent budget is to be financed from non-mineral revenues, while mineral revenues shall be used in-part to finance investment in physical and human capital (60 percent) and the remaining 40 percent saved for future generations. Primary concerns with this rule are that it prescribes procyclical investment expenditure and an ad-hoc allocation between savings and investment with levels that seem difficult to achieve given the data.

### Designing a Fiscal Rule for Botswana

3. **Fiscal rule frameworks generally comprise an anchor (long-term target) and medium-term operational rule consistent with this anchor.** One standard framework for commodity exporters is the permanent income hypothesis (PIH) model, which sets an anchor on net wealth, defined as net financial assets plus resource wealth, and sets an operational rule for the non-resource primary balance (NRPB). The framework allows to compute the NRPB target consistent with intergenerational equity, i.e. that which would stabilize net wealth at its current level. However, caveats to the PIH framework include, among others, its reliance on accurate estimates of long-term commodity prices, its compatibility with very low net financial assets (high net debt) which can carry risks, and its exclusion of both physical assets from the definition of net wealth and feedback effects of public investment on growth.
4. **An alternative fiscal rule framework comprises an anchor on net debt,** or a ceiling on gross debt combined with a floor on financial assets, with a target path for the (structural) overall or primary balance as an operational rule. This type of rule would require Botswana to establish an explicit anchor for financial assets and a target annuity for intergenerational equity objectives, in addition to its current ceiling on gross debt. The anchors should be calibrated so that assets are in line with the ARA metrics and include buffers needed for smoothing cyclical fluctuations.

**5. The returns required for intergenerational equity can be achieved through alternative government policy choices on paths for investment and savings.** Model simulations illustrate three policy paths for attaining the same annuity in 2050 by: (i) direct accumulation of financial assets (denoted ‘baseline’ scenario), (ii) lower accumulation of financial assets coupled with higher investments in infrastructure (denoted ‘infrastructure’ scenario), and (iii) even lower accumulation of financial assets coupled with investments in infrastructure, accompanied by structural reforms that raise TFP growth (denoted ‘infrastructure and TFP’ scenario). These scenarios, as well as other key modeling assumptions, are outlined below.

### Framework of Analysis and Main Assumptions

**6. Standard methods for the estimation and design of fiscal rules are employed and customized to incorporate important Botswana-specific issues.** In particular, a large fraction of revenue comes from SACU proceeds, which are highly volatile. In addition, given that debt has been low and is expected to remain low, the emphasis for designing the fiscal framework is less on attaining debt sustainability, and more on preserving and building buffers. The framework for analysis adds such features to the analysis in IMF (2018). Since we consider long-term horizons for intergenerational equity, most variables will be assumed to grow in tandem with GDP (akin to a balanced growth path that prevails while mineral resources are available). The full dynamic general equilibrium effects of shocks and changes in policy are abstracted away, but may be useful for the eventual calibration of the fiscal framework in Botswana.

**7. Government fiscal balance.** In the framework of analysis employed, the government saves in financial assets ( $A_t$ ), invests in physical capital<sup>1</sup> ( $K_t^g$ ), has recurrent expenses (proportional to non-mining GDP with a time varying ratio  $\mu_t$ ), services debt ( $D_t$ ), and obtains revenue from SACU proceeds and taxes on mining production ( $GDP_t^m$ ) and non-mining production ( $GDP_t^{nm}$ ). The overall deficit ( $d$ ) at every period  $t$  is defined as:

$$d_t = -SACU_t - \tau_t^{nm}GDP_t^{nm} - \tau_t^mGDP_t^m + I_t^g + \mu_tGDP_t^{nm} + (r_t^g + \Delta)D_t$$

where  $\tau_t^{nm}$  and  $\tau_t^m$  denote the average rate of taxation respectively on the non-mining and mining sectors,  $r_t^g$  and  $\Delta$  respectively denote the average interest and amortization rates on government debt, and  $s_t^A$  and  $I_t^g$  respectively denote savings in financial assets and investment in physical capital. Public asset stocks, which can take the form of financial assets or physical infrastructure, evolve with the following laws of motion:

$$A_{t+1} = A_t(1 + r_t^A) - d_t^A$$

$$K_{t+1}^g = K_t^g(1 - \delta^g) + \zeta_t I_t^g$$

<sup>1</sup> An extended version of the model can also consider government investment in human capital.

