

Bank of Tanzania



Curriculum Vitae

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THE MONETARY POLICY FRAMEWORK IN TANZANIA

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¹ The views expressed in this paper are entirely those of the author and do not necessarily reflect the official position of the Bank of Tanzania

1. BACKGROUND

1.1 The East African Currency Board (EACB)

The evolution of monetary policy in Tanzania dates back to 1919, when the East African Currency Board (EACB) was established by the British colonialists. The major objective of the EACB was to supply and control currency in East Africa, following growth in commercial banking in the region. The EACB aimed at automatic redemption against the pound sterling. In this regard, currency was issued only if fully backed by the pound sterling. The EACB was required to hold more than 100% cover in pound sterling for the reserves. It was also agreed that there would be no profit distribution until the desired level of reserves had been achieved.

The EACB had a low level of reserves during the period 1925 to 1935, following a fall in the price of silver, which also led to depreciation of the dominant East African silver rupee. The EACB incurred huge losses in conversion, which were compounded by the world recession in the 1930s. This was followed by a decline in currency in circulation. However, the level of reserves rose rapidly after 1940, with the ratio of reserves to currency breaking the 100% mark in 1950.

The EACB had two main achievements. Firstly, it ensured the continuous convertibility of the shilling, a factor which created confidence in the currency and the economy as a whole. Secondly, there was no room for inflationary financing as the money supply was strictly tied to foreign assets. However, given that the money supply was strictly tied to foreign assets, the EACB failed to expand domestic credit to stimulate investment in and hence the growth of the domestic economy. Similarly, the fact that the domestic money supply was tied to foreign assets implied that foreign trade governed the domestic money supply. There was also a lack of monetary sovereignty for the East African states which actually had different levels of economic development. The high cost of holding high levels of sterling reserves by the poor East African states, was also another serious shortcoming of the currency board arrangement in East Africa.

Reorientation of EACB functions

Export trade, particularly of agricultural produce, started to grow rapidly after 1950. More banks also opened branches in East Africa, resulting in the rapid monetisation of the economies. Given these new developments, it was considered necessary for the EACB to play a more active role in the regulation of the domestic money supply.

Limited government borrowing was now allowed, implying that currency in circulation could increase without a matching increase in foreign reserves.

In 1961 Tanganyika (now Tanzania Mainland) gained its independence. However, this independence was preceded by a massive flight of capital and withdrawals from commercial banks, as the business community was uncertain about the future under the independent government that would take over.

Given these developments, the banking system could not meet domestic credit demands. It was in response to the above developments that the following changes were made in the operations of the EACB:

- The Board introduced the lender-of-last-resort function, which was based on discounting highly rated bills for a crop finance facility. This was intended to allow commercial banks access to credit in order to finance agricultural exports.
- The headquarters of the Board was moved from London to Nairobi and representatives from member countries were appointed to the Board.

Despite the changes, commercial banks relied very little on EACB borrowing, due to the high rediscount rate and the high standard of the paper that could be discounted.

1.2 Establishment of central banks in East Africa

The second phase of monetary transformation in East Africa was the period when the newly independent East Africa States established individual central banks.

Following its independence in 1961, Tanzania commissioned an expert, Dr E Blumenthal, to study the operations of the EACB and give advice on a new setting, given the developments that had taken place. Although it was recommended that the EACB be converted to an East African Central Bank and the individual states establish smaller country central banks, the East Africa authorities considered the idea unfeasible owing to the political environment prevailing at that time. Instead, the governments decided to establish individual central banks and the three central banks, namely the Bank of Uganda (BOU), the Central Bank of Kenya (CBK) and the Bank of Tanzania (BOT), were established in 1966.

2. ESTABLISHMENT OF THE BANK OF TANZANIA

The Bank of Tanzania was established in 1966 by an Act of Parliament, to perform all the traditional functions of central banking, without any special reference to a commitment to low inflation. The bank initially operated by using mainly indirect instruments. However, only eight months after its establishment, the Arusha declaration was announced in 1967. The declaration proclaimed socialism and self-reliance as the official policy of Tanzania. The BOT reoriented its functions to reflect the change in political direction. The use of indirect instruments in monetary policy implementation was immediately suspended and direct instruments were introduced instead. Among the instruments was the Annual Finance and Credit Plan (AFCP). The AFCP targeted specific levels of credit growth to different sectors of the economy, to be attained through administered interest rates. The BOT also operated the annual Foreign Exchange Plan (FEP), which tried to match the demand and supply for foreign exchange. Under this plan, the Foreign Exchange Allocation Committee met on a regular basis, to allocate foreign exchange to all applications submitted to the central bank.

2.1 The 1978 Amendment of the BOT Act

To enable the BOT to address development problems, the BOT Act was amended in 1978. The focus of the Bank was broadened, so as to allow the Bank to be involved in development financing, particularly in the promotion of credit to the agricultural sector. A Rural Finance Department was established in the BOT, to enable the BOT to advise the government and financial institutions on matters pertaining to credit for agricultural development. Similarly, special funds were created to facilitate the attainment of developmental goals. The funds included the Rural Finance Fund (RFF), which was used to finance rural development, including the guaranteeing of loans to the agricultural sector and also a refinancing facility for banks which lent money to agriculture. The Industrial Finance Fund (IFF) was also established to promote industrial development, and the Export Credit Guarantee Fund (ECGF) was used to promote exports, through guaranteeing exports. The Capital and Interest Subsidy Fund was used to subscribe to the share capital of development finance institutions and to provide interest subsidy to these institutions.

