



MONETARY POLICY STATEMENT 2011

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1. INTRODUCTION

- 1.1 The Bank of Botswana (Bank) annual Monetary Policy Statement (MPS) communicates to stakeholders the policy framework that guides the formulation and implementation of monetary policy. In this regard, the Bank seeks to foster policy credibility with a view to anchoring public expectations of low, predictable and sustainable level of inflation. The Bank also fulfils the obligation of accountability and transparency in implementing the monetary policy mandate through publication of the MPS. Thus, the 2011 MPS evaluates economic trends during 2010, examines the main determinants of price developments and 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 economic and financial developments that are likely to affect the outlook for inflation in the medium term and, in turn, the Bank's policy choices for the ensuing year.*
- 1.2 In line with the prognosis of the 2010 MPS, inflation increased from 5.8 percent in December 2009 to 7.4 percent in December 2010 and was above the objective range for most of the year. The increase in inflation reflected mainly the increase in value added tax (VAT), from 10 percent to 12 percent, and the upward adjustment of some administered prices and government levies (Section 3). In the absence of these factors, it is estimated that inflation would have been within the objective range throughout 2010 as demand pressures on inflation were generally low. Following a reduction in 2009, output increased in 2010, although it was below trend and, therefore, exerting little pressure on prices. Household demand was restrained by slow growth in wages and the impact on disposable incomes of the increase in VAT and administered prices. At the same time, growth in government spending fell markedly, as the Government implemented measures to reduce the budget deficit. These factors also contributed to the relatively slow expansion in commercial bank credit, in particular to the household sector. Overall, money supply increased at an annual rate of 10.7 percent to December 2010, following a contraction of 0.8 percent in 2009, against the background of some acceleration in the rate of growth of credit and a decrease in the rate of decline in foreign exchange reserves.*
- 1.3 Globally, the pace of economic recovery was subdued, contributing to low inflationary pressures, while international commodity prices, including food prices, were relatively stable in the early part of the year. However, rising demand, especially from emerging market economies and, in some cases, supply shortages, resulted in a significant increase in a broad range of commodity prices, including food, towards the end of 2010.*
- 1.4 In the light of prospects for stable inflation in the medium term, the Bank maintained the policy rate (Bank Rate) at 10 percent for most of the year, followed by a reduction to 9.5 percent in December 2010. The Bank's policy stance was also influenced by the potential for backward-looking expectations as inflation was above the objective range for most of 2010 and projected to remain so into the first quarter of 2011. Implementation of the exchange rate policy involved a modest*

downward crawl of the nominal exchange rate (NEER), as the inflation objective for Botswana was above the expected inflation for trading partner countries. However, bilateral exchange rates fluctuated significantly, with the Pula depreciating by 7.4 percent against the rand and appreciating by 3.6 percent against the US dollar in the twelve months to December 2010.

- 1.5 Looking ahead, it is anticipated that inflation will remain above the objective range in the short term, thus reflecting the lingering impact of the increase in 2010 of VAT, administered prices and the alcohol levy, as well as the impact of the increase in administered prices in early 2011. In addition, it is projected that international food and oil prices¹ will rise markedly in the short to medium term. A full transmission of these higher costs to domestic prices implies that inflation will remain above the objective range into the first quarter of 2012.² In the absence of these factors, it had previously been forecast that inflation would fall within the objective range in the second quarter of 2011. Upside risks to the inflation outlook include any substantial increase in administered prices and government levies, as well as oil prices beyond the current projections.*

2. MONETARY POLICY FRAMEWORK

- 2.1 The Bank's monetary policy objective is to achieve price stability, defined as sustained inflation within a range of 3 – 6 percent. Such a low and predictable level of inflation contributes towards the broader national objective of attaining sustainable economic growth and development through promoting savings mobilisation and productive investment and, at the same time, fostering international competitiveness of domestic producers.*

- 2.2 In pursuit of the objective of price stability, the Bank uses interest rates and open market operations to affect demand conditions in the economy and, ultimately, the rate of price increases. Changes in interest rates and the availability of loanable funds influence choices with respect to credit demand and saving and, in turn, the determination of aggregate demand. Domestic demand conditions,³ along with other factors such as foreign inflation, the exchange rate, changes in administered prices and taxes, contribute to the level of inflation (Appendix I). Public expectations with respect to the future level of inflation also influence price increases by firms and wage adjustments.*

1 It is noted, however, that for Africa and, therefore, Botswana, an increase in food prices will be moderated to some extent by good harvest of the continent's predominant staple, maize, in many countries, e.g., South Africa, Zambia and Niger.

2 Overall, changes in food and oil prices have a relatively large impact on domestic inflation given their large weight (21.84 percent and 7.74 percent, respectively) in the consumer price index (CPI) basket.

3 In this instance, the rate of change in prices is associated with the variation in the demand/supply conditions in the economy, influenced by a change 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 are referred to as "real monetary conditions", on the availability of credit and domestic industry competitiveness.

- 2.3 *The monetary policy framework entails an assessment of prospective developments in various factors that can influence price movements, thereby allowing the Bank to generate an inclusive and broad-based forecast for inflation in the medium term that, in turn, informs the monetary policy response. In this way, the Bank determines the factors that are likely to lead to a longer-lasting deviation of inflation from the objective range (including public expectations) and those that have a transitory impact, as indicated by the duration of their disaggregated effect on the inflation forecast. In general, the Bank will change the monetary policy stance in response to a sustained deviation of the inflation forecast from the objective range and where the causal factors could be influenced by domestic monetary policy.*
- 2.4 *In considering the adverse effects of high inflation, which tend to erode the purchasing power of incomes and financial savings, the price stability objective takes account of the fact that sustained periods of low or rapidly falling inflation could be indicative of subdued economic activity, which would require policy easing to stimulate growth. In this regard, the Bank monitors the output gap⁴ as a leading indicator of the direction of inflation resulting from economic factors that cause domestic demand to deviate from the economy's capacity to supply goods and services (long-term output trend). A sustained level of economic performance above trend is potentially inflationary and could signal 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.*
- 2.5 *In this regard, the regular meetings of the Bank's Monetary Policy Committee (MPC) allow for periodic and timely review of economic developments and, hence, the inflation outlook, and the implications for the direction of monetary policy. This information, together with the policy decision, is disseminated to stakeholders after each meeting of the MPC, in order to help anchor inflation expectations and contribute toward sustained policy credibility, which is critical in achieving long-term price stability.*
- 2.6 *The achievement of price stability supports international competitiveness of domestic producers through stabilising the real effective exchange rate (REER) in the context of the crawling band exchange rate mechanism implemented by the Bank. In this respect, attaining inflation equal to that prevailing in trading partner countries would indicate that the competitiveness of Botswana producers is stable at the existing nominal effective exchange rate (NEER). However, if Botswana's inflation differs from that of trading partners, a stable REER is attained through the adjustment of the NEER of the Pula. Thus, in instances where Botswana's inflation objective is higher than the forecast inflation of 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 important to emphasise that the best way to achieve durable improvement in the international competitiveness of domestic producers is through gains in productivity.*

⁴ The output gap refers to the difference between long-term trend output, as an indicator of productive capacity, and actual output.

2.7 Overall, the direction of both the REER 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. Therefore, an increase in real interest rates and/or an appreciation of the REER would indicate a tightening of monetary policy (or monetary conditions) that would serve to mitigate inflationary pressures, but this could also result in a slowdown in economic activity. Conversely, a reduction in real interest rates and/or a depreciation of the REER would imply a loosening of monetary policy, which may be necessary to stimulate output growth, but this is potentially inflationary.

3. INFLATION TRENDS AND OTHER ECONOMIC DEVELOPMENTS IN 2010

3.1 Global inflationary pressures were generally restrained during 2010 owing to low levels of capacity utilisation, high rates of unemployment and well-anchored inflation expectations⁵ in major economies. However, there were indications of inflationary pressures in some of the fast-growing emerging market economies, notably China and India. With world output improving significantly from a contraction of 0.6 percent in 2009 to an expansion of 5 percent in 2010,⁶ global inflation increased from 2.5 percent in 2009 to 3.7 percent in 2010. Meanwhile, international oil prices fluctuated within a narrow range for most of the year, but mostly above USD70 per barrel, thus reflecting contrasting influences of uncertain prospects for global economic recovery and buoyant demand by some of the emerging market economies. However, oil prices exceeded USD90 per barrel towards year-end (the highest level in two years), against the background of optimism about the global economic recovery gaining momentum following an improvement in major stock markets and positive US economic data.

