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DEVELOPMENT OF BOND MARKET IN BANGLADESH: ISSUES, STATUS AND POLICIES

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Abstract

Bond market acts as buffer of equity market. This market in Bangladesh has been found very inefficient with respect to number of issues, volume of trade, number of participant, long-term yield curve, interest rate policy etc. In view of this, the present study has been undertaken aiming at identifying the problems that impedes the growth and development of Bond Market in Bangladesh. Researchers have collected both primary and secondary data and analysed the same by employing descriptive measure as well as multivariate technique-Varimax Rotated Factor Analysis. The study has found that the size of debt market of Bangladesh is very low as compared to other SAARC Countries; has huge growth potentiality; and identified important impediments to the growth and development of Bond Market in Bangladesh such as risk and return factor, liquidity and government policy factor, issue management factor, investment policy factor, macro-economic and regulatory factor, and market & issue related factor. The study has suggested some important policy measures such as regulatory change, establishment of long-term yield curve, offering fiscal benefits, encouraging companies raising funds through corporate bond issues, keeping treasury rate low etc. for the development of Bond Market in Bangladesh.

Keywords: Bond Market, Growth, Development, Yield Curve, Regulation, and Efficiency.

1. DEVELOPMENT OF BOND MARKET IN BANGLADESH: ISSUES, STATUS AND POLICIES

1.1. Introduction

The development of economy of any country depends mostly on the establishment of sound, effective and efficient financial system in that country. A well-developed financial system plays an important role in accelerating economic growth by mobilizing savings and facilitating investment in an efficient manner (Mu, 2007). Financial market is composed of different markets- Money Market, Capital Market, Derivative Market etc. All the markets play an interactive role for the development of economy by formation of capital through mobilizing funds, industrialization of economy through supplying adequate funds, providing services, linking investors to the industrial entrepreneurs etc. Besides, this requires sound regulatory framework, sound and investment sensitive administrative infrastructure, fiscal supports for making their role effective for economic development.

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The financial sector of Bangladesh is characterized by the dominating presence of commercial banks, especially the Nationalized Commercial Banks (NCBs). Although, a paradigm shift in the degree of dominance has been observed of late with the emergence of private commercial banks-traditional and shariah based banking. Banking sector accounted for about 75 percent of the total financial system. Most of the available funds go to the NCBs in the form of deposits and channeled into lending. However, the NCBs had substantial nonperforming loan (NPL) portfolios. Both insurance and mutual funds industries are very small.

The debt market being an integral part of financial market plays a complementary role in developing economy through allocation of funds to the different deficit sectors. The debt market consists of money market, mortgage market, bond market and derivative market. The debt market of Bangladesh is very small. The size of domestic debt accounted for only 20 percent of the financial system. Bangladesh's bond market represents the 'smallest' in South Asia, accounting for only 12 per cent of the country's gross domestic product (GDP), a World Bank report said. "It is surprising that Bangladesh, which is much larger than Nepal in terms of population, land area and other measures, has the smallest bond market in the region," the report added. Like in any other country, a well-developed tradable bond market is critical to ensuring stability and efficiency of the financial market in Bangladesh. An efficient bond market is important for managing public debt and bank liquidity and for efficient conduct of the monetary policy. So far the bond market has played a limited role in the economy. The priority of the development of Bangladesh's capital markets should be to promote the bond market development. Without a functioning bond market, the monetary transmission processes of policy measures would be circumvented, and the desired impact on the real economy can not be fulfilled, which compromises the effectiveness of the monetary policy operations. In view of this, the present study has been undertaken in order to evaluate the present bond market status and to identify the issues and factors that prompt the development of bond market in Bangladesh.

1.2. Objectives of the Study

The principal objective of the study is to evaluate present bond market status in Bangladesh. To accomplish this principal objective, following specific objectives have been covered:

1) To highlight the Bond Market status of Bangladesh.
2) To highlight the benefits of bond market for the parties to the Bond Market.
3) To identify the problems that impedes the development of Bond Market in Bangladesh.
4) To suggest some important policy measures for the development of Bond Market in Bangladesh.

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1.3. Scope of the Study

The inferences of the study would be used for the development of Bond Market in Bangladesh. It has covered opinions of 22 financial executives of listed companies on the issues that impede to the development of Bond Market.

