

# MONETARY POLICY STATEMENT 2010

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#### 1. INTRODUCTION

- 1.1 The Monetary Policy Statement (MPS) is the Bank's annual publication through which the policy framework that guides the formulation and implementation of monetary policy is communicated to stakeholders. In this respect, the Bank seeks to foster policy credibility, with a view to anchoring public expectations of low, predictable and sustainable inflation. The MPS provides an opportunity for the Bank to assess the performance of monetary policy and inform the public about any changes to the policy framework', thereby fulfilling the obligation of accountability and transparency in the formulation and implementation of The MPS also reviews economic trends and policy monetary policy. implementation in the past year and evaluates the extent to which inflation deviated from the Bank's medium-term inflation objective range of 3 – 6 percent. In looking ahead, the MPS assesses prospective developments with regard to the determinants of inflation, as well as the risks to price stability, and details the Bank's policy intentions for the ensuing year.
- Consistent with projections in the 2009 MPS, domestic inflation decreased from 1.2 13.7 percent in December 2008 to 5.8 percent in December 2009, thus falling within the Bank's objective range of 3-6 percent<sup>2</sup>. The decline in inflation was against the background of the world economic recession and the resultant fall in domestic economic activity, which led to low demand pressures on prices. Given subdued global economic activity, international commodity prices were generally lower compared to the previous year, while the rate of increase in food prices fell *markedly. In Botswana, the impact of the decrease in external demand was mostly* reflected in a fall in mining sector production (and exports) and the consequent decline in government revenue. While the growth of non-mining output was relatively strong, the risk of economic slowdown and moderate growth in personal incomes contributed to a deceleration in the rate of credit expansion. Overall, the rate of monetary expansion decelerated markedly from an annual increase of 21.1 percent in broad money supply (M3) in December 2008 to a contraction of 7.5 percent in 2009. This was due to the deterioration of the balance of payments, which resulted in a decrease in the level of foreign exchange reserves, and the slower rate of increase in both government spending and commercial bank credit to the private sector.
- 1.3 In consideration of these developments and the prospects for stable inflation over the medium term, the Bank maintained a monetary policy loosening bias in 2009; hence the Bank Rate was reduced five times during the year by a cumulative five percentage points. In implementing the exchange rate policy, the nominal effective exchange rate crawled downwards at a modest rate, with a marginal impact on inflation. However, bilateral exchange rates fluctuated significantly, with the Pula

Changes in the monetary policy framework could be motivated at various times by any of the following: economic developments, technical and operational advances, as well as policy innovations.

Inflation was within the objective range in the first half of 2002 (when the objective range was 4 – 6 percent) and during 2004 and 2007 (when the objective range was 4 – 7 percent).

- depreciating by 11 percent against the South African rand and appreciating by 11.1 percent against the Special Drawing Rights (SDR)<sup>3</sup>, largely reflecting the weakness of the US dollar.
- 1.4 Looking ahead, inflation is expected to rise in the short-term due to the increase in value added tax (VAT) from 10 percent to 12 percent⁴ and the winding down of base effects linked to the previous year's decrease in fuel prices. Nevertheless, inflation is projected to stabilise around the 3 − 6 percent medium term objective range from 2011, in the context of underlying low domestic demand pressures and benign foreign inflationary pressures associated with below-trend global and domestic economic activity. However, uncertainty with respect to oil prices and any inflationary increase in administered prices and government levies constitute a risk to the inflation outlook.

# 2. MONETARYPOLICYFRAMEWORK

- 2.1 The Bank's monetary policy objective is to achieve price stability, as defined by a sustainable, low and predictable level of inflation, within the 3 6 percent medium term objective range. Low inflation contributes towards the broader national objectives of sustainable economic growth and development through promoting savings mobilisation and productive investment, while fostering international competitiveness of domestic producers.
- 2.2 In order to attain price stability, the Bank uses interest rates and open market operations to affect demand conditions in the economy and ultimately the rate of price changes. Changes in interest rates and the availability of loanable funds influence choices with respect to credit demand and saving and, in turn, aggregate demand. Apart from interest rates and credit availability, domestic demand and economic activity is also influenced by factors such as fiscal policy (decisions relating to government spending and raising revenue) and trade and exchange rate developments. Domestic demand conditions<sup>5</sup>, along with other factors such as foreign inflation and changes in administered prices also contribute to inflation developments. In addition, public expectations about the future level of inflation have a bearing on employee wage adjustments and price increases by firms as employees and employers strive to maintain their level of real income.

<sup>3</sup> The SDR is the unit of account of the International Monetary Fund; it is the weighted average of the US dollar, euro, British pound and the Japanese yen.

The increase in VAT is effective from April 1, 2010. The simultaneous introduction of the 5 thebe per kilowatt hour levy on electricity consumption to finance the National Electrification Fund will have minimal impact on inflation.

In this instance, the rate of change in prices is associated with the variation in demand/supply conditions in the economy which are influenced by movements in interest rates and the exchange rate. Technically, this relates to the net impact of changes in real interest rates and real exchange rates, which together are referred to as "real monetary conditions", on the availability of credit and domestic industry competitiveness (see Appendix II for a more detailed explanation).

