Volume: 3, Issue: 1
Page: 260-273
2019

ISSN 2520-4750 (Online) & ISSN 2521-3040 (Print)

International Journal of Science and Business

Investment in Government Securities by State-owned Commercial Banks

Subrata Deb Nath, Munna Rani Biswas & Md. Habib Ullah Siddique

Abstract

The purpose of the study is to review the treasury functions of the SCOBs, to assess the amount of investment in government securities by the SOCBs and to find out the amount of loss incurred due to excess investment in government securities. The study found that Treasury Department of the various SOCBs is involved in CRR & SLR management, Currency Management, ALM and investment. Moreover, excess SLR of SOCBs was gradually increased in 2015 and 2016 with some exceptions. In addition, COF was between 6.95% to 11.87% in the period of 2014 to 2016 and WAIR of investment was drastically fall in 2015 and 2016. Consequently SOCBs incurred huge loss in 2015 and 2016. The implication of the study is that SOCBs can use the findings to take necessary actions regarding excess investment in government securities. Moreover, this study is a unique one in Bangladesh perspective, because a number research conducted on the investment in govt. securities or security market related topic but ''Investment in Government Securities by State-owned Commercial Bank" is new and unique. In addition, academician can use the results of the study for further research and policy makers and regulators can use it to take quick decision.

IJSB
Accepted 22 September 2019
Published 24 September 2019
DOI: 10.5281/zenodo.3459409

Keywords: Investment, Government security, State-owned commercial Banks, Profit, Loss.

About Author

Subrata Deb Nath (corresponding author), Principal Officer, Treasury Dept., Janata Bank Limited, Head Office, 110 Motijheel C/A, Dhaka-1000, Bangladesh.
Munna Rani Biswas, Senior Assistant Chief, Cabinet Division, Bangladesh Secretariat, People's Republic of Bangladesh, Dhaka-1000, Bangladesh.
Md. Habib Ullah Siddique, Senior Principal Officer, Treasury Dept., Janata Bank Limited, Head Office, 110 Motijheel C/A, Dhaka-1000, Bangladesh.

Introduction

The banking sector in Bangladesh comprises four categories of scheduled banks- State-owned Commercial Banks (SOCBs), State-owned Development Financial Institutions (DFIs), Private Commercial Banks (PCBs) and Foreign Commercial Banks (FCBs). There are six state-owned commercial banks operating in Bangladesh (BB Annual Report-2015). A Government Security (G-Sec) is a tradable instrument issued by the Central Government. It acknowledges the Government's debt obligation. Such securities are short term (usually called treasury bills, with original maturities of less than one year) or long term (usually called Government bonds or dated securities with original maturity of one year or more). G-Securities carry practically no risk of default and hence, are called risk-free gilt-edged instruments (RBI, 2016).

Government securities market of Bangladesh consists of tradable and non-tradable securities. Non-tradable securities include National Savings Certificates i.e. Sanchayapatras and Sanchaya-bonds which are only for retail investors. On the other hand, the tradable securities include Treasury Bills (T-Bills) of 91, 182 and 364 days maturities and Bangladesh Government Treasury Bonds (BGTB) of 2, 5, 10, 15 and 20 years maturities. T-Bills and BGTBs are issued through auctions. Only Primary Dealers (PD) can submit bids in the auctions. Other institutions and individuals can submit bids in auction but through the PDs. At present 20 banks are performing as Primary Dealer. T-Bills and BGTBs can be sold in the secondary market. In addition, Bangladesh Bank has its own depository system for the transaction and settlement of Government securities in the Market Infrastructure (MI) Module. In 2011 BB introduced this automated system to expedite the primary auction and secondary market (Anon, 2017).

In the recent time, banking industry faces two challenges, i.e., pressure of huge liquidity and declining of earning profit. The management of these two factors is very important for healthily growing of banking business. The trade-off between banks' liquidity and profitability depends on the demand and supply of liquidity in the banking sector. Banks have to maintain adequate liquidity to meet the demand of funds at the time needed at a reasonable cost. When the banks' demand for liquidity is higher than the supply then bank either sell its liquid asset or borrow funds to meet the deficit which impacts on profitability of the bank. On the other hand, when the bank's supply of liquidity exceeds its demand bank loss some earnings which also impact on bank's profitability. That is excess liquidity indicates idle funds that don't fetch any profit. On the other hand, insufficient liquidity might deteriorate bank's credit that would lead to forced liquidation of banks assets (Begum & Islam, 2015).

Methodology

The topic for the research is ``Investment in Government Securities by State-owned Commercial Banks" and the nature of the topic is theoretical and descriptive. So, to conduct the research the type of research suitable is Descriptive research and the study is conducted based on only secondary data. Secondary data have been collected from different departments and various publications of Bangladesh Bank, Annual Reports of commercial banks and published research journals, published books, websites, etc. Besides, treasury manuals of different banks have been consulted for preparing the report.

Justification of the Study

All banks including State-owned Commercial Banks, have to maintain 6.50% CRR (from june,2018 it is 5.50%) and 13.00% SLR as a regulatory requirement. This SLR is calculated on the basis of their two months earlier total demand and time liabilities. To fulfill their SLR requirement, banks invest their funds to the Government Securities. A Government Security (G-Sec) is a tradable instrument issued by the Government either short term (usually called treasury bills, with original maturities of less than one year) or long term (usually called Govt. bonds or dated securities with original maturity of one year or more) basis. Although, G-Secs. carry practically no risk of default but there is a negative relationship between excess liquidity and profitability. Therefore, studying investment in govt. securities by SOCBs is very important. The financial system of Bangladesh is bank dependent. Though at present, a large number of non-banks financial institutions (NBFIs) are operating in the financial sector, yet their proportionate share is not significant (Choudhury, 2012). Moreover, banks invested in govt. securities to make trade-off between liquidity and profitability. So, Researcher used Investment in Govt. securities by state-owned commercial banks as research tropic because SOCBs are the most dominating element of financial system of Bangladesh and G-Securities carry practically no risk of default. This topic is selected to present the real situation of investment in T-Bills & T-Bonds by State owned Commercial Banks in Bangladesh, the amount of income and loss generated from investment in government securities as well as why they went to this type of investment more.