3.2 Inflation in SDR countries⁷ rose slightly from 1.6 percent in 2009 to 1.8 percent in 2010,⁸ while in South Africa headline inflation declined significantly from 6.3 percent in 2009 to 3.5 percent in December 2010, and has been within that country's medium-term target range of 3 – 6 percent since February 2010.⁹ Overall, the trade-weighted average inflation of Botswana's trading partner countries fell from 4.4 percent in 2009 to 2.8 percent in December 2010.¹⁰ Chart 1 shows inflation for Botswana and trading partner countries.

5 There had been, nevertheless, a risk of higher inflation expectations in the UK, where inflation was forecast to remain above target (2 percent) until 2012.

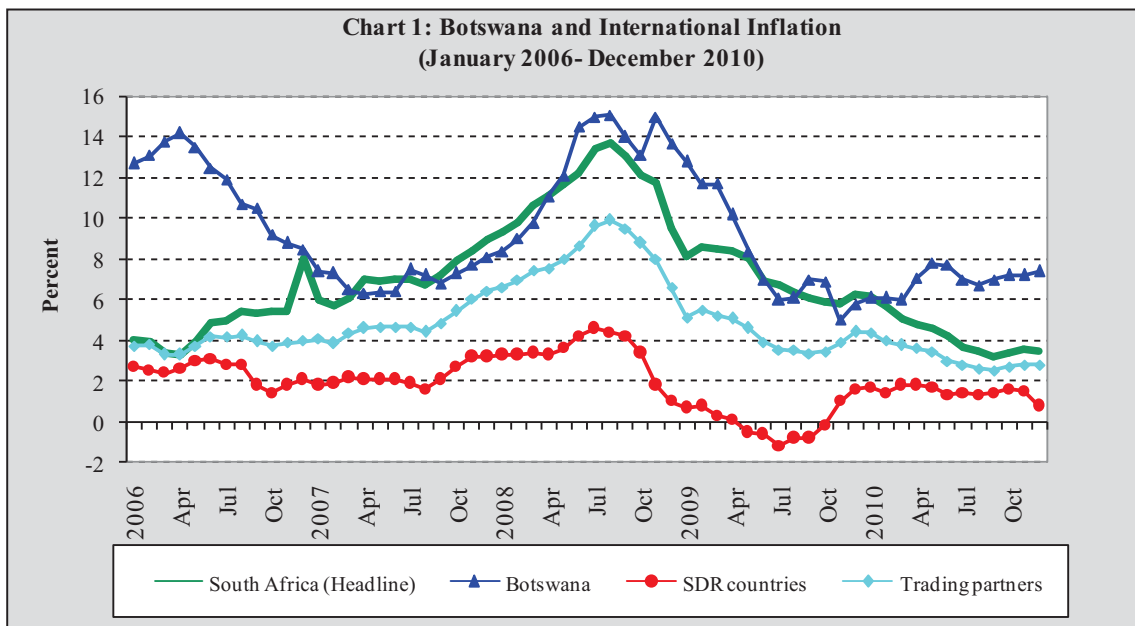
6 World Economic Outlook Update published by the International Monetary Fund (January 2011).

7 USA, UK, Japan and the euro zone.

8 However, there was considerable variation in price developments across constituent economies. For instance, throughout 2010, UK inflation remained significantly higher than in 2009, but was offset by the continued decrease in the level of prices in Japan.

9 Inflation was above South Africa's target range (at 6.2 percent) in January 2010.

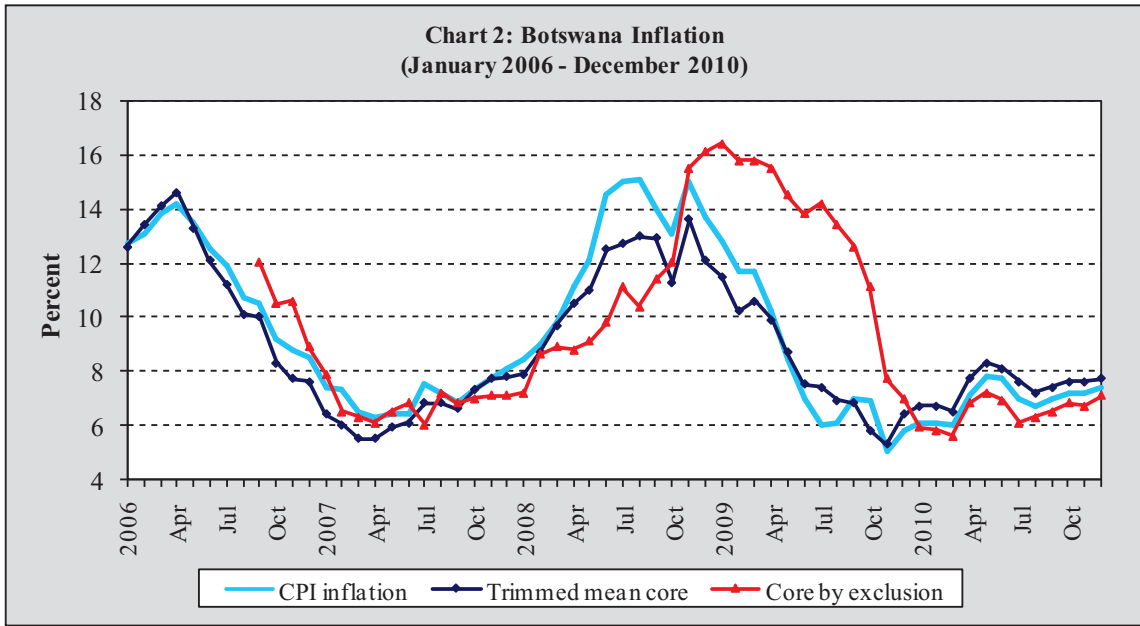
10 The trade-weighted average inflation comprises South Africa's headline inflation and the SDR countries' inflation.



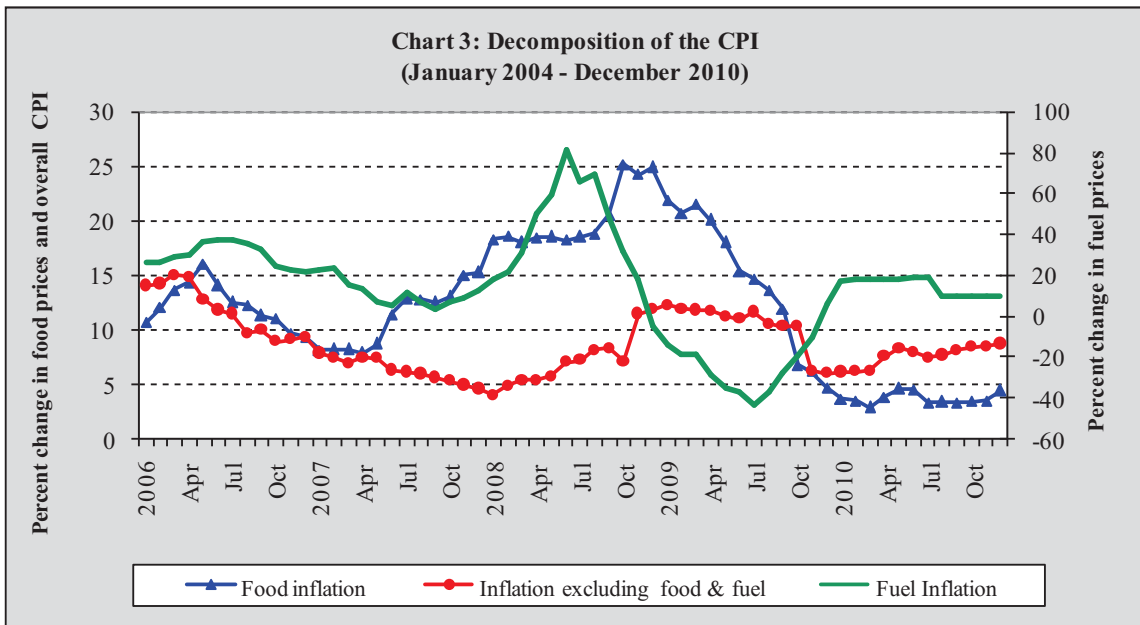
Source: Central Statistics Office

3.3 In Botswana, inflation was above the medium-term objective range of 3 – 6 percent for most of 2010 (Chart 2), due to the increase in VAT and administered prices. The cumulative initial impact of these shocks on inflation is estimated at approximately 3 percentage points, of which about 1.7 percentage points is attributed to the increase in VAT, and the remainder to the upward adjustment in administered prices and alcohol levy. Meanwhile, annual changes in the cost for other commodity groups, including food (decrease from 4.7 percent in December 2009 to 4.4 percent in December 2010)¹¹ and housing rentals (decrease from 9.4 percent in December 2009 to 3.2 percent in December 2010), held down overall CPI inflation (Charts 3 and 4). In the absence of the administrative adjustment to prices, inflation would have stabilised within the objective range in 2010. Headline inflation rose from 5.8 percent in December 2009 to 6.1 percent in both January and February 2010, before falling to 6 percent (the upper end of the objective range) in March. This increase in inflation in the first quarter of the year was due to higher prices of motor vehicles and base effects associated with the fuel price reductions in early 2009.

