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Money and Capital Markets in Barbados: A Challenge of Small Size

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Introduction

Well-developed money and capital markets are the hallmarks of a flourishing business environment. While money markets deal in short-term debt instruments, often treasury bills, interbank deposits, bankers acceptances and commercial paper, capital markets trade in longer-term debt instruments as well as equity. They are important means of making long-term investments liquid. They allow businesses to obtain finance with desired maturities and on flexible terms, permit easy entry and exit of businesses, allow for disposition of assets at market values and are generally essential for an efficient and active business environment. Such an environment permits owners and users of funds to come together in a symbiotic relationship, which can provide income and asset growth, can allow for the creation of new assets necessary for spurring economic activity and, in certain circumstances, can assist in giving effect to monetary policy. However, intermediation between firms, government and investors represents the main function of securities markets.

The challenge of fostering the development of money and capital markets in Barbados was jointly shared by Government, the Central Bank and the Securities Exchange of Barbados over the past 25 years. This paper traces the development of capital markets in Barbados and analyses the main factors which influenced that development. It identifies four phases of development. Particular phases were dominated by certain types of activity, but these activities did not cease abruptly with the end of each phase, so that there is overlap of activities in each phase of development. The first phase identified is the pre-1972 period which marks the period of establishment of an appropriate legislative framework; the second is the early Central Bank and pre-Stock Exchange era (1972-87) a phase of integration of monetary policy with the securities markets; the third is the period 1987-96, a period during which securities markets grew and consolidated but when the equities market made its greatest strides. The fourth period is the future, which is likely to be an era of structural change both in the stock and government securities markets and a period of greater interaction with regional and international markets.

1. Establishing the Legislative Framework

The task of establishing a legal framework for the issue of government securities started soon after the turn of the century. Government commenced the issue of treasury bills under the Treasury Bill Local Act of 1922. Issues of longer term government securities commenced in 1933 under the General Loans Act. Cap 96 and subsequently under Local Loans Acts. Immediately prior to 1987 both treasury bills and longer term securities were issued under this Act. Legal limits were set on the volume of domestic securities which could be outstanding at any time and these limits were revised periodically in line with the financing needs of Government.[1]

Government securities were seldom traded but, despite their illiquidity, Government was able to attract funding through the issue of bills and long term debentures. The major subscribers to government securities were commercial banks, trust companies, insurance companies, the Government Savings Bank, Statutory Corporations and pension funds. The National Insurance Board which was to become a major contributor had not yet joined the market. During this phase, there was little secondary trading of government securities.

A legislative framework for the trading of equities came much later. Indeed, for many years there was no formal market for trading of shares. Shares were traded on a matching basis through trust companies, at least one of which would advertise amounts available for sale or purchase and the expected price. Potential buyers and sellers would contact their trust companies to consummate the transaction.

Adequate information is not available on the distribution of share ownership during this period. However, data from institutional sources indicate

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[1] The Local Loans Act provides authority for the issue of Government debentures and treasury notes and the Treasury Bill and Tax Reserve Certificate Act provides authority for the issue of treasury bills. Advances from the Central Bank currently are limited to 10% of current revenue. This is controlled by the Administration and Audit Act.

that financial institutions held little equity and it appears that most shares were held by individuals and by other companies. Shares in public companies tended to be closely held by families and there was a marked tendency among investors to "buy and hold".

2. The Central Bank and Securities Market Development

This second phase of money and capital market development was marked by the advent of the Central Bank as a major actor in the development of capital markets in Barbados, particularly in government securities. It marked, a period when effective monetary policy was integrated with the issue of securities, it witnessed the development of new instruments and new tax initiatives.

One mandate of the Bank, as set out in the Central Bank Act, was to foster the development of money and capital markets in Barbados; a mandate which spanned both private and public sector securities markets. The other was the mandate as fiscal agent of the Government which, by implication, vested it with the role of manager of Government's debt. The Bank had the responsibility for advising on the timing, size, maturities and other features of government debt and, through its responsibilities for monetary management, it also influenced the trading of government securities. Consequently, with the establishment of the Central Bank of Barbados in 1972, the marrying of these twin objectives offered greater opportunities for the development of the money and capital markets, particularly the government securities market.