Literature Review

The financial system in Bangladesh is mainly composed of two types of institutions: banks and non-bank financial institutions (NBFIs). The banking sector is supervised and regulated by the Bangladesh Bank, the central bank of Bangladesh. The banking sector alone accounts for a substantial share of financial sector assets, with 48 banks accounting for about 95 percent of the sector's total assets as of the end of December 2011. Since 2002, the domination of the banking system by the state-owned commercial banks (SOCBs) has been declining while private commercial banks (PCBs) and foreign commercial banks (FCBs) have been gaining market share in both deposits and bank loans and advances reflecting an increased competition in the banking industry (Ahamed, 2012).

Before our independence, the use of bonds as a means of resource mobilization was virtually non-existent in Bangladesh. Immediately after liberation, the government of Bangladesh reissued long-term bonds accepting the liabilities of the Income Tax Bonds and the Defense Bonds of the Pakistan government held by Bangladeshi nationals and institutions. The government also issued a 5% non-negotiable bond to Bangladeshi shareholders of nationalized industries. In addition, savings bonds were also issued to pay for the value of demonetized in 1974. Most of these bonds are held by Bangladesh Bank. The first effort to mobilize savings for use of development expenditure was the issue of Wage Earners Development Bonds in 1981 to be sold to Bangladeshi wage earners abroad. Later, a two-year special treasury bond was issued in 1984 to be sold to individuals, public and private sector organizations including banks. During the implementation period of the financial sector reform program that took effect from 1990, nationalized commercial banks, specialized banks and development financial institutions had to make considerable provisions for huge classified loans. As a result, the capital base of those banks and financial institutions eroded severely and their viability was seriously threatened. In this situation, the government issued a series of bonds to restructure the capital base of these banks and financial institutions as well as to assume the liabilities of the bad loans made to a number of public sector organizations. Some bonds were also issued to mobilize funds for a number of public sector organizations like Bangladesh Biman. Following is the list of bonds issued by the government on various occasions: 15 years treasury bond (issued in 1990), 3 years Jatiya Biniyog Bond (issued in 1985), interest-free treasury bond (issued in 1988), treasury bond to specialized banks (issued in 1993), 3 years T&T bond (issued in 1993), 3 years special treasury bond (issued in 1993), 15 years treasury bond (issued in 1993), 25 years treasury bond (issued in 1993), 3 years treasury bond (issued in 1994), interest free treasury bond (issued in 1994) and 2 years treasury bond (issued in 1995), 3 years T&T bond (issued in 1994), 3 years treasury bond (issued in 1995), 3 years T & T bond (issued in 1995), 3 years jute treasury bond (issued in 1995), 25 years treasury bond (issued in 1994), 5 years Biman treasury bond (issued in 1995), 3 years jute treasury bond (issued in 1995), 25 years jute treasury bond (issued in 1995), 15 years agriculture treasury bond (issued in 1996), 3 years T&T bond (issued in 1996), 3 years treasury bond (issued in 1997), 5 years Biman treasury bond (issued in 1997), 3 years T & T bond (issued in 1999), 10 years jute treasury bond (issued in 1995), 5 years Biman treasury bond (issued in 1998), 5 years Biman treasury bond (issued in 1998), 10 years BSC treasury bond (issued in 1998), 10 years jute treasury bond (issued in 1995), 3 years T&T bond (issued in 1999) and 3 years treasury bond (issued in 2000). Marketability of bonds issued in the country was very limited up to 2005 as there was no secondary market for trading of these instruments. The banks, majority of which were government owned, held these bonds. There were provisions for holding of these bonds by the individuals and non-bank financial institutions also but response from them was minimum due mainly to maturity profile and non-flexibility in the rate of return offered on those instruments. These were held by the banks due to the government allocation system, as well as to maintain (Das, 2014).

In October, 2004 Islamic Investment Bonds (Islamic Bonds) in accordance with Islamic Shariah was introduced for investments by the Bangladeshi Institutions and individuals and non- resident Bangladeshis, who are willing to share profit or loss. These Bonds are of 6 Months, 1 Year and 2 Year maturities and are quite attractive to the investors due to short maturity profile and flexible attractive return. To mobilize long-term fund from domestic sources for financing government expenditure program Bangladesh Government Treasury Bonds (BGTB), bearing half yearly coupon interest, with tenors of 5 years, 10 years, 15 years and 20 years have been introduced. These bonds are issued at par through yield based multiple price auction mechanism held in Bangladesh Bank with effect from 2007. Recently 2 years treasury bond has been introduced in the market which also bears half yearly coupon interest. The most important event in the history of Bond market in Bangladesh is that from January 10, 2005 Bonds are being traded in the secondary market. A total of 18 Bonds were listed in Dhaka Stock Exchange for trading in the market. It may be noted that Bangladesh Bank appointed primary dealers to facilitate development of bond market in the country and until August, 2010 15 Primary Dealers comprising of banks and non-bank financial institutions are engaged in freely sale/purchase of bonds issued through auction mechanism. Primary dealers also get necessary support from Bangladesh Bank in case fund shortages. Since government is the single borrower in the bond market, the rates offered in other government savings instrument basically determine the yield structure of bond market. Given the nature and duration of maturities, yields had been relatively low for the bonds issued in the market as compared to the government savings instruments. This is clearly against the traditional rule of high risk-high return and vice versa which significantly impeded the growth of bond market in the country. Recently a declining trend in interest rate is being observed in the bond market, generating a relatively flat yield curve at the long end which desirable in anchoring inflation. Despite all these development, the overall situation of bond market in Bangladesh is not satisfactory due to absence of corporate bonds. The presence of a vibrant corporate bond market has strong and positive effect in reducing dominance of bank lending in private enterprises and to ensure competitive structure of rate of interest in the economy reflecting opportunity cost of money which is still lacking (Das, 2014).