- 2.3 The forecast-based approach to medium-term policy formulation that is implemented by the Bank enables an assessment of the various factors that can impact on future domestic inflation. The framework allows for a differentiation of factors that are likely to lead to a longer-lasting deviation of inflation from the objective range from those that have a transitory impact, as shown by the duration of their individual effect on the inflation forecast. The Bank is, therefore, able to generate an inclusive and broad-based forecast for inflation, which informs the determination of monetary policy response. In general, monetary policy responds to a sustained deviation of the inflation forecast from the objective range in order to achieve price stability in the medium term. In response, the Bank makes an assessment of the factors that impact on inflation, including public expectations, which could be influenced by domestic monetary policy. For example, interest rates would be increased to pre-empt potential macroeconomic instability and erosion of incomes and financial savings that would result from high and volatile inflation. Conversely, the Bank would reduce interest rates in the event of sustained low and rapidly falling inflation, a development which could be indicative of subdued economic activity. In this regard, the Bank pays particular attention to the performance of the economy vis-à-vis trend levels by monitoring the output gap<sup>6</sup>. A sustained level of economic performance above trend is potentially inflationary and could signify the need to increase interest rates to dampen inflationary pressures, while output below trend could require a reduction of interest rates to stimulate economic activity.
- 2.4 The Bank also implements the crawling band exchange rate mechanism that is aimed at maintaining international competitiveness of domestic producers by stabilising the real effective exchange rate (REER). Attaining inflation equal to that prevailing in trading partner countries would indicate that Botswana producers are price competitive at a given level of the nominal effective exchange rate (NEER). In part, stability of the REER is attained through adjustment of the NEER of the Pula, but it could also be realised when domestic inflation is equal to inflation in trading partner countries. Thus, in instances where the inflation objective is higher than the forecast inflation in trading partner countries, a downward crawl of the NEER would be required to maintain international competitiveness of exports and domestic tradeable goods. Conversely, an upward crawl would be implemented in the event of the domestic inflation objective being lower than forecast inflation of trading partner countries. However, it is fundamental to note that durable international competitiveness is attained through productivity improvements.
- 2.5 Overall, the direction of both the real exchange rate and real interest rates, measured by the real monetary conditions index, provides an indication of policy performance and the likely influence of monetary policy on inflation (and economic activity). In this respect, an increase in real interest rates and an appreciation of the REER would indicate a tightening of monetary policy (or monetary conditions) that would be necessary to mitigate inflationary pressures,

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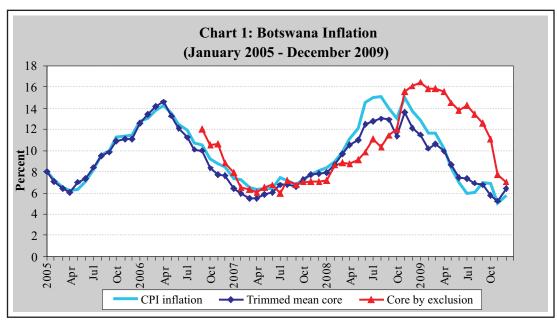
In general, the output gap refers to the difference between long-term trend output and actual output (Appendix II).

but it could also result in a slowdown in economic activity. Conversely, a reduction in real interest rates and a depreciation of the REER would imply a loosening of monetary policy, which may be necessary to stimulate output growth, but it is also potentially inflationary.

2.6 To facilitate a timely policy response and dissemination of information, the Bank's monetary policy framework entails a regular review of economic developments and the inflation outlook which, in turn, has implications for the monetary policy direction as determined by the Monetary Policy Committee. The post-meeting dissemination of information is intended to inform the public about relevant economic developments, inflation outlook and likely monetary policy response. This approach helps to influence inflation expectations and contributes to sustaining policy credibility, which is critical in achieving long-term price stability. Appendix II provides explanations of some of the key variables involved in the Bank's monetary policy framework.

# 3. INFLATION TRENDS AND OTHER ECONOMIC DEVELOPMENTS IN 2009

3.1 Inflation trended downwards in 2009 and was within the 3-6 percent objective range by the end of the year (Chart 1), in the context of lower international commodity prices and subdued demand pressures. Headline inflation fell from 13.7 percent in December 2008 to 6 percent in July 2009, largely reflecting the decrease in fuel prices. Thereafter, inflation rose to 7 percent in September, due mostly to the winding down of the favourable base effects arising from the fuel price reductions in the second half of 2008 and a significant increase in private house rentals. Inflation subsequently eased to 5 percent in November 2009, as the impact of the previous year's increase in the alcohol levy dropped out of the inflation calculation; it then rose to 5.8 percent in December 2009. The 16 percent trimmed mean measure of core inflation also decreased from 12.1 percent in December 2008 to 6.4 percent in December 2009, thus providing additional evidence of the generalised lower rate of price increases that is associated with less robust economic conditions than was the case the previous year. Core inflation excluding administered prices also decelerated sharply from 16.1 percent to 7 percent in the same period.



Source: Central Statistics Office.

