CENTRAL BANK OF
TRINIDAD & TOBAGO

THE IMPLEMENTATION OF MONETARY POLICY IN TRINIDAD & TOBAGO

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FOREWORD

External communications are an important part of the business of the Central Bank of Trinidad and Tobago. The Bank's outreach initiatives are intended to educate and inform the public generally, as well as to assist markets in understanding the Bank's policy actions and intentions.

In addition to the regular publications of its Research Department, the Bank's Outreach Programme has included lectures and speeches by senior Bank officials mentoring to undergraduate students and supporting an internship arrangement with the University of the West Indies.

This public education series is also a part of the Programme. Its intention is to provide information on topics and policies that are relevant to the management of the economy of Trinidad and Tobago. The world of business and trade is a fast-paced, ever-changing and challenging one, and the tools of knowledge and information must be strategically used to navigate it.

This pamphlet series is geared towards a broad readership. It is likely to be a good source of information for students at the secondary and tertiary level, professionals and other members of the public who are interested in increasing their knowledge of economics and business.

The pamphlet series will be published on a quarterly basis and will cover current and topical issues and explain new economic initiatives. In the series, every effort will be made to present the material in as non-technical a manner as possible while adhering to sound economic analysis and the highest editorial standards.

FOREWORD

To this end, the Bank has invited three well-known economists from the private sector to join the editorial team, firstly to suggest topics that would be of interest to the public and secondly, to advise on ways to reach the target audience. The Bank also intends to invite guest contributors to the series from time to time.

We hope that the series raises the level of public awareness and public discourse on economic issues and contributes to the strengthening of economic policy formation in Trinidad and Tobago.

EWART WILLIAMS
GOVERNOR

The Implementation of Monetary Policy in Trinidad & Tobago

Introduction

According to the Central Bank Act, "the Bank shall have as its purpose the promotion of such monetary, credit and exchange conditions as are most favourable to the development of the economy of Trinidad and Tobago". Under the Act, monetary policy should aim "to maintain monetary stability, control and protect the external value of the monetary unit, ...as well as encourage expansion in the general level of production, trade and employment."

While the Act identifies several objectives for monetary policy, the Central Bank of Trinidad and Tobago has defined the main objective as low inflation. This is so because there is strong empirical evidence that high inflation distorts the decisions of private agents as regards investment, savings, wage demands and production, and ultimately leads to slower economic growth. Once a low rate of inflation is achieved, monetary policy can and should have a role to play in helping to foster economic growth and employment creation or in the achievement of exchange rate stability.

Interest Rate Controls, Credit Ceilings and Reserve Requirements

For several years, monetary policy in Trinidad and Tobago was implemented through direct instruments such as administratively-set interest rate ceilings, individual bank credit ceilings (Box 1) and changes in reserve requirements (Box 2) . In the 1970's, the Bank sought to restrict borrowing by non-resident individuals and companies from the domestic banking system. The Bank also imposed selective credit controls on consumer credit.

BOX 1
SELECTED INTEREST RATE AND CREDIT CEILINGS
SUMMARY MEASURES, 1960S-1990S.

1960s

Although the Central Bank was concerned about bank lending to consumers in the 1960s, it relied more on the use of moral suasion rather than on its powers under the Act to regulate borrowing.

1970s

- Commercial banks were directed that the volume of domestic borrowing by non-residents and companies controlled by non-residents of Trinidad and Tobago should not exceed the total amount outstanding in respect of such borrowers at the close of business on May 17, 1970. These persons and companies were termed 'regulated borrowers'.

- Minimum down payment was raised and maximum repayment periods reduced for consumer durables.

- The ceiling on credit to regulated borrowers was increased from $85 million to $90.3 million.

- Commercial banks were directed to limit credit to individuals for non-business purposes.

1980s

- Central Bank issued guidelines to commercial banks that the maximum interest rate charged on loans should not exceed 4 percentage points above their prime loan rates. Also, the minimum down payment requirement was removed and repayment periods were extended.

- The absolute ceilings on individual bank lending to foreign-owned enterprises were removed and replaced with a guideline ceiling of 10 per cent of total loans.

- Selective credit controls were imposed on bank lending to state enterprises and statutory authorities.

