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The Government Securities Market and its role in Supplementing Monetary Policy in The Bahamas

By

Josephine Justilien & J. LaShell Adderley
The Central Bank of The Bahamas
NASSAU, THE BAHAMAS

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**THE GOVERNMENT SECURITIES MARKET AND ITS ROLE IN
SUPPLEMENTING MONETARY POLICY IN THE BAHAMAS**

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Prepared by J. L. Adderley & J. Justilien
Research Department
The Central Bank of The Bahamas

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Abstract

At the writing of this paper, the proposal of a market-based auction mechanism for the sale of long-term government securities (Bahamas Government Registered Stock) was under consideration. The auction mechanism already in place for short-term government securities (Treasury Bills) was also being reviewed. Within the context of monetary theory as regards small, open economies under a fixed exchange rate regime, this paper examines the market's role in the conduct of policy, and considers the feasibility and scope of enhanced open market operations in The Bahamas.

The views expressed in this paper are those of the authors and do not necessarily represent The Central Bank of The Bahamas'. This paper represents work in progress and comments are therefore welcome.

INTRODUCTION

By any standard, the primary goal of monetary policy is to create a stable financial environment that provides a solid foundation for sustained economic growth. Since the 20th century, this process of macro management, which includes, inter alia, the regulation of the supply of money and credit, has been advanced by central banks in both industrial and developing economies through the administering of various policy instruments at their disposal. As the financial system evolves, for policy to be effective it is important that central banks constantly review the mixture of tools that they employ and where necessary, adopt new approaches to policy implementation.

Indirect monetary instruments are seen to offer advantages over direct instruments, notably greater flexibility and effectiveness in the implementation and conduct of monetary policy, as well as depoliticizing the formulation of monetary and exchange rate policy and the allocation of credit and fostering the development of competitive financial markets. In a piecemeal fashion, therefore, central banks must undertake a diagnostic review to examine the prudence and structure of monetary instruments singly and combined to ascertain the possibility of enhanced operations.

In this vein, The Central Bank of The Bahamas (CBOB) recently undertook a review of the Government's securities issuance programme, with a view to proposing the implementation of a market-based auction mechanism for the sale of Bahamian Government Registered Stock (BGRS), the Government's long-term securities. It is hoped that such a system will enhance the local economy's macro-economic management structure in general, with specific regards to allowing market forces to directly affect pricing, in an attempt to produce more optimal results,

thereby aiding in the deletion of market imperfections. Additionally, with the onset of a local stock exchange, this position could possibly encourage a deepening and widening of capital market conditions.

Invariably, an auctioned based system for tendering of long-term government securities would also assist local authorities in fostering better overall monetary policies, which would inevitably support the tenet and prime role of monetary policy, securing domestic and external stability of money.

Within the context of monetary theory as regards small, open economies under a fixed exchanged rate regime, this paper examines the market and its role in the conduct of monetary policy, and considers the feasibility of enhanced open market operations. The survey period selected for this analysis is the 15-year period beginning 1983, although certain sections of the analysis are limited to a shorter, more recent period.

The remainder of this paper is organised as follows: Section I reviews theory relating to government securities markets generally and more specifically, open market operations in a small, developing economy with a fixed exchange rate regime; Section II provides an overview of instruments of monetary policy in The Bahamas over the survey period; Section III presents characteristics and trends of the Bahamian government securities market over the period 1983-1997, highlighting yield, liquidity, maturity and creditor patterns; Section IV discusses the impact of the government securities market on broader economic variables, with particular emphasis on growth potential and feasibility of enhanced open market operations; and the final section assesses challenges, limitations and the future of the trading environment.

SECTION I: THEORY OF OPEN MARKET OPERATIONS IN A SMALL ISLAND STATE

A review of the literature indicates that the term “open market operations” or OMOs is frequently used in a very narrow sense when referring exclusively to transactions in the secondary market. However, following the IMF, a broad definition of OMOs refers to the purchase and sale by central banks of specified assets--usually government securities but sometimes central bank securities, foreign exchange, gold, commercial bills and even company shares--for the purpose of influencing the prices and yields of such assets as well as the cash base of the banking system.

In order to conduct open market interventions, country experiences on the utilization of financial instruments have been divided into four categories. The groups consist of countries that have used central bank securities only; central banks which have consistently used government securities; dual usage of central bank and government securities, with the latter being the preferred choice and dual usage of central bank securities and government securities but the former is the instrument of choice. Regardless of the financial instrument chosen, or combination thereof, the use of open market operations suggest important implications between monetary and debt management.

