The background of the cover features a complex financial visualization. It includes a grid of horizontal and vertical lines in a light blue color. Overlaid on this grid are several data series: a prominent white line graph at the top showing fluctuations; a series of vertical blue bars of varying heights in the lower half; and a candlestick chart in the bottom right quadrant. The overall color palette is shades of blue, creating a professional and analytical atmosphere.

REPORT ON GOVERNMENT SECURITIES 2018-19

**DEBT MANAGEMENT DEPARTMENT
BANGLADESH BANK**

www.bb.org.bd

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- *This report is published in October 2019 and is based on data and information available for the FY 2018-19, unless stated otherwise. Feedback on this report may be sent to gm.dmd@bb.org.bd*
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List of Acronyms

Abbreviation/ Acronym	Elaboration
ALS	Assured Liquidity Support
AB	Amanat Bima Trust Tahbil
BB	Bangladesh Bank
BB Bills	Bangladesh Bank Bills
BBS	Bangladesh Bureau of Statistics
BDT	Bangladeshi Taka
BGIIB	Bangladesh Government Islamic Investment Bond
BGTB	Bangladesh Government Treasury Bonds
BPID	Business Partner ID
BSEC	Bangladesh Securities and Exchange Commission
CBS	Core Banking System
CB	Corporate Bodies
CB Repo	Central Bank Repo
CDBL	Central Depository Bangladesh Limited
CDMC	Cash and Debt Management Committee
CDMTC	Cash and Debt Management Technical Committee
CSE	Chittagong Stock Exchange
C-Money	Call Money
DMD	Debt Management Department
DSE	Dhaka Stock Exchange
DvP	Delivery versus Payment
FIDP	Financial Institutions Development Project
FnI	Foreign Investors
FRTB	Floating-Rate Treasury Bond
FY	Financial Year
GDP	Gross Domestic Product
GI	General Insurance Companies
GSOM	Government Securities Order Matching Trading Platform
G-Sec	Government Securities
HTM	Held-to-Maturity
HFT	Held-for-Trading
IB Repo	Interbank Repo
IC	Investment Companies
IDRA	Insurance Development and Regulatory Authority
IN	Individual
IPO	Initial Public Offering
ISIN	International Securities Identification Numbers

LI	Life Insurance Companies
LSF	Liquidity Support Facilities
MI Module	Market Infrastructure Module
MF	Mutual Fund
MPD	Monetary Policy Department
MoF	Ministry of Finance
NBFI	Non-Bank Financial Institution
NBR	National Board of Revenue
NFCA	Non-Resident Foreign Currency Account
NITA	Non-Resident Investors Taka Account
NPD	Non-Primary Dealers
NRI	Non-resident Investors
NSD	National Savings Directorate
OMO	Open market operations
OTC	Over-the-Counter
PCB	Private Commercial Bank
PD	Primary Dealer
PF	Provident Fund
SCB	State-Owned Commercial bank
SD	Statistics Department
SLR	Statutory Liquidity Ratio
T-Bill	Treasury Bill
T-Bond	Treasury Bond
TWS	Trader Work Station
WAR	Weighted Average Rate

Executive Summary

As a part of being the Government's debt manager, the Debt Management Department (DMD) of Bangladesh Bank is responsible for providing functional and advisory services to the Government on matters related to the Government's debt management policy and the issuance of various treasury instruments as per the Bangladesh Bank Order-1972, article 20 and Treasury rules-1998 (Appendix-1, Section-3). The department also regulates and supervises the primary dealer (PD) system and has the responsibility for the development of the primary and secondary markets of government securities (G-Sec). Since 2017, DMD has been publishing a report on government securities and this report (FY 2018-19) is an effort in that direction to disseminate information for the investors as well as other stakeholders to build an efficient G-Sec market.

Overview of G-Sec Market

The G-Sec market of Bangladesh consists of both tradable and non-tradable securities. The tradable securities include T-bills (14-day, 91-day, 182-day and 364-day) and T-bonds (2-year, 3-year FRTB, 5-year, 10-year, 15-year, 20-year) whereas non-tradable securities include Sanchayapatras (3-monthly interest-bearing Sanchayapatra, 5-year Bangladesh Sanchayapatra, Poribar Sanchayapatra, and Pensioner Sanchayapatra), Sanchayabonds (US Dollar Premium Bond, US Dollar Investment Bond, and Wage Earners Development Bond), and Prize bond. The Government borrows from the banking system through T-bills and T-bonds and the non-banking system mainly through National Savings Directorate (NSD). Resident Individuals and institutions such as banks, NBFIs, insurance companies, corporations, authorities responsible for the management of provident funds, pension funds, etc. are eligible to purchase the T-bills and T-bonds, whereas foreigners/non-resident individuals/institutions can invest in T-bonds.

Primary Market Operations

During FY 2018-2019, the net issuance of T-bonds was BDT 19,864.58 crore and T-bills were BDT 17,731.51 crore. Due to the cash management requirement, the net financing through T-bills for the financial year came positive implying that there was a higher order of fresh issuance compared with repayments. Throughout the fiscal year, the treasury auction (cut-off rate) yield curve exhibited an upward pattern for all types of T-bills and T-bonds. The cut-off yield shows that the T-Bonds with shorter maturities experienced a larger upturn in yields compared to the longer ones.

G-Sec Outstanding

The total outstanding public debt of the Government from the banking sector stood at BDT 199,363.65 crore (T-bills outstanding was 44,076.45 crore and T-bonds outstanding was 155,287.20 crore) constituted 7.86% of GDP at the end of June 2019 compared to 7.23% at the end of June 2018. In FY 2018-19, the banking sector is the leading part of investor categories accounting for 70.38% of total stock holding. Long-term investors like insurance and provident funds account for 14.91% of total holding. Bangladesh Bank held about 14.18% of the stock for its monetary operations.

G-Sec Secondary Market Trading

The total volume of G-Sec transacted on an outright basis during the FY 2018-19 observed an upward trend compared to the previous fiscal year and stood at BDT 18,309.82 crore. The trading activity of the major investor categories reveals that PD banks are the dominant trading institution accounting for 48.41% of buying as well as selling activity. Private sector local banks with about 38.77% of the trading volume come next, followed by foreign banks between 12.39%. During the current fiscal, PDs and local banks were net sellers and foreign banks were net buyers. The top ten traded securities accounted for 52.63% of total volume and the top ten member traders accounted for 67.06% of total volume in FY 2018-19.

The interbank Repo rate represents the money market rate as it is determined by the demand and supply of funds in the financial sector. Overall interbank repo transactions, which amounted to BDT 273,547.50 crore in FY 2018-19, showed 88.83% increased from FY 2017-18. However, the weighted-average interbank repo rate increased by 71 basis points from FY 2017-18 to FY 2018-19 indicating a mild liquidity pressure in the market, especially during the festive periods.

Open Market Operation

Assured Liquidity Support (ALS) and Repo transaction with BB exhibited a decreasing trend since FY 2014-15 till 2017-18 showing sufficient liquidity in the market. However, in FY 2018-19, a small number of banks and financial institutions availed the liquidity support facility (LSF) irregularly indicating a mild liquidity pressure occurring in the market especially during the festive periods. In FY 2018-19, BB provided total liquidity support of BDT 94,587.62 crore in the form of ALS and repo to the banks. Moreover, banks and NBFIs managed their liquidity from call money and interbank repo market instead of the repo with BB since BB's repo rate was higher than the IB repo and call money rate. It indicates that the market forces are determining the majority of the transactions while the market is becoming more efficient.

BB uses reverse repo operations as a monetary policy instrument, which is used to control the money supply in the economy and it is provided overnight (one-day) basis. The investment of banks in the reverse repo increased and stood at 1,174,795.52 in FY 2015-16 (no reverse repo bid has been received since then). On the other hand, the BB issued BB bills worth for sterilization purposes as well as to manage liquidity in the banking system to keep reserve money growth in line with the program level. BB bills with different maturities such as 07, 14 and 30-day respectively were issued for this purpose. To perform the monetary policy operations effectively, BB issued a total BDT 79,883.00 of BB Bills crore in FY 2018-19.

Market Analysis

The money market in Bangladesh experienced a mild increase in the liquidity pressure during the FY 2018-19 as there was a shift in the trend in the interbank repo and call money market. BB decreased the repo rate in 2013, 2016 and 2018 with a view to increasing the liquidity in the market.

The cut-off yields exhibited an upward pattern for all types of T-bonds at the end of June 2019 compared to the previous financial years. The Interest Rate on T-bills and T-bonds remained stable between 2016 and 2018. However, there was a major increase compared to the previous year

especially for the T-bonds with shorter maturities. For 2-year T-bonds, the FY ending cut-off yield increased by 51.30% compared to the end of the preceding FY.

The trend of the primary market bid to coverage ratio indicates a better liquidity situation in the market. From 2013 till December 2018, the bid coverage ratio of more than 2.0 indicated the market was liquid enough and the demand of G-Sec was high. However, between January 2019 and June 2019, the average to coverage ratio dropped below the 2.0 (ending up at 1.90).

The scenario of Government Debt

At the end of FY 2018-19, total outstanding public debt from the banking sector and non-banking sector (NSD) stood at BDT 1,99,363.65 and 2,89,267.88 crore respectively. In the revised budget of FY 2018-19, BDT 78,745.00 was targeted to be borrowed from domestic sources of which BDT 30,895 crore and BDT 47,850 (NSD: BDT 45,000 crore) crore were targeted to be borrowed from banking and non-banking sources respectively. During the period, government net borrowing was BDT 37,596.09 crore through T-bills and T-bonds from the banking system which was 121.69% of the revised budget of FY 2018-19. On the other hand, Government net borrowing through NSD instruments during the period was BDT 50,058.49 crore, which was 111.24% of the revised budget.

As the interest rate of NSD certificate was significantly higher than any other interest rate prevailing in the government securities market, the percentage of outstanding domestic public debt from the banking sectors (T-bills and T-bonds) decreased gradually from FY 2013-14 to 2017-18 whereas outstanding debt liabilities from NSD certificates increased significantly due to massive selling of non-marketable securities (i.e. Sanchayapatras). However, in the FY of 2018-19, due to the steps that were taken by the Government and BB, the sale of T-bills and T-bonds increased, while the sale of NSD instruments dropped slightly. At the end of June 2019, the interest rate of 3-monthly interest-bearing Sanchayapatra, 5-year Bangladesh Sanchayapatra, Poribar Sanchayapatra and Pensioner Sanchayapatra were 11.04%, 11.28%, 11.52% and 11.76% respectively whereas the interest rate of the T-bonds with 2, 5, 10, 15 and 20 years maturities were 7.55%, 8.10%, 8.44%, 8.90%, and 9.29% respectively.

In addition, at the end of FY 2018-19, the total outstanding public sector's external debt stood at equivalent BDT 384,604.13 crore, which constituted 15.16% of GDP.

Table-I: Key Indicators of G-Sec

(Taka in Crore)

Particulars	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19
Outstanding Balance of G-Sec	153,662.69	153,673.38	161,767.56	199,363.65
T-Bills	25,936.29	24,550.76	26,344.94	44,076.45
T-Bonds	127,726.40	129,122.62	135,422.62	155,287.20
Outstanding Balance of NSD Certificate	140,261.63	192,679.09	239,209.39	289,267.88
Outstanding Balance of Public Sector's External Debt (in Equivalent BDT)	250,927.04	279,696.55	341,350.31	384,604.13
Outstanding as % of GDP				
G-Sec	8.87	7.78	7.23	7.86
NSD Certificate	8.09	9.75	10.69	11.41
Public Sector's External Debt	14.48	14.16	15.25	15.16
Net Issuance of T-Bills & T-bonds				
T-Bills	(5,493.19)	(1,385.53)	1,794.18	17,731.51
T-Bonds	12,453.34	1,396.22	6,300.00	19,864.58
Outright Transactions in G-Sec				
Secondary Trading	67,513.02	40,058.40	15,334.40	18,309.82
IB Repo	408,160.39	190,605.22	144,862.09	273,547.50
Open Market Operations				
CB Repo & ALS	1,762.24	115.67	572.86	94,587.62
Reverse Repo with BB	1,174,795.52	-	-	-
Issuance of BB Bills	324,062.90	1,132,530.90	833,633.20	79,883.00
The Yield of G-Sec (as of 30 June)				
91-day T-Bills	4.13%	4.09%	4.58%	7.19%
182-day T-Bills	4.70%	4.32%	4.59%	7.38%
364-day T-Bills	5.29%	4.49%	4.99%	7.39%
02-year T-Bonds	6.09%	5.05%	4.99%	7.55%
05-year T-Bonds	6.60%	5.83%	6.10%	8.10%
10-year T-Bonds	7.29%	6.86%	7.50%	8.44%
15-year T-Bonds	8.00%	7.70%	8.06%	8.90%
20-year T-Bonds	8.50%	8.05%	8.90%	9.29%
Money Market Interest Rate				
Repo Rate	6.75	6.75	6.00	6.00
Reverse Repo Rate	4.75	4.75	4.75	4.75
WAR of Call Money	3.70	3.78	3.67	3.90
WAR of IB Repo	3.66	3.20	3.97	4.68

Source: SD, DMD, BB; and NSD

Table-II: The G-Sec Market in Bangladesh: Over the Years

Year	Event
1972	Introduction of the issuance of 90-day (3-month) treasury bills (T-Bills) in August on tap basis
1995	In October, treasury bills started being sold through auction at the market-determined rate
1996	Introduction of 30-day and 180-day treasury bills in February
1997	In March, the auction of 1-year treasury bills was introduced
1998	Issuance of 30-day, 90-day, 180-day, and 1-year bills through weekly auctions
1998	In September, existing T-bills were replaced by newly introduced 28-day, 91-day, 182-day, 364-day
2002	Introduction of Central Bank Repo facility against T-bills
2002	Introduction of IB Repo facility against G-Sec
2003	Issuance of Bangladesh Government Treasury bonds (BGTB) Rules, 2003 in September
2003	Introduction of Primary Dealer (PD) system
2003	Issuance of 5-year and 10-year BGTBs
2006	Introduction of auction calendar for the first time based on a deficit budget
2007	Issuance of 15-year and 20-year BGTBs
2007	Introduction of liquidity Support (LS) to the PDs against government securities (G-Sec)
2007	Introduction of bidding commitments and underwriting obligations on PDs for T-bills and BGTB auctions
2007	Introduction of underwriting commission for the PDs
2008	Suspension of the issuance of the 28-day T-bills
2008	Introduction of mark-to-market requirements under the accounting framework for government securities (G-Sec)
2009	Introduction of automated delivery versus payment (DvP) settlement system
2011	Introduction of the Market Infrastructure (MI) Module for the automation of G-Sec management and operations
2013	Introduction of re-issuance of BGTBs
2013	Issuance of 2-year BGTB
2014	Issuance of the circular directing funded pension provident funds of banks to be invested in G-Sec
2016	Introduction of Government Securities Order Matching Trading Platform (GSOM) in August
2016	Introduction of 14-day T-bills
2017	Started publishing report on G-Sec on an annual basis (from FY 2016-17)
2017	Publication of Bangladesh Compound Rate (BCR) as a reference rate
2018	Introduction of the secondary market yield curve (on a test basis)
2019	Introduction of 3-Year Floating-Rate Treasury Bond (FRTB)
2019	A working committee formed with a view to developing the long-term fixed-income securities market finalized the 'Comprehensive Framework on the Development of the Bond Market in Bangladesh'

Chapter 1

An Overview of the G-Sec Market

Preamble

G-Sec Available in Bangladesh

Investment Process of Tradable G-Sec



Chapter 1

An Overview of the G-Sec Market

1.1. Preamble

The fixed-income securities market plays a crucial role in the economic development of a country. It presents long-term financing opportunities by creating an alternative source of finance and provides a steady source of income to the investors. In Bangladesh, as far as the fixed-income securities market is concerned, the government securities (G-Sec) hold the absolute majority. To meet the deficit of the targeted government spending, public borrowing is integral. Therefore, debt financing and the method of its management is one of the focal issues for our economy. When the government is running a budget deficit, it has to borrow money through the issuance of government debt instruments like treasury bills (T-bills), treasury bonds (T-bonds) and Savings Certificates or from other external sources. When the Government intends to finance the deficit from domestic sources, the issuance and marketing of debt instruments are carried out by the Central Bank on behalf of the Government.

Until 2003, only the commercial banks were permitted to purchase those securities. Back at that time, T-bills were available with the maturity of 30-day, 91-day, 180-day, and 1-year. Despite the tradability of the instruments, secondary trading was not pragmatic due to a limited number of buyer-seller and consequently in the market. To address this issue, a lot of initiatives were taken to establish an effective secondary market for fixed-income securities under the supervision of the Financial Institutions Development Project (FIDP) financed by the World Bank Group. Subsequently, Non-Bank Financial institutions (NBFIs) were also allowed to engage in the secondary market of G-sec along with banks. As per the recommendation of the aforementioned project, trading of G-Sec started through electronic registration by listing in the Central Depository of Bangladesh Limited (CDBL) in 2003.

Subsequently, Bangladesh Bank (BB) introduced the Primary Dealer (PD) system in 2003 and appointed eight banks and one NBFIs as PDs for primary issuance and secondary trading of G-sec. Along with short-term T-bills, 5-year and 10-year T-bonds were introduced to implement the long-term development plans of the Government. For this purpose, based on deficit budget in FY 2006-07, for the first time, the auction calendar was published by the Government that brought transparency in the money market leading to avoiding a mismatch between cash and debt management of the Government.

In FY 2007-08, To fulfill the long-term financing needs of the Government while considering the long term investment avenues of investors (insurance companies and provident funds), 15-year and 20-year T-bonds were introduced along with the existing 5-year and 10-year T-bonds. Later, the PD system was enhanced with incentives and liquidity support against collateralized securities from BB. Following those steps, bidding commitments and underwriting obligations on PDs were introduced for T-bills and bonds auction in 2007 with a view to strengthening their role as market makers. Currently, 22 banks are performing the role of PDs to bring dynamism in the primary and secondary markets of G-sec.

In 2008, the mark-to-market requirements under the accounting framework for G-Sec were introduced. Later, the dependability of the market was secured by eliminating settlement risks through the introduction of an automated Delivery versus Payment (DvP) settlement system in 2009. In 2011, BB introduced the Market Infrastructure (MI) Module for the automation of G-Sec that acts as a depository while performing the role of transaction and settlement for G-Sec in the primary and secondary markets.

In contrast, the Bangladeshi corporate bond market (listed) was almost non-existent as it accounted for only 0.01% of the GDP (including the non-listed bonds, the corporate bond market was 1.51% of the GDP) at the end of FY 2018-19. Thus, the corporate bond market in Bangladesh is at a budding stage. During 1988-2019, only 3 corporate bonds and 14 debentures were issued by public offerings and listed with the stock exchange, but those debentures could not draw the attention of the investors as well as failing to pay the coupons and principal amounts. Many of these bonds and debentures were partially convertible to common stocks. The largest issue of the corporate bond was first made in 2007. It was a perpetual bond named 'IBBL Mudaraba Perpetual Bond' with a size of Taka 300 crore. ACI Limited issued zero-coupon bonds with attractive tax incentives in 2010 and BRAC Bank issued BRAC Bank 25% Subordinated Convertible Bonds to raise Tier-II capital to comply with the regulatory requirements of Bangladesh Bank in 2011.

1.2. G-Sec Available in Bangladesh

The government securities market of Bangladesh consists of both tradable and non-tradable securities.

1.2.1. Tradable Securities: Tradable securities issued by the Government include T-bills of 91-day, 182-day and 364-day and T-bonds of 2, 5, 10, 15 and 20-year maturities. At present, there is a Floating-Rate Treasury bond (FRTB) with a maturity of 3 years. Moreover, from time to time, for the purpose of short-term cash management of the Government, 14-day treasury bills are issued.

1.2.1.1. Treasury Bills: T-bills are the money market instruments of the government; they qualify as risk-free and tradable in the secondary market. T-bills are issued to meet short-term funding requirements of the government account. These are issued in scripless form at a discount and redeemed at the face value at maturity.

1.2.1.2. Treasury Bonds: T-bonds are issued by the Government with a promise to pay periodic (half-yearly/quarterly) coupon payments and to repay the face value at maturity. These are issued in scripless form at par to the face value and tradable in the secondary market.

1.2.2. Non-tradable Securities: Non-tradable securities are the type of government securities that are not allowed to be traded in the secondary market.

1.2.2.1. National Savings Certificates: Sanchayapatras (3-monthly interest-bearing Sanchayapatra, 5-year Bangladesh Sanchayapatra, Poribar Sanchayapatra, and Pensioner Sanchayapatra) and Bangladesh Prizebond.

1.2.2.2. Sanchayabonds: US Dollar Premium Bond, US Dollar Investment Bond, and Wage Earners Development Bond are only for retail non-resident investors.

1.2.2.3. Special Purpose Treasury Bonds (SPTB): There is another type of government instrument named ‘Special Purpose Treasury Bonds (SPTB)’ issued by the Government for special purposes that are not tradable in the secondary market.

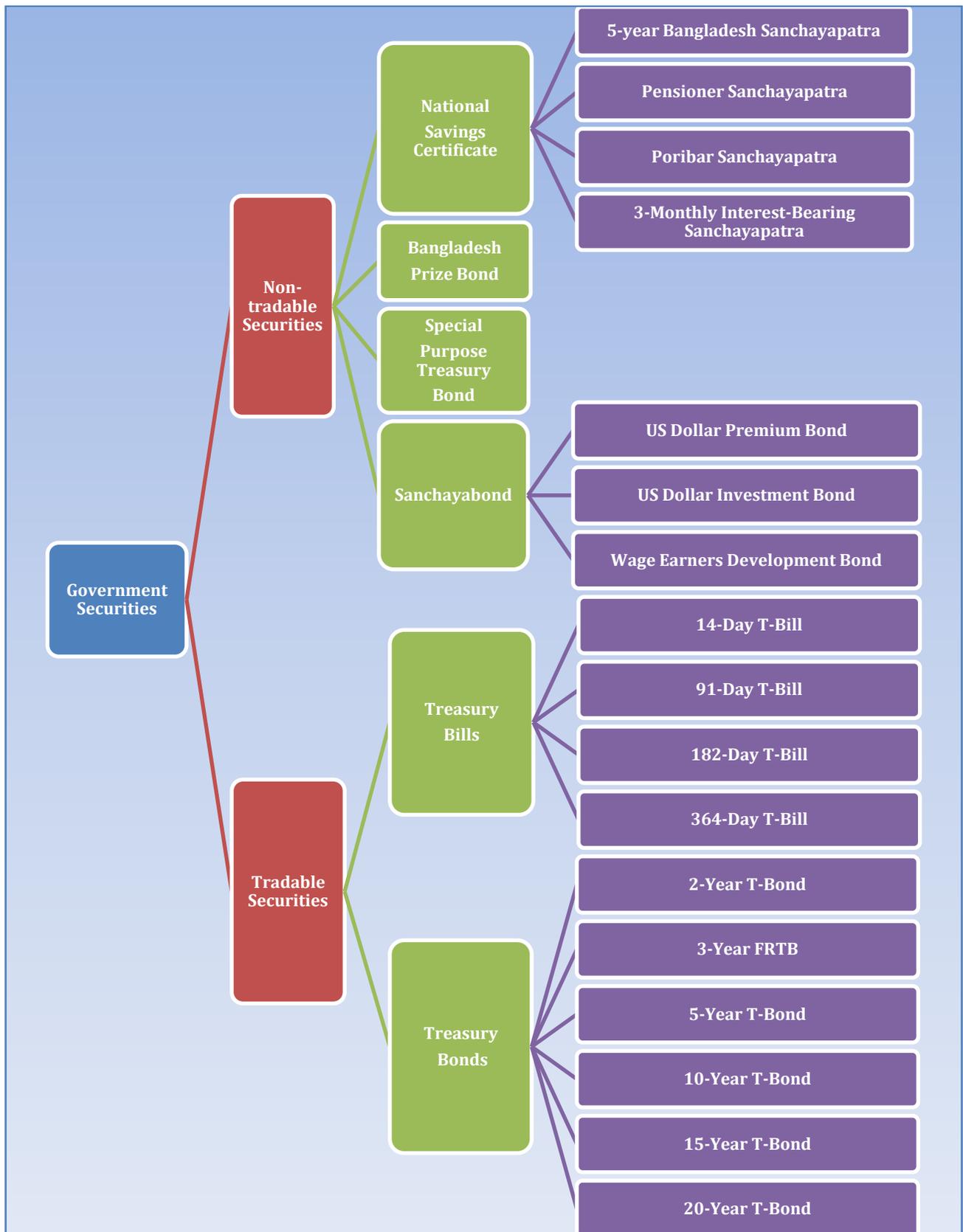


Figure 1: Government Securities in Bangladesh

1.3. Investment Process of Tradable G-Sec

1.3.1. Procedure for Investment and Trading by Resident Investors: Resident Individuals and institutions such as banks, NBFIs, insurance companies, corporations, authorities responsible for the management of provident funds, pension funds, etc. are eligible to purchase the T-bills and bonds from the primary market. All investors can also trade G-Sec in the secondary market through over-the-counter (OTC) or trader work station (TWS), an anonymous order-matching system of the MI module. For this purpose, individuals and institutions have to open a Business Partner (BP) ID in the MI module through any bank or NBFI.

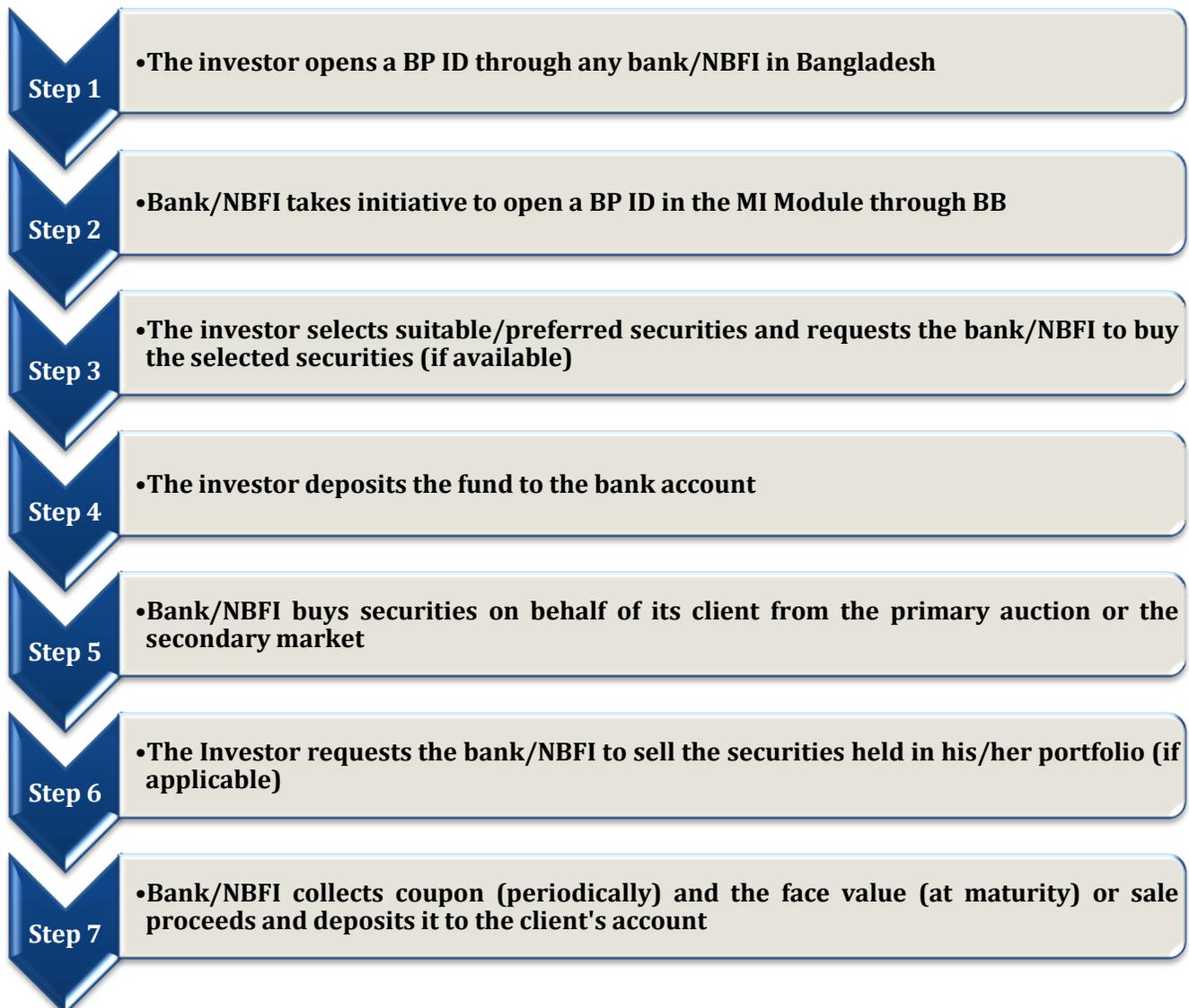


Figure 2: Operational Procedure for Investment and Trading by Resident Investors

1.3.2. Procedure for Investment and Trading by Non-Resident Investors: Foreigners/non-resident individuals/institutions can buy only T-bonds from the primary and secondary markets through PDs and other banks/NBFIs in Bangladesh. The purchase value of bonds should be paid from the investor's fund in a non-resident foreign currency account (NFCA) or non-resident investors taka account (NITA) maintained with a bank in Bangladesh. Coupon payments and resale/redemption proceeds are freely transferrable abroad in foreign currency after the

deduction of applicable taxes. T-bonds purchased by a non-resident may freely be resold at any time (no lock-in period) to any resident or non-resident individual/investor.