2.1 *Statutory Reserves and the Securities Markets*

Almost immediately, Government benefitted from a captive market in securities with respect to commercial banks as the Central Bank required commercial banks to hold treasury bills and debentures (that is both money and capital instruments) in satisfaction of secondary reserve requirements (Tables 8.1 and 8.2). Reliance on secondary reserve requirements was partly a function of the lack of demand for voluntary holdings of government securities and partly due to the thin market in securities; in addition, they were almost always imposed in order to protect the balance of payments. Indeed, secondary reserve requirements

Table 8.1: Government Debentures by Holder
Selected Years
$ Million

Period	Banks and Trust Company	National Insurance Board	Statutory Boards	Insurance Companies	Central Bank	Other	Total
1972	25.4	18.5	1.5	9.8	2.9	5.9	63.8
1980	58.2	27.6	4.2	16.1	1.9	12.6	130.6
1987	118.3	44.1	7.3	33.1	17.5	14.7	234.8
1990	182.9	82.2	6.8	34.8	12.0	28.3	341.2
1995	382.3	460.9	11.6	78.6	-	199.5	1132.8
1996	419.7	589.0	9.9	88.1	-	115.9	1222.7

Source: Annual Statistical Digest and Economic and Financial Statistics, Central Bank of Barbados

ratio was reduced for the first time - by two percentage points.[2] However, these increases were not conducive to encouragement of fiscal discipline.

To a lesser extent there was also a semi-captive market in securities held by insurance companies. While insurance companies were not required to hold government securities specifically, government securities were included in the list of eligible investments which they were required to hold in satisfaction of prudential requirements set by regulatory authorities. A dearth of alternative investment opportunities and restrictions on overseas investment also helped to encourage insurance companies into becoming significant holders of government securities.

The establishment of the Central Bank opened up possibilities for secondary trading and alleviated the problem of illiquidity of Government paper for commercial banks. By 1973 treasury bills and government debentures were traded between commercial banks and the Central Bank in order to satisfy the liquidity needs of commercial banks or to permit them to unload bills through a system of bill discounting. A true secondary market was not however developed,

[2] Reserve requirements in the form of cash and securities were raised from 3% of deposits in 1973 in a series of movements to 20% by 1978 and in 1982 by five percentage points to reach 27%, and by further increments to 33% in 1991.

Table 8.2: Government Treasury Bills by Holder
Selected Years
$Million

Period	Commercial Banks and Trust Companies	National Insurance Board	Central Bank	Statutory Boards	Other	Total
1972	5.9	1.5	2.4	0.8	1.0	11.6
1980	85.1	28.6	46.0	3.5	1.1	164.2
1987	221.7	181.8	-	14.1	5.5	423.9
1990	223.2	192.2	73.6	16.0	1.2	506.2
1995	332.8	3.0	53.2	26.0	8.8	504.4
1996	479.3	5.0	-	20.7	90.5	595.5

Source: Annual Statistical Digest, and Economic and Financial Statistics, Central Bank of Barbados.

as this facility still excluded the non-bank sector, and though banks frequently traded with the Central Bank, they rarely traded among themselves.

2.2 *New Instruments and their Tax Advantages*

In 1981, Government commenced the issue of savings bonds through the Central Bank and commercial banks. These were designed to encourage individual savings, while at the same time assisting Government in meeting its financing needs. Issued at a discount, the savings bond was targeted at the individual investor who desired liquidity but was not in need of a steady stream of interest income.[3] Tax incentives were added to increase the attraction of the instrument. Earnings on savings bonds were tax free up to a maximum holding of $50,000 per person. They compared with earnings on government debentures which carried a final tax of 12 ½ percent. Since savings bonds could be encashed at any time, this helped to improve the liquidity of government securities for the small saver. However, they were not negotiable between the holder and a third party so that the problem of limited negotiability was not completely eliminated.

[3]Issues of savings bonds outstanding at any one time were limited to $50 million but this was later increased to $100 million.

During 1986 Government commenced the issue of tax reserve certificates and tax refund certificates. However, public response to these instruments was disappointing and at December 1987 only $1.4 million had been issued; by December 1996 this figure had risen to $6.1 million, but these securities were held mostly in the form of tax reserve certificates.

Treasury notes were introduced in 1989. These carried maturities of 1-10 years and were targeted at the institutional investor with a shorter term horizon than could be satisfied with debenture issues which carried maturities of up to 35 years. Long term bonds issued by Government statutory corporations such as the Barbados Development Bank, the Barbados National Bank and even the Barbados Sugar Industries Limited were all guaranteed by Government, and shared characteristics of liquidity and maturity structures similar to those of government bonds. Government and government guaranteed debentures and bonds also qualified for preferential tax treatment.

Bonds issued by most statutory boards such as the Barbados Development Bank were often tax free up to a maximum of $20,000. In the case of equities, tax credits were available to corporate investors. From income year 1983 to 1986, immediately prior to the establishment of the Securities Exchange, dividends earned by investors were allowed a dividend tax credit of 50% where assessable income was less than $6,000. The shareholder was taxed at his marginal rate of tax. Where assessable income exceeded $6,000 the dividend was allowed a credit of 50% on the first $1,000 and 33⅓% on the excess. This was intended to give a boost to the market in equities.