Chandavarkar (1996) asserts that the separation of monetary policy objectives from the public debt management is effectively done via the issuance of central bank securities and additionally strengthens the operational autonomy of the central bank. However, the use of government securities in open market operations has the advantage of acting as a catalyst for the

deepening and widening of financial markets and improving the transparency of operations, while obviating the risk of central bank losses. Further, if central bank securities are issued alongside government securities, there should be coordination of efforts and design measures so that there is some complementarity between maturities of the two.

On the other hand, Quintyn (1994) stipulates that the type of security, whether central bank or government security, does not matter for the efficacy of open market operations since what is significant are the characteristics rather than the origin of the instruments. The critical condition is that these instruments be properly designed to foster a wide and active market and meet the following necessary conditions:

1. interest rates should be market determined, which requires that ownership be as broad-based as possible and easily transferable to stimulate competition and facilitate transmission of the monetary policy stance;
2. simple, transparent and uniform taxation of all financial instruments, including private paper;
3. appropriate maturities to stimulate trading; and
4. clear and well-defined rules for discounting.

Theoretically, use of open market operations should allow the central bank more flexibility and effectiveness in its efforts to influence cash balances within the banking system. The wider usage of government or central bank securities as vehicles for trading, as opposed to other resources, such as gold or foreign exchange, has gained wider acceptance because the degree of initiative and control by a Central Bank is heightened. In addition, securities are more responsive and sensitive to changes in interest rates and capital values and they also have an active capital reversible capital market. The utilization of this instrument requires the existence of a sufficiently deep and wide market with participants in high-quality securities through which central banks can alter the base and bank reserves without seriously disrupting the market itself.

Conventional objectives of open market operations may be summarized as follows:

- Assistance in debt management and government borrowing
- Provision of seasonal or other finance for commercial banks
- Creation and maintenance of a desired yield and maturity pattern
- Control of the banking system's reserve base

One advantage of open market operations is the ability to be applied on an incremental basis and to be administered with daily frequency, reflecting existing conditions in the money market environment.

Notwithstanding, for small open developing economies, experience has demonstrated that the absence of sophisticated capital markets can limit effective open market operations, and it is often difficult for a central bank to realize monetary objectives by singly utilizing open market operations. By its very nature, therefore, it would seem that under the more ideal conditions, open market operations are best suited for a developed economy where capital markets are deep and broad, as opposed to a less developed economy with a shallow capital market, if any, few market participants and narrow and concentrated ownership base.

Moreover, in the context of a fixed exchange rate regime and free capital mobility, conventional textbook theory is that there is a complete loss of monetary independence, to the extent that the Central Bank could not then set the domestic interest rate at a level different from the foreign interest rate. (Krugman & Obstfeld (1996), Dornbusch (1980)). Once some degree of control is placed on capital mobility, however, theory does provide some scope for policy independence.

Worrell (1995) narrows this focus to Caribbean economies, where smallness takes on an even more acute significance. He notes that monetary policy is possible for small, open economies; and open market operations may be effective, if conducted within a defined zone of

monetary autonomy. He cautions, however, that economies should not be overambitious in their expectations of open market operations.

Caribbean economies are characterized by their enclave structure with relatively weak sectoral linkages, and external dependency in the sense discussed in Girvan (1973) where monetary policy has had little sustaining and direct impact on growth. The primary focus of policy tends to be balance of payments management. Having framed the context for monetary policy, the issue is then to what ends can open market operations assist this objective.

SECTION II: OVERVIEW OF MONETARY POLICY IN THE BAHAMAS

In its application of monetary policy, the Central Bank has developed a framework that embodies a combination of conventional instruments of monetary and credit control. (See Figure 1) While no targets are set for the level of interest rates, the Bank does seek to ensure that rates are kept at a level consistent with the main policy objective of protecting the country's international reserves and thereby supporting the exchange rate arrangement of fixed parity with the United States dollar.

In earlier years, the Bank's monetary policy was characterised by heavy reliance upon moral suasion, supplemented by the use of the Bank or discount rate. This near total reliance on moral suasion underwent notable change in the early 1980s and again in the late 1980s, following a period of illiquidity, now commonly referred to as the liquidity crisis. Since then, control over the terms of instalment credit has received increased attention, with the Bank urging maintained prudence in the volume of banks' lending vis-a-vis their deposits.