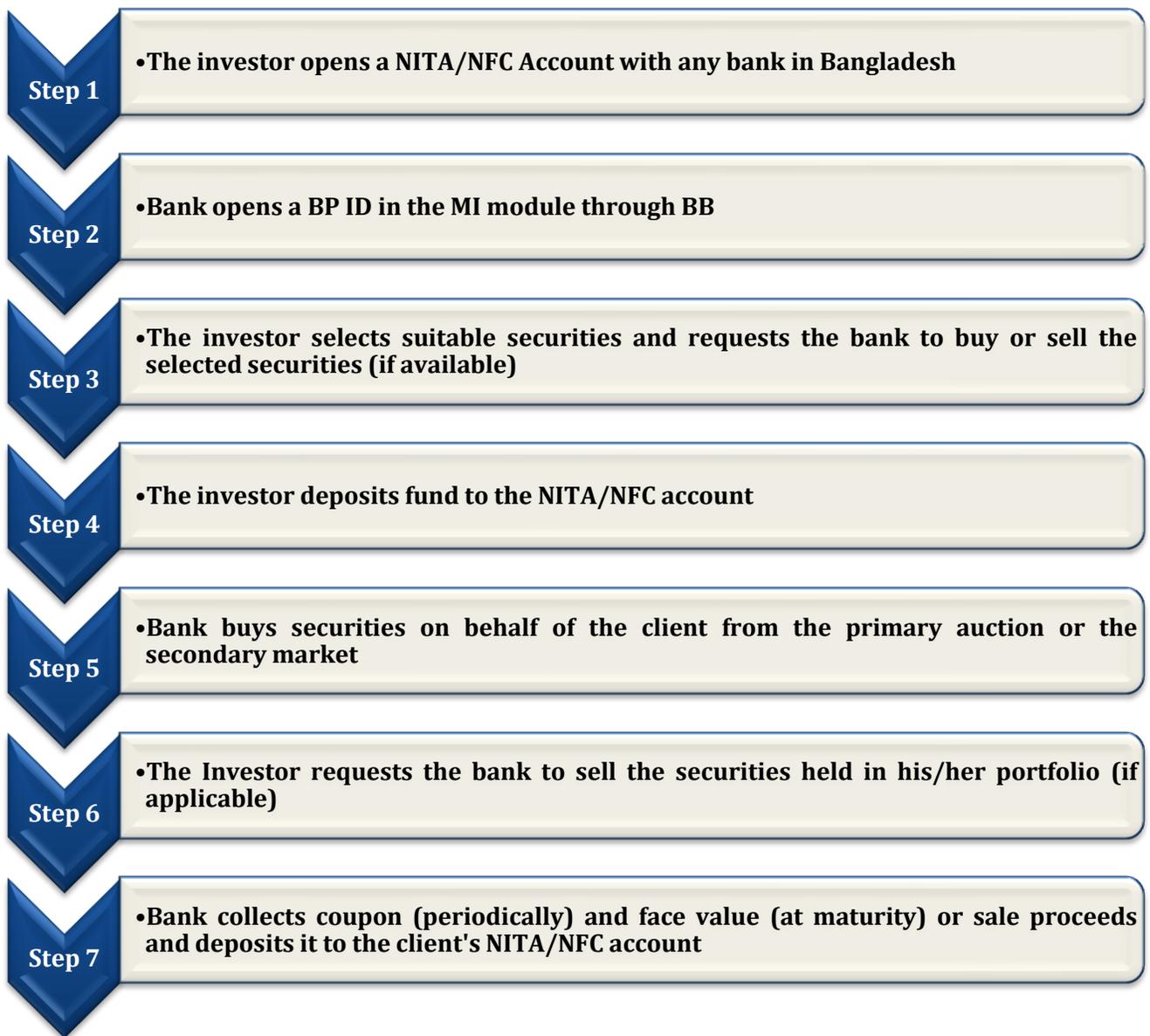


Figure 3: Operational Procedure for Investment and Trading by Non-resident Investors

N.B.: Banks and NBFIs in Bangladesh act as a dealer of the G-Sec. For this purpose, operational activities (BP ID opening, sale/purchase through the MI Module, etc) are done by the banks and NBFIs.

Chapter 2

Primary Market Operations of G-Sec

Issuance Details

Auction Management

Primary Dealer (PD) System

Net Issuance of T-Bonds and T-Bills

Primary Market Yield Curve



Chapter 2

Primary Market Operations of G-Sec

2.1. Issuance Details

As per the relevant laws and regulations, the Debt Management Department (DMD) of BB acts as the debt manager of the Government in consultation with the Ministry of Finance (MoF). These laws also empower BB to issue new loans and manage public debt on behalf of the Government. Chaired by the Secretary, Finance Division, MoF, a Cash and Debt Management Committee (CDMC) has been formed for the supervision of the Government's borrowings. The committee has been formed for efficient, effective and timely policy and decision making regarding debt management and budget financing. In addition to the CDMC, there is also a Cash and Debt Management Technical Committee (CDMTC) to assist the CDMC.

2.2. Auction Management

BB is authorized to conduct auctions for raising loans on behalf of the Government. The process of raising loans involves the issuance of G-Sec. This process is completed through an auction, and in some cases, through private placement. To conduct the auctions, there is an auction committee, chaired by a Deputy Governor of BB to determine the cut-off rate or price of the auction of G-Sec. The auction committee holds the authority to devolve on PD or BB (if required) and accept or reject the bids of the auction.

2.2.1. Auction Calendar: Auction calendar is published periodically by BB with the prior approval of the MoF.

2.2.2. Auction Notice: Auction notice is provided as per the auction calendar for the T-bonds mentioning auction amount, auction day, method, etc.

2.2.3. Auction Day: Weekly auctions of T-bills (usually on Sunday) and T-bonds (usually on Tuesday) of a particular tenor are held following a pre-announced auction calendar for a specified amount.

2.2.4. Auction Methods: An auction can either be price or yield-based multiple rates as per the instruction issued by BB. In the multiple rate method, successful orders are allotted at the offered rate. Bid amount is BDT 1,00,000.00 (one lac) and its multiples.

2.2.5. Conducting Auction: An auction is conducted for a pre-determined notified amount as per the discretion of the Issuer. PDs can place orders within a prescribed cut-off time and other members (Banks and NBFIs) can submit bids through PDs. Whereas, members (PDs and non-PDs) can submit bids on behalf of their clients (resident individuals and institutions such as insurance companies, corporate bodies, authorities responsible for the management of provident funds, pension funds, mutual funds, and foreigners/non-resident individual/institutions). Allotment of securities shall be credited to respective securities accounts of successful bidders upon receiving confirmation of fund transfer.

2.2.6. Devolvement: In case the notified amount is not fully allotted at the cut-off rate determined by auction committee, the residual amount may be devolved (if required) on Bangladesh Bank, and/or primary dealers. The amount to be devolved on BB, if any, is decided by

the auction committee and the remaining amount could be devolved on the PDs based on their underwriting obligation.

2.2.7. Non-competitive Bid: PDs may submit non-competitive bids on behalf of individuals or institutional clients who do not have a current account with BB. The maximum accepted amount of non-competitive bids in an auction is determined by BB.

2.2.8. Re-issuance: BB has started re-issuance of instruments in 2013 to reduce the number of T-Bonds in the market and to develop benchmark securities for the purpose of constructing a secondary market yield curve. Re-issuance of an existing instrument is handled in a way similar to the issuance of new securities through an auction. In those cases, the coupon rate and the dates of coupon payments are already known to the investors.

2.3. Primary Dealer (PD) system

The PD system was introduced in Bangladesh in 2003. A group of banks was appointed by BB to deal exclusively with the G-Sec. PDs play a vital role in the primary and secondary markets of G-Sec acting as market makers. At present, 22 banks are performing the role of PD (Appendix-1).

2.3.1. Roles and responsibilities of a PD

2.3.1.1. Bidding Commitment: A PD shall regularly and actively participate in all primary auctions of T-bills and T-bonds.

2.3.1.2. Underwriting Obligation: Each PD has to place bid(s) at least for an amount equal to its underwriting obligation.

2.3.1.3. Devolvement of Securities: In the event that bids for the notified amount are not received in the primary auction, or the auction committee decides to accept an amount less than the notified amount, the remaining amount will be devolved on the primary dealers.

2.3.1.4. Secondary Obligation: A PD shall actively participate in the secondary trading of G-Sec. For active market-making, the PDs are directed to quote firm two-way prices and keeping its trading window open throughout each business day. Furthermore, each PD will have to attain a target of BDT 240 crore of turnovers on a quarterly basis.

2.3.2. Privileges of a PD

2.3.2.1. Underwriting Commission: A PD is entitled to get underwriting commission on the amount of G-Sec underwritten by it at rates to be prescribed by the Government from time to time.

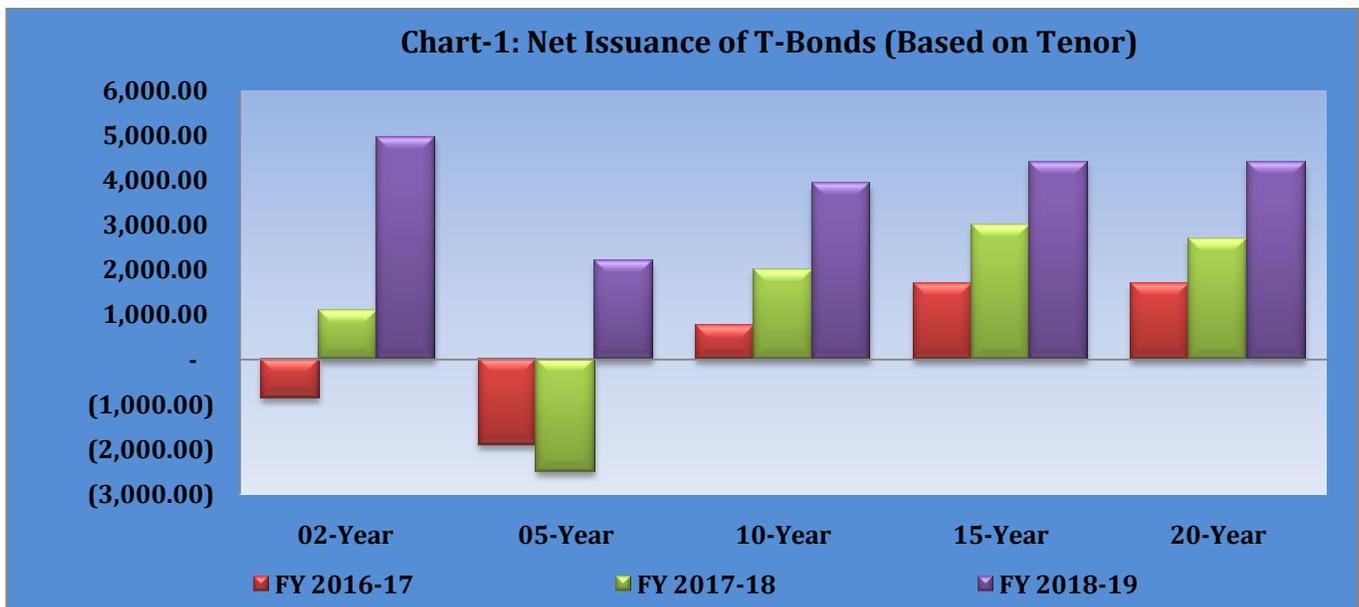
2.3.2.2. Liquidity Support: A PD is assured to receive liquidity support from BB in the form of repos against the T-Bills and T-Bonds purchased from primary auction up to a specific time period.

2.4. Net Issuance of T-Bonds and T-Bills

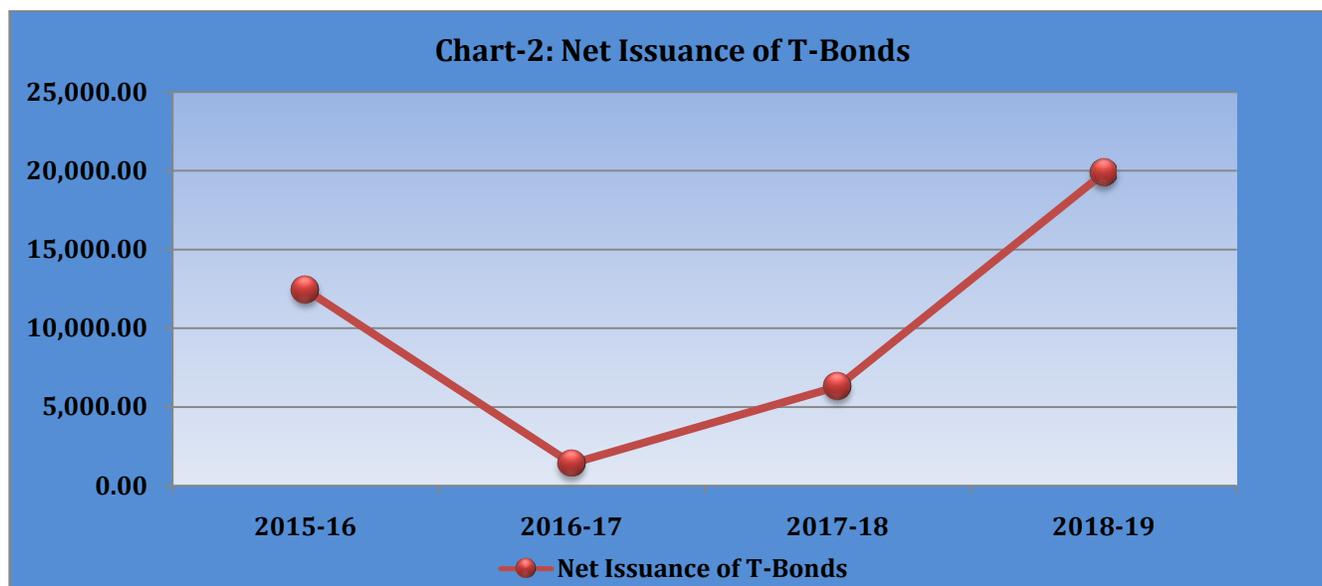
2.4.1. Net Issuance of T-Bonds: During FY 2018-19, T-bonds were issued worth BDT 36,475.00 crore while total repayments amounted to BDT 16,610.42 crore. Issuance of treasury bonds in FY 2018-19 was 45.32% higher than that of the previous fiscal year. The details of issuance of T-bonds in FY 2015-16, 2016-17, 2017-18 and 2018-19 are presented below:

Table-1: Net Issuance of T-Bonds							
(Taka in Crore)							
Financial Year	Issuance	02 year	05 year	10 year	15 year	20 year	Total
2015-16	a) Issue	5,800.00	6,000.00	5,800.00	3,450.00	3,100.00	24,150.00
	b) Repayment	5,700.00	5,250.00	746.66			11,696.66
	c) Net Issuance (a-b)	100.00	750.00	5,053.34	3,450.00	3,100.00	12,453.34
2016-17	a) Issue	3,150.00	4,250.00	4,300.00	1,700.00	1,700.00	15,100.00
	b) Repayment	4,006.00	6,150.00	3,547.78			13,703.78
	c) Net Issuance (a-b)	(856.00)	(1,900.00)	752.22	1,700.00	1,700.00	1,396.22
2017-18	a) Issue	6,900.00	5,700.00	6,800.00	3,000.00	2,700.00	25,100.00
	b) Repayment	5,800.00	8,200.00	4,800.00			18,800.00
	c) Net Issuance (a-b)	1,100.00	(2,500.00)	2,000.00	3,000.00	2,700.00	6,300.00
2018-19	a) Issue	9,800.00	9,400.00	8,475.00	4,400.00	4,400.00	36,475.00
	b) Repayment	4,850.00	7,200.00	4,560.42	-	-	16,610.42
	c) Net Issuance (a-b)	4,950.00	2,200.00	3,914.58	4,400.00	4,400.00	19,864.58

Source: DMD, BB.



The net issuance of T-bonds worth was BDT 19,864.58 crore in FY 2018-19, which was BDT 13,564.58 crore higher than that of FY 2017-18. Over the period, the issuance of all types of T-bonds increased significantly.



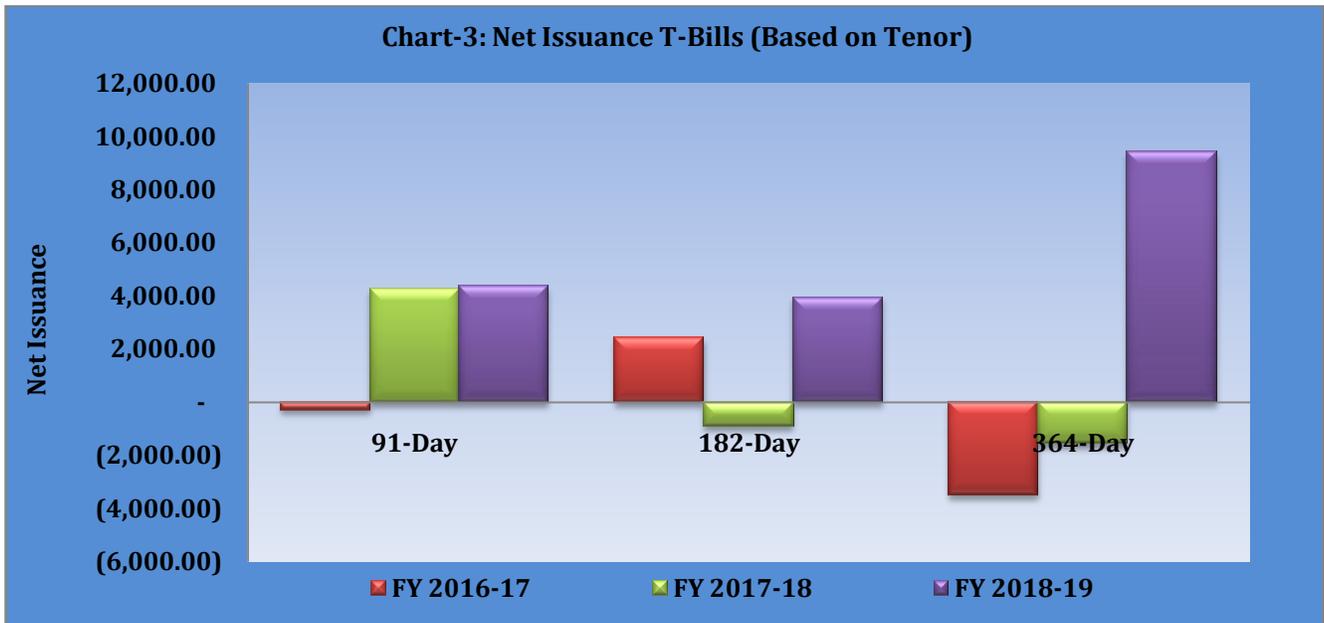
2.4.2. Net Issuance of T-Bills: Apart from being a source of money market securities with risk-free yields, T-bills are used as cash management instruments. Due to cash the management requirements, the net financing through T-bills for FY 2018-19 was positive. The total amount raised by the Government through treasury bills was BDT 90,493.60 crore while total repayments amounted to BDT 72,762.09 crore. Thus, the net issuance stood at BDT 17,731.51 crore during the FY 2018-19. The details of the issuance are presented below:

Table-2: Net Issuance of T-Bills

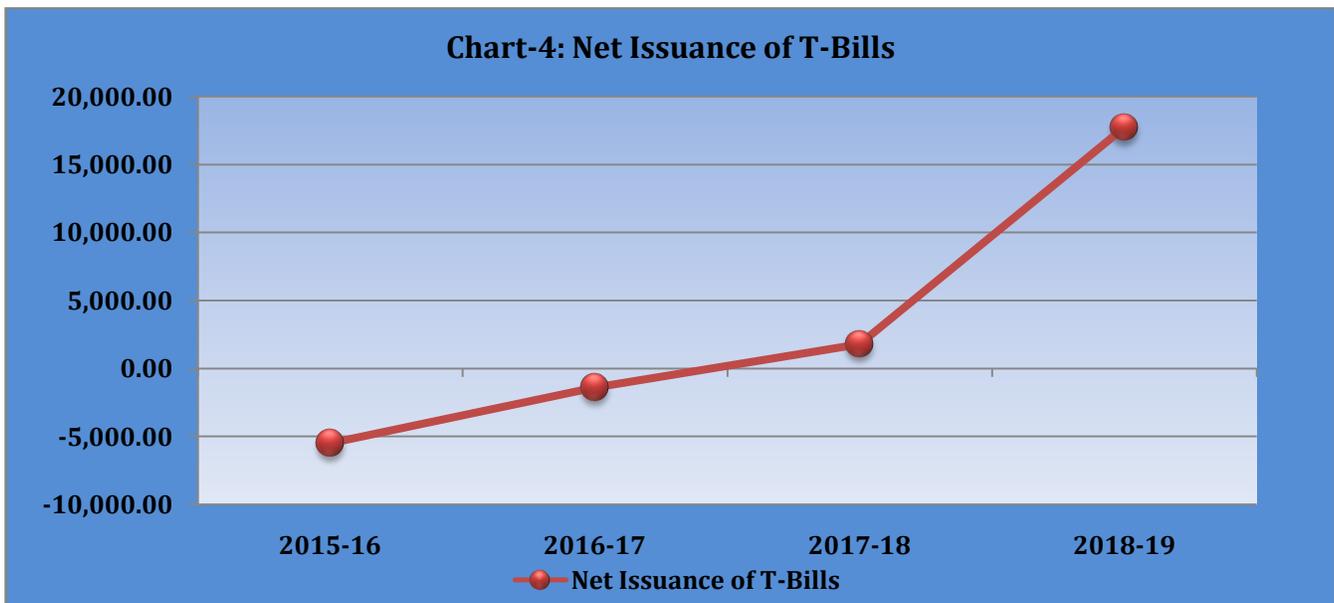
(Taka in Crore)

Financial Year	Issuance	91-day	182-day	364-day	Total
2015-16	a) Issue	31,474.93	13,711.39	12,282.58	57,468.90
	b) Repayment	30,943.08	15,903.58	16,115.43	62,962.09
	c) Net Issuance (a-b)	531.85	(2,192.19)	(3,832.85)	(5,493.19)
2016-17	a) Issue	31,750.39	14,999.16	8,768.43	55,517.98
	b) Repayment	32,044.47	12,576.45	12,282.58	56,903.50
	c) Net Issuance (a-b)	(294.08)	2,422.70	(3,514.15)	(1,385.53)
2017-18	a) Issue	30,151.55	12,538.77	7,188.64	49,878.96
	b) Repayment	25,878.50	13,437.87	8,768.41	48,084.78
	c) Net Issuance (a-b)	4,273.05	(899.10)	(1,579.77)	1,794.18
2018-19	a) Issue	56,794.32	17,084.99	16,614.29	90,493.60
	b) Repayment	52,423.97	13,149.46	7,188.65	72,762.09
	c) Net Issuance (a-b)	4,370.35	3,935.53	9,425.64	17,731.51

Source: DMD, BB.



91-day T-bills were the most common instruments for the Government as these provide more flexibility to public fund management. In FY2018-19, among the short-term instruments, the sale of 91-day T-bills ranked highest with BDT 56,794.32 crore, followed by 182-day and 364-day T-bills worth BDT 17,084.99 crore and 16,614.29 crore respectively. Overall, the net issuance of T-bills in FY 2018-19 was 17,731.51 crore, which was 888.23% higher than the previous fiscal year.



2.5. Primary Market Yield Curve

The yield curve for the T-bonds and T-bills are developed by BB on the basis of data collected from primary auctions. In the absence of a vibrant secondary market as well as an effective secondary yield curve for G-Sec, the primary market yield curves are being used for the valuation of the instruments.

2.5.1. Cut-Off Yield & Yield Curve of T-Bonds: The cut-off yields exhibited an upward pattern for all types of T-bonds at the end of June 2019 compared to the previous financial years. The details of the cut-off yields for T-bonds are presented below:

Table-3: Cut-off Yield of T-Bonds

(In percentage)

Tenor	At end-June 2016	At end-June 2017	At end-June 2018	At end-June 2019	Change (From 2018 -19)
02 year T-Bond	6.09%	5.05%	4.99%	7.55%	51.30%
05 year T-Bond	6.60%	5.83%	6.10%	8.10%	32.79%
10 year T-Bond	7.29%	6.86%	7.50%	8.44%	12.53%
15 year T-Bond	8.00%	7.70%	8.06%	8.90%	10.42%
20 year T-Bond	8.50%	8.05%	8.90%	9.29%	4.38%

Source: DMD, BB.

Chart-5: Yield Curve of T-Bonds



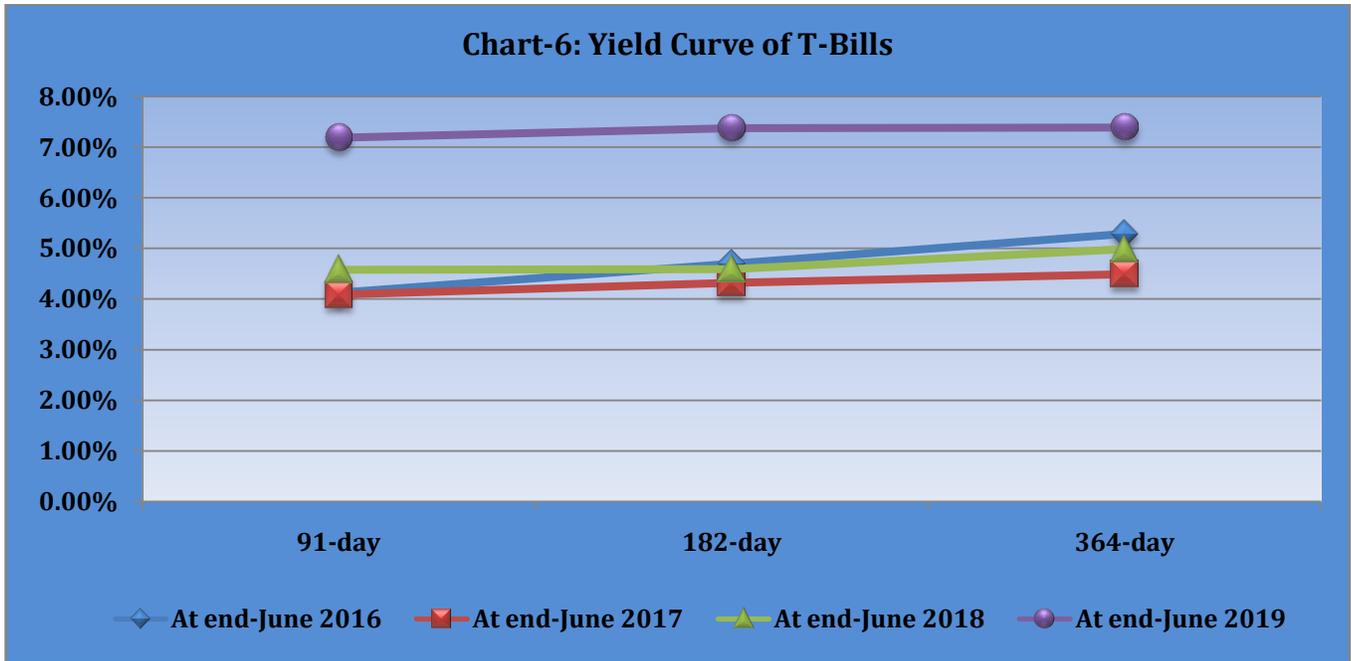
2.5.2. Cut-Off Yield & Yield Curve of T-Bills: At the end of June 2019, the yield (cut-off) curve exhibited an upward pattern for all types of T-bills compared to that of the previous fiscal year due to increased issuance of T-bills. Comparing to the cut-off yields at the end of June 2018, the cut-off yields for the T-bills at the end of June 2019 were 56.99%, 60.78%, and 48.10% higher for 91-day, 182-day, and 364-day, respectively.

Table-4: Cut-Off Yield of T-Bills

(In percentage)

Tenor	At End of June 2016	At End of June 2017	At End of June 2018	At End of June 2019	Change (From 2018 -19)
91-day T-Bill	4.13%	4.09%	4.58%	7.19%	56.99%
182-day T-Bill	4.70%	4.32%	4.59%	7.38%	60.78%
364-day T-Bill	5.29%	4.49%	4.99%	7.39%	48.10%

Source: DMD, BB.



Chapter 3

Trends of Outstanding G-Sec

Composition of Marketable G-Sec
Maturity Pattern for Outstanding T-Bonds
Holding Pattern of G-Sec
Non-Resident Investors (NRI)



Chapter 3

Trends of Outstanding G-Sec

3.1. Composition of Marketable G-Sec

The total outstanding public debt of the Government from the banking sectors increased from BDT 161,767.56 crore at the end of June 2018 to BDT 199,363.65 crore at the end of June 2019. The outstanding balance of tradable G-Sec stood at BDT 199,363.65 crore, which constituted 7.86% of GDP at the end of June 2019 compared to 7.23% at the end of June 2018. The increase in debt from the banking sector was significant due to substantial policy measures taken in selling non-tradable securities (i.e. Sanchayapatras).

Table-5: Composition of Marketable G-Sec

(Taka in Crore)

Issuance	At end-June 2017		At end-June 2018		At end-June 2019	
	Amount	(% of Total)	Amount	(% of Total)	Amount	(% of Total)
(a) T-Bills						
91-day T-Bill	7,931.05	32.00	12,204.10	46.00	16,574.45	37.60
182-day T-Bill	7,851.28	32.00	6,952.18	27.00	10,887.71	24.70
364-day T-Bill	8,768.43	36.00	7,188.65	27.00	16,614.29	37.69
Total T-Bill	24,550.76	100.00	26,344.94	100.00	44,076.45	100.00
(b) T-Bonds						
02-year T-Bond	8,950.00	7.00	10,050.00	7.00	14,500.00	9.34
05- year T-Bond	31,270.00	24.00	28,770.00	21.00	31,470.00	20.27
10-year T-Bond	49,849.17	39.00	51,849.17	38.00	55,763.75	35.91
15-year T-Bond	20,866.25	16.00	23,866.25	18.00	28,266.25	18.20
20-year T-Bond	18,187.20	14.00	20,887.20	16.00	25,287.20	16.28
Total T-Bond	129,122.62	100.00	135,422.62	100.00	155,287.20	100.00
Grand Total (a+b)	153,673.38		161,767.56		199,363.65	

Source: DMD, BB

3.1.1. Composition of T-Bonds: At the end of June 2019, the 10-year T-bonds held the largest portion among T-bonds with 35.91%, followed by 05-year, 15-year, and 20-year, whereas 02-year T-bonds holds the least portion among the composition.

Chart-7: Composition of T-Bonds at the End of June 2017

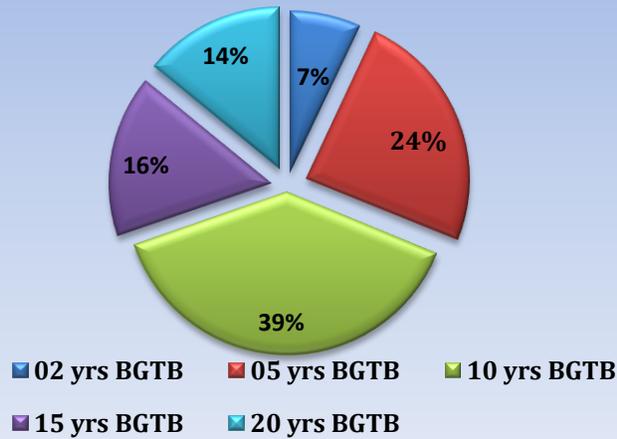


Chart-8: Composition of T-Bonds at the End of June 2018

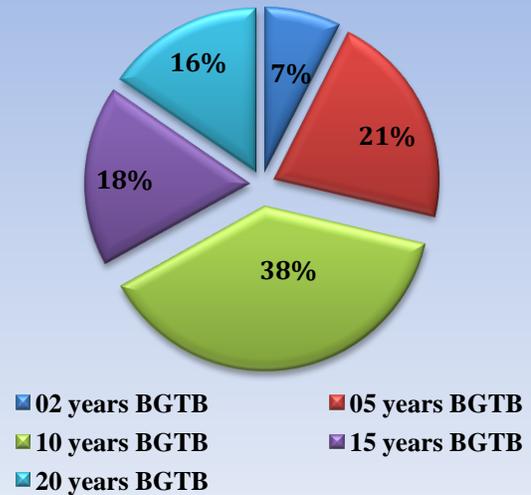
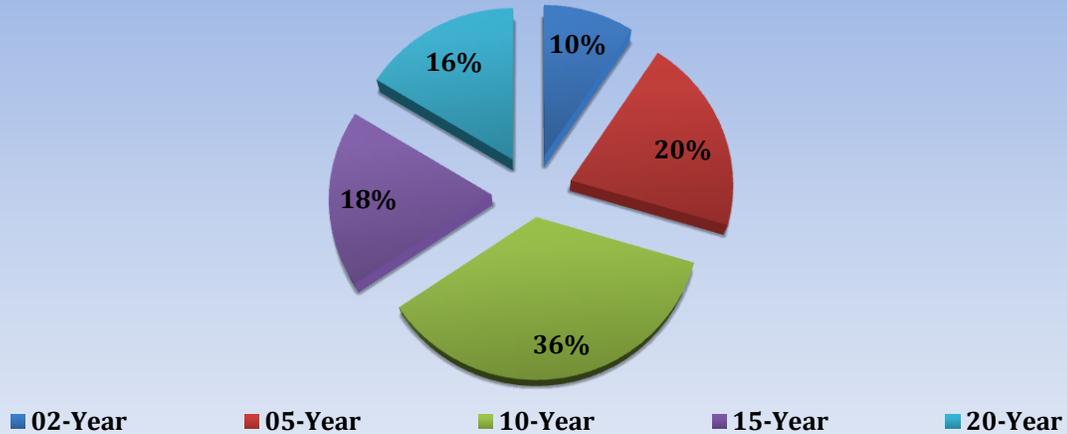


Chart-9: Composition of T-Bonds at the End of June 2019



3.1.2. Composition of T-Bills: Outstanding balance of 364-day T-bills holds the highest position due to more amounts being issued to meet the short-term financing requirement of the Government, followed by 91-day and 182-day T-bills in FY 2018-19.