Participant banks holding T-bills & T-bonds may sell their holdings to other banks, institutions or their clients. The terms of the secondary market transaction is mutually agreed upon by the buying and selling parties using any mode of communication agreeable to both parties (e.g., phone, fax or in person). This is called over-the-counter (OTC) trading, i.e., as opposed to trading on an organized exchange. The Central Depository Bangladesh Limited (CDBL) system has facility to allow participants to enter direct transfer or deliver and receive instructions online which the system will match in the latter case. The system will record debits and credits corresponding to matched deliver and receive instructions on the specified settlement date if there is sufficient balance in the delivering participant's securities account. With this infrastructure, transfers of ownership in the T-bills & T-bonds electronic registry will be undertaken directly into the investor's account. Individual and institutions resident in Bangladesh are eligible to purchase T-bills & T-bonds. Non-resident individual and institutions also are eligible to purchase these with foreign currency but are not allowed to sale within one year of purchase. In accordance with government fund raising program, T-bills & T-bonds are issued by the Bangladesh Bank through online auction system at cut-off prices. Auctions are held as per auction calendar prepared and announced prior to each financial year on the basis of government debt management strategy. The Primary Dealers act as the underwriters and market makers with commitments to bid in auctions. The unsold portion of the bond in any particular auction is devolved to the banks and other financial institutions. The bonds (Primary Issues) are issued by Bangladesh Bank, at coupon rates, which are determined at the auction dates and are payable at six monthly intervals from the date of issue. Banks and financial institutions maintaining current account with Bangladesh Bank including the PDs, may submit bids on own account and on behalf of others for face value amount in multiples of BDT 1,00,000.00. Separate bids will be submitted for bonds of different maturities. Bangladesh Bank also participates in bond market (both primary and secondary) for maintaining desired yield curve on residual amount not accepting by the market participants. Allowing market first, Bangladesh Bank assumes position for market development as well as macroeconomic stability of the country. Until 2003, there was no secondary market for T-bills & T-bonds transaction in Bangladesh. Government had decided to introduce the secondary T-bills & T-bonds market with a vision of broadening the government securities market. Citibank N.A. and Prime Bank Limited had taken part in the first secondary transaction. Citibank N.A. had sold a T-bond of 2 years maturity bearing BDT 3,00,00,000.00 of face value to Prime Bank Limited. Bangladesh Bank had taken necessary steps to assist that transaction. This was regarded the first secondary T-bond transaction in our country. Bangladesh Bank had selected eight banks and one non-bank financial institutions as primary dealers (PDs) to handle secondary transactions of T-bills and other government bonds. The eight banks were Sonali Bank, Janata Bank, Agrani Bank, Prime Bank Ltd, Uttara Bank Ltd, South-East Bank Ltd, Jamuna Bank Ltd, and NCC Bank Ltd., and the only NBFI is International Leasing and Financial Services Ltd. But now there are 15 primary dealers where 12 commercial banks and 3 finance companies exist. The inter-bank Repo is one kind of secondary market for T- bills & T-bonds which was introduced from July 27, 2003. The Bangladesh Bank earlier invited applications from all scheduled banks and financial institutions and directed interested parties to drop applications to the Foreign Exchange Reserve and Treasury Management Department of the central bank latest by August 21, 2003. A total of 18 commercial banks and 1 non-bank financial institution filed their applications for receiving PD licenses during the stipulated time. Central bank earlier issued a guideline for the PDs with a view to activating and streamlining the country's secondary bond market. Under the guideline, the PDs will subscribe and underwrite primary issues and make secondary trading deals with two way price quotes. A PD won't short sell any particular issue and won't carry a short position in secondary dealings. The PDs won't act as inter-bank or inter-dealer broker; it was specified in the guidelines. In Bangladesh, Multiple-units Auction Model is followed. Two types of bids may be submitted at the auction: Competitive bids, Non-competitive bids. Competitive bids specify both the quantity of the security sought and a yield. If the specified yield is within the range accepted at the auction, the bidder is awarded the entire quantity sought unless the specified yield is the highest rate accepted, in which case the bidder is awarded a prorated portion of the bid. Noncompetitive bids specify only the quantity of the security sought (Das, 2014).

Every Bank has to maintain Cash Reserve Requirement (CRR) and Statutory Liquidity Reserve (SLR) requirements on its Total Demand and Total Time Liabilities (TDTT) to fulfill the compliance of the central bank. Now CRR is 6.00% for Conventional Banks as well as Islamic Banks but SLR is 13.00% for Conventional Banks and 5.50% for Islamic Banks which was 19.00% & 11.50% accordingly. SLR requirement was changed by Bangladesh Bank’s DOS Circular No.-01, dated 19/01/2014 and the effective date was 1st February, 2014. CRR is maintained at cash form with Bangladesh Bank and SLR is calculated by total investment amount in T-bills & T-bonds, excess amount of CRR, foreign exchange reserve with Bangladesh Bank. Banks can purchase T-bills and T-bonds from central bank through Primary Dealer (PD) based on competitive online bid. Any bank can maintain whole 13.00% (Conventional Banks) of SLR requirement by purchasing T-bills and T-bonds. In 2013, excess liquidity in the market was BDT 83,000.00 crore and it was happened because of decreasing the private sector credit growth. Excess liquidity position means availability of excess fund beyond the amount of CRR & SLR requirements and idle fund of the banks. So that banks invested that excess fund at T-bills or T-bonds to offset the cost of deposit or to generate some profit. If banks did not do this, they put up with the cost of deposit or loss of the profit. Most of the banks earned more than BDT100.00 crore from investing in T-bills and T-bonds at that time of lending crisis (Das, 2014).

According to Mortaza & Shadat (2016), there are several reasons why the secondary bond market is not active in Bangladesh:

Absence of yield curve: Demand for bonds is constrained by the prevalence of fiscal dominance, which prevents competitive auctioning of government securities based on market prices. Consequently, primary dealers hold their portfolio of government securities until maturity to minimize losses, which impedes the development of a secondary government bond market. The corporate bond market, therefore, hardly exists because of the absence of a credible government yield curve.