where  $r_t^A$  and  $\delta^A$  respectively denote the nominal return on assets and depreciation rate of physical infrastructure and  $\zeta_t$  denotes the efficiency of investment spending.<sup>2</sup> The law of motion for external financial assets focuses on the role of the government as driver of national savings (and thus current account and ultimately external financial assets).<sup>3</sup> The second equation is a standard capital accumulation equation applied to infrastructure. In the baseline scenario, government capital (infrastructure) is assumed to be kept constant as a share of GDP, thereby growing at a pace given by nominal GDP plus the depreciation rate; the alternative scenarios relax this assumption. As will be detailed later on, infrastructure affects GDP through a production function setting.

**8. Government debt.** It is assumed that gross debt is kept constant as a share of GDP, which is a conservative assumption for Botswana (debt peaked around 2011 below 30 percent of GDP and has been on a declining path, and below 20 percent of GDP, since 2017). The government can, however, use its external assets to finance fiscal deficits (as has been the recent practice) or accumulate reserves with a nominal return of 9 percent, calibrated to match the average returns on assets over recent years<sup>4</sup>. During an initial five-year adjustment period, a gradual fiscal consolidation path is assumed with the overall balance converging to zero by 2024. Thereafter, given the anchor for assets and implied required savings in financial assets each period, and under the assumption of constant debt, the overall deficit is determined for each period (causing implied recurrent expenditures – the residual in the equation for overall balance – to adjust as a share of GDP via  $\mu_t$ , namely any adjustment is assumed to take place on recurrent spending).

**9. Mineral production and prices.** Resource exhaustion is assumed after a 30-year horizon. Mining production is assumed to be constant in real terms for its lifespan, after which production halts. Commodity prices are also assumed to remain constant in real terms over this period. These assumptions are in line with current projections for diamond production and prices. Absent shocks, mining GDP would be driven by:

$$Y_t^{m,pot} = Y_1^m \eta^{t-1}$$

where  $Y_1^m$  denotes the initial value of mining GDP and  $\eta$  is the constant balanced growth rate of the economy (assumed at a nominal rate of 7 percent).

<sup>2</sup> In the simulations, it is assumed that  $\zeta_t$  is constant and unitary implying that investment is perfectly efficient. Lower values of  $\zeta_t$  would result in lower capital accumulation, higher required overall surpluses, and lower GDP.

<sup>3</sup> Movements in private absorption that are not proportional to GDP are thus abstracted away, as they could be only properly captured in a full dynamic general equilibrium setting, which is outside of the objectives of this preliminary analysis of the effects of fiscal rules in Botswana.

<sup>4</sup> The investment strategy of reserves recently changed to include assets other than foreign risk free government bonds; it is managed by external asset managers and 9 percent was the most recent data; sensitivity of the analysis to this rate of return was performed.



**10. Non-mining potential GDP.** Total potential GDP is given by the sum of potential mining and non-mining sector components, where the latter is given by the following production function exhibiting constant returns to scale:

$$Y_t^{nm,pot} = z_t (K_t^g)^\gamma K_t^\alpha H_t^{1-\alpha-\gamma}$$

where  $z_t$  denotes total factor productivity for non-mining production,  $K_t$  and  $H_t$  denote the physical capital stock (excluding public infrastructure) and human capital stock (assumed to follow a law of motion with depreciation), and coefficients  $\alpha$  and  $\gamma$  are assumed to take values between 0 and 1. As such, the model allows public investment in physical capital to have positive spillover effects on TFP. In line with standard assumptions in the literature:  $\alpha$  and  $\gamma$  measure 0.3 and 0.1, respectively.