Chart-10: Composition of T-Bills at the End of June 2017

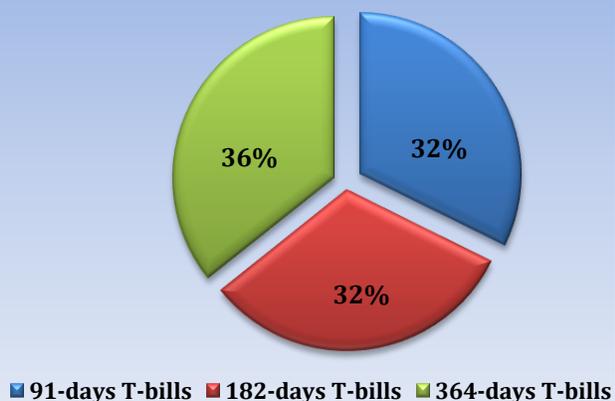


Chart-11: Composition of T-Bills at the End of June 2018

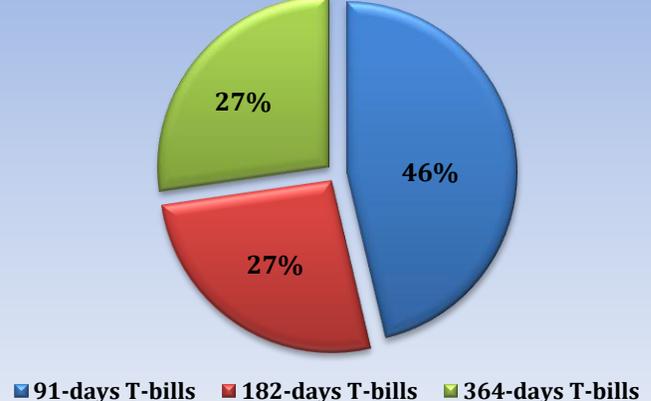
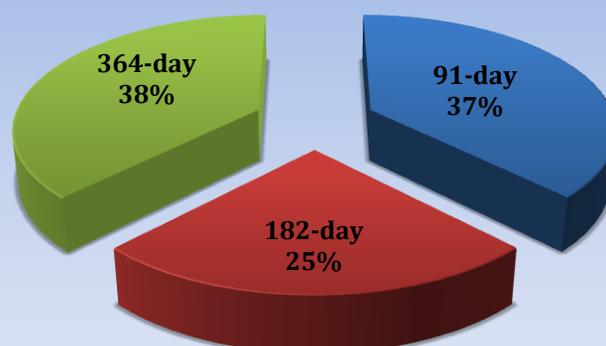


Chart-12: Composition of T-Bills at the End of June 2019



3.2. Maturity Pattern of Outstanding T-Bonds

The table below shows that at the end of June 2019, about 50.5% of outstanding stocks had residual maturities between 2 and 10 years. On the other hand, 48.46% of outstanding stocks had residual maturities of up to 5 years, which implies that over the next five years, on average, about 10% of outstanding stock needs to be rolled over every year. The moderate rollover risk is a conscious debt strategy of the Government. About 51.54% of the stocks had maturities above 5 years, which was a consequence of the robust demand from insurance companies and retirement funds for long-tenor bonds.

Table-6: Maturity Profile of Outstanding T-Bonds

(Taka in Crore)

Maturity Buckets	At end-June 2017		At end-June 2018		At end-June 2019	
	Amount	(% of Total)	Amount	(% of Total)	Amount	(% of Total)
Less than 1 Year	18,800.00	14	16,610.42	12	14,068.75	9.06
1-2 Years	14,910.42	12	13,768.75	10	25,250.00	16.2
2-5 Years	30,218.75	23	36,500.00	27	35,930.00	23.1
5-10 Years	35,576.25	28	35,726.25	26	42,634.45	27.4
10-15 Years	18,837.20	15	21,137.20	16	23,824.00	15.3
15-20 Years	10,780.00	8	11,680.00	9	13,580.00	8.75
Total	129,122.62	100	135,422.62	100	155,287.20	100

Source: DMD, BB

Chart-13: Maturity Profile at the End of June 2017

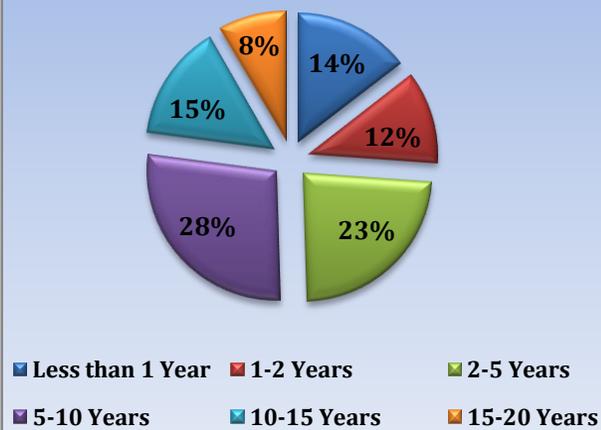


Chart-14: Maturity Profile at the End of June 2018



Chart-15: Maturity Profile at the End of June 2019



3.3. Holding Pattern of G-Sec

The holding pattern of government securities shows that banks were the major investors accounting for 70.38% of overall holding (PDs 41.64% and non-PDs 28.74%) in FY 2018-19. Long-term investors like insurance and provident funds accounted for 14.91% of total holding. Bangladesh Bank held about 14.18% of the outstanding G-Sec for its monetary operation purposes. Corporate bodies, investment companies, foreign investors, individuals, and the other investors held the remaining portion, which was insignificant compared to the portfolio held by the banks.

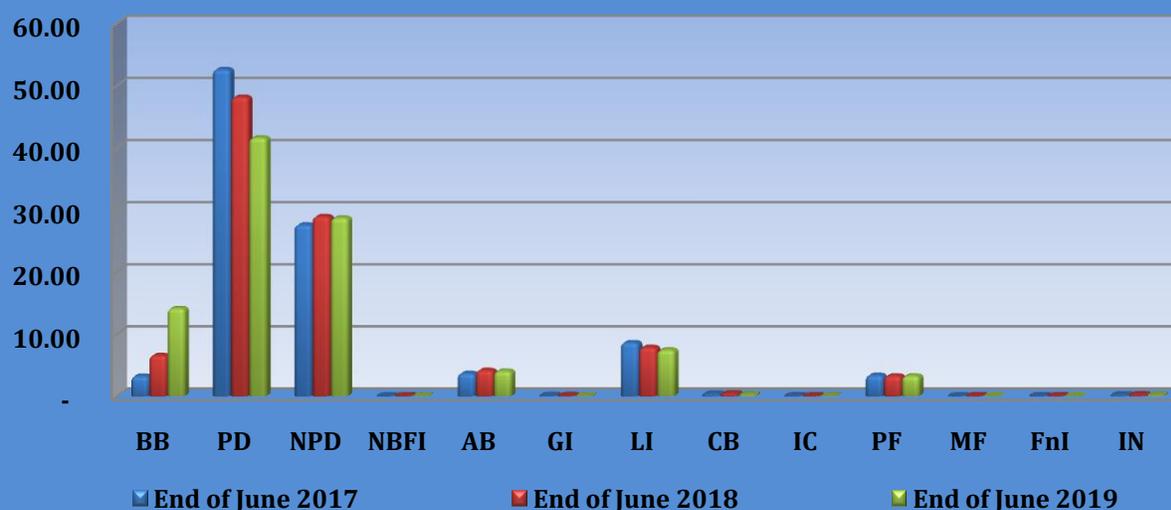
Table-7: Ownership Pattern of G-Sec

(Taka in crore)

Sl No.	Category	End of June 2017		End of June 2018		End of June 2019	
		Amount	(% of Total)	Amount	(% of Total)	Amount	(% of Total)
1.	Bangladesh Bank (BB)	5,031.14	3.27	10,682.93	6.60	28,256.70	14.18
2.	Primary Dealers (PD)	80,869.92	52.62	77,924.32	48.17	83,010.82	41.64
3.	Non-Primary Dealers (NPD)	42,407.06	27.60	46,835.11	28.95	57,292.95	28.74
4.	Non Bank Financial Institution (NBFI)	0.03	0.00	36.96	0.02	48.91	0.02
5.	Amanat Bima Trust Tahbil (AB)	5,694.31	3.71	6,804.23	4.21	8,115.58	4.07
6.	General Insurance Companies (GI)	136.22	0.09	107.13	0.07	109.50	0.05
7.	Life Insurance Companies (LI)	13,329.12	8.67	12,799.68	7.91	14,907.12	7.48
8.	Corporate Bodies (CB)	578.83	0.38	738.83	0.46	601.28	0.30
9.	Investment Companies (IC)	11.13	0.01	14.81	0.01	17.51	0.01
10.	Provident/Pension/Trust/Gratuity Fund (PF)	5,220.26	3.40	5,352.22	3.31	6,592.00	3.31
11.	Mutual Fund (MF)	6.00	0.00	33.28	0.02	6.00	0.00
12.	Foreign Investors (Fnl)	43.00	0.03	23.00	0.01	0.00	0.00
13.	Individual (IN)	346.36	0.23	415.06	0.26	405.28	0.20
Total		153,673.38	100	161,767.56	100	199,363.65	100

Source: DMD, BB.

Chart-16: Ownership Pattern of G-Sec



3.4. Non-Resident Investors (NRI)

Foreign investors started to invest in T-bonds from April 2013 and it gradually increased up till December 2014. Afterward, it gradually decreased due to the maturing of existing T-bonds followed by no new purchases by NRIs during the period. At the end of June 2018, net investment by foreign investors stood at BDT 23 crore, whereas, at the end of June 2019, there was no foreign investment in G-Sec. At the earlier period of the FY 2018-19, due to less issuance, the decreasing

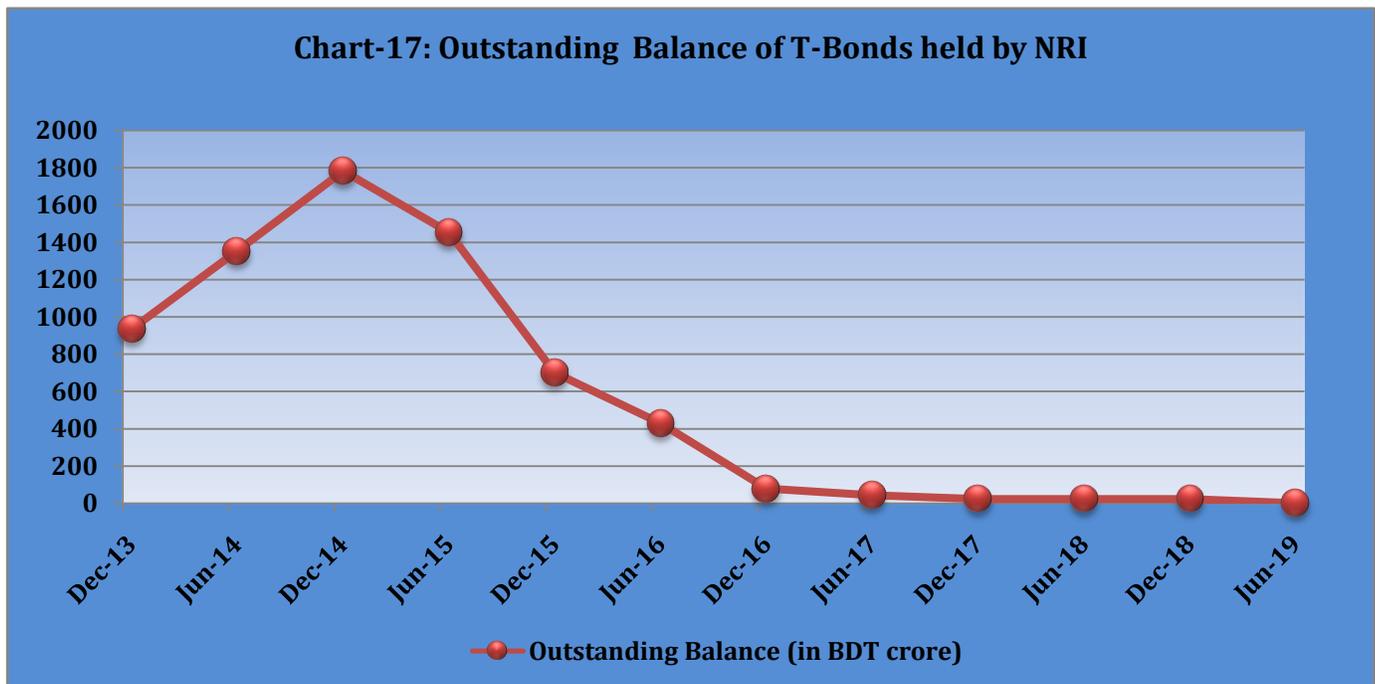
trend of G-sec interest rate and fluctuation in exchange rates, the G-Sec market failed to attract foreign investors.

Table-8: Outstanding Balance of T-Bonds held by Non-Resident Investors (NRI)

(Taka in Crore)		
SL No.	Month	Outstanding Balance
1	December 2013	934.24
2	June 2014	1,353.28
3	December 2014	1,781.94
4	June 2015	1,452.17
5	December 2015	700.37
6	June 2016	428.81
7	December 2016	78.41
8	June 2017	43.00
9	December 2017	23.00
10	June 2018	23.00
11	December 2018	23.00
12	June 2019	0.00

Source: DMD, BB.

Chart-17: Outstanding Balance of T-Bonds held by NRI



The curve illustrates that the outstanding T-bonds held by NRIs significantly increased from December 2013 to December 2014 and continued a decreasing trend over the years.

Chapter 4

Secondary Market of G-Sec

Over-the-Counter (OTC)

Trader Work Station (TWS)

Government Securities Order Matching Trading Platform (GSOM)

Secondary Market Yield Curve of G-Sec

Trading Pattern of G-Sec



Chapter 4

Secondary Market of G-Sec

G-Sec issued through auctions or private placements are eligible for secondary market operations. BB has introduced the automation process of trading and settlement of G-Sec transactions in October 2011. The secondary market of G-Sec in Bangladesh is comprised of Over-the-Counter (OTC) and Trader-Work-Station (TWS). Both mechanisms are integral parts of the Market Infrastructure (MI) module (an automated auction and trading platform for G-Sec).

4.1. Over-the-Counter (OTC)

In the OTC mechanism, trades occur by the negotiation between members outside of the trading platform (e.g. over the telephone). If the deal is confirmed through negotiation, it has to be reported in the system afterward for settlement. Either the buyer or seller member inputs the transaction details and is referred to as the 'instructing party'. The other member confirms/accepts the trade and is referred to as the 'confirming party'. Upon confirmation, the trade is taken up for settlement. Once they complete the trading process and the system accepts the trade, the data automatically flows to the Core Banking System (CBS) of BB for clearing and for the completion of the settlement of funds in CBS on a real-time basis. Afterward, the trading securities get automatically transferred to the buyer's securities account in the MI module.

4.2. Trader Work Station (TWS)

BB has introduced the TWS, an anonymous order-matching system, which is an electronic, screen-based, order-driven trading system for dealing in G-Sec. It provides users access to trade in the secondary market on a real-time basis. Order management and matching are the core components of the trading solution. The matching engine of the trading solution provides the algorithms that enable the members to trade instantaneously. Further, TWS has brought transparency in secondary market transactions in government securities. Members (PDs and Non-PDs) can place a bid (buy orders) and offer (sell orders) directly on the TWS screen. In that system, trades are automatically sent to the CBS for fund settlement. Other investors (individuals and institutions, insurance companies, bodies corporate, authorities responsible for the management of provident funds, pension funds, etc) can buy-sell government securities through Banks and NBFIs working in Bangladesh.

4.3. Government Securities Order Matching Trading Platform (GSOM)

Bangladesh Bank has introduced a web-based platform to make buy and sell orders of government securities visible through GSOM in August 2016. This web-based terminal (<https://gsom.bb.org.bd>) makes visible the entire submitting bids and asks price/yield including securities details on a real-time basis. Resident individuals and institutions such as banks, non-bank financial institutions, insurance companies, bodies corporate, authorities responsible for the management of provident funds, pension funds, etc. as well as foreigners/non-resident individuals/institutions can watch and search the order information from GSOM. They are not authorized to change or modify the information directly in GSOM. Only Member Dealers are eligible to change or modify or cancel the order information through TWS.

A specimen of GSOM platform is depicted below:

SL.	ISIN	Maturity	Re-Mat	Bid Amt (Cr.)	Bid Yield	Bid Price	Offer Price	Offer Yield	Offer Amt (Cr.)	LTP	LTY	LTA	TTA	Trades	Type
1.	BD0920011105	07-JUL-20	0.73	10.00	8.79	100.0000	-	-	-	-	-	-	-	-	BGTB
2.	BD0920051101	04-AUG-20	0.81	25.00	8.82	100.0000	-	-	-	-	-	-	-	-	BGTB
3.	BD0927191157	21-NOV-27	8.10	-	-	-	116.0659	9.15	0.01	-	-	-	-	-	BGTB
4.	BD0928481201	25-JUN-28	8.70	-	-	-	151.4255	6.51	0.14	-	-	-	-	-	BGTB
5.	BD0933281208	23-JAN-33	13.28	-	-	-	122.7571	9.35	0.12	-	-	-	-	-	BGTB
6.	BD0936411208	17-AUG-20	0.84	20.00	8.40	93.3008	-	-	-	-	-	-	-	-	TBIL
Total :				55.00					0.27						

4.4. Secondary Market Yield Curve of G-Sec

A secondary market yield curve of the Bangladesh Government Treasury Bonds (BGTB) has been developed on the basis of previous one-month secondary market traded data. At the initial stage, all the traded data of T-bonds in the secondary market (both OTC and TWS) and the cut-off rate of the re-issuance bonds are being considered to construct the curve. Interpolation and extrapolation methods are used to derive the yield of a particular maturity. The yield curves are presented with compare from zero to twenty years on one year's interval. At present, it is showing in a web-based terminal (<https://gsom.bb.org.bd>) on a test basis.

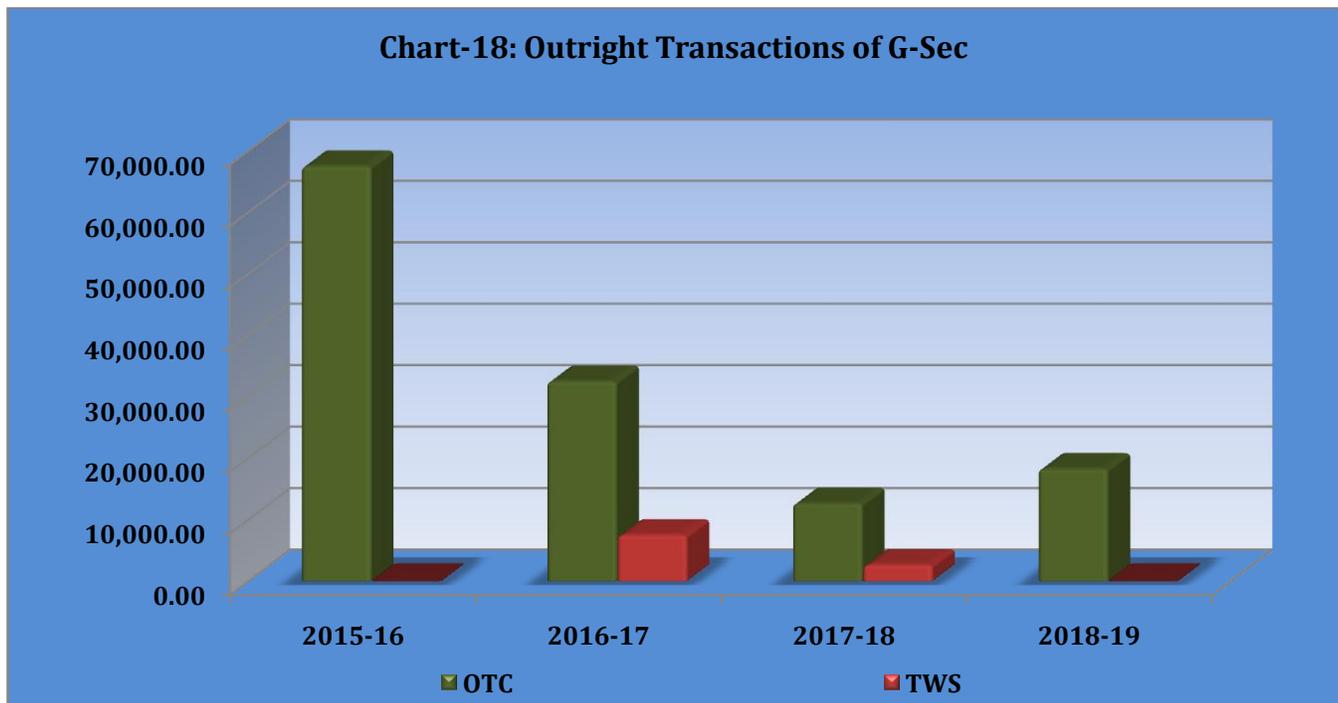
4.5. Trading Pattern of G-Sec

4.5.1. Outright Transactions: The total volume of government securities transacted on an outright basis during the FY 2018-19 stood at BDT 18,309.82 crore, which was considerably higher (by BDT 2,975.42 crore) comparing to the preceding financial year. The increase in volume was largely due to the increased issuance of government securities in the auction. In FY 2018-19, the transaction volume of Treasury securities increased by 19.40% compared with that of FY 2017-18. On the other hand, TWS trading of Treasury securities decreased in FY 2018-19 compared to that of the previous financial year.

Table-9: Outright Transactions of G-Sec

Table-9: Outright Transactions of G-Sec							
							(Taka in Crore)
Period	OTC			TWS			Grand Total
	T-Bonds	T-Bills	Total	T-Bonds	T-Bills	Total	
2015-16	59,499.98	8,012.98	67,512.96	0.06	-	0.06	67,513.02
2016-17	25,469.64	7,059.24	32,528.88	6,791.52	738.00	7,529.52	40,058.40
2017-18	12,370.16	297.24	12,667.40	2,667.00	-	2,667.00	15,334.40
2018-19	12,797.36	5,491.92	18,289.28	20.54	-	20.54	18,309.82

Source: DMD, BB.



4.5.2. Inter-Bank Repo Transactions: The interbank Repo rate, one of the most significant components of the money market, represents the money market rate as it is determined by the demand and supply of funds in the financial sector. Overall interbank repo transactions, which amounted to BDT 273,547.50 crore in FY 2018-19, showed 88.83% increased from FY 2017-18.

Table-10: Yearly IB Repo Transactions in G-Sec

(Taka in Crore)

Period	Inter-Bank Repo Transaction Volume		Inter-Bank Repo Rate	
	Amount	Change (In %)	Yearly WAR of IB Repo Rate	Change (In %)
2014-15	7,21,188.89	104.56	7.19	4.35
2015-16	4,08,160.39	-43.40	3.66	-49.10
2016-17	1,90,605.22	-53.30	3.20	-12.57
2017-18	1,44,862.09	-24.00	3.97	24.06
2018-19	2,73,547.50	88.83	4.68	17.88

Source: DMD, BB.

The weighted-average interbank repo rate increased by 71 basis points from FY 2017-18 to FY 2018-19 indicating a mild liquidity pressure in the market, especially during the festive periods. The increasing trend in the interbank repo is consistent with the trend in the issuance of government treasury securities. Since interbank repo transactions are collateral-based and government securities comprise the bulk of those collaterals, an adequate supply of government securities is required for the smooth functioning of this market.

Chart-19: Transaction Volume of Inter-Bank Repo

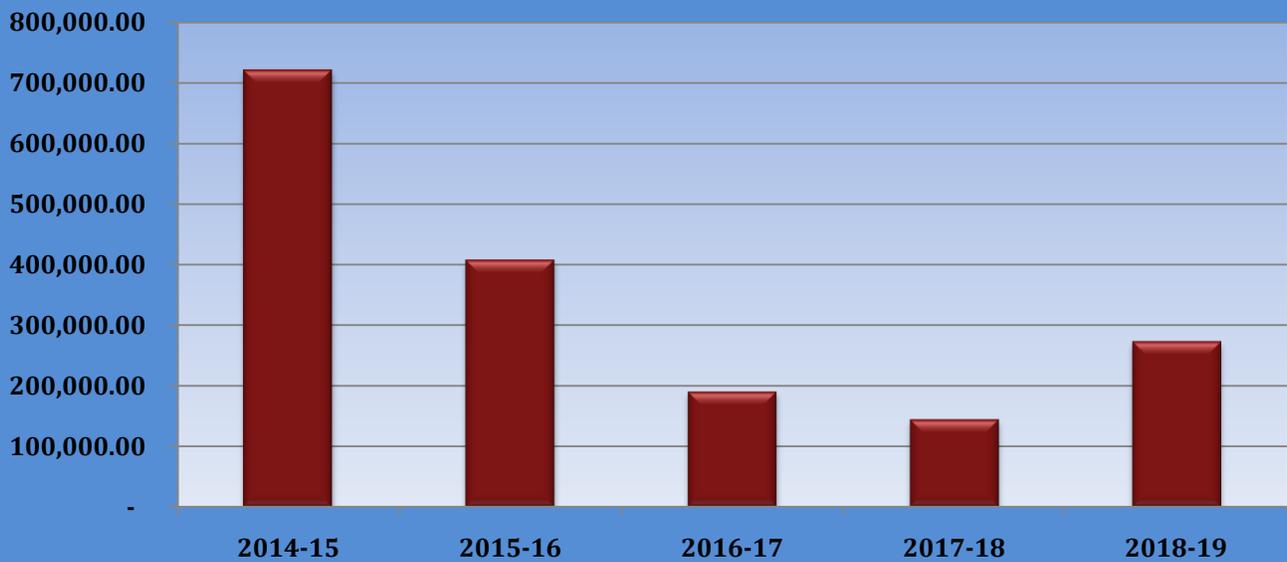


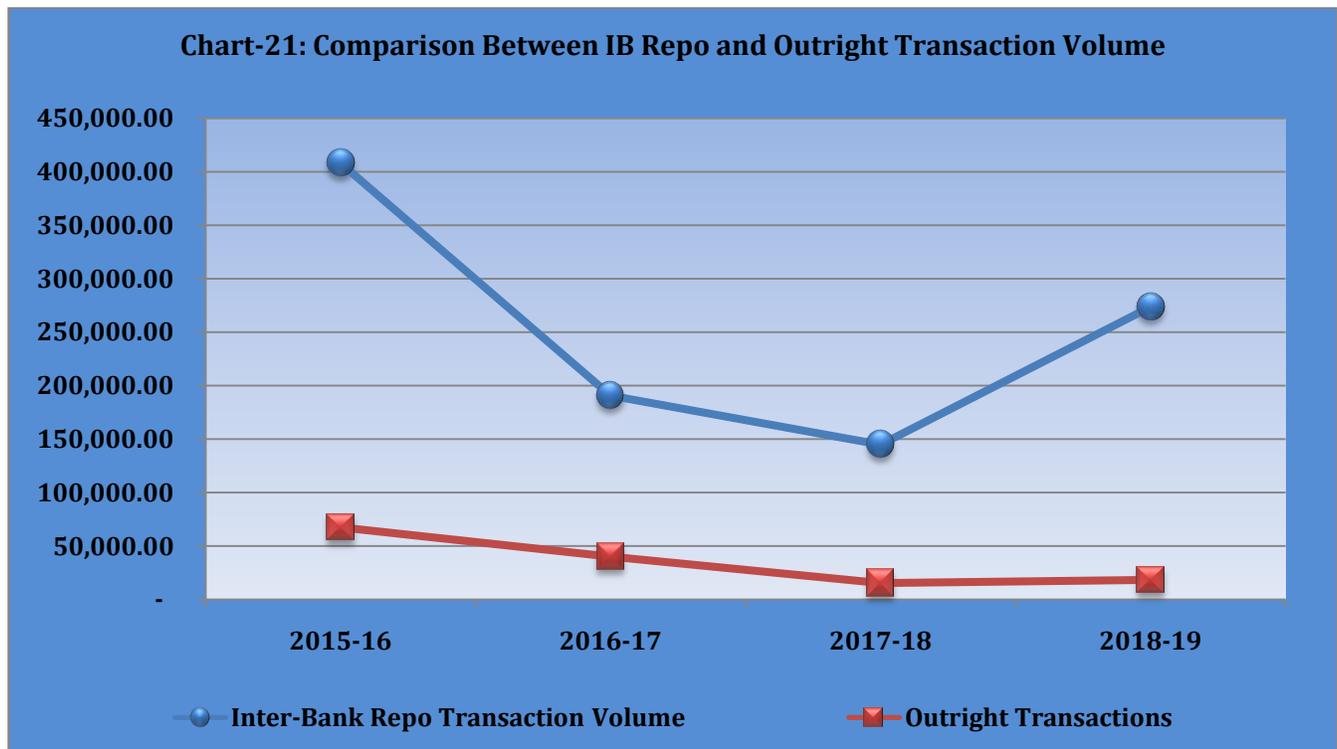
Chart-20: Weighted Average Rate of Inter-Bank Repo



Table-11: Comparison Between IB Repo and Outright Transaction Volume of G-Sec

(Taka in Crore)