1.4. Methodology of the Study

The study has been both theoretical and empirical one. Both primary and secondary data have been used.

Collection of Primary Data: The researcher has prepared a questionnaire on the basis of survey of existing literature as well as of discussions made with some executives associated with the stock market. He conducted interview of 22 respondents personally. In this case, the researcher has selected 30 companies from a list of different economically important sectors conveniently, and attempted to conduct interview of 30 financial executives of 30 selected companies. Finally, he successfully has conducted interview of 22 financial executives. The opinions of 22 experts have been captured on five point-likert scales such as 5(Most significant), 4 (Significant), 3 (Indifferent), 2(Insignificant) and 1(Most insignificant).

Collection of Secondary Data: The secondary data has been collected from different sources- Annual Reports of Bangladesh Bank, World Bank Reports, published research journals, published books, websites, etc.

Analysis of Data: The data thus collected has been tabulated first and then analyzed with the help of different financial, statistical and econometric techniques. The study has used financial ratio, percentage, mean, factor analytical technique etc. for analysis of data and drawing inferences.

Factor Analysis: Factor analysis is a method of reducing a large number of variables (tests, scales, items, persons and so on) to a smaller number of presumed underlying hypothetical entities called factor (Fruchter, 1967). It tries to simplify and diverse relationship that exist among a set of observed variables by uncovering common dimensions or factors that link together the seemingly unrelated variables and consequently provides insight into the underlying structures of the data(Dillion and Goldstein, 1984). The purpose of factor analysis is mainly two folds: data reduction and substantive interpretation. In the present study, 'Principal Components Varimax Rotated Method' of factor analysis has been used in order to identify the factors influencing the development of Bond Market in Bangladesh.

Principal component factor explains more variance that the loadings obtained from any method of factoring. In order to define the group membership, an algorithm may be used to uncover a structure purely on the basis of the correlation structure of the input variables. Then the number of principal components to be retained in the study has been decided on the basis of Kaiser's criterion (1958) of Eigen value ≥ 1 . Principal components having higher reliability coefficients are more reliable in the sense that the corresponding factors would be replicable in other similar kind of studies. Then Communality, symbolized by h^{2}----- are then worked out which show how much of each variable is accounted for by the underlying factors taken together. Then, factor scores have been generated on the basis of weighted average of Principal Factor loadings and average of respective variables included into the concerned group. Ranking of each factor has been made on the basis of scores derived.

1.5. Organization of the Study

The Study has been organized into three sections. The first section has covered introduction, objective of the study, scope and methodology of the study. The second section has covered findings of the study- Status of Bangladesh Bond Market, benefits of Bond Market participants, and identification of problems impeding the bond market development of the country. The final chapter deals with the summary of the findings, policy implications and conclusions.

2. FINDINGS AND THEIR ANALYSES

The Study has been undertaken aiming at evaluating the status of Bond Market and tracing the factors influencing the development of Bond Market in Bangladesh. These have been discussed in the following paragraphs:

2.1. Status of Bond Market in Bangladesh

Bond Market is composed of Treasury bond, Municipal Bond and Corporate Bond. This is of two kinds- Organized and OTC markets. There are various types of bond products depending on provisions, maturities, coupon rate, options, convertibility, etc. Bond Market in Bangladesh is dominated by treasury debt securities. It has now only one corporate bond; but does not have any municipal bond/debenture. In recent years, around 70 percent of the domestic savings are held in the form of bank deposits, while only 30 percent are investments in the debt market which is entirely dominated by government instruments. There hardly exists a corporate bond market in the country, it has a debenture market with only a small number f well-known issuers. As of today, only one corporate bond has been floated.

2.1.1. Size and Composition of the Bangladesh Market in Comparison with South Asian Countries

The size, access, efficiency and stability of the bond market across countries may by used to judge the state of the bond market development in Bangladesh. Compared with the neighboring countries, the Bangladesh bond market is rather small and has played a limited role in its economy. The survey of existing publication shows that the combined share of banking and insurance sectors in the country's GDP has stayed in the range of 1.5 to 1.6 over FY02 to FY05, while in India this was the case in the late 60s/early 70s. The Indian share between FY99 to FY04 has averaged 6.7 percent, that is, a multiple in excess of 4 vis-à-vis that of Bangladesh. On the level of financial deepening as measured by the rate of monetization of the economy, the broad money (M2) to GDP ratio in Bangladesh currently stands at 41 percent, while the M3/GDP ratio is substantially higher at 65 percent in India as of June 2005 (BIS, Central Banks).