Given the structure of the Bahamian economy-- an open economy with a fixed exchange rate and some capital controls amid a high propensity to import-- domestic credit expansion will lead to loss of external reserves, which provide the support for the exchange rate arrangement. In such an environment, the Central Bank is felt to have little direct control over the quantity of money, and domestic credit expansion and liquidity thus become extremely important as monetary target variables, and the Central Bank's intervention in this regard provides the only institutional link in the critical relationship between the balance of payments, domestic credit and the money supply.

To facilitate the conduct of monetary policy with respect to the banking sector, the Central Bank has at its disposal traditional instruments of monetary and credit control, namely: variable reserve requirement, variable liquid assets ratio, selective credit control, open market operations, discount rate/window, and moral suasion. However, in recent years, the Bank has favoured influencing credit through specific directives regarding credit terms and through liquidity management, rather than through frequent adjustment of interest rates. A chronology of monetary policy measures undertaken by the Bank is provided in Figure 1.

SECTION III: THE MARKET FOR GOVERNMENT SECURITIES, 1983-1997

In The Bahamas, the capital market lacks sophistication, as is characteristic of most Caribbean economies. Specifically, the market lacks both breadth in terms of offering a wide range of instruments with varying maturities and interest structures, and depth in terms of offering a large volume of investment opportunities to the investing public.

The market for government securities in The Bahamas is comprised by short-term Treasury bills with maturities of 91 and 182 days, and Government Registered Stock with original maturities that have ranged between two and 25 years over the survey period. However, legislation provides for maturities of up to one year on treasury bills and up to 60 years on bonds, however. Treasury bills are issued on a routine basis by auction mechanism and at discounts, with the Government rolling over this short-term financing; whereas Government Registered Stocks tend to be issued on only two or three occasions during the year, with rates administratively set. The amounts and timing of the supply of primary issues are dictated by the fiscal and budgetary requirements of the Ministry of Finance rather than by the monetary policy requirements of the Central Bank, even though the Bank acts as registrar and transfer agent for these securities. (See Figures 2 and 3 regarding issue volumes and relationship with government deficits, in respect of bonds, in particular.)

Interest on bonds is paid semi-annually, and may be on the basis of fixed or variable rates, with variable rates pegged to the Nassau Prime Rate. No ceiling exists on the amount of stock Government may issue; however, Parliamentary approval, by way of resolution, must be obtained for each issue.

To advantage, minimum investment requirements of \$100 render both the Treasury bill and the bond market ripe for broadened investor participation. In its effort to encourage liquidity in the bond market, the Central Bank has traditionally followed a policy of purchasing and selling at par. In the treasury bill market, however, a rediscount rate applies, which affixes a penalty premium of 0.5% above the market rate, the latter determined as 0.1% below the discount rate at tender.

Here, a closer analysis of trends in the government securities market is warranted. Given key differences in the Treasury bill market viz. the bond market, a segmented analysis is presented.

Market Depth & Creditor Patterns

The amount outstanding in respect of Treasury bills was \$132.5 million at the end of 1997, compared to \$1,119.1 million for Bahamas Government Registered Stock. It is noteworthy that the amount of Treasury bills that may be issued is constrained by law at 25% of Government's ordinary revenue, which explains stalled growth in this market since the early 1990s. As at December 1997, the amount of treasury bills outstanding was very close to this ceiling; with minimal prospects for significantly higher revenue, this, therefore, leaves little leeway for increased financing via these instruments.

As regards bonds, however, no quantitative limit exists in law, although parliamentary approval must be obtained prior to any issuance, which is made against specific parliamentary umbrella borrowing resolutions. Although Government Registered Stock tends to be oversubscribed, the low level of secondary market activity may appear to belie this interest; but in fact this low level of activity is indicative of investors' buy and hold practice, given the

relatively lucrative returns on bonds. Moreover, the bond market features price-taking, with the scope for learning and dynamism therefore limited. In the market for Treasury Bills, on the other hand, there is evidence of minimal learning and dynamism: participation is even narrower than in the bond market and would tend to suggest a need for information enhancement and generally improved market transparency, with a view to broadening private participation.

As regards bonds, (Table 1), public corporations (primarily the National Insurance Board) have been the major holder, followed by commercial banks, insurance companies and the private sector-- largely pension funds managed by investment firms. At the beginning of the survey period, public corporations, primarily the National Insurance Board, held more than half (55.5%) of the total Bahamas Government Registered Stock outstanding. By 1996, this proportion had waned to 52.7%; although NIB demand remained strong as a captive holder, growing awareness in the market resulted in increased holdings by insurance companies and the "other private" sector in particular, from 7.9% to 11.0%, and from 5.5% to 8.9%, respectively. Concomitantly, the Central Bank's holdings dipped to 2.2% from 6.7% in 1983. In 1997, the last year of the survey, the ownership pattern showed further change, largely due to the successful flotation of US\$50 million in the United States' private capital market.

