SEMI-ANNUAL MONETARY POLICY STATEMENT, JANUARY 2002

INTRODUCTION

This Semi-Annual Monetary Policy Statement is published under the Central Banking Act 2000, and represents a key element of the transparency and accountability arrangements of the Act. The Policy Statement is presented in two parts. The first covers economic developments in 2001 and projections for 2002. The second sets out the rationale for the monetary policy stance for 2002 and the conduct of monetary policy.

1. DEVELOPMENTS IN 2001 AND PROJECTED DEVELOPMENTS FOR 2002

In designing monetary policy for 2002, the Central Bank considered actual and projected developments in six main areas:

a) The World Economy;
b) Domestic Economic Activity;
c) Balance of Payments;
d) Fiscal Operations of the Government;
e) Inflation; and
f) Monetary and Financial Market Developments.

(a) The World Economy

World economic growth, as measured by Gross Domestic Product (GDP), is projected by the International Monetary Fund (IMF) to increase by 2.4 percent in both 2001 and 2002, compared to 4.7 percent in 2000. Economic activity in 2002 is expected to moderate following a slower than expected recovery in the United States (US), weak domestic demand and consumer confidence in Europe, recession in Japan and an on-going decline in the information technology sector. In addition, the terrorist attacks in the US on 11 September 2001 exacerbated the economic downturn with a worldwide negative impact on confidence, financial markets and growth prospects. In December 2001, the IMF revised downwards their 2002 real growth projections made in October 2001 with major industrialised countries, as a group, expected to grow by 0.6 percent. Real GDP is projected to grow by 0.7 percent in the US, by 1.8 percent in the United Kingdom, by 1.2 percent in the Euro Zone and decline by 1.0 percent in Japan. Global inflation is expected to edge lower from modest levels due to the prevailing downturn in the global economy.

All major central banks eased monetary policy throughout 2001 in response to the global slowdown to stimulate aggregate demand and investment. As shown in Chart 1 the US Federal Reserve Board reduced its Federal Funds rate by 4.75 percentage points to 1.75 percent. The Bank of Japan injected liquidity into the banking system to stimulate demand and investment as the economy failed to recover from prolonged recession and reduced its discount rate by 0.4 percentage points to 0.1 percent. The European Central Bank (ECB) lowered its Refinancing rate by 1.5 percentage points to 3.25 percent, while the Bank of England reduced its cash rate by 2.0 percentage points to 4.0 percent over the year. The Reserve Bank of Australia reduced its cash rate progressively by 2.0 percentage points to 4.25 percent at the end of 2001. Although the major central banks had lowered their official interest rates over the year, significant reductions were made after the September terrorist attacks in order to maintain global financial stability and confidence.

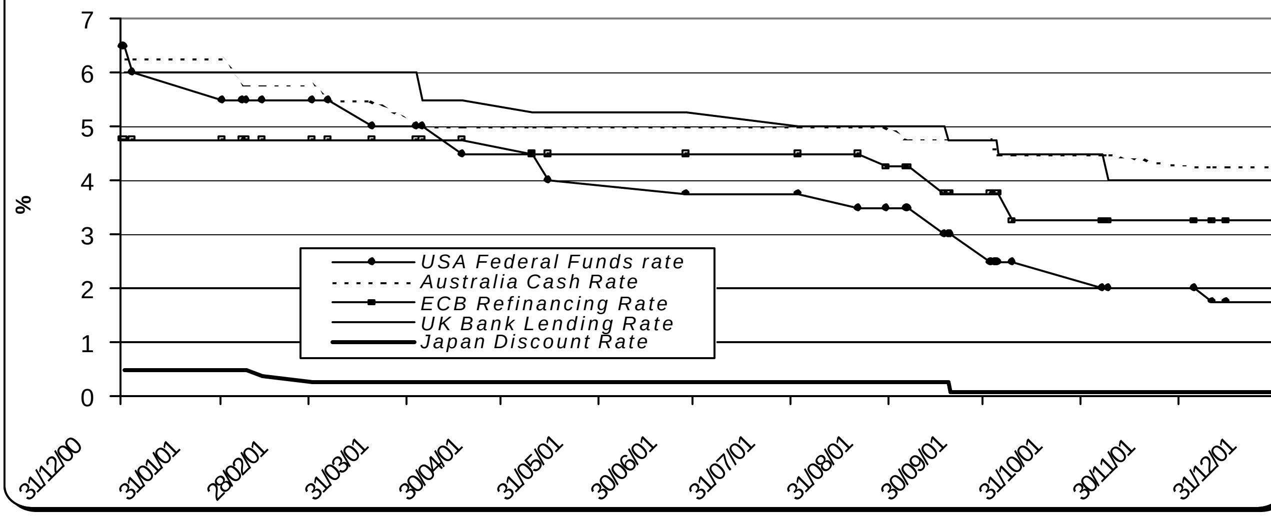
In the foreign exchange market, the US dollar appreciated against all the major currencies in 2001. Downgrading of Japan's sovereign debt ratings by credit ratings agencies as well as the high interest rate differential between Europe and the US in the first half of the year boosted the dollar. However, in the December quarter, the US dollar depreciated against the euro and Australian dollar (A$) as a result of the adverse impact of the September terrorist attacks which trig-

BOX 1: OBJECTIVE OF MONETARY POLICY

In pursuing monetary policy in Papua New Guinea, the Bank of Papua New Guinea (Bank of PNG) targets price stability. Maintaining price stability in a small open economy like PNG requires amongst other things, relative stability in the exchange rate which can:

- Improve confidence in the local currency and management of the economy;
- Provide certainty for private sector businesses to plan for long-term investment and development;
- Minimise volatility and price distortions;
- Provide the Government a foundation for stable revenue flows; and
- Potentially lead to a stable macroeconomic environment.

Chart 1: Movements in Official Interest rates in Major Economies in 2001



Source: Morgan Stanley Ltd, Royal Bank of Scotland, Nomura Ltd and Bloomberg Ltd.

gered capital flight from the US.

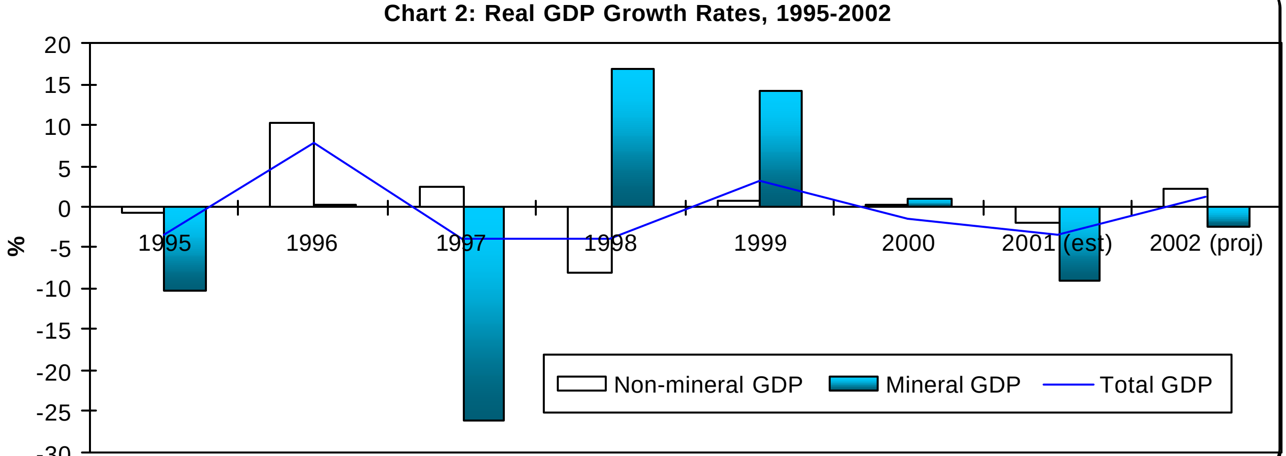
The global financial market was volatile during the second half of 2001. World stock markets collapsed following selling off of information technology related stock, while the fixed income market outperformed all the other markets. The fixed income market was aided by the global interest rate cuts, subdued inflationary pressures and safe-haven flows.

