Bank of Uganda

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MONETARY POLICY FRAMEWORKS IN AFRICA: THE CASE OF UGANDA

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Abstract

[1] The views in this paper are those of the authors and do not necessarily represent those of the Bank of Uganda

1. Introduction

After a long period of economic and financial management and political instability, Uganda adopted in 1987 a rehabilitation and recovery programme to rebuild the economy and restore macroeconomic stability under the auspices of the International Monetary Fund, the World Bank, and the donor community at large. A wide range of reforms and policies has been undertaken in all the major sectors of the economy. Inflation has been brought under control to single-digit levels, real GDP growth rate has averaged at least 6% per annum, the current and capital accounts of the balance of payments and the domestic marketing system have been liberalized, and government has reduced its involvement in commercial activities, thus providing an avenue for private sector participation. Controls on goods and interest rates have been eliminated. Uganda has benefited substantially from financial support from donors, which has helped to finance the fiscal and the current account deficits and to boost the foreign reserves of the Bank of Uganda.

Like a number of sub-Saharan countries, Uganda shifted from direct to indirect monetary policy control as part of the financial sector liberalization process undertaken under the Structural Adjustment Programmes. There is growing consensus that direct controls on interest rates and credit should be abandoned because they led to the misallocation of resources and inefficiency in financial intermediation with knock-on effects for savings mobilization, investment, and economic growth. Monetary policy in Uganda is set within the context of the macroeconomic objectives of achieving real economic growth and the maintenance of price stability as defined by Government from time to time. Consistent with this, monetary policy is designed with a view to achieving the target on inflation while providing adequate credit to the private sector to sustain the desired economic growth and improve the balance of payments. In the past, the capacity of the Bank of Uganda to manage monetary policy, regulate and supervise financial institutions had been greatly undermined by Government when the responsibility for the monetary policy formulation had vested in the Ministry of Finance. Realizing the need to rationalize the activities of the central bank, the Bank of Uganda Act of 1966 was amended as per the Bank of Uganda Statute of 1993, empowering the Bank of Uganda (BOU) as the only monetary authority in Uganda, with the autonomy to formulate and implement monetary policy. BOU was also empowered to supervise and regulate the financial institutions under the Financial Institutions Statute of 1993.

Since 1993, when BOU assumed its primary responsibility in the formulation and implementation of monetary policy, the Bank adopted the Reserve Money Programme (RMP) as the operating framework to facilitate indirect monetary control. Monetary policy instruments have been developed to regulate liquidity in the economy, with varying degrees of success. In terms of the overall macroeconomic objectives, the RMP has helped to determine an appropriate monetary policy stance that delivers low and stable inflation. Such inflation pays as it guides economic agents to make rational decisions, lengthens the planning horizon, reduces uncertainty, and also safeguards against eroding the purchasing power of a currency.

This paper reviews the monetary policy framework in Uganda. The first part attempts to track the evolution of monetary policy frameworks right from 1966 when BOU was established. The second part reviews the current framework of the RMP, highlighting its observed strengths and weaknesses. The third and fourth parts discuss the existing monetary policy instruments, their operational procedures, and their performance in the implementation of monetary policy. The fifth part brings out the current challenges for monetary policy management while the last part presents concluding remarks.

2. Evolution of the monetary policy framework

The evolution of the monetary policy framework cannot easily be described without tracking developments in the economy as a whole and especially monetary and credit aggregates and other major economic indicators. This paper will briefly attempt to track monetary policy developments from the time the Bank of Uganda (BOU) was formally established in July 1966.

2.1 Credit controls under monetary policy co-operation (1966-1971)

The functions of the BOU, when it was set up, are contained in the preamble to the Bank of Uganda Act of 1966, namely to

1) Issue legal tender;
2) maintain external reserves in order to safeguard the international value of the currency;
3) promote stability and a sound financial structure conducive to a balanced and sustained rate of growth in the economy and other connected purposes;
4) act as banker and financial adviser to the Government;
5) ensure that monetary and credit conditions are in accordance with the broad lines of economic policy decided by the government;
6) act as banker to commercial banks and exercise certain powers over their operations for the execution of monetary and credit policy.

Until the establishment of BOU, the East African Currency Board (EACB) issued a common currency that circulated in Uganda, Kenya, and Tanzania. BOU did not issue its own currency until January 1967 and its currency was allowed to co-circulate with EACB currency. Its notes continued to be legal tender until September 1967 and its coins until April 1969, but were still accepted by BOU for conversion purposes only.

The Treaty for East African Co-operation, which came into force in December 1967, required the Governors to meet at least four times a year, to consult and co-ordinate their monetary, balance of payments, and interest rate policies. The central banks of Uganda, Kenya, and Tanzania agreed to maintain their official rates of exchange for external currencies and interest rates in line with one another. They based their rates broadly on the EACB rate for rediscounting B which had been 5% since 1964. Treasury bills (TB) were made available to commercial banks on a *tap* basis at 5%, with an undertaking that they would be repurchased at the same rate to encourage them to invest surplus funds locally rather than use them to purchase foreign exchange. However, commercial banks showed an interest in investing in Treasury bills even after the withdrawal of the tap facilities. After the tap rate of 5%, the rate on Treasury bills remained for a greater part of the year at 4,5%.

The level of foreign reserves dictated monetary and credit policy aimed at avoiding any unnecessary increase in demand not matched by receipts of foreign exchange. For some years, commercial banks were over-lent, with their advances exceeding deposits, and the difference was met by borrowing from their offices abroad. Additional demand for seasonal crop financing increased an already borrowed position abroad. In view of the high rates in London, commercial banks exerted a lot of pressures on BOU for advances to minimize their oversold position abroad. When BOU realized the possible serious consequences of increased money supply on import demand and on foreign reserves, it implemented in 1967/68 the following directives to contain balance of payments difficulties:

- Reduce by 5% of commercial banks' outstanding credit for non-essential uses, in preference for essential purposes[2];
- Limit advances against bonded goods to 75% of the value of goods;
- Restrict letters of credit facilities to within 80% of the value of goods to be imported and require importers to advance cash deposits equivalent to 20% of the value of goods before issuing a letter of credit.

In conjunction with these measures, Government imposed higher customs duty on a wide range of imports. The response by banks to these directives was very satisfactory and the objective was achieved. But as long as the relatively shallow money and capital markets prevailed, fiscal measures remained the primary means of achieving economic stability. These credit restrictions and the reduction in foreign payments boosted BOU's reserves, enabling the Bank to follow a more liberal policy in its rediscounting of crop paper for commercial banks in 1967/68.

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2 These included agriculture, mining and quarrying, water and electricity, building and construction, manufacturing and processing of goods, and marketing of agricultural products.

The credit measures were relaxed in 1968/69 and this contributed to lowering the foreign reserves of BOU. A new Banking Act came into place, consolidating the law relating to banking in Uganda and also aimed at ensuring that commercial banks and other credit institutions would operate on sound financial principles and in conformity with overall Government economic policy. The law prescribed liquidity requirements of 20% on commercial banks' demand deposits and 15% on time and savings deposits.

In 1970, there was a turnaround in the economic events, with real GDP growth of 1,9%, down from an exceptionally high rate of 10,7% in 1969. The economic slowdown occurred mainly in the agricultural sector and in trade activity, the former being mainly attributable to a big drop in the production of coffee and the later being connected to the uncertainties in the private sector. A new Government in 1971 decided to restrict its participation to a maximum of a 49% share in companies of strategic importance to the economic development of the country. Monetary developments were heavily affected by big expansion in government's expenditures.

2.2 Credit and interest rate controls under the "printing press" regime, (1972-1985)

The year 1972 marked the beginning of a long period of economic and financial mismanagement, deterioration, and a general state of insecurity. The Liberation War aggravated the situation in 1979. The leadership took a decision in 1972 to declare a National Economic War, entailing ordering a number of non-nationals who had for a long time dominated a number of economic sectors, to remove themselves from the country so as to give way for Ugandan nationals take over. BOU continued to enforce restrictive measures in the form of quantitative ceilings on essential imports and credit limits to finance non-essential purposes. However, due to heavy foreign exchange bills to cover fares and freight charges for the departing non-nationals, there was a major drain on foreign reserves. In addition the export proceeds derived from export deals that had been concluded by the departing non-citizens never materialized. Furthermore, nearly all the departing persons never liquidated their financial obligations with banks while new credit had to be extended to the new businessmen. These factors made the imposition of BOU's restrictive policy inevitable. The leadership further directed that all banking business of government bodies, parastatal bodies, and cooperative unions be transferred to the Uganda Commercial Bank, the only fully indigenous bank at that time. This resulted in a number of expatriate banks closing down their upcountry branches and subbranches, making UCB the biggest bank in the country and the only one operating in upcountry areas.

Over the period 1972-1980, there was continuous growth in government borrowing from the banking system as a result of low and/or negative economic activity, especially after the declaration of the economic war. Credit extension was more for speculative transactions rather than genuine economic activity. A large part of the monetary sector virtually collapsed.

In 1981 Government embarked on a rehabilitation programme to bring the economy into balance, eliminate distortions, and restore conditions to sustain growth. In the field of monetary policy, all interest rates were raised sharply in October 1981, partly to mobilize resources for development and partly to encourage banking habits, while also taking account of inflation. This triggered a shift in the structure of financial assets, favouring quasi money and Treasury bills. Rates on Treasury bills were raised again in 1982 and tax on earnings was also waived. BOU also adjusted its Bank rate and rediscount rate in conformity with the change in interest rate conditions. An increase in overall credit was limited in agreement with the IMF and relevant outstanding amounts were subject to quarterly ceilings. Selective credit policy in form of channelling a certain proportion of total credit to the various economic activities and individual ceilings for banks, was abandoned. Selective credit controls were replaced by the stipulation that at least half of any increase in credit had to be extended to crop finance, other agricultural credits, and industry. It was not possible to float the exchange rate because of the inadequacy of foreign exchange reserves, and instead the country opted for a dual exchange rate system.

2.3 Credit and interest rate controls under the Stabilization Programme (1987-1992)

The policy environment changed dramatically when the authorities adopted the Economic Recovery Programme (ERP) in 1987, principally designed to restore macroeconomic stability. One of its priorities was to contain inflationary pressures by restricting the monetary growth largely associated with the monetization of budget deficits. In May 1987, a new Uganda shilling equivalent to 100 old shillings was introduced, coupled with a conversion tax of 30%, all intended to reduce the excessive liquidity overhang and generate additional tax revenue. But it was clear that the economic recovery could not progress without providing credit to the private sector to cover the cost of imports. Therefore, monetary policy was confronted with the problem of limiting monetary growth while accommodating private sector credit needs and this necessitated the repayment of the government debt owed to the banking system. Other measures entailed a reorientation of pricing and marketing policies and the rehabilitation of the industrial sector, in order to prepare the economy for market-oriented policies to stimulate the economy.