TABLE 1 - THE DEPTH OF SOUTH ASIAN BOND MARKETS (% OF GDP)

	1999	2000	2001	2002	2003	2004	2005	2008
Bangladesh	1.3	1.5	1.7	1.9	1.4	1.5	1.4	14.0
India	22.7	27.5	26.0	30.5	33.6	34.7	34.8	41.0
Pakistan	47.2	40.9	38.9	37.8	36.7	33.0	30.9	29.0
Srilanka	49.3	53.9	58.1	60.1	58.0	56.4	53.6	38.0

Note: Data have been compiled by the researchers.
Sources: a) BIS, central banks, security commissions.
b) The Annual Report (2005/2006/2007/2008). *Bangladesh Bank*, Dhaka, Bangladesh.

In terms of the depth of the bond market, Bangladesh is rather underdeveloped compared to the neighboring countries as shown in Table 1. At the end of 2008, the outstanding bond volume over GDP was only 14%, compared with India (41%), Pakistan (29%), and Sri Lanka (38%). The share of Bangladesh bond market in South Asia (0.2%) was also the smallest among the five countries as show in Table 2.

TABLE 2 - SIZE OF SOUTH ASIAN BOND MARKETS (US$ MILLION)

	1999	2000	2001	2002	2003	2004	2005	%
Bangladesh	560	669	759	877	706	796	787	0.2
India	102,100	117,000	130,100	155,800	203,100	248,240	272,530	84.9
Pakistan	26,766	26,737	26,586	28,403	30,905	31,495	33,964	10.6
Srilanka	7,554	8,215	8,778	9,823	10,562	10,947	12,412	3.9
Nepal	723	732	785	940	1,143	1200	1,183	0.4
Total	137,704	153,353	167,008	195,844	246,416	292,678	320,875	100

Note: Data have been compiled by the researchers.

Sources: a) BIS, central banks, security commissions.

b) The Annual Report (2005). *Bangladesh Bank*, Dhaka, Bangladesh

The Bond Market has played a very insignificant role in developing the economy of Bangladesh. Since the bond market of Bangladesh is still at initial stage of development. The bond market in Bangladesh is characterized by low base market and market participants, non-diversified products, lack of tailor made securities etc. In Bangladesh Bond Market, fixed income securities first time came into existence in 1987 with

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the floatation of debenture by two companies. However, no debenture was issued after 1999. Trading of Government Treasury bonds started in December 2005 at the Dhaka Stock Exchange (DSE). Till the end of December 2008, eight debenture, 111 treasury bonds with different maturities, and one corporate bond (floated in 2007 by the IBBL-Mudaraba Perpetual Bond) are being traded in the country's capital market

(Banglaesh Bank Report, 2008).

2.1.2. Market Participants of Bond Market

One of the preconditions of being efficient bond market is the existence of large number of market participants. Market participants can be divided into issuers, investors and intermediaries.

Issuers: The foremost impediment here is that Bangladesh lacks a significant number of potential, good-quality issuers. Its economy continues to be agriculturally based, employing 70% labour forces. The industry and service sectors contribute 20% and 50%, respectively, but compared with landholdings, the average size of industrial and commercial enterprises is rather modest.

Most private sector enterprises are small and owner-run, many are of "cottage size" and most are in the garment industry, which to date depends largely on short-term bank loans for financing. These enterprises could benefit from longer-term funding but are neither large enough nor well known enough to issue bonds. Most of the large-scale industrial units and commercial enterprises are state owned. Their shares are not listed, and they do not offer debentures since their financing needs are met by the government or by the state-owned NCBs. These state-owned firms generally stay outside the capital market. The privatization program for state-owned companies' works too slow to influence the market.

Second, although Bangladesh has a debenture market, to date only a small number of well-known issuers have used the market. The liquidity in those debentures at the stock exchange is insignificant because of the small number of investors and their buy-and-hold mentality. The investor community does not seem to find this market too attractive owing to weak disclosure by the issuers, which in turn reduces credibility and investor confidence.