1990s

- By 1994, selective credit control guidelines were removed which included the maximum lending rate ceiling of 4 percentage points above prime loan rates, ceiling on loans for non-business purposes and consumer installment credit guidelines.

BOX 2
SELECTED SUMMARY OF RESERVE REQUIREMENT MEASURES, 1980-2004
/PER CENT OF PRESCRIBED LIABILITIES/

Date	Commercial Banks		Non-Bank Financial Institutions
	Cash Reserve Requirement	Secondary Reserve Requirement	Cash Reserve Requirement
December 1980	11*	5	-
December 1981	14*	5	3
December 1983	17*	5	5
December 1984	17	5	5
December 1986	15	5	5
December 1987	9	11	5
December 1991	16	0**	5
December 1996	23	5	5
December 1997	24	5	9
December 1998	21	5	9
December 2001	18	5	9
December 2003	14	0**	9
December 2004	11	0**	9

Source: Central Bank of Trinidad and Tobago

* Effective Cash Reserve Requirement.

** The Secondary Reserve Requirement was eliminated.

Under a system of reserve requirements, banks are required to hold a portion of the deposits they mobilise from the public in non-interest bearing deposits at the Central Bank. Thus, an increase in the reserve requirements reduced the amount of resources available for lending, while a reduction in the ratio had the opposite effect. This system, which was once in widespread use in both developing and developed countries, began to lose favour when, with the evolution of financial markets, banks began to receive increased funding from sources other than deposits.

These non-deposit funds allow banks to circumvent Central Bank controls and this complicates the conduct of monetary policy. Reserve requirements are also of limited flexibility, since they cannot be adjusted quickly without causing severe cash flow problems for the banks. In addition, they can be distortionary since they operate as a tax – increasing the intermediation margin between deposit and lending rates.

Open Market Operations

In the 1980s, open market operations began to replace reserve requirements as the preferred tool of monetary policy for central banks in industrialised countries. These operations whereby the Central Bank sought to influence the level of banks' reserves through purchases and sales of government (or central bank) securities provided more flexibility to monetary policy. At the same time, as commercial banks received interest on their holdings of government securities, the "tax" element inherent in non-remunerated reserve requirements disappeared. This contributed to a reduction in banks' intermediation spreads.

The Central Bank of Trinidad and Tobago formally eliminated loan and interest rate ceilings in 1994. By the end of the 1990s, the

Bank started de-emphasising reserve requirements and increasing recourse to open market operations. In 2002, the Bank reduced reserve requirements for commercial banks, from 21 percent to 18 percent. In October 2003, the Bank announced a plan to reduce reserve requirements further from 18 percent to 9 percent over a three- to four-year period. So far, reserve requirements have been lowered to 11 percent. The final reduction – to 9 percent - will equalise the reserve requirements between commercial banks and non-banks.

Adoption of a New Monetary Framework

In recent years, many central banks have abandoned operating procedures designed to control reserve money growth and have instead focussed on controlling short-term interest rates. This shift has been prompted by widespread empirical evidence which suggests that the credit channel is able to explain inflation and long-term economic growth much better than changes in monetary aggregates. The shift to the credit channel is also related to the fact that financial innovation has made money demand extremely unstable.

In mid-2002, the Central Bank of Trinidad and Tobago adopted a new monetary framework using a policy interest rate – the Repo rate – as the main operating instrument. The Repo rate is the rate that the Central Bank charges commercial banks for overnight funds. In the new framework, changes in the Repo rate are used to influence banks' short-term interest rates, and ultimately, the interest rate structures of commercial banks and other financial institutions. The assumption is that interest rates influence credit expansion which affects , economic growth, employment and inflation.

Thus for example, a reduction in interest rates makes savings less desirable and borrowing more attractive and thus stimulates

spending. The opposite occurs when interest rates are increased. Changes in spending usually first affect output and employment. However, particularly when spare capacity is limited, increases in spending may lead to inflation. The impact of spending on inflation may be partly alleviated by an increase in imports which adds to domestic supply.

A change in interest rates may also affect spending by impacting on household wealth. For example, a reduction in interest rates will boost the prices of assets such as shares and real estate. As households feel wealthier, their willingness to spend increases, reinforcing the direct impact of interest rates on spending. The importance of the wealth effect on spending is likely to be stronger in industrialised economies with highly developed money and capital markets.