Period	Inter-Bank Repo Transaction	Outright Transactions
2015-16	408,160.39	67,513.02
2016-17	190,605.22	40,058.40
2017-18	144,862.09	15,334.40
2018-19	273,547.50	18,309.82



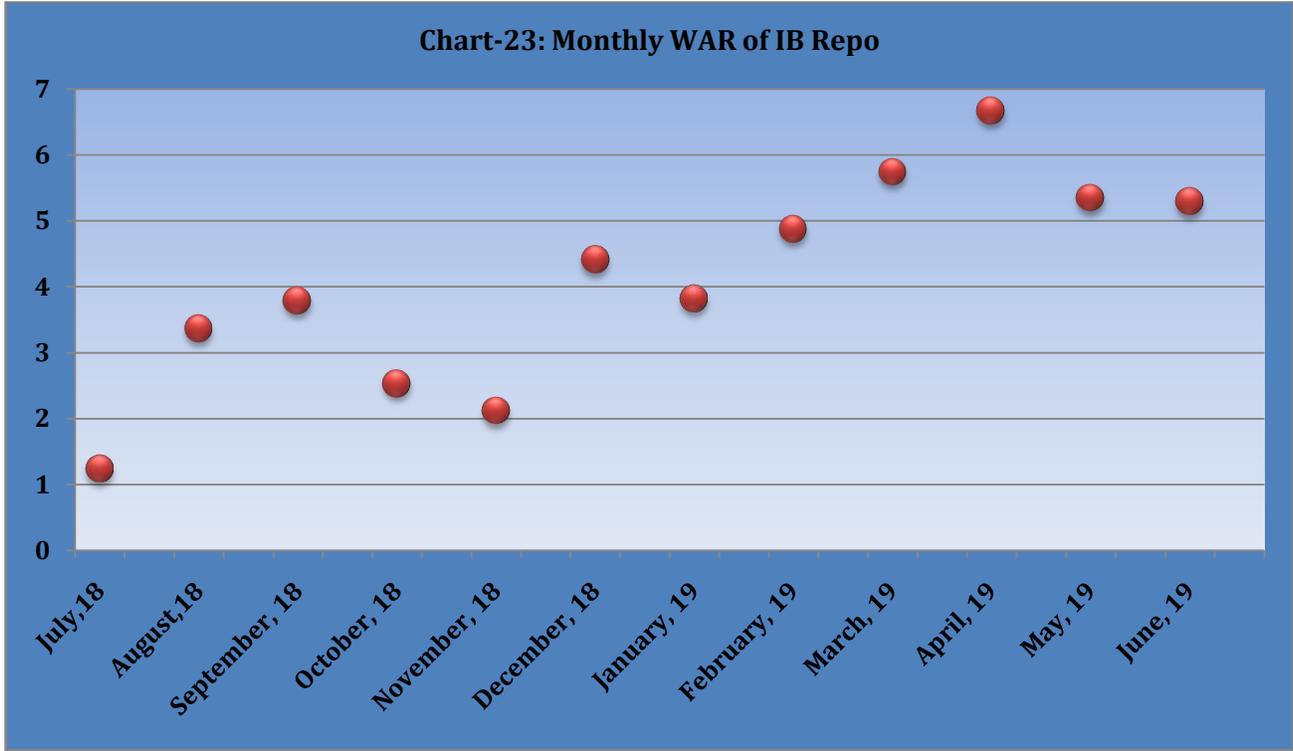
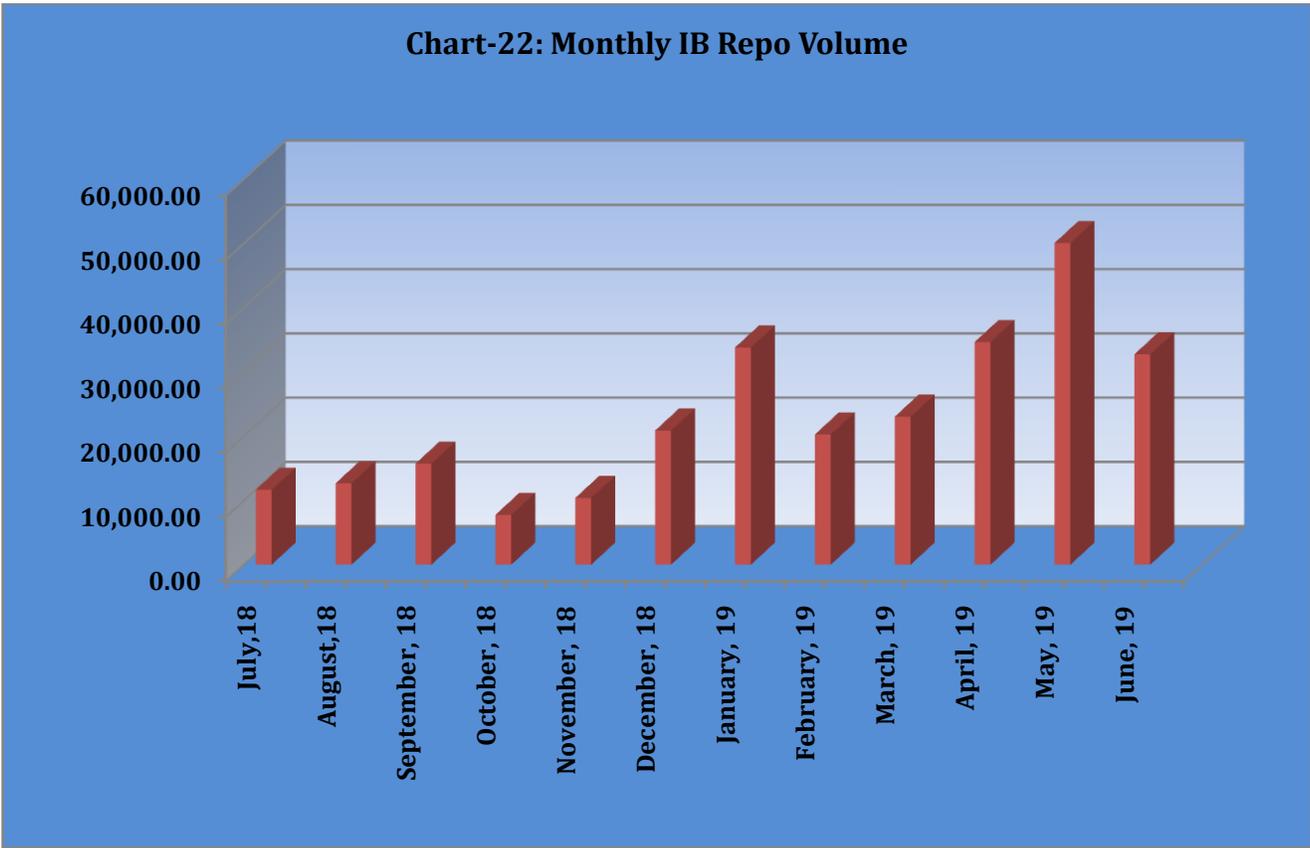
An active call money market, where uncollateralized transactions take place, plays a significant role in liquidity management of the financial system in Bangladesh. The interbank repo rate demonstrated an upward trend from July 2018 to June 2019 on monthly basis reaching about 5.28% in June 2019 from 1.23% in July 2018.

Table-12: Monthly IB Repo Transaction Volume of G-Sec in FY 2018-19

(Taka in Crore)

Month	Monthly IB Repo Transaction Volume	Monthly WAR of IB Repo (%)
July,18	11,651.05	1.23
August,18	12,665.63	3.36
September, 18	15,727.47	3.78
October, 18	7,745.87	2.53
November, 18	10,374.36	2.11
December, 18	20,873.85	4.41
January, 19	33,793.81	3.81
February, 19	20,258.54	4.87
March, 19	23,034.70	5.74
April, 19	34,639.09	6.66
May, 19	50,055.56	5.34
June, 19	32,727.55	5.28

Source: DMD, BB.



4.5.3. Top 10 Traded Securities: The top ten traded securities accounted for 52.63% of total volume in FY 2018-19, compared to 67.07% in the previous financial year. 10-year T-bonds were traded the most.

The list of top 10 traded securities for the FY 2018-19 and the previous financial years are presented in the table below:

Table-13: Top 10 Traded Securities							
(Taka in Crore)							
SL. No.	ISIN	Tenor	Turnover (FY 2017-18)	SL. No.	ISIN	Tenor	Turnover (FY 2018-19)
1	BD0919231029	02-Year	1,866.80	1	BD0938141209	20-Year	1,740.00
2	BD0922241056	05-Year	962.60	2	BD0928331109	10-Year	1,360.00
3	BD0923031100	10-Year	670.86	3	BD0928131103	10-Year	1,158.00
4	BD0922461100	10-Year	604.82	4	BD0909101182	91-Day	1,000.00
5	BD0924031109	10-Year	556.26	5	BD0921011054	05-Year	900.00
6	BD0923191102	10-Year	554.48	6	BD0920011022	02-Year	866.00
7	BD0924351101	10-Year	451.90	7	BD0918238181	182-Day	752.00
8	BD0925381107	10-Year	390.00	8	BD0936433202	364-Day	700.00
9	BD0927251100	10-Year	380.42	9	BD0923021051	05-Year	700.00
10	BD0923261103	10-Year	366.66	10	BD0936437195	364-Day	460.00

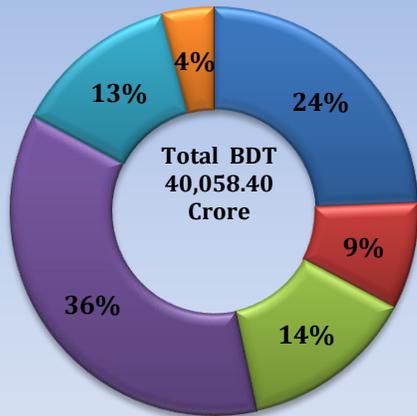
Source: DMD, BB.

4.5.4. Maturity Pattern of Outright Transactions: The maturity distribution of T-bond transactions is illustrated in the table and chart below. In the FY 2018-19, securities in the less than 1-year bracket accounted for the highest share of trading with 29.99% followed by the 5-10 years bracket with 29.61%. Securities with maturities between 10 and 15 years accounted for the lowest share with 5.87% in the FY 2018-19.

Table-14: Maturity Pattern of Outright Transactions			
(Taka in Crore)			
Maturity Bucket	FY 2016-17	FY 2017-18	FY 2018-19
Less than 1 Year	9,771.76	1,959.08	5,491.92
1-2 Years	3,369.98	1,482.68	1,182.60
2-5 Years	5,537.58	3,890.06	2,730.20
5-10 Years	14,462.88	5,400.32	5,422.26
10-15 Years	5,267.86	842.32	1,075.42
15-20 Years	1,648.34	1,759.94	2,407.42
Total	40,058.40	15,334.40	18,309.82

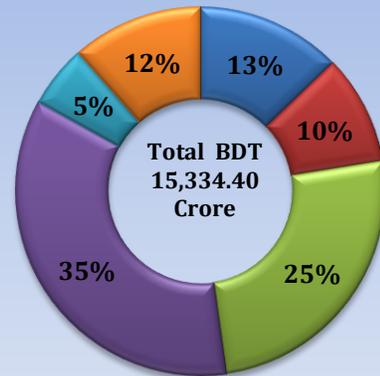
Source: DMD, BB

Chart-24: Maturity Pattern of Outright Transactions FY 2016-17



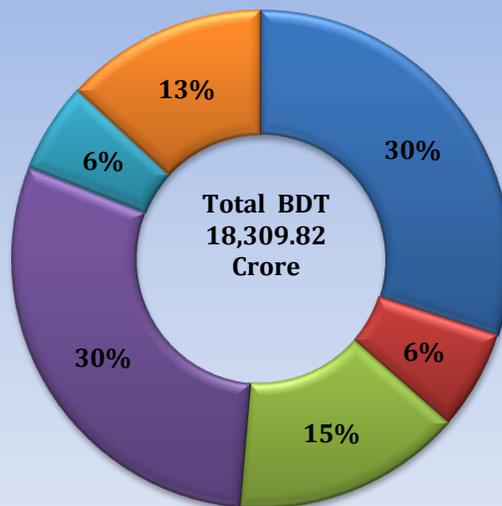
■ Less than 1 Year ■ 1-2 Years
■ 2-5 Years ■ 5-10 Years
■ 10-15 Years ■ 15-20 Years

Chart-25: Maturity Pattern of Outright Transactions in FY 2017-18



■ Less than 1 Year ■ 1-2 Years
■ 2-5 Years ■ 5-10 Years
■ 10-15 Years ■ 15-20 Years

Chart-26: Maturity Pattern of Outright Transactions in FY 2018-19



■ Less than 1 Year ■ 1-2 Years ■ 2-5 Years ■ 5-10 Years ■ 10-15 Years ■ 15-20 Years

4.5.5. Category-wise Buying and Selling: Trading activity of the major investor categories reveals that PD banks are the dominant trading institutions accounting for around 50.88% of selling and 45.95% of buying activity in FY 2018-19. Private sector local banks with about 38.77% of the total trade volume stand next, followed by foreign banks of about 12.39%. During FY 2018-19, PDs and local banks were net sellers whereas foreign banks were net buyers.

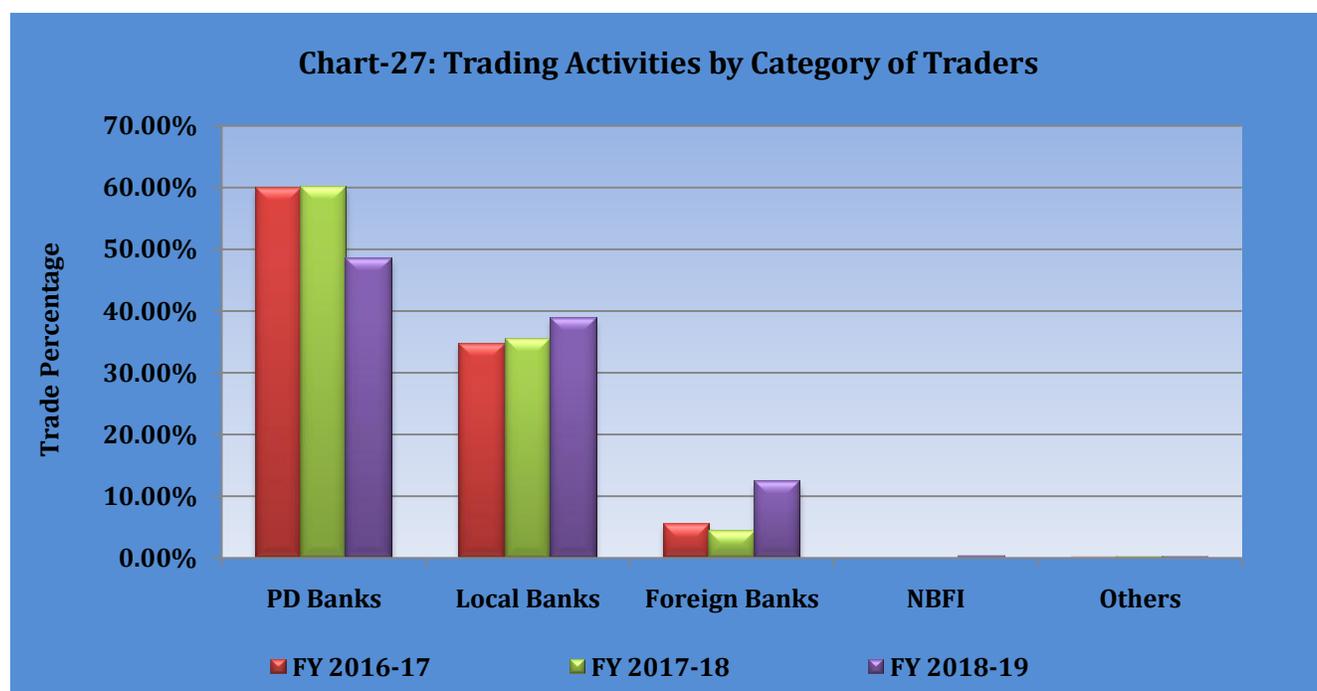
Yearly change in the share of various categories/participants in the secondary market trading activity (buy and sell) of G-Sec is shown in the table and chart below:

Table-15: Category-wise Buying and Selling (% of Total Trade)

Category	FY 2016-2017		FY 2017-2018		FY 2018-2019	
	Buy (%)	Sell (%)	Buy (%)	Sell (%)	Buy (%)	Sell (%)
PD Banks	57.44	62.35	55.11	66.45	45.95	50.88
Local Banks	32.67	36.73	37.58	31.94	33.68	43.86
Foreign Banks	9.77	0.91	7.12	1.34	20.00	4.78
NBFI	0.00	0.00	0.00	0.00	0.00	0.48
Others	0.12	0.01	0.18	0.27	0.37	0.00
Total	100	100	100	100	100	100

Source: DMD, BB.

Chart-27: Trading Activities by Category of Traders



4.5.6. Top 10 Member Traders: In FY 2018-19, the top 10 member traders accounted for 67.06% of total trade volume compared to 79.05% in the previous FY. This decrease essentially is a sign of less trading concentration among the member traders. Janata Bank Limited secured the highest position (11.91%) among all traders, followed by Jamuna Bank Limited (9.86%) and BRAC Bank Limited (8.87%) in the FY 2018-19. The trading patterns by member traders show that the top positions attained by the banks changed in FY 2018-19 compared to the preceding two FYs.

The list of top 10 member traders for the FY 2018-19 and the previous FYs are illustrated in the table below:

Table-16: Top 10 Member Traders

SL. No.	Bank Name	% of Total Trade (FY 2016-17)	Bank Name	% of Total Trade (FY 2017-18)	Bank Name	% of Total Trade (FY 2018-19)
1	BRAC Bank	11.79	BRAC Bank	14.73	Janata Bank	11.91
2	AB Bank	8.73	AB Bank	13.67	Jamuna Bank	9.86
3	National Bank	6.50	National Bank	13.04	BRAC Bank	8.67
4	Midland Bank	6.48	Midland Bank	8.84	Southeast Bank	7.61
5	Prime Bank	5.52	The City Bank	7.26	City Bank	6.53
6	The City Bank	5.49	Jamuna Bank	6.66	SCB	4.71
7	Janata Bank	5.47	Eastern Bank	5.84	Bank Asia	4.61
8	Jamuna Bank	5.37	Sonali Bank	3.59	Eastern Bank	4.57
9	SCB	3.80	SCB	3.37	National Bank	4.40
10	NRBC Bank	3.50	Modhumoti Bank	3.34	Sonali Bank	4.19

Source: DMD, BB.

Chart-28: Top Ten Member Traders of 2018-19



Chapter 5

Monetary Policy Tools: Open Market Operations (OMO)

Central Bank Repo and ALS Transactions

Reverse Repo and Bangladesh Bank Bills

Comparative Scenario of Open Market Operations



Chapter 5

Monetary Policy Tools: Open Market Operations (OMO)

Monetary Policy refers to systematic actions taken by a central bank affecting money supply, interest rates, and exchange rate, in order to influence inflation. Price stability is the primal goal of monetary policy to achieve high output growth and low unemployment. To achieve price stability & interest rate stability, the stability of financial markets and foreign exchange markets are essential for monetary policy.

Open market operations (OMO) refer to Central Banks' activities in the secondary market of G-Sec. Central Bank buys and sells govt. securities as a means to implement monetary policy. OMO help to control liquidity in the money market using eligible securities without liquidation and smooth the temporary and unexpected disturbances in the supply and demand for money. BB usually uses some OMO tools like Central Bank Repo, Reverse Repo, and Bangladesh Bank Bills to control the money supply to maintain price stability.

5.1. Central Bank Repo and ALS Transactions

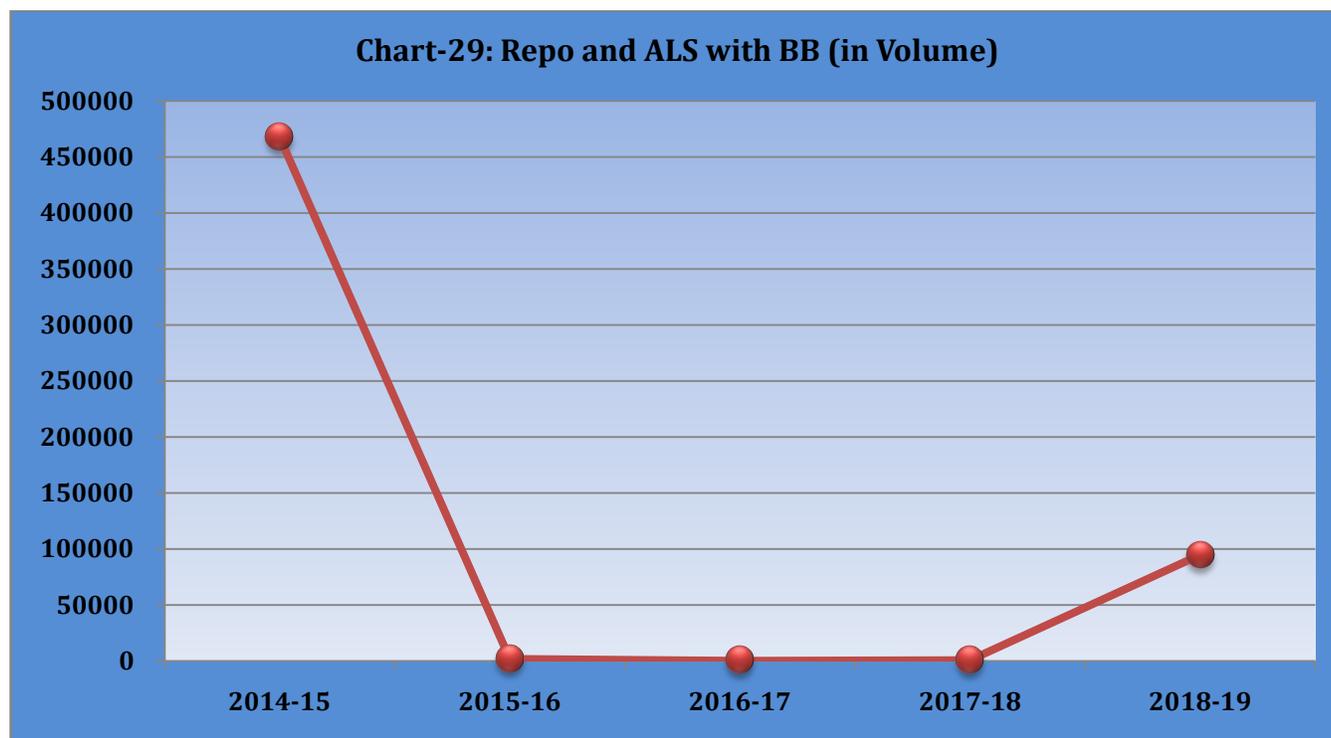
CB Repo facilities are provided on an overnight (one-day) or 7, 14 and 28-day basis to the banks and NBFIs to resolve the temporary liquidity problem as well as to increase the money supply in the economy. BB also provides ALS facilities to the PDs against G-Sec received from the auction up to 60 days from the date of issuance for the same purpose. Furthermore, BB provides a special liquidity facility under the Special Repo for special purposes. Assured Liquidity Support (ALS) and Repo transaction with BB exhibited a decreasing trend since FY 2014-15 till 2017-18 showing sufficient liquidity in the market. The financial system did not seem to face any abrupt liquidity pressure as BB's repo facility was used only occasionally. A small number of bank and financial institutions availed liquidity support facility (LSF) irregularly indicating adequate liquidity in the financial system throughout the period. Importantly, banks and NBFIs managed their liquidity from call money and interbank repo market instead of the repo with BB. It indicates that the market forces are determining the majority of the transactions while the market is becoming more efficient. In contrast, during FY 2018-19, this trend reversed as the overall transaction volume increased indicating a mild liquidity pressure occurring in the market especially during the festive periods.

Table-17: Repo and ALS Transaction Volume

(Taka in Crore)

Period	Repo & ALS with BB
2014-15	467,743.74
2015-16	1,762.24
2016-17	115.67
2017-18	572.86
2018-19	94,587.62

Source: DMD, BB



The drastic fall of Repo and Assured Liquidity Support (ALS) transaction with BB from FY 2015-16 to FY 2017-18 implies adequate liquidity in the financial system throughout the period. Banks & NBFIs didn't require taking recourse to the central bank as they have sufficient liquidity to continue their business operations during those periods. In the FY 2018-19, Repo and ALS transactions increased slightly and the total was during this FY was 94,587.62 crore.

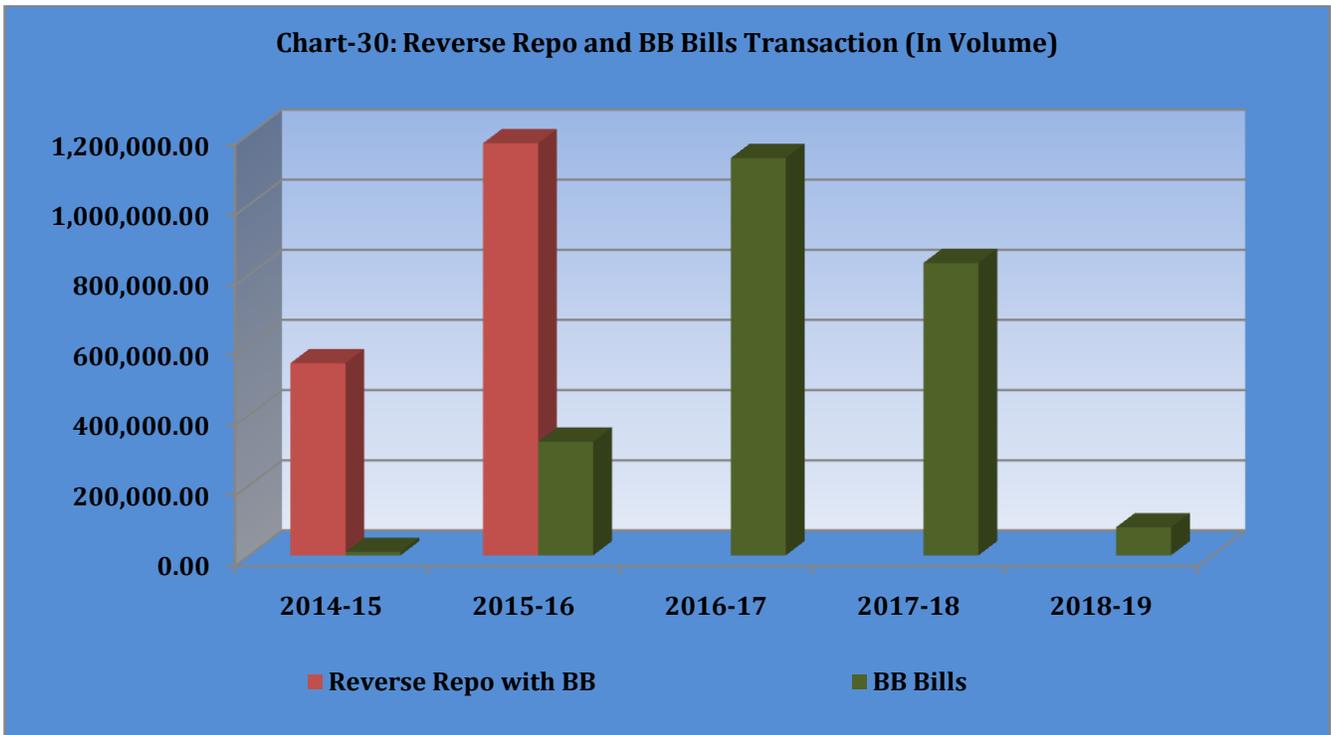
5.2. Reverse Repo and Bangladesh Bank Bills

BB uses reverse repo operations as a monetary policy instrument, which is used to control the money supply in the economy and it is provided overnight (one-day) basis. The investment of banks in the reverse repo increased and stood at 1,174,795.52 in FY 2015-16. On the other hand, the BB issued BB bills worth for sterilization purposes as well as to manage liquidity in the banking system to keep reserve money growth in line with the program level. BB bills with different maturities such as 07, 14 and 30-day respectively were issued for this purpose.

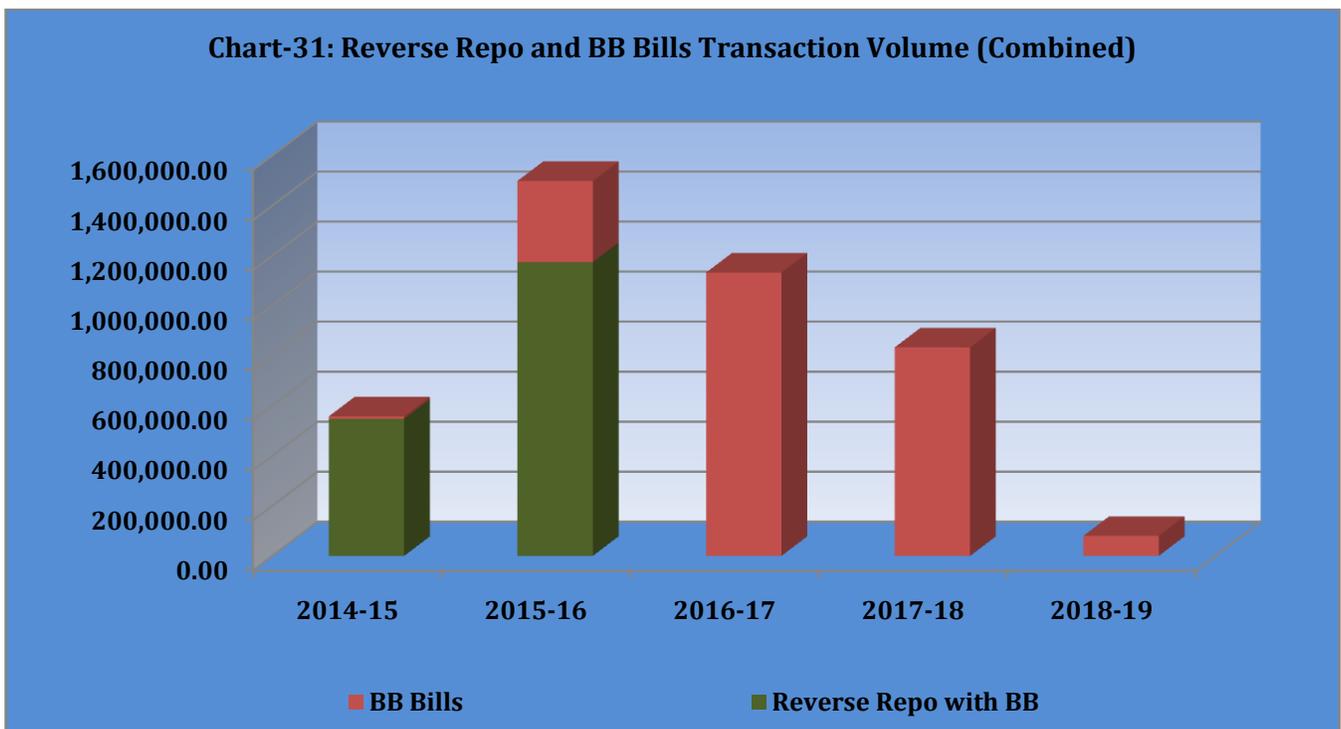
Table-18: Reverse Repo and BB Bills Transaction Volume

(Taka in Crore)			
Period	Reverse Repo with BB	BB Bills	Total
2014-15	547,761.50	9,718.80	557,480.30
2015-16	1,174,795.52	324,062.90	1,498,858.42
2016-17	-	1,132,530.90	1,132,530.90
2017-18	-	833,633.20	833,633.20
2018-19	-	79,883.00	79,883.00

Source: DMD, BB.



