Development of Government Bond Market with Special Reference to Developing A Yield curve: Experience of Sri Lanka

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Abstract

Sri Lanka has given special emphasis to the development of a domestic government bond market under the market oriented economic policy regime introduced in 1977. This study attempts to examine the measures and actions taken and to evaluate the outcomes and existing issues related to domestic bond market development. The paper reveals that Sri Lanka has made a reasonable progress in developing a government bond market and a default-risk free benchmark yield curve but the country still has a long way to go in order to realize full benefits of a developed bond market. (JEL H63, N20)

I. Introduction

In Sri Lanka, development of the domestic bond market has received high priority in the financial sector development agenda. Its potential benefits for fiscal consolidation, macroeconomic stability, long term investment expansion, resource allocation efficiency, resilience of the economy and ultimately, sustainable high growth performance, became clearer under the market oriented economic policy framework introduced in 1977. The development of the domestic government bond market received early attention since government bonds are the backbone of fixed income securities in Sri Lanka as in other countries. In this context, developing a yield curve has been identified as a critical objective, given its pivotal role in developing an efficient and competitive domestic debt market. Overall, the country has made satisfactory progress in developing the domestic government bond market, including some progress in the development of a default-risk free bench mark yield curve[(2)], even though progress has been slow in some areas. Therefore, continuation of the ongoing efforts is crucial in ensuring realization of the full benefits from the domestic bond market.

This paper attempts to examine the experience of developing Sri Lanka's domestic bond market with special emphasis on developing a yield curve. Section II will present the objectives of developing a domestic bond market. Pre-requisites and basic changes required

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2/ Benchmark yield curve: Yield curve formed on the basis of yields on benchmark securities of selected maturities.

for developing a domestic bond market will be discussed in Section III. Section IV will give reasons for developing a yield curve and measures taken. Outcomes, challenges, existing issues and required next steps will be summarized in section V. Section VI will conclude the discussion.

II. Objectives of Developing a Domestic Bond Market

Although it has not been announced explicitly, one of the primary objectives under the new economic policy framework, as implied in various policy discussions, has been to develop an efficient bond market characterized by a competitive market structure, low transaction costs, a low level of fragmentation, a robust and safe market structure, and a high level of diversity among market participants. Accordingly, steps have been taken to promote basic elements required for bond market development, such as promotion of long-term issuers and investors, and development of intermediaries, infrastructure and regulatory regime. The continuation of the government's investment programmes mainly concentrating on infrastructure development projects, which have long-term gestation periods, creates the necessity of issuing long-term government bonds. A series of steps have been taken to develop long-term investors such as pension and provident funds, insurance institutions and unit trusts. The insurance sector has been liberalized and the public sector has completely moved out of the insurance business with the privatization of Sri Lanka Insurance Corporation, the largest firm in the industry, in 2002. Reforms in pension and provident funds are in progress, though the progress is slow.

The objectives of public debt management have not been announced explicitly. However, the implicit objective as revealed from various discussions, is to ensure that government's financing needs and its payment obligations are met at the lowest possible cost over the medium to long run, consistent with a prudent degree of risk. Development of a reference yield curve is also considered to be another objective.

These objectives receive due attention in the preparation of the government's borrowing strategy and annual borrowing programme, and in the implementation of financial sector reforms. As a developing country, Sri Lanka places its priority on long-term concessional foreign assistance in financing the fiscal deficit. However, since the early 1980s, the government has been increasingly relying on market based instruments when financing the balance in the fiscal deficit from domestic sources.