High issue cost: There is a large amount of cost associated with issuance of new bonds in Bangladesh. The costs are related with Bangladesh Securities and Exchange Commission (BSEC) registration; publication of prospectus; printing of prospectus and application; certificate, post issue, postage; listing fees; issue manager or underwriter; trustee fee; credit rating, bankers, legal and audit; central depository fee. It is estimated that the public issue cost averaged about 8.0%, topping with a recurring annual 1% trustee fee and related listing fees. In a prevailing high interest regime, a high establishment and issue cost base rendered most public issue of corporate debentures unviable.

High cost of trading in secondary markets: As there are no debt trades taking place on the Dhaka Stock Exchange, the present cost structure of trading equities on the DSE has been quite high. It is found that the cost of trading equities goes up to 0.7% of total value of securities traded depending on the volume and the broker.

High government borrowing at high interest rates: The government has traditionally been the major borrower through the various 'national savings schemes' with the highest interest rate. The government instruments crowd out corporate borrowers and bank deposits in comparable tenures.

Higher interest rate on savings certificates: Much of the fraud and abuse in the past has originated from the poor performance of the primary and secondary markets. The institutional investor base is poorly developed. Retail investors are not so familiar bond market operations. While investors can get higher capital gain from investing in NSD certificated, they show litter interest in the debt securities.

Attractive syndicated loans: Syndicated loans from commercial banks are cheap as well as flexible and tailor-made, which makes bonds less attractive to the corporate issuers.

Absence of alternative financial instruments: The absence of alternative financial instruments limits the depth and breadth of Bangladesh's capital markets. The lack of a regulatory framework for alternative financial instruments, such as *sukuks* (Sharia-compliant bonds), is a major factor for the absence of such instruments.

Traditionally, a successful treasury department was one that remained invisible; if it performed its tasks successfully, then the organization's business units, Board of Directors and senior management paid little to no attention to its activities. In many organizations, Treasury ensured an efficient banking structure, adequate liquidity and the safekeeping of cash resources that allowed the rest of the organization to focus on the more "important" tasks of acquisition, growth and development. Treasury's role was certainly a critical one, but it was often relegated to a support function with "back-office" status–it protected the firm's resources rather than create value. Those days are long gone. Treasury is now recognized as a full "partner" by the rest of the organization and external stakeholders (Wyman, 2014).

The excess investment in Treasury Bills & Treasury Bonds in 2013 in Bangladesh was more profitable than other investment such as loans & advances for Banks (Conventional Commercial Banks) & other Financial Institutions (FIs). In 2013, country's political situation was fully disfavor of real sector investment and banks did not increase their loans & advances to increase their profitability but Banks had to bear the costing of deposit. So banks & other FIs suffered from excess liquidity problem. To control the situation Bangladesh Bank (BB) sold more T-Bills & T-Bonds to control the excess liquidity position (Das, 2014). M. K. Mujeri, and Md. Habibur Rahman (2009), focused in the research paper titled "Financing Long Term Investments in Bangladesh: Capital Market Development Issues" regarding the capital market position that there has been an increased demand for the development of infrastructural services and opening up of the infrastructural sector for private investment so that a large number of financial intermediaries and private sector participants would participate the financial market to raise long term funds in Bangladesh. He, therefore, opined to set up the required debt market infrastructure which can create a vibrant secondary debt market in Bangladesh. The paper analyzes recent developments in the country's capital market and suggests measures and ways to ensure a liquid capital market in Bangladesh in support of the country's rapid development needs. Alak Kumar Saha (2012), in his study titled "Capital Market in Bangladesh: An Overview" found that the Capital market could not play the proper role as it was expected in comparison with the neighboring, regional and some other countries that the study finds. It suggests that the government along with the authorities concerned should be more active in strengthening this market so that the investors as well as issuers could come forward to involve themselves with full confidence.

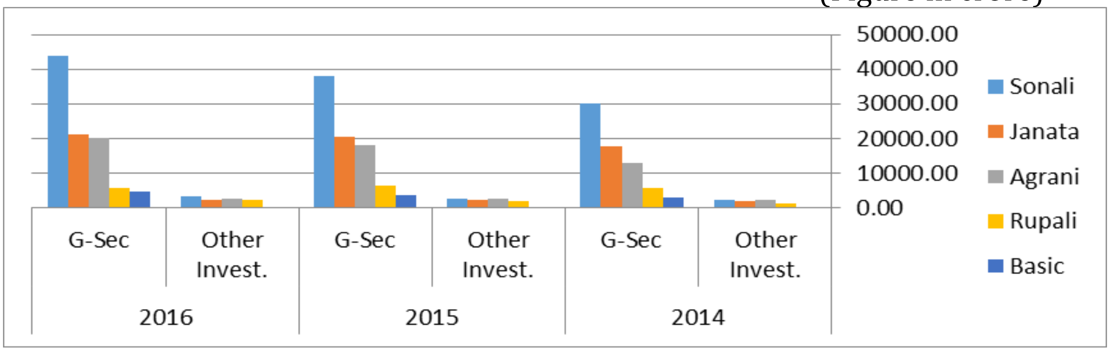
During the last decades, investors from abroad have increased their presence in government bond markets. The financial crisis broke this trend. Domestic financial institutions allocated a larger share of government securities in their portfolios. Increases in the share held by institutional investors or non-residents by 10 percentage points are associated with a reduction in yields by about 25 or 40 basis points, respectively. The data show a varied lead-lag relationship between bond yields and investor holdings. Portfolio balance estimates suggest that a change in statutory or regulatory holdings of government securities to the tune of 10 percent of the outstanding stock causes expected returns to decline by 7 to 25 basis points (Andritzky, 2012).