For reasons beyond the control of the authorities, the budget deficit turned out higher than envisaged. The programme somewhat underestimated the damage inflicted on the economy after a decade of progressive disintegration and political instability.

In the year after the launch of the ERP, the focus was again on limiting the financing of the government by BOU in order to contain inflation. This could not be tackled without expenditure controls and enhancing government revenues. With a narrow tax base heavily dependent on coffee exports, the only way to raise revenues was to discretely devalue the exchange rate. However, the coffee prices plummeted and the targets on revenue could not be achieved. Coupled with government lending for crop finance purposes, the money supply expanded rapidly. The responsibility for the provision of crop finance was transferred from the government to BOU to enable the Coffee Marketing Board (CMB) to pay off its liabilities. This led to a doubling of money supply, contributing to inflationary pressures of about 86%. In retrospect, the programme overestimated the speed with which stabilization could be achieved. The programme for 1989/90 contained measures aimed at controlling credit expansion, mainly for crop financing. Repayment of debt by the CMB was one of the measures. In response to these other measures, the domestic situation improved markedly, monetary growth decelerated, the real GDP growth rate was higher than 7%, and inflation fell to 29%.

At the beginning of 1990/91, foreign exchange bureaux were introduced as part of the gradual process of liberalizing the exchange rate system. This move was in recognition of the important role of the secondary market, parallel to the official market. It provided a legitimate channel for the execution of certain foreign exchange transactions at market-based exchange rates, thus improving an incentive for export commodities other than coffee whose receipts were still subject to surrender requirements. In order to improve the competitiveness of coffee relative to other exports, and also to reduce the spread between the official and bureau rate, the official exchange rate underwent a series of devaluations. The economic performance fell below expectations, repayments by government were less than envisaged in the programme, largely on account of shortfalls in donor support disbursements, declines in coffee export receipts, and higher fiscal expenditures. Real GDP rose by 5%, while prices rose by almost 39%, mainly on account of a sharp rise in international prices that led to an increase of 70% in local retail petroleum prices.

In 1991/92, there was a fiscal policy slippage resulting from severe shortfalls in donor support inflows and revenue collections. The repayment trend that had started in the previous year was reversed, leading to liquidity expansion. Annual inflation shot up by 63%.

Tight fiscal policy was adopted in 1992/93, during which time the Government of Uganda made repayments to the banking system and the rate of inflation plunged to negative 1% on a year-end basis. Other contributing factors that slowed monetary expansion included the increase in foreign exchange purchases for imports and the large amount of non-performing loans. The Treasury bill auction was initiated in April 1992, allowing the participation of commercial banks for the first time. Since then, Treasury bills have been used as an instrument of monetary policy. Before 1992, Treasury bills had been used as a fiscal instrument to mobilize funds for the budget, and commercial

banks had not been allowed to hold them. This new arrangement allowing banks to hold Treasury bills helped to improve BOU's liquidity management.

2.4 Market-based monetary policy regime (1993/94 to date)

The tight fiscal conditions pursued in the preceding year continued to prevail in 1993/94 with government's continued repayments to the banking system. For the first time, government's net position with the banking system turned into a credit. The liberalization of the exchange and trade system and net donor support inflows led to an accumulation of net foreign assets by the banking system. Though net foreign assets increased, the net domestic assets of the banking system declined and inflation fell from an annual average of 28% in 1992/93 to 6,5% in 1993/94. This trend of monetary growth coming from increased net foreign assets of the banking system has been observed since then.

Government realized that an efficient financial sector with an effective banking system was essential to support and foster its stabilization and adjustment programme. In 1993/94, it adopted a Financial Sector Adjustment Programme in collaboration with the International Monetary Fund (IMF) and the World Bank. The programme's overall and long-term objectives were to deepen the financial system and to establish an efficient system of resource mobilization that would offer a greater variety of instruments to borrowers and savers in an increasingly liberal and market-oriented environment. The components of this programme included the following:

7) Reform of the legal and regulatory framework of the banking system.
8) Reducing financial repression by liberalizing interest rates and eliminating credit controls.
9) Restructuring the commercial banks.
10) Establishing freedom of entry into and procedures for orderly exit from the banking industry.
11) Instituting the transition from direct to indirect monetary policy.
12) Developing financial markets, including Treasury bill markets and other money markets.
13) Improving the financial infrastructure including bank supervision, the payments system, auditing, and accounting.

The available literature (e.g. Popiel, 1994; Roe and Sowa, 1994; Njuguna Ndung'u, 1997) indicates that certain preconditions have to be in place for financial sector liberalization to bring about the desired benefits.

The pursuance of a tight monetary and fiscal policy stance strengthened by the political commitment to maintaining macroeconomic stability, the existence of a Treasury bill auction, and the gradual liberalization of interest rates are among the important factors favourable for the adoption of financial sector liberalization, particularly the transition from direct to indirect monetary policy management. The fiscal authorities adopted in 1992/93 a Acash-driven budget@ strategy to maintain fiscal discipline, thus contributing to the containment of inflation to target low and stable single-digit levels every year.

In summary, for the period 1971/72 to 1992/93, the conduct of monetary policy was largely subdued and subordinate to fiscal considerations. Monetary control was exercised through direct means, characterized by interest rate controls, credit controls (selective and directed credit) and was basically dormant. Reserve requirements remained unchanged at 10% of commercial banks' deposit liabilities between 1972 and 1992 even when liquidity conditions called for a change. Statutory limits were hardly enforced and a number of commercial banks had open-ended access to credit from the Bank of Uganda. Interest rates were administratively set and remained unchanged for long periods, despite inflation developments. When they were changed, the adjustments were not high enough to offset inflation. This resulted in negative real interest rates for most of the period, and created excessive demand for bank credit, with suppressed mobilization of financial resources. The Treasury bill instrument hardly served its monetary policy role, given the independent role of the Ministry of Finance in determining the issues and even the approval given to the customers without due consideration for desired liquidity conditions in the economy. Monetary policy therefore remained virtually dormant even under the stabilization programmes pursued in the 1980s, despite its crucial role in promoting macroeconomic stabilization. The introduction in 1993

of indirect monetary policy instruments was part of the broader set of reforms in the financial sector, which not only included the financial sector but also macroeconomic stability and the liberalization of the whole economy in general. (See Table 2 in the Appendix on BOU's monetary policy rates.)

3. Current monetary policy framework

The Reserve Money Programme (RMP) was introduced in 1993 as the monetary policy-operating framework after the Bank of Uganda Act of 1993[3] gave powers to BOU to formulate and implement monetary policy. Since then, BOU has exercised its autonomy in the formulation and implementation of monetary and exchange rate policy. Concurrently, the Financial Institutions Statute (FIS, 1993) was enacted, giving BOU the mandate to supervise and regulate financial institutions. This opened up the financial sector to new entrants and allowed commercial banks more operational freedom, and improved bank supervision. The RMP is based on conventional IMF financial programme. There were basically three factors that led the monetary authorities to use the RMP in the shift from direct to indirect monetary control:

1) Where monetary targeting is adopted, the most effective operational tool is one that the monetary authorities can easily control, namely the central bank's balance sheet.
2) Data on base money could become easily available with a shorter lag than data on broader monetary aggregates.
3) There existed underlying economic relationships among base money, broader monetary aggregates, economic growth, and inflation that underpin the workings of the RMP. Econometric work done in the Research Department of BOU (Research Department, 1993) indicated a stable money demand function and a predictable money multiplier between base money and broad money supply (M2) at the inception. Subsequent research work (Katarikawe and Sebudde, 1999) also indicated stable money demand in the long run.

The RMP is a flow of the consolidated assets and liabilities of a central bank. In determining the demand for base money, BOU follows three steps (see Appendix Table 1):

1) The ultimate macroeconomic objectives are defined in terms of quantitative targets for real GDP growth rate, inflation, and import cover.

2) Broad money growth for M2 and other components of the monetary survey are projected, consistent with the macroeconomic objectives with assumptions for velocity. This makes broad money supply the intermediate target.

3) The growth of base money is then projected to be in line with the broader monetary aggregates and inflation. The annual growth target is converted into monthly targets that reflect seasonality in the money demand. The desired levels for daily movements are worked out from the monthly targets.

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[3] The Act empowered BOU to formulate and implement monetary policy directed at the economic objectives of achieving and maintaining economic stability. Added responsibilities are: to maintain external reserves, issue legal tender, banker and financial adviser to government and manager of public debt, banker and provide a clearing house for cheques and other instruments for financial institutions; supervise, regulate, control, and discipline all financial institutions and, where appropriate, participate in the economic growth and development programmes. The Uganda Constitution of 1995 also clearly stipulates that BOU must not be under the direction of any other person or body.

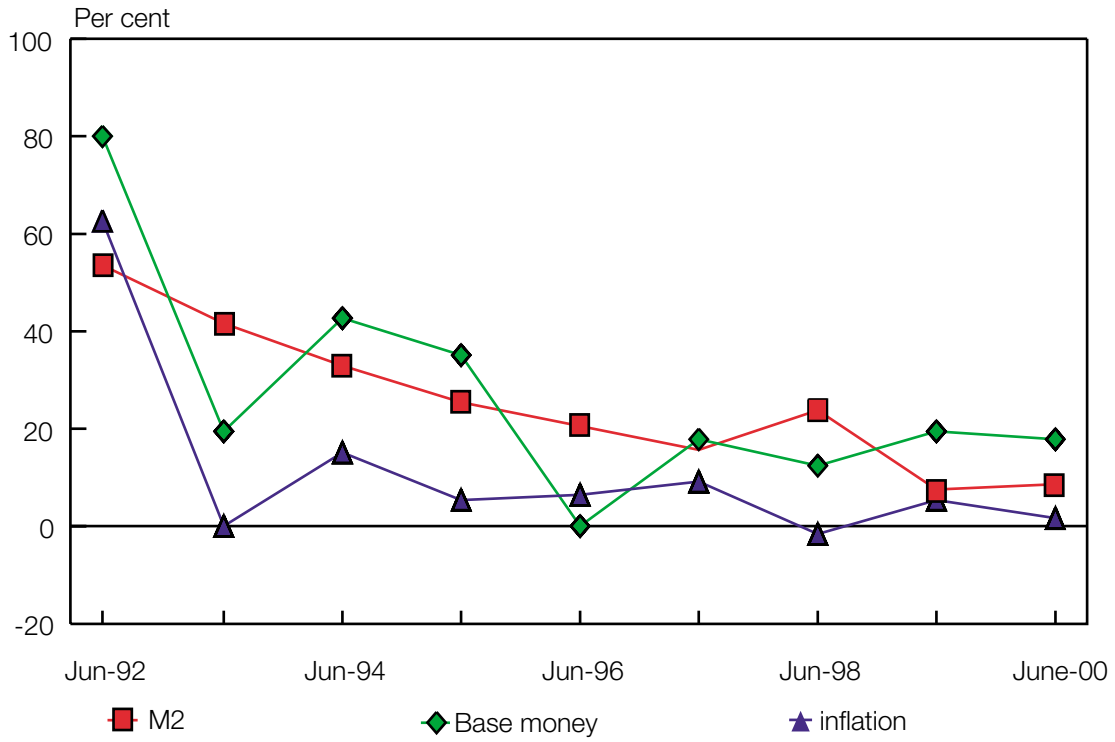
On the supply side, factors affecting base money are divided into two categories: autonomous (non-discretionary) factors that are not directly under the control of the central bank and policy factors driven by the discretionary actions of the central bank. For a particular week, the outturn of base money is compared with the desired level and the gap dictates the direction of monetary policy, bearing in mind developments in the prospective supply of base money and other macroeconomic variables (inflation, exchange rates, and interest rates). Thus, the RMP has been flexibly applied to guide monetary policy.