III. Pre-requisites and Basic Changes in Developing a Domestic Bond Market

A series of measures has been taken to provide basic pre-requisites and a conducive environment for the development of the domestic bond market. Primary pre-requisites are a credible macroeconomic framework, sound fiscal and monetary policies, effective legal, tax and regulatory structures, smooth and secure settlement system, and effective and efficient intermediaries. The acceptance of a market oriented economic policy framework by all major political parties has significantly reduced political risks, while improving the economic policy environment. Similarly, the Fiscal Management (Responsibility) Act enacted in 2002, which has explicitly specified medium-term targets for the budget deficit and the public debt to GDP ratio, requires the government to adhere to prudent fiscal policy(3). Meanwhile, one of the primary objectives in the Monetary Law Act (i.e., economic and price stability) requires the Central Bank to follow a prudent monetary policy(4). In practice, monetary and fiscal policies have been improved, but there is still a long way to go to reach a more desirable level. A series of amendments to existing legislation and new legislation have been enacted to strengthen the legal system required for developing a domestic bond market. Similarly, regulatory and supervisory systems in the financial sector have been strengthened, raising prudential requirements towards internationally accepted standards. Furthermore, measures have been taken to develop a smooth and secure settlement system. Meanwhile, the continuation of financial sector liberalization since 1977 by encouraging reforms in the existing institutions and enabling the establishment of new institutions has helped to develop a competitive financial system. However, reforms have been slow in certain areas, particularly in pension and provident fund liberalization and simplification of taxes affecting the financial sector.

The most crucial requirement in developing a government domestic bond market is the adoption of a market-oriented government deficit financing strategy. Such a strategy should include the government's adherence to basic market principles of broad market access and transparency, a commitment to finance itself through the market, and a proactive approach in developing the necessary regulatory framework to support market development. The government has introduced new long-term marketable instruments and increased its reliance on market based borrowings. Access to the bond market has been expanded by relying increasingly on multi-price auctions for bond sales on a regular basis and encouraging primary dealers to expand facilities into the outstations. Meanwhile, dissemination of quality and timely information has been improved by announcing an annual borrowing calendar, publishing of fiscal data, and Treasury bill and Treasury bond auction information and having regular discussions with primary dealers and investors in government securities.

Table 1 - Government Debt

	1970	1980	1990	2000	2004
(1) Domestic as % of GDP	46.1	43.7	41.6	53.8	56.4
(2) Foreign as % of GDP	17.5	33.5	55.0	43.1	49.1
(3) Total as % of GDP	63.6	77.2	96.6	96.9	105.5

3/ The medium term fiscal targets in the Fiscal Management (Responsibility) Act are (i) reduction of fiscal deficit to 5 per cent of GDP by 2006 and maintain it below that thereafter and (ii) reduction of public debt to GDP ratio to 85 per cent by 2006 and further to 60 per cent by 2013.

4/ As indicated in the Monetary Law Act, the major objectives of the Central Bank of Sri Lanka are (i) economic and price stability and (ii) financial system stability.

IV. Reasons for Developing a Yield Curve and Measures Taken

A. Reasons for Developing a Yield Curve

The government has recognized the benefits of developing a yield curve. A well-established yield curve for government bonds facilitates government debt management as well as development of the private debt market, particularly towards the long-end of the market. It encourages issuers by enabling them to price borrowing instruments more competitively in the domestic debt market. Similarly, it provides pricing guidance to investors, particularly to long-term investors, facilitating their portfolio management. Thus, the yield curve promotes economic growth prospects through its impact on savings promotion, investment expansion and improving resource allocation efficiency. Therefore, the government has paid special attention to developing a reference yield curve in its domestic government bond market development efforts.

Situation Before Economic Liberalization: When economic liberalization and reforms were initiated in 1977 a yield curve was almost non-existent in the Sri Lankan bond market, a result of the inward looking and government interventionist economic policies adopted for almost two decades in the country. Therefore, all government domestic long-term borrowings were made through a non-marketable instrument, i.e., rupee loan securities. They were transferable only by registration and were bought almost entirely by captive sources, such as pension and provident funds, the Sri Lanka Insurance Corporation and the National Savings Bank, which were directly under the public sector management. Treasury bills were marketable but they were also largely held by the captive sources and the Central Bank, while holdings of commercial banks were limited for meeting specific prudential requirements such as the liquidity ratio and statutory reserve requirements(5). Money market activities were limited primarily to inter-bank transactions, constraining the development of even the short-end of the yield curve. Fiscal and monetary policies did not provide a conducive policy environment for developing a yield curve. Government deficit financing from domestic sources was heavily reliant on non-market borrowings, while monetary management was concentrated on less market-oriented policy tools, such as statutory reserve requirements, allocation of credit at subsidized interest rates and moral suasion. Private sector financing requirements, including long-term investment financing, were mainly met through commercial bank loans and subsidized credit schemes funded by the Central Bank and the government. In summary, there was no conducive environment for developing a yield curve at the time of the commencement of economic liberalization in 1977.