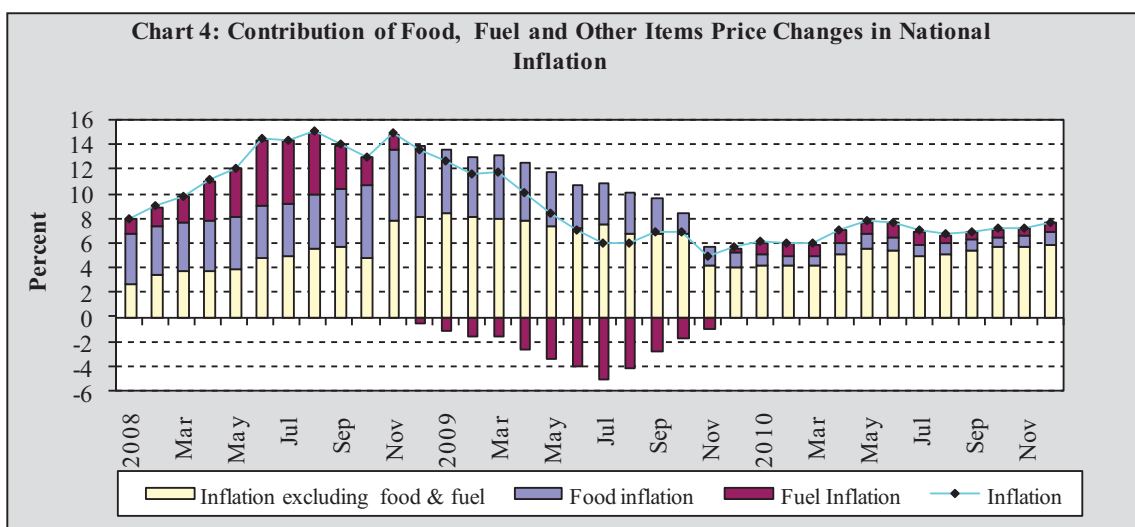
¹¹ The fall in inflation for the food group reflects the substantial decrease in the price index for the bread and cereals commodity sub-group, from -2.6 percent in the year to December 2009 to -4.4 percent in the year to November 2010 and -2.9 percent in December 2010.



Source: Central Statistics Office



Source: Central Statistics Office



Source: Central Statistics Office

- 3.4 In the second quarter of 2010, inflation increased to 7.8 percent (May), following the increase in VAT,¹² fuel prices and electricity tariffs.¹³ Subsequently, inflation fell to 6.7 percent in August 2010 when fuel prices were reduced, before increasing to 7 percent in September 2010 as public transport fares and motor vehicle prices were raised, and to 7.2 percent in October and November. Inflation then rose to 7.4 percent in December 2010, after the increase in the alcohol levy (from 30 percent to 40 percent). With respect to other measures, the 16 percent trimmed mean measure of core inflation rose from 6.4 percent in December 2009 to 7.7 percent in December 2010, while core inflation excluding administered prices rose from 7 percent to 7.1 percent in the same period.
- 3.5 Domestic tradeables inflation increased from 1.9 percent in December 2009 to 5 percent in December 2010, given the higher VAT. Similarly, the annual increase in the cost of imported tradeables rose significantly from 6 percent in December 2009 to 10.4 percent in May 2010, thus reflecting the impact of higher fuel prices; it however, fell to 9.3 percent in December 2010. For non-tradeables, inflation eased from 8.5 percent in December 2009 to 6.9 percent in December 2010, mainly reflecting the lower annual increase in the cost of some services (housing rentals, health services and social protection).
- 3.6 Domestic demand pressures were generally low in 2010 in the context of the below-trend economic expansion. Domestic consumption was constrained by the increase in VAT and administered prices and sluggish growth in incomes given the continuing freeze on civil service salaries (although this was alleviated somewhat by the October 2010 increase in public officers' salaries by 10 percent¹⁴).

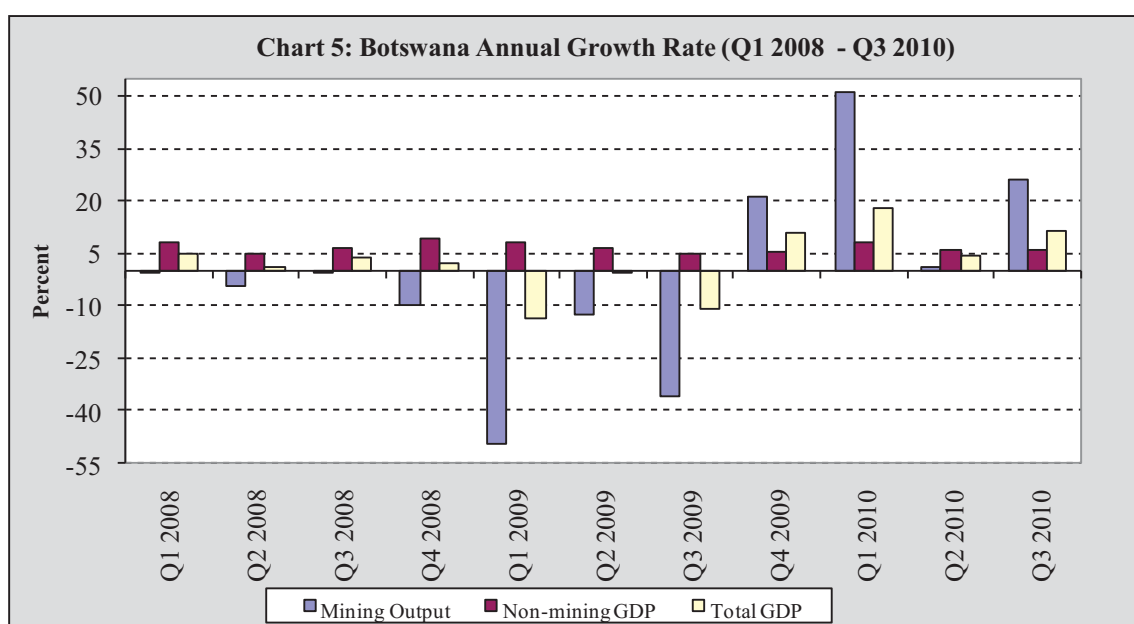
¹² VAT was increased from 10 percent to 12 percent effective April 1, 2010.

¹³ The increase in electricity tariffs ranged from 15 percent for lower consumption households to 30 percent for the rest. In addition, a levy of 5 thebe per kWh of electricity consumption was introduced to help fund the rural electrification programme.

¹⁴ The 10 percent increase in wages (backdated to May 2010) was effected to comply with the new Public Service Act, as the number of days in a month eligible for payment was deemed to be 22 and not 20.

Government expenditure growth was also restrained in a bid to reduce the budget deficit. Meanwhile, the level of foreign exchange reserves declined only nominally in 2010, thus contributing to the 10.7 percent increase in broad money in 2010, following a 0.8 percent contraction in 2009.

3.7 The increase in money supply in 2010 occurred alongside a sustained recovery in output from the last quarter of 2009. Year-on-year to September 2010, output growth was 10.7 percent (Chart 5 shows annual GDP growth rates by quarter), thus reflecting the 21.7 percent increase in mining production during the period. Non-mining GDP rose at the lower rate of 6.3 percent in the twelve months to September 2010, with notable growth in agriculture (40.3 percent), water and electricity (7.3 percent), transport and communications (5.7 percent), and trade, hotels and restaurants (5.2 percent).