(b) Domestic Economic Activity

Preliminary estimates of economic activity indicate that total real GDP declined by 2.6 percent in 2001 (see Chart 2), following a decline of 1.5 percent in 2000. The decline in the growth rate was due to subdued activity in the mineral, building and construction, retail and wholesale, transportation and community, social and personal services sectors.

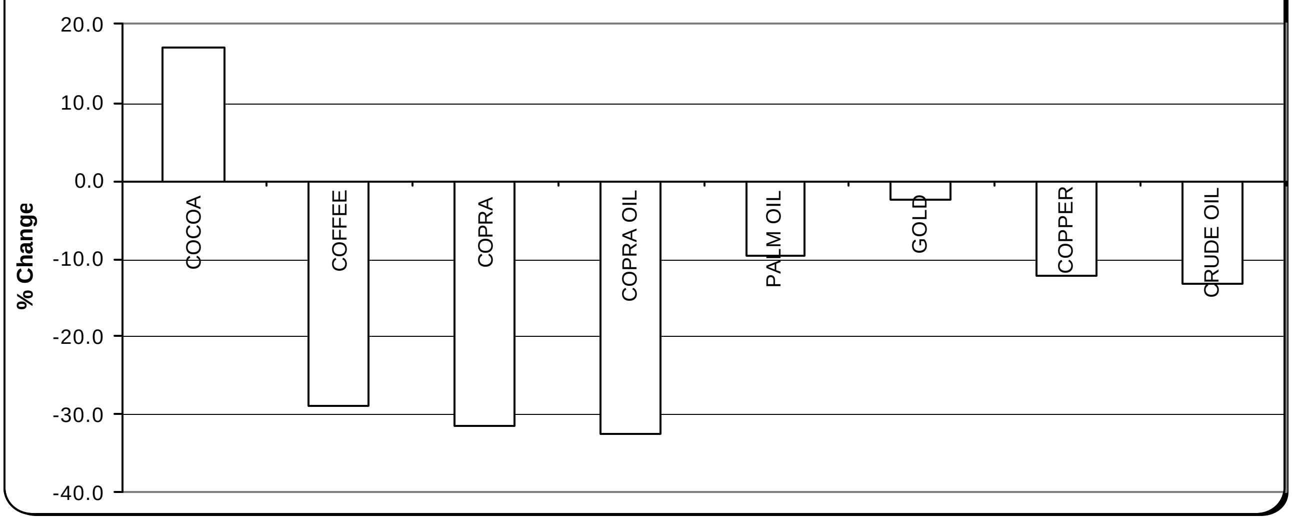
For 2002, real GDP is projected to increase by 1.2 percent with growth in the non-mineral sector more than offsetting an expected decline in the mineral sector. Growth in the agriculture/forestry/fisheries sector is forecasted to grow by 5.1 percent in 2002, reflecting increased cocoa and palm oil production. However, activity in the other non-mineral sectors is expected to remain subdued. Real activity in the

Chart 2: Real GDP Growth Rates, 1995-2002



Source: National Statistical Office (NSO) and *National Budget 2002*, Dept. of Treasury.

Chart 3: Average Percentage Changes in International Prices between 2000 and 2001



Source: Public Ledger.

mineral sector is expected to decline by 2.4 percent in 2002.

(c) Balance of Payments

i) Ten Months to October 2001

Preliminary outcome of the balance of payments for the ten months to October 2001, showed an overall surplus of K654 million. This resulted from a surplus in the current account of K737 million, which more than offset a deficit of K179 million in the capital account. The current account surplus was attributed to higher values of merchandise exports, mainly crude oil, copper, forestry, marine products and net service receipts, which more than offset the decline in most agricultural exports and higher imports. The deficit in the capital account was due to loan repayments by the Government, net purchase of short-term money market instruments abroad and the build-up in foreign currency account balances of the mineral companies. The depreciation of the kina against the currencies of Papua New Guinea's (PNG) major trading partners, resulted in an increase in the kina value of all balance of payment transactions during the ten months to October, 2001.

The level of gross foreign exchange reserves at the end of October 2001 was US$433.9 (K1,563) million, sufficient for 6.1 months of total and 8.4 months of non-mineral import cover.

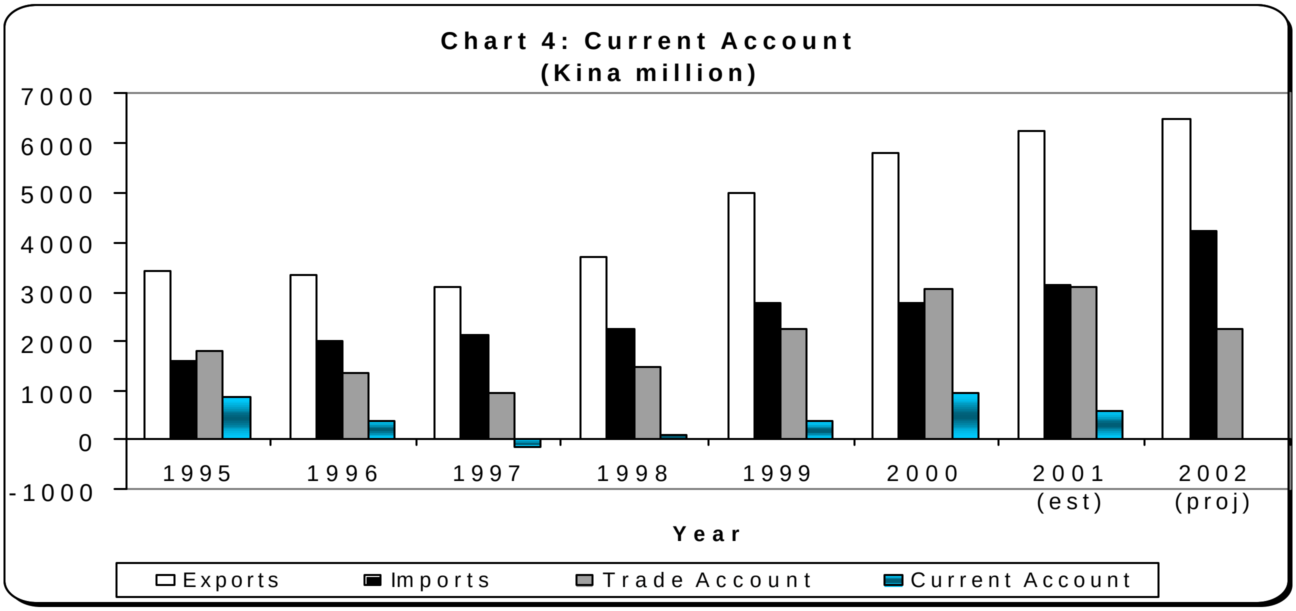
ii) International Price Developments

With the exception of cocoa, the average international prices for PNG’s major commodities declined during 2001, compared to 2000. Chart 3 shows that mineral and non-mineral commodity prices both declined as a result of oversupply in the world market with lower demand for the commodities from major consuming regions.