The policies implemented immediately after 1978, led to rapid growth in the money supply, mainly caused by central bank accommodation of the government and commercial banking lending to government-owned parastatal institutions. Most of the credit was extended to these institutions without a proper assessment of the economic viability of the projects.

2.2 The period of broad macroeconomic reforms

Given the broad macroeconomic imbalances that had become evident in the economy, the government introduced broad-based reforms in 1986. The objective was to stabilise the economy and address structural problems.

To facilitate a rapid transformation of the financial sector, the government put in place a number of institutional arrangements, some of which are outlined below.

i) **The Banking and Financial Institutions Act (BFIA 1991)**

The Act provided for major changes in the financial sector. Privately owned banks and financial institutions were allowed to do business in Tanzania for the first time since independence. The objective was to stimulate domestic competition among banks and financial institutions so as to increase efficiency and strengthen efforts to mobilise savings. The number of banks grew rapidly to 19 licensed private commercial banks and eight non-bank financial institutions within a span of only six years. The full liberalisation of interest rate regime was also implemented in 1993. The BOT introduced the Treasury bills market to act as an anchor for market-determined interest rates, a source of non-inflationary financing for the budget and a platform for monetary policy implementation.

On the foreign exchange front, the Inter-bank Foreign Exchange Market (IFEM) was established in June 1993, to pave the way for a market-determined exchange rate.

ii) **The new 1995 BOT Act**

A new Bank of Tanzania Bill was submitted to Parliament and enacted in 1995. The new Act became the cornerstone for a new policy vision and a move away from the multiple policy objectives of the former Bank of Tanzania Act, to the single policy objective of price stability. The implementation of monetary policy also changed from the use of direct instruments to indirect instruments. The Act also increased the autonomy of the central bank.

3. MONETARY POLICY UNDER THE NEW BOT ACT

3.1 Objectives of monetary policy

a) The primary objective – price stability

In terms of the new Act, the primary objective of the Bank shall be to formulate and implement monetary policy, directed to the economic objective of maintaining price stability, conducive to a balanced growth of the national economy of Tanzania. This stance is based on the fact that empirical evidence throughout the world suggests that inflation is mainly caused by the excessive creation of money, implying that inflation is a monetary phenomenon. Therefore, in order to achieve price stability, the BOT, like other central banks, by virtue of its ability to exert influence on the money supply process, has been given the task of regulating the quantity of money in the economy.

b) Secondary objectives

There are also other objectives of the central bank – secondary objectives – which are also important for the attainment of a stable macroeconomic environment. These include the following:

- **Financial stability**

This includes ensuring that the financial system, for example commercial banks and other financial institutions, conduct business on a sound prudential basis and according to the various guidelines, regulations and laws in force.

- **Adequate reserves to facilitate imports, debt repayment and intervention**

The Bank acts as the depository of the official external assets of Tanzania. This includes intervention in the foreign exchange market, for purpose of either building reserves or sustaining the external value of the currency. It also includes reserves management aimed at the prudential investment of funds, with due regard to safety, liquidity, profitability and external debt management.

- **Promotion of financial development**

This refers to the establishment of an efficient financial system, to facilitate the smooth financial transmission of monetary policy signals and the execution of financial transactions at high speed and minimum cost, implying an efficient payment system.

- **Realistic interest rates (at least above inflation)**

Despite the fact that interest rates are market determined, the central bank seeks to attain a level of interest rates, which is consistent with the fundamentals of inflation.

- **Increase in credit consistent with growth and money supply targets**

Though the intermediate objective of the Bank remains that of attaining a steady and acceptable rate of increase in the money supply, it is the interest of the BOT to promote a rate of credit that will be consistent with the target growth of GDP and inflation.

3.2 Implementation of monetary policy

The implementation of monetary policy in Tanzania involves the setting of targets, followed by the choice of instruments. There are basically three levels of targets:

1. Operating target
2. Intermediate target
3. Final objective/target

Operating target

Principally, an operating variable is a variable which can be easily controlled by the central bank. However, the actual choice of target depends on factors such as the level of sophistication of markets, or the type of anchor being used by the central bank (i.e. money based vs. exchange rate based stabilisation). Generally, the chosen target must be measurable, controllable and predictable. The BOT uses reserve (base) money as the operating variable/target.

Intermediate target

An intermediate target is a quantifiable target, strongly influenced by the operating target and closely linked to the ultimate/final target. This may be either the money supply or exchange rate level, depending on the type of anchor being used by the central bank. In Tanzania the money supply (M2) is the intermediate target, given that is a money-based stabilisation system.

3.3 Instruments of monetary policy

The Bank of Tanzania uses indirect instruments of monetary policy, implying that central bank operations are used to influence money supply indirectly. Indirect instruments were employed in Tanzania following the adoption of a market-based system of economic management, so as to exploit their higher efficiency, compared with direct instruments, in a market-based environment. The instruments used in Tanzania include open market operations (OMO), reserve requirements, discount policy, foreign exchange market operations, repurchase agreements, moral suasion and gentlemen's agreements. These instruments affect the supply of money through changing either the stock of reserve money or the money multiplier.

Open market operations (OMO)

Basically, two main approaches are used in OMO: the active approach and the passive approach. The active approach aims at attaining a particular level of base money, while allowing the price of reserves (i.e. interest rates) to fluctuate freely. This approach is generally good for economies which lack efficient secondary or inter-bank markets, for it allows the central bank to define its goal more clearly, especially when control of inflation is the overriding goal. By contrast, the passive approach aims at a particular price of reserves (interest rate) while allowing the amount of reserves to fluctuate. This system is better suited to well-developed and sensitive markets. In Tanzania, OMO is the principal instrument for monetary policy, as the active approach is taken.