The combined scenario of the reverse repo and BB bills over the years is illustrated below:



5.3. Comparative Scenario of Open Market Operations

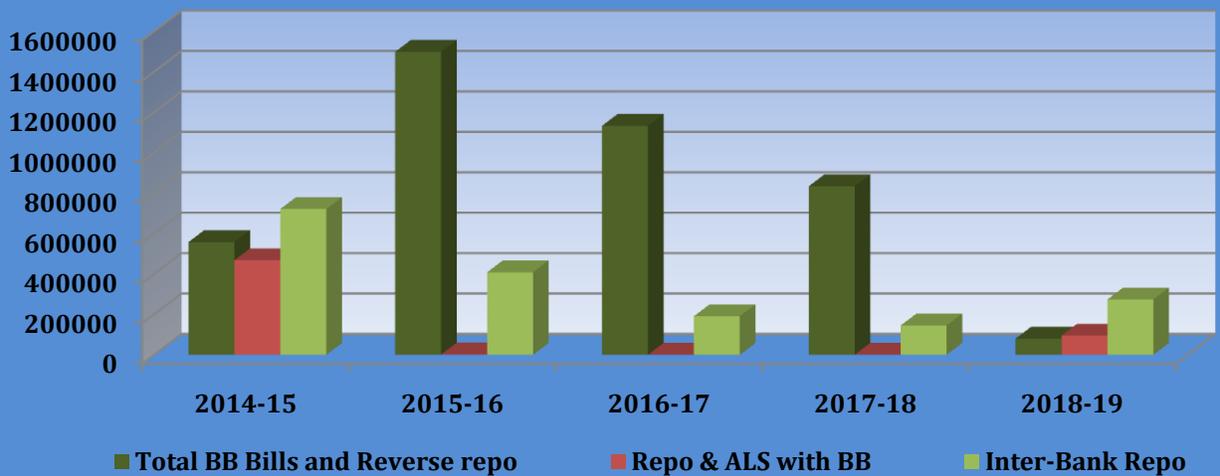
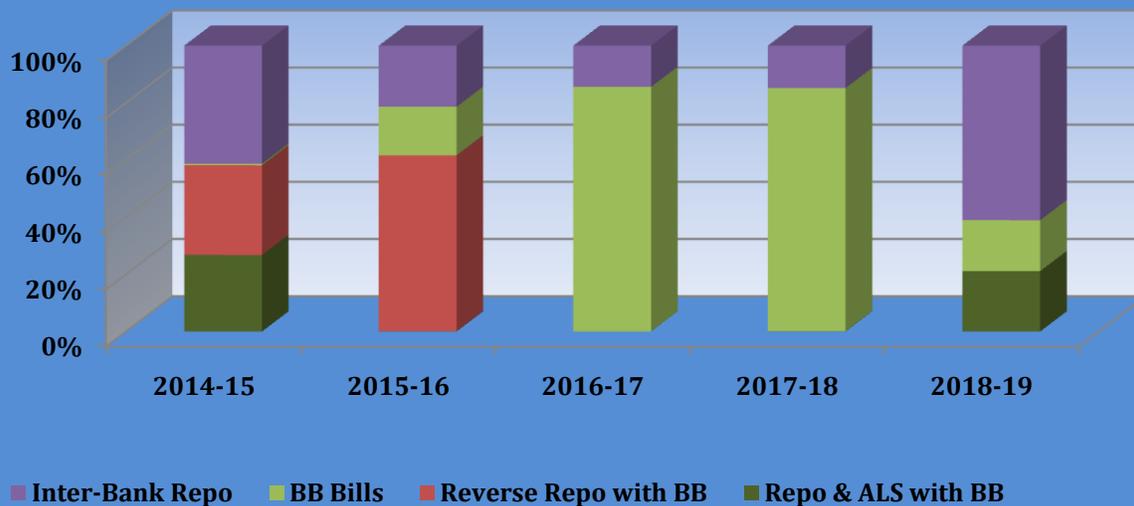
BB Bills, a substitute tool of Reverse repo is using frequently by the BB to control the money supply in the economy. The use of BB Bills increased from FY 2014-15 to FY 2016-17 and declined afterward. During FY 2018-19, the total issuance of the BB bill was 79,883.00 crore.

Table-19: Securities Used in Open Market Operations

(Taka in Crore)

Period	Repo & ALS with BB	Reverse Repo with BB and BB Bills			Inter-Bank Repo
		Reverse Repo with BB	BB Bills	Total	
2014-15	467,743.74	547,761.50	9,718.80	557,480.30	721,188.89
2015-16	1,762.24	1,174,795.52	324,062.90	1,498,858.42	408,160.39
2016-17	115.67	-	1,132,530.90	1,132,530.90	190,605.22
2017-18	572.86	-	833,633.20	833,633.20	144,862.09
2018-19	94,587.62	-	79,883.00	79,883.00	273,547.50

Source: DMD, BB.

Chart-32: Repo and ALS, Reverse Repo and BB Bills, IB Repo Composition

Chart-33: Securities Used in Open Market Operations


Chapter 6

Market Analysis

6.1. Money Market

The money market in Bangladesh experienced a slight increase in the liquidity pressure during the FY 2018-19 as there was a shift in the trend in the interbank repo and call money market. BB decreased the repo rate in 2013, 2016 and 2018 with a view to increasing the liquidity in the market. The call money market plays a significant role in day-to-day liquidity management of the money market in Bangladesh. The call money rate, unlike the interbank repo rate, includes a risk premium for being an unsecured type of instrument. The state-owned commercial banks (SCBs) were the top lenders in the call money market while PCBs and NBFIs remained top borrowers.

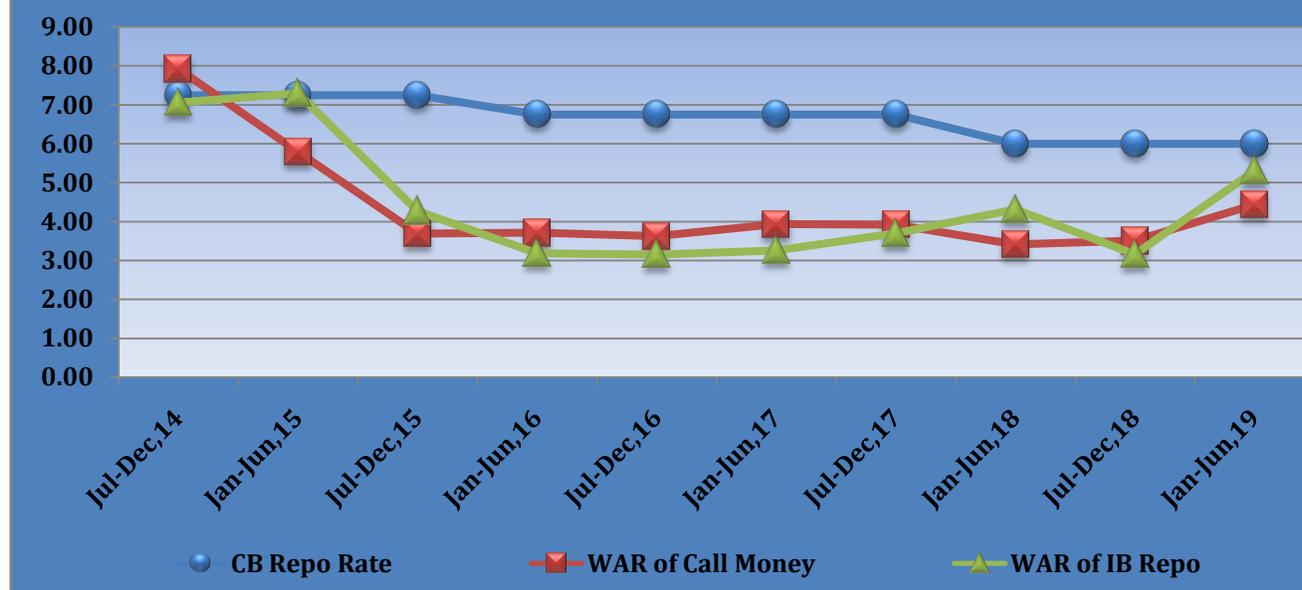
Table-20: Comparative Money Market Interest Rate (CB Repo, Call Money, and IB Repo)

(In percentage)			
Period	CB Repo Rate	WAR of IB Repo	WAR of Call Money
Jul-Dec,13*	7.25	7.28	7.11
Jan-Jun,14	7.25	6.51	6.25
Jul-Dec,14	7.25	7.06	7.93
Jan-Jun,15	7.25	7.30	5.79
Jul-Dec,15	7.25	4.27	3.69
Jan-Jun,16**	6.75	3.18	3.71
Jul-Dec,16	6.75	3.15	3.62
Jan-Jun,17	6.75	3.26	3.93
Jul-Dec,17	6.75	3.70	3.92
Jan-Jun,18***	6.00	4.31	3.41
Jul-Dec,18	6.00	3.16	3.51
Jan-Jun,19	6.00	5.30	4.43

Source: DMD, BB

*MPD circular No-01, Date 31 January 2013,
 ** MPD circular No-01, Date 14 January 2016,
 *** MPD circular No-02, Date 03 April 2018.

**Chart-34: Comparative Money Market Interest Rate
(CB Repo, Call Money and IB Repo)**



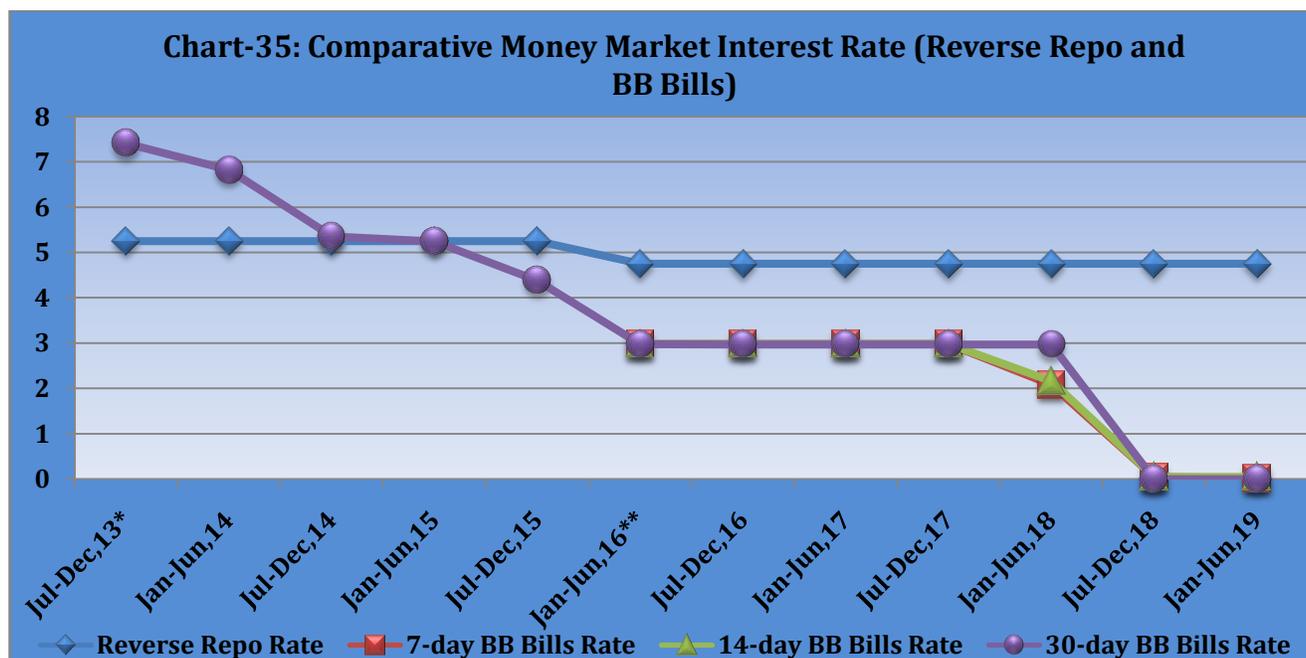
The reverse repo auction remained suspended since December 2015. In contrast, 7-day and 14-day BB bills were issued throughout the FY 2018-19 with a view to achieving BB's monetary policy targets. BB issued BB bills for sterilization purposes as well as to manage liquidity in the banking system to keep reserve money growth in line with the program level. BB decreased the reverse repo rate in January 2016 in accordance with the adjustment with the market that remained the same throughout the FY 2018-19 too.

Table-21: Comparative Money Market Interest Rate (Reverse Repo and BB Bills)

(in percentage)				
Period	Reverse Repo Rate	7-day BB Bills Rate	14-day BB Bills Rate	30-day BB Bills Rate
Jul-Dec,13*	5.25	-	-	7.41
Jan-Jun,14	5.25	-	-	6.83
Jul-Dec,14	5.25	-	-	5.36
Jan-Jun,15	5.25	-	-	5.25
Jul-Dec,15	5.25	-	-	4.38
Jan-Jun,16**	4.75	2.98	2.98	2.98
Jul-Dec,16	4.75	2.98	2.98	2.97
Jan-Jun,17	4.75	2.98	2.98	2.97
Jul-Dec,17	4.75	2.98	2.98	2.97
Jan-Jun,18	4.75	2.08	2.16	2.97
Jul-Dec,18	4.75	0.05	0.05	-
Jan-Jun,19	4.75	0.02	0.05	-

Source: DMD, BB.

*MPD circular No-01, Date 31 January, 2013,
** MPD circular No-01, Date 14 January, 2016



6.2. Capital Market

6.2.1. Equity Market

The issuance and trading of equity instruments in Bangladesh are regulated by the Bangladesh Securities and Exchange Commission (BSEC). The issuance of equity securities are governed by the Securities and Exchange Commission (Issue of Capital) Rules, 2001, Bangladesh Securities and Exchange Commission (Public Issue) Rules, 2015, Securities and Exchange Commission (Rights Issue) Rules, 2006, and other relevant regulations. BSEC has the overall responsibility to formulate securities legislation and to regulate the market accordingly. BSEC governs the Dhaka Stock Exchange (DSE) and the Chittagong Stock Exchange (CSE). At present, DSE has 195 registered trading members/brokers and CSE has 124 registered brokers. The overview of the Initial Public Offering (IPO) of the equity instruments in Bangladesh is illustrated below:

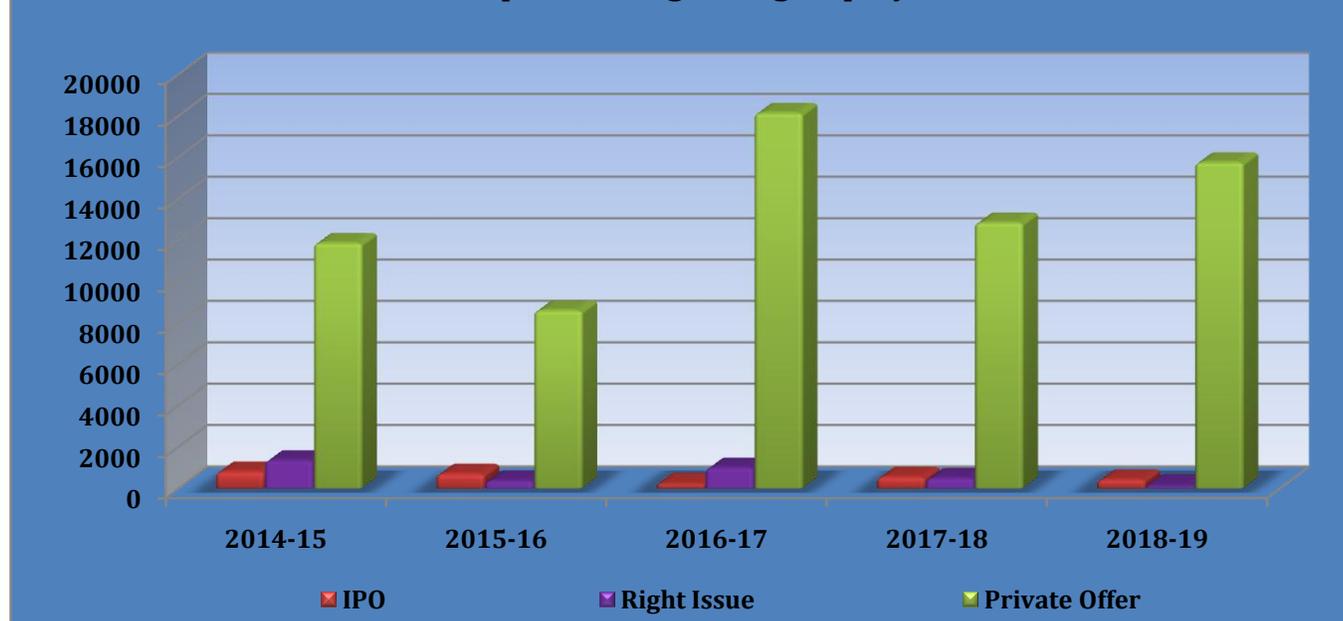
Table-22: Capital Raising through Equity Issuance

(Taka in Crore)

Period	IPO		Right Issue		Private Offer		Total
	No. of Companies	Amount (Including Premium)	No. of Companies	Amount	No. of Companies	Amount	
2014-15	11	808.17	4	1,354.10	154	11,852.60	14,014.87
2015-16	9	368.00	3	365.80	146	8,592.50	9,326.30
2016-17	6	236.25	3	989.60	147	18,135.80	19,361.65
2017-18	13	553.25	4	491.50	194	12,840.40	13,885.15
2018-19	9	424.00	1	141.40	170	15,749.20	16,314.60

Source: BSEC

Chart-36: Capital Raising through Equity Issuance



6.2.2. Corporate Bonds Market

For issuance of debt securities through the private offer, an issuer should submit an application under the Securities and Exchange Commission (Private Placement of Debt Securities) Rules, 2012. On the other hand, for issuance of debt securities through public offer, an issuer needs to submit an application under Bangladesh Securities and Exchange Commission (Public Issue) Rules, 2015 upon compliance of relevant requirements of the Securities and Exchange Commission (Private Placement of Debt Securities) Rules, 2012. Issuer issued corporate bond and debenture through private offer and public offer are:

Table-23: Issuance of Corporate Debt Securities in Bangladesh: Private Offer

(Taka in Crore)

Period	Corporate Bond		Corporate Debenture		Total	
	No. of Companies	Amount	No. of Companies	Amount	No. of Companies	Amount
2014-15	12	2,950.00	2	6.75	14	2,956.75
2015-16	13	4,059.12	2	27.20	15	4,086.32
2016-17	4	2,160.00	3	497.50	7	2,657.50
2017-18	29	10,698.50	3	518.00	32	11,216.50
2018-19	23	12,755.00	-	-	23	12,755.00

Source: BSEC

Chart-37: Outstanding of Corporate Bond and Debenture: Private Offer

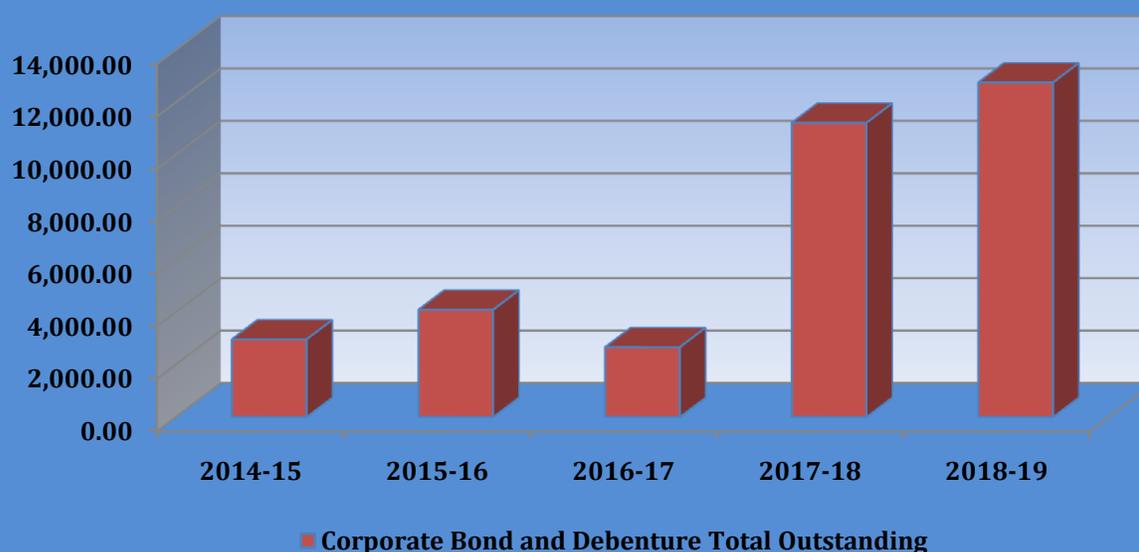


Table-24: Issuance of Corporate Debt Securities in Bangladesh: Public Offer

(Taka in Crore)				
Serial no.	Corporate Bonds/Debentures	Year of issue	Features	Size
1.	IBBL Mudaraba Perpetual Bond	2007	Profit Sharing	300.00
2.	ACI 20% Convertible Zero-Coupon Bonds*	2010	20% Convertible	107.00
3.	BRAC Bank 25% Subordinated Convertible Bonds*	2011	25% Convertible	300.00

Source: BSEC

**Already been converted to equity*

At present, the public offering of corporate bonds is very limited as only one issue (the IBBL Mudaraba Perpetual Bond, amounting to 300 crore Taka) is listed on the stock exchanges (DSE, CSE). The total market capitalization of this listed corporate bond is BDT 282 crore in 2018-19, where the secondary trading is very insignificant. Although there are a few subordinated bonds issued by the banks, the major portion of those is currently being held by other banks through private placement (which are not listed in the stock exchanges and thus, not contributing to the development of the secondary market).

6.2.3. Overview of Global Markets

The capital market of Bangladesh is gradually expanding. Different indicators, such as index value, market capitalization, turnover and volume increased at the Dhaka Stock Exchange (DSE), the prime bourse in Bangladesh. Total market capitalization as a percentage of GDP is an important indicator of stock market deepening. The followings are the world capital market scenario in terms of market capitalization ratio as a percentage of GDP.

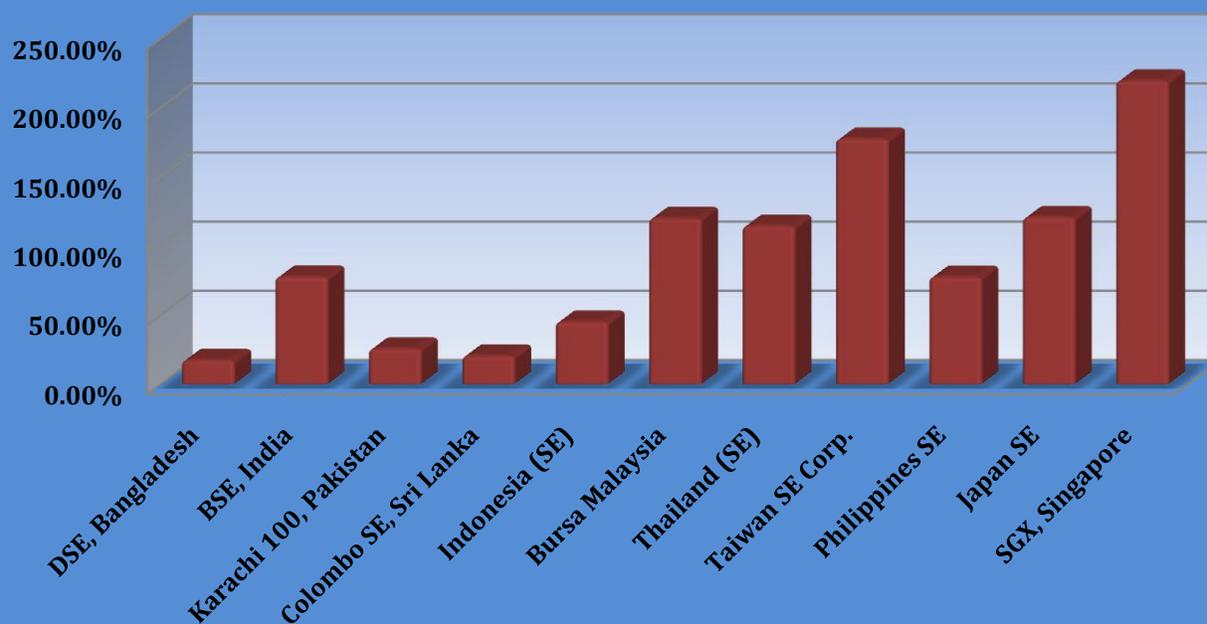
Table-25: Overview of Global Markets

(as of June 2018)

SL No.	Name of the Capital Markets/Index	Country	Domestic Market Capitalization in US\$ Billion	GDP in US\$ Billion	Market Cap to GDP
1.	DSE	Bangladesh	45.97	267.44	17.19%
2.	BSE	India	2,204.74	2,848.23	77.41%
3.	Karachi 100	Pakistan	77.24	303.99	25.41%
4.	Colombo SE	Sri Lanka	18.97	93.45	20.29%
5.	Indonesia (SE)	Indonesia	481.98	1,074.97	44.84%
6.	Bursa Malaysia	Malaysia	437.39	364.92	119.86%
7.	Thailand (SE)	Thailand	552.32	483.74	114.18%
8.	Taiwan SE Corp.	Taiwan	1,086.33	613.30	177.13%
9.	Philippines SE	Philippines	257.00	332.45	77.30%
10.	Japan SE	Japan	6,219.79	5,167.05	120.37%
11.	SGX	Singapore	766.53	349.66	219.22%

Source: BSEC

Chart-38: Market Capitalization to GDP (%)



Though the market capitalization of Bangladesh is increasing in contrast to other developing countries, the market capitalization-GDP ratio remained smaller still now.

6.3. G-Sec Market

A vibrant bond market is essential for developing an efficient and competitive capital market in Bangladesh, particularly in the backdrop of the current liquidity situation of the banking sector. Bond is basically a debt instrument that can be used as an alternative to bank finance. Therefore, an efficient government securities market and the promotion of corporate bond issuance in the

capital market can be considered as a comfortable solution for the current demand for medium and long-term investment financing.

6.3.1. The trend of Primary Market Yield Curve of T-Bills

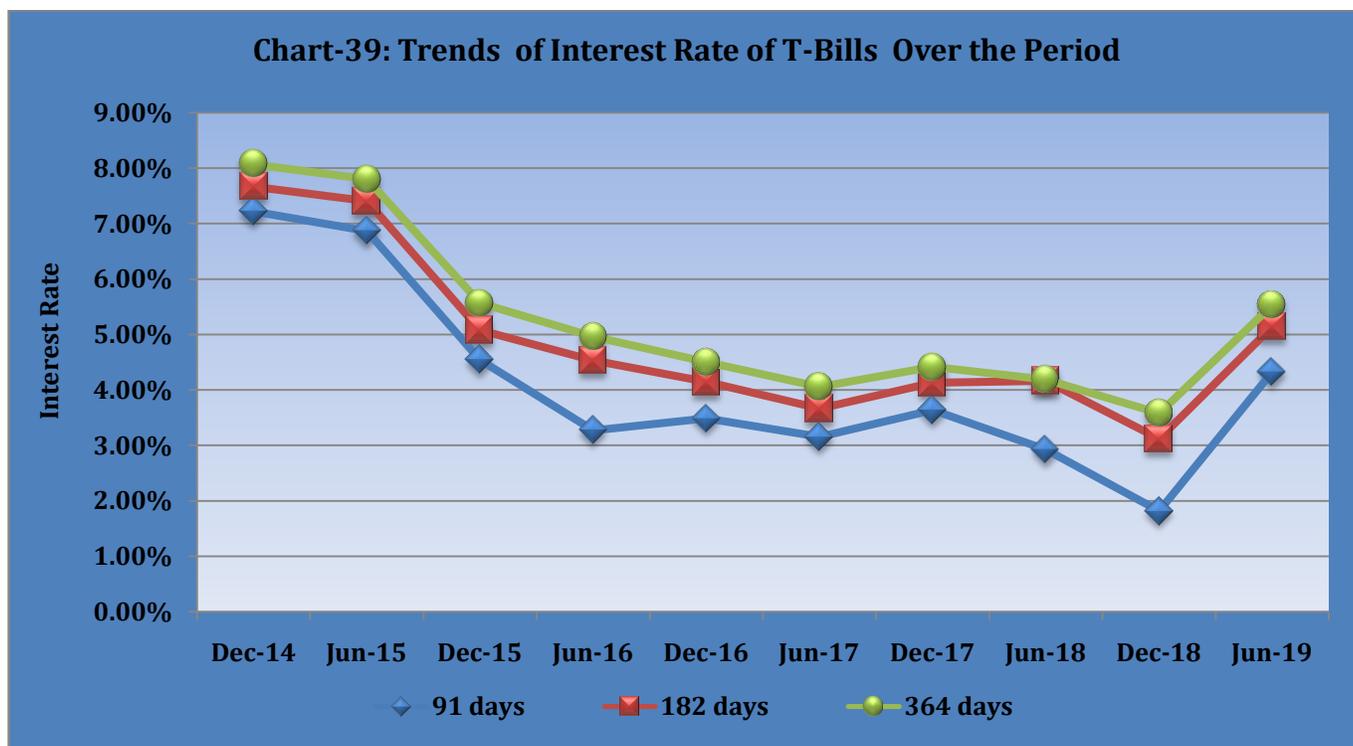
The average yield curves of T-bills of different maturities were substantially volatile during the FY 2018-19. The interest rate of T-bills observed a decreasing trend since 2013-14, which reversed from the beginning of January 2019. This shows that the supply was high during the second half of FY 2018-19.

Table-26: Trends of Average Interest Rate (%) of T-Bills Over the Period

Particular	FY 2014-15		FY 2015-16		FY 2016-17		FY 2017-18		FY 2018-19	
	Dec-14	Jun-15	Dec-15	Jun-16	Dec-16	Jun-17	Dec-17	Jun-18	Dec-18	Jun-19
91-day	7.22	6.87	4.54	3.27	3.49	3.16	3.64	2.93	1.82	4.33
182-day	7.67	7.41	5.08	4.53	4.15	3.66	4.13	4.17	3.12	5.14
364-day	8.07	7.80	5.56	4.96	4.50	4.06	4.42	4.19	3.58	5.53

Source: DMD, BB.