By the end of 2001, the prices of PNG's major exports remained depressed. Gold prices declined due to higher supply in the world market resulting from the sale of gold by the Swiss National Bank and the Bank of England, combined with lower demand from Asia and Europe. Copper prices declined resulting from increased copper stocks at the London Metal Exchange (LME) and reduced demand in Asia and Europe. Crude oil prices fell due to higher production as members of the Organisation of Petroleum Exporting Countries (OPEC) produced above their quotas. Coffee prices declined as a result of oversupply in the world market as major producers in South America, Asia and Africa had bumper harvests. Copra and copra oil prices declined as a result of higher copra production from the Philippines.

iii) 2001 Estimates and 2002 Projections

The balance of payments for 2002, which includes extraordinary financing of US$35 (K116.7) million sec-



Source: Bank of PNG.

ond tranche from the Asian Development Bank (ADB) associated with the Public Service Reform Programme is projected to show an overall deficit of K47 million in 2002, compared to an estimated surplus of K403 million in 2001 (see Chart 4). This outcome is attributed to a combined deficit in the current and capital accounts. The current account is projected to record a deficit of K3 million in 2002, compared to an estimated surplus of K605 million in 2001, reflecting higher net service payments and a lower trade surplus. The capital account, including extraordinary financing, is projected to record a deficit of K169 million in 2002, compared to an estimated deficit of K176 million in 2001. The projected outcome is due to higher loan repayments by the Government, which more than offset a net inflow by resident companies.

The level of gross foreign exchange reserves at the end of 2002 is projected at US$373.4 million, sufficient for 3.5 months of total and 5.5 months of non-mineral import cover. This compares to US$425.2 million in 2001, sufficient for 5.4 months of total and 7.7 months of non-mineral import cover. The higher reserves in 2001 reflects the full disbursement of exceptional financing to Government.

(d) Fiscal Operations of the Government

i) Ten Months to October 2001

Preliminary estimates of the fiscal operations of the National Government during the ten months to October 2001 showed an overall surplus of K48.0 million, compared to a surplus of K24.4 million in the corresponding period in 2000. The surplus was the result of lower expenditure, which more than offset a decline in revenue (see Table 1).

Total expenditure was K2,091.8 million in the first ten months of 2001, K141.7 million lower than in the corresponding period in 2000. The outcome was due to lower development expenditure following the delay in disbursement of external extraordinary financing and slower project implementation. This more than offset an increase in recurrent expenditure due to higher interest payments and grants to statutory bodies.

Total revenue receipts and grants amounted to K2,139.2 million during the ten months to October 2001, compared to K2,256.7 million in the same period in 2000. The overall decline in revenue was a result of lower foreign grant receipts, which more than offset an increase in tax and non-tax receipts. The decline in foreign grants was attributed to the delay in disbursement of grants from donor countries.

The budget surplus, combined with a positive total domestic financing of K32.9 million resulted in a net repayment to external sources of K81.3 million, which comprised of K157.3 million in net concessionary and K54.8 million in net commercial loan repayments, and more than offset an inflow of K130.7 million in extraor-

Table 1: Fiscal Operations of the Government
(Kina million)

	1999	2000	2001 Jan-Oct (p)	2001 [1] Est.	2002 [1] Budget
Total Revenue & Grants	2569	3009	2139	3102	3308
Total Expenditure	2801	3201	2091	3307	3500
Deficit / Surplus	-232	-192	48	-205	-192
% of GDP	-2.6	-2.0	0.5	-2.0	-1.8
Financing	232	192	-48	205	192
External	178	70	-81	230	-39
Domestic	54	122	33	-25	231
of which					
Bank of PNG	-35	-362	-20	-	-
Commercial Banks	9	256	-59	-	-
Other Domestic Financing	80	228	112	-	-

Source: Quarterly Economic Bulletin, Bank of PNG and *National Budget 2002,* Dept. of Treasury.

[1] In 2001, an estimated K22 million payment to the Privatisation Commision was deferred to 2002, which is consistent with the delay in the sale of the PNG Banking Corporation. The deficits in 2001 and 2002 were adjusted accordingly.

(p) Preliminary.

dinary financing under the Structural Adjustment Programme. Domestic financing of K230.0 million from the non-banking system was through increased holdings of Government securities, which more than offset negative financing of K118.0 million and K79.2 million by other domestic sources and the banking system, respectively.

ii) 2001 Estimates and 2002 Budget

The estimated deficit of 2001 of K205 million and net domestic repayment of K25 million are expected to be financed by K230.0 million from external sources. This reflects the exceptional financing of US$91 million from the World Bank, Asian Development Bank and the Japan Bank of International Cooperation received in December 2001. The estimated deficit is 2.0 percent of GDP.

The Fiscal Policy of the Government continues to aim at providing a fiscal framework that promotes macroeconomic stability in order to stimulate sustainable broad based growth, through various reform programmes, improved fiscal management and good governance. The 2002 National Budget passed by Parliament in December 2001 is therefore targeted at providing the conditions necessary to maintain macroeconomic stability, by focusing spending on areas important for on-going development of the economy. These are support for renewable resources; improving efficiency and effectiveness of Government agencies; increasing development expenditure; and enhancing capacity for revenue collection and generation. These priority areas and other Budget components will be funded entirely from revenue and project grants combined with the proceeds from the privatisation program. In the 2002 Budget the three key new initiatives introduced were: free education; support for the tree crop agriculture sector; and abolishment of the District Development Grants.

The projected headline Budget deficit of K192 million for 2002 is 1.8 percent of GDP. Excluding the exceptional expenditures of K16.0 million for arrears, K87.0 million for structural adjustment and K45.0 million for the 2002 National Elections, the underlying deficit for 2002 is K44.0 million. Net external loan repayments of K39.3 million are budgeted, comprising of net repayments of K122.9 million and K33.0 million in concessionary and commercial loans, respectively, and an

Table 2: Consumer Price Indices
(annual percentage change[1,2])

	Actual			Forecast	
	1998	1999	2000	2001	2002
HEADLINE	21.8	13.2	10.0	13.0	8.8
UNDERLYING[3]	20.4	16.3	7.8	9.2	8.5

Source: National Statistical Office (NSO) for *Headline* and Bank of PNG for Forecasts and *Underlying* measure.
[1] December on December.
[2] All annual inflation figures are rounded to 1 decimal place. Quarterly values tabulated in BOX 2 may not equate to the annual figures due to rounding.
[3]CPI excluding seasonal, excise and price control items.

inflow of K116 million in extraordinary financing. Net domestic financing of K231.0 million includes the budgeted asset sales of K456.0 million. This would be used to repay K39 million of external financing and the Budget deficit of K192 million.