Foreign exchange market operations

Foreign exchange market operations are conducted through the Inter-bank Foreign Exchange Market, where the central bank buys and sells foreign exchange to commercial banks. However, the exchange rate of the shilling is freely determined by the market, with the central bank intervening only to smoothen short fluctuations and build external reserves, without prejudice to the primary objective of price stability.

Reserve requirements

Central banks traditionally used reserve requirements as an instrument for monetary control. These requirements work by affecting the proportion of assets that banks are required to hold, and hence their ability to expand liquidity. The BOT does not use this instrument frequently because it is considered to be more direct than indirect. Its frequent variation causes considerable uncertainty for commercial banks and may have negative implications for the cost of funds, since it is not remunerated in Tanzania. Currently the reserve requirement is 10% of all deposit liabilities but excludes 50% of vault cash.

Discount rate

The discount rate is the rate that the central bank charges on funds borrowed from it by commercial banks and the government. When there is a tight monetary policy stance, the discount rate imposes limitations on access by banks and government to borrowing from the central bank. In Tanzania, where OMO is the principal tool for monetary policy implementation, the discount rate is highly restrictive so as to discourage borrowers from resorting to the discount window. A penal rate is currently used and is 5 percentage points above the weighted average yield for all Treasury bill maturities. Despite the penal rate, the discount window at the BOT is basically closed.

Moral suasion

Attempts by the central bank to influence the behaviour of market players are normally described as moral suasion. This instrument is sometimes applied in Tanzania, especially in persuading commercial banks to be prudent in setting their deposit and lending rates. However, moral suasion is always used in conjunction with other instruments.

Gentlemen's agreements

These are voluntary agreements between the central bank and banks, aimed at improving monetary conditions in the economy. In Tanzania such agreements have been used between the central bank and the largest commercial bank in an effort to lower the spread on interest rates.

3.4 The Reserve Money Programme of the Bank of Tanzania

This is an operational framework of the BOT, based on the principle of tracking developments in the base money compared with projected levels, by using the central bank's balance sheet. It is based on the assumption that there is a stable relationship between base money and the money supply:

i.e. $M2 = mM0$ (1)

$M2$ = broad money supply; m = money multiplier; $M0$ = base money

The monetary base of a central bank, which determines the level of money supply in the economy, is in turn determined by the assets maintained by the central bank. Central banks, like other banks, obtain funds (create liabilities) through either borrowing (e.g. commercial banks' deposits with the central bank) and/or issuing other liabilities (i.e. currency in circulation outside the central bank). In this regard, reserve (base) money can be defined either from the sources (assets) side or from the uses (liabilities) side.

From the sources side, $MO = NFA + NDC + OIN$ (2)

- MO = Reserve Money
- NFA = Net Foreign Assets
- NDC = Net Domestic Credit
- OIN = Other Items Net

By contrast, when defined from the uses or liabilities side, it includes currency in circulation outside the central bank and commercial banks' deposits with the central bank.

Given the relationship described earlier, a change in the money stock is brought about either by changes in the stock of reserve money or by changes in the multiplier.

Changing the stock of reserve money

Taking as an example the open market operations where the central bank sells Treasury bills to a commercial bank, this would imply that commercial banks' deposits at the central bank are debited by the same amount, thus reducing base money by the same amount. From the assets side, the transaction increases the other liabilities of the other items net. Since $M0=NFA+NDC+OIN$, the OIN component declines, thereby reducing base money by the same magnitude. Through the multiplier, the stock of the broad money supply is also proportionately affected.

Changes in the money multiplier

$$-m = [1+c/d] / [rr+er/d+c/d] \dots\dots\dots (3)$$

- m = money multiplier
- c = currency in circulation
- d = demand deposits
- er = excess reserves
- rr = required reserve ratio

A reduction in the reserve requirements increases the excess reserves of the banking system, hence increasing the supply of money because commercial banks may increase their lending which increases the currency in circulation outside banks.

4. DEVELOPMENT OF THE MONETARY PROGRAMME

4.1 The Annual Monetary Programme

The Bank of Tanzania develops an annual monetary programme every year in June, which becomes the basis for drawing out a Reserve Money Programme. The annual monetary programme of the Bank of Tanzania is based on the exchange equation, and a stable demand for money function.

The Exchange Equation, $MV = PQ \dots\dots\dots (4)$
 $M = M3$, $V =$ money velocity, $P =$ general price level, $Q =$ Output

Therefore:
 $\Delta M3 + \Delta V = \Delta P + \Delta GDP \dots\dots\dots (5)$
Assuming a constant velocity for money,

$\Delta M3 = + \text{CPI Inflation} + \Delta \text{ real GDP} \dots\dots\dots (6)$

To estimate the stock of M3 at the end of the year, the stock position at the close of the current year is allowed to increase by the M3 growth rate determined by Equation (6). The growth rate in M3 (flow) is the amount apportioned equally in the 12 months of the year, on the assumption that it will be straight-line growth. In so doing, M3 growth is determined for every month, and this is then added to the stock figure.

The Reserve Money Programme is then derived from the monetary programme by dividing the stock of M3 for every month by the assumed money multiplier for the month. Estimates are also made for net domestic credit and net foreign assets.

4.2 The Monetary Policy Statement

The whole monetary programme for the year is tabled in Parliament at the beginning of the programme year (June every year) in a document, namely the Monetary Policy Statement. The Minister of Finance tables this statement in Parliament. The Monetary Policy Statement reviews the implementation of monetary policy during the year, and gives a target for monetary policy for the coming year and explains how the targets are going to be achieved. A review of the statement is tabled in Parliament after six months of implementation.