Investors: On the investor side, few investors are sophisticated enough to think about investing in bonds. About 80% of the base here is made up of retail investors, whose primary concerns include the equity at the stock exchange or the government savings certificate. Of the few institutional investors that could support a bond market, most are either prevented from investing in corporate bonds by restrictive guidelines or are not professionally managed.

The major institutional investors are the Investment Corporation of Bangladesh—a government-owned financial institution—and the insurance companies. The mutual fund industry in Bangladesh is the exclusive

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domain of ICB. There are no private mutual funds to mobilize savings toward the debt market, and the ICB's monopoly has prevented new investor companies, that is, mutual funds, from developing in Bangladesh. There are provident and pension funds (total assets managed amount to Tk 6.7 billion; see The Financial Express), self-managed by public and private corporate entities, but none are professionally managed. The pension obligations of the government are not funded. The Trust Act of 1882 prohibits those funds from being invested in equities, corporate debentures, and private money market instruments. In addition, no protective laws are in effect to ensure that investors will get their dividend and capital back. Missing are higher audit standards together with SEC regulations on disclosure standards in prospectus along with arbitrary institutions. Furthermore, most investors lack a trading mentality and just buy and hold because of SLR requirements or because they do not know how to trade. Few foreign investors are attracted to this, mainly because of the weak disclosure by the borrowers. As for the general public, it has little understanding of debt products, and the intermediaries are not much help because few engage in research on markets, companies and industries to encourage investment.

Intermediaries: Intermediaries in Bangladesh lack many of the skills needed to foster an active local corporate bond market. As mentioned earlier, commercial banks dominate the financial sector and not enough intermediaries are skilled in securities. Few are able to identify issuers and investors and bring them to the market. They provide little or no research analysis on industries or companies to encourage investment in the local debt market. Too few private merchant banks are able to conduct financial advisory and trust services. Nor do any feel motivated to become a market maker for an issue. Hence the market is illiquid, with large spreads. At the same time, the fee structure and pricing are high enough to allow intermediaries to make money. Even if they are able to participate, intermediaries are reluctant to take any risk in dealing.

2.2. Benefits of Bond Market for Market Participants

A vibrant broad based bond market benefits all market participants to a varying degrees depending on professional expertise, policies and strategies being adopted by them. This has a positive effect on the development of economy on the one hand; and enables market participants to exploit the opportunities available in the market and thereby accomplishing their objectives on the other hand. Following benefits can be harvested by the bond market participants:

2.2.1. Benefits for Issuers

Following benefits can be derived by the issuers from issuing bonds in the capital market:

a) Raising funds without collateral for long term.
b) Lower cost of debt and thereby lowering cost of capital for the firm.
c) Lower effective rate of interest for not being able to be compounded.

d) No change in interest rate with the increase in inflation rate.
e) Reduces tax burden since interest is shown as a charge.
f) Protecting firms from the exposition to the market volatility.
g) Exploiting benefits from uncertainty in bond market through issue of diverse types of bonds/debenture.

2.2.2. Benefits of Investors

Investors can harvest following benefits from investment in corporate bonds as compared to other similar securities of money and debt markets:

a) Pays higher interest rates than savings.
b) Offers safe return of principal.
c) Have less volatility than the stock market.
d) Offers regular income.
e) Requires smaller initial investment.
f) Highly liquid.
g) Interest received is exempted from payment of tax up to certain limit.
h) building blocks by entering into derivative contracts-FRAs, Caps, Collar and Floor, Interest rate futures etc.

2.2.3. Benefits of Intermediaries

Intermediaries being integral part of the capital market can get benefited from the issue management of bonds in the following ways:

a) Large spread can be exploited.
b) High commission/fees.
c) Phenomenal growth opportunities.
d) Cut down policy of commercial lending brings opportunity for broadening bond market base.
e) Encouragement of bond market through fiscal effect and lowering interest rate in the money market.
f) Large gap between demand for funds and supply of funds.

2.3. Factors Influencing the Development of Bond Market in Bangladesh

Bond markets in most countries have been built on the same basic elements: a number of issuers with long term financing needs, investors with a need to place savings or other liquid funds in interest bearing securities, and intermediaries that bring together investors and issuers, and an infrastructure that provide a conducive environment for transaction of securities, ensures legal title to securities and settlement of transactions and provides price discovery information. The regulatory regime provides the basic framework for bond market. Developing bond market can be more complicated that developing equity market. This need supporting pricing infrastructure and more sophisticated market participants.