**11. Mining output and SACU revenue shocks, and their direct effects on GDP.** To simulate the fiscal rule performance in the face of adverse commodity cycles and other sources of revenue, shocks to mining output and SACU proceeds are included in the model and jointly estimated using annual data for the period 1994-2018. An AR(1) process is assumed for the cyclical components of these variables (obtained using an HP filter with smoothing parameter 6.25), with mean-zero multivariate normal error term allowing for the shocks to be correlated, and estimated values are obtained for the persistence coefficients and variance-covariance matrix. These estimated processes are then simulated using 10,000 runs to produce shock series. Recent and reliable input-output matrices are not available for Botswana, but we assume that a one percent shock to mining production translates into a 0.04 percent shock to non-mining output, to capture the linkages between these sectors. This response would be in line with the average response of the last 5 years.

**12. Alternative scenarios.** An 'infrastructure' scenario assumes lower savings in financial assets, and that all of the lower savings are channeled to public investment in infrastructure. A scenario with the same investment in infrastructure but where structural reforms are implemented is also considered. Structural reforms are assumed to take time to start having effects (concretely, we assume that their effects start at year 6 and last for the next 8 years and reforms are assumed to increase non-mining TFP by 0.08 percent per year over an 8 year period, broadly in line with panel estimates of the effects of structural reforms on productivity for Botswana reported in the Staff Report).

### Implications for Fiscal Balances and GDP

**13. Achieving the target annuity in thirty years' time requires realizing fiscal surpluses, after a five-year adjustment period, in each of these scenarios.** The baseline, which assumes the capital stock ratio to GDP is kept constant over time, and high savings in assets, requires a target overall surplus of 0.8 percent of GDP. Higher investments in physical capital infrastructure is costly due to capital depreciation, despite delivering some positive spillover effects on TFP and hence fiscal revenues, requiring higher fiscal surpluses. If higher investments in physical capital are accompanied by structural reforms that substantially raise TFP, the fiscal surpluses required can be much smaller.

**14. These alternative paths for reaching intergenerational equity generate different paths for real GDP.** First, we allow changes in the overall balance (fiscal impulse) to have effects on non-mining GDP. The assumption is that for each 1 percent of consolidation (expansion) non-mining GDP contracts (expands) by 0.4 percent. Second, high savings in financial assets come with an opportunity cost of investing the value of these assets in productive capital which can generate higher growth, especially if accompanied by structural reforms that increase productivity in the economy.

### Impact of Shock Realizations

**15. Stochastic simulations, focused exclusively on shocks to mining and SACU revenues, show that necessary long-run asset accumulation and medium-term buffers remain within desired targets with at least 75 percent probability.** Botswana has large financial assets and should be able to afford smoothing out large shocks. First, we considered the impact of a permanent shock to mining revenues (for a shock equivalent in the highest 80 percentile of the distribution). We then estimated the necessary resources so that adjustment in spending necessary after such a shock is not done immediately, but smoothly over 3-5 years, and found required buffers to be in the range of 2-3 percent of GDP. Second, we generated standard stochastic simulations (shocks exclusively based on mining and SCAU proceeds). According to these simulations, the probability that asset accumulation falls short of the target required for intergenerational equity, under the baseline, is less than 25 percent. The baseline also attains the ARA metric including cyclical buffers with at least 75 percent probability. Strategies that result in lower financial asset accumulation, including paths with higher investment in infrastructure, would leave the economy more exposed. This highlights the importance of debt management optimization strategies that take into account the cost of borrowing (as shocks could be smoothed out by borrowing) against returns on assets in financing fiscal deficits, as well as the relative risks associated with the respective financing strategies.

**16. The above are conservative bounds as they are built assuming the nominal ceiling for recurrent expenditure of 7 percent binds (after the transition period).** VAR estimations for Botswana, following the methodology of Frankel et al. (2013), show that fiscal policy has been neutral with respect to the business cycle over the recent decade. While this is better than most emerging and developing countries, for which fiscal policy has predominantly been procyclical – thereby exacerbating the underlying business cycle –, some countercyclical policy may be desirable, and the present framework would allow for some flexibility.

## References

Frankel, Jeffrey A. & Vegh, Carlos A. & Vuletin, Guillermo, 2013. "[On graduation from fiscal procyclicality](#)," *Journal of Development Economics*, Elsevier, vol. 100(1), pages 32-47.

International Monetary Fund, 2018, "How to calibrate fiscal rules: A primer," *How to Notes Series*, Fiscal Affairs Department, Washington D.C.