Post-economic Liberalization: During the initial years under the new economic policy framework, the government undertook a massive infrastructure development programme consisting of housing construction and expansion in irrigation, power generation, transport and communication facilities. Although the financing of almost all such major public investment projects was largely supported by international donors on highly concessionary terms, the government had to raise the required counterpart funds in the domestic market. How-

5/ A part of the Treasury bill holdings by commercial banks was accepted as a part of the statutory reserve requirement to be held, subject to a ceiling, in order to encourage investment in Treasury bills.

ever, the government was unable to mobilize even such limited financing requirements through non-bank domestic market sources due to the weaknesses in the domestic financial system. Therefore, in order to implement a market orientation in government borrowing, development of the domestic bond market became a priority. Similarly, as the private sector was expected to play a major role in the economy, its ability to raise long-term financing in the domestic market had to be facilitated through the development of the domestic bond and equity markets. Further, moving towards a more market oriented monetary management envisaged under the economic liberalization programme necessitated the development of the money and bond markets with a yield curve in order to improve the transmission process of monetary policy. Therefore, not only the development of the domestic bond market but also developing a yield curve became a priority.

B. Measures and Actions

A series of measures and actions supporting, directly or indirectly, the development of a yield curve have been taken since 1977.

Commitment to Market-based Borrowing: The market oriented economic framework provided a conducive policy environment for the development of domestic financial markets and a yield curve. Government's commitment to market oriented borrowing for its deficit financing was the most important impetus for developing a liquid default-risk free yield curve. The relative share of marketable debt instruments in total government domestic borrowing increased continuously (Table 2).

Favourable Legal Framework: A number of amendments to the existing statutes and a series of new laws were enacted to create the required legal background for developing the domestic bond market and yield curve.

Market Developments: Implementation of a market based borrowing strategy supported the development of the primary and secondary markets for government securities, enabling

Table 2 - Changes in Relative Composition of Government Domestic Debt and Extension of Yield Curve

	1970	1980	2000	2004
A. Maturity (%)-				
Short-term -	37	40	31	24
Medium and long term	63	60	69	76
B. Marketability (%)				
- Marketable	31	33	50	78
- Non-marketable	69	67	50	22
C. Investor base (%)				
- Central Bank	39	38	14	10
- Commercial banks	06	03	15	14
- Captive sources	53	58	52	52
- Others	02	01	19	24
D. Maximum maturity in the yield curve				
- Primary market (years)	01	01	03	20
- Secondary market (years)	01	01	03	10

the development of a market-based yield curve. The introduction of the weekly auction system for Treasury bills (1986) and Treasury bonds (1997), and moving to an electronic bidding system (1998) were key steps that contributed to developing the primary market for government securities. Similarly, the opening of a secondary market window (1981), Repurchase window (1993), Reverse Repurchase window (1995), and the establishment of Bloomberg bond-trading platform (2003) were key steps that contributed to the development of secondary market. The appointment of primary dealers in 1992 helped expansion of trading activities in both primary and secondary markets. Meanwhile, liberalization of the insurance industry and reforms in pension and provident fund management expanded the market-based demand for government securities.

Marketable Instruments: The availability of marketable instruments has been expanded by introducing Treasury bills with multiple maturities (i.e., 91, 182 and 364 days), and Treasury bonds in 1997. The introduction of jumbo Treasury bonds and increasing the replacement of maturing and callable rupee loan securities with marketable Treasury bonds served as reopening and buyback(6) operations in developing the domestic bond market and hence a benchmark yield curve. Consequently, the relative share of marketable instruments and medium/long-term bonds increased continuously.

Institutional Developments: The appointment of primary dealers and development of the supervisory and regulatory system to monitor their activities were the major supportive institutional developments. The primary dealer (PD) system has both advantages and risks. The major potential benefits are facilitating the change to a market-based borrowing environment, improving government's ability to tap investors, developing liquidity and expanding public awareness. Nevertheless, it may pose a risk of weakening competition, especially in a country where the financial system is relatively small. Therefore, it is useful to review the system after a few years of operation to maximize potential benefits and minimize risks.