Table 3 - FACTORS INFLUENCING THE DEVELOPMENT OF BOND MARKET IN BANGLADESH

Variable Serial	Factor Variables
X_1	Moderate Economic Growth
X_2	Low Interest Rate Environment
X_3	Poor Savings and Investment Rate
X_4	Dominance of Banking System
X_5	Absence of Market-determined Interest Rate
X_6	Regulatory Reform
X_7	Small Investor Base
X_8	High Time to Market for Time Consuming and Complicated Administrative Process
X_9	Undefined Economic Benefits
X_{10}	Investor's Reluctance to Maintain Bond Portfolio
X_{11}	Conservative Policy of Investors
X_{12}	Lack of Awareness Program for Investors and Risk Associated Sequential Process
X_{13}	Adverse Perception by Market Participant of Settlement Risk
X_{14}	Lack of Diversity in Features
X_{15}	Lack of Benchmark Bonds
X_{16}	Lack of Intermediaries with Expertise in Debt Products
X_{17}	High Floatation Cost
X_{18}	No Hedge against Inflation
X_{19}	Compounding not Possible
X_{20}	Political Instability
X_{21}	Financial Sector Vulnerability for Huge Non-Performing Loans
X_{22}	Unbundled Pension and Insurance Funds
X_{23}	Poor Disclosure of Accounting Information
X_{24}	Insignificant Contribution of Non-Banking Sector
X_{25}	High Yielding Government Instruments Hindering Private Sector Bond Issue
X_{26}	Lack of Awareness and Confidence in Debt Products.
X_{27}	Poor Marketability

Bond Market acts as buffer of equity market. This enables issuers and investors to convert the limitations of equity market into the opportunities. Financial system to be sound and effective has to have an efficient bond market. Otherwise, Capital Market especially cannot play its due role for developing economy through allocation of capital; and generating employment opportunities through industrialization of economy of the country. Developing bond market can be attributed to the following reasons (International Organization of Securities Commissions, 2002):

a) An alternative source of domestic debt finance;
b) Lower cost of capital;
c) Reduced risks associated with maturity and currency mismatch;
d) Broadening of capital markets;
e) Efficient pricing of credit risk; and
f) Ensuring financial stability.

The study has conducted extensive literature survey and informal interview of some practitioners in order to identify problems impeding the development of bond market in Bangladesh. The problems extracted from the survey and the discussions have been shown in Table 3.

2.3.1. Identification of Important Impediments of Bond Market Development on the Basis of Mean Weights

The study has collected opinions of 22 financial experts of 22 listed companies over the problems impeding the development of bond market in Bangladesh. The study has identified the problems of different degrees as in Table 4:

TABLE 4 - IDENTIFICATION OF PROBLEMS ON MEAN WEIGHTED SCORES

Variables	Factor Variables	Mean Score
Most Significant		
X_5	Absence of Market-determined Interest Rate	**4.5455**
X_6	Regulatory Reform	**4.5000**
X_{15}	Lack of Benchmark Bonds	**4.2273**
X_{22}	Unbundled Pension and Insurance Funds	**4.1818**
X_{25}	High Yielding Government Instruments Hindering Private Sector Bond Issue	**4.4091**
X_{27}	Poor Marketability	**4.3182**
Significant		
X_8	High Time to Market for Time Consuming and Complicated Administrative Process	**3.8182**
X_9	Undefined Economic Benefits	**3.7273**
X_{10}	Investor's Reluctance to Maintain Bond Portfolio	**3.5000**
X_{11}	Conservative Policy of Investors	**3.2525**
X_{12}	Lack of Awareness Program for Investors and Risk Associated Sequential Process	**3.7273**
X_{13}	Adverse Perception by Market Participant of Settlement Risk	**3.6273**
X_{16}	Lack of Intermediaries with Expertise in Debt Products	**3.2727**
X_{17}	High Floatation Cost	**3.7727**
X_{20}	Political Instability	**3.2273**
X_{23}	Poor Disclosure of Accounting Information	**3.8182**
X_{26}	Lack of Awareness and Confidence in Debt Products.	**4.0000**
Insignificant Variables:		
X_1	Moderate Economic Growth	**2.7727**
X_2	Low Interest Rate Environment	**2.5000**
X_3	Poor Savings and Investment Rate	**2.7000**
X_4	Dominance of Banking System	**2.6000**
X_7	Small Investor Base	**2.5000**
X_{14}	Lack of Diversity in Features	**2.5700**
X_{18}	No Hedge against Inflation	**2.4545**
X_{19}	Compounding not Possible	**2.7500**
X_{21}	Financial Sector Vulnerability for Huge Non-Performing Loans	**2.8000**
X_{24}	Insignificant Contribution of Non-Banking Sector	**2.3250**

Note: Data have been compiled by the researchers.