## Appendix II. Details of a General Equilibrium Model for Botswana

**1. The model is a dynamic general equilibrium model of a small open economy with multiple sectors.** There are heterogeneous households, both within and across sectors. Urban and rural households differ with respect to their occupations as well as to their access to financial intermediaries. Within-sector heterogeneity is due to household specific shocks to productivity.

### Economic Sectors

**2. There are four types of occupations in the economy, three urban and one rural:**

- Agricultural workers (rural);
- Entrepreneurs (urban);
- Public sector workers (urban); and
- Private sector workers (urban).

Households are confined to their sectors and cannot easily switch occupations.

### Production

**3. Small plot owners use their own labor to produce agricultural goods while large holders can employ others.** Agricultural workers differ in their land holdings (some are small farmers and others own large plots) and employ land, labor and fertilizer to produce.

**4. Public sector workers work for the government which does not produce marketable goods, while private sector workers provide their labor to the entrepreneurs.** Private and public sector workers can also devote some of their time to household enterprises.

**5. Entrepreneurs produce tradables and non-tradables using capital, labor and energy.** Tradable goods can then either used for consumption or investment. Their price is determined in international markets (small open economy assumption). Non-tradables are produced only for the domestic market. Capital depreciates over time, so that new investments are necessary to maintain the capital stock.

**6. Entrepreneurs also produce diamonds using a capital-intensive technology.** Diamonds are a tradable good, and their prices are determined in international markets (Botswana influences the price of diamonds but from the perspective of the model what matters is that the price is exogenous so whatever influence Botswana has can be incorporated by moving the price as necessary).

Production Structure			
Good	Producer	Input	Use
Agricultural goods	Agricultural workers	Land, labor, fertilizer	Consumption, and input production of agricultural export
Tradables	Entrepreneurs	Private sector labor, and capital	Consumption, investment, exports
Non-tradables	Private/public sector workers. Entrepreneurs	Informal technology	Consumption
Diamonds	Entrepreneurs	Capital	Exports

## Preferences and Household Decisions

**7. Households live forever and are forward looking.** In every period, they decide how much of their disposable income to consume and how much to save or borrow, facing credit constraints. Households face uncertainty regarding their future income and are risk averse: they want to avoid large fluctuations of their consumption over time. Having access to a financial intermediary allows them to accumulate a buffer of financial wealth as insurance against future drops in income. Households facing more severe shocks can borrow to smooth consumption if they have access to finance.

**8. Households also decide how to allocate their consumption expenditure over two food items** (domestic agricultural goods and imported food) and the non-food goods (tradables and non-tradables).

**9. Workers choose how much of their time to devote to the formal labor market and how much to work in the informal sector** (defined as the output of household enterprises/production, not subject to income taxes) based on the income per hour that can be obtained in each sector.

## Financial Intermediation and Financial Sector Policies

**10. Financial intermediaries have two distinct roles in the economy:**

- They convert manufacturing and services goods into capital.
- They allow households to save and borrow.

## Fiscal Policy Parameters

**11. The government in the model has access to a rich set of mineral and non-mineral taxes and transfers to pay the public sector workers, to finance subsidies, and to provide insurance to vulnerable households.** These policies are captured by a set of exogenous policy parameters:

- A tax on entrepreneurs' capital income;
- A tax on private and public sector workers' wage earnings;
- Royalties on diamond production; and
- Sector specific and means-tested transfers and subsidies.

## Idiosyncratic Shocks

**12. Individual level productivity is subject to random changes over time, but these changes in productivity are different across households.** At each point in time, some households are lucky while others are unlucky. There is no aggregate uncertainty and, given the large number of households, a law of large numbers applies, so that the distribution of shocks across households within each sector remains constant. That is, the number of unlucky households is always the same.

## Equilibrium and Steady State

**13. At each point in time, prices, wages, and interest rates are set to ensure that the markets for credit, labor and the goods produced only for domestic consumption clear.** Moreover, given these prices (both in the present and future) and government policies, all household decisions are made to maximize the present value of lifetime utility. The prices of diamonds, and manufacturing goods are exogenously given.