In Sri Lanka, the primary dealer system has been playing a crucial role in developing the domestic bond market and yield curve by expanding the market coverage, improving efficiency and liquidity in the market, diversifying the investor base, and increasing public awareness about bond market activities. The supervisory and regulatory system, as well as their activities, have been reviewed and upgraded in order to ensure market competition, investor protection and market stability. A list of directions issued to the PDs is given in Appendix Table IV. The PD system was reviewed and reformed in 1996 and 2000.

Payment and Settlement System: The payment and settlement system has been modernized and improved. The introduction of a Real Time Gross Settlement (RTGS) system, Scripless Securities Settlement System (SSSS) and Central Depository System (CDS) in 2004 are some of the major steps taken to improve efficiency and minimize risks in the payment and settlement system in Sri Lanka. Measures have also been implemented to dematerialize securities issued previously.

Relationship among Financial Markets: Steps have been taken to strengthen the relationship among the money, bond and equity markets, improving the liquidity of the bond

6/ Buyback option: Repurchase of bonds by the issuer prior to their maturity.

7/ The Central Bank issues its own securities only when Government securities are not available in its portfolio adequately.

market and facilitating development of a yield curve. Permitting PDs to participate in the Repurchase (Repo) market of the Central Bank and the money market, and providing them with an intra-day liquidity facility (ILF) were also supportive measures. The appointment of the Colombo Stock Exchange as a primary dealer and permitting the trade of government bonds in the stock exchange increased liquidity in bonds.

Dissemination of Information: Dissemination of information needed by bond market participants has been improved. The publication of a government borrowing calendar, auction information and results, bond market data, fiscal developments, money market information and key macroeconomic indicators helped the PDs and investors in the bond market. The development and publication of a bond index also provided useful information to the issuers and investors.

Facilitating Development of a Yield Curve: In its borrowing strategy, the government has given special attention to the yield curve development particularly when selecting instruments, maturity, issuance cycle and distribution system. In the selection of instruments high priority has been given to marketable instruments reducing sharply the dependency on non-marketable instruments. Even maturing non-marketable instruments were increasingly replaced with marketable instruments, accelerating their supply. The choice of maturity has been challenging. Development of the yield curve required extending the maturity from the short-term to the medium-term as well as to the long-term. However, the high inflationary expectations in the economy, resulting from the continuation of relatively high and volatile realized inflation, imposed a high interest premium in pricing long-term bonds. In fact, even some long-term fund managers preferred the short maturity bonds due to the high volatility in inflation. Therefore, extension of the maturity period for marketable bonds has been done gradually and cautiously, balancing the short-term high debt service cost and potential long-term benefits of bond market development. Accordingly, the maturity period of Treasury bond has been extended gradually from 2-3 years to 4-5 years, and then to 10 years and 20 years in 2003. However, the market appetite for long-term maturities over 5 years is still low.

Table 3: Yield Curve (Net of Tax)

Per cent

Maturity Period	Primary Market					Secondary Market		
	1995 End	2000 End	2002 End	2003 End	2004 End	2002 End	2003 End	2004 End
91 days	19.26	17.77	8.93	7.35	7.25	9.90	7.27	7.21
182 Days	18.91	17.90	8.90	7.30	7.40	9.90	7.20	7.33
364 Days	18.97	18.22	8.92	7.24	7.65	10.16	7.18	7.59
2 Years		18.97	11.86	7.64	8.25	10.08	7.57	8.30
3 Years		18.71	12.20	7.44	8.60	10.73	7.64	8.74
4 Years			10.85	7.38	8.75	10.17	7.66	9.30
5 Years			11.02	7.07	7.75	10.79	7.69	9.40
6 Years			11.08	6.67		10.91	7.73	9.82
10 Years				6.65				9.38
15 Years				7.63				
20 Years				6.08				

The issuance cycle and timing of auctions have been determined giving due attention to the problem of bunching in the maturity profile and the availability of financial resources in the market. Attempts have been made to prevent bunching in the maturity as far as possible in order to prevent potential refinancing risks and pressure on interest rates in the domestic bond market. The annual issuing calendar has been prepared limiting Treasury bond auctions in months where demand for liquidity is high, particularly during festive seasons.