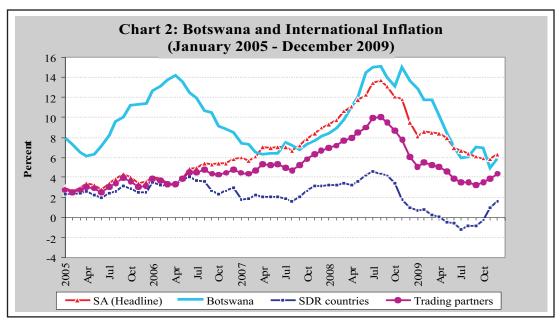
- 3.2 Global inflationary pressures were subdued during 2009, mainly reflecting the impact of the economic recession that prevailed in the first half of the year. The collapse in world demand due to the recession resulted in much lower commodity prices (compared to 2008), low capacity utilisation and weak labour markets, resulting in minimal upward pressure on wages and other prices. As a result, some of the advanced economies (USA, UK and Japan) experienced a decrease in the price level - although, except for Japan, there was no sustained deflation. World inflation decreased from 6.3 percent in 2008 to 2.7 percent in 2009, with global output growth slowing considerably from 3 percent in 2008 to a contraction of 0.8 percent in 2009<sup>7</sup>. Meanwhile, international oil prices have been much lower than the levels recorded in 2008, when they peaked at USD147 per barrel in July. However, oil prices rebounded from a low of USD38 per barrel in December 2008 to around USD80 per barrel in December 2009, thus reflecting entrenchment of expectations of global economic recovery, depreciation of the US dollar and production cuts by the Organisation of Petroleum Exporting Countries (OPEC). As a result, domestic fuel prices were increased in June and August 20098.
- 3.3 Average inflation in SDR countries fell from 3.4 percent in 2008 to zero percent in 2009, as some of the major economies experienced a decrease in the price level

<sup>7</sup> World Economic Outlook published by the International Monetary Fund (January 2010).

<sup>8</sup> Prices for petrol, diesel and illuminating paraffin were increased by 12.5 percent, 9.9 percent and 4.5 percent, respectively, in June, and by 8 percent, 0.9 percent and 4.8 percent, respectively, in August 2009.

<sup>9</sup> USA, UK, Japan and Euro zone.

during the year. In South Africa, inflation decreased from 9.5 percent in 2008 to 6.3 percent in 2009, thus falling outside the country's medium term target range of 3 – 6 percent<sup>10</sup>. Overall, the trade-weighted average inflation of Botswana's trading partner countries decelerated from 6.1 percent in 2008 to 4.4 percent in December 2009<sup>11</sup>. Chart 2 shows a comparison of inflation trends for Botswana and trading partner countries.

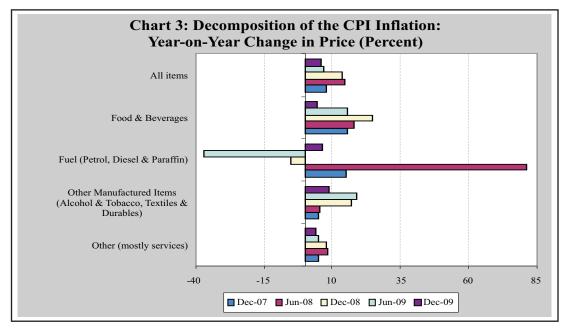


Source: Bank of Botswana

3.4 Although the increase in fuel prices in 2009 is estimated to have contributed 0.6 percentage points to domestic inflation, the overall decrease in the cost of fuel, compared to 2008, exerted substantial downward pressure on inflation. Similarly, the lower rate of increase in food prices during 2009 was disinflationary. Meanwhile, adjustments in public transport fares and the cost of education are estimated to have added 0.6 percentage points to inflation in 2009. Chart 3 shows a decomposition of the CPI for the period December 2007 to December 2009 into four broad categories, viz., food, fuel, other manufactured items and other (mostly services).

<sup>10</sup> Effective January 2009, headline inflation replaced the CPIX rate of inflation as the target measure of inflation for South Africa. In October and November 2009, headline inflation fell within the target range for the first time in more than two years.

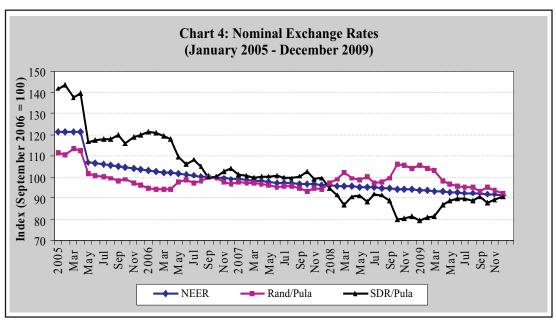
<sup>11</sup> The trade-weighted average inflation comprises South Africa's headline inflation and SDR inflation.