3.1 Usefulness of the RMP

The transition to indirect monetary policy control, being supported by major reforms on the fiscal front and other policy measures, has provided positive benefits:

(1) Inflation has been brought under control, down from double-digit levels of 66% in June 1992 to single-digit levels currently, and has been maintained (Figure 1).

Figure 1: Annual monetary growth and inflation



This trend reflects two major factors: first, the continued pursuance of prudent monetary and fiscal policies. Fiscal restraint, evidenced through continued savings with the banking system, combined with close co-ordination between the monetary and fiscal authorities, assisted tremendously in bringing down inflationary expectations. At times when there were fears that fiscal operations would lead to liquidity injections that would not be easily sterilized by available monetary policy instruments, the fiscal authorities would postpone and cut down on expenditures in favour of macroeconomic stability. Second, the reduction of inflation in the early 1990s and the commitment of the monetary and fiscal authorities to containing inflationary pressures probably contributed to lowering inflationary expectations.

2) Partly as a result of declining inflation, interest rates became positive in real terms, which augur well for the mobilization of domestic financial resources. Indeed, financial savings in the form of time and savings deposits and non-bank holdings of Treasury bills have increased tremendously from 0,63% of GDP as at end-1988 to 4,1% as at end-1999. Gross domestic savings have increased from 1% to 10%.

(3) Increased use of the financial sector, evidenced through the reduction in the share of cash holdings to broad money from 40,5% as at end-June 1991 to 29,5% as at end-June 2001.

3.2 Shortcomings and weaknesses of the RMP

There are two interrelated concerns that have cropped up in the day-to-day use of the RMP:

14) Deciding how quickly a deviation in base money from the target (or desired level) should be corrected.

15) Deciding when RMP-based policies should be suspended in case conflicting signals arise.

Other things being equal, the gap between the outturn and desired levels would give the direction of the monetary policy stance: ease if base money is below desired level, tighten monetary policy if base money is above desired level, and leave monetary policy unchanged/neutral if base money is in line with desired levels. However, in the current situation of structural changes in the financial and non-financial sectors, any action would have to be strongly supported by developments in other indicators. If such movements call for an easing of policy while developments in other indicators show the contrary, allowing discretion such as temporary suspension of RMP-based policy may be preferable. In any case, easing monetary policy under such conditions may be inappropriate as it would fuel rather than contain inflation. In the short run, because of the innovations partly brought about by the liberalization process, the relationships between money, prices, and other indicators tend to become hard to predict (Honohan, 1995), thus complicating the conduct of monetary policy.

3.2.1. Problems in forecasting autonomous factors

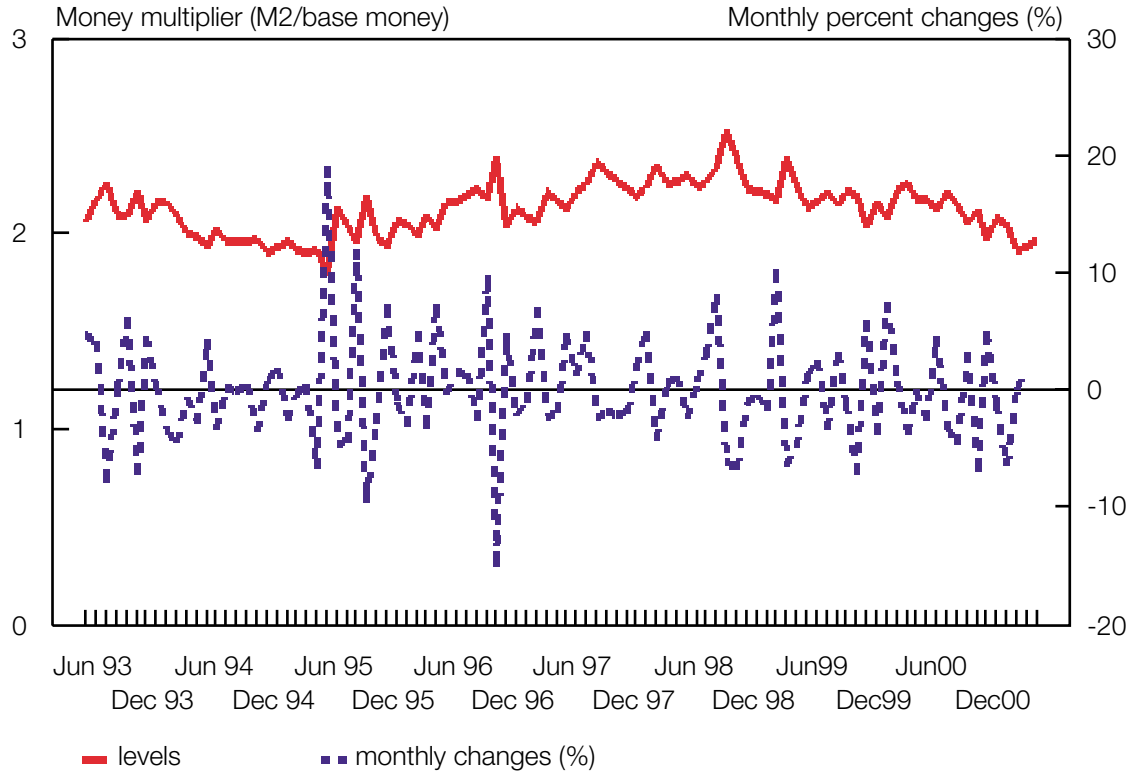
Until recently, the monetary policy stance was driven by the gap between the outturn of base money and the desired level, implying a backward-looking approach. Monthly liquidity forecasts were made, showing the likely supply factors of base money and the desired size of monetary policy operations. These could only give an indication of the direction of monetary policy on an annual basis, but could not provide an input into the determination of the monetary operations from one week to another, for two major reasons: (a) the problems in forecasting autonomous factors affecting base money, evidenced by the observed wide divergences between the monthly forecasts and the actual numbers of these supply factors, and (b) failure to anticipate the exact timing of these transactions within a month. The variable that provided the biggest challenge to forecasting was and still remains the government's operations.

The monthly BOU's foreign exchange and the government's cash flows were the major sources of data for the autonomous flows on BOU's net foreign assets and net claims on government. They contain information on net donor resources and movements in the cheque float, which are crucial for determining the impact of net government operations on base money. On similar items appearing in both data sets, there were often differences that gave discretion to the compiler to choose which set to use and, in any case, donor import support disbursements proved very difficult to forecast, since they were often influenced by considerations beyond the control of BOU. In addition, there were delays in remitting tax revenues from UCB with resulting additive effects on commercial banks' reserves and base money. However, partly because government pursued a cash-driven budget, there were no fiscal slippages to cause any macroeconomic instability.

Starting with 1997/98, the monetary programme was designed in such a way as to ensure uninterrupted and fairly smooth fiscal expenditures (unless there were shortfalls in government revenues) and net BOU's intervention[4] in the foreign exchange market. This effectively insulated fiscal expenditures and intervention from exogenous factors affecting donor budgetary support disbursements, external debt service payments, non-bank financing of the fiscal deficit, and other transactions whose exact timing could not easily be established at the beginning of the programme period. Although this has helped to monitor the programme to ensure that the IMF quantitative benchmarks on monetary and credit aggregates are met, it has created challenges for monetary and exchange rate policy management, as we shall see later.

Weekly liquidity forecasts, which are consistent with monthly forecasts and the annual monetary programme, now form the basis for determining the size of the offers for Treasury bills and repurchase agreements, enabling BOU take a forward-looking approach to the conduct of monetary policy, while combining it with past developments. Despite the delays in the payments system and in other areas, BOU has established a fairly reliable weekly pattern of tax revenue receipts and has also set up a mechanism to project government expenditures in the form of cheque payments and automatic (direct) releases, together with other factors affecting base money. One of the setbacks is that it is currently difficult to extend these projections beyond a week. There is a need to improve on the current liquidity forecasts before extending them. This can be through the timely production of the central bank balance sheet, and shortening the lag of reporting by commercial banks to enable BOU make a assessment of the movements in the broader monetary aggregates (M2 and M3) and the money multiplier.

Figure 2: Money multiplier (levels & percent monthly changes)



[4] To the extent that BOU's operations have been conducted beyond the need to smoothen wide fluctuations in the exchange rate, this would be reflected as sterilization rather than intervention.

3.2.2 Instability in the money multiplier

The link between the central banks' balance sheet and the broader monetary aggregates is through the money multiplier, which is a function of the currency ratio, required reserve ratio, the proportion of time deposits to demand deposits, and the excess reserve ratio. While the required reserve ratio is under the central bank's control, the portfolio behaviour of depositors and the commercial banks drive the other three ratios. The workings of the reserve money programme dictate a predictable money multiplier. Figure 2 shows the trend and monthly change of the money multiplier (broad money (M2)/base money). In 1994/95 and since 1998/99 the multiplier has been very unstable and this has somewhat raised questions about the credibility of the desired path of base money.

The observed volatility of the money multiplier reflects a number of factors:

16) Terms of trade shocks B in 1994/95, Uganda was faced with a positive shock when the international prices of coffee more than doubled, boosting agricultural incomes, with spillover effects on the rest of the economy. The Uganda shilling appreciated against the US dollar by 15,4% and agents shifted out of foreign to domestic currency denominated assets. The recent terms of trade shock characterized by a steep decline in coffee prices coupled with the steady increase in oil prices, led to a depreciation of the exchange rate. On average, the exchange rate depreciation was 15% on an annual basis from 1998/99. Agents responded by shifting out of domestic to foreign denominated assets to hedge against the depreciation. These complications are largely associated with over-reliance on coffee as a major export item.

17) The closure of 4 commercial banks in 1998/99 and 1999/2000 created some panic and hurt confidence in the use of the banking system among the non-bank public. Economic agents shifted into more liquid financial assets such as cash, demand deposits and foreign exchange deposits at the expense of time and savings deposits in local currency. This was exacerbated by a depreciating Uganda shilling.

18) There was a flight to quality as depositors shifted their funds from small banks to high street banks for the safety of their funds.

19) Following enhanced supervision, there has been a slowdown in credit extension to the private sector, leading to high excess reserves of commercial banks. Annual growth of credit to the private sector of about 10-15% has, in recent times, been below programmed levels consecutively for two financial years, unlike in the past, when it expanded by over 25%.