5. IMPLEMENTATION OF THE MONETARY PROGRAMME

5.1 Monthly Monetary Policy Committee Meetings

The Monetary Policy Committee, which is a committee of the BOT Board, is responsible for making decisions on monetary policy as specified in the Monetary Policy Statement tabled in Parliament. The Monetary Policy Committee (MPC) holds a monthly meeting at the end of the month. The MPC reviews the implementation of MPC decisions during the previous month and makes decisions concerning what monetary policy measures should be taken in the month ahead, in order to attain the monetary targets specified in the annual monetary programme. The liquidity position at the close of the month is estimated. In comparing this estimate with programmed liquidity for the period, instruments to mop up (or inject) liquidity are suggested and approved. The Governor chairs the MPC. It has six other members, including the Permanent Secretary in the Ministry of Finance.

5.2 Weekly MPC Subcommittee meetings

The MPC Subcommittee meets every week to review liquidity developments during the week and the implementation of monetary policy measures. It also forecasts liquidity in the economy over the coming week and proposes additional measures to contain liquidity. The subcommittee is a committee of the Bank management and is chaired by the Governor. It meets every week on Wednesdays after the Treasury bill auctions.

6. POLICY CO-ORDINATION

Policy co-ordination is given strong emphasis at the BOT because of the strong influence that fiscal policy has on monetary policy. The various monetary policy committees already described above, have been so structured that they take into consideration this important aspect. Apart from these committees, there is also a joint committee on government expenditure projections and monitoring. The joint committee meets once a month, projects the resource envelop for the month and prioritises expenditure in terms of the available resources. The committee is chaired by the Permanent Secretary in the Ministry of Finance. It has eight members and three are from the BOT.

7. PERFORMANCE OF MONETARY POLICY

The current monetary policy framework in Tanzania has scored considerable success. The sharp decline in growth in the broad money supply from levels of 20 per cent in the early 1990s to growth rates of around 10 per cent in the late 1990s, has enabled inflation to decline persistently from over 35 per cent in the early 1990s to only 6,1 per cent in June 2001 (see Charts 1 and 2).

Chart 1 : Trend in M0 and M2 growth rates

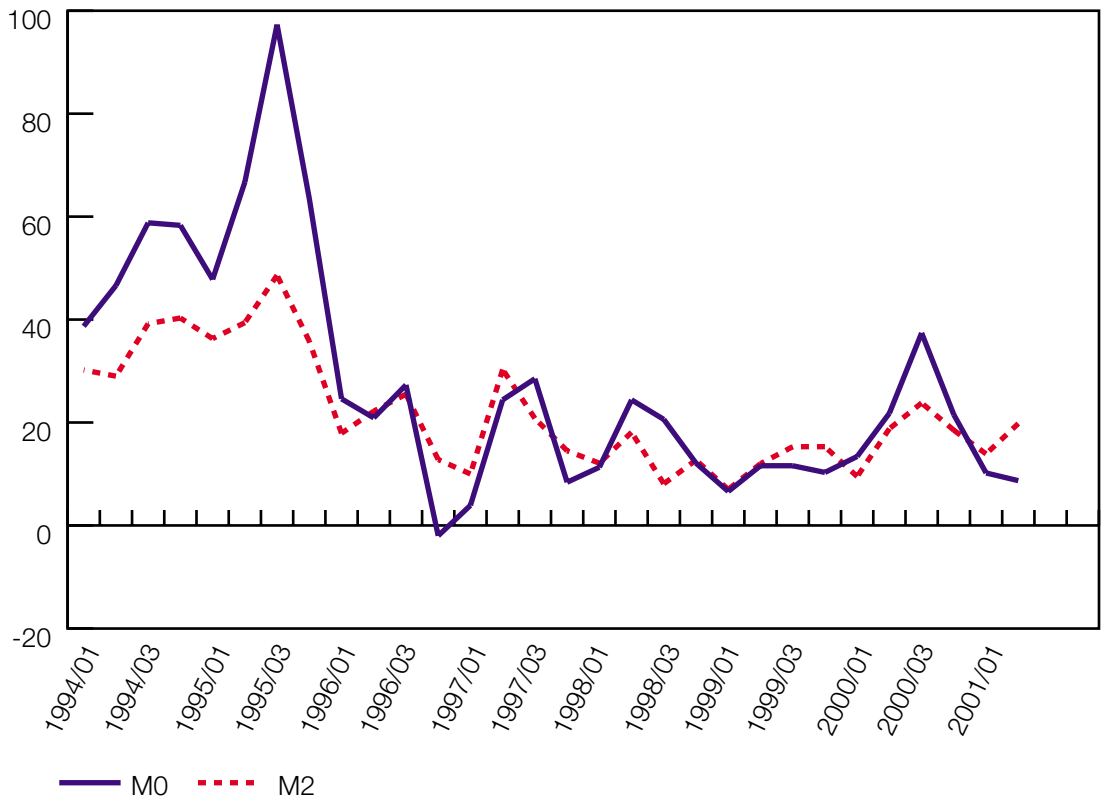
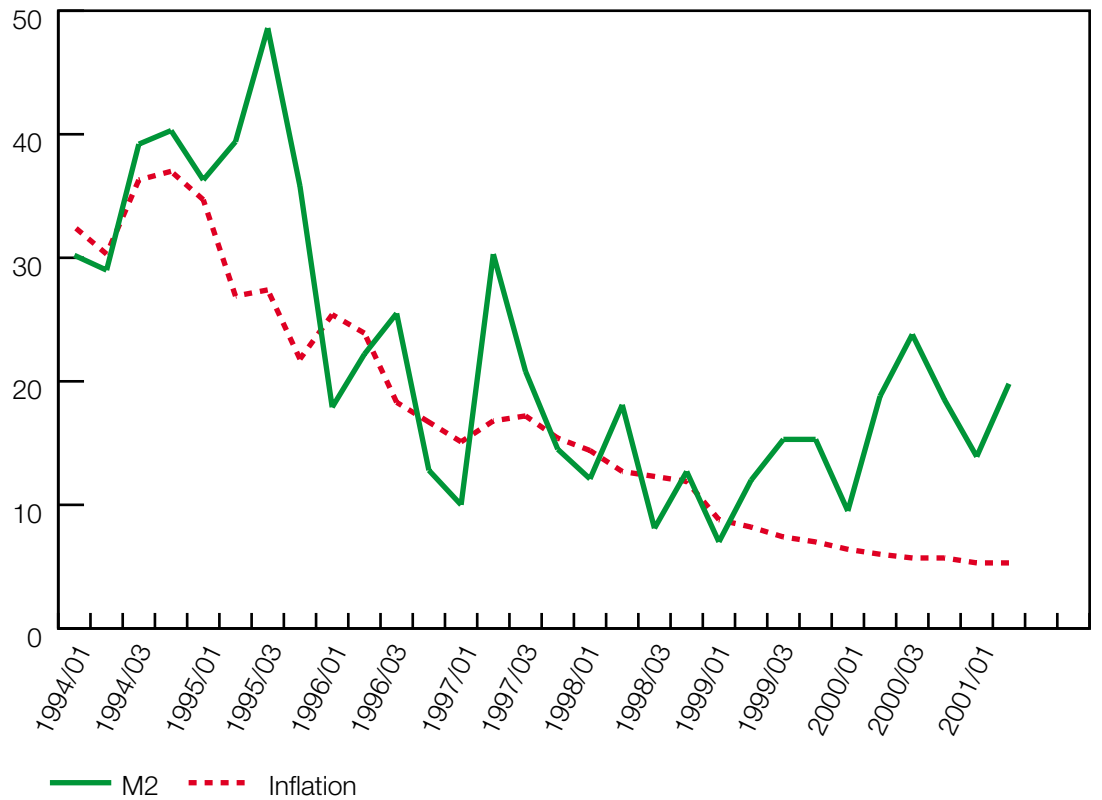