While Government's financing needs were being satisfied and while trust companies helped to cater to the long term capital requirements of the real estate sector, the financing of risk and venture capital requirements remained unsatisfactory. Companies wishing to embark on business expansion programmes had either to call on shareholders to withdraw personal savings with commercial banks, liquidate assets, or obtain mortgage loans on the security of personal property. Towards the end of the period identified as the first phase of capital market development, it was clear that with relatively comfortable levels of per capita incomes and comparatively high levels of per capita financial savings, that Barbados was ready for the establishment of a stock exchange. Countries with lower savings rates have had more vibrant stock markets than Barbados but, where the size of the market is small, if savings rates can reach comfortable levels, this can become an important indicator that conditions are conducive to the establishment of a stock exchange. By 1987, the year of establishment of the Exchange, this time had come. Per capita incomes had risen from BDS$3,017 in 1977 to BDS$9,880, and per capita savings at financial institutions from

BDS$4,053 in 1977 to $11,710. By 1987 also, deposits of commercial banks had risen from $243 million in 1972 to $1342 million.

2.3 *Preparing for the Securities Exchange*

In 1987 there were 13 active insurance companies, a heavily funded compulsory National Insurance Scheme and several private in-house pension schemes in the larger commercial houses. While insurance companies were not major holders of equity in local companies, possibilities existed for greater participation. At that time, insurance companies in Barbados held over $300 million in local assets, one third of which were in mortgages. Given the tremendous advantage to them and to prospective policy owners from the offer of home mortgage facilities, it was most unlikely that the Securities Exchange would have been able to entice companies into holding significantly more equity at the expense of a reduced mortgage portfolio. Only 5% of the local insurance companies' portfolio tended to be in equities and technically they could not be requested to hold more than 25% of their total assets in equities. Therefore, no dramatic increase in the equity holding of insurance companies was anticipated.

However, based on incomes, the level of savings in the banking system, and the increasing complexity of businesses, the time seemed ripe for the establishment of a Stock Exchange. The Central Bank took an active part in its establishment, through its presence on the Steering Committee and through several other contributions to the setting up of an appropriate framework for the functioning of the Exchange and in providing accommodation.

3. The Securities Exchange comes on Stage

The establishment of the Securities Exchange in 1987 served to identify an institution with the responsibility for the development of the equities market. Its establishment was preceded by changes in supporting legislation, including a new Companies Act which was put in place in 1982. That Act redefined "public company", called for the issuing of prospectuses and increased reporting obligations of public companies. Also, in preparation for the establishment of the Securities Exchange, Government put in place a tax regime designed to encourage greater vibrancy in the market for debt and equity.

A new tax concession was offered in the form of tax-free bonus shares to employees. Tax concessions were also granted on amounts up to $10,000 spent on the purchase of new shares in public companies and the purchase price of such shares was fully deductible. Income from the sale of shares which received this benefit was brought back into assessable income if the shares were sold within five years of purchase.

Other changes were made to facilitate trading. Property transfer taxes on shares passing through the Exchange were lifted in the Budgetary Proposals of April 1987 in order to remove the burden of added costs on the transfer of share ownership. These concessions were vital to the functioning of the Exchange. The absence of a tax on capital gains in Barbados was also a decided advantage to the development of the Securities Exchange. The rate of economic growth at the time of the start up of trading of the Exchange was not exactly propitious. The economy grew by a modest 2.5% that year. However, it had in large part, recovered from the 1981-1983 recession and seemed poised again to resume a continuing trend of higher rates of growth.

The Securities Exchange commenced operations with 10 listed companies. Within the first six months of its operation share prices rose dramatically (by an average 50%) despite efforts of the Exchange to set margins to restrict opening bids on each day's trading. This was explained partly by the fact that shares might have been undervalued. The rise in share prices was further assisted by increases in disposable incomes and high levels of liquidity in the banking system. The rate of inflation at the time was very favourable to the development of a vibrant Exchange, as was the level of interest rates. In 1987 the annual average rate of inflation was 3.4% following an inflation rate of 1.3% in the previous year. Interest rate levels were low; rates on savings deposits were 3% and rates on long term deposits were 7%. Most companies were however able to post dividends in excess of 7% which after gross-up and credit, would have been in excess of 10% for the average investor; still a more lucrative return than that on deposits in the banking system.