In view of these shifts, which were aggravated following the liberalization of the capital account in July 1997 and have tended to become noticeable when Uganda is faced with an adverse terms of trade shock, the monetary authorities regularly review the pattern of the money multiplier and the movements in all monetary aggregates, including the demand for base money.

Velocity has been on a decline, a reflection of three factors: first, the increased monetization of the economy. Since the start of the Structural Adjustment Programme in 1987, the proportion of monetary GDP to total GDP has been rising steadily from 65,1% in 1987 to 77% in 1999/2000. This has been possible with the return to political and economic security, the rebuilding of the infrastructure, and improved marketing and distribution systems. Second, the maintenance of positive real interest rates has encouraged economic agents to keep financial assets such as time and savings deposits and wholesale deposits. Third, the sources of monetary growth have changed from net domestic assets to net foreign assets. Sharer et al. (1995) suggest that it may be that the transmission mechanism between foreign assets and prices is less certain and direct.

Such velocity changes have permitted the authorities to operate with slightly higher than programmed monetary growth without causing inflation. It is clear that, in recent times, such room for monetary expansion is beginning to decelerate, especially for M2 signalling the need for the monetary authorities to be cautious and ensure that base money trends close to desired levels. The deceleration has occurred at a time when agents can easily switch between foreign- and domes-

tic-denominated financial assets (Figure 3 in the Appendix).

3.2.3 Weak interest rate sensitivity

Indirect monetary policy works best in a situation where all the different interest rates are well integrated with one another and with the credit market (Roe and Sowa, 1995, Ncube, 1997). The changes in the Treasury bill rates feed through to affect the deposit rate, lending rates and other rates. Weak interest rate sensitivity has been noted, with changes in TB rates failing to trickle down to banks' deposit and lending rates. This is partly on account of the low share of time deposits in M2 at less than 30%, which would form the interest sensitive component of deposits. Over 60% of total domestic currency denominated deposits are in demand deposits, which are relatively passive and not sensitive to interest rate changes. Roe and Sowa 1995 argue that the dominance of the transaction demand in overall money demand could be one of explanatory factors for this insensitivity. This is justifiable on the grounds that Uganda's transactions are predominately carried out in cash. Ncube 1997 states that the impact of monetary policy on interest rates and output tends to be faster in economies where the large part of their wealth is held in highly interest-rate sensitive assets and a large share of securities in total credits. However, there has been an observed sensitivity between the 91-day TB rate and commercial banks' prime lending rates, albeit with a lag, and sometimes between 91-day TB rates and weighted interbank lending rates.

3.2.4 High levels of commercial banks' excess reserves

Roe and Sowa (1995) contend that open market operations will work best if they confront commercial bankers who are operating with a good system of asset and liability management and who are well aware of the profitability forgone by holding excess reserves rather than more remunerative assets. As already mentioned, the phenomenon of excess reserves dates as far back as the early 1990s (see Figure 4 in the Appendix). Factors contributing to high levels of excess reserves include:

20) Cautious lending behaviour on the part of commercial banks given the past experience of non-performing assets. In order to boost their incomes and profits, commercial banks have tended to invest more in relatively risk-free financial assets such as Treasury bills and foreign exchange than in credit extension.

21) The Uganda Commercial Bank Limited (UCBL), the largest bank in Uganda with the widest branch network, has been undergoing far-reaching restructuring programmes, in preparation for its privatization[5]. This has limited its involvement in the credit market for the purposes of improving its balance sheet. There is a plan to re-privatize the UCBL.

22) Delays in the payments system that resulted in unforeseen requirements have also forced commercial banks to maintain high and unremunerated excess reserves. There are proposals to improve the payments system. Recently in 1999, BOU, in conjunction with commercial banks and other stakeholders, developed and adopted a National Cheque Standard whose primary objectives are to: (i) strengthen the management of risk through more and enhanced security features, (ii) improve the efficiency of cheque clearing through the automation of clearing and settlement operations.

Overall, the prevalence of high levels of excess reserves in the banking system is mainly symptomatic of the structural problems in the credit market. This has weakened the link between monetary policy operations and private sector credit.

In view of these shortcomings and weaknesses, there is a lot of interest and preliminary work to assess whether the RMP should be abandoned in favour of inflation targeting as a framework for the conduct of monetary policy.

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5 This bank underwent restructuring, which involved closing down some of its branches, before it was sold in 1998. Later after finding serious faults with the first buyer, the Uganda Government filed a legal suit against the owners, won the case, and reclaimed the bank. Now, it awaits re-privatization and is currently undergoing further restructuring.

3.3 Inflation targeting

Inflation targeting means controlling inflation through the monetary policy actions of the central bank. Debelle et al. (1998) indicate that inflation targeting has two requirements:

1. Central banks need freedom to choose instruments that they can use to control inflation. To comply with this requirement, fiscal policy considerations should not dictate monetary policy. In fact, government borrowing from the central bank should be low or nil. Domestic financial markets should be deep and broad enough to absorb placements of public debt and government should have a broad revenue base to minimize its reliance on seigniorage.

2. The monetary authorities should be willing and able to refrain from targeting other indicators apart from inflation. In practice, the authorities need to be wholly devoted and committed to achieving future inflation targets and must indicate to the public that achieving these targets takes precedence over the other objectives of monetary policy.

   Inflation targeting would require the monetary authorities to adopt a forward-looking approach to ensure that monetary policy instruments can be adjusted to meet the targets. In this regard, the authorities should be fully aware of how long it takes for monetary policy action to impact on inflation and the relative effectiveness of the different monetary policy instruments available. The country should be easy to model in order to obtain reliable forecasts of inflation, and the economic relationships should be firmly stable.

Recasting these requirements for Uganda, the following issues can be pointed out:

23) Uganda satisfies the institutional prerequisites (e.g. central bank independence, commitment to fighting inflation). Monetary and fiscal policies are committed to low and stable inflation. Central bank independence in using the TB instrument as a major monetary policy instrument exists.

24) The technical prerequisites are problematic, with the biggest drawbacks being the lack of reliable forward-looking indicators of inflation and a reliable model for forecasting inflation. This is partly a reflection of the scarcity of high frequency data on real sector activity. Data on GDP are currently available on a semi-annual basis but data on industrial production (monitored on the basis of the few key industries) have a lag of more than six months.

25) Government has a very narrow tax base and its tax effort of about 13% to GDP is lower than about 26% in Kenya and this has partly contributed to its being a net receiver of donor import support flows to finance its public expenditure programmes.

The problems highlighted require further attention and consideration before BOU can adopt inflation targeting.

4. Monetary policy instruments

With effect from 1993, BOU abandoned the use of direct monetary policy instruments and adopted indirect monetary policy instruments. In line with indirect monetary control, BOU requires effective monetary policy instruments to control commercial banks' reserves and to ensure that the supply of base money is in line with the desired levels. Currently, BOU employs the following monetary policy instruments:

26) Open-market type operations through Treasury bills, BOU bills, and recently the repurchase agreements (repos).

27) Cash reserve requirements on all deposit liabilities irrespective of their denomination.

28) Bank rate to regulate commercial banks' borrowing from BOU.

29) Rediscount rate to address any liquidity shortages.

Table 3 in the appendix shows the factors that have affected the growth of base money, divided into autonomous and policy factors.

5. Monetary policy operational procedures

5.1 Open market operations

Open market-type operations conducted through Treasury bills (TB), BOU bills and repurchase agreements (repos) are the major monetary policy instruments. Of the three, the TB is the most commonly used (Table 1). BOU decides on the size of offer and lets the market determine the interest rate. Net TB issues are varied in line with current and prospective prevailing liquidity conditions, facilitated by the weekly liquidity forecasting techniques.

The TB is used solely as a monetary policy instrument because government rarely uses the TB proceeds to finance its expenditures. This has minimized conflicts between government debt management and monetary policy needs that would have ensued if the TB played its usual dual role. Government pays the interest costs associated with the TB and the net TB proceeds held on account of the non-bank public go towards improving its position with the banking system. Participation in the TB market is heavily dominated by commercial banks with a share of over 75%. This skewness indirectly limits the scope of the TB as a sustainable financing source for government; otherwise private sector credit would be squeezed through high TB rates.

Treasury bill offers are announced five days before the auction day (which is Wednesday of every week). Applicants submit bids and must hold, either directly or indirectly, accounts in the central depository system (CDS), which was first operationalized in July 2001. Bids in amounts less than Shs10 million are sold on a non-competitive basis while bids above this amount are sold on a competitive basis. The offer amount is first allotted to non-competitive bidders at a weighted average discount rate struck in the auction. Competitive bidders purchase Treasury bills at each respective bid price, indicating a multiple-price bid system. Settlement is done one day after the auction. The CDS records security ownership in paperless form and, alongside this, there is a delivery and payment procedure to facilitate settlement by commercial banks through their transactions accounts and established channels for the non-bank public.

BOU disseminates the auction results through the local newspapers, Reuters, and the Internet. Information about every bill is provided in an aggregate form, showing the following:

1) Offer amount.
2) The total amounts sold broken into sales on a competitive and non-competitive basis.
3) The bid price range showing the maximum and minimum prices.
4) The weighted average price, the relevant discount rate, and the effective yield.

Since the 1970s, the interest income on Treasury bills has been exempt from taxation. This has been changed with effect from the 2001/02 financial year and the tax exemption on income earned on Treasury bills and other central bank securities has been abolished. This move was to ensure the equitable treatment of financial securities and to remove any fiscal biases favouring the government.

5.2 BOU bills and repurchase agreements

To increase its array of monetary policy instruments and exercise greater flexibility in monetary management, BOU introduced its own bill to supplement the TB in November 1996, purely for liquidity management. BOU decided on the volume of the BOU bill offer and left the commercial banks to decide on the rate. Like the Treasury bill, it was sold on a discount basis and to commercial banks

only. Its maturity was limited to a maximum of 60 days to avoid having similar features as the Treasury bill that would confuse the market. The BOU bill was usually deployed during the intra-auction days to bring base money to desired levels. It was a very effective instrument, but its use was halted in 2000/01 when BOU introduced repurchase agreements (repo).

The inherent flexibility of the repo was seen as having a potential for enhancing liquidity in the underlying securities, thus helping the development of the secondary market. Furthermore, it has an advantage of offering more protection to the cash lender than a collateralized loan in case of the insolvency of the borrower.

All commercial banks that have signed the Master Repurchase Agreement and opened CDS accounts are eligible to participate in the repo market. Acceptable collateral is the Treasury bill only. Dealing and settlement are done on the same day and repos are priced on an effective yield basis, with a minimum dealing amount of Shs100 million. The length of the repo is limited to 70 days and BOU announces the repo rate and leaves the volumes to be determined by the market participants. In line with a monetary-targeting framework, BOU usually determines a *priori* the volume desired to be traded, depending on the desired monetary policy stance.