Although formal types of reopening operations and buyback operations have not been implemented yet, the opening of jumbo issues and replacing of callable rupee loan securities with marketable bonds having popular maturity periods have been helping to develop benchmark issues in the government bond market and hence developing a benchmark yield issue. All marketable government borrowing instruments have been distributed through auction systems except for a few issues that have been made on a placement basis. The multi-price auctioning system has ensured the competitiveness of the bond market. Furthermore, the auctioning system and expansion of bond trading facilities to the outstations have expanded and diversified the resource base, increasing the diversity in the investor base.

Monetary and Interest Rate Policy: Prudent monetary policy has facilitated the development of the domestic bond market by improving price stability (i.e., low inflation without excessive volatility) and maintaining desired rupee liquidity in the market. The most important monetary policy change was the gradual phasing out of all subsidized credit schemes, allowing interest rates to reflect market developments. Monetary management has also increased the liquidity of government securities by increasingly relying on open market operations using Treasury bills and Treasury bonds[(7)]. Under this, the introduction of the Central Bank secondary market window (1981), Repurchase window (1993) and Reverse Repurchase window (1995) for Treasury bills and the move to active open market operations (2003) were the major steps forward. Furthermore, Central Bank reliance on government securities for open market operations in monetary management has avoided the potential fragmentation of the domestic bond market. Similarly, improvement in coordination between monetary policy and fiscal policy has facilitated domestic bond market and yield curve development. In this context, the establishment of the Domestic Debt Management Committee (DDMC) and Domestic Market Operations Committee (DMOC) and regular discussions and sharing of information between the Central Bank and the Ministry of Finance further strengthened the coordination in implementing of monetary and fiscal policies.

V. Outcomes, Challenges, Existing Issues and Required Next Steps

A. Outcomes

Reflecting benefits of these measures, the government bond market has been developing (Table 2) while the yield curve has been extending gradually towards longer maturities (Table 3 and Chart 3). Highlights of the outcomes are given below:

8/ The Central Bank issues its own securities only when Government securities are not available in its portfolio adequately.

- Increasing the relative share of securities with medium and long maturity periods, extending the weighted average maturity period of government domestic debt.
- Increasing the relative share of marketable instruments in total domestic government debt, reflecting government's increasing reliance on market-based borrowings.
- Reducing government dependency on borrowings from captive sources and the Central Bank in deficit financing.
- Diversification of the investor base, thereby increasing trading and liquidity in the bond market.
- Extending the maximum maturity yield in the yield curve.

B. Challenges

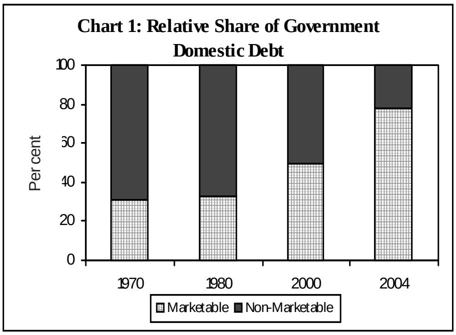
Following are the major challenges faced during the process of developing the government domestic bond market and yield curve.

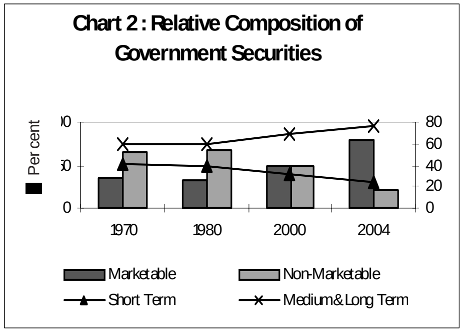
- Balancing of short-term debt service cost against long-term economic benefits, as investors demand high premia initially for longer maturities.
- Relatively high volatility in inflation, reducing market preference for longer maturities, thereby resulting in a high premium in the bond market for long-term bonds.
- Holding of securities as a long-term investment by passive large investors, thus limiting the liquidity in the bond market.
- Balancing the benefits of the primary dealer system with its risk of weakening competition in the bond market.
- Potential conflict of interest when commercial banks are working as primary dealers. Commercial banks may prefer to mobilize deposits and invest in government securities keeping a margin, rather than developing retail sales of securities to savers.