IMPLEMENTATION OF THE NEW FRAMEWORK

(i) Sources of Liquidity Supply

Typically, the major sources of primary liquidity creation in an economy are (i) Central Bank net purchases of foreign exchange; (ii) Central Bank net credit to the banking system; and (iii) Central Bank net credit to Government.

In Trinidad and Tobago, the Central Bank does not normally provide credit to the commercial banks, nor to the Government. Moreover, the Central Bank only purchases foreign exchange from the Government. These purchases represent tax payments from the energy sector companies – and have as their counterpart Government deposits at the Bank. The draw-down of these deposits to finance net expenditures is the major source of liquidity in the economy. A rough estimate of the size of the liquidity injection is provided by the Central Government's net domestic fiscal deficit.

Because of the significant contribution of the energy sector to total tax collections (about one-third), the net domestic fiscal deficit tends to be large and somewhat of a structural phenomenon.

(ii) Estimating Bank's Demand for Liquidity

On the demand side, commercial banks hold liquid balances at the Central Bank, firstly to meet their statutory reserve requirement and beyond that, to cover settlements. The statutory reserve holdings are determined as a given percentage (currently 11 percent) of "prescribed liabilities".[1] Banks must manage their operations so that the average daily holdings meet the statutory requirement each day of the reserve week. The "averaging" provision allows banks to over- and under-fill reserve requirements during the maintenance period and, in so doing, it acts as a buffer to limit interest rate volatility in the face of changing liquidity conditions.

Banks face some challenges in estimating the level of reserves to be held for settlements purposes. The settlement claims on a given bank could be very volatile as they could be affected by several exogenous factors. In particular, the demand for settlement balances by commercial banks is affected by the efficiency of the payments system and by the volatility in receipts and payments. In Trinidad and Tobago, where up to recently the payments between banks were done through the clearance of cheques, there has been a strong incentive for banks to hold large excess reserves so as not to be caught off-guard. The absence of an active secondary market in government securities also encourages the holding of excess reserves.

[1] In addition to deposits denominated in local currency, "prescribed" liabilities include short-term credit instruments with a maturity of up to one year as well as other fund-raising instruments with maturities in excess of one year.

It should be noted that banks earn no interest on reserve balances maintained either to meet statutory requirements or for settlement purposes. At the same time, deficiencies on statutory holdings may be levied at a penalty interest rate. This asymmetry reinforces the tendency for banks to take the conservative approach and hold excess reserves.

(iii) Reducing Excess Liquidity

Based on its forecasts of the demand and supply of liquidity, the Central Bank conducts regular open market operations to absorb excess liquidity. For this purpose, the Bank normally uses three and six-month treasury bills and one-year treasury notes. However, as excess liquidity is something of a structural phenomenon in Trinidad and Tobago, the Bank sometimes uses longer term securities to absorb liquidity on a more permanent basis.

The essence of open market operations is that the resources absorbed are sterilized, that is, held in blocked accounts at the Central Bank. This effectively means that the resources have been withdrawn from the financial system. To that extent, the Bank's open market operations, conducted for monetary policy purposes, differ from its regular treasury bill auctions which raise resources to finance government expenditure.

Each day there are several debits and credits to commercial banks' reserve accounts, reflecting both statutory-reserve and payments settlements transactions. While the banks manage their liquidity positions, the Central Bank constantly monitors liquidity conditions in the system as a whole and conducts ad-hoc open market operations as required to keep liquidity conditions tight. The operating principle is that the

transmission of the Bank's policy signals is best done in the absence of excess liquidity.

(iv) The Repo Rate

During the day, banks can meet any liquidity shortages for payments settlements through the Central Bank's interest-free intra-day liquidity facility. However, at the end of each day, banks must return any borrowings under this facility to the Central Bank. Then, if banks are short (in need of funds), they may borrow in the inter-bank market or conduct an overnight repurchase at the Repo rate.[2] If banks are long (have excess funds), they may lend on the inter-bank market and/or deposit excess funds into special deposit accounts at the Central Bank. These deposit accounts are remunerated at the Special Deposit rate.[3] By modifying the cost at which the Central Bank is prepared to provide credit to the commercial banks, changes in the Repo rate are expected to indicate the desired stance of monetary policy.