It is widely believed that a central bank in conducting open market operations cannot control both the price and the quantity of an asset at the same time. More so, the announcement of a repo rate in the case of Uganda runs contrary to its current operating framework that focuses on monetary targeting. This was viewed as a short-term measure to prevent commercial banks from using high interest rates to outbid BOU, a trend observed with the BOU bill. In most cases, BOU has used the repos to mop up excess liquidity and most offers have been oversubscribed.

In the present circumstance, the repo would only achieve the intended reduction in base money if the repo rate were set sufficiently high to ensure that the auction would not be under-subscribed. If it were under-subscribed, BOU would have failed to mop up the desired liquidity. If it were over-subscribed, BOU would sell repos at a rate higher than the market would have dictated, with consequences for the profit and loss account of the Bank. In practice, it is difficult (nearly impossible) to know in advance the repo rate that would lead the market-determined volumes, and vice versa. It would be desirable to set the volumes dictated by the liquidity forecasts and leave the market to decide on the repo rate or announce the repo rate with a clearly defined objective.

5.3 Reserve requirements

Cash reserve requirements can affect banks' free reserves in the short run and the supply of broad money in the long run. The cash reserve requirement is one of the instruments available to BOU for controlling base money. Historically, central banks have regarded reserve requirements more as a prudential instrument than as a monetary policy instrument to ensure that commercial banks kept sufficient liquidity to meet any unforeseen shortfalls associated with unexpected cash withdrawals. Reserve requirements were and are still differentiated, with a higher rate on demand deposits than on time and savings deposits.

During most of the 1980s, commercial banks grossly violated the reserve requirements due to the open-ended borrowing at BOU. In 1988, banks were required to operate three separate accounts at BOU (interest-bearing loan account, statutory reserves account, and the clearing account) to make reserve requirement a more effective instrument. This performed remarkably well, and then in November 1994, the three accounts were merged into one B the transactions account. In April 1996, the maintenance of and compliance with cash reserves were changed from a daily basis to an average basis covering a two-week period. Commercial banks are allowed to have automatic recourse to their cash balances with BOU on a daily basis of up to 50% of their requirements as long as the average level of transactions balances plus 30-50% of vault cash at least equals the reserve requirement by the end of the reserve maintenance period. It was hoped that the reserve-averaging procedures would give commercial banks room for flexible liquidity management, encourage a reduction in high levels of excess reserves, and spur the development of the inter-bank money market. However, these have not developed to the degree expected.

The computation of cash reserve requirements is based on four-week moving average of deposits, which are reported in the Weekly Statement of Assets and Liabilities submitted to BOU by commercial banks. The same methodology is applied in the calculation of the proportion of vault cash which is an eligible reserve asset introduced in 1990 to alleviate a liquidity shortage in UCB.

In November 1996, the cash reserve ratio on domestic currency deposits was raised by 1 percentage point from 7% to 8% to 8% and 9% on time and savings deposits and demand deposits to contain the rapid expansion of private sector credit. In August 2000, the reserve requirement was extended to cover foreign-currency deposits, partly to control for excess liquidity and partly to provide a level playing field among deposits. In December 2000, the cash reserve requirements were again raised by 1 percentage point from 8% and 9% to 9% and 10% on time and savings deposits and demand deposits, respectively, to control for excessive liquidity. In an era of developing indirect monetary policy instruments, it is often argued that the reserve requirements should not be used as a first option in the conduct of monetary policy because of its potential distortional effects. Nevertheless, in a system like ours, we still use reserve requirements on an infrequent basis, partly because of an inherent weakness in the financial sector and because the market instruments are not fully developed.

In 1998, the portion of vault cash that is an eligible reserve asset was raised from 30% to 50% for those commercial banks with ten or more bank branches outside Kampala. The aim was to ease the burden of and costs incurred in transportation of currency from commercial banks to currency centres in a cash-dominated economy; otherwise it remained unchanged at 30%.

To ease the costs of administration and for simplicity, this concession also applies to foreign-denominated vault cash. Cash reserves are kept in domestic currency and are not remunerated, implying an indirect tax on commercial banks.

Regarding overall performance, commercial banks have met their reserve requirements with huge margins, indicating persistent excess reserves. Those banks that fail to meet their reserve requirements by the end of the reserve maintenance period are penalized for the deficiency. The penalty should not exceed one-tenth of one percentum per day on the amount of the deficiency for each day during which the deficiency continues.

5.4 Discount window facility

Central banks usually limit access to their funds by commercial banks, by using a penal rate and/or through the prescribed amounts. There are two types of discounting facilities: rediscounting of Treasury bills before their maturity and short-term lending by BOU.

5.4.1 Rediscounting

The BOU Statute of 1993 requires that the Rediscount rate be linked to the Bank rate by a margin of not less than 1 percentage point and it was administratively set. Before April 1995, the Rediscount rate was out of line with the market-determined Treasury bill rates. The determination of the Rediscount rate was then changed to reflect developments in the Treasury bill market. Thus the rediscount rate is determined on the basis of the four-week moving average of the annualized yield of the 91-day Treasury bill plus a policy margin that reflects the monetary policy stance. In order not to jeopardize monetary policy, eligible instruments for rediscounting are limited to Treasury bills with remaining days to maturity of 91 days or less. Commercial banks have not normally rediscounted Treasury bills except for speculating in the foreign exchange market during periods of seasonal flows. This was very common in 1999/2000.

5.4.2 Short-term lending facility

Before the introduction of indirect monetary policy instruments in the early 1990s, BOU called for systematic and gradual repayment by commercial banks to eliminate their prevalent open-ended borrowing, thus limiting monetary expansion. Later on, an inter-bank money market was established, with the intention of encouraging trading among banks so that those with surplus funds

could lend them to banks in need of liquidity, instead of accessing central bank credit. Meanwhile, credit from BOU was regulated through the new clearing-house rules introduced in 1993 that merged the existing three accounts of banks at BOU into one account B the clearing (or transactions) account. Under the new rules, all the banks had to clear. If a bank found it had insufficient funds, it would be required to cover the shortage from either the inter-bank money market or BOU. With an undeveloped and segmented inter-bank money market coupled with a restricted discount facility, these rules had to be relaxed. Problem banks found they were operating overdrawn accounts at BOU and were, most times, not collateralized. The Bank rate was administratively set at one percentage point above the Rediscount rate.

In 1994, BOU provided for four separate arrangements for advances on a secured basis at the Bank rate. There were the basic borrowing facility limited in amount and frequency, a supplemental borrowing arrangement, a seasonal line of credit, and under exceptional circumstances, credit for periods of more than three months. However, this approach was never implemented.
In April 1995, the determination of the Bank rate was changed to take into account interest rate developments in the inter-bank money market. The Bank rate was determined on the basis of the four-week moving average of the inter-bank money market plus a policy margin reflecting the monetary policy stance from April 1995 to August 2000.

Since 1996, commercial banks have been allowed to borrow from BOU automatically up to a maximum of 5% of their reserve requirements against shilling deposits for a maximum of five days. Beyond this amount, banks may borrow on a case-by-case basis, subject to approval by BOU. Treasury bills or any other eligible instruments as determined by BOU, with an original or remaining term to maturity of not more than 91 days, should be the collateral for the credit. Any amounts borrowed should not exceed 75% of the market value of the collateral.

Banks have not actively used the automatic borrowing facility and/or for the discount window. This, however, excludes banks that have faced structural and liquidity problems and operated overdrawn accounts at BOU for longer than five days, requiring liquidity support of a long-term nature. Possible reasons for this include the following:

30) The reserve averaging system gives some room for flexible liquidity management. Banks can fall below their reserve requirements by not more than 50% of their required amount on any day within the reserve maintenance period as long as they meet their requirements by the end of the period;

31) Banks, as a whole, have been holding excess reserves at the BOU by an average of about 5-10% of their requirements.

32) An interbank money market exists and banks can lend to one another, sometimes at rates below the Bank rate and for periods longer than five days and in amounts exceeding 5% of their required reserves.

33) Some banks lack the required collateral to pledge when borrowing from BOU.

34) The Bank rate has tended to be above the inter-bank lending rate, making it quite expensive for banks to borrow from BOU.

Limited access to automatic BOU credit of 5% of the required reserves was prompted, among other things, by the need to develop the inter-bank money market, rather than being accommodated at BOU. Indications are that this has been achieved, if judgement can be done in terms of liquidity management. The habit of open-ended lending by BOU to commercial banks is a thing of the past. There have been few, if any, instances when commercial banks have accessed credit from BOU for liquidity management. However, the inter-bank money market is still under-developed and continues to be segmented, with foreign-owned bank wishing to trade among themselves and reluctant to do so with the small indigenous banks. The development of this market might take a long time.

Due to this segmentation and the lack of integration between the inter-bank money market and the Treasury bill market, it became difficult, at times, to ensure that the Bank rate remained above the Rediscount rate. To address this problem, the policy of linking the Bank rate to inter-bank lending rates ceased in 2000 and now the Bank rate is set at least one percentage point above the Rediscount rate.

BOU extended liquidity support on a long-term basis to assist commercial banks undergoing restructuring. With recent enhanced bank supervision and given past experience that some of the banks that operated overdrawn accounts at BOU were eventually closed, BOU can only extend short-term liquidity support to solvent but illiquid banks. This was motivated by the need to reduce costs and minimize losses.

In summary, the availability of this facility can, therefore, be seen more as a safety net to meet any unforeseen liquidity shortages rather than a key monetary policy tool. This is demonstrated by the dismal extent to which commercial banks have used this facility in day-to-day liquidity management.

5.5 Foreign exchange transactions

Before discussing foreign exchange operations, there is need to say something about the exchange rate policy. BOU pursues a flexible and market-determined exchange rate regime, which is in line with the current policy followed by most central banks. BOU neither targets a rate nor defends a predetermined trend of the rate. Uganda's foreign exchange market can be categorized into two classes: the wholesale market established in November 1993 following the liberalization of the current account transaction of the balance of payments, and the retail market that was started in July 1990. The wholesale market participants currently comprise BOU and commercial banks, but the foreign exchange bureaux are restricted to the retail market. The foreign exchange deals between BOU and the market participants (commercial banks) have predominantly been on a spot basis.

By far, BOU's intervention in the foreign exchange market has been on account of two reasons: first, foreign exchange transactions have largely aimed at removing wide fluctuations in the exchange rate and maintaining order in the foreign exchange market. This is in the interest of economic sectors that transact business in foreign exchange.

The second reason is associated with the need to intermediate donor budgetary resources earmarked for the government's poverty eradication programmes. BOU has to intervene in the foreign exchange market to sell, in a phased manner, some of the foreign exchange that the government receives from donors in the form of budgetary support. Government uses the local equivalent of the budgetary support to help finance its expenditures in the key poverty-reducing sectors such as education, health, and agricultural extension. Some of the foreign exchange is used to settle external debt payments and to build up the foreign reserves of BOU, but the remainder must be sold to the foreign exchange market. If BOU did not sell this foreign exchange to the market, it would be forced to issue more Treasury bills to control money growth and this would squeeze lending to the private sector. Increased sales of foreign exchange in 1999/2000 as portrayed in Table 3 reflect this factor.