**14. The economy is in a steady state.** Aggregate variables and prices are constant over time, as is the distribution of wealth, income, and consumption across households. The income, wealth, and consumption of individual households however changes over time with the realization of their idiosyncratic shocks.



INTERNATIONAL MONETARY FUND



## Appendix III. Draft Press Release

Press Release No. 20/xx  
FOR IMMEDIATE RELEASE  
[Month dd, yyyy]

International Monetary Fund  
Washington, D.C. 20431 USA

### IMF Executive Board Concludes 2019 Article IV Consultation with Botswana

On March xx, 2020, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation<sup>1</sup> for Botswana.

Persistently lower mineral revenues and SACU proceeds and delays in the needed fiscal adjustment, including the large increase in the wage bill, have contributed to a moderately overvalued exchange rate and eroded buffers and savings for future generations. These challenges, together with a severe drought, have contributed to slower real GDP growth and a deterioration in the fiscal and external balances in 2019.

Growth is expected to pick up in the near-term mostly driven by the mining sector. Yet, over the medium term, absent bold reforms, growth will remain around 4 percent, a level that is insufficient to achieve the authorities' objectives of reducing unemployment and transitioning to high-income status. Inflation is expected to remain within the Bank of Botswana's target range.

The outlook is subject to significant downside risks, including potential disruptions from the coronavirus, most of which will affect Botswana through diamond and SACU revenue. Over the medium and longer term, Botswana could also be affected by climate change.

In the FY2020 budget, the first after the October 2019 general election, the authorities envisage to resume fiscal consolidation, mostly through reprioritization of capital spending, cuts in non-priority recurrent expenditures and increases in fees, while the public wage bill will continue to increase. With a constrained fiscal position, the budget also acknowledged the need to transform the economy toward a private sector, export-led and knowledge-based

<sup>1</sup> Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses with officials the country's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board.

growth model, and increase the efficiency of public spending while aligning the human and physical capital on the transformation agenda.

### **Executive Board Assessment<sup>2</sup>**

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<sup>2</sup> At the conclusion of the discussion, the Managing Director, as Chairman of the Board, summarizes the views of Executive Directors, and this summary is transmitted to the country's authorities. An explanation of any qualifiers used in summing up can be found here: <http://www.imf.org/external/np/sec/misc/qualifiers.htm>.