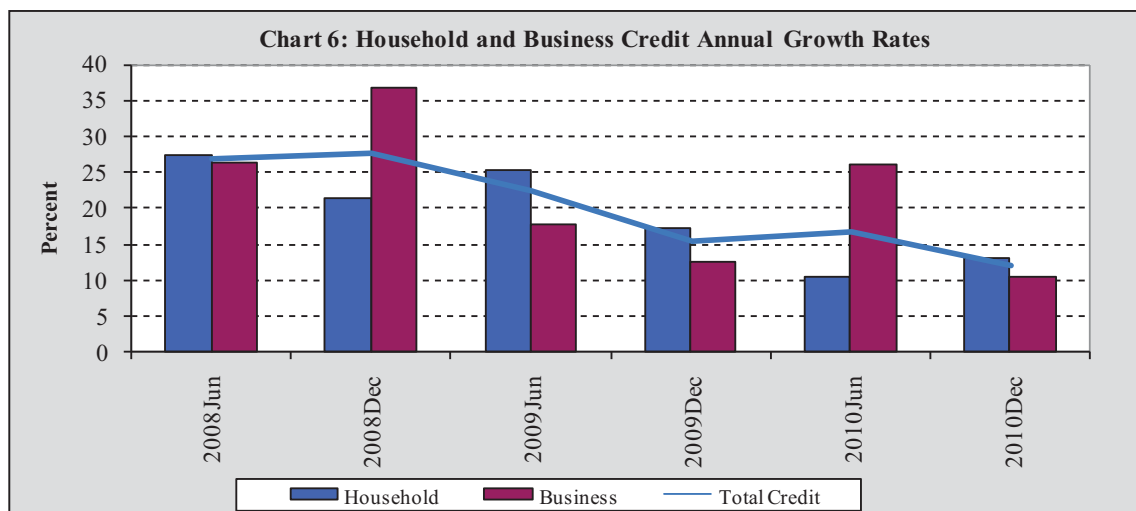


Source: Central Statistics Office and Bank of Botswana calculations

Note: The growth rate is calculated as the percentage change in GDP for the current year's quarter over the level for the same quarter in the previous year.

3.8 Net foreign assets declined by a further 11.1 percent in 2010, after decreasing by 18.9 percent in 2009. This is against the background of some improvement in exports, which rose by 31.4 percent in 2010 compared to 26.9 percent decline in 2009, while growth in imports rose to 10.4 percent from -3 percent in the same period. The contribution of credit growth to money supply was less expansionary in the context of cautious lending by banks and restrained borrowing given uncertain economic and income prospects. In the circumstances, banks continued to experience low and manageable default rates and remained stable and sound, with adequate capital levels and sufficient liquidity.

3.9 The annual increase in commercial bank credit to the private sector, which decelerated markedly in 2009 (from a peak of 31 percent in January 2009), was 11.9 percent in December 2010 (Chart 6).¹⁵ When disaggregated, growth in lending to businesses decreased from 12.6 percent in 2009 to 10.5 percent in 2010, in an environment of lower interest rates, but it was also volatile due to lumpy transactions. The expansion of credit to households in 2010 was 13.1 percent, down from 17.1 percent in the previous year, as demand was restrained due to sluggish growth in personal incomes, in the absence of an across-the-board wage increase for civil servants in the past two fiscal years.



Source: Bank of Botswana

3.10 The moderating influence of Government on the economy is reflected in the decrease in the rate of expenditure growth from the revised 9.6 percent in the fiscal year 2009/10 to 4.6 percent in 2010/11, as announced in the 2011 Budget Speech. In particular, development expenditure growth is projected to decrease from 13.5 percent in 2009/10 to 2.4 percent in 2010/11, while recurrent spending is expected to grow by 5.8 percent in 2010/11, following an increase of 7.7 percent in 2009/10. Meanwhile, it is estimated that total government recurrent and development expenditure will rise by a marginal 1.4 percent in the fiscal year 2011/12.

3.11 In view of the continuing cash flow constraints, the Government announced a prioritisation of project spending, a tightening of budget management and revenue raising measures which included the increase in VAT, government levies and increased dividends from parastatals. The Government's expenditure rationalisation will, to some extent, reduce the expansionary effect of government spending on the broader economy,¹⁶ although this may be offset by renewed emphasis on local procurement.

15 Credit figures are distorted somewhat by the reclassification by a major commercial bank of credit card debt as domestic credit, as well as the reclassification of a merchant bank into a commercial bank in January and September 2009, respectively. For example, adjusting for the impact of the reclassification of credit card debt results in a lower credit growth of 11.3 percent in December 2009.

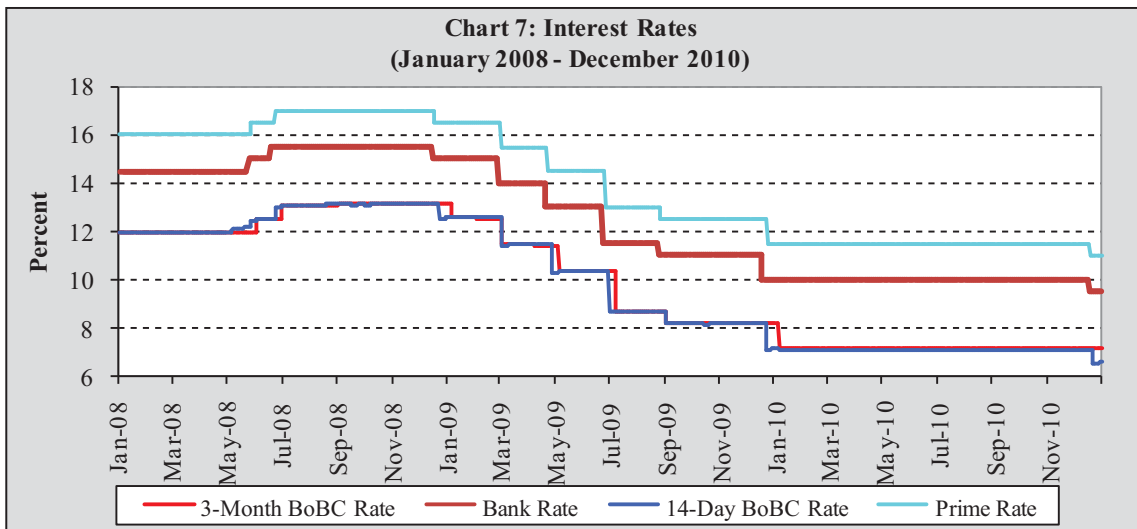
16 This has already been observed in the GDP estimates, for example, in relation to construction.

4. MONETARY POLICY IMPLEMENTATION IN 2010

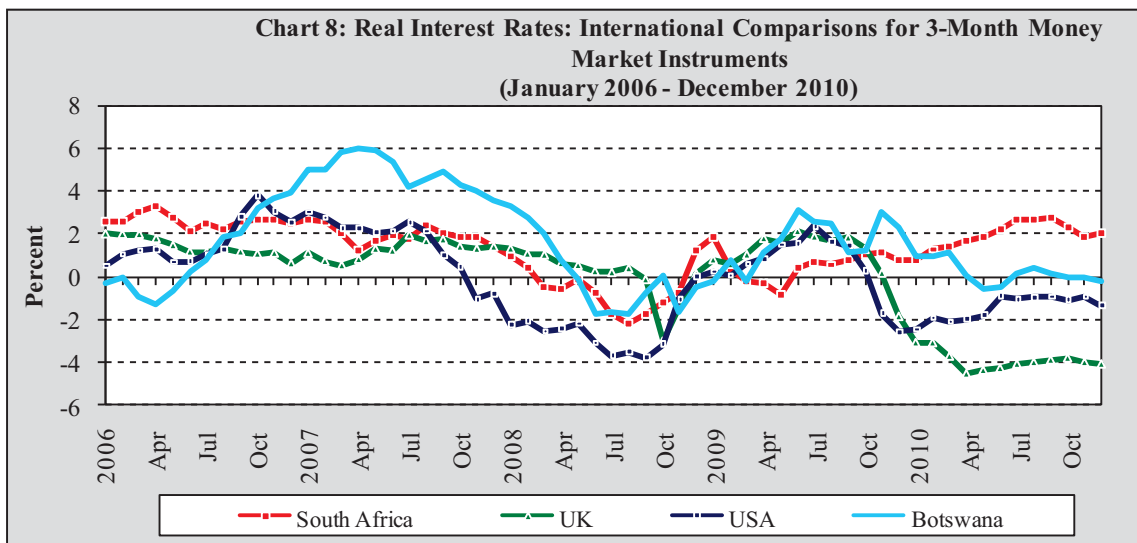
- 4.1 *Developments in domestic and world output and inflation were generally as projected in the 2010 MPS. Globally, monetary policy was conducted against the background of uncertain economic recovery. Output growth had gained momentum at the beginning of the year; it moderated somewhat in the second half of the year and remained uneven across countries and regions, thus engendering different policy responses. While the authorities in some of the major economies maintained a loosening bias and undertook quantitative easing, central banks in emerging markets countries increasingly moved towards tighter monetary policy in order to curb inflationary pressures induced by robust economic performance. In the circumstances, lower yields in developed countries contributed to capital flowing to emerging market economies, thus contributing to currency appreciation in some of those economies. This gave rise to concerns that there could be disruptive competitive currency devaluations.*
- 4.2 *In terms of specific jurisdictions, the Federal Reserve Bank of the USA, European Central Bank, Bank of England and Bank of Japan maintained low policy interest rates in 2010. The US and the UK also continued to rely heavily on quantitative easing to stimulate economic activity. The largest of the emerging market economies, China, increased the policy interest rate and reserve requirements in an effort to rein in growing inflationary pressures. India, Australia and Norway, among others, also raised policy interest rates during the year in response to inflationary pressures.*
- 4.3 *For Botswana, monetary policy was implemented in an environment of the below-trend non-mining output and generally low inflationary pressures. Domestic inflation was, however, higher than the 3 – 6 percent objective range due to transient factors. On account of the positive medium-term inflation outlook that reflected low demand pressures, below-trend economic performance (negative output gap) and benign external inflationary pressures, the Bank Rate was maintained at 10 percent for most of 2010 and reduced to 9.5 percent in December 2010. The average commercial banks' prime lending rate was also constant at 11.5 percent for most of 2010 and was reduced to 11 percent in December 2010, in line with the change in the Bank Rate.*
- 4.4 *Open market operations were used to support implementation of monetary policy through absorption of excess liquidity in the banking system so as to maintain the desired level of interest rates. In order to reduce the amount of liquidity that needed to be mopped up through issuing Bank of Botswana Certificates (BoBCs), the primary reserve requirement for Pula denominated deposits at commercial banks was increased from 5 percent to 6.5 percent with effect from November 1, 2010. Money market interest rates, which were largely stable in 2010, eased in response to the decrease in the Bank Rate. Thus, the 14-day BoBC yield fell from 7.12 percent in December 2009 to 6.56 percent in December 2010, while the 3-month BoBC yield fell from 7.14 percent in January 2010 to 6.61 percent in January 2011.¹⁷*