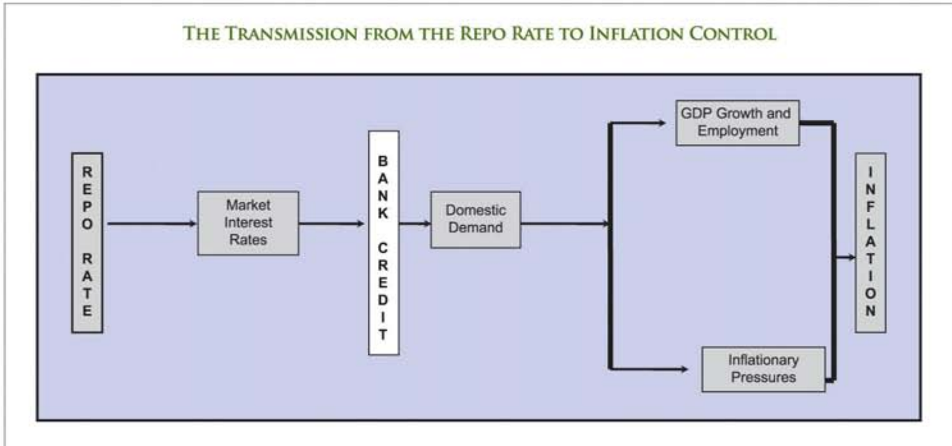
If inflation is trending outside the target range and a more restrictive credit environment is deemed to be appropriate, the Bank will opt to raise the Repo rate while tightening liquidity conditions in the system through open market sales. The increase in the Repo rate in a tight liquidity environment is expected to trigger a rise in inter-bank rates and in commercial banks' lending rates. This is expected to prompt a slow-down in credit demand and in so doing, help ease inflationary pressures.

[2] In a repurchase agreement (repo), the Central Bank purchases a security from a commercial bank with an agreement that the bank repurchase the security at a higher price on a specified date.

[3] Prior to September 01, 2005, the special deposit rate was remunerated at two percentage points below the Repo Rate. It has now been de-linked from the Repo Rate.

A simplified diagram of the transmission mechanism is shown in Chart 1.

CHART 1



Inflationary pressures may arise from sources other than excess demand – such as wage pressures, exchange rate movements or supply shocks. In such circumstances, policies to deal with the proximate causes of inflation – such as wage restraint or measures to expand domestic agricultural production or to re-establish exchange rate stability – become necessary. Even in such situations, however, tightening monetary conditions could still be very important so as not to validate inflation nor to foster inflationary expectations.

If the Central Bank wishes to ease monetary policy, for instance, because of sluggish economic growth or lagging employment, it may opt to lower the Repo rate and take steps through open market purchases to ease liquidity. The reduction in the Repo rate, in the context of expanding bank liquidity, should lead firstly to a lowering of the inter-bank rate. This is likely to be followed by a reduction in commercial bank lending rates, stimulating an increase in bank

loans and advances to businesses and consumers. In a situation of ample spare capacity, an increase in credit expansion should spur economic growth and employment.

When the operating environment is functioning as envisaged, the inter-bank market rate should be just below the Repo rate to encourage banks to have first recourse to the market. Since in this environment the level of special deposits (available for inter-bank transactions) is limited, banks' need for liquidity must be met through repurchases at the Repo rate.

To help ensure the correct liquidity environment, commercial banks are expected to participate in a certain minimum percentage of open market auctions and to utilise the inter-bank market before having access to the Central Bank's Repo facilities.

Review of Experience

The new framework has worked reasonably well in its short period of operation. Soon after it was introduced, the Central Bank sought to ease monetary conditions by lowering the Repo rate from the initial level of 5.5 percent set in May 2002, to 5.25 percent in September 2002 and further to 5 percent in September 2003. In response, short-term money market rates and commercial banks' lending rates also declined in line with changes in the Repo rate. Later, the downward movement in interest rates was reinforced by the phased reduction in reserve requirements (Chart 2).

CHART 2

The reduction in interest rates led to an expansion in bank credit to the private sector, which contributed to increased activity in the non-oil sector and to a marked rise in employment in that sector (see Table 1). Over time, as spare capacity was reduced, inflationary pressures began to emerge, exacerbated by supply shocks in the agriculture sector.