(e) Inflation (See Box 2)

i) 2001

During the September quarter of 2001, headline inflation, as measured by the Consumer Price Index (CPI), increased by 3.8 percent, compared with 3.4 percent in the June quarter of 2001, which represents a 10.0 percent annual change.

The rates of inflation over the June and September quarters of 2001 were considerably higher than consumer price changes recorded in the December quarter of 2000 and the March quarter of 2001 (0.9 and 1.6 percent, respectively). The main factors fuelling inflation over the period has been the significantly high price increases of fruits and vegetables due to seasonal 'supply' shocks, the increases to excise duties imposed on cigarettes and the flow-through effects on imported costs to domestic firms from a depreciating kina. The first two developments are transient in nature and will not result in persistent price pressure. In concordance with these developments the CPI excluding the selected seasonal and excise impacted subgroups increased by only 1.3 and 2.1 percent in the June and September quarters of 2001, respectively, compared with 1.2 and 2.0 percent increases in the December quarter of 2000 and the March quarter of 2001, respectively. The increases in the other CPI underlying measures were also lower than that of headline CPI during the period.

Mainly as a result of the unpredictable seasonal supply shocks, the forecasted annual inflation for 2001 has been revised up to 13.0 percent, slightly higher than the projection in the July 2001 Statement.

Although the relatively high quarterly inflation outcomes of the June and September quarters in 2001 can be explained by transient factors, the trend in underlying inflation over the year to September 2001 has increased persistently. This is illustrated in Chart 5, where the underlying CPI measure has increased steadily since the September quarter of 2000.

On the imported price pressure side the influence of the exchange rate on the price of general import goods is likely to have caused the increasing trend in the underlying inflation measures. The exchange rate has a direct feed-through effect on consumer prices because of the high propensity to consume imported goods in PNG. Therefore, it is an important determinant of inflation. The kina has continued to depreciate against the import-weighted index (IWI), falling by 6.8 percent in the September quarter and by 8.1 percent in the December quarter of 2001. This increased import price pressure is expected to feed-through to higher consumer prices in early 2002.

On the domestic price pressure side, results from the

BOX 2: INFLATION MEASURES

Inflation Measure	**1999**	**2000**				**2001**		
(Quarterly % change)	**Dec**	**Mar**	**Jun**	**Sep**	**Dec**	**Mar**	**Jun**	**Sep**
Headline								
CPI	2.9	2.6	4.3	1.8	0.9	1.6	3.4	3.8
Underlying								
CPI Exclusion-based measures:								
-ex seasonal	3.1	2.6	4.8	0.6	1.0	1.7	2.7	2.6
-ex seasonal & excise	3.0	3.2	2.8	0.3	1.2	2.0	1.3	2.1
-ex seasonal, excise & price control	3.1	3.2	3.0	0.4	1.0	2.0	1.2	2.3

Source: NSO for *Headline* and Bank of PNG for *Underlying* measures.

The CPI is calculated on a quarterly basis and is the only available measurement of prices of consumer good in PNG. It measures the change in prices of goods and services that represent the spending pattern of the urban population. Inflation measured by the CPI is highly volatile due partly to various supply shocks (droughts, tax system reforms, etc). Such high volatility hampers the interpretation of current inflation and the forecasting of future inflation.

The solution to the above problem is to construct underlying inflation measures that filter out transient movements in inflation while retaining the persistent movements. Such underlying measures are then used to conduct monetary policy. A variety of underlying measures have been constructed and presented in the table above. A brief explanation of these measures is outlined below:

- **Exclusion-based measures**. These involve zero weighting volatile sub-groups or items such as *fruit & vegetables*, *betelnut*, and prices which are largely determined by non-market forces, including *Alcoholic drinks*, *Cigarettes & tobacco* and other infrequently adjusted price-regulated items. These exclusion-based measures aid the reduction of inflation volatility and are useful in interpreting the impact of seasonal supply and Government policy shocks on consumer prices.

CPI ex seasonal: Excludes CPI subgroup *Fruit and vegetables* and the item *Betelnut*.

CPI ex seasonal & excise: Excludes seasonal items and selected excise impacted sub-groups including *Alcoholic drinks* and *Cigarettes & tobacco.*

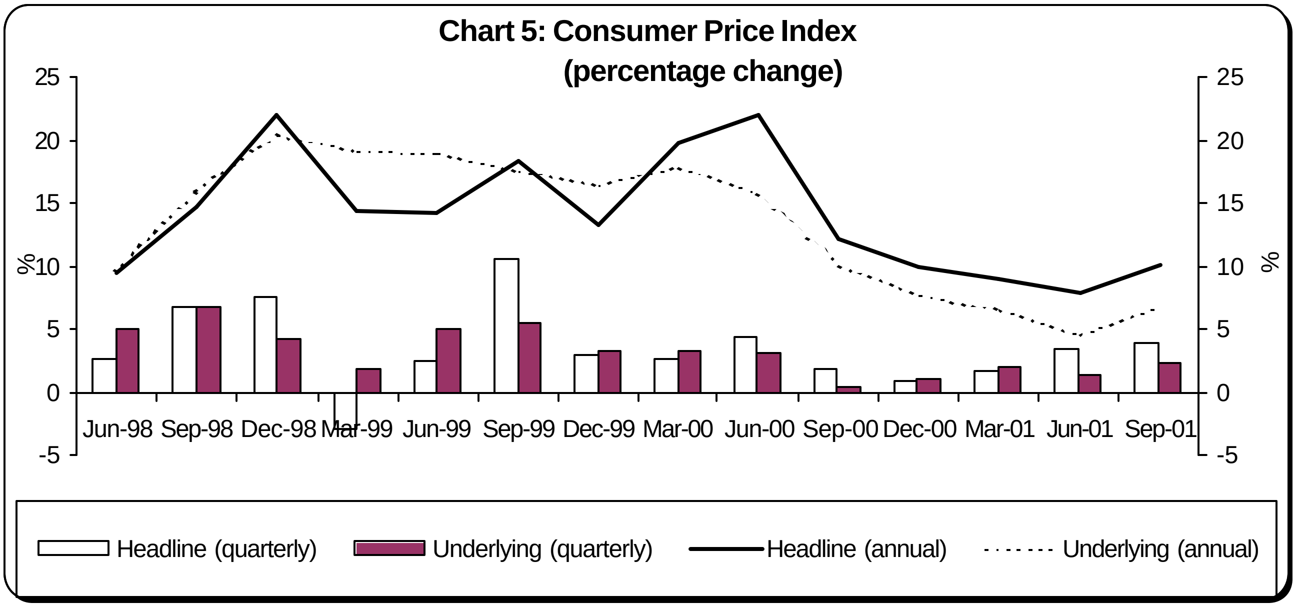
CPI ex seasonal, excise & price-control: Excludes seasonal items, selected excise impacted Items and selected price-regulation impacted CPI categories including the *Rents, council charges fuel/power* group, and the *Fares, Communication and Medical and health care* sub-groups.