6. Challenges to monetary policy management

During this three-year period ended 2000/01, monetary policy management faced five challenges. The first was associated with the payment of depositors of closed banks while, at the same time, ensuring overall macroeconomic stability. When the closure of banks occurred in 1998/99, government decided to pay depositors the full amount of their deposits net of their debts. This was over and above the insured amount in accordance with the regulations of the Deposit Insurance Fund. To smoothen the monetary injection involved in such an exercise, BOU paid for the compensation through cash payments for small depositors and interest-bearing promissory notes issued to large depositors and to banks that had agreed to take over the deposit liabilities of the Co-operative Bank[6] . As these promissory notes matured in 1999/2000 and in 2000/01, an effort was made to

6 This was one of the banks closed in 1998/99.

roll them over into Treasury bills. The second challenge was the continued weakening of the Uganda shilling against the US dollar, partly as a result of the deterioration in the terms of trade, was characterized by sharp fall in coffee prices and compounded by increased oil prices in 2000/01. The third challenge emanated from the widespread drought that adversely affected agricultural production in general, with implications for real GDP growth, inflation, and money demand. Fifth, as the country was undergoing a terms of trade shock, there were liquidity injections associated with expenditures on poverty-reducing programmes in the monetary programme. Besides, the financial sector is still underdeveloped with low monetary depth. This section below discusses some of these challenges and their implications for the conduct of monetary policy, together with highlights of the outcomes.

6.1 Underdeveloped financial sector

Uganda's financial sector comprises the central bank (Bank of Uganda), 17 commercial banks, six credit institutions, the Post-Bank, 18 insurance companies, three development banks (which primarily on-lend donor funds), the National Social Security Fund, the Uganda Securities Exchange, 76 licensed foreign exchange bureaux and a fairly well developed and diversified micro-finance industry[7]. Commercial banks dominate the financial sector, accounting for about 75% of the total financial assets in Uganda (excluding BOU). The government-owned bank (UCBL) is the biggest commercial bank, accounting for slightly less than one-third of the total deposits in the system and five foreign-managed banks (Barclays, Bank of Baroda, Stanbic, Citibank, and Standard Chartered) combined hold an additional 55% of deposits. Commercial bank lending has been concentrated in three main areas: manufacturing, agriculture, and trade and commerce extended in form of short-term credits of one year or less and in overdrafts and at very high interest rate spreads averaging 15-20%. Credit owed to the agricultural sector has been declining because of pre-financing from abroad. Nevertheless, most agricultural lending is in the form of crop finance, providing short-term funds to coffee exporters until they receive payment from foreign purchasers. There is little bank lending to farmers for agricultural production, yet the agricultural sector contributes almost one-half of total GDP.

Uganda's formal financial sector is one of the least developed in sub-Saharan Africa. The financial sector is characterized by a low degree of monetization of the economy. Monetary GDP is estimated to be 77% of total GDP, and the ratio of broad money (M2) to GDP is very low at about 14%, compared with almost 44% for Kenya and 18% for Tanzania. Moreover, the economy is cash-oriented, with about 30% of outstanding money supply in the form of cash, compared with 13% in Kenya and 32% in Tanzania. The strong preference for cash reflects in part the structural deficiencies of the financial sector and in part a lack of confidence in using cheques, and the uneven distribution of the banking system itself. Most of the banks are located in the urban areas, especially in Kampala.

The portfolio of available financial instruments is limited to those offered by commercial banks, Treasury bills, two privately issued bonds, and shares floated by three private companies. Nearly all the financial assets held in Uganda consist of liabilities of the government, the BOU, or commercial banks.

6.2 Management of donor aid and implications for the conduct of monetary and exchange rate policy

Uganda is a major recipient of donor funds in form of grants and loans to finance public investment programmes and for budget support. To date, net donor financing accounts for nearly 10% of GDP or when expressed as a ratio to total expenditure, amounts to about 50%.

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[7] This industry, which has direct links with two commercial banks and two non-bank financial institutions, has up to 100 NGO-type organizations and numerous financial co-operatives. It remains quite small relative to the needs of the rural population where the bulk of the population resides and contributes almost 40% of GDP.

The institutional set-up is such that when the donor funds flow in, the foreign exchange is sold to BOU and the local equivalent is credited to the government account. These funds are devoted to financing the budget and particularly the social sector expenditures, which play a critical role in the Poverty Reduction and Growth Programmes, as they are fully protected from any shortfalls in revenue and in donor support disbursements. This implies that, in the event of a shortfall in a programmed resource envelope, other non-priority programme areas and non-wage expenditures suffer cutbacks.

The experience of BOU with liquidity management shows that monetary policy sometimes gets over-burdened in the current situation of limited monetary policy instruments. While there was flexible fiscal adjustment in the past, room for flexibility is now very limited because most expenditures are now protected. The only policy action left for the monetary authorities is to sell dollars to the foreign exchange market and/or increase the net issuance of domestic government securities to mop up the excess liquidity created by fiscal spending.

The monetary programme allows for intervention in the foreign exchange market not only to mitigate demand pressures arising from foreign exchange requirements by the private sector, but also to mop up liquidity injected by government spending. This is done while bearing in mind the quantitative targets on BOU's net international reserves, net claims on government, and net domestic assets (excluding revaluation) of the banking system in the monetary programme. However, the procedures for BOU's intervention in the foreign exchange market do not always warrant intervention for monetary policy purposes. In a situation where BOU has sold foreign exchange to the market for purposes of achieving monetary growth targets, the impact has been to appreciate the exchange rate. Past intervention by BOU in the foreign exchange market has largely been to smoothen wide fluctuations in the exchange rate and to instil order in the market.

There is a trade-off to decide on which of the sectors (exports, government, and the private sector credit) is likely to make the most significant contribution to long-term sustainable economic growth. At present, the public sector spends mainly for poverty reduction purposes (which are fully protected) in line with the poverty reduction strategy, which is probably the optimal choice. However, there is also a great concern over the disastrous effects of an exchange rate appreciation on the export sector's competitiveness, when the exports account for a mere 12% of GDP. Consequently, there is a need to determine the extent to which increased budgetary resources have crowded out the private sector by ascertaining the productivity gains, the private sector's cost of doing business, and the greater absorptive capacity resulting from increased government expenditures. There is also a need to determine whether the crowding out of the private sector more than offsets the loss of export sector competitiveness created by intermediating donor inflows in the foreign exchange market and whether the current framework can sustain development in the long run. These issues pose complicated policy dilemmas for economic policy management and are currently being discussed and debated.

6.3 Interest rate volatility

Excessive interest rate volatility can discourage the development of domestic money markets and forward foreign exchange markets, reduce the policy information content of interest rate movements and adversely affect the transmission mechanism from short-term to long-term interest rates and the health of the financial sector.
Interest rates on TBs, which had declined from 1995/96 to 1998/99, started to increase thereafter, reaching peak levels in January 2001. Not only did interest rates rise, they were also very volatile, as evidenced by the increasing standard deviations, as indicated in Table 4. This volatility in 2000/01 could be on account of the fact that commercial banks were still learning to price the longer-dated government securities at a more frequent interval than before.

The increase in TB rates reflected a sharp rise in the volume of TBs issued and held by the commercial banks. In 2000/01, BOU had limited its market intervention to smoothen the pace of depreciation while leaving the exchange rate to adjust to the economic fundamentals. As this happened, it put a lot of pressure on Treasury bills, as evidenced by increased interest rates as BOU mopped up excessive liquidity in order to bring base money in line with desired levels. The high level of inter-

est rates posed a threat of crowding out the private sector since the yields were close to commercial banks' lending rates. The monetary authorities reacted by changing the mix of instruments and scaled down TB issues combined with sales of foreign exchange to allow TB rates to fall. However, the dangers of this stance were that the market sometimes failed to take up the dollars and/or quoted outrageous rates, not permitting BOU to sterilize all the liquidity injections. This ran the risk of fuelling inflationary pressures. Balancing the available monetary policy instruments in such an environment to ensure macroeconomic stability without crowding out the private sector is currently still a major challenge facing the monetary authorities.

In the short term, there is a need for further co-ordination of monetary and fiscal policy to improve the liquidity forecasts, improve the payments system, and establish regular contact with both the domestic and foreign markets for timely information. This would enable the monetary authority to decide on the appropriate amount of the sterilization required and enable better information to be obtained from the markets. The recent move by government to re-privatize the UCBL and also eliminate its monopoly on the collection of government taxes might assist in smoothening the interest rates.

6.4 Dollarization and the conduct of monetary policy

The shift by economic agents from holding domestic to foreign-denominated assets has raised some concern about liquidity management, in view of the effects dollarization can have on the monetary aggregates, monetary control, and the conduct of monetary policy. The existence of foreign exchange accounts held by residents date as far back as 1992 when, in the course of the foreign exchange liberalization process, agents B especially exporters and other earners of foreign exchange B were permitted to hold such accounts in order to minimize currency mismatches and to facilitate their businesses. From that time until 1997, the ratio of foreign exchange deposits to M3 remained fairly stable between 10B15%.

During the crisis in the banking system during 1998-1999, this ratio shot up and almost doubled, but this was short-lived as confidence returned. The declining trend, however, was also reversed at the onset of the terms of trade shock that led to a depreciation of the exchange rate. Empirical work done in the Research Department of BOU indicated that dollarization in Uganda is in the form of asset substitution rather than for transaction purposes. If it were for currency substitution, this would imply the inclusion of foreign currency deposits in the monetary aggregate that is used as an intermediate target for the conduct of monetary policy. Although asset substitution is a portfolio choice that cannot be easily influenced by the monetary authorities, there is need to maintain macroeconomic stability in order not to push the economy into more undesirable forms of dollarization involving currency substitution.

However, one of the consequences of dollarization in Uganda is that, with limited available areas for commercial banks to invest foreign-denominated assets, the banks keep most of the foreign-denominated deposits abroad in order to avoid a currency mismatch and to avoid violating the exposure limits. Consequently, financial savings of this kind are not available to finance investment in Uganda.

6.5 Markets for open market operations

There appears to be general consensus that the conduct of monetary policy is facilitated by the existence of well-functioning markets, and that indirect monetary policy instruments contribute to deepening financial markets (Roe and Sowa, 1995, Ncube, 1997). On the one hand, the view is that developed markets serve as one of the channels of transmitting monetary policy, and on the other hand, the introduction of indirect monetary policy instruments helps markets to develop. Besides, most indirect monetary policy instruments are market-based, and markets need to work efficiently.