Chart 2 : Trend in M2 growth rate and inflation



Good support has come from the government, which has implemented stringent budgetary constraints, under the cash budget system. Revenue efforts have been enhanced through the broadening of the tax base, and expenditure has been rationalised through the cash budget system. Given these measures, the budget deficit has improved considerably over the years since 1990.

8. CHALLENGES OF MONETARY POLICY IN TANZANIA

Weak monetary policy transmission mechanism

The transmission of monetary policy in Tanzania is still weak due to the structural impediments in the economy which hinder the development of an efficient financial system. Weakness in the legal framework, coupled with a high risk level in the economy, have impacted negatively on monetary policy transmission. The BOT, in collaboration with other stakeholders, is currently spearheading broad-based measures aimed at addressing the weaknesses in the economy that have impacted negatively on monetary policy transmission. These include recommendations on improving the legal framework and enhanced reforms in the financial sector.

Poor payment system

The payment system in Tanzania is rudimentary, with a high level of the money supply being tied up in the payment system. This phenomenon has led to large amounts of money not being involved in the production of goods and services. The BOT, in collaboration with the banking system, has initiated the National Payment Systems Development Project, which aims at developing the current payment systems into a modern and efficient payment system. A special unit, charged with this responsibility, has been established at the Bank.

Weaknesses in the current monetary policy framework

Frequent changes in the money multiplier and instability in the velocity of money has affected the central bank's ability to attain the projected level of the intermediate target as well as the final objective for monetary policy.

Unpredictability of some sources of growth in base money

Unexpected government actions and unanticipated foreign exchange inflows cause deviations from the projected and the actual liquidity levels in the economy and hence difficulties in attaining monetary objectives.

Need for continued study on alternative frameworks for monetary policy

The current monetary policy framework has scored considerable success in Tanzania. Given the achievements, there seems to be no immediate concern about migrating from the current framework to an alternative framework for monetary policy implementation. But this does not imply that there is no need to continue to evaluate the viability of the current framework and develop the capacity that will give the Bank greater flexibility for the adoption of an alternative framework, should the need arise.

The BOT is currently re-examining the monetary targeting framework and developing capacity towards inflation targeting as a future option. In this regard, the BOT will continue to take deliberate measures to deepen financial markets, identify the determinants for inflation in Tanzania and develop technical capacity in inflation targeting, so as to increase the Bank's flexibility in monetary policy implementation.

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MONETARY POLICY FRAMEWORK IN TANZANIA

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Background to Monetary Policy in Tanzania

- The East African Currency Board (EACB)
- Established by the British colonialists in 1919.
- Major objective was
 - *to supply and control currency in the E.A. (following growth of commercial banking) aimed at automatic redemption against the pound sterling.*

EACB...

- Thus currency issuance undertaken only if fully backed with pound sterling
- EACB required to hold reserves in sterling, more than 100% cover.
- No profit distribution until desired level achieved.

Performance of the EACB era

- Low level of reserves during the period 1925 to 1935.
 - Fall in silver price – led to depreciation of the dominant E.A. silver rupee.
 - Thus huge losses by EACB in conversion.
 - Losses compounded by the world recession, 1930s.
- This was followed by decline in currency in circulation.
 - The level of reserves went up rapidly after 1940, with the ratio of reserves to currency breaking the 100% mark in 1950.