TABLE 1

TABLE 1: GROWTH IN PRIVATE SECTOR CREDIT, NON-OIL GDP AND NON-OIL EMPLOYMENT			
	YEAR-ON-YEAR GROWTH IN PRIVATE SECTOR CREDIT	YEAR-ON-YEAR GROWTH IN NON-OIL GDP	YEAR-ON-YEAR GROWTH IN EMPLOYMENT IN NON-OIL SECTORS
Mar-02	9.22	1.71	2.39
Jun-02	4.69	-2.99	2.44
Sep-02	6.42	-2.36	1.19
Dec-02	8.6	2.9	1.4
Mar-03	3.97	3.96	0.24
Jun-03	1.31	7.21	1.55
Sep-03	5.32	4.72	3.83
Dec-03	8.97	11.27	2.38
Mar-04	18.92	11.15	2.49
Jun-04	22.02	8.05	4.9
Sep-04	23.51	14.08	5.01
Dec-04	22.52	7.51	7.37

Sources: Central Bank of Trinidad and Tobago and the Central Statistical Office

Beginning in late 2004, the Bank began to significantly increase the level of open market operations to absorb excess liquidity. In March 2005, the Central Bank raised the Repo rate to 5.25 percent to signal a desired change in the monetary environment. This move was followed by a corresponding adjustment in short-term and commercial banks lending rates. The level of special deposits has, however, remained high while recourse to the inter-bank market has been somewhat below expectations.

Future Challenges

The operation of the new monetary framework so far has signalled a few shortcomings which need to be addressed if its effectiveness is to be enhanced. The main issue is that if the monetary framework is to yield a transparent and credible indicator of the desired monetary stance, the Central Bank would need to have better control of the liquidity situation so that changes in the Repo rate are transmitted rapidly through the system. Thus for instance, an increase in the Repo rate, intended as a signal of a tightening of monetary policy, should be supported by tight liquidity conditions.

Accordingly, the Bank is paying close attention to:

(i) strengthening its ability to forecast trends in liquidity so that it could better plan its open market operations. To this end, the Bank and the Ministry of Finance, are collaborating on the preparation of weekly projections of central government's fiscal operations, which are the main source of liquidity injection.

(ii) reducing incentives for banks to hold excess reserves. The recent launch of the electronic settlement system - the Real Time Gross Settlement System (the RTGS) – for the settlement of large transactions will begin to reduce the need for banks to hold large settlement balances. The introduction of a similar electronic system for small transactions (the Automated Clearing House – ACH), scheduled for early next year will reinforce this trend. In addition, the Bank is currently reviewing the level of interest rates placed on special deposits which encourages banks to hold excess liquidity. The Central Bank is working with Government securities intermediaries on the development of a secondary market in government securities. This should assist in improving liquidity management and reduce the need for holding excess reserves.

(iii) improving the availability of up-to-date information. The Bank is also developing a broad range of "flash" statistical indicators which could serve as a basis for estimating trends in domestic demand, employment, economic activity, sources of inflationary pressures, etc. These indicators would provide clearer evidence of the need for changes in the monetary stance.

Concluding Observations

While monetary policy is an important tool in a government's economic policy arsenal, it should be noted also that the implementation of monetary policy by itself is insufficient to achieve inflation control since inflation has several proximate causes. For maximum effect in controlling inflation, monetary policy needs to work in concert with fiscal discipline, income restraint and relative exchange rate stability.

It is worth noting that monetary policy affects the rate of inflation with lags of uncertain duration. These lags make it difficult for the Central Bank to control inflation from month to month and for most economies, results are more likely to be seen over the course of a year. This perhaps, underscores the need for early action when inflationary trends are evident .

APPENDIX

THE MONETARY OPERATING FRAMEWORK (INSTITUTIONAL ASPECTS)

The following are some institutional aspects of the current monetary framework.

1. On the third Friday of every month, the Central Bank announces the overnight Repo rate for the month ahead. The announcement is provided in a press release which also discusses the reasons behind any change (or no change). The timing of the press release has been changed from the first to the third week of the month to coincide with the availability of the previous month's inflation data, which are now being released with a 15-day lag.

2. Under exceptional circumstances, such as unusual exchange market or financial system stress, the Central Bank may announce a Repo rate change outside of the scheduled monthly review dates.