There is no 'ideal' measure of underlying inflation that perfectly satisfies both the needs for forward-looking policy making, and the backward-looking public accountability needed for ensuring policy credibility. Therefore, it is important the Central Bank considers a variety of measures both in making policy and in providing policy accountability. Currently, the Bank of PNG is actively researching other measures of underlying inflation, including the trimmed mean and variance weighted approaches. It would be imprudent to place too much reliance on a single measure when conducting monetary policy.

Bank's bi-annual liaison survey, in conjunction with other economic indicators collected by the Bank, indicate that domestic demand is stagnant. The adverse income shock from the lack of major development projects and a decline in agricultural exports has led to lower aggregate demand. This may explain why the feed-through effect from the depreciating kina to consumer prices has been lower and slower than expected as increased competition could have forced businesses to accept reduced price-cost margins.

ii) 2002 Projections

Imported and domestic price pressures will both continue to influence the inflation outcome for 2002. Key factors include the balance of payments performance and the potential impact of the National Elections on fiscal policy. Despite the steady downward trend since 1998 the rate of inflation is expected to stabilise in 2002. The forecasted annual rate of inflation in 2002 is 8.8 percent and 8.5 percent for headline and underlying



Source: NSO for *Headline* CPI and Bank of PNG for *Underlying* CPI.

measures, respectively. Headline inflation is expected to be higher than underlying inflation because of excise duty increases scheduled for the June quarter of 2002.

From the imported price pressure perspective, these 2002 forecasts are based on the assumption that seasonal increases in major primary commodity exports between March and September of 2002 will counter the lagged effect of the depreciation of the kina in the second half of 2001. However, if there is increased Government spending leading up to the 2002 National Elections, this could be another potential source of pressure on the domestic currency and hence, an increase in prices of imported goods.

Domestic price pressure will come about from the carry-over effects of the budgeted 7.0 percent increase in public sector wages in January 2002. Although real sector activity is projected to pick-up in 2002, domestic price pressure is unlikely to be significant.

(f) Monetary and Financial Market Developments

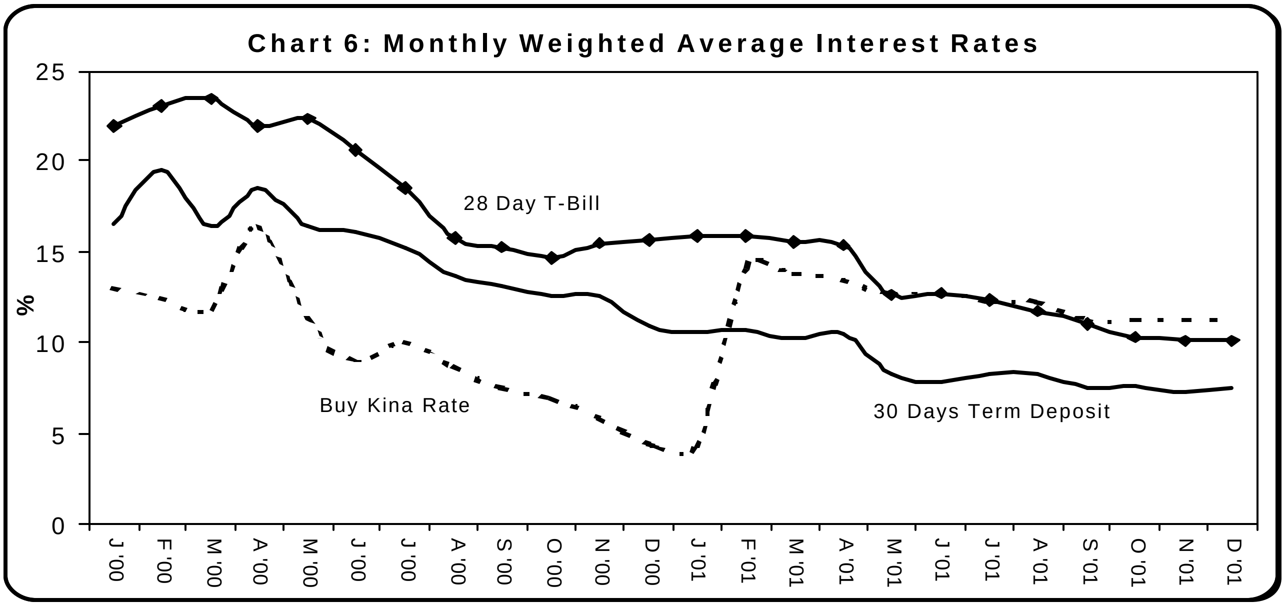
The Central Bank gradually eased monetary policy over the year to September 2001, following stability in exchange rates and a lower than expected inflation rate between the December quarter of 2000 and June quarter of 2001. Accordingly, the Central Bank reduced the Kina Facility Rate (KFR, see Box 3) by 3.5 percentage points in aggregate from 15.5 percent in February to 12.0 percent in September 2001.

However, due to the increase in underlying inflation in the September quarter, the risk of further inflationary pressure, and uncertainties relating to financing of the 2001 Budget, no further adjustment was made to the KFR in the December quarter of 2001.

Over the year, as the KFR was progressively reduced, all market interest rates declined with the 182 days Treasury bill rate falling from 14.9 percent in December 2000 to 10.2 percent at the end of December 2001. The weighted average 28 day term deposit rate and the Indicator Lending Rates (ILRs) of the commercial banks also declined during the period. The minimum ILR declined from 16.75 to 15.25 percent.

The KFR was initially based around the 28 day Treasury bill rate but since then the latter has fallen below the KFR by up to 100 basis points, reflecting favourable inflationary expectations over the second half of 2001 by holders of Government securities and adequate liquidity levels in the banking system (see Chart 6).