Results and Discussion:

Investment of State-owned Commercial Banks:

Figure:1- Total investment of SOCBs

(Figure in crore)

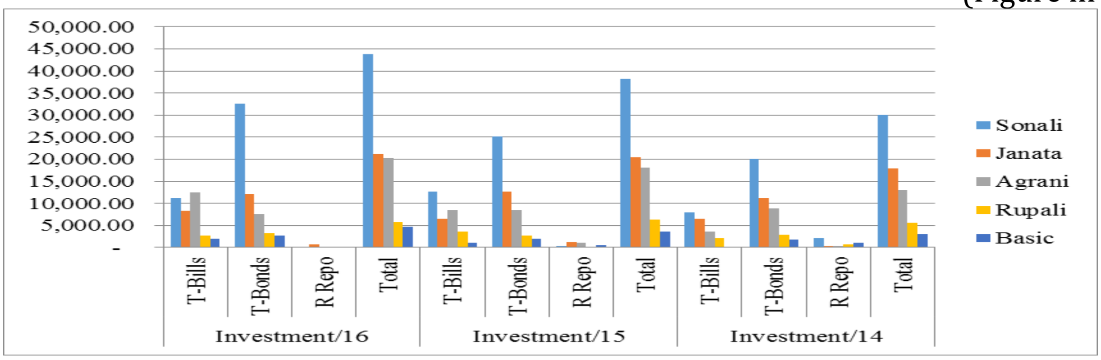


(Source: Annual report of SOCBs 2014-2016)

Total investment of SOCBs is shown in figure -1. State-owned Commercial Banks investments composed of investment in Govt. securities and in other govt. securities. Investment in Govt. securities includes Treasury bill, Treasury Bonds, Reverse repo and other govt. securities include other bonds, Debenture, Share etc. From the above graph it is seen that investment in Govt. securities were increasing gradually but invest in other govt. securities were more or less same. Figure-1 shows that, Sonali bank Limited had the highest investment in Govt. securities in 2016 which was around Tk. 43,798.80 crore followed by Janata Bank limited and Agrani Bank Limited. However, Basic bank Limited had the lowest investment in both Govt. securities and in other govt. securities.

Figure:-2 Investment in various Govt. securities

(Figure in crore)



(Source: Annual report of SOCBs 2014-2016)

Investment in various Govt. securities by SOCBs is depicted in the figure:-2. Treasury Bills include 91 days treasury bills, 182 days treasury bills, 364 days treasury bills, 7 days Bangladesh Bank bills, 14 Bangladesh Bank bills 30days Bangladesh Bank bills and Treasury Bonds include 2 years Govt. Treasury Bond, 5 years Govt. Treasury Bond, 10 years Govt.

Treasury Bond, 15 years Govt. Treasury Bond, 20 years Govt. Treasury Bond etc. (Appendix-i-v). Figure:-2 show that Sonali Bank Limited had the highest investment in Treasury Bonds in 2016 which was Tk. 32,520.02 crore. Investment in Treasury Bonds increased by 62.20% in 2016 compare to 2014 which was Tk. 20,049.82 crore. Janata Bank Limited had the second largest investment in Treasury Bonds in 2016 which was Tk. 12,477.84 crore and followed by Agrani Bank Limited and Rupali Bank Limited. Here also, Basic Bank Limited had the lowest investment in Treasury Bonds.

Investment Scenario of SOCBs:

All banks including State-owned Commercial Banks, have to maintain 6.50% Cash Reserve Requirement (CRR) and 13.00% Statutory Liquidity Reserve (SLR) as a regulatory requirement. But they maintained huge excess amount of SLR in the year 2014, 2015 & 2016 (Table-1). In the year 2014, Sonali, Janata, Agrani, Rupali and Basic Bank Limited maintained excess SLR of Tk. 19886.59, 12263.26, 8249.11, 3670.42, & 1394.89 crore respectively. On the other hand, except Rupali Bank (which decreased by 2.54% in 2015 and 36.12% in 2016), it (amount of excess SLR) was increased by 49.09%, 15.00%, 50.00% & 83.21% in 2015 and 66.30%, 13.50%, 76.28% & 110.02% in 2016 respectively compared to the year 2014.

Table: 1: Required SLR & Excess SLR

(Figure in crore)

Bank	2014			2015			2016		
	Investment	Required SLR	Excess SLR	Investment	Required SLR	Excess SLR	Investment	Required SLR	Excess SLR
SBL	28547	8661	19887	39685	10035	29649	45184	12112	33072
JBL	18646	6383	12263	21053	6950	14103	21801	7883	13918
ABL	12706	4457	8249	17767	5344	12423	20654	6113	14541
RBL	6430	2759	3670	6869	3292	3577	6085	3740	2345
Basic	3095	1700	1395	4278	1722	2556	4783	1853	2930

(Source: Annual report of SOCBS 2014-2016)

Cost of Fund (COF), Weighted Average Interest Rate (WAIR) & Yield on Advance:

COF, WAIR & Yield on advance varies from bank to bank due to various reasons. In the year 2014, COF of state-owned commercial banks was between 8.09 to 11.87%, whereas it was between 7.34 to 10.24% in 2015 and 6.95 to 8.42% in the year 2016.

Table:- 2: COF, WAIR & Yield on advance

Bank	2014			2015			2016		
	COF	WAIR	Yield	COF	WAIR	Yield	COF	WAIR	Yield
SBL	8.09%	10.0%	7.88%	7.34%	5.46%	8.78%	6.95%	6.02%	8.70%
JBL	8.82%	9.27%	11.44%	7.94%	6.13%	9.35%	8.05%	5.52%	8.54%
ABL	9.58%	9.57%	12.17%	9.01%	5.86%	11.24%	8.42%	5.20%	10.02%
RBL	8.21%	9.68%	12.77%	8.02%	6.56%	12.52%	7.62%	4.95%	10.45%
Basic	11.87%	9.22%	13.50%	10.24%	6.21%	6.54%	8.31%	6.38%	6.01%