Chart-39: Trends of Interest Rate of T-Bills Over the Period



6.3.2. The trend of Primary Market Yield Curve of T-Bonds

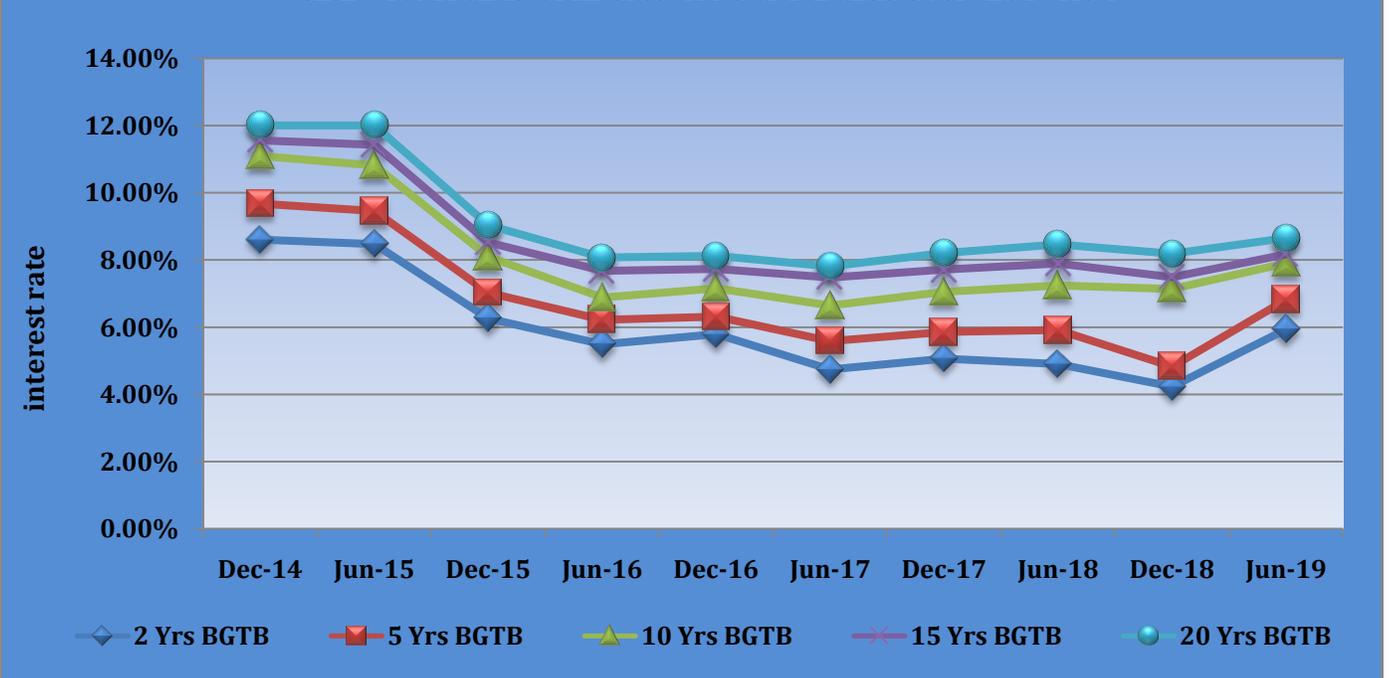
The Interest rate of T-bonds observed an upturn during the FY 2018-19. The average yield curves of T-bonds decreased dramatically from June 2015 to June 2016 due to excess demand to meet up the regulatory requirements and maintained a downward trend until December 2018 and afterward, it has taken an upturn.

Table-27: Trends of Average Interest Rate (%) of T-Bonds Over the Period

Particular	FY 2014-15		FY 2015-16		FY 2016-17		FY 2017-18		FY 2018-19	
	Dec-14	Jun-15	Dec-15	Jun-16	Dec-16	Jun-17	Dec-17	Jun-18	Dec-18	Jun-19
2-Year	8.61	8.48	6.26	5.49	5.79	4.75	5.06	4.91	4.23	5.94
5-Year	9.68	9.46	7.03	6.23	6.31	5.59	5.86	5.92	4.83	6.82
10-Year	11.10	10.82	8.09	6.88	7.16	6.64	7.05	7.24	7.14	7.90
15-Year	11.57	11.43	8.52	7.68	7.74	7.48	7.72	7.89	7.49	8.17
20-Year	12.01	12.01	9.03	8.07	8.12	7.81	8.21	8.46	8.19	8.65

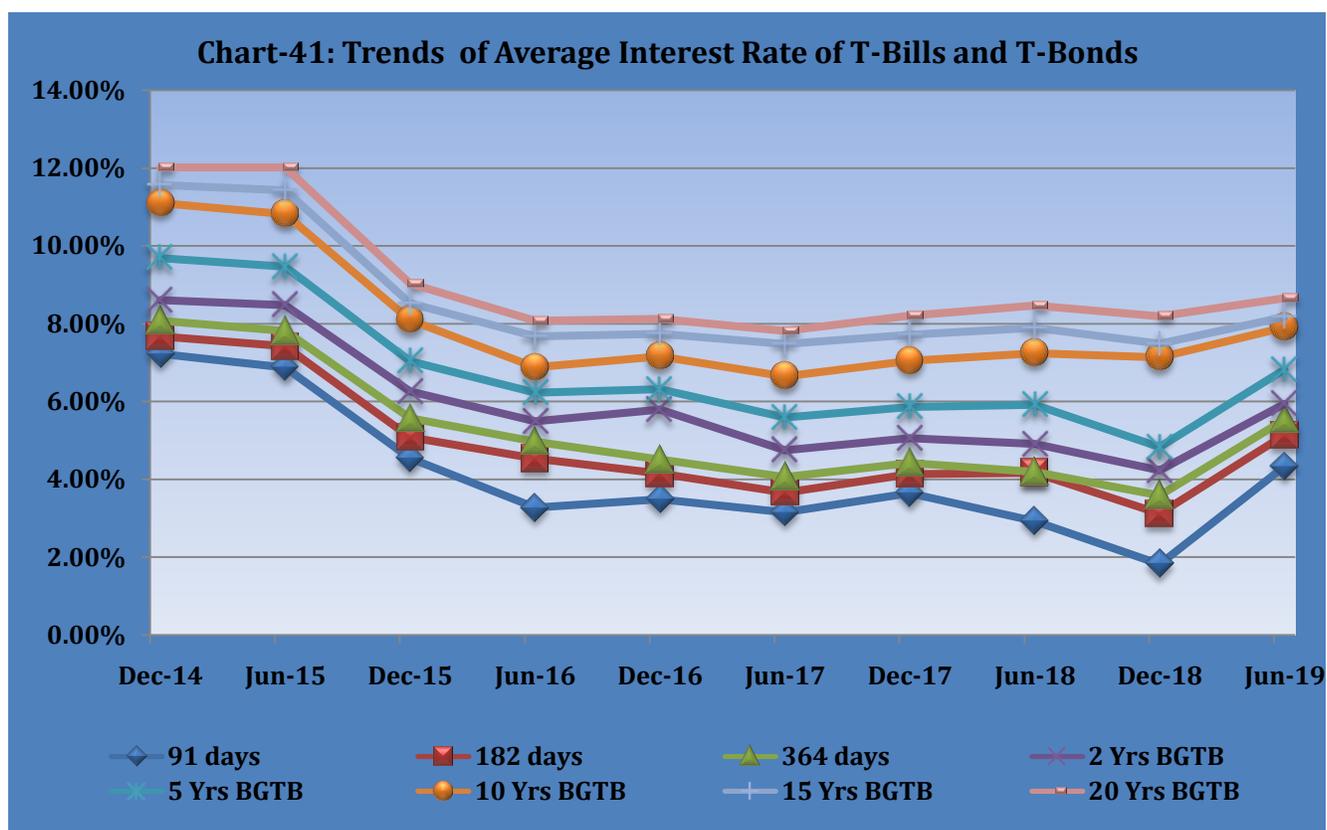
Source: DMD, BB.

Chart-40: Trends of Interest Rate of T-Bonds Over the Period



6.3.3. The trend of Primary Market Yield Curve of T-Bills and T-Bonds

The yields of both T-bills and T-Bonds observed a significant upturn during the FY 2018-19. Interest Rate of T Bills & Bonds observed a downward trend between 2013 and June 2015 and dropped significantly afterward till June 2016. Then, between December 2018 and June 2019, the interest rate observed a substantial upward turn, especially for T-bills.



6.3.4. Primary Market Liquidity Position

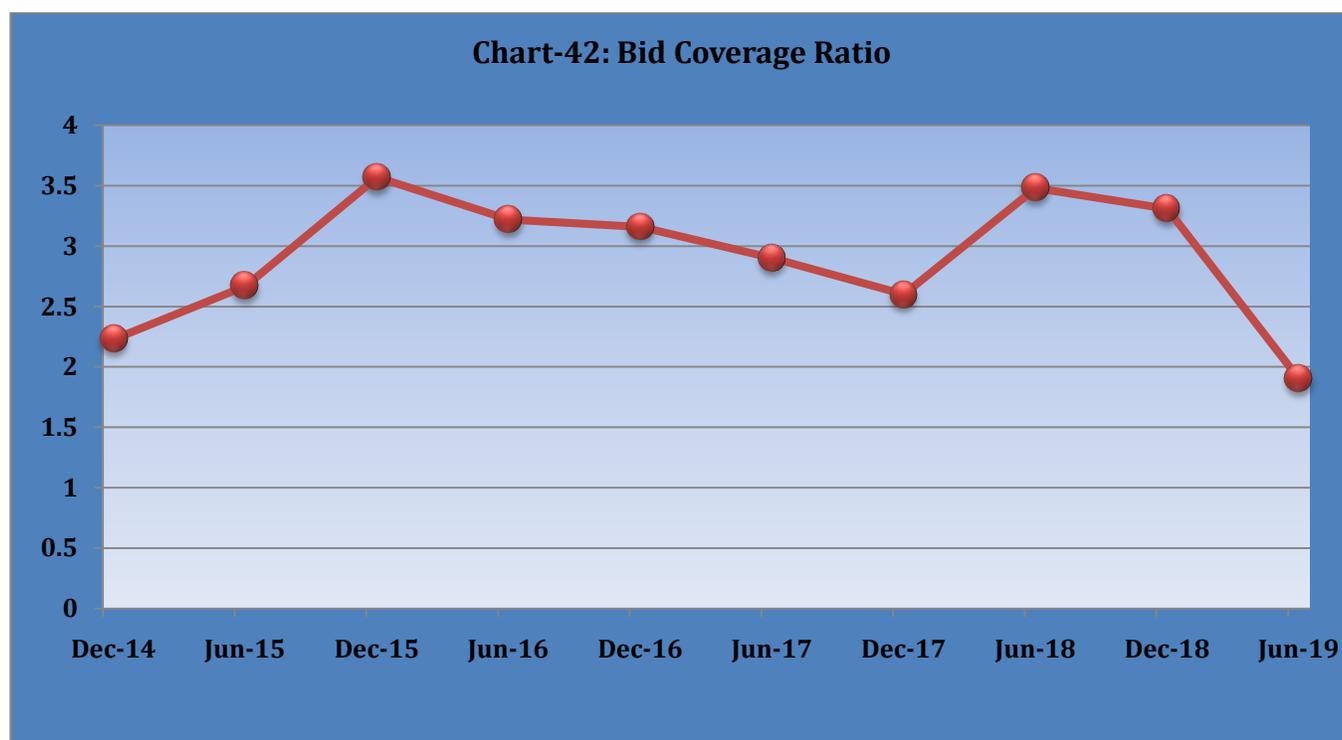
The trend of the primary market bid to coverage ratio indicates a better liquidity situation in the market. From 2013 till December 2018, the bid coverage ratio of more than 2.0 indicated the market was liquid enough and the demand of G-Sec was high. However, between January 2019 and June 2019, the average to coverage ratio dropped below the 2.0 (ending up at 1.90) indicating lesser excess liquidity in the market.

Table-28: Primary Market Liquidity Position

(in times)

Serial No.	Period	Average Bid-Coverage Ratio
1	July-December,13	2.28
2	January-June,14	2.38
3	July-December,14	2.23
4	January-June,15	2.67
5	July-December,15	3.57
6	January-June,16	3.22
7	July-December,16	3.16
8	January-June,17	2.90
9	July-December,17	2.60
10	January-June,18	3.48
11	July-December,18	3.31
12	January-June,19	1.90

Source: DMD, BB.



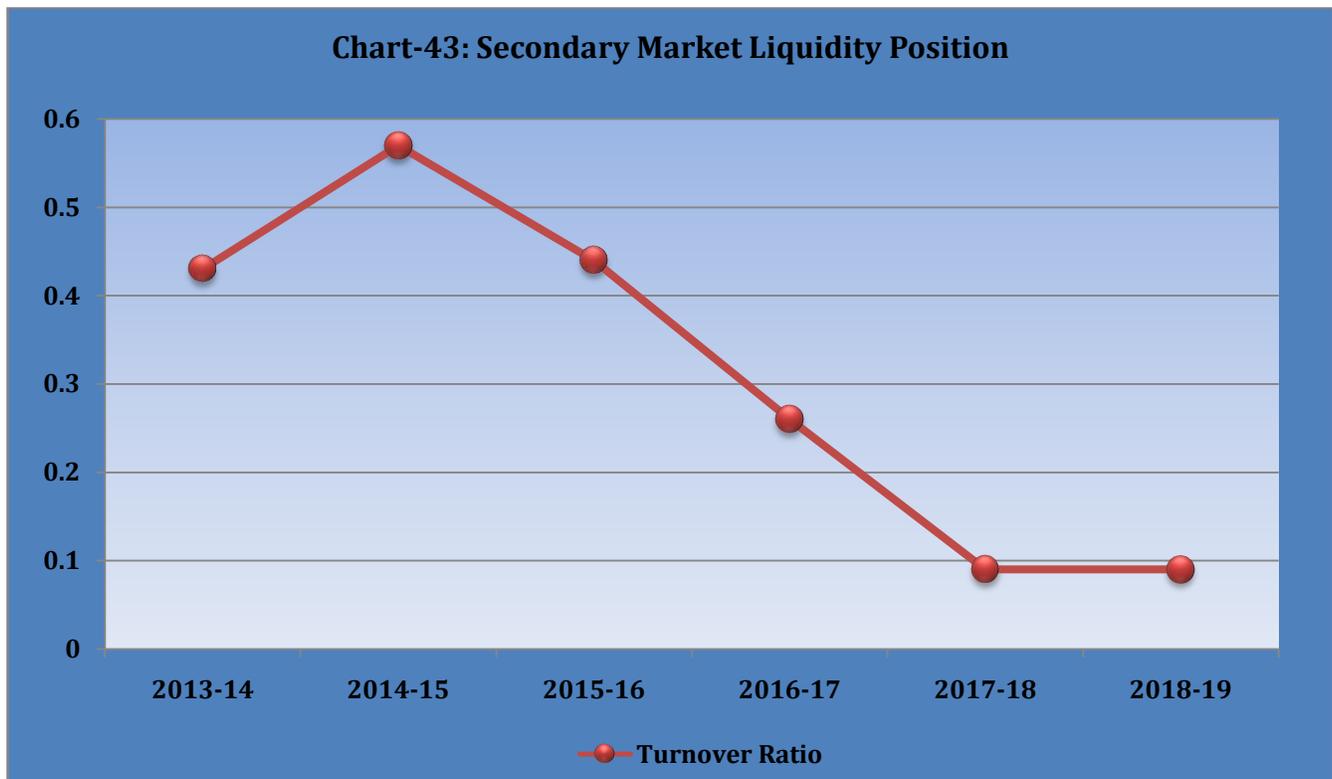
6.3.5. Secondary Market Liquidity Position

Traded turnover to market capitalization, also known as turnover velocity ratio, is an indicator of liquidity in the market. Investors prefer a high turnover velocity ratio as it indicates better liquidity. The trend in turnover velocity ratio during the year indicates poor liquidity situation in the government securities secondary market. The table below shows that the turnover in terms of outstanding balances decreased since FY 2014-15 until FY 2017-18. This happened due to a higher demand for G-Sec to meet the SLR requirement of the banks. However, over the past two FYs, the turnover ratio remained stable.

Table-29: Secondary Market Liquidity Position

(Taka in Crore)				
Financial Year	Outstanding Balances (T-bills & bonds)	Secondary trading turnover	Turnover (Times)	% of Increase/ (Decrease)
2013-14	143,410.91	61,978.52	0.43	-
2014-15	146,702.53	83,664.62	0.57	33
2015-16	153,662.69	67,513.02	0.44	(23)
2016-17	153,673.38	40,058.40	0.26	(41)
2017-18	161,767.56	15,334.40	0.09	(65)
2018-19	199,363.65	18,309.82	0.09	(-)

Source: DMD, BB.



6.4. Performance of Bangladesh Government Islamic Investment Bond (BGIIB)

Since 2004, On behalf of the Government, BB started issuing Bangladesh Government Islamic Investment Bond (BGIIB). The Government issues these bonds as guarantees against the pool of funds formed by the Shariah-based banks and individuals in order to develop the money market in the Islamic banking sector. This bond is issued to collect the surplus fund from the Islamic Shariah-based banks/financial institutions and deploy the funds in the deficit Islamic Shariah-based banks/financial institutions. The return of the bonds depends on profit or loss in line with the Islamic Shariah, the savings rates, the investment volume of the fund, and other related factors. These Bonds are governed by the principles of Mudaraba.

At present, there are two Islamic bonds are in operation; the 3-month Bangladesh Government Islamic Investment Bond (BGIIB) and the 6-month BGIIB. As per the rules, Bangladeshi institutions, individuals and non-resident Bangladeshis, who agree to share profit or loss in accordance with the Islamic Shariah, may purchase these bonds. The auction of the bond is held on every Thursday of the week in the Islamic bond system maintained by Bangladesh Bank.

Despite the significant presence of the Shariah-based banks in the country, there is a lack of Shariah-compliant instruments to support this industry. This is because, unlike other debt securities, the returns on Islamic bonds are based on profit or loss sharing in line with the Shariah law. To ensure compliance with Islamic principles, the formulation of Islamic bonds requires approval from Shariah advisers. Hence, the Government does not borrow money from the Islamic banking sector.

The outstanding and remaining amounts of this bond are presented below:

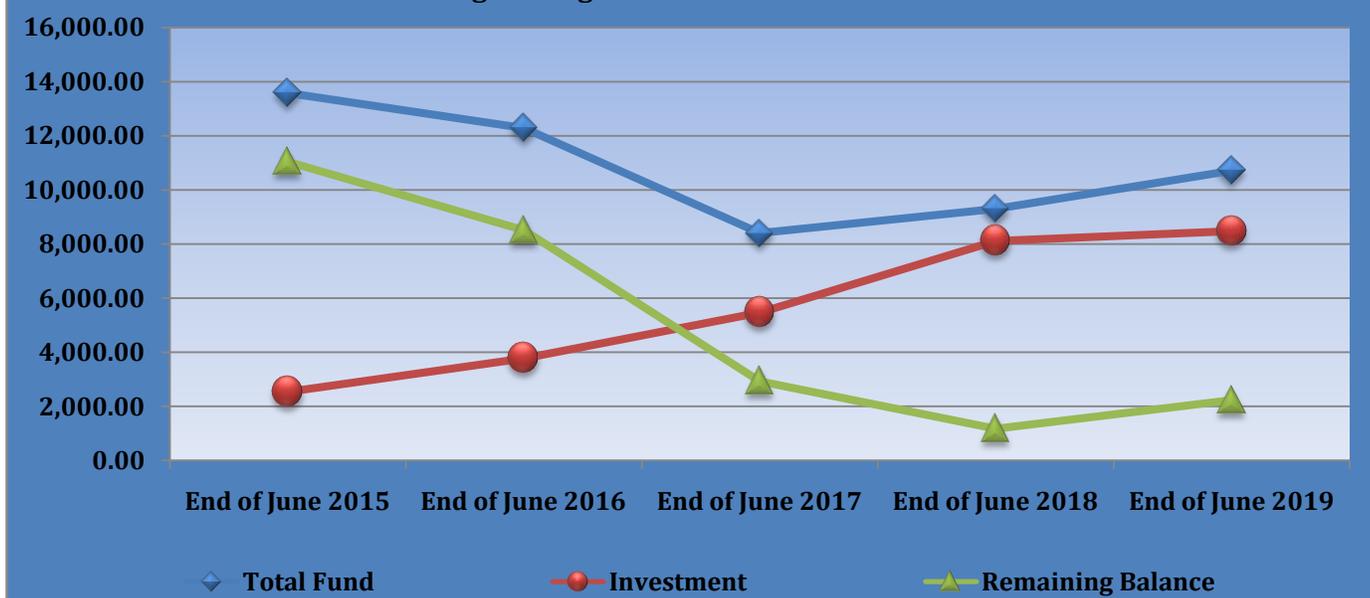
Table-30: Outstanding of Bangladesh Government Islamic Investment Bond

(Taka in crore)

Serial	Period	Total Fund	Investment	Remaining Balance
1	End of June 2015	13,583.95	2,539.57	11,044.38
2	End of June 2016	12,293.50	3,779.57	8,513.93
3	End of June 2017	8,401.49	5,469.57	2,931.92
4	End of June 2018	9,294.78	8,119.57	1,175.21
5	End of June 2019	10,711.18	8,479.69	2,231.49

Source: BB.

Chart-44: Outstanding of Bangladesh Government Islamic Investment Bond



The total investment in BGIIB is maintaining an increasing trend since 2015. Along with that trend, the total fund, as well as the remaining balance, is decreasing. This shows the efficient management of this fund over the past 5 years.

Chapter 7

Comparative Scenario of Government Debt

- Comparative Outstanding Balances of Tradable and Non-Tradable Securities
- Comparison of Net Issuance of Tradable and Non-Tradable Securities
- Comparison of Outstanding Balance of Public Sector's Domestic and External Debt
- Comparison of the Net Issuance of Public Sector's Domestic and External Debt
- Outstanding of Public Sector's Domestic and External Debt Compared to GDP
- Bond Outstanding to GDP: A Comparison with Other Asian Countries



Chapter 7

Comparative Scenario of Government Debt

7.1. Comparative Outstanding Balances of Tradable and Non-Tradable Securities

At the end of FY 2018-19, total outstanding public debt from the banking sector and non-banking sector (NSD) stood at BDT 1,99,363.65 and 2,89,267.88 crore respectively. In the revised budget of the FY 2018-19, BDT 78,745.00 crore was fixed for net borrowing from domestic sources by the Government of which BDT 30,895 crore and BDT 47,850 (NSD: BDT 45,000 crore) crore were targeted to borrow from banking and non-banking sources respectively. During the period, the Government's net borrowing was BDT 37,596.09 crore through T-bills and T-bonds from the banking system, which was 121.69% of the revised budget. On the other hand, the Government's net borrowing through NSD instruments during this period was BDT 50,058.49 crore, which was 111.24% of the revised budget.

In the FY 2019-20, BDT 77,363 crore is targeted for the net borrowing from domestic sources by the Government of which BDT 47,364 crore and BDT 30,000 core (NSD: BDT 27,000 crore) are targeted from the banking and non-banking sources respectively. At the end of June 2019, the interest rate of 3-monthly interest-bearing Sanchayapatra, 5-year Bangladesh Sanchayapatra, Poribar Sanchayapatra and Pensioner Sanchayapatra were 11.04%, 11.28%, 11.52% and 11.76% respectively whereas the interest rate of the T-bonds with 2, 5, 10, 15 and 20 years maturities were 7.55%, 8.10%, 8.44%, 8.90%, and 9.29% respectively.

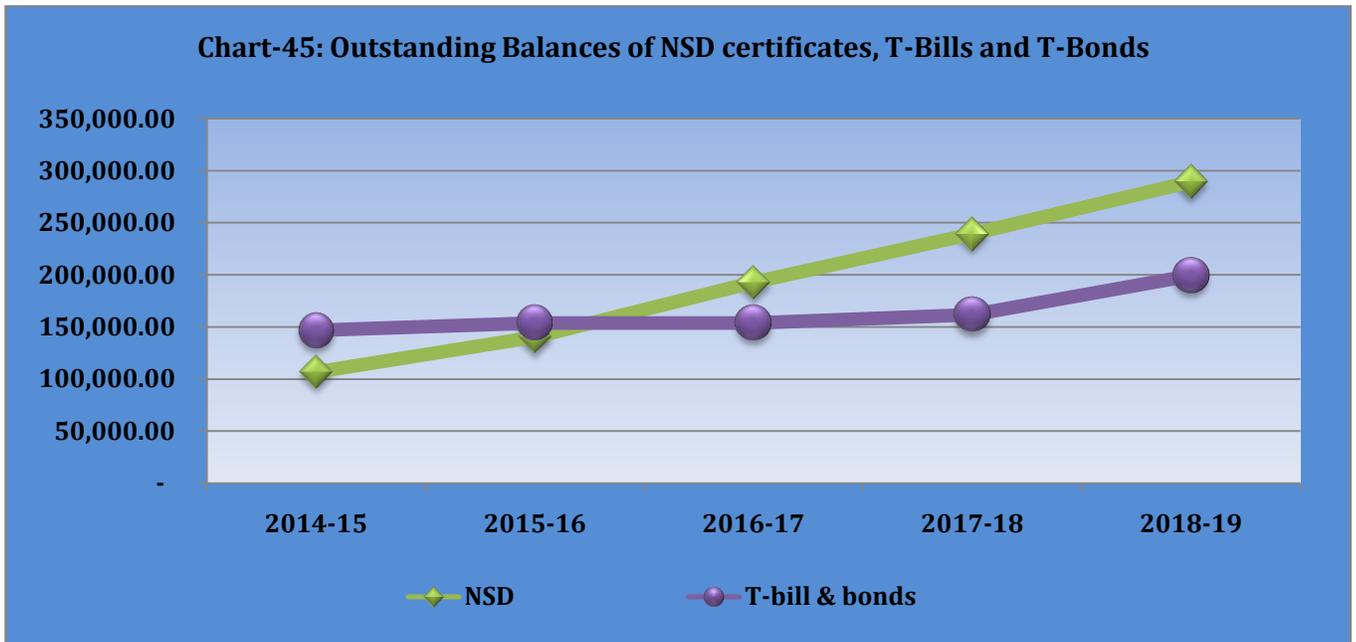
The percentage outstanding of domestic public debt from the banking sectors (T-bills and T-bonds) decreased gradually from FY 2012-13 to 2017-18 whereas outstanding debt liabilities from NSD certificates increased significantly during the same period due to the massive selling of non-marketable securities. However, in the FY of 2018-19, due to the steps were taken by the Government and BB, the sale of T-bills and T-bonds increased while the sale of NSD instruments dropped slightly.

Table-31: Comparative Outstanding Balances of NSD Certificates, T-Bills and T-Bonds

(Taka in Crore)

Period	Outstanding Balances		Total Amount	Total	
	NSD Certificates	T-Bills and T-Bonds		NSD certificates	T-Bills and T-Bonds
2014-15	106,573.03	146,702.53	253,275.56	42%	58%
2015-16	140,261.63	153,662.69	293,924.32	48%	52%
2016-17	192,679.09	153,673.38	346,352.47	56%	44%
2017-18	239,209.39	161,767.56	400,976.95	60%	40%
2018-19	289,267.88	199,363.65	488,631.53	59%	41%

Source: DMD, BB, and NSD



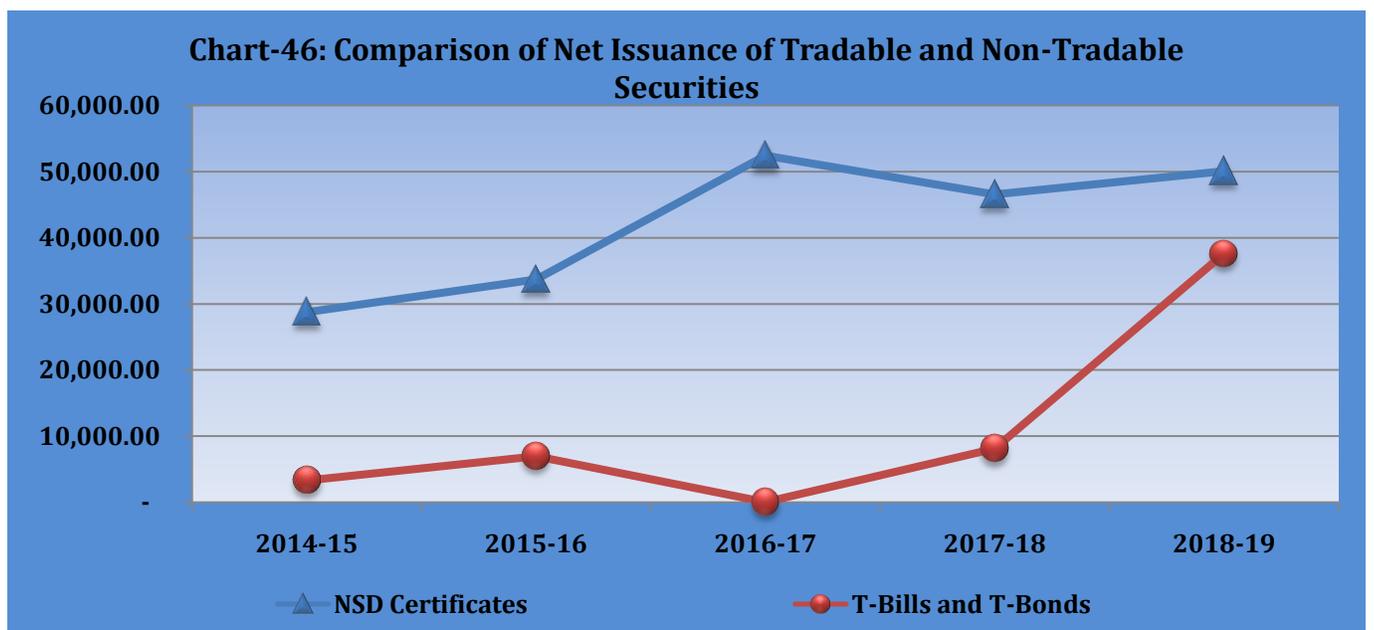
7.2. Comparison of Net Issuance of Tradable and Non-Tradable Securities

Table-32: Comparison of Net Issuance of Tradable and Non-Tradable Securities

(Taka in Crore)

Financial Year	T-Bills & Bonds	NSD Certificates
2014-15	3,291.62	28,732.64
2015-16	6,960.16	33,688.60
2016-17	10.69	52,417.46
2017-18	8,094.18	46,530.30
2018-19	37,596.09	50,058.49

Source: DMD, BB, and NSD



7.3. Comparison of Outstanding Balance of Public Sector’s Domestic and External Debt

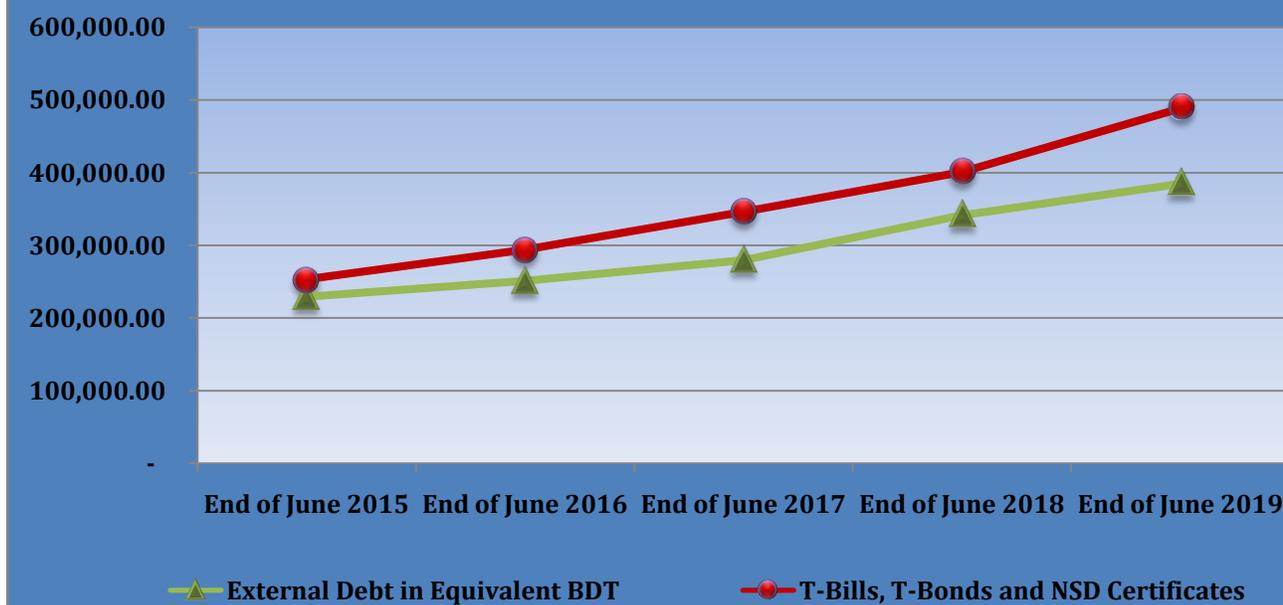
Since FY 2014-15, the outstanding of both domestic and external debts of the public sector is on an increasing trajectory. However, the portion of the total debt from the domestic/internal sources was larger than the external one for each FY. The table and the chart below illustrate the overall amount and the trends:

Table-33: Comparison of Outstanding Balance of Public Sector's Domestic and External Debt

(Taka in Crore)		
Financial Year	T-Bills, T- Bonds, and NSD Certificates	External Debt in Equivalent BDT
2014-15	253,275.56	229,141.04
2015-16	293,924.32	250,927.04
2016-17	346,352.47	279,696.55
2017-18	400,976.95	341,350.31
2018-19	488,631.53	384,604.13

Source: SD, DMD, BB, and NSD

Chart-47: Comparison of Outstanding Balance of Public Sector's Domestic and External Debt (in crore)



7.4. Comparison of the Net Issuance of Public Sector's Domestic and External Debt

Similar to the total outstanding amount, the net amounts of both domestic and external debts of the public sector are on an increasing trend since FY 2014-15. Apart from FY 2017-18, the net amount of domestic debt was larger than the external debt.