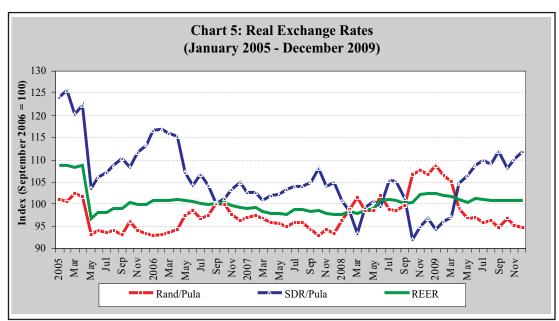
Source: Central Statistics Office and Bank of Botswana calculations.

3.5 By tradeability, domestic tradeables inflation decreased sharply from 26.4 percent in December 2008 to 1.9 percent in December 2009 as the impact of the November 2008 increase in the alcohol levy dissipated. Similarly, the annual increase in the cost of imported tradeables fell significantly from 11.9 percent in December 2008 to -1.7 percent in July 2009, thus signifying the impact of lower fuel prices. Imported tradeables inflation rose to 6 percent in December 2009 as the cost of fuel stabilised and the previous year's price reduction dropped out of the inflation calculation. The 2.6 percent increase in motor vehicle prices in December 2009 also contributed to the rise in inflation for imported tradeables. Despite the 11 percent annual depreciation of the Pula against the South African rand in the twelve months to December 2009, price increases for imported goods were moderate because of low demand pressures<sup>12</sup>. Nevertheless, inflation for non-tradeables rose from 6.4 percent in December 2008 to 8.5 percent in December 2009. Overall, as a result of counter-balancing 11.1 percent appreciation of the Pula against the SDR, the trade-weighted nominal effective exchange rate depreciated by 2.7 percent in the year to December 2009 (Chart 4).

The South African rand has a larger influence on domestic price developments as South Africa is the principal source of imports and the South African rand is more heavily weighted in the Pula basket.



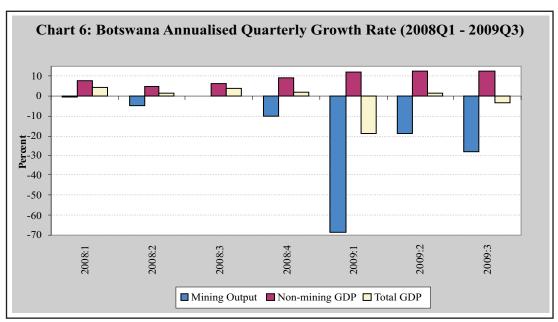
Source: Bank of Botswana



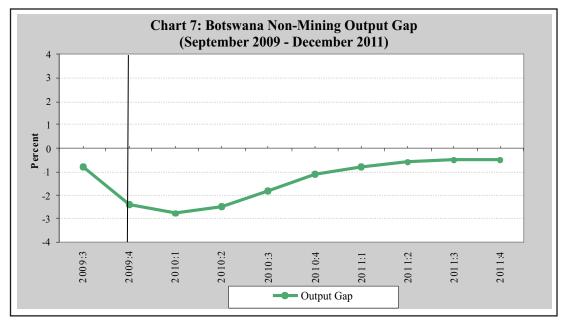
Source: Bank of Botswana

3.6 In 2009, domestic demand pressures were low largely due to the impact of the slowdown in global economic activity on diamond production and government revenue. In turn, the resultant decrease in the level of foreign exchange reserves, and the slower growth in government expenditure and commercial bank credit to the private sector, contributed to a significant deceleration in monetary expansion. In terms of output, mining production in the year to September 2009 was 38.4 percent lower than in the corresponding period in 2008, and this resulted in overall GDP decreasing by 6.7 percent in the same period (Chart 6 shows GDP growth rates between the first quarter of 2008 and the third quarter of 2009). In contrast,

non-mining GDP increased by a robust 12.4 percent in the year to September 2009, with notable growth in construction (15.9 percent), social and personal services (13.6 percent), and transport and communications (10.6 percent). However, there are indications of a decline in non-mining output growth as shown by the change in the output gap from positive to negative in the second half of 2009 (moving from above trend to below trend - Chart 7).