**Table 1. Botswana: Selected Economic and Social Indicators, 2014–2025**

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
					Prel.	Projections						
(Annual percent change, unless otherwise indicated) <sup>1</sup>												
National income and prices												
Real GDP	4.1	-1.7	4.3	2.9	4.5	3.4	4.4	5.6	3.8	3.9	3.9	3.9
Mineral <sup>2</sup>	0.5	-19.6	-3.5	-11.1	7.4	-1.1	7.1	26.0	5.1	4.0	2.7	0.4
Nonmineral	4.9	1.7	5.5	4.8	4.1	3.9	4.1	3.3	3.6	3.9	4.1	4.4
GDP per capita (US dollars)	7,498	6,539	6,958	7,584	7,994	...	...	...	...	...	...	...
Consumer prices (average)	4.4	3.1	2.8	3.3	3.2	2.8	3.5	3.5	4.0	4.0	4.0	4.0
Diamond production (millions of carats)	24.7	20.8	20.9	22.9	24.4	24.0	25.8	25.3	26.0	26.8	27.5	27.5
Money and banking												
Monetary Base	-8.5	18.6	3.7	-13.7	17.5	9.4	7.7	7.0	7.8	8.0	8.3	8.5
Broad money (M2)	4.6	19.9	5.4	2.7	8.3	9.4	7.7	7.0	7.8	8.0	8.3	8.5
Credit to the private sector	13.7	9.0	9.0	5.3	6.6	5.6	7.9	7.3	8.1	8.3	8.3	9.1
(Percent of GDP, unless otherwise indicated)												
Investment and savings												
Gross investment (including change in inventories)	28.2	32.6	28.6	28.2	29.4	34.5	30.8	32.3	31.9	30.8	30.9	31.0
Public	8.2	8.8	8.5	8.2	8.0	6.6	5.6	5.0	4.8	4.6	4.4	4.2
Private	20.0	23.8	20.0	20.0	21.4	27.9	25.2	27.2	27.1	26.2	26.5	26.7
Gross savings	42.6	39.5	34.6	36.4	31.5	30.2	28.7	31.5	31.8	31.2	31.7	31.9
Public	19.8	16.1	16.2	15.2	12.1	9.2	10.2	10.8	11.1	10.7	11.1	11.5
Private	22.8	23.4	18.4	21.2	19.5	21.0	18.6	20.7	20.7	20.5	20.6	20.5
Central government finances <sup>3</sup>												
Total revenue and grants	38.3	31.2	33.2	30.9	27.7	25.5	28.2	27.0	26.8	25.9	26.3	26.1
Total expenditure and net lending	34.7	35.8	32.5	32.0	32.3	31.3	31.3	29.2	28.1	27.5	26.8	26.0
Overall balance (deficit –)	3.7	-4.6	0.6	-1.1	-4.6	-5.8	-3.1	-2.3	-1.3	-1.6	-0.5	0.1
Non-mineral primary balance <sup>4</sup>	-16.1	-18.1	-17.6	-14.3	-17.1	-15.4	-13.5	-12.8	-12.1	-11.2	-10.3	-9.3
Total central government debt	22.6	23.2	21.3	18.1	18.9	18.7	16.7	16.7	16.0	15.5	14.5	13.3
External sector												
Exports of goods and services, f.o.b. (% change)	8.2	-24.1	14.0	-15.7	9.8	-20.0	25.0	6.0	4.5	7.6	4.5	3.1
o/w diamonds	10.4	-28.4	24.6	-17.6	6.8	-24.9	31.3	-0.6	2.5	6.6	4.2	2.0
Imports of goods and services, f.o.b. (% change)	-2.1	-10.0	-14.6	-10.0	16.6	-3.8	14.4	1.6	1.1	5.6	3.6	3.3
Current account balance	10.7	2.2	7.8	6.1	2.1	-4.3	-2.1	-0.8	-0.1	0.4	0.8	1.0
Overall Balance	3.7	-5.4	-2.3	1.8	2.0	-7.7	-1.9	-0.9	0.0	0.9	1.3	1.4
Nominal effective exchange rate (2010=100)	94.8	94.9	95.1	95.4	95.5	...	...	...	...	...	...	...
Real effective exchange rate (2010=100)	104.3	105.2	104.8	105.0	105.1	...	...	...	...	...	...	...
Terms of trade (2005=100)	165.7	197.6	176.1	160.1	147.2	134.7	132.5	132.5	132.4	132.4	132.3	132.3
External public debt <sup>5</sup>	17.2	18.4	14.3	11.6	11.9	11.0	10.0	8.9	8.1	7.4	6.7	6.0
o/w public and publicly guaranteed	4.8	5.3	4.7	4.4	4.2	4.0	3.7	3.3	3.1	2.8	2.6	2.4
(Millions of U.S. dollars, unless otherwise indicated)												
Gross official reserves (end of period)	8,323	7,546	7,189	7,502	6,657	6,557	6,182	5,986	5,994	6,365	6,673	7,032
Months of imports of goods and services <sup>6</sup>	12.3	13.1	13.9	12.4	11.4	9.9	9.4	9.0	8.5	8.5	8.6	8.8
Months of non-diamond imports <sup>6</sup>	17.8	17.5	17.8	16.4	14.0	12.5	11.9	11.4	10.8	10.8	10.9	11.0
Percent of GDP	54.3	58.0	44.9	41.1	37.5	35.3	32.2	29.0	27.7	28.3	28.4	28.3

Sources: Botswana authorities and IMF staff estimates and projections.

<sup>1</sup> Calendar year, unless otherwise indicated.<sup>2</sup> Projections are based on diamond production due to lack of information on the breakdown of mining value added by mineral.<sup>3</sup> Year beginning April 1.<sup>4</sup> The non-mineral primary balance is computed as the difference between non-mineral revenue and expenditure (excluding interest receipts and interest payments), divided by non-mineral GDP.<sup>5</sup> Includes central government-guaranteed debt.<sup>6</sup> Based on imports of goods and services for the following year.