¹⁷ *The December 2010 figures are not used since the 3-month BoBCs are auctioned only monthly, not weekly, as is the case with the 14-day BoBCs. Thus, changes in the Bank Rate in December are reflected in changes in the 3-month BoBC yield of January of the following year.*

Similarly, the average 88-day deposit interest rate offered by commercial banks eased from 5.79 percent in December 2009 to 5.49 percent in December 2010.



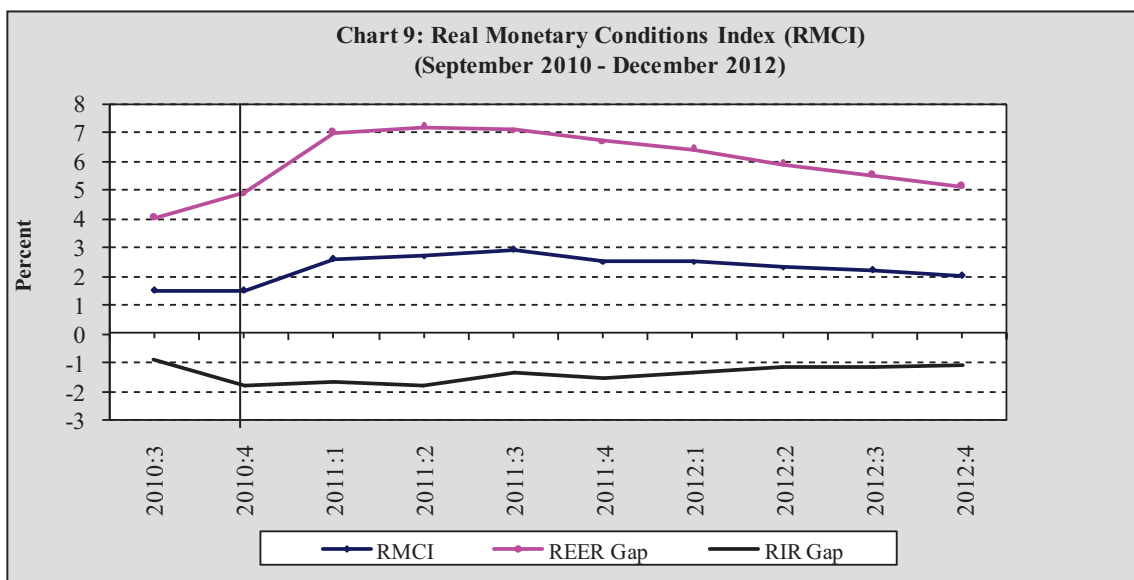
Source: Bank of Botswana



Source: Bank of Botswana

4.5 Overall, real monetary conditions, as measured by the combination of changes in the REER and real interest rates, were relatively tight in 2010, although gradually moderating (Chart 9), thus contributing to low inflationary pressures. The loosening effect of the decrease in real interest rates was more than offset by an

appreciation of the REER. The real 14-day BoBC rate decreased from 1.25 percent in December 2009 to -0.78 percent at the end of December 2010, thus reflecting the increase in inflation.¹⁸ The inflation raising effect of transient factors accounted for the 1.6 percent appreciation of the REER, as the downward crawl and the resultant 2.7 percent depreciation of the NEER was smaller than the differential between inflation in Botswana and the average inflation of trading partner countries (Charts 10 and 11).

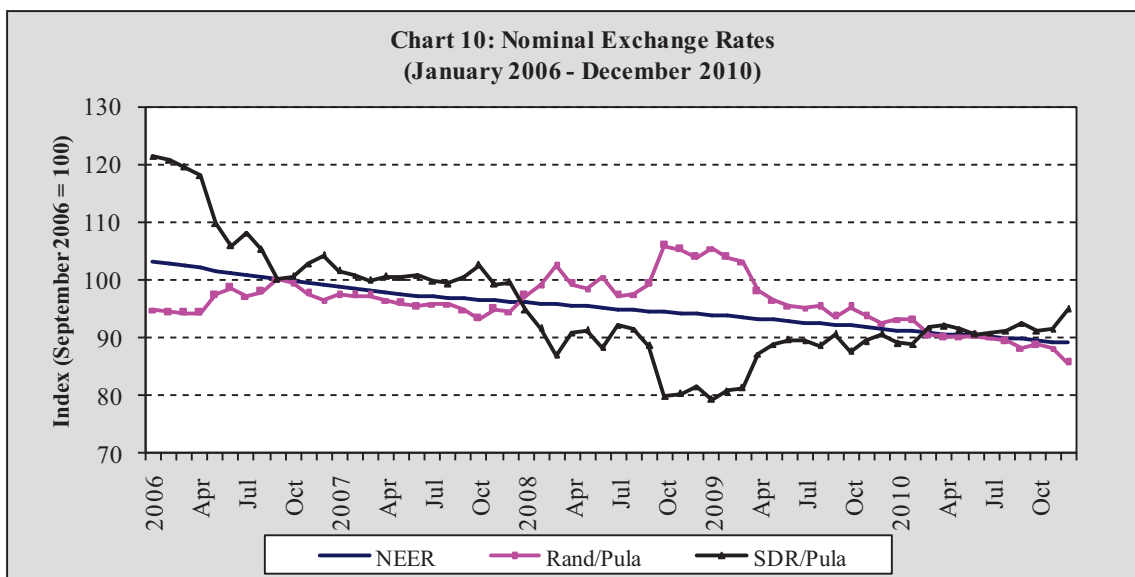


Source: Bank of Botswana

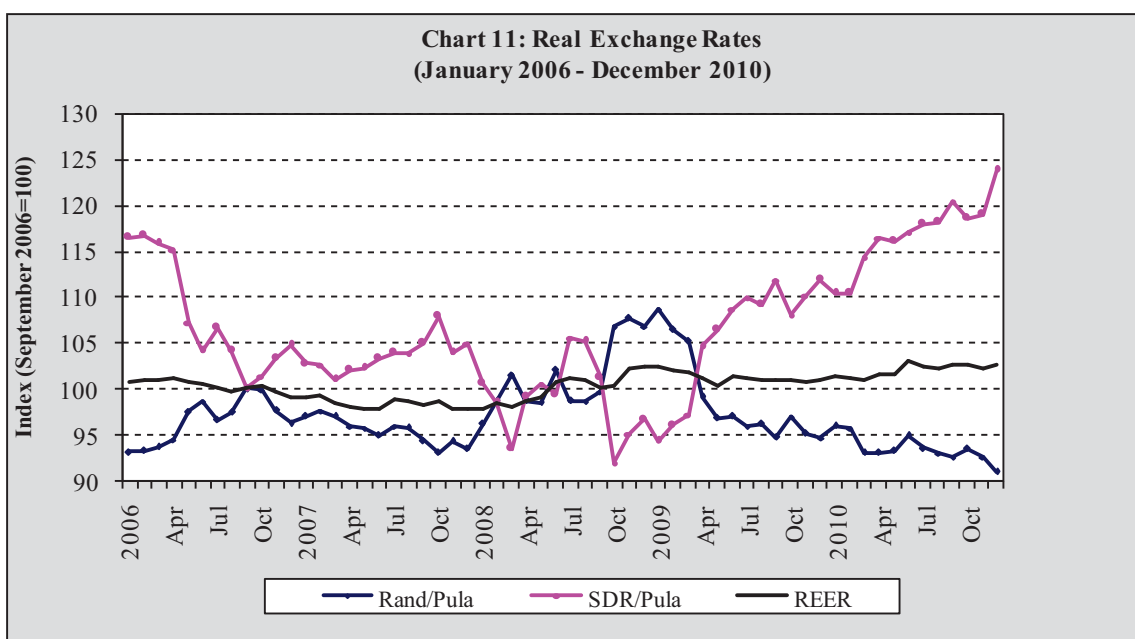
Notes:

- (1) The REER gap is a measure of the deviation of the actual REER from its trend value.
- (2) The real interest rate (RIR) gap is a measure of the deviation of the real interest rate (3-month real BoBC rate) from its trend value.
- (3) The real monetary conditions index (RMCI) is a weighted average of the REER gap and RIR gap.