EACB achievements

- The EACB had two main achievements:
 - 1. Ensured continuous convertibility of the shilling – *CONFIDENCE*
 - 2. No room for inflationary financing
 - *money supply was strictly tied to foreign assets*

SETBACKS OF THE EACB

- Failure to expand domestic credit.
- Domestic money supply governed by foreign trade.
- Lack of monetary sovereignty for states with different levels of econ. dev.
- High cost of holding high levels of sterling reserves

REORIENTATION OF EACB FUNCTIONS

- Necessary due to:
 - Growth in agric. export trade –1950 led to rapid monetization,
 - hence need for more active role in regulating domestic money supply.
 - Capital flight – independence approached
 - Thus domestic credit requirements could no longer be met by the banking system.

The changes

- Limited government borrowing allowed.
- The “lender-of-last-resort function”, introduced.
- Headquarters of the Board were moved from London to Nairobi.
- Representatives from member countries appointed to the Board.

Establishment of central banks in E. Africa

- Following independence in 1961 Tanzania commissioned a study on the operations of EACB.
- It was recommended that:
- The EACB be converted to East African Central Bank.
- The individual states establish smaller country central banks,

BUT

- E.A. authorities considered the idea unfeasible.
- Governments established individual central banks in 1966.

Central banking under the newly independent EA States

(1st generation central banking)

- New central banks started operations in a background of:
- a low growth in money supply,
- low domestic credit, and
- rapid capital flight.

Policies

- Policies directed towards direct controls –
- Stringent exchange controls.
- Directed credit - esp. to agriculture.
- Preferential interest rates set by CBs.

Characteristics of the 1st generation CBs:

- Excessive government borrowing from central banks.
- Accumulation of bad debts by commercial banks.
- *Very evident in Tanzania and Uganda.*
- Lack of serious supervision of financial intermediaries.

Also...

- Multiple policy objectives:
- development financing,
- export promotion,
- guarantees to priority sectors, etc.

Led to...

- High levels of inflation.
- Negative real interest rates.
- Large parallel markets.
- Increase in cash transactions – weaknesses in the formal financial system.

CENTRAL BANKING UNDER LIBERALIZED E. AFRICAN ECONOMIES

- (2nd generation CB)
- Between early 1980 and early 1990s:
- Deliberate efforts to free the economies from:
 - financial repression,
 - state controls, and
 - introduction of market.
- *Laid the foundation for the introduction of indirect instruments of monetary management.*

Early period

- Marked with:
 - expansionary fiscal policies,
 - automatic central bank accommodation,
 - high growth in money supply,
 - high inflation, and
 - absence of central bank independence.

Measures

- Interest rates were raised towards positive real rates.
- Introduction of ceilings on government borrowing.
- Frequent devaluations – to restore value of currency.
- Structural measures to eliminate controls in the foreign exchange market.

Adoption of indirect instruments

- After 1994, central banks in E. Africa moved towards:
- Total abolition of controls.
- Adopting indirect instruments.
- Liberalization of financial sectors, esp. – TZ and UG.

Furthermore...

Central Banks pushed for:

- Single policy objective – PRICE STABILITY.
- Greater independence.
- Monetary targeting is the means towards stabilization.

Hence...

- Reserve Money Programming.
- Open Market Operations – the primary instrument.
- Treasury bill auctions – anchor for market rates.
- Competitiveness in the banking stepped up.

ESTABLISHMENT OF THE BANK OF TANZANIA

- Established 1966 by Act of Parliament.
- To perform all traditional functions of central banking.
- It was required to operate under indirect instruments.

The Arusha Declaration 1967 – Socialism

- The BOT reoriented its functions.
- Indirect instruments were suspended.
- Direct Instruments introduced.

This led to...

- The creation of Annual Finance and Credit Plan (AFCP),
- administered interest rates and
- Foreign Exchange Plan (FEP).

The 1978 Amendment of the BOT Act

- To enable the BOT to address development problems

The BOT established special funds ...

- Rural Finance Fund.
- Industrial Finance Fund.
- Export Credit Guarantee Fund.
- Capital and Interest Subsidy Fund.

Rapid money supply growth

- Increased monetization of Government deficit.
- Increased financing of agriculture.
- Increased financing of state parastatals.

The new 1995 BOT Act

- A move away from multiple policy objectives.
- To single policy objective – PRICE STABILITY.
- The implementation of monetary policy through indirect instruments.
- Increased autonomy of the central bank.

IMPLEMENTATION OF MONETARY POLICY UNDER THE NEW BOT ACT

Objectives of monetary policy in Tanzania

- Primary objective – PRICE STABILITY.
- Secondary Objectives:
 - financial stability,
 - adequate reserves to facilitate intervention,
 - efficient financial markets,
 - realistic interest rates (at least above inflation),
 - increase in credit consistent with growth and money supply targets.

Implementation of monetary policy

- Two issues:
 1. Set targets
 2. Choose instruments

SETTING THE TARGETS ...

- There are three levels of targets:
 - 1. Operating Target.
 - 2. Intermediate Target.
 - 3. Final Objective/Target.
-
- Is a variable easily controlled by the central bank
 - BOT uses Reserve Money (RM) as operating variable/target.
 - RM is also called:
 - Base Money.
 - Central Bank Money.
 - High-powered Money.
 - Monetary Base.

Criteria for choosing the operating target

- Depend on the level of sophistication of markets.
- Choice is between:
 - Monetary anchors,
 - Exchange Rate anchors.

Generally, the chosen target must be:

- Measurable.
- Controllable.
- Predictable.