The spread between the weighted average lending and deposits rates widened, reflecting the slower pace of adjustment in the earning rates on loans than the cost of funds on deposits. While earning rates on prime assets of commercial banks, primarily Government securities, also declined, average cost of funds fell faster than the average earnings rates, thereby improving profit margins. Chart 7 shows that the margin between the weighted average lending and deposit

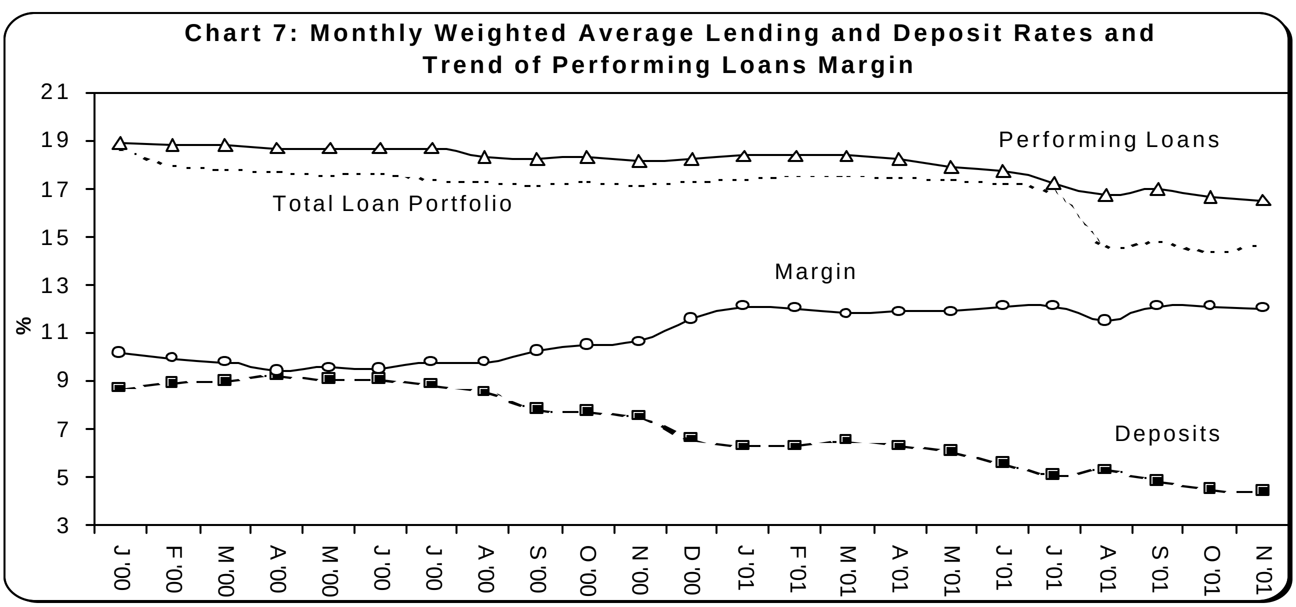


Source: Bank of PNG.

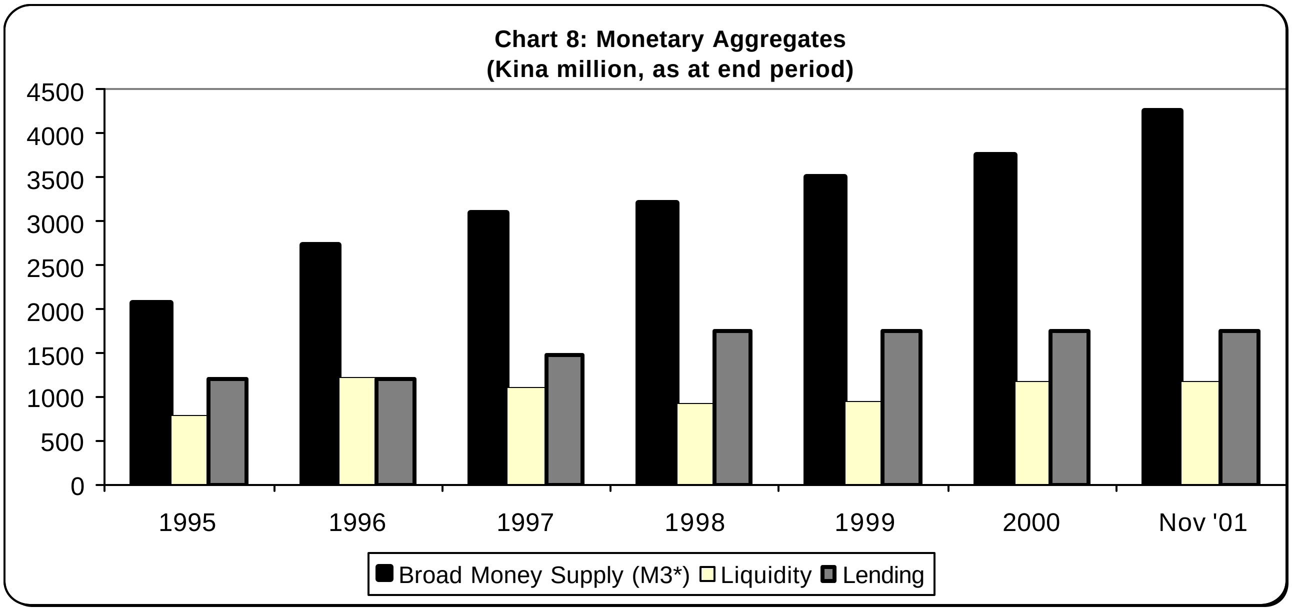
rates widened for performing loans. The decline in the Total Loan Portfolio reflects an increase in the number of loans considered as non-performing during 2001. In addition, it also reflects an improvement in reporting by some of the commercial banks.

The level of broad money (M3*) increased by 12.9 percent between December 2000 and November 2001 as a result of higher net foreign assets of the banking system, which more than offset a decline in net credit extended by the banking system of 1.7 percent. An increase in lending to the non-financial private enterprises, primarily for trade financing and commercial agriculture, and non-monetary financial institutions was more than offset by the declines in loans to official entities and to households (see Chart 8).

The Central Bank continued to utilise its open market instruments in implementing monetary policy in 2001, with no changes made to both the Cash Reserve Requirements (CRR) and the Minimum Liquid Asset Ratio (MLAR). Although the Central Bank recognises



Source: Bank of PNG.

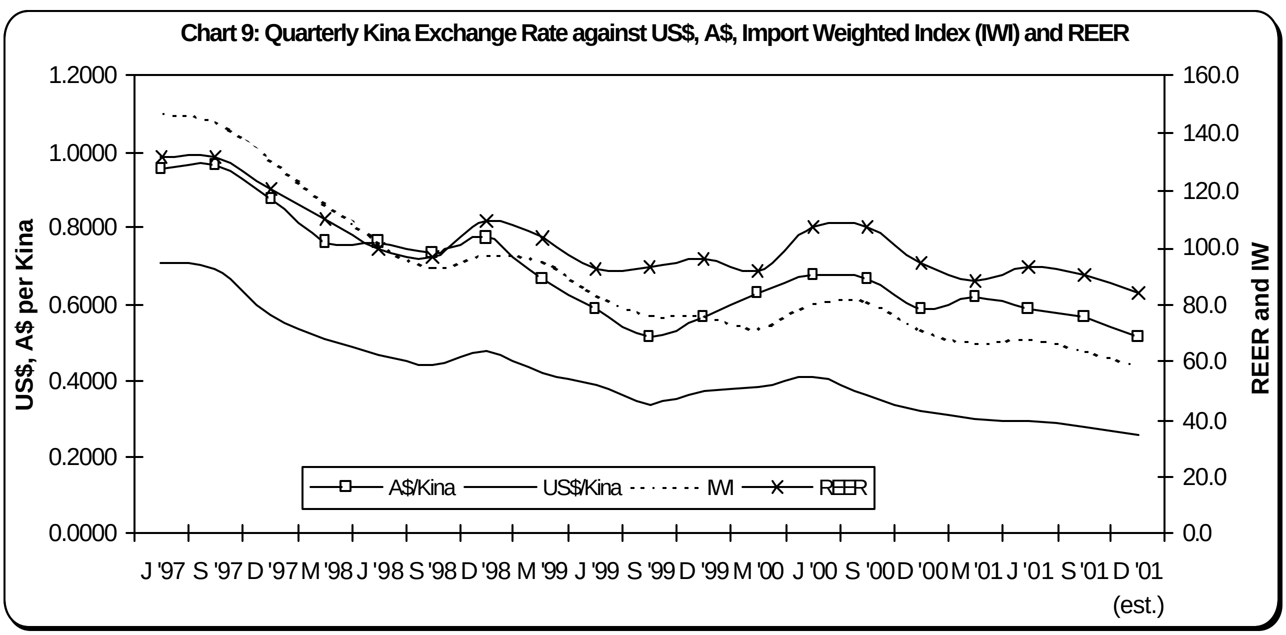


Source: Bank of PNG.

the impact that the CRR has on cost of funds, it has been maintained due to the high level of liquidity in the banking system.