With the establishment of the Securities Exchange the potential existed for the floating of corporate debt issues. This would have been a new thrust in the funding of debt since companies had not until then issued corporate debentures and bonds but tended to rely on equity, bank finance or private deposit-taking. Moreover, debt issues were generally a cheaper form of funding than either preferred or common shares, since interest on bonds was deductible as an expense before tax, whereas dividends on preferred and common shares were paid out of corporate after-tax profits. These tax factors may also have slowed the development of an active money market and may also partly explain why, with the exception of treasury bills, the commercial paper market never took off.

Although the establishment of the Exchange meant that potential holders of debt and equity were afforded greater liquidity, and securities would become more marketable and attractive to investors, and that a new set of investors would be encouraged to hold equity, volumes remained low. The Exchange opted for listing requirements that were achievable so as to encourage listing. Companies eligible for listing had to have a minimum of $1 million in net assets. In time, the Securities Exchange established a second window for unlisted securities in order to broaden the scope of the Exchange and to increase the volume and range of long term funding available to corporations. However, the response to the unlisted securities market was very poor.

One feature of the market was the absence of effective dealers. Most members of the Exchange were brokers who did not hold an inventory of securities for their own account but mainly acted in the market to satisfy orders. The Central Bank of Barbados therefore established a subsidiary company to act as a dealer, holding for its own account an inventory of securities in an effort to give some depth to the market. However, because it could not act for private individuals (it was felt that the Bank should not be in competition with the private sector), it was therefore unable to function as envisaged and was subsequently wound up. The market continued to be very thin, with virtually no truly effective market makers.

In choosing between a multi-function system and a specialist system, a hybrid system seemed to have emerged. Most of the commercial banks were Canadian and came out of a system where there was separation of the banking and securities markets, the so-called Chinese walls, and therefore traded with the Exchange through their trust companies. This was also the case in Britain until dual capacity was introduced in 1986. By accepting both systems, the Exchange can be said to have permitted a multifunction approach to securities trading. Whether underwriting was a specialist function was also left open. In theory the notion of separation is intended to encourage new and wide membership and to prevent oligopolistic features from developing in the market, a policy that is most desirable given the economic and financial structure of the country. However, the small size of the market suggests that insistence on specialization would have been costly (Williams (1988)).

Despite an early set-back in the form of the modification in the dividend tax credit soon after its establishment and despite the imposition between 1987 and 1989 of a 7.5% surcharge on corporate profits and a surcharge of 5%-7.5% on personal incomes, activity on the Exchange increased. In the period 1987-1996 the Securities Exchange grew from a market capitalization of $583.6 million in 1988 (the earliest date for which data were available) to $1,120.3 million at December 1996, while the number of listed companies increased from 10 to 19 in the period 1987 to 1996. The Exchange commenced publication of a market index from

Table 8.3: Securities Exchange of Barbados-
Selected Indicators

Period	No. of shares Bought/Sold	Market Capitalization $ M	Index Jan 1988=100
1989	22,120	583.6	1,268.8
1992	1,897	518.3	1,099.3
1994	6,417	1,035.4	1,395.2
1995	3,013	988.8[1]	1,297.6
1996	n.a.	1,120.3	1,276.9

[1]The index and market capitalization from 1995 is not comparable with previous years. The difference in the index is due to a change in the method of calculation to bring calculations in line with other regional exchanges.

Source: Annual Statistical Digest and Economic Financial Statistics, Central Bank of Barbados.

1989 and since its introduction this index rose from a base of 1000 in January 1988 to 1276.87 points at December 1996 (Table 8.3). The data suggest that market activity was rather low. However, there was a flurry of activity in 1995 when the first commercial bank - Canadian Imperial Bank of Commerce (West Indies Holdings) Ltd. - listed its shares, and again in 1997 when the first local life Insurance company, Life of Barbados, also joined the Exchange as a listed company. In the interim, the Exchange conducted an active public awareness programme aimed at familiarizing the community with the process of trading in shares. During this phase the Exchange also prepared for the development of its regulatory system, developing guidelines on bond trading and commencing work on take-over bids.

At the regional level, trading in cross-listed and cross-traded shares commenced in 1991 in response to official initiatives taken at the regional level. However, following an initial spurt of activity at the commencement of cross-trading, the volume of shares traded continued to be low. In order to facilitate the exchange of cross-listed and cross-traded shares, Government exempted cross-traded shares from stamp duty and the Central Bank delegated to the Securities Exchange the authority to deal in transactions up to $1 million without reference to the Bank. Initiatives are currently being taken in the context of the Caricom

Single Market and Economy to further promote and facilitate the cross-trading of securities.