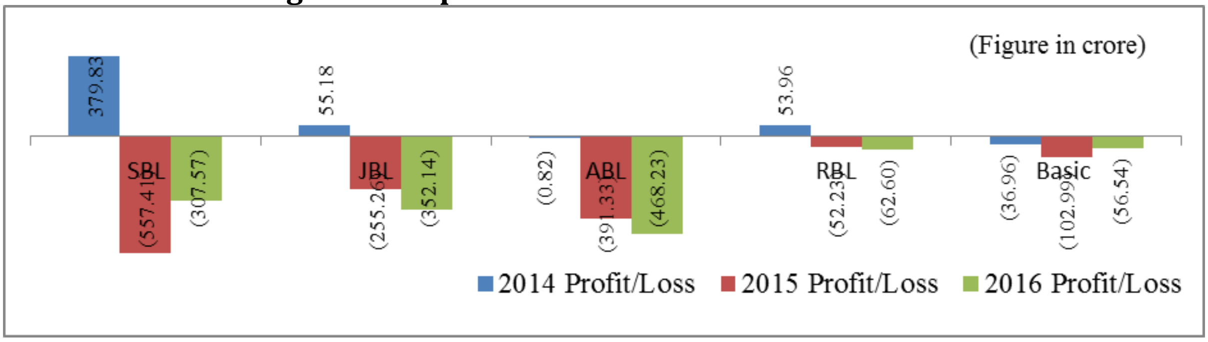
(Source: Annual report of SOCBS 2014-2016)

* WAIR calculation shown in the appendices-i-v

On the other hand, in the year 2014, weighted average interest rate received from govt. securities of state-owned commercial banks was between 9.22 to 10.00%, whereas it was between 5.46 to 6.56% and 4.95 to 6.38% in 2015 and 2016 respectively, that is, WAIR had drastically fall. Moreover, Yield on advance also had fall in the year 2016 compare to the year 2014.

Impact of excess SLR based on COF & WAIR:

Figure-3: Impact of excess SLR based on COF & WAIR



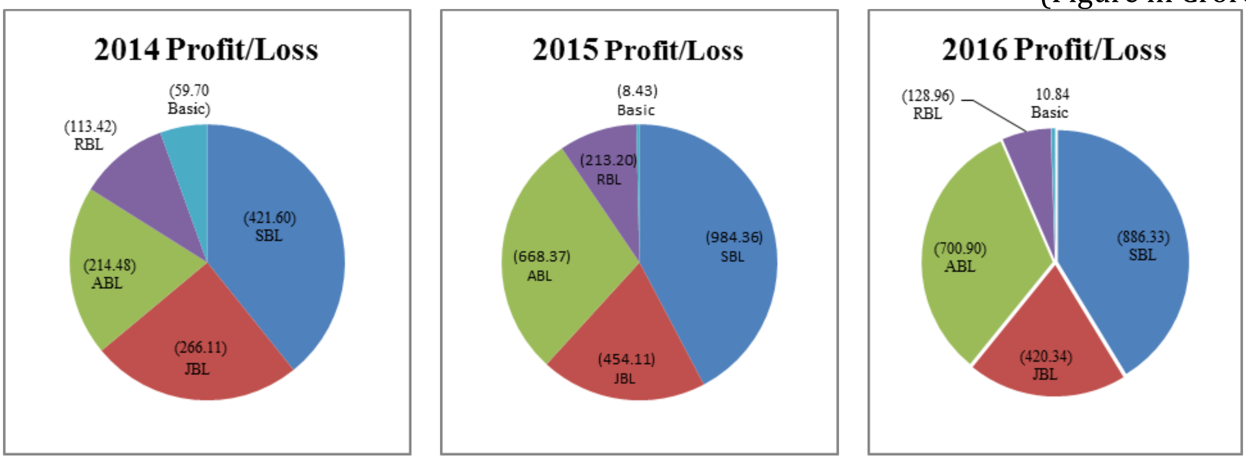
(Source: Annual report of SOCBS 2014-2016)

In 2014, except Agrani & Basic bank, all other SOCBs were profitable because their cost of fund was less than weighted average interest rate received from govt. securities. But in case of Agrani & Basic bank, cost of fund was higher than weighted average interest rate. However, in 2015 and 2016, cost of fund of SOCBs was higher than weighted average interest rate. As a result, in 2015 Sonali, Janata, Agrani, Rupali & Basic bank incurred loss of Tk. 557.41, 255.26, 391.33, 52.23 & 102.99 crore respectively due to maintaining excess amount SLR by those banks. Moreover, in 2016, the amount loss was Tk. 307.57, 352.14, 468.23, 62.60 & 56.54 crore respectively (Figure-3).

4.5 Impact of excess SLR based on Yield on Advance & WAIR:

Figure- 4: Impact of excess SLR based on Yield on Advance & WAIR

(Figure in Crore)



(Source: Annual report of SOCBS 2014-2016)

***Profit/loss calculation shown in the appendix-vi-vii**

Generally Yield on Advance is higher than cost of funds. Therefore, if SOCBs were able to invest their excess SLR in the conventional loan and advances then their operating income would raise tremendously. However, SOCBs were unable to do this and this scenario is depicted in the above Figure-4. In the year 2014, Sonali, Janata, Agrani, Rupali & Basic Bank Limited incurred loss of Tk. 421.60, 266.11, 214.48, 113.42 & 59.70 crore respectively due to maintaining excess amount SLR by those banks. On the other hand, except Basic Bank (which increased by 85.88%) the amount of loss incurred was increased by 133.46%, 70.65%, 211.62% & 87.97% in the year 2015 compared to 2014 due to decrease in WAIR, although in the year 2016, the amount of loss incurred was decreased compared to 2015 because of slightly increase in WAIR in the year 2016.