It is evident from the Table 4 as stated above that the study has identified six most significant problems, eleven significant and 10 insignificant problems against the bond market development in the country. The problems identified by the study have been found to belong to macro-economic level, industry level, market level and firm level. Some of the significant variables are systematic and some others are unsystematic.

2.3.2. Identification of Problems Impeding the Development of Bond Market in Bangladesh on Varimax Rotated Factor Analysis

The study has estimated zero-order correlation of all 27 variables considered for study. The correlation matrix has shown that Variables understudy have formed several groups on the basis of relationship underlying between variables. Variables within the group have been found to have significant relationship at different level of significance. The correlation matrix of all 27 variables has been further subjected to principal component analysis. The Eigen values, the percentage of total variance, and rotated sum of squared loadings have been shown in Table -5:

TABLE 5 - TOTAL VARIANCE EXPLAINED

	Initial Eigen-values			Rotation Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	9.891	36.634	36.634	9.332	34.561	34.561
2	4.535	16.797	53.430	3.614	13.386	47.947
3	3.398	12.585	66.016	3.194	11.830	59.777
4	2.285	8.462	74.478	3.002	11.117	70.895
5	1.712	6.342	80.820	2.442	9.045	79.940
6	1.442	5.341	86.161	1.680	6.221	86.161

Extraction Method: Principal Component Analysis.

The factor matrix as obtained in the principal component analysis has also been further subjected to Varimax Rotation. An examination of eigen values has led to the retention of six factors. These factors have accounted for 36.634%, 16.797%, 12.585%, 8.462%, 6.342%, and 5.341% of variation. This implies that the total variance accounted for by all six factors is 86.161% and the remaining variance is explained by other factors. The rotated factor matrix has been shown in Table-6.

TABLE 6 - ROTATED FACTOR MATRIX

Variable	**Factor Component**					
	1	2	3	4	5	6
X24	**.987**					
X4	**.987**					
X21	**.987**					
X7	**.987**					
X2	**.987**					
X19	**.987**					
X3	**.987**					
X18	**.975**					
X8	**-.723**					

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Variable	Factor Component					
X9		**.856**				
X12		**.856**				
X13		**.856**				
X5			**.916**			
X6			**.916**			
X15			**.708**			
X1			**-.615**			
X11				**-.814**		
X10				**-.814**		
X26				**.641**		
X14				**-.592**		
X22				**.482**		
X27					**.876**	
X25					**.748**	
X20					**-.561**	
X17					**.512**	
X23						**.785**
X16						**-.739**

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a Rotation converged in 12 iterations. * Bold Figures have formed a cluster/group

This shows that variables understudy have constituted six groups/factors which have been discussed in the following paragraphs:

Factor-I: Market and Issue Related Factor

Factor-I explains 34.561 percent of the total variations existing in the variable set. This includes variables-X_{24}, X_4, X_{21}, X_7, X_2, X_{19}, X_3, X_{18}, and X_8. This factor has significant factor loadings on these variables which have formed this major cluster. This factors belongs to macro-economic, industry and firm levels relating to bond market. So, this factor provides a basis for conceptualization of a dimension, which may be identified as Market and Issue Related Factor.

Factor-II: Risk and Return Factor

Factor-II explains 13.386 percent of the total variations existing in the variable set. This includes variables-X_9, X_{12} and X_{13}. This factor has also significant factors loading on these variables which formed second important cluster with respect to the variation. This factor is concerned with the investors in the bond market. So, this has provided a dimension of conceptualizing investor related variables, which may be identified as Risk and Return Factor.

Factor-III: 'Macro-economic and Regulatory Factor'.