18 Real 3-month money market interest rates were -0.23 percent, 2 percent, -4.1 percent, -1.4 percent and -1.9 percent in December 2010 for Botswana (3-month BoBCs), South Africa, UK, USA and the Euro zone, respectively.



Source: Bank of Botswana



Source: Bank of Botswana

5. OUTLOOK FOR INFLATION

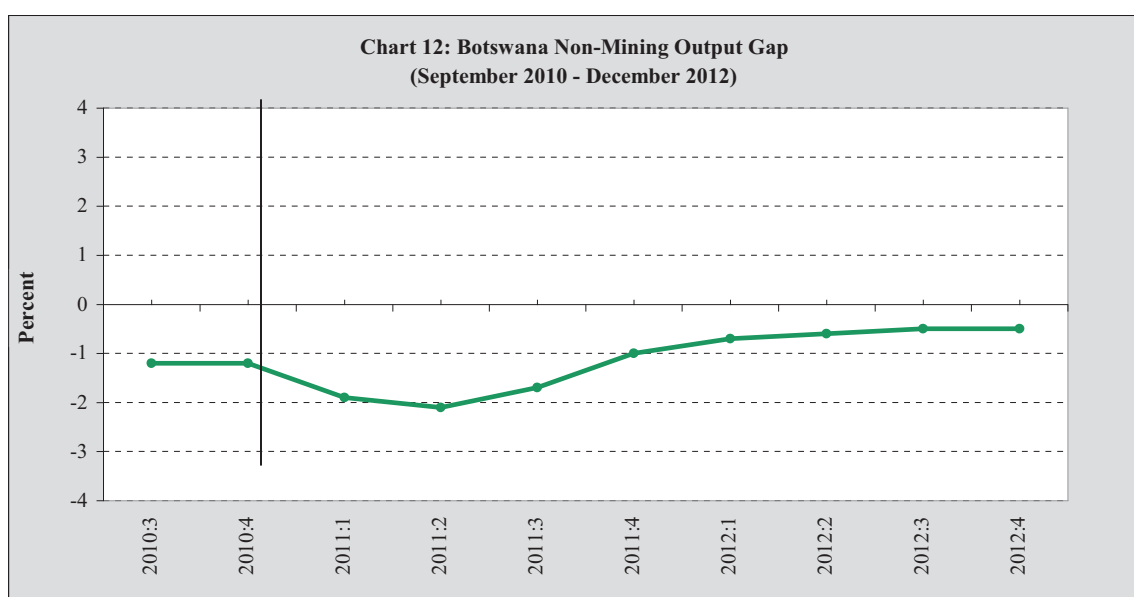
- 5.1 *World GDP growth is forecast to ease from 5 percent in 2010 to 4.4 percent in 2011. The anticipated moderation in the global economic recovery underlies the forecast lower GDP growth. The uncertain and lower growth prospects for some of the major economies in 2011 reflects the diminishing impact of earlier fiscal stimuli and fiscal consolidation that was aimed at ensuring long-term fiscal and debt sustainability;¹⁹ this is in the context of heightened market pressure on sovereign debt and potentially higher borrowing costs (Appendix Charts A1 and A2). Recovery is also constrained by subdued private domestic demand,²⁰ which is associated with weak balance sheets for both the financial sector and households, with high rates of unemployment and slow improvement in income levels contributing to subdued confidence levels. In the circumstances, there is little policy space to stimulate demand as fiscal support is being reversed and monetary policy response is limited where interest rates are close to zero. On the other hand, while economic performance in most emerging market economies is generally strong and self-sustaining, it is expected to moderate to the long-term sustainable level.*
- 5.2 *The overall picture is of different policy challenges across countries. For major economies, sustained recovery would require a meaningful shift of demand from the public sector to the private sector, given the widespread need to improve government finances. For these countries, it is expected that monetary policy will continue to be accommodative. However, with interest rates at minimum levels, and to the extent that inflationary pressures do not become manifest, central banks will use quantitative easing and other unconventional policy instruments in order to sustain financial intermediation and stimulate demand. For the emerging market economies, it is anticipated that the focus will be on economic stabilisation to mitigate potential overheating and emergence of asset price bubbles associated with large capital inflows. Therefore, it is expected that there will be a shift of macroeconomic policies to a neutral stance and/or contractionary bias to rein in inflationary pressures.*
- 5.3 *Overall, global inflationary pressures are expected to be generally restrained, given low levels of capacity utilisation, high rates of unemployment and well-anchored inflation expectations, while some emerging market economies are beginning to experience robust growth and signs of inflationary pressures. World inflation is, therefore, forecast to decline from 3.7 percent in 2010 to 3.1 percent in 2011. However, there are risks to the inflation outlook emanating from uncertain price developments relating to oil and other commodities (including food), which could arise in the event that economic recovery gains momentum, and acute food supply shortages occur.*

19 *Notable examples include Greece, Italy, Portugal, Spain and Ireland. In many other countries, public debt rose substantially (given fiscal deficits) during the global economic crisis and remained high in 2010. The euro zone has put in place temporary assistance measures for Greece and Ireland and approved an outline of a long-term European Stability Mechanism that is intended to create a permanent bailout facility and prevent contagion.*

20 *Many developed countries are looking to exports as the main source of growth going forward.*

5.4 *Forecast inflation in SDR countries for 2011 is 1.6 percent, lower than 1.8 percent in 2010. In South Africa, headline inflation is expected to increase from 3.5 percent in 2010 to 4.4 percent in 2011, thus remaining within the 3 – 6 percent inflation target. Given the inflation objective range of 3 – 6 percent in Botswana, and forecast trading partner inflation in the range of 3 – 4 percent, there should be a marginal downward crawl of the NEER in 2011. Foreign price developments, as transmitted through imported inflation, are, therefore, expected to have little influence on domestic inflation.*

5.5 *It is anticipated that the domestic economic recovery will be sustained as the markets for diamonds and other export commodities improve. Moreover, it is projected that the negative non-mining output gap will narrow going forward, as non-mining output strengthens, albeit remaining negative in the medium term (Chart 12). The narrowing of the output gap is influenced by similar expected improvements in economic activity in South Africa, where the economy is growing towards the trend level.²¹ The anticipated below-trend level of output occurs alongside projected moderate rate of monetary expansion, thus partly reflecting sluggish growth in personal incomes and a slowdown in government expenditure growth. Notably, fiscal spending is expected to decline significantly in real terms as the Government targets reducing the budget deficit to about P7 billion in 2011/12, with a view to achieving a balanced budget the following year. Overall, reduced government expenditure growth could weaken the stimulus the public sector gives to domestic economic activity.*