Source: Central Statistics Office

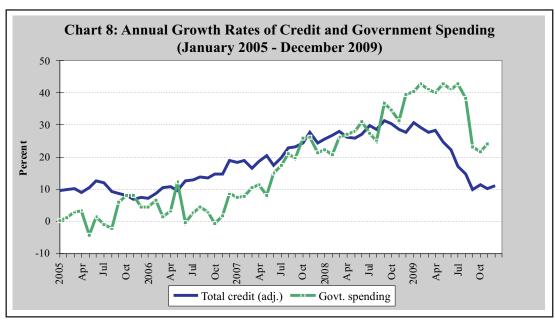


Source: Bank of Botswana

- 3.7 Growth in broad money decelerated from an annual increase of 21.1 percent in 2008 to a contraction of 7.5 percent in 2009 as net foreign assets declined by 11 percent, compared to an increase of 20.4 percent in 2008. Credit growth also eased markedly from 27.7 percent in December 2008 to 15.2 percent in December 2009 (Chart 8). This was due to restrained demand for and supply of credit in an uncertain economic environment, an increase in loan loss provisions, the absence of an across-the-board wage increase for civil servants in 2009, and base effects associated with the acceleration of credit growth in 2008. In 2008, household credit demand increased partly due to the increase in salaries of civil servants, while businesses also increased their borrowing markedly; hence growth in credit to households and businesses decreased from 21.5 percent and 36.9 percent in 2008 to 17.4 percent and 12.3 percent in 2009, respectively.
- 3.8 Consistent with developments in other factors influencing monetary expansion, annual growth in government expenditure slowed significantly in 2009. In the year to November 2009, government expenditure rose by 24.1 percent compared to 30.4 percent in the year to November 2008. This was due to a slowdown in the annual increase in development expenditure in the same period, from 64.3 percent to 29.8 percent. Growth in recurrent spending increased from 19.4 percent to 21.6 percent in the same period.
- 3.9 The increase in government expenditure was much higher than the budgeted growth of 5.3 percent for the fiscal year 2009/10, which was announced in the Budget Speech (February 2009). Moreover, government expenditure for the fiscal year to March 2010 is projected to grow by 15.5 percent compared to the 2008/2009 spending<sup>13</sup>. Although existing spending programmes were largely maintained in order to complete projects that had commenced and, as a countercyclical measure to support economic activity, the sharp contraction in revenues has had adverse implications for the government budget. The budget deficit increased from P4.7 billion in 2008/09 to P13.4 billion in 2009/10, and was partly financed through borrowing funds from, among others, two multilateral institutions, the African Development Bank (AfDB) and World Bank, to ease expenditure constraints<sup>14</sup>.

As reported in the 2010 Budget Speech, the higher-than-budgeted growth in government expenditure reflects the impact of supplementary ministerial allocations that were made in December 2009, inadequacies in budget administration as reflected in cost overruns, award of tenders without enough funds and change of scope of projects.

The Government was granted a loan of USD 1.5 billion (approximately P10.5 billion) by the African Development Bank (AfDB) to help finance the deficit. In addition, the Government acquired a loan of USD 186 million from the World Bank to fund the country's Integrated Transport Project, while proceeds from the domestic bond programme have been earmarked for the development of tertiary education infrastructure.



Source: Bank of Botswana

#### 4. MONETARYPOLICYIMPLEMENTATION IN 2009

- 4.1 During 2009, monetary policy was conducted in an environment of a global economic recession, generally low inflationary pressures, weak mining production and the expected transition to below trend growth for non-mining output. The projected path for these variables (global and domestic output and inflation) were largely realised, as had been anticipated in the 2009 MPS, while the forecast beyond 2009 is largely unchanged. The Bank, therefore, maintained a monetary policy loosening bias with a view to providing economic stimulus in an environment in which the potential for sustained fiscal stimulus was constrained by the decline in government revenue. Furthermore, there were prospects to realise a low and stable inflation in the medium-term. Accordingly, the Bank Rate was reduced on five occasions by a cumulative 5 percentage points in 2009, and ended the year at 10 percent (Table 1). The commercial banks' prime lending rate came down from 16.5 percent at the end of 2008 to 11.5 percent at the end of 2009.
- 4.2 The Bank continued to use open market operations to support monetary policy through absorption of excess liquidity in the banking system in order to maintain the desired level of interest rates. In the context of monetary policy easing, the yield on both the 14-day and 3-months Bank of Botswana Certificates (BoBCs) fell from 12.55 percent to 7.12 percent. Meanwhile, the average 88-day deposit rate, which was 8.53 percent in December 2008, declined to 5.79 percent in December 2009.
- 4.3 Real money market interest rates, which were negative at the beginning of 2009, became positive from March 2009, while the REER depreciated. The overall policy dynamics were such that the decrease in interest rates (5 percentage points for the

Bank Rate) was lower than the decrease in inflation (7.9 percentage points), and this meant a tightening of monetary policy<sup>15</sup>. For example, the real 14-day BoBC rate increased from -1.01 percent in December 2008 to 1.3 percent at the end of 2009<sup>16</sup>. This effect was partially offset by the 1.4 percent depreciation of the REER, which resulted from a downward crawl of the nominal exchange rate that was larger than the differential between inflation in Botswana and average inflation of trading partner countries. Overall, real monetary conditions as measured by the combination of changes in the REER and real interest rates were relatively tight in 2009 (Chart 10), thus contributing to the easing of inflationary pressures.

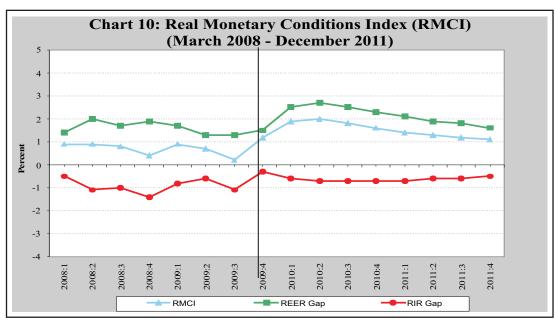
Table 1: Bank Rate - 2009

Month	Bank Rate before Change (percent)	Magnitude of Change (basis points)	Bank Rate after Change (percent)
February	15	100	14
April	14	100	13
June	13	150	11.5
August	11.5	50	11
October	11	-	11
December	11	100	10
Cumulative change		500	

Source: Bank of Botswana

It should be noted, however, that this is only a partial analysis of contemporaneous changes in variables, while a forward-looking framework can involve measured policy changes that recognise the lagged impact of policy on inflation and output.