For Treasury bills, a narrow ownership pattern has characterised the market for the entire survey period, with participation by a few commercial banks, the National Insurance Board, the Central Bank and the odd private investor, as indicated in Table 2.

Creditor patterns have significant implications for effectiveness of open market operations; although banks are generally the targets for open market operations, it may well be the case that institutional and private investors are more responsive to open market operations.

The questions then become:

- Should these groups be targeted more explicitly in sales, so as to enhance a more competitive structure? and
- Should we therefore bolster the medium-term maturity scale, in terms of increasing the flexibility of market participants particularly with regard to discounting of securities?

Liquidity

As stated earlier, the Central Bank stands ready to buy and sell government securities between issues and auctions, thus providing a secondary market, albeit narrow. For government bonds in particular, this arrangement by the Central Bank permits sellers to recoup their money value at any time desired.

Here, a survey of transfers of Treasury bills between maturities is instructive in assessing secondary market operations. The volume of transactions in the Treasury bill re-issues/re-calls market has been considerable, and suggests that the auction of these short-term instruments is potentially an extremely powerful monetary instrument. Between 1991/1 and 1996/3, sales volume in the secondary market for treasury bills totalled \$1,009.5 million (face value), representing a turnover ratio of 8.1. Central Bank purchases over the same period amounted to \$612.4 million or a turnover of 4.9. Total transactions volume indicated a turnover ratio of 13.1.

As regards the government bond market, secondary market transactions are at more favourable terms for the investor, that is, sales and purchases are at par. According to available data, secondary market bond sales between 1983/1-1987/1 totalled \$33.8123 million, 16.1% of total bonds issued during this period, and 12.4% of total bonds outstanding at the end of 1986. Indicative of the buy and hold practice by bond investors, bond secondary market purchases by

the Central Bank totalled \$6.7723 million over the same period, for a turnover ratio of 0.03. Closer analysis of more recent data for Treasury bills and bonds is to be conducted to provide a more current outlook. However, Figure 4 provides a useful perspective of recent trends.

Indeed, in the case of The Bahamas, although bank holdings of government securities exhibit fluctuations, this has corresponded more closely to seasonal liquidity management on the part of banks, as opposed to significant intervention by the Central Bank of The Bahamas to manipulate the monetary aggregates. Moreover, in considering turnover ratios in the government securities market, it is critical to observe that activity is strongly reflective of banks' obligations to satisfy statutory requirements as regards liquidity.

Maturity

In the market for Treasury bills, the only available maturities are 91 days and 182 days, the latter introduced only in 1992. Bond maturities have ranged between 2 years to 25 years, although a frequently raised issue in recent times has been the dearth of government paper within the 1-10 year maturity range, and the resultant limitation of domestic investment. Some consideration has been given to further diversification of maturity, however.

As regards bonds, the Government may be seen to have achieved some measure of success in terms of bond maturity spectrum, with a fairly even maturity distribution. What is of significance, however, is that over the next 18 years, an annual average of \$50-plus million will be payable on official debt for Registered Stock alone. (See Figure 5)

Yield

A comparative survey of interest rate structure in the market is instructive, for the 15-year period ending 1997. As regards Treasury bills, in the beginning years of the survey period, these

instruments provided a cheap source of financing for government (See Figure 6); however, in recent years, rates have converged toward market deposit rates. Rates in the market for government bonds, in contrast, are held to be relatively high not only in terms of return to investors, but also from the perspective of government's borrowing costs vis-à-vis the private sector's prime borrowing costs.

From 1983-1989, interest rates on bonds were exclusively at fixed rates, set in relation to the prime rate at the time. Variable-rate bonds were re-introduced in 1990, and over the 1990-1997 period, featured margins above prime. This development has resulted in notable variance in the rate of return on bonds currently outstanding, comparing fixed-rate bonds vis-à-vis variable-rate bonds. Further perspective on yield patterns in the government securities market is provided in Figure 7, which shows a 1997 yield curve inverted for certain maturities and suggesting a generally downward sloping curve.