Factor-III explains 11.830 percent of the total variations existing in the variable set. This includes variables-X_1, X_5, X_6, and X_{15}. This factor has moderate factor loadings on these variables which have formed a third

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important cluster. This factor is related to regulatory reform and macro-economic variables relating to bond market development. So, This factor has provided a basis for conceptualization of a dimension, which may be called 'Macro-economic and Regulatory Factor'.

Factor-IV: Investment Policy Factor

Factor-IV explains 11.117 percent of the total variations existing in the variable set. This includes variables- X_{11}, X_{10}, X_{14}, X_{22} and X_{26}. This factor has factor loadings ranging from moderate to high on these variables which have formed a fourth important cluster. This factor has provided a basis for conceptualization of dimension which may be called Investment Policy Factor.

Factor-V: Liquidity and Government Policy Factor

Factor-V explains 9.045 percent of the total variations existing in the variable set. This includes variables- X_{17}, X_{20}, X_{25}, and X_{27}. This factor has factor loadings ranging from moderate to high on these variables which have formed a fifth important cluster. This factor is concerned with the liquidity and Government Policy.This factor has provided a basis for conceptualization of dimension which may be called 'Liquidity and Government Policy' factor.

Factor-VI: Issue Management Factor.

Factor-VI explains 6.221 percent of the total variations existing in the variable set. This includes variables- X_{16} and X_{23}. This factor has high factor on these variables which have formed a sixth important cluster. This factor has provided a basis for conceptualization of dimension which may be called Issue Management Factor.

Finally, the rankings obtained on the basis of factor wise average scores are shown in the following Table-7:

TABLE-7 - RANKINGS OF THE FACTORS/ PROBLEMS THAT IMPEDE THE DEVELOPMENT OF BOND MARKET IN BANGLADESH

	Factor	Average Score	Rank
I	**Market and Issue Related Factor**	1.711	6
II	**Risk and Return Factor**	3.400	1
III	**Macro-economic and Regulatory Factor'**	2.15	5
IV	**Investment Policy Factor**	2.35	4
V	**Liquidity and Government Policy Factor**	2.80	2
VI	**Issue Management Factor**	2.70	3

Note: Data have been compiled by researchers.

The factor ranking show that Factors II: Risk and Return is the most important problem that impedes the development of bond market in Bangladesh. This factor includes variables such as define economic benefits, lack of awareness program and adverse perception by market participants of settlement risk. This has really reflected the actual scenario of investor class in the bond market. The second most important factor is the

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liquidity and Government Policy related factor. This factor includes variables such as high floatation cost, political instability, high yielding government securities and poor marketability. These variables have been found working as impediments to the development of bond market in Bangladesh. The third important factor is the issue management factor which includes variables such as lack of intermediaries with professional expertise in debt products and insignificant contribution of non-banking sector. Other important factors are investment policy factor, macro-economic and regulatory factor and market and issue related factor in order of magnitudes.

3. SUMMARY OF THE FINDINGS AND POLICY IMPLICATIONS

The study has been both theoretical and empirical one. It has used direct approach to the collection of primary data and consulted available existing literature for collecting secondary data. It has used both financial and sophisticated multivariate techniques for analysis of data collected for study. The study has found followings findings:

a) The size of debt market is very low as compared to other SAARC countries.
b) There are huge opportunities for growth and making money for bond market participants.
c) The problems which draws attention of policy makers, professionals and market participants for the development of bond market are shown as follow in order of magnitudes:

I. Risk and Return Factor;
II. Liquidity and Government Policy Factor;
III. Issue Management Factor;
IV. Investment Policy Factor;
V. Macro-economic and Regulatory Factor; and
VI. Market and Issue Related Factor.

Following policies have been put forwarded for the development of bond market in Bangladesh:

I. Securities and Exchange Commission can deregulate the existing laws and promulgate news laws for creating congenial regulatory environment for the development of bond market in the country.
II. Establishment of Dhaka Inter-bank Offered Rate is one step ahead for the developing of bond market. This has to give a fair opportunity for establishment of long term yield curve which is pre-condition for that.
III. SEC can undertake both education and training program for the market participants. This creates awareness among the market participants.
IV. The Government has to offer a define fiscal benefits like investment in equity market for the development of bond market in Bangladesh.
V. The government should stop issuing securities offering interest rate higher that market yield rate.

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VI. Government should encourage state owned enterprises for raising funds by issuing corporate bond from the market. It should stop providing financial assistance to the SOEs.

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