4. The Government Securities Market and Monetary Policy

4.1 *Maturities of Government Securities*

Domestic government securities grew 10-fold over the 25-year period. Outstanding issues of government debentures rose from $48.6 million at December 1972 to $1223 million at December 1996, while outstanding issues of treasury bills rose from $11.6 million at December 1972 to $595.5 million in the same period. The share of domestic securities in total debt reached its peak (84% of total debt) between 1973 and 1981. The highest level thereafter was in 1993 when domestic debt represented 71% of total debt. Foreign debt, both privately placed and securitized, accounted for 29% of the total.

There were also shifts in maturity structure. With the uncertainty in international exchange rates and interest rates which followed the floating of sterling (to which the Barbados dollar was tied) in 1971, maturities of domestic securities contracted in the succeeding years, mirroring the shorter maturities which prevailed in the international markets. While in the pre-1973 period government securities carried long maturities, ranging from 12 to 35 years; in the post-1973 period securities with maturities of 20 years or over were never again placed on the market[4] after 1973.

The emphasis on short term debt was most marked in periods of IMF Stand-by programmes of 1981-83 and 1991-92, suggesting a level of urgency in the issuing of new debt. During these periods Government became increasingly dependent on 90-day treasury bills as a means of financing Government expenditure and these were continuously rolled over, forming a hard core of short term debt (Williams (1994)).

4.2 *Yields on Government Securities*

Inverted yields, when they occurred, were a temporary phenomenon and resulted principally from high yields on treasury bills in tight money situations. With the exception of 1981-82 and 1992 when such pressures of debt financing

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[4] In 1993 Government converted a contingent liability to BNB in respect of its debts owed to it by the sugar industry, into a 25 year facility.

combined with tight bank liquidity to push short term yields to levels in excess of longer maturities, yield curves tended to be upward sloping. Yields tended to range between 7% - 10% per annum, and given the relatively low levels of inflation, real returns tended to be positive (with the exception of the period 1981-82).

Except for the 1981-83 period which was complicated by high international interest rates, yields on domestic securities in Barbados were generally low and hardly ever exceeded 10% per annum. Yields fluctuated according to Government's financing needs. Where Government's financing needs were low, coupons on government securities and yields on treasury bills tended to be below average lending rates, and to rise sharply in times of excessive government spending. Rates of inflation were, for the most part, rather low and there was no pressure to issue floating rate debt or indexed bonds.

Virtually each increase in reserve requirements was accompanied by increases in interest rates. The Central Bank would also bid up yields on treasury bills so as to encourage a shift into bills and out of private sector credit. The objective was often, less to discourage private sector credit than to shift the burden of financing of government deficit away from the Central Bank and on to the private sector. As a result, rapid increases in private sector debt prompted increases in domestic debt issues designed to absorb liquidity.

In especially illiquid situations yields on government bonds exceeded the ceiling on the average lending rate as Government attempted to compete with commercial banks for surplus loanable funds. In periods of surpluses they were a much needed means of unloading liquidity. For the greater part of the period, yields on government securities tended to be below average lending rates. To the extent that these securities were held in satisfaction of required secondary reserve requirements in tight money situations, this had adverse implications for profitability. They then became an inflexible part of banks' portfolio and represented an opportunity cost for banks.

As illustrated in Table 8.4, yields on Government securities were usually higher than the minimum savings rate, and affected both deposit rate accumulation and shifts in investments by banks between public and private sector. A small differential was sufficient to satisfy the depositor that the additional liquidity, convenience and accessibility of depositing with commercial banks exceeded the differential in favour of government securities. As this differential widened the likelihood of shifts into government securities increased.

Table 8.4: Comparative Interest Rates (%)
(Selected Years)

Period	Average Discount Rate on Treasury Bills	Savings Deposit Rates	Prime Lending Rate
1972	5.98	3.50	8.00
1977	5.00	2.5-5.00	8.00
1980	6.19	5.00-5.25	9.50
1987	4.99	3.00	8.25-8.75
1990	8.06	5.50	10.25-11.0
1995	8.27	5.00	9.75-10
1996	5.61	5.00	9.75-10.00

Source: Central Bank of Barbados Economic and Financial Statistics.

4.3 *Open Market Operations and Central Bank Intervention*

Tight liquidity conditions were as problematic as excess liquidity conditions. The Central Bank often bid up the yields on treasury bills, but was not always able to bid them to levels which would avoid its having to hold unnecessarily high levels of treasury bills. For where liquidity was tight, commercial banks sales of securities to the Central Bank increased, thus leading to increased holdings of government securities by the Central Bank. This sometimes occurred even when government financing needs were under control, but the Bank was nevertheless forced into involuntary increases in credit to Government because of heightened demand for credit by the private sector.