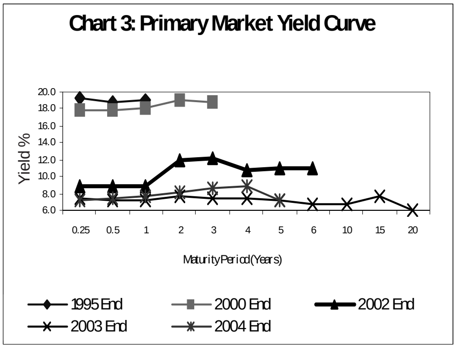
C. Existing Issues and Required Next Steps

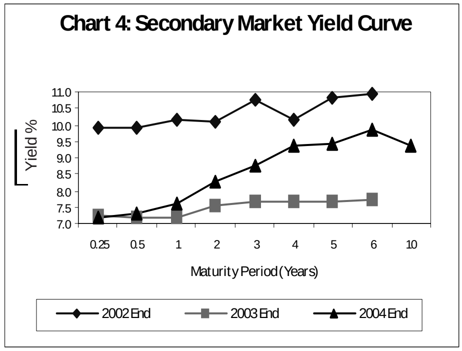
Following are the major issues to be addressed in further developing the government domestic debt market and extending the yield curve.

- The continuation of a large number of series in outstanding bonds is not helpful in developing a benchmark yield curve (Table 4). Therefore, it is prudent to concentrate on benchmark issues, which may reduce the government borrowing cost while helping to develop a benchmark yield curve.
- At present, debt management coordination is difficult due to the involvement of a number of institutions, viz., the Public Debt Department of the Central Bank, (all rupee borrowings and commercial dollar borrowings through market instruments), the External Resources Department (all concessional foreign loans) and the Treasury Operations Department of the Ministry of Finance (short-term bank borrowings and administrative borrowings). Therefore, it would be useful to establish a separate public debt office, which could develop an overall debt management policy and strategy and manage the public debt more efficiently.









- Large deviations of government borrowings from budgetary targets weaken the credibility of fiscal policy and disturb the smooth implementation of the borrowing programme. Therefore, minimization of fiscal deviations is crucial in ensuring moving towards medium-term fiscal targets announced in the FMRA and implementing the government borrowing programme more effectively.
- High volatility in inflation not only prevents extension of the yield curve but also increases the government debt service cost due to declining average maturity thereby rising rollover risks. Therefore, continuation of prudent monetary policy supported by fiscal policy, thereby ensuring price stability, is crucial in further developing the government domestic bond market and yield curve.

Table 4 - Number of Series Outstanding

	2000	2001	2002	2003	2004
Treasury Bills	91	91	91	91	91
Treasury Bonds	61	63	87	92	78
Rupee Securities	79	88	92	79	48
Total	231	242	270	262	217

VI. Conclusion

Sri Lanka has identified the benefits of developing the domestic bond market and taken a series of necessary measures since 1977. Outcomes have been encouraging as shown by increasing relative share of market oriented instruments in the total government debt, developing a market oriented government bond market, and emerging default-risk free benchmark yield curve even though the progress has been slow. Therefore, the continuation of efforts to develop the domestic bond market further, particularly paying more attention to the establishment of a separate public debt office, minimization of fiscal deviations, reliance on market-based borrowing strategy and ensuring of price stability, is necessary to ensure the development of an efficient and dynamic domestic bond market in Sri Lanka.