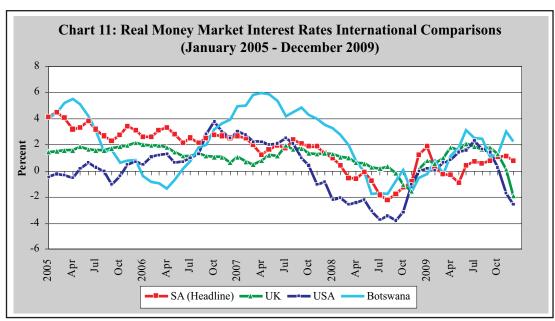
<sup>16</sup> Real 3-months money market interest rates were 2.3 percent, 0.8 percent, -1.9 percent, -2.6 percent and -0.6 percent in December 2009 for Botswana (3-month BoBCs), South Africa, UK, USA and the Euro zone, respectively.



Source: Bank of Botswana.

#### Notes:

- (1) The REER Gap is a measure of the deviation of the real South African rand/Pula exchange rate from its trend value.
- (2) The real interest rate (RIR) Gap is a measure of the deviation of real interest rate (3-months real BoBC rate) from its trend value.
- $(3) \textit{ The real monetary conditions index (RMCI) is a weighted average of the REER \textit{ Gap and RIR Gap}.}$



Source: Bank of Botswana.

### 5. OUTLOOK FOR INFLATION

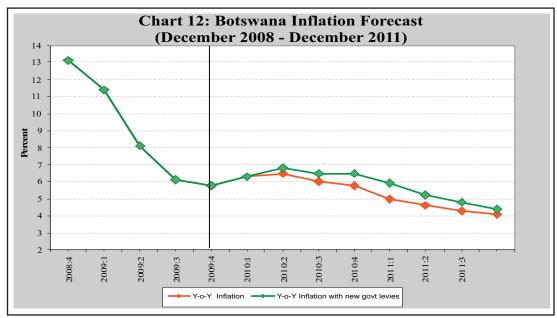
- 5.1 World GDP is projected to improve significantly in 2010 as more economies continue to emerge from recession (Appendix Charts A1 and A2). However, economic recovery in developed economies is slow and, in some cases, fragile, while concerns about the build-up of government debt in the wake of fiscal expansion is growing. Furthermore, there is a high rate of unemployment and slow improvement in income levels, both of which contribute to low demand. On the other hand, there are prospects for faster recovery in emerging market economies. In particular, economic expansion in Asian economies is underpinned by China's manufacturing-led growth, which is supported by the substantial fiscal stimulus and the increase in bank lending.
- 5.2 The challenge facing monetary policy makers is the desire to strike a balance between supporting the still fragile economic recovery and rein in potential pressures on inflation. Central banks are also addressing strategies for an orderly withdrawal of policy stimulus packages in 2010. In the context of the still weak global financial system, the approach is to institute a gradual, internationally coordinated and transparent framework for withdrawal. It is anticipated that the major economies will strive to reduce their fiscal deficits in order to avoid inflationary pressures. However, the major economies are likely to maintain low interest rates in 2010 as this should lend support in the face of expected sluggish and fragile economic recovery. As part of a broad exit strategy, the reduction of fiscal stimulus packages is critical to mitigating loss of confidence in macroeconomic stability that could arise from increasing public sector debt in the medium-to long-term.
- 5.3 Overall, world GDP growth is projected to expand by 3.9 percent in 2010, thus reversing the contraction of 0.8 percent in 2009. Inflationary pressures are expected to remain subdued given below-trend world output growth and lower international commodity prices. Labour markets also remain weak, and this implies minimal upward pressure on wages and limited demand pressure on inflation. However, there are risks to the inflation outlook emanating from uncertainty about international oil prices and the potential rise in commodity prices that would accompany global economic recovery. World inflation is, therefore, forecast to increase from 2.7 percent in 2009 to 3.8 percent in 2010.
- 5.4 Average inflation in SDR countries is forecast to increase from zero percent in 2009 to 1.5 percent in 2010. South Africa's headline inflation is expected to decrease from 6.3 percent in 2009 to 5.8 percent in 2010, thus falling within the country's 3 6 percent inflation target. Meanwhile, the exchange rate influence on import prices in Botswana is expected to be minimal. Given the inflation objective range of 3 6 percent and forecast trading partner inflation in the range of 3 5 percent, there should be a marginal downward crawl of the NEER in 2010. Foreign price developments, as transmitted through imported inflation, are expected to have benign influence on domestic inflation.