6.5.1 Treasury bill market

Treasury bills dominate the money market in Uganda, accounting for the largest portion of all government domestic debt. Its initiation in 1992 through an auction system provided the minimum

market base necessary to facilitate the transition from direct to indirect monetary control. The 91-day TBs were offered to banks and to the non-bank institutions on a fortnightly basis, but the frequency later increased to a weekly basis. In January 1993, the term structure of the TB market was lengthened, with the weekly auction being augmented by a monthly allocation of 182-day and 273-day TBs and later by the 364-day TBs in December 1994. This continued until July 2000 when the frequency of the 182-, 273-, and 364-day TBs increased from a monthly to a weekly basis.

While most bids are competitive, small purchases are allowed on a non-competitive basis. Throughout commercial banks' holdings have accounted for the highest portion, standing at 77% of the outstanding stock of TBs. The central bank's holdings, a large part of which facilitate repurchase agreements, account for the second-largest at 13% followed by other categories with 8% and insurance companies with 2%. Due to the enormous need to mop up excessive liquidity, the stock of TBs more than doubled from Shs 206 billion as at end-June 1999 to Shs 486 billion as at end-December 2000.

Despite this amount, equivalent to almost 50% of M2, trading in TBs has remained at the primary level. The secondary market has not developed, with the exception of rediscounting and repurchase agreements done at BOU, since most players hold them until maturity. Even after the introduction of the CDS that eliminated the risks associated with transacting with bearer certificates, commercial banks have hardly engaged in interbank lending backed by TBs (liens), thus largely relying on mutual trust. Consequently, the TB instrument has remained illiquid.

6.5.2 Interbank money market

This market was established in 1993 in an effort to encourage commercial banks to lend among themselves rather than being accommodated at BOU. However, though trading was recorded to take place almost weekly, this market has remained segmented with banks forming two clusters (strong and foreign-owned banks versus small and indigenous banks) that lend to one another within the cluster at fairly comparable rates. The foreign-owned banks either have no lending relationship with the small banks or lend them at exorbitantly high rates. Due to its huge deposit base and high liquidity levels, the UCBL does not fall in either of the clusters and, because of its current peculiar situation, it has been fairly active in this market. At its inception, one of the banks played the role of a broker, linking the often illiquid and small banks to the foreign-owned banks. Over time, this has ceased and although the segmentation still persists, all the banks trade at fairly comparable rates. There are two factors that have deterred the development of the inter-bank money market: lack of trust among commercial banks and lack of market makers. Some commercial banks, especially the foreign-owned ones, have established credit lines in relation to other banks based on their instructions given by their headquarter offices abroad and do not even wish to become exposed to banks they are not sure of. The new Financial Institutions Bill calls for collateralized inter-bank lending and this may go a long way towards strengthening bank-to-bank relationships, thus enhancing the liquidity of the underlying instrument.

7. Concluding remarks

Like other sub-Saharan countries, Uganda shifted from direct to indirect monetary as part of the financial sector reforms adopted within the context of the Structural Adjustment Programme. For over two decades since its establishment, BOU had to ensure that monetary and credit conditions were in accordance with the overall economic polices decided by government. For a large part, the conduct of monetary policy was subdued and subordinate to fiscal considerations. With the exception of the period 1966 to 1970, monetary developments were strongly influenced by the monetization of the government deficit, especially following a breakdown of the country's economic fabric after the declaration of the National Economic War in 1972. Indirect monetary policy, co-ordinated with other policies, has enabled the authorities to bring down inflation from double-digit to single-digit levels and ensure positive real interest rates on Treasury bills and time deposits. The RMP has been the operating framework for the conduct of indirect monetary policy. Of the monetary policy instruments available to BOU, open market-type operations conducted with TBs are commonly used in controlling commercial banks' reserves. The fact that TBs are used solely as a monetary policy instrument has eliminated the policy conflicts that would have ensued between debt and

monetary management, had the instrument played a dual role.

The effectiveness of the RMP in indirect monetary control has been undermined by a number of factors: problems in forecasting the autonomous factors affecting base money, especially net government operations; the instability of the money multiplier; weak interest rate sensitivity; and high levels of commercial banks' excess reserves. The application of the RMP in guiding monetary policy actions has somewhat improved through liquidity forecasting. There is still a lot to be done to improve the forecasts. The collection of timely information should assist with checking the reliability of the liquidity forecasts and reduce the forecasting errors. The privatization of UCBL might help to reduce the levels of excess reserves. Before adopting the inflation-targeting framework, it is crucial that the technical prerequisites are met and the tax base is widened to minimize government borrowing from BOU.

Furthermore, monetary policy management has faced a number of challenges, including the terms of trade shock. BOU's policy stance has been broadly sound in the midst of these challenges while operating in a liberal environment. This is demonstrated by the fact that inflation has largely been brought under control. More should be done to avoid wide fluctuations in interest rates, partly through further co-ordination of monetary and fiscal policy to assess the volume and timing of liquidity injections in the system, improvements in the payments system to reduce delays, and establishing regular contact with the markets to get better market information. It is hoped that government's recent move to eliminate the monopoly of the UCBL on the collection and transfer of government revenues will assist to smoothen interest rates on government securities. Some of the problems faced by the monetary authority, such as the undeveloped nature of the financial system and the credit market are structural in nature, requiring structural policy measures.

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Appendix

Table 1: Uganda's selected economic indicators

	Nominal GDP (Shs millions)	Monetary GDP (Shs millions)	Broad money (M2, Shs millions)	Private sector deposits (million shs)	Currency in circulation (million shs)	Credit to the private –PSC (million shs)	Annual inflation (1995= 100)	Real GDP rate	91-day TB rate	Time Deposit rate	Lending rate	Interest rate spread	Real 91-day TB rate	Real Deposit rate	Real Lending rate	Monetary GDP/ total GDP	Cash/ M2	M2/ GBP	PSC/ GDP	Private sector deposits/ GDP
Jun-83	5,001.60	3,330.00	460.82	343.22	117.60	214.11	24.5	7.80	12.00	10.7	1.2	5.5	-12.1	-13.4	-7.9	66.58	25.52	9.21	4.28	6.86
Jun-84	7,593.13	5,002.00	726.76	526.56	200.20	221.99	42.73	0.70	22.00	16.0	21.9	5.9	-20.7	-26.7	-20.8	65.88	27.55	9.57	2.92	6.93
Jun-85	16,348.50	10,999.00	1,748.79	1,284.69	464.10	608.40	157.65	(3.00)	22.00	20.0	24.0	4.0	-135.7	-137.7	-133.7	67.28	26.54	10.70	3.72	7.86
Jun-86	39,830.60	25,225.00	4,514.92	2,538.32	1,976.60	1,235.67	160.98	0.60	35.00	23.3	33.3	10.0	-126.0	-137.7	-127.7	63.33	43.78	11.34	3.10	6.37
Jun-87	120,011.25	75,578.00	8,824.47	4,652.77	4,171.70	3,650.00	200.03	4.10	35.00	30.0	38.0	8.0	-165.0	-170.0	-162.0	62.98	47.27	7.35	3.04	3.88
Jun-88	373,755.35	239,229.00	26,717.59	12,420.89	14,296.70	12,293.00	196.12	7.60	28.00	20.0	24.0	4.0	-168.1	-176.1	-172.1	64.01	53.51	7.15	3.29	3.32
Jun-89	856,943.54	550,659.00	60,165.77	31,000.97	29,164.80	42,594.00	61.44	6.00	43.00	35.0	33.0	-2.0	-18.4	-26.4	-28.4	64.26	48.47	7.02	4.97	3.62
Jun-90	1,295,649.80	834,292.00	94,433.04	55,828.44	38,604.60	70,641.00	33.12	5.80	43.00	35.0	33.0	-2.0	9.9	1.9	-0.1	64.39	40.88	7.29	5.45	4.31
Jun-91	1,710,503.98	1,151,380.00	138,559.48	82,359.48	56,200.00	67,020.00	23.86	5.20	31.00	30.0	32.0	2.0	7.1	6.1	8.1	67.31	40.56	8.10	3.92	4.81
Jun-92	2,588,799.90	1,794,146.00	212,629.13	128,229.13	84,400.00	89,743.00	62.65	3.10	39.00	38.0	40.0	2.0	-23.7	-24.7	-22.7	69.30	39.69	8.21	3.47	4.95
Jun-93	3,625,938.25	2,481,870.00	301,820.42	201,920.42	99,900.00	143,262.00	0.30	8.40	24.00	19.0	27.0	8.0	23.7	18.7	26.7	68.45	33.10	8.32	3.95	5.57
Jun-94	4,069,441.58	2,890,813.00	402,574.31	267,274.31	135,300.00	175,115.00	15.03	5.40	10.78	6.0	14.0	8.0	-4.2	-9.0	-1.0	71.04	33.61	9.89	4.30	6.57
Jun-95	4,922,397.53	3,619,057.00	504,430.50	334,930.50	169,500.00	210,725.00	5.59	10.60	7.37	8.0	19.5	11.6	1.8	2.4	13.9	73.52	33.60	10.25	4.28	6.80
Jun-96	5,565,385.70	4,213,994.00	609,044.00	398,744.00	210,300.00	294,205.00	6.75	7.80	11.75	10.8	20.8	10.0	5.0	4.1	14.0	75.72	34.53	10.94	5.29	7.16
Jun-97	6,022,952.75	4,717,949.00	705,572.00	484,772.00	220,800.00	294,205.00	9.45	4.50	9.76	11.9	21.7	9.8	0.3	2.5	12.3	78.33	31.29	11.71	4.88	8.05
Jun-98	7,104,302.50	5,467,267.00	873,050.90	633,550.90	239,500.00	383,075.00	(1.42)	5.40	6.95	12.3	21.5	9.2	8.4	13.7	22.9	76.96	27.43	12.29	5.39	8.92
Jun-99	7,963,405.90	6,176,081.00	941,643.30	668,043.30	284,700.00	547,026.00	5.53	7.40	8.12	9.3	23.0	13.7	2.6	3.8	17.4	77.56	30.23	11.82	6.87	8.39
Jun-00	8,655,880.60	6,820,593.00	1,025,513.50	729,613.50	306,700.00	557,060.00	1.72	5.10	18.36	10.2	21.9	11.7	16.6	8.5	20.2	78.80	29.91	11.85	6.44	8.43

Source: IMF's International Financial Statistics Yearbook, Bank of Uganda Annual Reports

Table 2: Bank of Uganda rates charged to and Reserve and Liquid Asset Requirements for Commercial Banks