As regards yields and the possible arbitrage for which potential exists nowadays, it has been suggested that the authorities consider implementing a mechanism to regularise the yield on short-term holdings of bonds with those of treasury bills and 3-month money, for example. This may be accomplished via a system of premium or discount trading of instruments prior to maturity.

SECTION IV: SCOPE FOR EFFECTIVE OPEN MARKET OPERATIONS IN THE BAHAMAS

In the Central Bank of The Bahamas Act, primary reference to use of open market operations--in the broad sense of the term—is in Section 27, which cites the purpose for buying, holding and selling of securities as promotion of the development of a capital market.

The Bahamas does not have a developed money and capital market and for this reason, open market transactions remain restricted. The Central Bank therefore continues to rely on other devices, as detailed in Section II. That is not to concede, however, that open market operations are, as a considerable portion of the literature suggests, impossible or as Higgins (1994) asserts “simply not available”.

At present, transactions in government securities are not undertaken for monetary policy purposes, although they may be seen to serve as a supplement to monetary policy. To date the government bond market, in particular, has not had appreciable success in mobilizing savings in the domestic economy. Such failure to achieve savings mobilization is evident from the fact that whereas the resident private sector held \$2,120.8 million in bank deposits at the end of 1997, private holdings of Registered Stock at that same date amounted to only \$239.7 million.

The existent rationale behind the issue of government securities may be maintained, i.e. for the purposes of providing for the development needs of the government, as well as facilitating financial institutions’ maintenance of secondary reserve requirements, while at the same time absorbing excess liquidity. Notwithstanding, it is submitted that movement to an auction mechanism for government bonds would inhibit market questions about pricing in the market for government securities, as such a transition would bring competitive forces to prevail on the prices of long-term securities, as compared to the relatively rigid pricing mechanism presently employed, in addition to encouraging capital market deepening.

It is further submitted that the Treasury bill market may benefit from increased promotion, so as to broaden participation, particularly by the private individual sector, which

apparently does not have the sophistication as yet for market entry. The matter of promotion, however, is perhaps outside of the purview of the Central Bank.

Based on the conventional objectives of open market operations, as asserted by Quintyn (1994)-- assistance in debt management and government borrowing, provision of seasonal or other finance for commercial banks, creation and maintenance of a desired yield and maturity pattern, and control of the banking system's reserve base-- it is submitted that government securities in The Bahamas may be used as an instrument of monetary policy.

Khatkatke asserts that two conditions have to prevail if open market operations are to be a feasible proposition from the point of view of monetary management:

- 1) The structure of interest rates has to be sufficiently variable; and
- 2) The assets management policy of banks has to be significantly affected by the action of the Central Bank on bond prices.

At the end of 1997, the amount of government securities held by commercial banks totalled \$271.4 million or 8.2% of commercial banks' domestic assets. Given the situation in The Bahamas, it is this paper's contention that for open market operations to be effective in The Bahamas, the target institutional category may be switched to the non-bank private sector. It is submitted that enhanced responsiveness to signals would exist for the private sector. It is further submitted that consideration may be given to the establishment of dealer houses that would transact in government securities, with commitments to underwrite issues.

The main and most direct impact of securities on real economic variables comes from their issue by government, wherein funds are made available for expenditure. The holding or trading of previously issued securities has less discernible direct effects, although there would

appear to be some indirect effects on consumption and saving through changes in wealth and portfolio composition, and on investment, depending on how the Government uses the acquired funds and how buyers might otherwise have used such funds.

Sustained economic growth requires a financial sector that efficiently mobilizes and allocates financial resources to areas of higher returns. In the process of financial market development, the relative roles of the monetary and fiscal authorities need to be co-ordinated in the areas of government debt programming, primary debt issuance and secondary market operations, however.

In The Bahamas, as in many other developing countries, open market operations have been used more to assist the Government with its borrowing operations and to maintain orderly conditions in the government securities market itself than for influencing the availability and cost of credit, although at times the latter objective has been addressed through the design of securities issues to absorb excess liquidity in the banking system.

The use of government securities, and treasury bills in particular, for monetary policy purposes, requires that the volume of primary market sales be based on monetary policy considerations. The market for government securities, i.e. both short-term securities and the medium-term to long-term Registered Stock, has the capacity to serve as a useful device of fiscal discipline, provided that market forces are permitted looser rein. Moreover, the Central Bank may influence the maturity holding pattern of debt, which pattern in turn may assist in macroeconomic management as financial markets develop.

It is anticipated that as the market for government securities develops further, concurrent with development in the fledgling equity market in The Bahamas, market demand for

significantly enhanced information will increase, particularly as regards economic variables which will assist in investors' forecasts about future interest rates.