In the first half of 2001 the kina appreciated by 0.6 percent against the Australian dollar, while it depreciated by 7.8 percent against the US dollar. The Central Bank intervened in the foreign exchange market to smooth out short-term volatility in the exchange rate.

However, over the second half of 2001, the kina depreciated against the US and Australian currencies by 12.5 percent and 13.1 percent, respectively. This outcome was the result of lower foreign exchange inflows due to declining exports combined with the seasonal increase in demand for imports. The real effective exchange rate (REER)[1] declined in the March quarter with the trend reversing in the June quarter of 2001 (see Chart 9). The decline reflected a deprecia-



Source: Bank of PNG.

[1]For definition, refer to the July 2001 Monetary Policy Statement. REER is calculated by the Bank of PNG.

tion in the nominal exchange rates and a low domestic inflation outcome for the March quarter of 2001. The direction of the REER reversed in the June quarter as the exchange rate stabilised. In the second half of 2001 further declines in the nominal exchange rates more than offset increases in domestic headline inflation to result in a decrease in the REER. The decrease in the REER reflects an improvement in international competitiveness of the export sector following the depreciation of the exchange rate, which more than offset the increasing inflation trend. However, the benefits to the export sector of the increase in competitiveness were offset by the lower level of supply responses to the changes in international prices, coupled with other structural impediments such as the deterioration in infrastructure and land tenure systems.

2. MONETARY POLICY

(a) Monetary Policy Stance

The gradual easing of monetary policy in the third quarter of 2001 was attributed to the following:

- The underlying inflation outcomes for the March and June quarters were better than expectations;
- The exchange rate was relatively stable against the Australian dollar, but depreciated against the US dollar;
- The level of economic activity remained flat with prospects for an immediate recovery remote, as major export prices including coffee had fallen to record low levels. Global economic downturn worsened the prospects for recovery of export prices;
- Overseas official interest rates had fallen sharply, following actions by major central banks to ease monetary policy in order to stimulate economic activity;
- No signs of recovery in domestic demand as monetary and credit aggregates continued to moderate, although nominal interest rates had declined;
- Continued tight control on expenditures by the Government with a cut of K89 million in expenditure, in light of lower tax revenue and delays in draw down of external extraordinary financing; and
- The IMF and World Bank programmes were broadly on track though some delays were being experienced.

However, the easing of monetary policy moderated into the December quarter of 2001 due to the following:

- The underlying inflation outcome for the September quarter of 2001, which continued the increasing trend since the September quarter of 2000, with prospects for further inflationary pressure from exchange rate depreciation. There are also potential increases in prices from the restoring of price-cost margins, which have been squeezed over a considerable period;
- The depreciation of the kina against the US and Australian currencies, mainly arising from the

BOX 3: KINA FACILITY RATE (KFR)

In order to improve the efficiency of transmission of monetary policy the Central Bank introduced the KFR in February 2001. The KFR has become the principal tool for signaling to the commercial banks and the public the monetary policy stance of the Central Bank. The KFR is announced by the Governor at the beginning of each month and determines the rates that the Bank of PNG will deal with commercial banks to supply/withdraw funds to/from the system. The Governor decides the rate following discussion in the Monetary Policy Committee. Discussion is based on analysis of a range of factors to assess underlying economic fundamentals and include:

- Inflation;
- Real Sector Activity, including Gross Domestic Product;
- Balance of payments;
- Exchange rates;
- Fiscal Operations of the Government;
- Developments in the world economy including foreign interest rates and inflation;
- Developments in the domestic monetary aggregates and interest rates;
- Relations with international financial institutions such as IMF and World Bank; and
- The Factors that influence investor confidence in the country.

The degree of influence of each variable or a combination of variables depends on the economic situation at a particular point in time. Therefore, it is crucial for the Bank to consider a wider range of variables in determining the KFR.

BOX 4: IMPLICATIONS OF NEW ISSUANCE OR RETIREMENT OF DOMESTIC DEBT BY THE GOVERNMENT

The Government intends to restructure its debt portfolio, which includes the issuance of longer-term and retirement of short-term debt, to improve debt management and minimise the cost of debt servicing. In 2001, the Government retired some Treasury bills, which are short-term debt, and issued K140 million of new Inscribed Stocks with maturities from 1-3 years.

The issuing of new debt to the domestic market is likely to have the following impacts:

- Purchases of Government debt by the commercial banks may crowd out lending to the private sector, while purchases by non-banks is likely to reduce the level of liquidity in the banking system and increase market interest rates; and
- Increase future domestic interest costs, which may exert budgetary pressures and lead to further increase in the stock of debt.

The retirement of domestic debt is likely to have the following impacts:

- Less non-risky investment opportunities are available to the banks, which will give them incentives to increase lending to the private sector; and
- Increased liquidity in the banking system, and may have the potential to reduce market interest rates. Reduced domestic interest costs to Government might allow savings to be re-distributed to other productive expenditures.

The impact of changes to the stock of Government debt, whether through new issuance or retirement, on the exchange rate and inflation is ambiguous and depends on the relative nature of expenditure between the private and public sectors. For example, if the issuance of new debt is to be used by the Government to finance non-productive expenditure, then there is a potential for it to impact adversely on the exchange rate and inflation. If the retirement of Government debt leads to an increase in private sector expenditure for imported consumer goods then price stability may also be adversely impacted.

Under either condition, it is very important that the Central Bank has sufficient monetary instruments (such as Treasury bills, Repurchase Agreements and Kina Facility) available, so that it can use them to manage the liquidity levels in the banking system, in order to stabilise monetary conditions and reduce the potential pressures on exchange rate and inflation.

high current account deficit of the non-mineral sector;

- The issue of new Treasury bills and Inscribed Stocks by the Government to counter lower than expected revenue collection (see Box 4) and the delay in release of the remaining external extraordinary financing. In addition, there was higher utilisation of the Temporary Advance Facility to bridge temporary shortfalls in revenue; and
- The outlook for international commodity prices worsened due to the continued weakening of the world economy.