The Intermediate Target

- Is a quantifiable target, highly influenced by the Operating Target and closely linked to the Ultimate/Final Target.
- This can be either:
 - Money Supply Anchors,
 - Exchange Rate Anchors.

Instruments of monetary policy

- **Direct instruments**
 - Mandatory monetary limits set by the central bank, in order to attain certain policy objectives
 - Applied by BOT in the past
 - Credit ceilings, fixed interest rates, fixed exchange rates, etc.
- **Indirect instruments**
 - Central bank operations, which influence money supply indirectly.

Current policy is indirect instruments

- As a country's markets expand, direct controls become less effective.
- Markets can easily find a way around direct controls.
- The need to move with the world – globally, indirect instruments are gaining ground.

Instruments used in Tanzania include:

- Open market operations (OMO).
- Reserve requirements.
- Discount policy.
- Foreign-exchange market operations.
- Repurchase agreements.
- Moral suasion.
- Gentlemen's agreement.
- These instruments affect the supply of money through changing either the stock of reserve money or the money multiplier.

Open market operations (OMO)

- OMO are the principal policy instrument used by the BOT.
- They operate on the cash reserve position of the banking system,
- They influence the supply and demand for reserve (central bank) money.
- **The active approach**
 - Aims at a particular level of reserve money and allowing the price of reserves (i. e. interest rates) to fluctuate freely.
 - Is good for economies which lack efficient secondary or interbank markets.
 - Allows the central bank to define its goal more clearly – esp. when control of inflation is the overriding goal.

The second approach is ...

- The passive approach
 - Aims at a particular interest rate, and allows the amount of reserves to fluctuate.
 - Is good for well-developed and sensitive markets.
- In Tanzania, we use the active approach.

Reserve requirements

- Traditionally used by central banks for monetary control.
- Affect the proportion of assets that banks are required to hold, hence their ability to expand liquidity.
- Currently the requirement is 10% of all deposit liabilities (including forex), but excluding vault cash.

Discount policy

- Imposes limitations on access of banks and Government to borrowing from the central bank.
- OMO is the principal tool, the discount policy is very restrictive.
 - Uses penal rates (5 percentage points above WAY of TBs).
 - Also has very restrictive guidelines.

Moral suasion

- Attempts by the central bank to influence the behaviour of market players.
- Sometimes applied in Tanzania, to persuade commercial banks to apply prudence in setting deposit and lending rates.

Gentlemen's agreements

- Voluntary agreements between the central bank and economic agents aimed at improving monetary conditions in the economy.
- Once used between the Bank and the largest commercial bank on interest rates.

But

- Effective implementation of monetary policy requires a framework to manage the supply of money.

In Tanzania

- MONETARY TARGETING Framework is used.
- Done by controlling reserve (high powered, or base) money.
- Through reserve money programming.

Reserve money programming

- Is an operational framework of the Bank of Tanzania.
- Manages Base money by managing the central bank's balance sheet.

Simply,

- it enables the central bank to attain the **intermediate target** of monetary policy,
- i.e. the money supply target.

Reserve money (M0) defined

- Two ways to define it ...
- From the "SOURCES side"
 - i.e. according to sources of reserve money
- 2. From the "USES side",
 - i.e. according to the uses of reserve money

From the SOURCES Side ...

- $MO = NFA + NDC + OIN$
 - MO = reserve money
 - NFA = net foreign assets
 - NDC = net domestic credit
 - OIN = other items net

The components defined ...

Net foreign assets (NFA) – i.e. Net international reserves ...

- Foreign exchange
- Gold reserves
- SDRs
- Quota in IMF
- Foreign liabilities

Net domestic credit

- Net claims on Government
- Net claims on DMBs

Other items net (OIN)

- Premises and equipment
- IPC
- Other assets
- Other liabilities (includes liquidity papers)

RM defined from the USES side ...

- Currency in circulation outside the central bank, *plus ...*
- Commercial banks' deposits with the central bank.

Control of reserve money by the central bank

- The central bank controls money supply by controlling the monetary base or reserve money, given that: **MS = m.MO**
 - *MS* = Money supply
 - *m* = Money multiplier
 - *MO* = Reserve money
- Basically, this is done by controlling the Central Bank Balance Sheet

CENTRAL BANK BALANCE SHEET

Assets (Sources)	Liabilities (Uses)
1. NFA	1. Currency Issued
2. NDA	2. Banks deposits

Thus ...

- Change in money stock is brought about by :
 - (i) changes in the stock of reserve money;
 - (ii) changes in the multiplier.

Changing the stock of reserve money

- Take an example of open market operations
- The central bank sells in the open market liquidity papers worth TZS 5 billion

... the USES side: (M0 = CC+ BD)

- The buyer pays by writing a cheque.
- The payment is effected by debiting an account of a DMB: so the DMB's deposits with the CB decline by TZS 5 billion.
- THUS reserve money declines by 5bn/=

On the SOURCES side: (M0 = NFA + NDA)

- NDA will decline by TZS 5bn.
- Because:-
 - $NDA = NDC + OIN$
 - But $OIN = Other Assets - Other Liabilities$
 - Other liabilities increase by 5bn/=,
 - Hence, OIN declines by 5bn/=
- THUS, reserve money declines by 5bn/=

Now...

- Assuming a multiplier of 3,
- the money supply will decline by TZS 15 billion (3 x 5 billion)

Changing in the money multiplier

- A reduction in reserve requirements increases the excess reserves of the banking system, hence
- an increase in the supply of money because commercial banks may increase their lending which increases currency outside banks.
- In this way the money multiplier will increase.

Note that ...