- 5.5 Economic activity in Botswana is expected to recover and grow at a faster rate in 2010 than was the case in 2009. Overall, it is forecast that output in the medium term will remain below trend (Chart 7), partly due to the lagged effect of the hitherto relatively restrictive monetary policy and the impact of the global economic recession. Furthermore, the pace of output expansion will potentially be constrained by low demand due to the significant decrease in real government expenditure and reduction in real disposable income associated with the wage freeze. This will be further compounded by the impact of the 2 percentage point increase in VAT and anticipated upward adjustment of levies for government services and some utility tariffs. The anticipated below-trend growth is, therefore, against the background of the slower rate of monetary expansion, including a budgeted 3.7 percent annual reduction in nominal government spending<sup>17</sup>. It is also expected that credit growth will be restrained in the context of sluggish growth of personal incomes and an uncertain economic environment. With respect to the other source of increase in money supply, namely, net foreign assets, it is anticipated that, while exports will recover, receipts will continue to be lower than the levels reached prior to the global economic recession.
- 5.6 A recovery in output growth is also anticipated by domestic businesses, where confidence is shown to have markedly improved towards the end of 2009. However, the level of confidence is still substantially below that prevailing prior to the onset of the global economic downturn<sup>18</sup>. The indicative improvement in business confidence seems to be also partly underpinned by the willingness of the Government to increase national debt substantially in the medium term, rather than to significantly curtail its spending programme.
- 5.7 Given the projected below-trend economic activity and subdued disposable incomes, it is anticipated that domestic demand pressures on inflation will be low, as will be the impact of foreign price developments. It is estimated that the increase in VAT will add 1.7 percentage points to inflation from the second quarter of 2010 (Chart 12). In addition, there is an upside risk to the inflation outlook emanating from uncertain prospects for oil prices as the global recovery progresses, while any large increase in administered prices and government levies<sup>19</sup> would also exert upward pressure on inflation. Overall, on the basis of current information, it is expected that inflation will rise in the short-term, and stabilise around the Bank's medium-term objective range of 3 6 percent next year (Chart 12).

<sup>17</sup> At P12.1 billion, the deficit for the 2010/11 budget is less than the P13.5 billion for the 2009/10 budget. The Government intends to balance the budget by 2012/13. The deficit for 2010/11 is expected to be financed through a combination of drawing down the government's savings, external borrowing and the ongoing domestic bond issuance programme.

<sup>18</sup> This analysis compares results from the March and September 2009 Business Expectations Surveys.

<sup>19</sup> It was indicated in the 2010 Budget Speech that the realisation of budgeted revenue was premised on significant adjustments, including an increase in several fees and levies that have not kept up with the costs of providing the associated services.



Source: Bank of Botswana.

#### 6. 2010 MONETARY POLICY STANCE

- 6.1 The outlook for both inflation and output suggests a largely neutral monetary policy stance in the medium term. Notably, inflation, which is forecast to stabilise within the objective range in the medium-term, is expected to increase in the short-term due to transitory supply-side factors, while underlying inflationary pressures are projected to be low. A below-trend level is forecast for GDP, with output expected to increase toward trend levels in the medium term.
- 6.2 With prospects for low stable inflation in the medium-term, there is scope for monetary policy to support economic growth in an environment in which fiscal stimulus (or even government contribution to economic activity) is constrained by limited revenue. In addition, there is a case for accommodating an increase in money supply (especially credit to the business sector) to support economic recovery. However, the projected short-term increase in inflation implies a need to manage and forestall inflationary expectations that could be detrimental to long term price stability. Moreover, prospects for an expansionary monetary policy could be undermined by the potential risks to the inflation outlook. These include a faster pace of global economic recovery that would engender an inflationary increase in commodity prices (including oil prices), an overall increase in foreign inflationary pressures, and an inflationary increase in administered prices and government levies.

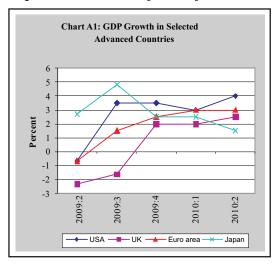
6.3 Consistent with its mandate, the Bank is committed to responding in a timely manner to any deviation of the medium-term inflation forecast from the inflation objective range of 3 – 6 percent, in order to engender expectations of low and sustainable inflation. With respect to the rate of crawl for the exchange rate, the Bank's inflation objective remains higher than the forecast average inflation of trading partner countries. This means that there will be a modest downward crawl of the Pula exchange rate in order to support international competitiveness of domestic industries and to enhance prospects for sustainable economic diversification.