CONCLUTION

State-owned Commercial Banks have to maintain 5.50% Cash Reserve Requirement (CRR) and 13.00% Statutory Liquidity Reserve (SLR) as a regulatory requirement but these banks maintained an huge excess amount of SLR in the years 2014, 2015 & 2016 because of excess liquidity in the market, low private sector credit growth, unwillingness by the bank for disbursing loan and advances, etc. For instance, study found that Sonali, Janata, Agrani, Rupali and Basic bank maintained excess SLR of 35.49%, 22.95%, 30.92%, 8.15% and 20.55% in 2016 respectively against their regulatory requirement of 13% only. In addition, depending on the liquidity conditions in the money market, the weighted average interest (yield) rate of government securities of different maturities declined significantly in 2015 and 2016 with some exceptions. However, cost of funds of SOCBs was not reduced significantly. This pushed Sonali, Janata, Agrani, Rupali & Basic bank incurring loss of Tk. 557.41, 255.26, 391.33, 52.23 & 102.99 crore in 2015 and Tk. 307.57, 352.14, 468.23, 62.60 & 56.54 crore in 2016 respectively due to maintaining excess amount SLR by those banks. However, if SOBCs take into consideration yield on advance, then the amount of loss incurred by Sonali, Janata, Agrani & Rupali would be Tk. 886.33, 420.34, 700.90 and 128.96 crore in 2016. Therefore, SOCBs should try to maintain SLR as minimum as possible so that profitability as well as liquidity of that bank does not hampered.

REFERENCES

Ahamed, M. M. (2012), “Market Structure and Performance of Bangladesh Banking Industry: A Panel Data Analysis”, *Bangladesh Development Studies*, Vol. XXXV, September 2012, No. 3.

Ahmed, M. N, Md. Alamgir, Mehdi Zaman and Arequl Arefeen (2016), “Treasury Operations of Bank”, *Banking Review Series,* Bangladesh Institute of Bank Management (BIBM), August 2016, pp175-176.

Andritzky, J. R. (2012), “Government Bonds and Their Investors: What Are the Facts and Do They Matter?”, *IMF Working Paper*, No. WP/12/158.

Begum, M. N. and Md. Ezazul Islam (2015), “Nexus between Bank’s Liquidity and Profitability in Bangladesh: An Overview”, *Thoughts on Banking and Finance* Vol. 4 Issue 2, July-December, pp. 9-32.

Das, B. C. (2014), “Investment in Treasury Bills and Treasury Bonds in 2013: A study of Bangladesh”, *International Journal of Economics, Finance and Management Sciences*, Vol. 2, No. 2, pp. 182-187, Accessed on: April 20, 2014, Available at http://www.sciencepublishinggroup.com/j/ijefm).

Choudhury, T. A. (2015), “Development of Financial Markets and Financial Stability in Bangladesh”, *Independent Business Review*, Vol. 8, No. 1 & 2, p-2.

Hillier, D. (2014), “*Treasury and Risk Management in the Emerging Markets*’’, Unpublished book.

Mujeri, M. K. and M. H. Rahman, (2009), “Financing Long Term Investments in Bangladesh: Capital Market Development Issues”, *Working Papers*.

Mortaza, M. G. and Shadat, Wasel Bin, (2016), “Cost-Benefit Analysis of Establishing A Secondary Bond Market in Bangladesh, Bangladesh Priorities”, *Copenhagen Consensus Center*, Vol. 4, pp. 4-5.

Pettinger, T. (2012), "Purpose of Banks", Available at: http://www.economicshelp.org/blog/glossary/banks/. Accessed on: 31 July, 2017.
Saha, A. K. (2012), "Capital Market in Bangladesh: An Overview", *International Journal of Science and Research (IJSR*), Vol. 1, Issue 3, December pp. 68-70.
Wyman, O. (2014), "AFP Strategic Role of Treasury: Report of Survey Results" *Association for Financial Professionals*, pp. 4-5.
Agrani Bank Limited, *Annual Report 2014-2016*, Dhaka, Bangladesh.
Basic Bank Limited, *Annual Report 2014-2016*, Dhaka, Bangladesh.
Bangladesh Development Bank Ltd, *Annual Report 2014-2016*, Dhaka, Bangladesh.
Janata Bank Limited, *Annual Report 2014-2016*, Dhaka, Bangladesh.
Rupali Bank Limited, *Annual Report 2014-2016*, Dhaka, Bangladesh.
Sonali Bank Limited, *Annual Report 2014-2016*, Dhaka, Bangladesh.
(https://en.wikipedia.org/wiki/List_of_banks_in_Bangladesh).
(https://www.bb.org.bd/eservices.php).

APPENDICES

Appendix-i: WAIR Calculation of Sonali Bank Limited

Types of Security	Investment amount								
	2014	**Rate**	**W factor (1*2)**	**2015**	**Rate**	**W factor (4*5)**	**2016**	**Rate**	**W factor (7*8)**
	1	2	3	4	5	6	7	8	9
91 Day T-Bill	4256	8.00%	340	8880	3.00%	266	3200	2.98%	95
182 Day T-Bill	551	8.25%	45	2330	3.98%	93	899	3.20%	29
364 Day T-Bill	3129	8.40%	263	1392	4.09%	57	484	3.80%	18
2 years T-Bond	1884	8.48%	160	2123	5.50%	117	2616	4.54%	119
5 years T-Bond	5367	9.60%	515	7240	6.00%	434	10063	6.00%	604
10 years T-Bond	4575	11.00%	503	5663	7.40%	419	8545	6.89%	589
15 years T-Bond	1068	11.52%	123	1817	7.87%	143	2917	7.64%	223
20 years T-Bond	6455	12.05%	778	2242	8.99%	202	2765	7.89%	218
Total	27283		2728	31687		1731	31489		1895
WAIR		10.00%			5.46%			6.02%	

Appendix-ii: WAIR Calculation of Agrani Bank Limited

Types of Security	Investment amount								
	2014	Rate	W factor (1*2)	2015	Rate	W factor (4*5)	2016	Rate	W factor (7*8)
	1	2	3	4	5	6	7	8	9
91 Day T-Bill	2205	8.00%	176	5874	3.00%	176	8038	2.98%	240
182 Day T-Bill	1191	8.25%	98	2423	3.98%	96	2363	3.20%	76
364 Day T-Bill	668	8.40%	56	1230	4.09%	50	2211	3.80%	84
2 years T-Bond	131	8.48%	11	99	5.50%	5	30	4.54%	1
5 years T-Bond	769	9.60%	74	723	6.00%	43	645	6.00%	39
10 years T-Bond	1997	11.00%	220	2027	7.40%	150	2221	6.89%	153
15 years T-Bond	836	11.52%	96	786	7.87%	62	823	7.64%	63
20 years T-Bond	576	12.05%	69	616	8.99%	55	576	7.89%	45
Total	8373		801	7904		463	8868		461
WAIR			9.6			5.855			5.198