In 2002, the Central Bank will continue to monitor developments in the key macroeconomic indicators and may make adjustments to its monetary policy stance. The pace and extent of further adjustments to the stance will depend on the following factors and their combined influence on price stability:

- The recovery in volumes and prices of PNG's major exports that will sustain the contribution of the non-mineral sector to the balance of payments and foreign exchange reserves;
- The recovery in the global economy;
- Successful conclusion of asset sales by the Government and the use of the proceeds to retire domestic and external debt and finance the budget deficit;
- Fiscal consolidation and prioritisation of expenditure by the Government to prevent major slippages in the lead up to the National Elections, which might otherwise jeopardise the recent gains on price stability;
- The pace of domestic debt reduction by the Government, which will minimise crowding out of the private sector credit growth;
- Moderation in supply side cost increases, especially wages and salaries; and
- Continuation of the Government's Structural Adjustment Programme that may lower the cost to Government and inflation over the longer term.

Under these conditions the monetary and credit aggregates are expected to develop in 2002 as shown in Table 3.

Accordingly, the 2002 annual percentage change in

Table 3: Growth in Monetary and Credit Aggregates (percentage)	2000 (Actual)	2001 (p)	2002 (Proj)
Broad money supply	7.7	5.4	6.3
Reserve money	3.5	5.5	4.2
Private sector credit	0.5	-1.4	8.7
Net credit to Government[1]	10.8	-23.1	28.3

Source: Bank of PNG.
[1] The decline in 2001 reflects the large credit balances in Government accounts due to the loan proceeds from the World Bank, ADB and JBIC. The corresponding increase in 2002 represents growth from the low base in 2001.

the headline and underlying inflation rates are forecasted to be 8.8 percent and 8.5 percent, respectively.

(b) Conduct of Monetary Policy

The KFR, a new price based signalling mechanism introduced in 2001, has enhanced the transmission of monetary policy. This signalling rate in turn sets the rates at which the Central Bank deals with commercial banks both for the weekly deposits and loans in the Kina Facility and for the over-night transactions in its Repurchase Agreement Facility (RAF)[2]. These arrangements have facilitated a lower interest rate structure and re-aligned the link between the signalling rate and market interest rates. However, the pace of adjustment for rates of return and cost of funds on different classes of assets and liabilities differs considerably. The varying pace of adjustment is consistent with the nature of assets, depending on whether they have fixed or floating rates of interest. The pace of adjustment for assets (loans) with a floating base rate and a margin can be expected to be more rapid than for fixed rate loans.

Reinforcing the new signalling arrangement, daily liquidity is managed within the reserve money framework. Reserve money is defined as currency in circulation and deposits of commercial banks with the Central Bank and, along with the level of liquid assets in relation to statutory requirements, is an indicator of the capacity of the banking system to finance new lending. During 2002, reserve money is expected to increase by 4.2 percent following an estimated increase of 5.5 percent in 2001. The growth in reserve money is unlikely to impact on inflation, as the Central Bank will continue to use its open market instruments to sterilise any excess reserve money in the banking system.

To further strengthen the transmission mechanism of monetary policy, the RAF, which was introduced on 5 February 2001 has been utilised for daily liquidity management, while the Master Repurchase Agreements (MRAs) were finalised and executed in January 2002 (see Box 5). Under the MRAs, over-night and term repurchase and reverse-repurchase transactions involving exchange of cash for Government securities will be conducted between the commercial banks and the Central Bank, which is presently conducted on an unsecured basis. Following the execution of the MRAs, the Central Bank has been considering changes to the weekly Kina Facility arrangement.

In line with the Government's policy to reduce and restructure its domestic debt to improve debt management, the Government expects a net redemption of K42.9 million in Treasury bills in 2002 and intends to reissue to the market the Inscribed Stocks of 1 year maturities issued in 2001. In addition, over 2002 a number of large flows of funds associated with privatisation and other Government related transactions are expected. These will provide challenges for monetary management by the Bank of PNG in ensuring that temporary fluctuations in financial markets are minimised.

The Treasury bill auction remains the main instrument for injecting and diffusing liquidity from the banking system. Further refinements to the auction arrangements in the second half of 2001 have improved the

[2] In the January 2001 Monetary Policy Statement this facility was described as the Standby Repurchase Facility (SRF).

BOX 5: REPURCHASE AGREEMENT FACILITY

Upon the introduction of the Kina Facility Rate (KFR) in February 2001 the Central Bank also launched the Repurchase Agreement Facility (RAF) or Repo to complement the new monetary policy signalling arrangement. Since the introduction of the RAF, transactions have been overnight only and unsecured, primarily because the Master Repurchase Agreement (MRA) was still being drafted. The MRA is now finalised and will be implemented in the first half of 2002.

A repurchase agreement involves the sale of securities with a simultaneous agreement to repurchase them upon an agreed date in the future. When the securities are repurchased, the cash is returned, plus an amount constituting interest, which is the repurchase price paid. Under a Repo, the ownership of securities transfers with the initial payment of cash and if the initial seller does not meet its obligations under the agreement, the buyer retains ownership of the securities. A reverse repurchase agreement occurs when the Bank of PNG accepts cash from the banking system in exchange for Government securities held in its portfolio.

When fully operational, transactions under the RAF will be for up to 5 business days. RAF transactions were not meant to compete against but to complement the inter-bank market because it becomes available only after the inter-bank market closes at 4.30 p.m. on normal working days, and 5.00 p.m. on Fridays, and depends on banking system liquidity requirements. Because transactions in the RAF have an immediate impact on reserve money, the discretion to participate in the RAF rests with the Bank of PNG based on its monetary policy stance. The price of transactions in the RAF is fixed at the beginning of each month by the Governor of the Bank of PNG. Currently, there is a dealing margin of 1.0 percentage point above and below the KFR for repurchase agreements and reverse repurchase agreements, respectively.

Central Bank's flexibility to adjust liquidity and influence the yield curve on Government securities.

Treasury bill issues under the Tap Facility continue to encourage purchases by the non-bank entities and individuals directly from the Central Bank at interest rates, which are set at 1.0 percentage point below those obtained at the weekly auction. The Tap arrangement provides an alternative investment opportunity for the public, excluding commercial banks and other financial institutions, thereby enhancing the competition for funds. The Tap Facility is offered to the public at the discretion of the Central Bank, and the public will be advised of its availability. Some refinements to the Tap arrangements in the latter half of 2001 have improved the Central Bank's ability to estimate its impact on liquidity movements.

Consistent with the Government's intention to reduce its domestic debt, the Central Bank, in addition to the MRAs and the anticipated changes to the weekly Kina Facility, will consider other instruments for liquidity management in 2002. In addition, the MLAR and CRR will be reviewed to determine their appropriate levels consistent with the stance of monetary policy.

The Central Bank will continue to assess the effectiveness of its liquidity instruments and make further refinements where necessary.

Queries on the contents of the Monetary Policy Statement should be directed to the Manager, Monetary Policy Unit, Economics Department at the Bank of Papua New Guinea on telephone number 3227 312 or fax number 3200 757. Copies of the Statement can be obtained from the Manager, Public Information Unit on telephone number 3227 326 or fax number 3200 757.