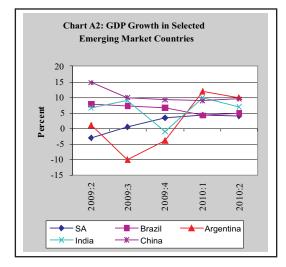
# 7. CONCLUSION

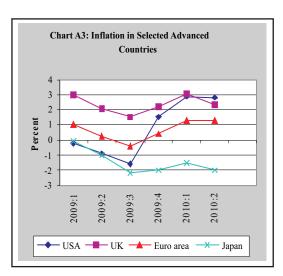
- 7.1 Inflation maintained a downward trend during most of 2009 and ended the year at 5.8 percent, mainly reflecting the disinflationary impact of the smaller rate of increase in the cost of food and the largely stable price of fuel.
- 7.2 Global economic activity is projected to improve in 2010 with more countries beginning to experience positive growth as coordinated policies (fiscal stimulus and monetary policy easing) that were designed to support demand take effect. However, recovery is largely constrained by high unemployment rates and the slow growth of incomes in advanced economies. As global output growth recovers, commodity prices (including oil prices) are expected to increase further, and this will exert upward pressure on inflation. Nevertheless, world inflation is expected to remain largely restrained in the context of the measured pace of economic recovery.
- 7.3 Domestic inflation is projected to rise in the short-term and should revert to within the Bank's inflation objective range of 3 6 percent on a sustainable basis from the first quarter of 2011. In an environment of below-trend output expansion, and all things being equal, there is some scope for an appropriate counter-cyclical adjustment of monetary policy, while it is important to recognise the potential for unfavourable expectations arising from short-term inflation developments. Overall, the Bank remains committed to responding appropriately to all economic and financial developments to attain price stability in the medium term without undermining sustainable economic growth.

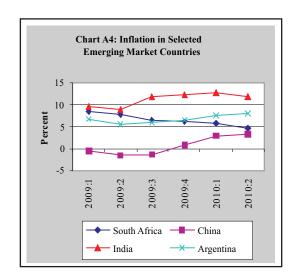
# Appendix I

# Output Growth and Inflation for Selected Countries









Source: JP Morgan Chase

Note: Data from Q4 2009 to Q2 2010 are forecasts

Appendix II

### Key variables and their role in the Bank's medium-term macroeconomic model

## (a) Output Gap

The output gap relates the measured level of economic performance to the long-term trend. Thus, it measures the state of the business cycle in terms of whether the level of output is below or above potential. Potential or long-run trend output is estimated by imposing a trend line on historical GDP data. It is assumed that deviations around the trend level represent an estimate of the output gap; the output gap is positive when measured GDP is above the trend level and negative when measured GDP is below the trend level. Measuring the output gap is useful in assessing inflation developments and the determination of the monetary policy stance. While the long-run trend level of output is associated with a stable rate of price increases, a positive output gap suggests upward inflationary pressures in the economy, a situation that would call for monetary policy tightening to mitigate inflationary pressures. Conversely, a negative output gap suggests downward inflationary pressures; this situation would require easing of monetary policy to restore economic activity to the trend level. It is assumed that the balance of pressure (beyond the trend level output) is on prices, thus pushing inflation up or down, as the case may be. In this regard, it is important to note that, while monetary policy can influence business cycle developments in the short-term, it cannot influence output permanently, meaning that it cannot change the long-run trend output. Changes in trend output are rather a function of structural changes, innovation and productivity improvements in the economy.

In the Bank's forecasting model, non-mining output is used as a proxy for output in the economy, as this is considered to be a measure of economic activity that is more responsive to variations in the monetary policy stance. Conceptually, the output gap is measured as a percent above/below the trend level of output.

# (b) Real Monetary Conditions Index (RMCI)

The RMCI is a measure that combines estimates of the deviation of the real exchange rate and real interest rate from their trend (equilibrium) values. It is, therefore, a weighted average of the real exchange rate gap and the real interest rate gap. It is assumed that trend/equilibrium levels with respect to these variables are consistent with the trend long-run output for the economy, while deviations represent relative tightness or easiness of financing conditions; and whether they constrain/stimulate demand. An increase in both the real interest rate gap and the real exchange rate gap would imply a tightening of financing conditions, hence it is associated with monetary policy tightening (similarly, a combination of changes that results in an increase in the index). Conversely, a decrease in both the real interest rate gap and the real exchange rate gap would imply a

loosening of financing conditions in the economy and is associated with an easing of monetary policy (similarly, a combination of changes that results in a decrease in the index).

For the equilibrium real exchange rate, and consistent with the policy objective, the Bank's forecasting model assumes that the equilibrium appreciation or deprecation is zero (empirically, the equilibrium exchange rate appreciation or depreciation is also estimated at around zero). Like that for GDP, the long-run trend for the equilibrium real exchange rate and the real interest rate is assumed to be represented by a fitted trend using historical data.

# (c) Monetary Policy Rule

The key equation of the model is the policy reaction function, which estimates the level of the policy variable (BoBC Rate and related Bank Rate) associated with the direction and level of both inflation and the output gap. In particular, interest rates are set each period in response to a weighted combination of the deviation of inflation from the objective/target and of output from equilibrium. The rule provides a tool to guide the direction and magnitude of interest rate changes in formulating and implementing monetary policy. However, the direction is of paramount importance while the magnitude could be influenced by assessment of alternative scenarios.

#### **General Comment**

Most variables in the Bank's forecasting model are expressed in terms of gaps (the difference between actual and trend values) or business cycle movements. This is guided by the widely accepted view on "long-run neutrality" of money, which postulates that real variables in the economy are, in the long run, essentially determined by real (supply-side) factors, and cannot be permanently influenced by monetary policy. Therefore, in the short- to medium-term, the role of monetary policy is to stabilise the business cycle component of the real values around the sustainable long-run equilibrium values consistent with the specified inflation objective. Supply-side factors are those factors that drive the supply of goods and services in the economy, in particular the amount and quality of capital and labour, as well as technological progress and the design of structural policies.