	Bank Rate	Rediscount Rate	Liquid assets ratio on deposits: (%)		Reserve requirements on deposits (%)		Portion of vault cash eligible as a reserve asset (%) 1/
	Per cent per annum (%)		Demand deposits	Time & Savings deposits	Demand	Time & Savings deposits	
Jun-67	6	4	N/A	N/A	4	3	N/A
Jun-68	6	4	N/A	N/A	4	3	N/A
Jun-69	6	4.75	20	15	4	3	N/A
Jun-70	6	4.75	20	15	4	3	N/A
Jun-71	8	6	20	15	4	3	N/A
Jun-72	8	6	20	15	4	3	N/A
Jun-73	8	6	20	15	4	3	N/A
Jun-74	n.a.	n.a.	20	15	n.a.	n.a.	N/A
Jun-75	n.a.	n.a.	20	15	n.a.	n.a.	N/A
Jun-76	n.a.	n.a.	20	15	n.a.	n.a.	N/A
Jun-77	n.a.	n.a.	20	15	10	9	N/A
Jun-78	n.a.	n.a.	20	15	10	9	N/A
Jun-79	n.a.	n.a.	20	15	10	9	N/A
Jun-80	n.a.	n.a.	20	15	10	9	N/A
Jun-81	8	7	20	15	10	9	N/A
Jun-82	10	9	20	15	10	9	N/A
Jun-83	11	10	20	15	10	9	N/A
Jun-84	24	23	20	15	10	9	N/A
Jun-85	n.a.	n.a.	20	15	10	9	N/A
Jun-86	n.a.	n.a.	20	15	10	9	N/A
Jun-87	36	35	20	15	10	9	N/A
Jun-88	31	32	20	15	10	9	N/A
Jun-89	55	48	20	15	0	9	N/A
Jun-90	55	48	20	15	10	9	30
Jun-91	44	38	20	15	10	9	30
Jun-92	49	43	20	15	10	9	30
Jun-93	26	25	20	15	8	7	30
Jun-94	19.5	18.5	20	5	8	7	30
Jun-95	12	10.4	20	15	8	7	30
Jun-96	15.4	14.1	20	15	8	7	30
Jun-97	15.1	12	20	15	9	8	30
Jun-98	10.1	14.6	20	15	9	8	30
Jun-99	11.2	9.7	20	15	9	8	30
Jun-00	27	25.3	20	15	9	8	30

Source: Bank of Uganda

Footnotes: n.a. – not accessed;
N/A – Not Applicable.
1/ In 1998, the proportion of vault cash which is an eligible reserve asset was increased from 30% to 50% for banks with > than 10 branches outside Kampala.

Table 3: Factors affecting base money, 1993/94 to 1999/00 (Billions of Uganda shillings)

	93/94	94/95	95/96	96/97	97/98	98/99	99/00
Autonomous factors	**51,4**	**61,0**	**-21,2**	**9,8**	**64,6**	**123,5**	**415,0**
Net foreign assets	113,5	94,1	88,0	115,6	214,1	166,8	207,2
Net claims on government	-43,9	-57,0	-7,1	-85,3	-77,6	60,3	606,7
Private sector credit	4,4	3,4	-2,7	-0,3	-4,0	22,8	-4,9
Net credit to banks		-0,7	-1,7	6,9	0,0	21,2	-9,2
Other items net	-22,6	21,2	-97,7	-27,1	-67,9	-147,6	-384,8
Non-autonomous (policy) factors	**10,6**	**11,7**	**21,6**	**41,4**	**-23,2**	**-51,0**	**-334,7**
BOU's net market intervention	15,4	15,9	22,7	43,9	6,3	-33,8	-177,4
Net open market operations	-11,5	-6,4	-6,4	-2,5	-42,5	-45,6	-163,6
Net TB issue	-11,5	-6,4	-6,4	-2,5	-37,0	-36,2	-146,3
Net BOU bills/repos	-	-	-	-	-5,5	-9,4	-17,3
Net credit to banks	0,2	-0,7	-1,0	0,0	1,8	28,5	-3,5
Rediscounts	6,5	2,9	6,3	-	11,2	-	9,8
Total change in base money	**62,0**	**72,7**	**0,4**	**51,2**	**41,4**	**72,6**	**80,3**
Base money (Shs billions)	207,4	280,2	280,5	331,7	373,1	445,6	525,9
Memo items: (as percent of total policy factors)							
BOU's net market intervention	145.28	135.90	105.09	106.04	-27.16	66.40	53.00
Net Open Market operations	-108.49	-54.70	-29.63	-6.04	183.19	89.59	48.88
Credit to banks, net	1.89	-5.98	-4.63	0.00	-7.76	-55.99	1.05
Rediscounts	61.32	24.79	29.17	0.00	-48.28	0.00	-2.93

Source: Bank of Uganda

Table 4. Mean (%) and standard deviations (s.t.) of interest rates on TBs (source: BOU)

		94/95	95/96	96/97	97/98	98/99	99/00	00/01
91-day TB	Mean	7,69	10,22	11,62	9,41	6,30	10,06	13,91
	s.t.	1,43	1,53	1,16	1,13	1,46	3,26	4,71
182-Day TB	Mean	11,99	12,32	13,45	11,10	6,92	10,60	17,88
	s.t.	2,24	1,24	0,61	0,91	1,77	3,55	6,16
273-day TB	Mean	14,03	13,80	14,20	11,97	7,80	9,99	19,64
	s.t.	1,41	0,98	0,43	1,27	1,92	1,86	6,24
364-day TB	Mean	15,98	14,68	14,31	12,43	8,70	10,20	18,95
	s.t.	0,57	0,66	0,55	0,93	1,95	1,36	5,39

Indirect Monetary Policy Instruments

Reserve Requirements
Discount Window
Treasury Bill/Central Bank Paper Auctions
Open Market Operations through repurchase agreements

Operating Target

Commercial banks' Reserves

Intermediate Targets

Broad Money (M2)

Ultimate Macro-economic Objectives
Inflation
Real GDP Growth
Balance of Payments Viability

- Reduction of the Current Account (excluding official grants) to GDP
- Import cover

Figure 3: Velocity of Money

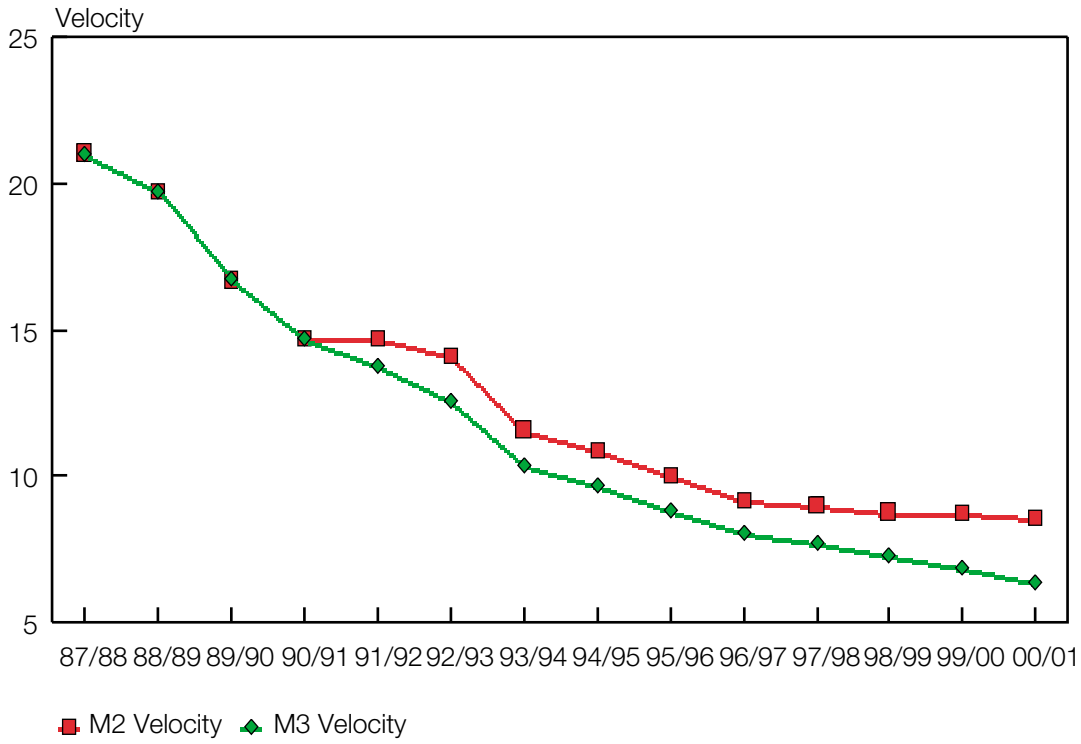

Figure 4: Required and Excess Reserves (Shs billion)

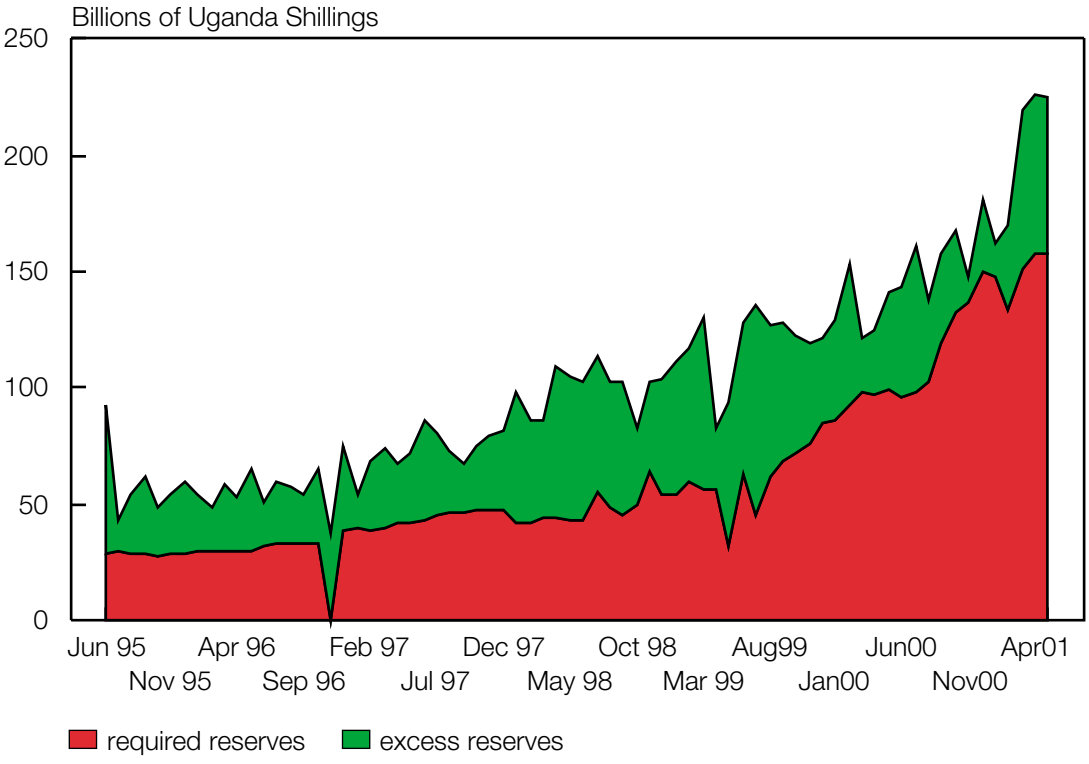

Figure 5: Foreign deposits/M3 and trend of the Exchange rate, June92-May01