3. Rates of interest on other standing facilities at the Central Bank are also revised along with the repo rate. These are:

(i) the Special Deposit rate, which was set at 200 basis points below the Repo rate has now been delinked from the Repo rate. The special deposit rate provides a floor to short-term money market rates in the event of a temporary excess supply of funds.

(ii) the Reverse Repo rate, which is set at 50 basis points below the Repo rate, is the rate at which the Central Bank is prepared to absorb overnight excess liquidity.

(iii) the Re-Discount rate, which is set at 200 basis points above the Repo rate, serves as a disincentive for frequent use of Central Bank financing facilities.

4. Changes in the Repo rate will normally be made in small increments (e.g. by 25 or 50 basis points).

5. The Central Bank expects that administered interest rates of the commercial banks (e.g. the prime lending rate or other base rates) would follow changes in the repo rate quite closely. It is to be emphasized that by setting the benchmark, the Central Bank is not displacing market forces since the system leaves the spread above the base rate to be determined by cost and risk factors and competition between lenders.

6. The responsibility for setting the repo rate lies with the Central Bank's Monetary Policy Committee (MPC), which is chaired by the Governor of the Central Bank and includes the two deputy Governors and the Managers of Research and Policy and Capital Markets.

7. The Monetary Policy Committee is advised by a Monetary Policy Support Committee which analyses the latest available economic and financial information and makes recommendations about the appropriate monetary policy stance.

GLOSSARY OF TERMS

GLOSSARY

Basis point

A basis point represents 1/100th of a per cent. For example, when the Central bank increases the Repo rate from 5.50 to 5.75 per cent, this represents an increase of 25 basis points.

Capital markets

Markets in which long-term debt securities and corporate equity are issued and traded. For instance, the Trinidad and Tobago Stock Exchange is a centralized market for the trading of bonds and corporate equity.

Economic growth

An increase in a country's output of goods and services, which is measured by the changes in the real Gross Domestic Product.

Excess liquidity

This refers to the maintenance by banks of a higher level of funds than is normally required to meet their statutory reserve requirements and settlement balances.

Financial innovation

This refers to the development of new funding instruments.

Government securities

Short- and long-term securities issued by the government to raise funds to finance its expenditures.

GLOSSARY

Inflation

Inflation refers to a sustained increase in the average level of prices in the economy and is usually measured by changes in the Index of Retail Prices. This Index is based on a basket of goods and services purchased by households (consumers).

Inter-bank market

The market in which commercial banks borrow and lend funds to each other.

Inter-bank rate

The rate of interest charged by commercial banks for the use of funds on the inter-bank market.

Intermediation margin

The intermediation margin refers to the difference between lending and deposit rates.

Liquid market

This refers to the ability of a financial market to absorb the purchase or sale of a security without a substantial change in price. Securities in this market are easily convertible into cash.

Monetary conditions

The availability and cost of money and credit in the financial system.

GLOSSARY

Money demand

The desire or need to hold money in the form of notes, coins and deposits rather than in other forms such as bonds or shares.

Money markets

A market for short-term debt instruments maturing in one year or less. Examples of instruments traded in money markets include treasury bills, commercial paper and certificates of deposits.

Open market operations

The sale and purchases of government securities (treasury bills and treasury notes) by the Central Bank.

Prescribed liabilities

These comprise deposits denominated in local currency, short-term credit instruments with a maturity of up to one year and other fund-raising instruments with maturities in excess of one year. As new financial instruments are created by licensed financial institutions, this prescribed list may be extended from time to time by the Central Bank.

Repo rate

The rate that the Central Bank charges commercial banks for the use of overnight funds. This rate was raised to 5.75 per cent by the Central bank on September 23, 2005.

GLOSSARY

Reserve requirement

The percentage of prescribed liabilities that licensed financial institutions need to retain at the Central Bank. The reserve requirement for commercial banks was lowered from 14 per cent of prescribed liabilities to 11 per cent in October 2004.

Secondary market

The market in which previously issued securities are traded prior to maturity.

Treasury bills

These are short-term debt securities issued by the government for a duration of one year or less.

Treasury notes

These are medium-term debt securities issued by the government for a duration greater than one year but less than five years.