However, the challenge of absorbing excess liquidity also had implications for Government financing. As liquidity builds up in the system, if credit demand remains low, new issues would be placed on the market to absorb excess funds and to prevent capital leaving the country in search of investment instruments. In some cases, Government's financing needs may not have indicated a need for funding so that trade-offs were called for between the need to contain Government's debt and the need to protect the balance of payments.

The Bank's involvement in limited open market operations created a dual role for itself. When commercial banks wished to unload treasury bills because of increasing credit demand, yields ought to have fallen. However, because the Central Bank was reluctant to hold government securities it would try to keep yields up. Market indicators and Central Bank objectives therefore exerted different influences on the treasury bill rate. For this reason some Central Banks are not involved at the stage of primary issues, while others are involved for the same reason. The policy position depends on the peculiarities of each system. Also, in the Barbados case there were no designated primary dealers to commit to purchases.[5]

This intervention made actors in the market more familiar with pricing strategies, though these were still rudimentary. Prearranged margins were added on the buying side and deducted on the selling side for treasury bill purchases and sales. In the post 1990 period, discretionary margins were widely used, though an outside limit remained, so that full open market operations could not be said to exist during this period.

For much of the period Government relied on other instruments of monetary control such as credit controls and interest rate controls, so that active open market operations were relegated to second place. In periods of credit controls and interest rate controls, a scenario of declining bank liquidity and increasing credit demand was sometimes handled by authorities through the raising of interest rates. Also, authorities could, when monetary and balance of payments conditions allowed, keep interest rates down as a means of combating inflation and of controlling operational costs of the business sector.

5. The Future

With the abandonment of many direct controls and a shrinking of options formerly available to Central Banks in the execution of monetary policy, greater reliance may in future need to be placed on the securities market and on the responses of investors to yields on government securities.

Several developments point to the need to develop a more active market in Government securities. Firstly, Government's decision to reduce its external debt places greater emphasis on domestic resource mobilization. Consequently between 1991 and 1994 domestic securitise/d debt doubled from $885.5 million

[5]There is no legal limit to the Central Bank holdings of government securities but there is an administrative limit set internally by the Bank but it applies to primary issues and not purchases on the secondary market.

in 1991 to $1708.2 million in 1994.[6] With this size of the country's assets held in government securities it becomes more important for the holders that the liquidity of these instruments be improved.

Secondly, the Central Bank partially loosened its direct control of interest rates, so that it is becoming increasingly important to find ways of influencing the level of interest rates indirectly, at least over the short term. Thirdly, reserve requirements levels are already high. Also, liberalization of credit controls has freed commercial banks from direct intervention by the Central Bank over credit, so that the Bank may need to position itself to use indirect means of influencing credit where it can. If properly positioned, it can then choose whether or not to intervene.

Increased liberalization of exchange controls also introduces other considerations. A system in which exchange controls are relaxed, is less tolerant of a low domestic interest rate regime relative to international rates, so that the facility must exist for domestic returns to be raised in order to discourage outward capital movements or lowered, to mop up liquidity and encourage economic activity. Also, financial liberalization and new technologies are likely to make local investors more interest rate sensitive.

5.1 *The Market in Government Securities*

The further development of the primary and secondary markets could encourage greater investment in government securities by the non-bank private sector and could achieve a more efficient system of trading among institutional investors and the public. In particular, the development of the secondary market in government securities could offer an opportunity for enhancing open market operations, if the Bank so chooses, and could reduce reliance on the Central Bank in providing or reducing liquidity in the banking system in the short term, since presently commercial banks trade with Central Bank rather than with each other.

The advantages of a market-based system of trading in securities are:

i) improved efficiency;

ii) elimination of bottlenecks in trading and irregularity in pricing;

[6]Issues of $ 281 million in respect of securitized debt relating to the sugar industry contributed to the increase in 1993.

iii) a more integrated system in which prices of Government securities bear a clear relationship to other interest rates; and

iv) fuller information to all players in the market.

Barriers to the development of an efficient government securities market are:

i) a lack of market information on the part of financial managers and corporate decision makers and a lack of familiarity with investment trading in a market environment; and

ii) traditional rigidity in investment patterns influenced by the ready accessibility to the Central Bank both for buying and selling securities and for providing liquidity at the discount window;

Development of the market in Government securities requires that changes be made in the legal and regulatory framework in which securities trade and that regulatory impediments to the improvement of the secondary market in government securities are removed. The existing primary and secondary market in treasury bills, bonds and debentures may need to be restructured, and arrangements for trading among institutions, brokers and banks modified.