The table and the chart below illustrate the net amounts:

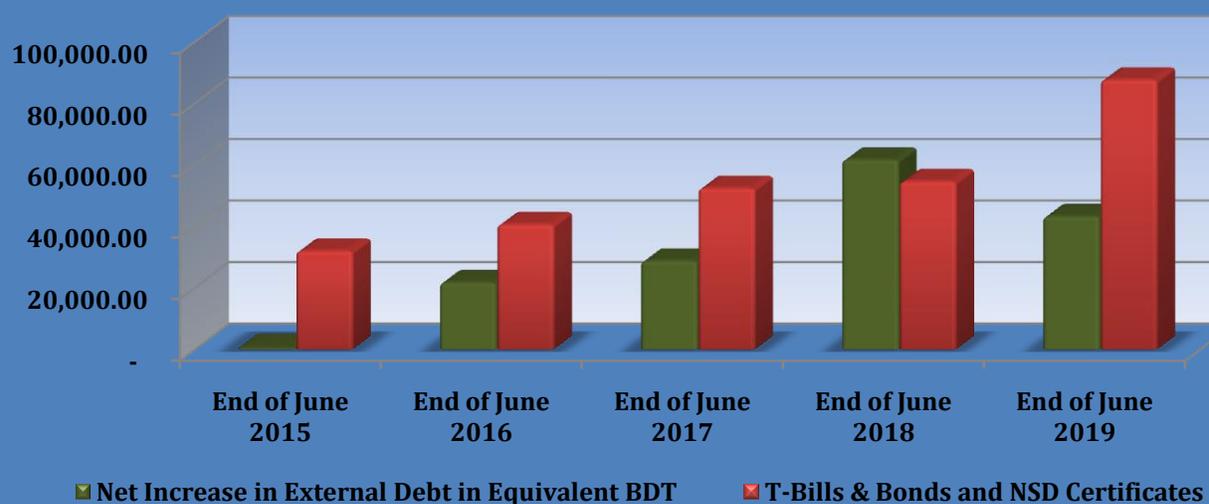
Table-34: Comparison of the Net Issuance of Public Sector's Domestic and External Debt

(Taka in Crore)

Financial Year	T-Bills, T- Bonds, and NSD Certificates	External Debt in Equivalent BDT
2014-15	32,024.26	580.30
2015-16	40,648.76	21,786.00
2016-17	52,428.15	28,769.51
2017-18	54,624.48	61,653.76
2018-19	87,654.58	43,253.81

Source: SD, DMD, BB, and NSD

Chart-48: Comparison of the Net Issuance of Public Sector's Domestic and External Debt



7.5. Outstanding of Public Sector's Domestic and External Debt Compared to GDP

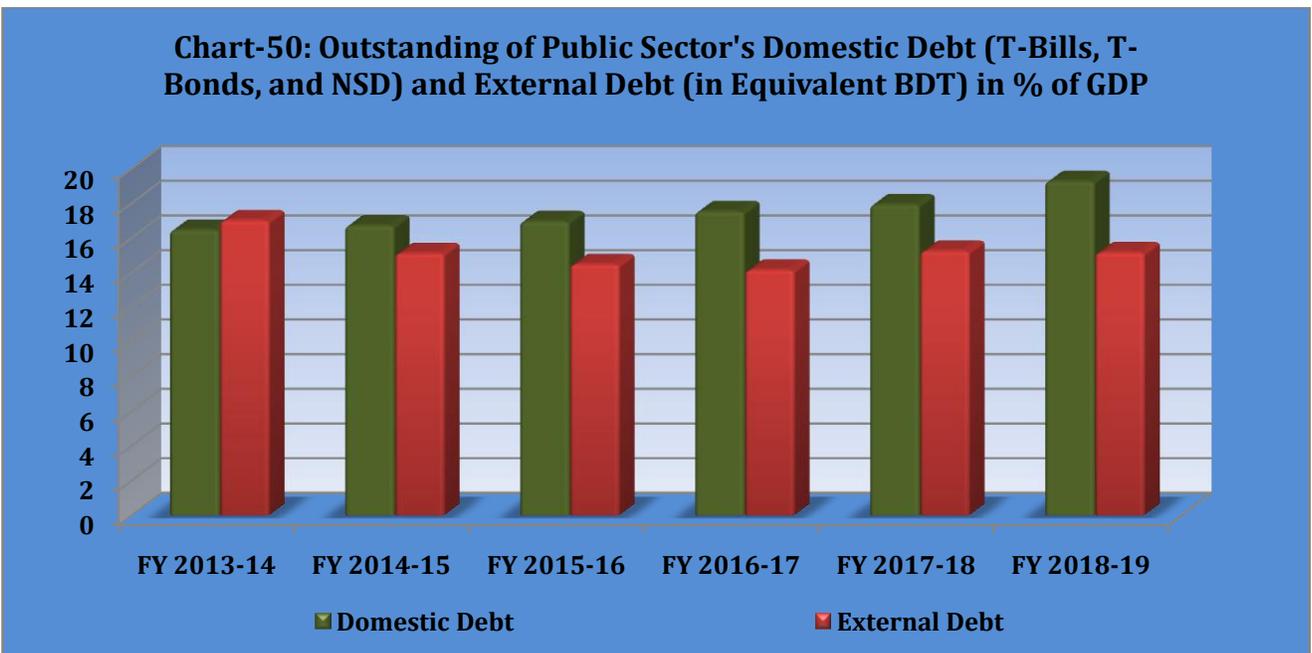
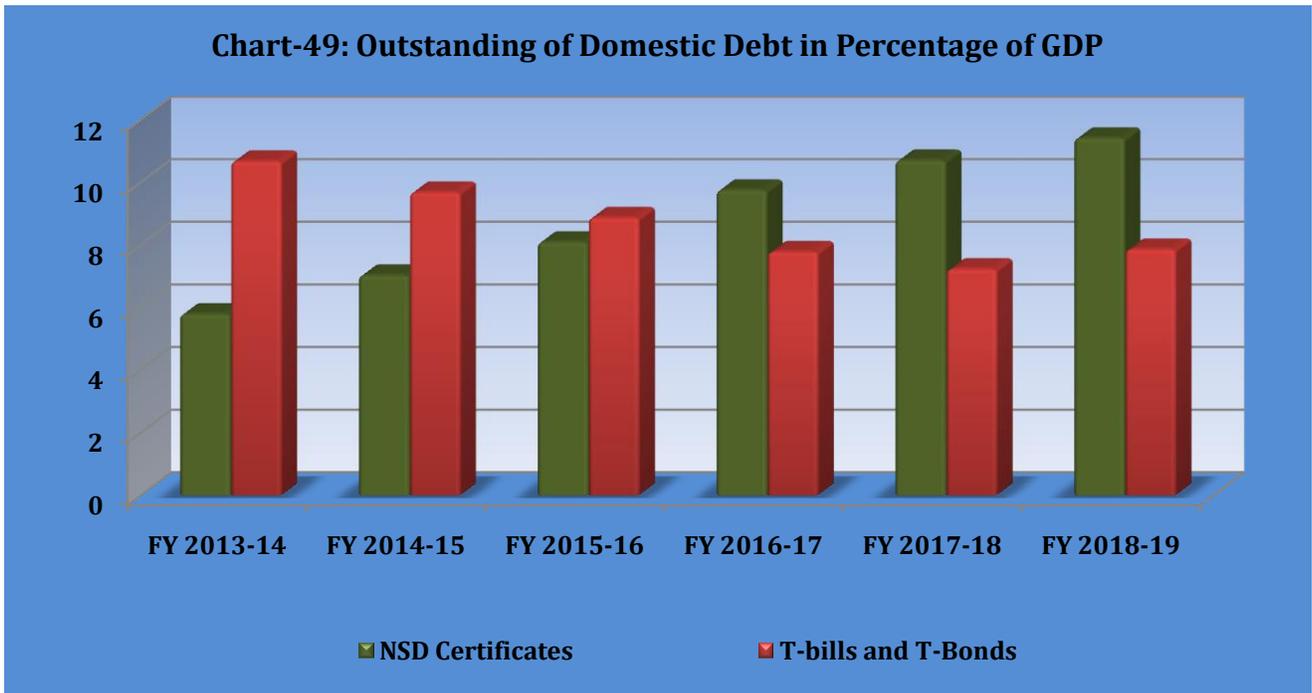
As the interest rate of NSD certificates was significantly higher than any other interest rate prevailing in the G-Sec market, the Government borrowing increased over the years through NSD certificates. In contrast, borrowing from the banking sector decreased until FY 2017-18. However, during FY 2018-19, the Government borrowing from the banking sector increased by 8.71%.

Table-35: Outstanding of Public Sector's Domestic and External Debt Compared to GDP

(In percentage)

Instruments	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19
NSD Certificates	5.79	7.03	8.09	9.75	10.70	11.41
T-Bills and T-Bonds	10.67	9.68	8.87	7.78	7.23	7.86
External Debt	17.01	15.12	14.48	14.16	15.25	15.16

Source: BB, BBS & NSD.



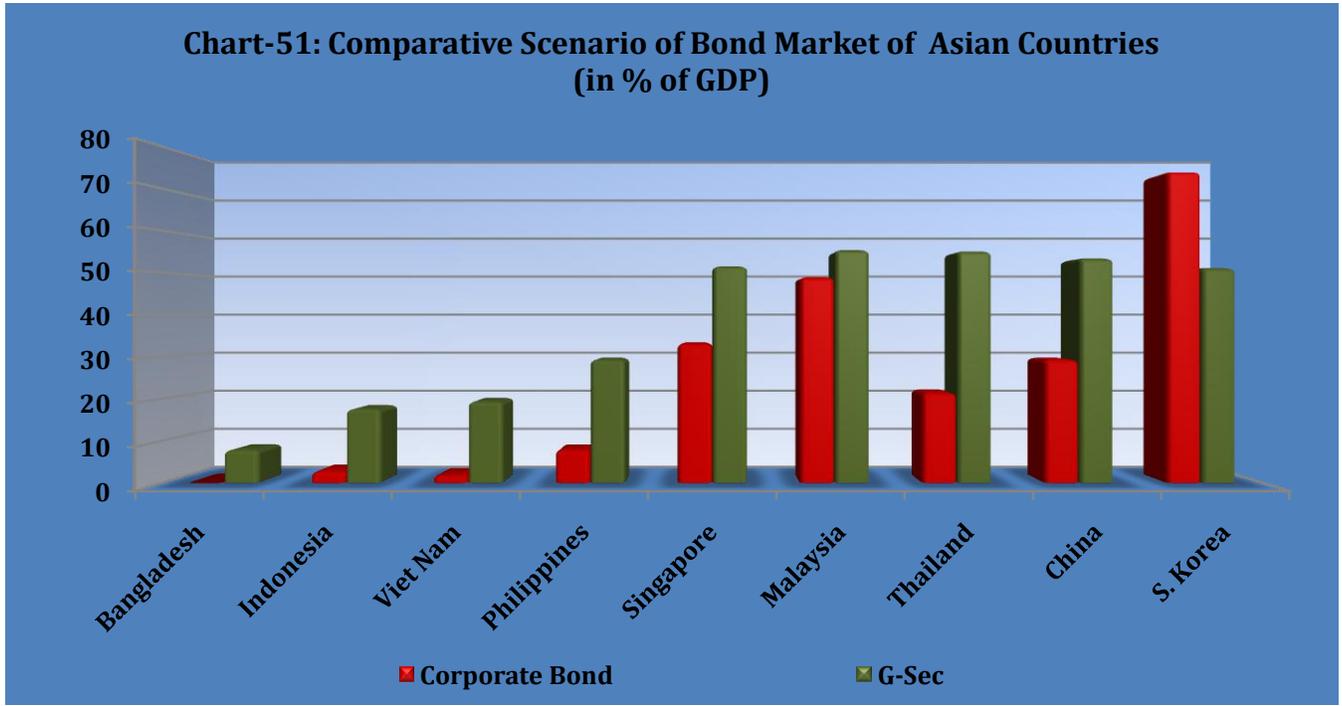
7.6. Bond Outstanding to GDP: A Comparison with Other Asian Countries

In comparison with some other Asian countries like South Korea, China, Vietnam, Malaysia, etc., the fixed-income securities market of Bangladesh made up for a smaller portion corresponding GDPs. Among the countries featured in the analysis, the South Korean fixed-income securities market held the largest percentage with respect to their GDP. In contrast, the Bangladeshi corporate bond market (listed) was almost non-existent as it accounted for only 0.01% of the GDP (including the non-listed bonds, the corporate bond market was 1.51% of the GDP) at the end of FY 2018-19.

Table-36: Comparative Scenario of Bond Markets in Asia (In % of GDP) 2019

Bonds	Bangladesh	Indonesia	Viet Nam	Ph'pines	Singapore	Malaysia	Thailand	China	S. Korea
Corporate	0.01	2.8	1.8	7.8	33.2	49.1	21.5	29.4	74.3
Government	7.86	17.6	19.4	29.4	51.7	55.6	55.3	53.6	51.3

Source: BB, DSE, and ADB.



Chapter 8

Recent Initiatives in Developing the Bond Market

Why do we need a Long-Term Bond Market?
The Recent Initiatives Taken in Resolving the Issues
Other Initiatives



Chapter 8

Recent Initiatives in Developing the Bond Market

To develop a fully functioning fixed-income market, BB focused on establishing a robust infrastructure to support the existing market structure. Over the years, BB simplified the process of G-Sec transaction by dematerializing the instruments, establishing a secured settlement system and ensuring a transparent trade reporting to build confidence in the market. However, despite addressing the initial obstacles related to the market-transparency, disclosure standards and dissemination of information, the secondary market of the fixed-income securities in Bangladesh is yet to function at the desired level. At present, one of the biggest challenges that we are facing is the incentivization of the investors as well as the issuers. The issuers needed to be encouraged to consider the debt raising alternatives away from traditional bank-financing. In order to implement and ensure the dynamism of the secondary market, the policy measures that we need to adopt are related to issuers, investors, instruments, other investment opportunities, intermediaries, and infrastructure. To address the aforementioned issues, a number of steps have been taken in recent times by BB and MoF.

8.1. Why do we need a Long-Term Bond Market?

An advanced and diversified financial system with sound debt and equity markets enhance risk-pooling and better risk-sharing opportunities for the investors and borrowers. The fixed-income securities market links the issuers having short and long-term financing needs with investors willing to place funds in short and long-term interest-bearing securities. It also makes the financial market more competitive by generating market-based interest rates. A well-functioning market offers the Government and the private institutions the flexibility to diversify their sources of funding and provides them with alternative sources of raising funds. Therefore, a vibrant fixed-income market is needed for several reasons:

8.1.1. An active fixed-income securities market allows the Government to finance large fiscal deficits without resorting to financial repression or foreign borrowing. For that reason, the drive for the development of the government securities market understandably comes from the Government to facilitate the financing of large fiscal deficits.

8.1.2. The development of a well-functioning fixed-income market supports the efficient implementation of the monetary policy. It offers the instruments needed for the execution of monetary policy and improves the transmission mechanism of the monetary policy. Long-term bonds also facilitate the sterilization operations by the central bank as exclusive reliance on short-term instruments tends to drive up the short-term interest rates and encourage further inflows into such instruments.

8.1.3. The growth of a bond market, especially a vibrant G-Sec market, can improve access to local currency financing. An active G-sec market can offer local currency investors, such as retail and institutional investors, a way to invest in the local currency, and therefore, ensure better management of inflation and exchange rate risk. Those investors are also provided with a safe alternative investment compared to local currency bank deposits.

8.1.4. A long-term fixed-income securities market, being accessible to foreign investors, increases financial integration by attracting foreign capital, which can lower the cost of borrowing for the Government while improving risk-sharing across the countries.

8.1.5. Whilst the stock market capitalization of about 20% of the total financing requirement is well below the regional peers, the long term debt market is almost non-existent (World Bank Group Report on Bangladesh Capital Markets, August 2018). This means, 80% of debt financing comes from the banking sector, which cannot typically lend longer than around 5 years, given that 70% of bank deposits are for 1 year or less (Scheduled Banks Statistics, October-December, 2018). Financing long-term projects by borrowing from the banking sector's short-term deposits could pose a major systemic risk and wider maturity mismatch in the industry. These factors can negatively affect the banks' resilience in regards to the liquidity crisis. Moreover, to materialize the objectives of the Vision-2021, our economy needs to achieve 8+% growth of the GDP, which is not probable solely depending on the bank-financing.

8.1.6. The local currency government bond market can act as a catalyst for the development of corporate bond markets by providing a benchmark yield curve. Similarly, derivatives markets cannot flourish without a well-developed fixed-income securities market with underlying instruments.

8.1.7. Without the presence of a lively corporate bond market, corporate lending by the banking system becomes oversized leading to maturity mismatch in the market. In Bangladesh, corporations tend to fund their long-term projects using loans from commercial banks. As we know, the banking deposits are chiefly of short-term tenures (3 months to less than 1 year). At present, as stated above, around 70% of the deposits are within the 1-year bucket. Therefore, funding long-term assets with short-term liabilities creates a huge maturity mismatch in the banking sector.

Facing those aforementioned challenges, the banking sector is always under pressure to accumulate more deposits to address the maturity mismatch in their books. This may become detrimental to the market affecting the interest rates. In this context, in the absence of a long-term bond market, banks are financing long-term projects with the tenors of the loans that are indeed shorter than actually needed. This leads to the installment sizes of those loans becoming oversized to the capacity of the borrowers, which ultimately creates asset quality impairments and overdue loan repayments leading to Non-performing Loans (NPL).

8.2. The Recent Initiatives Taken in Resolving the Issues

A working committee was formed with a view to developing the long-term fixed-income securities market in Bangladesh. The committee, headed by the General Manager of Debt Management Department, includes the members of different related departments of Bangladesh Bank, Bangladesh Securities and Exchange Commission (BSEC), and a commercial bank. The committee has finalized a comprehensive framework outlining the obstacles in developing the long-term fixed-income securities market in Bangladesh and recommendations focusing on overcoming the hindrances. The comprehensive framework has been sent to different stakeholders (MoF, BSEC, NBR, and IDRA) for implementation.

Table-37: Summary of Recommendations in Developing the Bond Market in Bangladesh

Government Securities (G-Sec)	
Issues/Focus Area	Recommendations
Proper Cash Management	<ul style="list-style-type: none"> ✓ MoF should establish a central IT-based cash management cell, where all the stakeholders (different line ministries) could input their expenditure and revenue plans periodically to adopt a clear issuance strategy; ✓ CDMC should focus on the development of the financial market along with the cash and debt management of the Government; ✓ CDMC may adopt a policy in regards to the management and investment of the surplus cash amount in the market by exploring alternative investment opportunities.
Introduction of a Medium-Term Auction Calendar	Planning and publication of an auction-calendar at least on a half-yearly basis and conducting auctions as a preannounced auction calendar.
Open-Limit on the Sale of Savings Certificates	<ul style="list-style-type: none"> ✓ To fulfill the borrowing from the banking sector as per the budgetary plan, the Government should sell the NSD instruments only to the targeted people (senior citizens, low-income people, etc.); ✓ While adding a social-security premium, the yield of the savings certificates could be set in line with the yield of the tradable securities.
Lack of Sufficient Instrument Balance	Increasing the issuance of marketable government bonds to ensure a minimum net issuance every year.
A Large Number of Securities (ISIN) in the Market	<ul style="list-style-type: none"> ✓ An intensive program of buyback and switching should be taken; ✓ Reissuance of the securities with tenors close to the preceding slab issued as a lesser tenor bond rather than a fresh one; ✓ Increasing the upper limit (at present 3,000 crore) of the bonds against a single ISIN.
Lack of Benchmark Securities	<ul style="list-style-type: none"> ✓ Identifying benchmark securities in the market; ✓ Issuing securities with even longer tenors (e.g. 30-year, 40-year).
Absence of an Effective and Realistic Secondary Yield Curve	<ul style="list-style-type: none"> ✓ Frequency of trading in the secondary market has to be increased; ✓ Examining whether the already developed secondary market yield curve fulfills the international standards.
Unavailability of Two-Way Price Quoting	<ul style="list-style-type: none"> ✓ Selecting the benchmark securities liquid enough for the primary dealers to be able to quote on a two-way basis in the secondary market; ✓ Establishing the infrastructure to enable the two-way price quoting system; ✓ Directing the PDs to quote two-way on a daily basis.
Introduction of a Central Counterparty (CCP)	<ul style="list-style-type: none"> ✓ To ensure secure transfer of securities and secondary trading of G-sec, we should have a depository guideline for smooth functioning; ✓ Analyzing the feasibility of introducing a legal entity like CCP to mitigate the counterparty default risks and settlement risks.
Restructuring of the Held-to-Maturity (HTM) and Held-for-Trading (HFT) Portfolio	Based on the market conditions, HTM and HFT portfolios should be restructured/revised from time to time.
Absence of Established Pension/Provident Funds	<ul style="list-style-type: none"> ✓ Forming separate pension funds for civil servants rather than depending for budget allocation; ✓ Investing the funds in tradable government securities; ✓ Establishing a separate regulatory body to formulate policies and to regulate the entities dealing with public and private pension funds; ✓ Directing the Government/semi-government/ autonomous corporations as well as the corporations/ organizations in the private sector to invest a certain percentage of their provident and gratuity funds in government bonds instead of NSS certificates.
Other	a) Introducing foreign currency-denominated G-sec to,

Recommendations Related to G-Sec	<ul style="list-style-type: none"> ✓ Attract foreign investors; ✓ Increase inflow of foreign remittance; ✓ Reduce pressure on the local money market; ✓ Borrow funds at cheaper rates; ✓ Establishing creditworthiness in the global market; ✓ Widening the bond market. <p>b) Allowing G-sec to be traded on the DSE and CSE platforms along with the MI module to make the trading more convenient for the institutional/individual/foreign investors.</p> <p>c) Implementing a uniform tax treatment for all the Government debt instruments and other saving instruments for individual investors.</p> <p>d) Setting a holding period limit and the stop-loss limit for PDs based on the reviewed PD guidelines.</p> <p>e) Establishing clear rules for market-making and ensure two-way quotes for the benchmark bonds by reviewing the PD guidelines, In this regard, Bangladesh Bank should redesign the PD guidelines by addressing the concerned issues.</p> <p>f) Bangladesh Bank may consider securities trading activities to support the market making process. For BB to actively participate in the trading of G-Sec, periodic discretionary trading-limits could be allowed to the DMD, BB.</p>
Corporate Bond	
Issues/Focus Area	Recommendations
Prolonged Approval Period	The required time to get approval for issuing corporate bonds should be reduced while simplifying the process.
Issuance of Bonds in Multiple Steps (Shelf Offering)	For efficient utilization of funds, the issuers should be allowed to get the approval in one step with the issuance taking place in multiple steps in case of public offerings.
Absence of Debt-Instruments Issued by Different Government Bodies	<ul style="list-style-type: none"> ✓ Government/autonomous corporations/local government bodies/utility companies (e.g. BPC, PDB, ICB, HBFC, Power Generation Companies, and Bangladesh Railway) could consider issuing bonds to raise funds for the long-term projects; ✓ Additionally, to avoid the crowding-out effect, emphasis should be given in promoting increased issuance of corporate debt instruments along with increased issuance of the government securities.
Bonds Issued By Banks through Private Placement Not Being Listed	<ul style="list-style-type: none"> ✓ BSEC may take steps to enlist the instruments issued through private placement;
Overreliance on Bank Financing	<ul style="list-style-type: none"> ✓ Policy measures are needed to be taken to ensure a competitive interest structure for the bonds in line with bank financing; ✓ In this regard, BSEC may conduct further studies to determine the aforementioned structure to smoothen the bond issuance process; ✓ Bangladesh Bank may consider revisiting the policies regarding loan rescheduling/restructuring to make those more rigorous and stringent.
Absence of Instructions on Mandatory Issuance of Bonds after Reaching a Debt-Ceiling	Bangladesh Bank should conduct an analysis to determine the certain debt-ceiling after which a portion of the marginal fund to be raised by issuing debt instruments.
Absence of Secondary Yield Curve/Effective Valuation Tools	<ul style="list-style-type: none"> ✓ Introduction of diversified government debt instruments and frequent transactions of those instruments are needed for the secondary market to be able to offer an effective secondary yield curve; ✓ DMD, BB should take necessary steps to publish a reliable and effective yield curve for the G-Sec to be used as the benchmark/risk-free rate.

Shortage of Special Purpose Vehicle/Entity (SPV/E)	Trust structures and favorable regulations should be formed to guarantee that the incomes generated through such assets are ring-fenced.
Limited Role of the Trustees	The role and purview of the trustee should be defined by the BSEC clearly to ensure the protection of the funds of the investors in case of a default or late payment.
Limited Confidence among the Investors in Relation to Credit Rating Agencies	The regulatory framework should be formulated for the local credit rating agencies to establish strategic partnerships with recognized international agencies (e.g. S&P, Fitch).
Tax Disincentives to the Issuers	Consider removing the stamp duty and reducing the corporate tax rate/offer a tax-holiday period to the issuers.
Tax Disincentives to the Investors	<ul style="list-style-type: none"> ✓ The Government should consider introducing a uniform tax treatment on government and non-government debt instruments for a specific period; ✓ Income from the corporate bonds could be placed outside of the scope of source-taxation, which means, tax on the interest of corporate bonds could be allowed to be paid at the time of submitting income tax return instead of deduction at source.
High Cost Related to Issuance and Secondary Trading	Issuance costs and secondary transaction costs (amounting almost 6% of issue size) should be reduced to incentivize bond issuance.
Absence of a Separate Trading Platform for Fixed-income Securities	<ul style="list-style-type: none"> ✓ Stock exchanges should consider establishing a separate platform for trading of fixed-income securities for enhanced liquidity; ✓ A separate platform would also make the debt instruments more accessible to individual investors for secondary transactions.
Nonexistence of Legal Framework for Local and International Guarantors	<ul style="list-style-type: none"> ✓ BSEC may draft the legal framework identifying the roles of local or international guarantors in ensuring the protection of investors' funds in the issuance of fixed-income instruments; ✓ The Government may consider establishing a separate credit guarantee corporation (or a regulatory body) to ensure the protection of the investors.
Additional Recommendations	
Issues/Focus Area	Recommendations
Amendment of the Insurance Rules 1958	The forthcoming Insurance Rules (to be issued under the Insurance Act, 2010) could be amended with instructions for the insurance companies to invest a minimum obligatory portion of their portfolio in Fixed-Income Securities
Amendment of the Mutual Funds Act	BSEC should consider reducing/abolishing the rule regarding the minimum requirement of obligatory equities in the mutual funds' portfolios.
Awareness Programs for the Investors and the Issuers	Bangladesh Bank and BSEC may arrange training programs for the institutional investors (e.g. insurance companies, mutual funds) and individual investors as well as for the potential issuers on a regular basis to promote awareness regarding the fixed-income securities.
Incentives for the Foreign/Non-Resident Investors	<ul style="list-style-type: none"> ✓ The process of investing in corporate bonds should be simplified for the foreign/non-resident investors; ✓ Relevant hedging instruments need to be introduced to attract those investors.
Including Investment-Grade Instruments in SLR	<ul style="list-style-type: none"> ✓ DOS and BRPD, BB may conduct further studies to analyze the viability of allowing investment-grade bond/debenture portfolio to be recognized as a part of the banks' SLR as well as in Repo transactions (with necessary haircut); ✓ The DFIM circular letter no. 01/2017 should be amended by setting the ceiling for the NBFIs in allowing maintaining their SLR with the balances held in banks and other NBFIs.
Introduction of Inflation-Indexed Bonds	The Government, banks, NBFIs and other corporate bodies may consider issuing inflation-indexed bonds to attract foreign investors by guaranteeing an inflation-adjusted return.