CONCLUDING COMMENT

This preliminary review of the government securities market would tend to suggest, as Worrell (1995) has cautioned, that open market operations, while useful for accommodating seasonality and short-term effects, may not be used to alter economic fundamentals.

Although the United States is seen as *the* model for successful open market operations, it may well be that for developing economies, open market operations may bear significantly different characteristics yet achieve similar efficacy of monetary policy supplementation. For instance, the network, or open market, need not be as intricate as in the United States: there already exists securities brokerage in The Bahamas with market fundamentals seeming to come into play.

From the perspective of the Central Bank or more accurately, the Securities Board in its still evolving role as regulator of the securities market, what is critical is that the market be properly organized a priori, particularly with respect to market oversight. While it appears that the relevant authorities are labouring towards the overdue official implementation of a stock exchange, the protracted delay may be indicative of the need to construct a comprehensive and appropriate framework for regulation of the entire market, rather than to attempt to draft regulations that would address every possible scenario.

The task of monetary management is becoming increasingly complex. To compound this, the goals of price stability, economic growth and employment are attainable only if monetary policy is supported by appropriate income and pricing policy. Notwithstanding, prior to considering how to organise the market for government securities so that central banks may conduct open market operations, it is critical that we consider the feasibility of open market

operations. In particular, Worrell's paper on open market operations focuses on the potential for monetary autonomy within fixed as well as flexible exchange rate regimes, and may provide a useful framework for further analysis.

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Figure 1

Monetary Policy Instruments Used by CBOB, 1983-1997		Action Taken	Dates Employed
D I R E C T	1. Selective Credit Controls	To relieve pressure on the country's external reserves vis-à-vis the weakened economic environment and unsustainable private sector credit demand, Central Bank directed commercial banks to insist upon a minimum 35% equity requirement on all personal loan and overdrafts Due to improve liquidity conditions, the Central Bank lifted the 35% equity requirement on consumer installment credit The Central Bank issued a directive to banks urging them to demand a 20-25% equity requirement on consumer lending	Oct-88 & Nov-90 Jan-93 May-98
	2. Moral Suasion	CBOB's Governor meets monthly with banks to review and discuss developing economic trends and on various policy objectives	Monthly
	3. Interest Rate Controls	Citing a need to avoid excessive upward pressure on lending rates amid tight liquidity and the bidding up of deposit rates among banks, CBOB imposed an 8.00% interest rate ceiling on all new deposits accepted by banks Reduction on ceiling of deposit rates to 7.0% The ceiling on deposits was reduced to 6.75% The Central Bank removed the 6.25% interest rate ceiling on deposit liabilities.	Oct-88 Feb-92 Jan-93 Apr-94
I N D I R E C T	1. Open Market Operations		
	2. Reserve Requirements	Has remained unchanged since inception at 5% for all Bahamian dollar deposit liabilities	
	3. Discount Rate	The Bank lowered its discount rate to 9% from 10%. However, the rate for frequent and/or heavy borrowing was kept at 11%. This was done in an effort to stem the upward pressure on interest rates, while simultaneously maintain rates at existing levels CBOB raised the minimum lending rate to 9.50% from 9.00%, and reduced the rate for frequent borrowing to 10.00% from 11.00%. In the context of slowing credit growth coupled with rising external reserves and liquidity levels, the bank trimmed its bank rate by a full percentage point to 8.5% The Central Bank, responding to high levels of liquidity in the local banking system, and consistent with prevailing trend in international rates, reduced its discount rate from 8.5% to 7.5% In an effort to discourage commercial banks' use of the Bank's resources, the Bank rate was increased to 9.00% from 7.50% In light of the trend in international interest rates and the prevailing weaknesses in the local economy, the Bank lowered its discount rate to 7.0% from 9.0%. In an attempt to spark domestic activity, the Central Bank decreases its discount rate by 50 basis points to 6.50%.	Apr-83 Dec-84 May-85 May-88 Dec-87 Feb-92 Apr-94
	4. Public Sector Deposit Placement	Mainly the utilization of the National Insurance Board (NIB) funds	From 1982 onward