However, the extent to which yields on government securities can be used as an instrument of monetary policy is limited and is influenced by several factors either together or individually. These are principally, the size of the fiscal deficit, the rate of growth of savings (principally deposits), excess liquidity, private sector demand for credit, domestic and international interest rates, and other factors such as the extent of exchange control regulation. The major factor will be the extent of government's financing needs. Yields on Government securities will tend to rise *"ceteris paribus"* if government's borrowing requirements rise. Low international interest rates are likely to be supportive of a regime of low yields on government securities, but only to the extent that domestic demand for financing is controlled. Historical trends would suggest that in situations where government's financing requirements are low, where there is excess liquidity, or where authorities wish to stimulate spending, yields on government securities are likely to decline. This will still be influenced by international interest rates and by the extent to which exchange controls may still be in operation. An active secondary market in Government securities is not however, a substitute for fiscal discipline, nor for effecting major shifts in monetary policy. Its objective is to achieve greater efficiency in the trading of Government securities, but it has the advantage of offering a means of making short-term corrections in the market, should the Central Bank so choose (Williams (1995)).

An interdealer broker might be necessary to facilitate trading as would a clearing house for information on trades. Bids and offer prices should be readily available. In this way, at any time during the day, any dealer could access this information, make contact with one or more institutions, complete a transaction and report the details to the clearing house. This would permit a record to be kept of the volume of trades and would allow for update of bid/offer information. In due course market bid/offer information and aggregate trading information should be available on line, and actual trades could be finalized electronically. Auctioning could be introduced on a more frequent basis and consideration could be given to some issues carrying floating rates, priced in relation to some benchmark rate.

Repurchase agreements (special purchase and resale agreements) could also be considered for relieving upward pressure on interest rates and for reducing the use of the Banks discount window. Reverse repos could also be offered (sale and agreement to repurchase) where the Central Bank wishes to push rates up. The Bank could become active in providing overnight funds. The Central Bank would then provide temporary accommodation at the discount window only where there were no interested buyers of securities. Use of the discount window would become truly a last resort and would be used to exert pressure on interest rates. These are options incidental to the making of a secondary market and are not the raison d'etre for its development.

Improved access to market information would be expected to give impetus to the development of a commercial paper market, spurred by familiarity of the private sector with the bid/offer process. The development of the secondary market and the attendant opportunities for resale should permit the issue of securities of longer maturities consistent with the needs of institutions like insurance companies, and could reduce some of the refinancing preoccupations of Government.

5.2 *Pension Funds and Mutual Funds*

Other areas of market development include a more clearly defined and more flexible environment for the development and management of pension funds and mutual funds. This latter activity is traditionally a significant source of corporate funding in developed countries. While the National Insurance Scheme to which employers contribute has reduced the need for private sector firms to establish their own private pension schemes, several private firms still offer in-house employee schemes. Though many of these schemes are integrated with the National Insurance Scheme they still provide a significant source of investible funds. This source of funding should grow in the years ahead and should find its way into the equities market through the placement by the National Insurance Board of some of its funds into equities.

5.3 *Venture Capital*

New vehicles will be needed. Already a venture capital fund is in place in the form of the Barbados Investment Fund, managed by Caribbean Financial Services Corporation. Also, in 1996 a Venture Capital Fund was established for small business. In addition the Barbados Development Bank, as part of its restructuring, is expected to engage in venture capital funding as well.

It will be necessary, in due course that these vehicles afford investors the opportunity to trade their securities and permit them exit and switching opportunities. The development of a method of trading in these securities will therefore become increasingly important, particularly as most of them are unlikely to be listed in their early years.

5.4 *Commercial Paper and Corporate Debentures*

The development of a market in corporate debentures may well also be imminent. While it is a major source of funding in developed countries, to date only one Barbadian company has issued corporate debentures. There is however, the likelihood of the establishment of a market in commercial paper. Already, an embryonic commercial paper market exists in the form of deposits placed with commercial houses, though these instruments are not negotiable and the activity is not encouraged by bank supervisors, because of its under regulation.

5.5 *Stock Exchange Regulation*

Also in a developmental stage is the regulation of the Exchange. The Board of the Securities Exchange is mandated to "direct the management of the affairs, business and duties of the Exchange". This relates principally to the making of by-laws, the most important of which is a take-over code on which work has started. Presently there is no Securities Exchange Commission vested with the power to regulate the Exchange itself. Therefore, the Board of the Securities Exchange itself is unofficially expected to perform the regulatory and developmental role which one would expect of a Commission.