- $m = [1 + c/d] / [rr + er/d + c/d]$
 - m = money multiplier
 - c = currency in circulation
 - d = demand deposits
 - e r = excess reserves
 - rr = required reserve ratio

In summary

- An increase in reserve money will increase the currency holdings of the non-bank public and/or the reserves of the commercial banks.
- An increase in money multiplier will increase the money supply, even if reserve money remains unchanged.

THE ANNUAL RESERVE MONEY PROGRAMME OF BOT

- Done every year in June as part of the annual MONETARY PROGRAMME.
- Monetary Programme is submitted to the Parliament in the MONETARY POLICY STATEMENT.

Procedure

- Get the macroeconomic targets of GDP and inflation.
- Determine MS growth, which is consistent with growth and inflation targets.
- This is based on the Exchange Equation, $MV = PQ$
- $M = M3$, $V =$ money velocity, $P =$ CPI inflation, $Q =$ GDP
- Therefore:
 - $\Delta M3 + \Delta V = \Delta P + \Delta GDP$
 - Assuming a constant velocity for money,
 - $\Delta M3 = \Delta \text{real GDP} + \text{inflation (CPI inflation)}$

Suppose...

- Real GDP growth target = 5%
- Inflation rate target = 10%
- Then,
- $M3 \text{ growth} = 5\% + 10\% = 15\%$

The second step is ...

- Get the M3 position at end June (say, TZS 800bn/=)
- Let it grow by 15% for the year, i.e. TZS 800 (1.15) = TZS 920bn.
- Then, divide total growth in M3 by 12 months, = (920 -800)/12 = TZS 10bn per month
- Determine month-to-month stock of MS,
- e.g. for July MS = TZS (800 + 10) bn = TZS 810 bn.

The third step is ...

- Get actual June MO position, say, TZS 320 bn.
- Determine 3-month moving average for the actual multiplier at end June.
- This becomes your implied multiplier, say 2.5

Then ...

- Use implied multiplier to determine month-to-month RM targets.
- Recall: MS = mMO
- Therefore July MO = 810/2.5 = TZS 324bn.

Projecting the sources side

- Basic relationship: MO = NFA + NDC + OIN
- NFA projection: consider:
 - actual position end of period,
 - expected inflows and outflows.
- NDC projection:
 - MO minus NFA = NDA
 - Estimate credit to (or repayment by) Government based on Govt. budget frame.
 - Credit to non-government also estimated (reasoning: based on policy)
 - OIN residual.
- A complete framework for MO, NFA, NDC and OIN is then established
- (See Annex: Summary of seasonally adjusted data for 2000/2001 Monetary Programme)

Implementation of the programme

Monthly:

- Monetary Policy Committee meeting held at end of each month.
- Estimated liquidity position at close of month is made.
- Comparisons with programmed liquidity for the period instruments to mop up (or inject) liquidity are suggested/approved.
- (See Annex: Matrix of Monetary Policy Instruments).
- Same procedure followed for weekly programmes.

Policy implementation and co-ordination:

Facilitated through:

- the Monetary Policy Statement (MPS),
- the Monetary Policy Committee (MPC),
- The MPC Subcommittee,
- Daily Management internal consultations.

The MPS

- Policy document by the central bank, tabled at the National Assembly.
- Reviews performance of the macro-economy.
- Performance of monetary policy.
- Monetary policy objectives for coming year (in line with macroeconomic objectives).
- Monetary policy instruments to be employed.

The MPC

- Meets monthly to agree on monetary policy targets and instruments. Members are:
- Governor (Chairman),
- Permanent Secretaries - Treasury (Z'Bar & Mainland),
- 2 Directors of the Board,
- Treasury Commissioner for Policy and the Accountant-General,
- BOT Research and Markets staff.

The MPC Subcommittee

- Meets weekly.
- Chaired by Governor.
- Research staff.
- Markets staff.

Management

- Responsible for:
- proposing the framework to MPC,
- day-to-day implementation of the programme.

Shortcomings of current monetary framework

- Assumptions may not hold:
 - instability of multiplier and
 - instability of velocity for money.
- This affects the reliability of the chosen intermediate target (M3).

Also ...

- Sometimes, indirect instruments may not be efficient,
 - especially when the market are shallow,
 - markets not competitive,
 - instruments are narrow or too few,
 - state of the economy, e.g. ongoing structural changes make dynamics unclear.

Other shortcomings are ...

- Some sources for growth in RM may be unpredictable, e.g.
 - government actions,
 - unanticipated foreign exchange inflows;
- hence proposed instruments may not match liquidity position.

Alternative frameworks ...

Inflation targeting (IT)

- *Defined*: Strategy where the central bank will target the final objective of inflation itself, without going through an intermediate target.

Prerequisites

- Primary objective of price stability.
- Considerable level of central bank independence.
- Depth in financial markets – efficiency in monetary policy transmission.
- Fiscal discipline.

Applicability of IT to Tanzania

- Inflation fairly low – around 5%.
- Good degree of independence
 - fiscal discipline,
 - Govt. does not rely on inflation tax.

BUT ...

- Low level of development of financial markets.
- Weak monetary policy transmission mechanism.
- Structural breaks, following reforms.

Conclusion

- Current monetary policy framework has scored considerable success
 - low inflation (declined from over 30% 1992 to only 5,3% in May 1999,
 - reserves built up,
 - exchange rate stability.
- Demand for money equation still fairly stable.
- No immediate concern for changing from MT to IT.

Way forward

- Research on causes of inflation in Tanzania:
 - identify determinants,
 - develop basic model for IT.
- Study on transmission mechanism:
 - identify hitches,
 - sort out hitches.
- Develop technical capacity
- Take measures to deepen markets.