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Apendix Table I : Composition of Instruments

	1970	1980	1990	2000	2002	2003	2004
Treasury Bills (%)	31.0	33.4	50.8	20.0	22.2	21.5	21.3
Treasury Bonds (%)	0.0	0.0	0.0	30.2	36.6	47.4	56.3
Rupee Loans (%)	62.4	59.9	40.8	39.0	30.3	24.4	14.4
Other (%)	6.7	6.7	8.4	10.9	10.8	6.7	8.0
Total (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Appendix Table II : Issuing Methods

Year	Auction System	Non- Auction Systems	Total
	Rs. Billion		
1996	190.8	94.1	285.0
1997	195.6	73.8	269.4
1998	242.6	79.3	321.9
1999	236.5	64.2	300.7
2000	240.6	109.0	349.6
2001	227.1	118.9	346.0
2002	387.5	200.7	588.2
2003	358.7	247.1	605.8
2004	357.9	329.8	687.7
	Relative Share (%)		
1996	67.0	33.0	100.0
1997	72.6	27.4	100.0
1998	75.4	24.6	100.0
1999	78.6	21.4	100.0
2000	68.8	31.2	100.0
2001	65.6	34.4	100.0
2002	65.9	34.1	100.0
2003	59.2	40.8	100.0
2004	52.0	48.0	100.0

Appendix Table III - Historical Developments in the Government Bond Market in Sri Lanka

The management of public debt is an important agency function performed by the Central Bank on behalf of the Government of Sri Lanka since 1950. Highlighted below are the major events in the history of public debt management in Sri Lanka.

1923	Issue of loans commenced under the Colonial Treasury Bills Ordinance by Crown Agents in UK.
1937	Issue of Rupee Loans commenced under RSSO No.7 of 1937.
1941	Issue of Treasury bills commenced under LTBO (Chapter 287).
1950	Public debt management was vested with the Central Bank under the Monetary Law Act.
1981	A secondary market window was opened for Treasury bills, by the CBSL.
1986	Weekly Treasury bill auctions commenced.
1989	Issuance of Treasury bills with multiple maturities commenced.
1992	Primary Dealers were appointed.
1993	Repo window for Treasury bills was introduced by the CBSL.
1994	Primary Dealer system was recognized.
1995	Non-competitive bidding at primary auctions was phased out.
1995	Reverse Repo window was introduced by CBSL.
1995	RSSO, LTBO and MLA were amended to enable scripless issue of Treasury bills and Treasury bonds.
1997	Issue of Treasury bonds commenced.
1998	Introduction of electronic bidding system.
2000	Dedicated Primary Dealers were appointed.
2000	Primary Dealer supervision commenced.
2001	US dollar denominated Sri Lanka Development Bonds were issued.
2002	Fiscal Management (Responsibility) Act was enacted.
2003	Issue of 10,15 and 20 year Treasury bonds commenced.
2003	Bloomberg bond trading system for Primary Dealers was introduced.
2004	RSSO, LTBO and MLA was amended to enable the trading of scripless securities.
2004	Scripless Securities Settlement System (SSSS) and Central Depository System (CDS) commenced operations.

Notes: RSSO - Registered Stocks and Securities Ordinance
LTBO - Local Treasury Bills Ordinance
MLA - Monetary Law Act

Appendix Table IV - Directions to Primary Dealers

No.	Direction	Issue Date
1	Direction on Segregation of Proprietary Government Securities Accounts.	10/01/02
2	Direction on Financial Statements.	10/01/02
3	Direction on New Products.	09/04/02
4	Direction on the Establishment of a Branch Office by Primary Dealers.	09/04/02
5	Direction on Repurchase and Reverse Repurchase Agreements.	02/05/02
6	Direction on Secondary Market Actual rates.	15/07/02
7	Direction on Capital Adequacy.	30/10/02
8	Direction on Custodial and Trust Holdings of Scrip Securities.	14/02/03
9	Direction on Forward Rate Agreements and Interest Rate Swaps.	01/04/03
10	Direction on Firm Two Way Quotes (Bid and Offer Prices) for Benchmark Maturities.	23/07/03
11	Direction on Minimum Subscription Levels for Treasury Bill and Treasury Bond Auctions.	15/08/03
12	Direction on minimum Capital requirement.	28/11/03
13	Direction on Special Risk Reserve.	28/11/03
14	Direction on Accounting for Repo Transactions.	19/12/03
15	Direction on Short Selling of Securities.	06/01/04
16	Direction on Adjusted Trading (Away Prices)	07/06/04