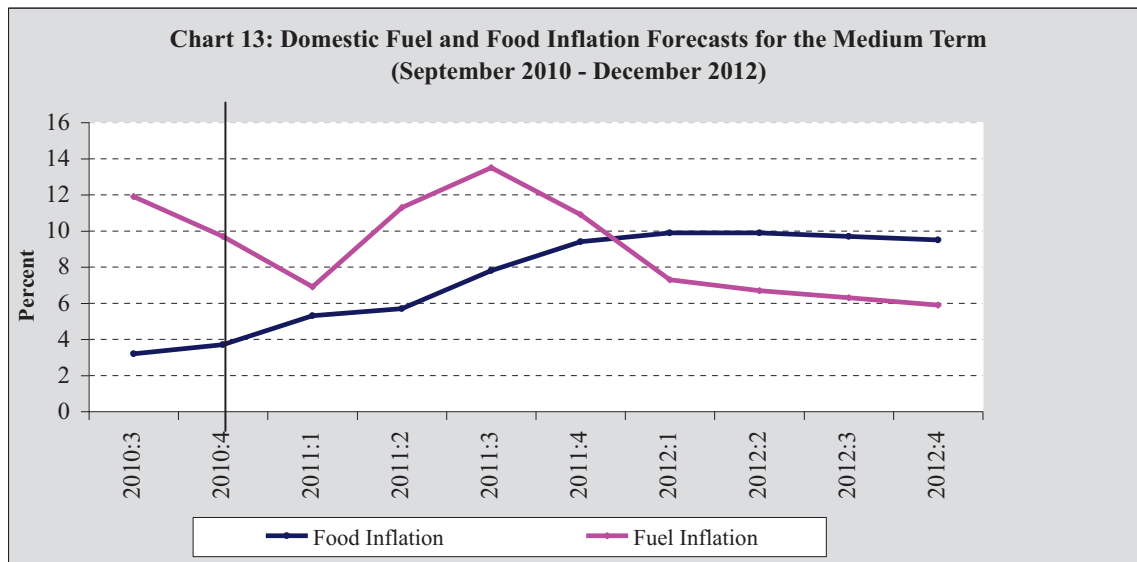


Source: Bank of Botswana

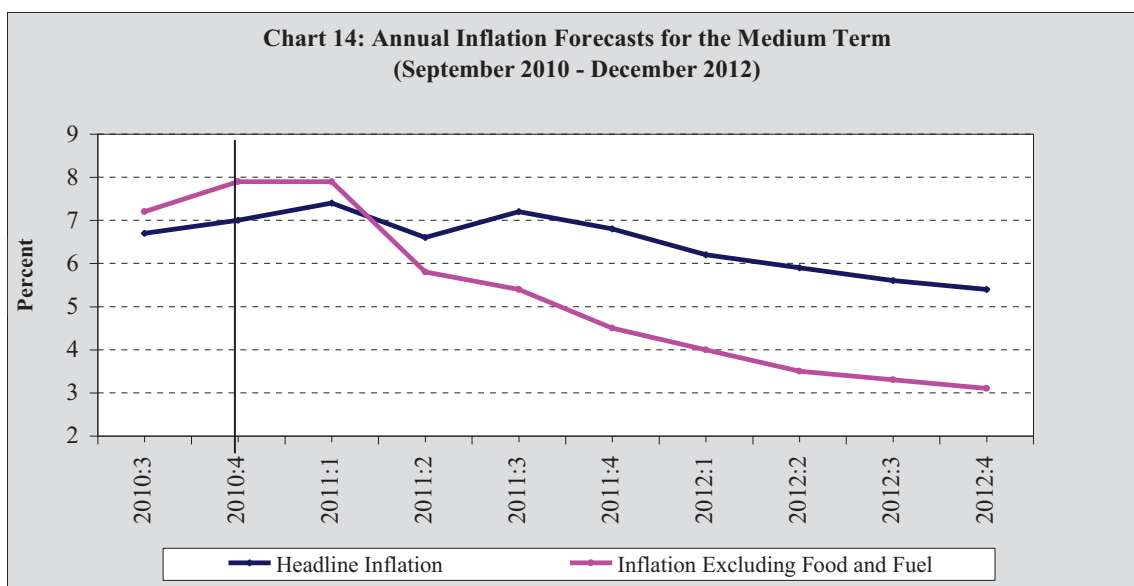
²¹ *The projected negative output gap does not necessarily imply that output growth will be negative; rather that actual output will be below the trend level, but it will be catching up to it.*

5.6 Nevertheless, the Bank's September 2010 Business Expectations Survey (BES) indicates that domestic businesses were increasingly confident about economic prospects for 2011. As a result, they expect to build productive capacity despite the expected rising input costs. However, there are indications that businesses have revised their expectations of inflation downward towards the Bank's objective range, although average expected inflation by businesses is still above the upper end of the objective range. Moreover, the business community considers the objective range reasonable and achievable in the medium term.

5.7 Given the forecast below-trend economic activity and depressed incomes, it is anticipated that domestic demand pressures on inflation will be low, as will be the impact of foreign price developments. Nevertheless, there is an upside risk to the inflation outlook which would emanate from any substantial upward adjustment in administered prices and levies for government services. In addition, international commodity prices, including oil prices, could increase substantially if the global economic recovery accelerates, thus exerting upward pressure on domestic fuel prices. International food prices could also rise substantially on the back of the poor wheat harvest associated with unfavourable weather conditions in major producing countries (Chart 13 shows forecast food and oil price inflation). This is, however, counterbalanced by the high grain yield in Southern Africa. Overall, on the basis of current information, inflation is forecast to remain above the objective range in the short term, but to be within the Bank's medium-term objective range of 3–6 percent on a sustainable basis in the second quarter of 2012 (Chart 14).



Source: Bank of Botswana



Source: Bank of Botswana

6. 2011 MONETARY POLICY STANCE

- 6.1 *In view of the current monetary policy stance and the forecast influence on price developments, it is anticipated that domestic inflation will converge to the medium-term objective in the second quarter of 2012, as underlying demand pressures continue to be restrained and projected output remains below long-term trend. In the light of prospects for low and stable inflation in the medium term, there is some scope for monetary policy to be accommodative. This would help support sustained economic recovery in an environment where fiscal stimulus (or even government contribution to economic activity) is constrained by limited revenue. However, in the short-term, the upside risks, such as a possible increase in administered prices, government levies and oil prices beyond current forecasts, pose a challenge for monetary policy as inflation expectations may be biased upwards. Therefore, while continuing to be forward looking, the formulation of monetary policy will need to take into account the impact of short-term price developments on medium-term inflation expectations.*
- 6.2 *With respect to the rate of crawl for the exchange rate, the upper end of the Bank's inflation objective remains higher than the forecast average inflation of trading partner countries. Therefore, in line with the exchange rate policy framework, there should be a modest downward crawl of the nominal Pula exchange rate, in order to support international competitiveness of domestic industries and enhance prospects for sustainable economic diversification. Overall, and consistent with the mandate, the Bank is committed to responding timely 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.*

7. **CONCLUSION**

- 7.1 *Domestic inflation was above the upper end of the medium-term inflation objective range of 3 – 6 percent for most of the year, thus mainly reflecting the increase in VAT, administered prices and the alcohol levy.*
- 7.2 *The global economic recovery was interrupted in the middle of 2010, such that world economic activity is forecast to moderate in 2011, in part due to the diminishing impact of earlier fiscal stimuli and fiscal consolidation in some of the major economies. This is aimed at ensuring long-term fiscal and debt sustainability. Recovery is also constrained by subdued demand that is associated with high unemployment rates and the slow growth of incomes in advanced economies. The potential for a substantial increase in commodity prices, including oil and food prices, is the major risk to global inflation. Nevertheless, world inflation is expected to remain largely subdued due to the moderate pace of economic recovery, weak labour markets and well-anchored inflation expectations.*
- 7.3 *Domestic inflation is forecast to remain above the price stability objective in the short term. The challenge for monetary policy is to entrench expectations of low and sustainable inflation in the medium term, through timely responses to economic and policy 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.*

Box: The Structure and Key Characteristics of the Bank's Forecasting and Policy Analysis System

The Bank's inflation forecasting framework has two complementary elements, namely, the Near Term Forecasting System and the Core Model for Medium-Term Forecasting that, in addition to expert analysis and judgment, is used to support monetary policy formulation. These are based on assumptions and research on the policy and price transmission process. Figure A shows, in broad terms, the transmission process. The Near-Term Forecasting System projects inflation for four quarters ahead and incorporates the influence of inflation in South African, the rand/Pula exchange rate, inflation persistence (represented by past inflation – a quarter earlier) and known/projected adjustments to administered prices (e.g., fuel prices and utility tariffs), government levies and consumption taxes. Prospective developments with respect to these factors, therefore, determine the forecast path for inflation for the next four quarters.

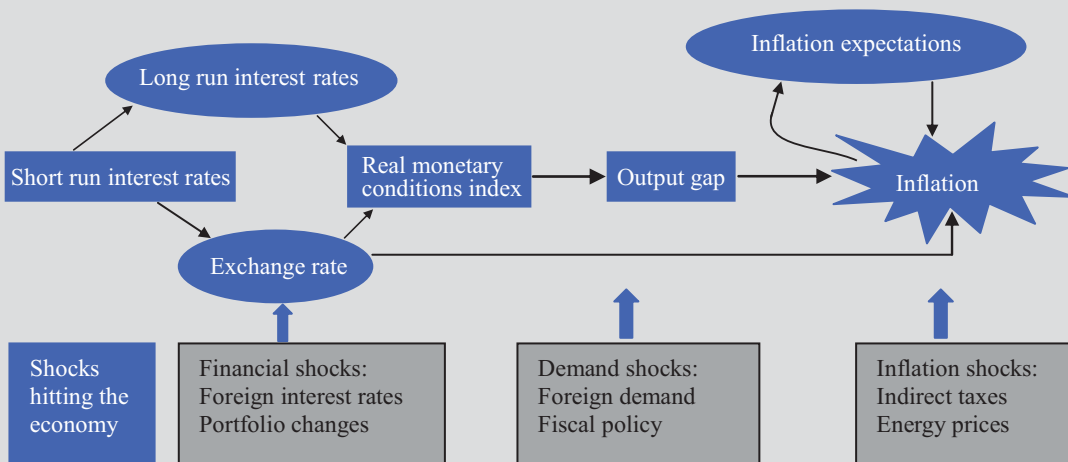
The Core Model for Medium-Term Forecasting is a structural representation that captures key relationships (transmission process) within the Botswana economy. The model allows for consistent projections of up to 12 quarters ahead for key macroeconomic variables, such as GDP, inflation, interest rates and exchange rates. In this formulation, real variables are expressed in terms of the deviation from their trend values. An important feature of the model is the built-in policy response, in terms of adjustment to the policy interest rate (Bank Rate) to bring inflation to the target range, and adjustment of the nominal effective exchange rate (through adjustment to the rate of crawl) in line with the inflation objective and underlying real trends.