Figure 2

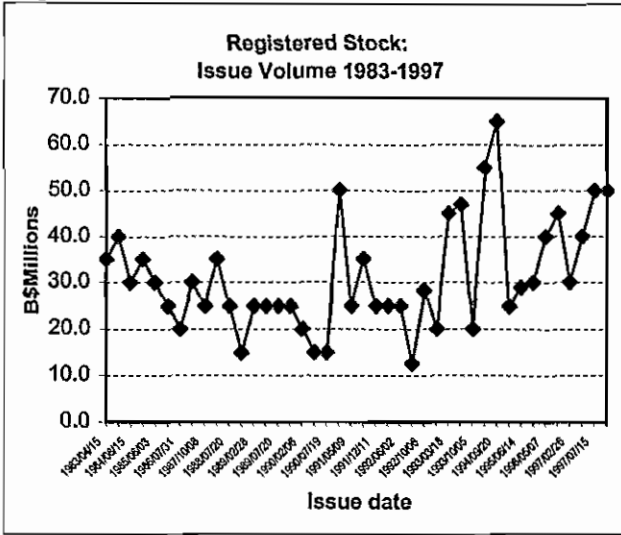


Figure 3

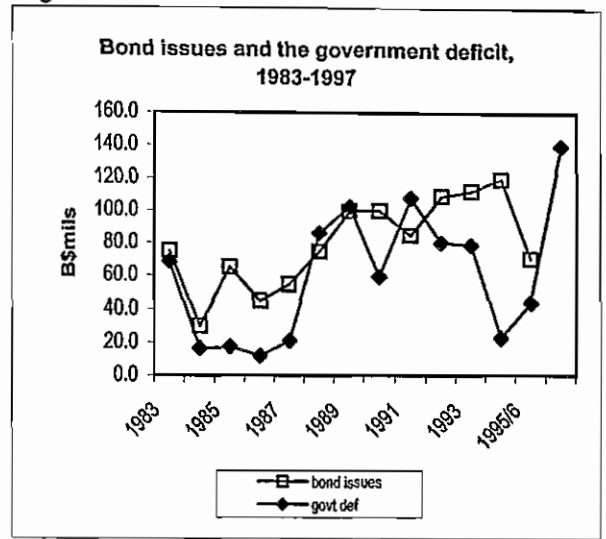


Figure 4 (separate leaf)

Figure 5

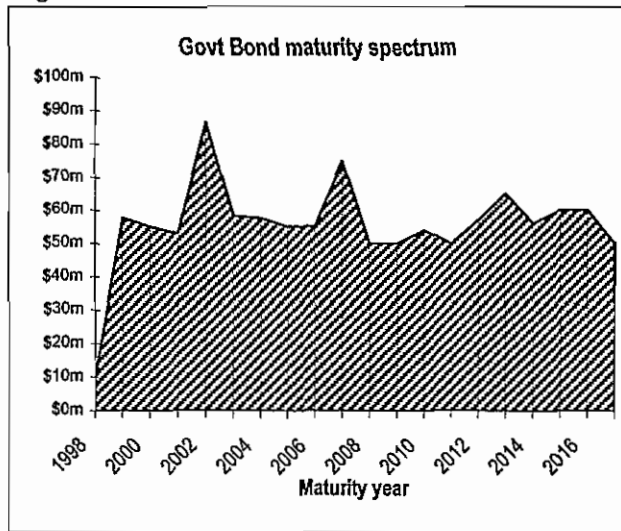


Figure 6

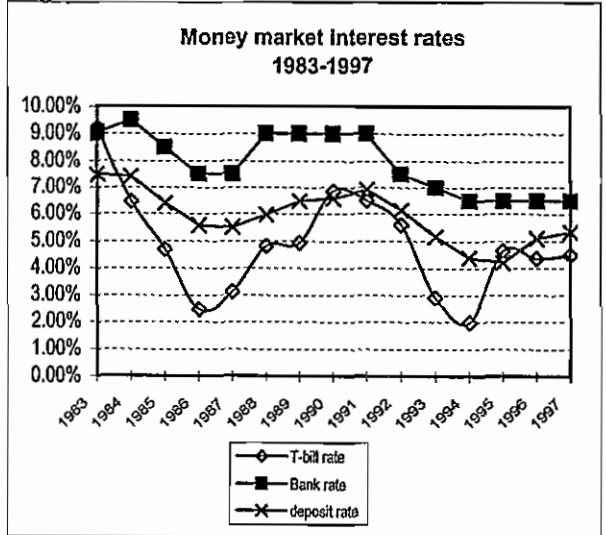
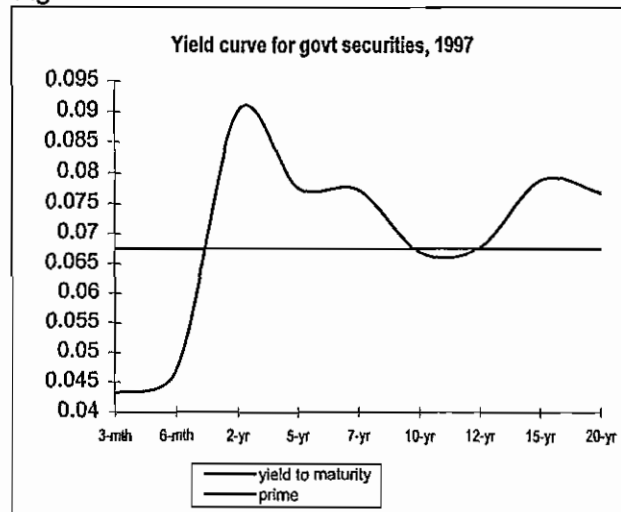