Introduction of Diversified Products	A detailed analysis should be conducted to study the feasibility of introducing Credit Default Swap, Interest Rate Swap, Residential Mortgage-Backed Securities (RMBS), Asset-Backed Securitizations, green bonds, Sukuk, and other types of project-specific bonds.
Introduction of Shariah-based Products	A detailed study should be conducted to analyze the feasibility of the introduction of Islamic finance products (e.g. Sukuk) in the market.
Separate Rules for Debt Securities	<ul style="list-style-type: none"> ✓ Separate rules should be drafted by BSEC specifically focusing on the debt-securities as the tax, duty, and cost structure designed for equity issuance and trading can be disincentivizing for the fixed-income securities market as transaction sizes differ significantly; ✓ In order to stimulate the secondary trading of government securities, MoF and Bangladesh Bank may consider drafting rules allowing short-selling of government securities.

8.3. Other Initiatives

8.3.1. To boost up the Shariah-based (Islamic) bond market, another committee was formed to prepare a set of recommendations. The committee has already submitted a report to the competent authority outlining the issues and recommendations with a view to developing the Shariah-based bond market in Bangladesh.

8.3.2. Moreover, a high-powered committee led by the Secretary, Financial Institutions Division, MoF is working for Bangladesh Long-Term Financing and Capital Market Development. High officials from BB, BSEC, IDRA, World Bank Group, and NBR are included in the committee. The said committee has already prepared a set of recommendations that have already been sent to the respective stakeholders to speed-up the implementation process.

8.3.3. To implement the recommendations of the working committee formed by BB with a view to developing the long-term bond market in Bangladesh and the recommendations of a committee formed by the Ministry of Finance (MoF) with a similar view, a committee has already been formed by BB. The committee is headed by the Executive Director in charge of the Debt Management Department, which includes the General Managers of different related departments as members.

Chapter 9

Conclusion



Chapter 9

Conclusion

As an emerging economy, Bangladesh is looking to foster the fixed-income securities market to ensure efficient financing options for long-term development projects taken by the Government or any public/private entity. A developed and diversified financial system with a sound debt and equity market enhances risk-pooling and better risk-sharing opportunities for the investors and borrowers. The fixed-income securities market links the issuers having short and long-term financing needs with investors willing to place funds in short and long-term interest-bearing securities. A well-functioning market offers the Government and the private entities the flexibility to diversify their sources of funding and provides them with alternative sources of raising funds having different maturities at a low cost. Similarly, the local and foreign investors would have confidence in making investments as a result of lower liquidity risk. Therefore, to finance the planned long-term developmental projects by the public and the private sector, the development of a sustainable long-term financing option is integral.

An efficient market ensures competitiveness while ensuring the desired level of liquidity. It also makes the market function in an effective manner by generating market-based interest rates. Moreover, when the secondary market functions smoothly, the interactions among the counterparties attract newer issuers and investors by offering liquidity as well as financing and investment opportunities alternate to the traditional equity-based ones. Therefore, to make the fixed-income securities market a fully-functioning intermediary, the role of the secondary market should be focused on. To address the challenges and barriers in developing the debt securities market, along with the steps taken by BB, the inter-organizational cooperation among different regulatory bodies will be paramount.

Appendices

Appendix-1: List of Primary Dealers

Sl.	Name of PD Banks	Web Link
1.	AB Bank Limited	http://www.abbl.com
2.	Agrani Bank Limited	http://www.agranibank.org
3.	Community Bank Bangladesh Limited	http://www.communitybankbd.com
4.	Jamuna Bank Ltd	http://www.jamunabankbd.com
5.	Janata Bank Limited	http://www.janatabank-bd.com
6.	Meghna Bank Limited	http://www.meghnabank.com.bd
7.	Mercantile Bank Limited	http://www.mblbd.com
8.	Midland Bank Limited	http://www.midlandbankbd.net/
9.	Modhumoti Bank Ltd.	http://modhumotibankltd.com/
10.	Mutual Trust Bank Limited	http://www.mutualtrustbank.com
11.	National Bank Limited	http://www.nblbd.com
12.	National Credit & Commerce Bank Ltd	http://www.nccbank.com.bd
13.	NRB Bank Limited	http://www.nrbbankbd.com
14.	NRB Commercial Bank Limited	http://www.nrbcommercialbank.com/
15.	NRB Global Bank Limited	http://www.nrbglobalbank.com
16.	Padma Bank Limited	http://www.padmabankbd.com/
17.	Prime Bank Ltd	https://www.primebank.com.bd/
18.	Shimanto Bank Limited	https://www.shimantobank.com/
19.	Sonali Bank Limited	http://www.sonalibank.com.bd
20.	South Bangla Agriculture & Commerce Bank Limited	http://www.sbacbank.com/
21.	Southeast Bank Limited	https://www.southeastbank.com.bd
22.	Uttara Bank Limited	http://www.uttarabank-bd.com

Appendix-2: List of Non-Primary Dealer Banks

Sl.	Non-PD Members	Web Link
1.	Bangladesh Commerce Bank Limited	http://bcblbd.com/
2.	Bank Al-Falah Limited	http://www.bankalfalah.com
3.	Bank Asia Limited	http://www.bankasia-bd.com
4.	BASIC Bank Limited	http://www.basicbanklimited.com
5.	BRAC Bank Limited	http://www.bracbank.com
6.	Citibank N.A	http://www.citi.com/domain/index.htm
7.	Commercial Bank of Ceylon Limited	http://www.combank.net/bdweb/
8.	Dhaka Bank Limited	http://dhakabankltd.com
9.	Dutch-Bangla Bank Limited	http://www.dutchbanglabank.com
10.	Eastern Bank Limited	http://www.ebl.com.bd
11.	Habib Bank Ltd.	http://globalhbl.com/Bangladesh/
12.	IFIC Bank Limited	http://www.ificbank.com.bd/
13.	National Bank of Pakistan	http://www.nbp.com.pk
14.	One Bank Limited	http://www.onebankbd.com
15.	Premier Bank Limited	http://www.premierbankltd.com
16.	Pubali Bank Limited	http://www.pubalibangla.com
17.	Rupali Bank Limited	https://rupalibank.org/en/
18.	Standard Bank Limited	http://www.standardbankbd.com
19.	Standard Chartered Bank	http://www.standardchartered.com/bd
20.	State Bank of India	https://bd.statebank/
21.	The City Bank Ltd.	http://www.thecitybank.com
22.	The Hong Kong and Shanghai Banking Corporation. Ltd.	http://www.hsbc.com.bd
23.	Trust Bank Limited	http://www.trustbank.com.bd
24.	United Commercial Bank Limited	http://www.ucb.com.bd/
25.	Woori Bank	http://www.wooribank.com

Appendix-3: List of Active Treasury Bonds (as of June 30, 2019)

(Taka in Crore)

Sl. No.	ISIN	Tenor (Year)	Issue Date	Maturity Date	Coupon Rate	Outstanding Balance
1.	BD0919111023	2	6-Dec-17	6-Dec-19	5.14%	2,800.00
2.	BD0920231026	2	4-Apr-18	4-Apr-20	5.44%	2,700.00
3.	BD0920011022	2	4-Jul-18	4-Jul-20	5.04%	3,000.00
4.	BD0920111020	2	7-Nov-18	7-Nov-20	3.70%	3,000.00
5.	BD0921251023	2	6-Mar-19	6-Mar-21	5.40%	3,000.00
6.	BD0922281037	3	27-Mar-19	27-Mar-22	6.50%	500.00
7.	BD0919021057	5	9-Jul-14	9-Jul-19	10.00%	700.00
8.	BD0919061053	5	13-Aug-14	13-Aug-19	9.82%	700.00
9.	BD0919101057	5	10-Sep-14	10-Sep-19	9.49%	700.00
10.	BD0919141053	5	15-Oct-14	15-Oct-19	9.59%	700.00
11.	BD0919181059	5	12-Nov-14	12-Nov-19	9.66%	700.00
12.	BD0919221053	5	10-Dec-14	10-Dec-19	9.60%	700.00
13.	BD0920261056	5	14-Jan-15	14-Jan-20	9.50%	50.00
14.	BD0920301050	5	11-Feb-15	11-Feb-20	9.48%	500.00
15.	BD0920341056	5	11-Mar-15	11-Mar-20	9.45%	750.00
16.	BD0920371053	5	15-Apr-15	15-Apr-20	9.40%	120.00
17.	BD0920011055	5	16-Jul-15	16-Jul-20	8.60%	600.00
18.	BD0920061050	5	12-Aug-15	12-Aug-20	7.60%	600.00
19.	BD0920101054	5	9-Sep-15	9-Sep-20	7.49%	450.00
20.	BD0920141050	5	14-Oct-15	14-Oct-20	7.35%	400.00
21.	BD0920181056	5	11-Nov-15	11-Nov-20	5.15%	300.00
22.	BD0920221050	5	9-Dec-15	9-Dec-20	6.00%	450.00
23.	BD0921261055	5	13-Jan-16	13-Jan-21	6.44%	600.00
24.	BD0921301059	5	10-Feb-16	10-Feb-21	5.89%	50.00
25.	BD0921341055	5	9-Mar-16	9-Mar-21	5.94%	2,850.00
26.	BD0921381051	5	13-Apr-16	13-Apr-21	6.25%	1,700.00
27.	BD0921421055	5	11-May-16	11-May-21	6.24%	3,000.00
28.	BD0921011054	5	13-Jul-16	13-Jul-21	7.09%	2,450.00
29.	BD0922241056	5	11-Jan-17	11-Jan-22	5.84%	2,800.00
30.	BD0923021051	5	11-Jul-18	11-Jul-23	5.74%	2,900.00
31.	BD0923121059	5	14-Nov-18	14-Nov-23	4.50%	3,000.00
32.	BD0924261052	5	13-Mar-19	13-Mar-24	6.44%	1,700.00
33.	BD0924371059	5	12-Jun-19	12-Jun-24	8.10%	1,500.00
34.	BD0919011108	10	8-Jul-09	8-Jul-19	9.45%	450.00
35.	BD0919051104	10	5-Aug-09	5-Aug-19	8.74%	450.00
36.	BD0919091100	10	2-Sep-09	2-Sep-19	8.49%	450.00
37.	BD0919131104	10	7-Oct-09	7-Oct-19	8.75%	393.75
38.	BD0919171100	10	2-Dec-09	2-Dec-19	8.75%	445.00
39.	BD0920251107	10	4-Feb-10	4-Feb-20	8.75%	200.00
40.	BD0920291103	10	3-Mar-10	3-Mar-20	8.77%	200.00

Sl. No.	ISIN	Tenor (Year)	Issue Date	Maturity Date	Coupon Rate	Outstanding Balance
41.	BD0920331107	10	7-Apr-10	7-Apr-20	8.77%	120.00
42.	BD0920371103	10	5-May-10	5-May-20	8.77%	120.00
43.	BD0920411107	10	2-Jun-10	2-Jun-20	8.79%	120.00
44.	BD0920011105	10	7-Jul-10	7-Jul-20	8.79%	350.00
45.	BD0920051101	10	4-Aug-10	4-Aug-20	8.82%	350.00
46.	BD0920091107	10	8-Sep-10	8-Sep-20	8.85%	350.00
47.	BD0920131101	10	6-Oct-10	6-Oct-20	8.85%	400.00
48.	BD0920171107	10	3-Nov-10	3-Nov-20	8.90%	400.00
49.	BD0920211101	10	8-Dec-10	8-Dec-20	9.50%	400.00
50.	BD0921251106	10	5-Jan-11	5-Jan-21	9.53%	500.00
51.	BD0921291102	10	2-Feb-11	2-Feb-21	9.45%	500.00
52.	BD0921331106	10	2-Mar-11	2-Mar-21	9.45%	500.00
53.	BD0921371102	10	6-Apr-11	6-Apr-21	9.45%	500.00
54.	BD0921411106	10	4-May-11	4-May-21	9.45%	500.00
55.	BD0921451102	10	8-Jun-11	8-Jun-21	9.45%	500.00
56.	BD0921021103	10	13-Jul-11	13-Jul-21	9.45%	300.00
57.	BD0921061109	10	10-Aug-11	10-Aug-21	9.50%	300.00
58.	BD0921101103	10	14-Sep-11	14-Sep-21	9.53%	300.00
59.	BD0921141109	10	12-Oct-11	12-Oct-21	9.55%	500.00
60.	BD0921181105	10	10-Nov-11	10-Nov-21	9.55%	500.00
61.	BD0921221109	10	14-Dec-11	14-Dec-21	9.55%	500.00
62.	BD0922261104	10	11-Jan-12	11-Jan-22	11.25%	550.00
63.	BD0922301108	10	15-Feb-12	15-Feb-22	11.35%	550.00
64.	BD0922341104	10	14-Mar-12	14-Mar-22	11.40%	550.00
65.	BD0922381100	10	11-Apr-12	11-Apr-22	11.50%	700.00
66.	BD0922421104	10	16-May-12	16-May-22	11.56%	700.00
67.	BD0922461100	10	13-Jun-12	13-Jun-22	11.60%	700.00
68.	BD0922021102	10	11-Jul-12	11-Jul-22	11.65%	650.00
69.	BD0922061108	10	22-Aug-12	22-Aug-22	11.75%	650.00
70.	BD0922101102	10	12-Sep-12	12-Sep-22	11.75%	650.00
71.	BD0922141108	10	10-Oct-12	10-Oct-22	11.80%	700.00
72.	BD0922181104	10	14-Nov-12	14-Nov-22	11.75%	700.00
73.	BD0922221108	10	12-Dec-12	12-Dec-22	11.80%	700.00
74.	BD0923261103	10	9-Jan-13	9-Jan-23	11.90%	700.00
75.	BD0923301107	10	13-Feb-13	13-Feb-23	12.00%	700.00
76.	BD0923341103	10	13-Mar-13	13-Mar-23	12.10%	2,500.00
77.	BD0923031100	10	17-Jul-13	17-Jul-23	11.22%	1,200.00
78.	BD0923191102	10	20-Nov-13	20-Nov-23	12.16%	1,400.00
79.	BD0924351101	10	19-Mar-14	19-Mar-24	11.75%	1,450.00
80.	BD0924031109	10	16-Jul-14	16-Jul-24	11.59%	1,600.00
81.	BD0924191101	10	19-Nov-14	19-Nov-24	10.92%	1,840.00
82.	BD0925381107	10	22-Apr-15	22-Apr-25	10.72%	2,800.00
83.	BD0925071104	10	19-Aug-15	19-Aug-25	8.39%	3,000.00
84.	BD0926271109	10	20-Jan-16	20-Jan-26	7.39%	2,600.00

Sl. No.	ISIN	Tenor (Year)	Issue Date	Maturity Date	Coupon Rate	Outstanding Balance
85.	BD0926021108	10	20-Jul-16	20-Jul-26	7.59%	2,700.00
86.	BD0927251100	10	18-Jan-17	18-Jan-27	6.77%	2,600.00
87.	BD0927101107	10	18-Oct-17	18-Oct-27	7.00%	2,800.00
88.	BD0928331109	10	20-Jun-18	20-Jun-28	7.50%	2,800.00
89.	BD0928131103	10	22-Nov-18	22-Nov-28	7.15%	3,000.00
90.	BD0929311100	10	17-Apr-19	17-Apr-29	7.74%	1,675.00
91.	BD0929381103	10	19-Jun-19	19-Jun-29	8.44%	2,000.00
92.	BD0922021151	15	11-Jul-07	11-Jul-22	14.00%	100.00
93.	BD0922061157	15	15-Aug-07	15-Aug-22	13.97%	100.00
94.	BD0922101151	15	12-Sep-07	12-Sep-22	13.48%	100.00
95.	BD0922141157	15	10-Oct-07	10-Oct-22	13.20%	100.00
96.	BD0922181153	15	14-Nov-07	14-Nov-22	12.94%	100.00
97.	BD0922221157	15	12-Dec-07	12-Dec-22	12.89%	100.00
98.	BD0923261152	15	9-Jan-08	9-Jan-23	12.22%	100.00
99.	BD0923301156	15	13-Feb-08	13-Feb-23	12.22%	100.00
100.	BD0923341152	15	12-Mar-08	12-Mar-23	12.22%	100.00
101.	BD0923381158	15	9-Apr-08	9-Apr-23	12.22%	100.00
102.	BD0923421152	15	14-May-08	14-May-23	12.22%	100.00
103.	BD0923461158	15	11-Jun-08	11-Jun-23	12.22%	100.00
104.	BD0923021150	15	9-Jul-08	9-Jul-23	12.14%	150.00
105.	BD0923061156	15	13-Aug-08	13-Aug-23	12.14%	150.00
106.	BD0923101150	15	10-Sep-08	10-Sep-23	12.14%	150.00
107.	BD0923141156	15	15-Oct-08	15-Oct-23	12.14%	150.00
108.	BD0923181152	15	12-Nov-08	12-Nov-23	12.14%	150.00
109.	BD0923221156	15	11-Dec-08	11-Dec-23	12.14%	150.00
110.	BD0924261151	15	14-Jan-09	14-Jan-24	12.14%	150.00
111.	BD0924301155	15	11-Feb-09	11-Feb-24	12.14%	150.00
112.	BD0924341151	15	11-Mar-09	11-Mar-24	12.14%	150.00
113.	BD0924381157	15	15-Apr-09	15-Apr-24	12.00%	150.00
114.	BD0924421151	15	13-May-09	13-May-24	10.60%	150.00
115.	BD0924461157	15	10-Jun-09	10-Jun-24	10.09%	80.00
116.	BD0924021159	15	15-Jul-09	15-Jul-24	9.39%	150.00
117.	BD0924061155	15	12-Aug-09	12-Aug-24	8.59%	150.00
118.	BD0924101159	15	9-Sep-09	9-Sep-24	8.80%	131.25
119.	BD0924141155	15	14-Oct-09	14-Oct-24	8.69%	150.00
120.	BD0924181151	15	9-Dec-09	9-Dec-24	8.69%	150.00
121.	BD0925231153	15	13-Jan-10	13-Jan-25	8.74%	100.00
122.	BD0925261150	15	10-Feb-10	10-Feb-25	8.74%	100.00
123.	BD0925301154	15	10-Mar-10	10-Mar-25	8.75%	100.00
124.	BD0925341150	15	15-Apr-10	15-Apr-25	8.77%	80.00
125.	BD0925381156	15	12-May-10	12-May-25	8.80%	75.00
126.	BD0925421150	15	9-Jun-10	9-Jun-25	8.80%	75.00
127.	BD0925021158	15	14-Jul-10	14-Jul-25	8.85%	140.00
128.	BD0925061154	15	11-Aug-10	11-Aug-25	8.86%	140.00

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129.	BD0925101158	15	15-Sep-10	15-Sep-25	8.92%	140.00
130.	BD0925141154	15	13-Oct-10	13-Oct-25	8.95%	150.00
131.	BD0925181150	15	10-Nov-10	10-Nov-25	9.05%	150.00
132.	BD0925221154	15	15-Dec-10	15-Dec-25	9.12%	150.00
133.	BD0926261159	15	9-Feb-11	9-Feb-26	9.12%	200.00
134.	BD0926301153	15	9-Mar-11	9-Mar-26	9.20%	200.00
135.	BD0926341159	15	13-Apr-11	13-Apr-26	9.30%	250.00
136.	BD0926381155	15	11-May-11	11-May-26	9.35%	250.00
137.	BD0926421159	15	15-Jun-11	15-Jun-26	9.35%	250.00
138.	BD0926071152	15	17-Aug-11	17-Aug-26	9.65%	150.00
139.	BD0926111156	15	21-Sep-11	21-Sep-26	10.30%	150.00
140.	BD0926151152	15	18-Oct-11	18-Oct-26	10.99%	200.00
141.	BD0926191158	15	16-Nov-11	16-Nov-26	11.00%	200.00
142.	BD0926231152	15	20-Dec-11	20-Dec-26	11.00%	200.00
143.	BD0927271157	15	18-Jan-12	18-Jan-27	11.50%	275.00
144.	BD0927311151	15	22-Feb-12	22-Feb-27	11.60%	275.00
145.	BD0927351157	15	21-Mar-12	21-Mar-27	11.65%	275.00
146.	BD0927391153	15	18-Apr-12	18-Apr-27	11.70%	500.00
147.	BD0927431157	15	23-May-12	23-May-27	11.75%	500.00
148.	BD0927471153	15	20-Jun-12	20-Jun-27	11.80%	500.00
149.	BD0927031155	15	18-Jul-12	18-Jul-27	11.85%	350.00
150.	BD0927111155	15	19-Sep-12	19-Sep-27	11.88%	350.00
151.	BD0927151151	15	17-Oct-12	17-Oct-27	11.93%	100.00
152.	BD0927191157	15	21-Nov-12	21-Nov-27	12.00%	100.00
153.	BD0927231151	15	19-Dec-12	19-Dec-27	12.10%	100.00
154.	BD0928271156	15	16-Jan-13	16-Jan-28	12.20%	100.00
155.	BD0928311150	15	20-Feb-13	20-Feb-28	12.30%	100.00
156.	BD0928351156	15	20-Mar-13	20-Mar-28	12.38%	100.00
157.	BD0928391152	15	17-Apr-13	17-Apr-28	12.38%	200.00
158.	BD0928431156	15	22-May-13	22-May-28	12.38%	200.00
159.	BD0928471152	15	19-Jun-13	19-Jun-28	12.40%	200.00
160.	BD0928041153	15	24-Jul-13	24-Jul-28	12.40%	150.00
161.	BD0928081159	15	29-Aug-13	29-Aug-28	12.40%	150.00
162.	BD0928121153	15	25-Sep-13	25-Sep-28	12.42%	150.00
163.	BD0928161159	15	23-Oct-13	23-Oct-28	12.42%	150.00
164.	BD0928201153	15	27-Nov-13	27-Nov-28	12.29%	150.00
165.	BD0928241159	15	26-Dec-13	26-Dec-28	12.29%	150.00
166.	BD0929281154	15	29-Jan-14	29-Jan-29	12.20%	150.00
167.	BD0929321158	15	26-Feb-14	26-Feb-29	12.10%	150.00
168.	BD0929361154	15	27-Mar-14	27-Mar-29	12.00%	350.00
169.	BD0929401158	15	23-Apr-14	23-Apr-29	11.97%	350.00
170.	BD0929441154	15	28-May-14	28-May-29	11.97%	400.00
171.	BD0929481150	15	25-Jun-14	25-Jun-29	11.97%	400.00
172.	BD0929041152	15	23-Jul-14	23-Jul-29	11.87%	250.00

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173.	BD0929081158	15	27-Aug-14	27-Aug-29	11.59%	250.00
174.	BD0929121152	15	24-Sep-14	24-Sep-29	11.50%	250.00
175.	BD0929161158	15	29-Oct-14	29-Oct-29	11.42%	250.00
176.	BD0929201152	15	26-Nov-14	26-Nov-29	11.47%	680.00
177.	BD0930041159	15	29-Jul-15	29-Jul-30	10.06%	2,700.00
178.	BD0930121159	15	23-Sep-15	23-Sep-30	8.44%	3,000.00
179.	BD0931401154	15	27-Apr-16	27-Apr-31	7.79%	2,850.00
180.	BD0933101158	15	26-Sep-18	26-Sep-33	7.20%	2,100.00
181.	BD0933141154	15	28-Nov-18	28-Nov-33	7.55%	1,900.00
182.	BD0927041204	20	25-Jul-07	25-Jul-27	15.95%	50.00
183.	BD0927081200	20	29-Aug-07	29-Aug-27	15.44%	50.00
184.	BD0927121204	20	26-Sep-07	26-Sep-27	14.23%	50.00
185.	BD0927161200	20	24-Oct-07	24-Oct-27	13.88%	50.00
186.	BD0927201204	20	28-Nov-07	28-Nov-27	13.49%	50.00
187.	BD0927241200	20	26-Dec-07	26-Dec-27	13.29%	50.00
188.	BD0928281205	20	23-Jan-08	23-Jan-28	13.19%	50.00
189.	BD0928321209	20	27-Feb-08	27-Feb-28	13.14%	50.00
190.	BD0928361205	20	27-Mar-08	27-Mar-28	13.14%	50.00
191.	BD0928401209	20	23-Apr-08	23-Apr-28	13.14%	50.00
192.	BD0928441205	20	28-May-08	28-May-28	13.13%	50.00
193.	BD0928481201	20	25-Jun-08	25-Jun-28	13.09%	50.00
194.	BD0928041203	20	23-Jul-08	23-Jul-28	13.07%	125.00
195.	BD0928081209	20	27-Aug-08	27-Aug-28	13.07%	125.00
196.	BD0928121203	20	24-Sep-08	24-Sep-28	13.07%	125.00
197.	BD0928161209	20	29-Oct-08	29-Oct-28	13.04%	125.00
198.	BD0928201203	20	26-Nov-08	26-Nov-28	13.04%	125.00
199.	BD0928241209	20	24-Dec-08	24-Dec-28	13.02%	125.00
200.	BD0929281204	20	28-Jan-09	28-Jan-29	13.00%	125.00
201.	BD0929321208	20	25-Feb-09	25-Feb-29	12.99%	125.00
202.	BD0929361204	20	25-Mar-09	25-Mar-29	12.98%	150.00
203.	BD0929401208	20	29-Apr-09	29-Apr-29	11.48%	150.00
204.	BD0929441204	20	27-May-09	27-May-29	11.09%	133.20
205.	BD0929481200	20	24-Jun-09	24-Jun-29	10.07%	80.00
206.	BD0929041202	20	29-Jul-09	29-Jul-29	8.97%	125.00
207.	BD0929081208	20	26-Aug-09	26-Aug-29	8.59%	3.00
208.	BD0929161208	20	28-Oct-09	28-Oct-29	9.10%	125.00
209.	BD0929201202	20	23-Dec-09	23-Dec-29	9.10%	150.00
210.	BD0930251204	20	24-Feb-10	24-Feb-30	9.11%	100.00
211.	BD0930281201	20	24-Mar-10	24-Mar-30	9.15%	100.00
212.	BD0930321205	20	27-Apr-10	27-Apr-30	9.17%	80.00
213.	BD0930361201	20	26-May-10	26-May-30	9.20%	75.00
214.	BD0930401205	20	24-Jun-10	24-Jun-30	9.15%	75.00
215.	BD0930041209	20	29-Jul-10	29-Jul-30	9.20%	125.00
216.	BD0930081205	20	25-Aug-10	25-Aug-30	9.23%	125.00

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217.	BD0930121209	20	29-Sep-10	29-Sep-30	9.25%	125.00
218.	BD0930161205	20	27-Oct-10	27-Oct-30	9.25%	125.00
219.	BD0930201209	20	24-Nov-10	24-Nov-30	9.45%	125.00
220.	BD0930241205	20	29-Dec-10	29-Dec-30	9.57%	125.00
221.	BD0931281200	20	26-Jan-11	26-Jan-31	9.60%	150.00
222.	BD0931321204	20	23-Feb-11	23-Feb-31	9.60%	150.00
223.	BD0931361200	20	23-Mar-11	23-Mar-31	9.63%	160.00
224.	BD0931401204	20	27-Apr-11	27-Apr-31	9.65%	175.00
225.	BD0931441200	20	25-May-11	25-May-31	9.65%	175.00
226.	BD0931471207	20	29-Jun-11	29-Jun-31	9.65%	185.00
227.	BD0931041208	20	27-Jul-11	27-Jul-31	10.00%	150.00
228.	BD0931081204	20	24-Aug-11	24-Aug-31	10.25%	150.00
229.	BD0931121208	20	28-Sep-11	28-Sep-31	10.85%	150.00
230.	BD0931161204	20	26-Oct-11	26-Oct-31	11.50%	175.00
231.	BD0931201208	20	23-Nov-11	23-Nov-31	11.50%	175.00
232.	BD0931241204	20	28-Dec-11	28-Dec-31	11.50%	175.00
233.	BD0932281209	20	25-Jan-12	25-Jan-32	11.95%	250.00
234.	BD0932321203	20	29-Feb-12	29-Feb-32	12.00%	250.00
235.	BD0932361209	20	28-Mar-12	28-Mar-32	12.03%	250.00
236.	BD0932401203	20	26-Apr-12	26-Apr-32	12.07%	325.00
237.	BD0932441209	20	30-May-12	30-May-32	12.10%	325.00
238.	BD0932481205	20	27-Jun-12	27-Jun-32	12.12%	341.00
239.	BD0932041207	20	25-Jul-12	25-Jul-32	12.12%	300.00
240.	BD0932081203	20	29-Aug-12	29-Aug-32	12.16%	300.00
241.	BD0932121207	20	26-Sep-12	26-Sep-32	12.16%	300.00
242.	BD0932161203	20	25-Oct-12	25-Oct-32	12.16%	100.00
243.	BD0932201207	20	28-Nov-12	28-Nov-32	12.18%	100.00
244.	BD0932241203	20	26-Dec-12	26-Dec-32	12.28%	100.00
245.	BD0933281208	20	23-Jan-13	23-Jan-33	12.38%	100.00
246.	BD0933321202	20	27-Feb-13	27-Feb-33	12.48%	100.00
247.	BD0933361208	20	27-Mar-13	27-Mar-33	12.48%	100.00
248.	BD0933401202	20	24-Apr-13	24-Apr-33	12.48%	100.00
249.	BD0933441208	20	29-May-13	29-May-33	12.47%	100.00
250.	BD0933481204	20	26-Jun-13	26-Jun-33	12.48%	100.00
251.	BD0933041206	20	24-Jul-13	24-Jul-33	12.48%	150.00
252.	BD0933081202	20	29-Aug-13	29-Aug-33	12.48%	150.00
253.	BD0933121206	20	25-Sep-13	25-Sep-33	12.48%	150.00
254.	BD0933161202	20	23-Oct-13	23-Oct-33	12.48%	150.00
255.	BD0933201206	20	27-Nov-13	27-Nov-33	12.33%	150.00
256.	BD0933241202	20	26-Dec-13	26-Dec-33	12.33%	150.00
257.	BD0934281207	20	29-Jan-14	29-Jan-34	12.26%	150.00
258.	BD0934321201	20	26-Feb-14	26-Feb-34	12.24%	150.00
259.	BD0934361207	20	27-Mar-14	27-Mar-34	12.14%	300.00
260.	BD0934401201	20	23-Apr-14	23-Apr-34	12.14%	300.00

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261.	BD0934441207	20	28-May-14	28-May-34	12.14%	350.00
262.	BD0934481203	20	25-Jun-14	25-Jun-34	12.12%	350.00
263.	BD0934041205	20	23-Jul-14	23-Jul-34	12.10%	250.00
264.	BD0934081201	20	27-Aug-14	27-Aug-34	11.89%	250.00
265.	BD0934121205	20	24-Sep-14	24-Sep-34	11.98%	250.00
266.	BD0934161201	20	29-Oct-14	29-Oct-34	11.98%	250.00
267.	BD0934201205	20	26-Nov-14	26-Nov-34	11.98%	680.00
268.	BD0935041204	20	29-Jul-15	29-Jul-35	10.36%	2,600.00
269.	BD0935201204	20	25-Nov-15	25-Nov-35	8.70%	2,650.00
270.	BD0936401209	20	27-Apr-16	27-Apr-36	8.24%	2,850.00
271.	BD0938141209	20	28-Nov-18	28-Nov-38	8.24%	3,000.00
272.	BD0939391209	20	26-Jun-19	26-Jun-39	9.29%	800.00