Influences on the key variables are specified as follows:

- (a) the output gap is determined by its past level, real monetary conditions index, South Africa's output gap and any aggregate demand shocks (e.g., increase in incomes, taxes);*
- (b) inflation is explained by its past level, inflation expectations, import prices, output gap and shocks to aggregate supply;*
- (c) real marginal cost push influences are in the form of imported inflation and domestic demand pressures arising from the output gap;*
- (d) the exchange rate changes are consistent with the crawling band arrangement; and*
- (e) adjustment of the policy rate (Bank Rate) occurs to stabilise inflation around the objective and maintain trend output growth.*

The output gap estimates the extent to which GDP is either above or below the long-run trend level that is consistent with price stability. Excessively high output compared to trend is inflationary, while much lower output compared to trend is disinflationary. Real monetary conditions refer to a combination of the level of real interest rates and real exchange rates that define the extent to which monetary policy is restrictive or accommodative of output expansion in terms of financing and demand.

Figure A: Botswana's Monetary Policy Transmission Mechanism



The process for generating price increases and inflation is based on three key assumptions:

- (a) *monopolistic competition: a market structure that has many producers/sellers of similar, but slightly differentiated products (e.g., Nike vs Adidas; Mercedes vs BMW; Sony vs LG). Each producer/seller can set the price without affecting the market as a whole;*
- (b) *imperfect substitution between factor inputs: faced with an increase in demand, suppliers would need to increase production and supply. However, in the short-term, while adjusting, they cannot maintain the optimal relative proportions of the factors of production. For example, land and capital cannot be readily adjusted, but labour can be quickly adjusted. Hence, workers are required to work more hours and/or there is an increase in the number of workers for the same amount of land and capital to meet an increase in demand. Therefore, initially labour productivity tends to decline and marginal costs of additional production increase. Hence, in addition to increasing supply, firms respond to an increase in demand by raising prices.*
- (c) *the magnitude of the price increase would, however, reflect both backward-looking (inflation persistence) and forward-looking (inflation expectations) levels of inflation.*

Demand, output gap and real monetary conditions: An increase in the Bank Rate results in an increase in other market interest rates and adjustment of the exchange rate, to the extent it is flexible. These developments change demand, real monetary conditions and the desire for borrowing. The response of firms to the lower demand determines the margin of the output gap and the rate of increase of prices.

Foreign price increases: Other things remaining the same, local vendors would tend to pass on to consumers price increases of foreign sourced goods and services.

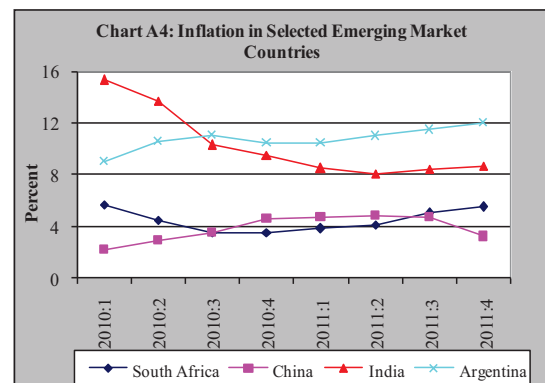
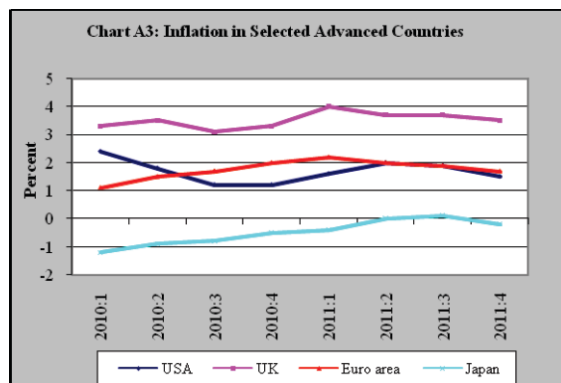
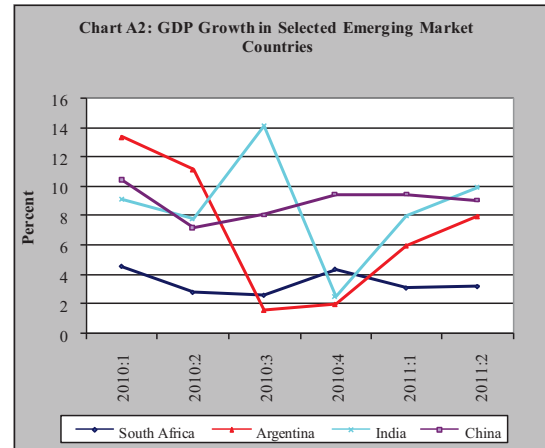
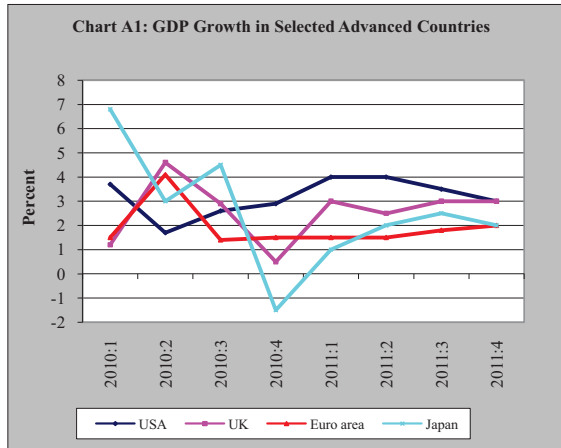
Exchange rate developments: A change in the exchange rate will affect the import price of foreign sourced goods and services. The exchange rate, on the other hand, can be affected by capital flows (cross-border financial transactions) that respond to the variation in interest rate differentials. This channel is, however, weak in Botswana, given that the exchange rate is not fully flexible and, therefore, does not respond to changes in interest rates. Nevertheless, a change in the Pula exchange rate from any source will be transmitted through this channel.

Other price shocks: For Botswana, these would include an increase in administered prices (mostly the cost of utilities and government levies and others such as fuel prices and transport fares). To the extent that these are artificially held below market levels for a long time, subsequent adjustments tend to be much larger than the general price trends and the inflation objective.

Expectations: Suppliers of goods and services and workers, among other considerations, base their decisions on price increases and wage adjustments on what they expect inflation to be. Expectations can be both backward and forward-looking. Those with backward-looking expectations see inflation persisting at past levels and will be slow to respond to changes in policy that affect inflation. On the other hand, setting the inflation objective and the credibility of the policy framework can have a significant influence on encouraging forward-looking expectations, which take account of the current and prospective conditions in determining expectations of future inflation.

While there are significant foreign influences and other occasional shocks to domestic inflation (as shown in the bottom part of Figure A), the monetary policy framework is premised on an understanding that the rate of domestic price increases reflects, in the main, local demand conditions and the policy environment. Monetary policy, therefore, has an impact on expectations and other second-round effects. First, the extent to which local vendors pass on foreign price increases to consumers will depend on local conditions with respect to competitiveness and demand for goods and services. In turn, demand is influenced by the monetary policy stance and its effect on real monetary conditions. Second, a well-articulated and credible policy influences expectations as a source of inflation; thus, price increases generally, and demand for wage adjustments would be related to the monetary policy stance and the extent to which the public believe the inflation objective to be achievable on a sustained basis. Third, a widely accepted price stability objective can influence the rate of increase in administered prices to be consistent with the inflation objective. In the circumstances, there is scope for policy coordination and a measured approach to such cost increases.

Output Growth and Inflation for Selected Countries



Source: JP Morgan Chase
 Note: Data from Q1 2011 to Q4 2011 are forecasts