Figure 7



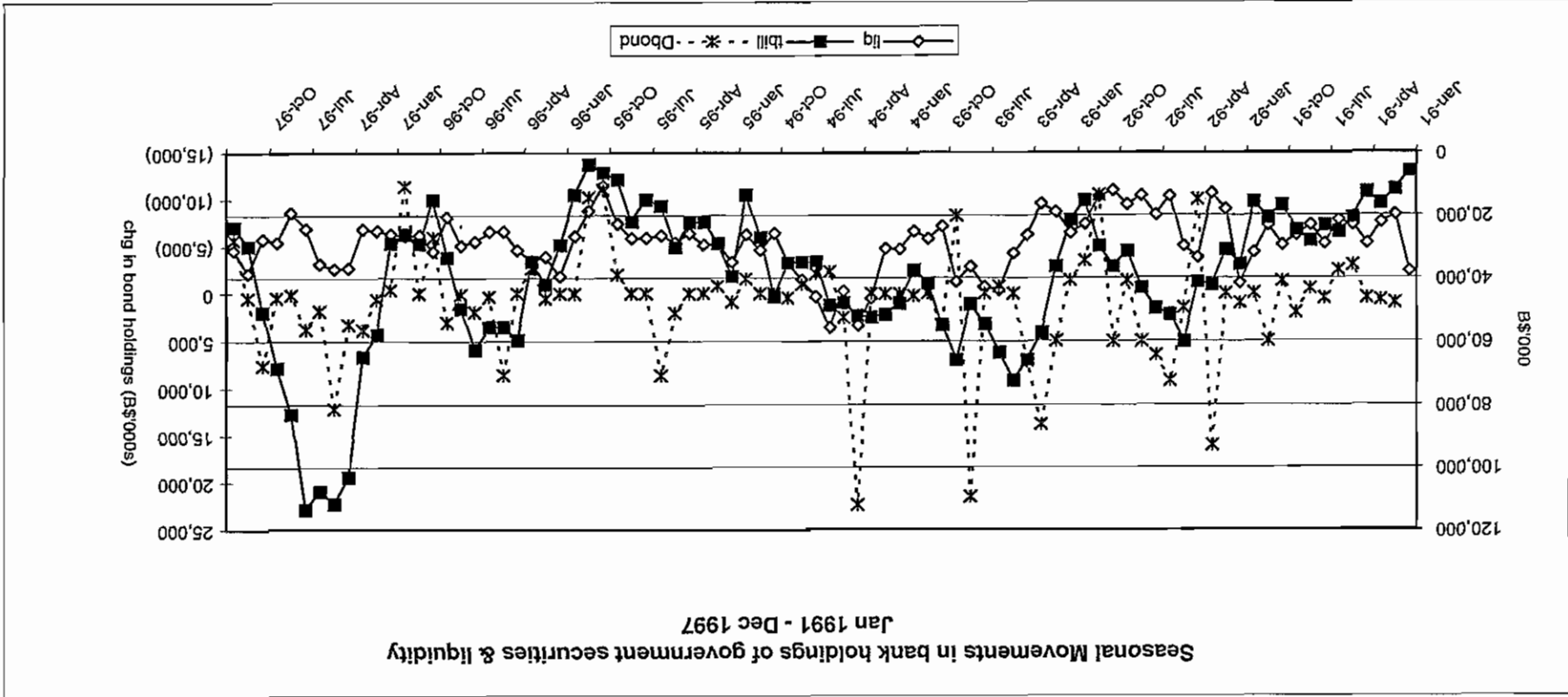


Figure 4