Generally, the Securities Exchange has contributed to an improvement in the flow of information on corporate activity and to more reliable valuations of shares used as collateral in commercial banking, for tax purposes and for estate settlement. It has offered potential investors an opportunity to diversify their portfolios without sacrificing liquidity. However, the process of building a vibrant exchange is a continuing one and the education process must be on-going. Similarly, while the Central Bank has been particularly important in facilitating activity in the Government securities market, greater development seems indicated.

5.6 *Integration of the Local and Regional Capital Markets.*

At the hemispheric level, mutual funds, because of the opportunities they offer for sharing risks, have taken off almost exponentially in Latin America and have become an important means of attracting capital into these countries, particularly in the context of reduced funding from International Financial Institutions(IFIs). There may be lessons here for Barbados.

Global developments, for example the creation of the North America Free Trade Area (NAFTA), the Free Trade Area of the Americas (FTAA) and the Association of Caribbean States (ACS) are also likely to impact on financial markets in the Caribbean. If Barbados is to position itself to compete, several adjustments to the reporting and functioning of financial markets will be necessary. Also, intermediation costs will probably have to compare favourably with international standards and greater efficiencies could be forced on countries like Barbados who are affected by other regional and extra-regional markets.

The evidence shows that major obstacles to the development of equity markets are low income and small size. The fortunes of the stock markets of the region reflect this and development of a regional stock exchange is being given priority. In the Caribbean, the process of cross-listing and cross-trading of regional securities which was put in place in 1991 to help to correct the problem of small size and to give more liquidity to the market, has had only mediocre results. Impediments to capital movements and fear of exchange rate changes are some of the major concerns.

However, both these factors become less critical if there is integration of equity markets. Caribbean countries with fixed exchange rates are examining the implications for their economies of the freeing up of exchange controls within

Caricom. At a more general level, greater familiarity with the process of trading in equities, ability to liquidate securities on demand and speedy settlement are necessary whether or not there is integration.

At the regional level, the three stock exchanges in the English-speaking Caribbean are all in the process of benefitting from technical development of clearing and settlement services under a Multilateral Investment Fund through the Inter-American Development Bank (IDB), and the benefits of this exercise should be reflected in speedier settlements over the next year or so.

Other developments, many already identified by the Exchanges themselves, are necessary:

1. New financial instruments are needed to cope with the problems of some businesses.

2. Greater activity in the corporate bond market is required so as to lengthen the maturity of financing.

3. Privatisation programmes need to make greater use of the stock market. Despite the acknowledged need for foreign exchange in exchange for debt some part of the shares of the privatised enterprises should be placed on the stock markets.

4. Educational programmes on the mechanics of buying and selling shares need to be intensified so as to get the average saver more informed about the stock market.

A number of steps need to be taken in order to remove all impediments to regional trading, but some measures will depend on the level of financial volatility which each country is able to accommodate. The steps identified are:

i) the removal of alien land holding legislation in some Caribbean countries;

ii) the removal of remaining exchange controls on capital flows consistent with financial stability;

iii) use of the same trading day in each country for conducting cross border trades so as to avoid arbitraging opportunities;

iv) computerised trading facilities; and

v) improved corporate information available to all exchanges.

Companies are also beginning to raise money on the foreign markets by way of public issues, and this is an area in which securities development could grow in the years ahead. A further development has been the use of the regional market for placements of foreign currency denominated government issues. Two issues have so far been placed on the regional market (in 1980 and 1995) both in Trinidad and Tobago. Both were successful and indications are that this interest will continue. The more recent resurgence in interest is a direct result of the freeing up of exchange controls in some Caribbean countries and the holding of foreign currency accounts by a greater section of the investing public. The prospect of the increased use of regional issues in hard currency will also be one of the challenges ahead, another will be the management of liberalization of the securities markets in the region and beyond; and a third, the management of liquidity in the banking system.

6. Conclusion

Capital markets in Barbados are therefore at an exciting stage of development. Though the consolidation experienced in earlier periods has earned the markets a reputation for efficiency, transaction size continues to be a drawback, influencing both the level of innovation and the implementation of economically justifiable changes. However, prospects for further development in 1997 and beyond appear encouraging, and a wider regional market should give a further impetus to the development of more active domestic securities markets, as these distinctions will become blurred. It will be critical in the globalised environment for Barbados to provide better access to equity funding and improved access to venture capital. Confidence, financial stability and a reasonable expectation of profit will all be essential factors in cultivating the appropriate investment climate. Much has been done but much remains to be done if Barbados and the Caribbean are to take their places in the increasingly international business environment.

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