Appendix-iii: WAIR Calculation of Janata Bank Limited

Types of Security	Investment amount								
	2014	Rate	W factor (1*2)	2015	Rate	W factor (4*5)	2016	Rate	W factor (7*8)
	1	2	3	4	5	6	7	8	9
91 Day T-Bill	1333	8.00%	107	3649	3.00%	109.5	6947	2.98%	207
182 Day T-Bill	1961	8.25%	162	969	3.98%	38.6	0	3.20%	0
364 Day T-Bill	3144	8.40%	264	1830	4.09%	74.8	3725	3.80%	142
2 years T-Bond	3755	8.48%	318	4341	5.50%	238.8	3725	4.54%	169
5 years T-Bond	1275	9.60%	122	1436	6.00%	86.1	1861	6.00%	112
10 years T-Bond	2759	11.00%	304	3252	7.40%	240.6	3153	6.89%	217
15 years T-Bond	1063	11.52%	123	1322	7.87%	104.0	1401	7.64%	107
20 years T-Bond	645	12.05%	78	799	8.99%	71.9	792	7.89%	62
Total	15935		1477	13948		855	14657		809
WAIR			9.268			6.1284			5.52

*** WAIR =Weighted Average Interest rate**
*** WAIR = Weighted (W) Factor/ Total Investment *100**

Appendix-iv: WAIR Calculation of Rupali Bank Limited

Types of Security	Investment amount								
	2014	**Rate**	**W factor (1*2)**	**2015**	**Rate**	**W factor (4*5)**	**2016**	**Rate**	**W factor (7*8)**
	1	2	3	4	5	6	7	8	9
91 Day T-Bill	334	8.00%	27	476	3.00%	14	2149	2.98%	64
182 Day T-Bill	238	8.25%	20	0	3.98%	0	550	3.20%	18
364 Day T-Bill	1569	8.40%	132	350	4.09%	14	0	3.80%	0
2 yrs T-Bond	35	8.48%	3	12	5.50%	1	121	4.54%	5
5 yrs T-Bond	198	9.60%	19	198	6.00%	12	265	6.00%	16
10 yrs T-Bond	1225	11.00%	135	823	7.40%	61	1011	6.89%	70
15 yrs T-Bond	376	11.52%	43	505	7.87%	40	518	7.64%	40
20 yrs T-Bond	274	12.05%	33	553	8.99%	50	552	7.89%	44
Total	4250		411	2917		191	5165		256
WAIR		9.68%			6.56%			4.95%	

Appendix-v: WAIR Calculation of BASIC Bank Limited

Types of Security	**Investment amount**								
	2014	**Rate**	**W factor (1*2)**	**2015**	**Rate**	**W factor (4*5)**	**2016**	**Rate**	**W factor (7*8)**
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
91 Day T-Bill	1086	8.00%	87	0	3.00%	0	0	2.98%	0
182 Day T-Bill	33	8.25%	3	0	3.98%	0	0	3.20%	0
364 Day T-Bill	614	8.40%	52	536	4.09%	22	169	3.80%	6
2 yrs T-Bond	50	8.48%	4	32	5.50%	2	213	4.54%	10
5 yrs T-Bond	943	9.60%	91	925	6.00%	56	809	6.00%	49
10 yrs T-Bond	739	11.00%	81	905	7.40%	67	1253	6.89%	86
15 yrs T-Bond	74	11.52%	9	102	7.87%	8	202	7.64%	15
20 yrs T-Bond	22	12.05%	3	39	8.99%	3	163	7.89%	13
Total	3562		328	2540		158	2809		179
WAIR		**9.22%**			**6.21%**			**6.38%**	

*** WAIR = Weighted Average Interest rate**
*** WAIR = Weight (W) Factor/ Total Investment *100**

Appendix-vi: Profit/Loss Calculation Based on Cost of Fund

Bank	2014				2015				2016			
	COF (%)	WAIR (%)	Excess SLR	Profit /Loss	COF (%)	WAI R (%)	Excess SLR	Profit/ Loss	COF (%)	WAI R (%)	Excess SLR	Profit / Loss
SBL	8	10	19887	380	7	5	29649	(557)	7	6	33072	(308)
JBL	9	9	12263	55	8	6	14103	(255)	8	6	13918	(352)
ABL	10	10	8249	(1)	9	6	12423	(391)	8	5	14541	(468)
RBL	8	10	3670	54	8	7	3577	(52)	8	5	2345	(63)
Basic	12	9	1395	(37)	10	6	2556	(103)	8	6	2930	(57)

Profit/loss= (WAIR-COF)* Excess SLR*100

Appendix-vii: Profit/Loss Calculation Based on Yield on Advance

Bank	2014				2015				2016			
	Yiel d (%)	WAIR (%)	Excess SLR	Profit/ Loss	Yield (%)	WAIR (%)	Excess SLR	Profit / Loss	Yiel d (%)	WAI R (%)	Excess SLR	Profit/ Loss
SBL	8	10	19887	422	9	5	29649	(984)	9	6	33072	(886)
JBL	11	9	12263	(266)	9	6	14103	(454)	9	6	13918	(420)
ABL	12	10	8249	(214)	11	6	12423	(668)	10	5	14541	(701)
RBL	13	10	3670	(113)	13	7	3577	(213)	10	5	2345	(129)
Basic	14	9	1395	(60)	7	6	2556	(8)	6	6	2930	11

Profit/loss= (WAIR-Yield)* Excess SLR*100 **(Source: BB website & SOCBs Annual report-2014-2016)**

Cite this article:

Subrata Deb Nath, Munna Rani Biswas & Md. Habib Ullah Siddique (2019). Investment in Government Securities by State-owned Commercial Banks. ***International Journal of Science and Business***, 3(1), 260-273. doi: https://doi.org/10.5281/zenodo.3459409

Retrieved from http://ijsab.com/wp-content/uploads/411.pdf

Published by