

A study of Indian Corporate Bond Market

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Abstract

Capital Markets are the important source of fund generation for Corporate. Various instruments have been used by the corporation for the same, most popular of these being Equity Public Issues, Rights Issue, Qualified Institutional Placements, Corporate Bonds Public Issues and Private placement of Corporate Bonds. But the biggest change in traditional trends of fund generation can be seen with the introduction of Non-convertible Debentures since 2008. The public issues of NCD's have clearly replaced Public issues of Equity. Further, it has been a significant contributor in overall fund generation as well, increasing the overall resources mobilized by the corporation. The Introduction of Non-Convertible Debentures in the Capital market have been a significant reform, which has shown its effects in the last few years. The Instrument has become the most favorite instrument of the Corporation for Fund Generation through Public Issues replacing Equity issues. Equity was the most preferred source till 2003-2004 with nearly 25% contribution in overall Fund Generation. But since 2008, after the introduction of NCD's there has been a gradual replacement and in the year 2013-14 the NCD's have contributed nearly 25% in overall Fund generation with Equity is contributing just 2% including Private Issues. When it comes to fund generation only through Public Issues, Corporate Bonds have crossed 90% out of Total funds generated through Public Issues.

Key words: Corporate Bond, Non-convertible Debentures, Primary Market, Public Issue.

I. INTRODUCTION

Capital markets are the financial markets in which corporate equity and long term debt are issued and traded. Capital market works as a conduit for demand and supply of long term debt and equity capital. It is the means through which small and scattered savings of the investors are directed into productive activities of corporate entities. It is the medium through which corporate can mobilize the resources require and so capital markets are the barometer of the health of the economy. A well organized and regulated capital market facilitates sustainable development of the economy by providing long-term funds in exchange of financial assets to investors.

The Indian capital market is one of the oldest and largest capital markets of the world. In the past few years the Indian capital market has begun to transform rapidly in order to provide a world-class platform to corporate to mobilize the funds. A variety of developmental measures like deregulation and economic reforms, disintermediation and financial sector reforms, institutionalization of capital markets, investors' preference for higher standards of disclosures and corporate governance in measures similar to those followed in developed markets, globalization and tax reforms etc., have all contributed to bring about the required changes in the capital markets.

Market Segments: The securities market has two interdependent and inseparable segments, namely, the new issues (primary) market and the stock (secondary) market. The primary market provides the channel for the creation and sale of new securities, while the secondary market deals in the securities that were issued previously. Another segmentation of the Capital / securities market can be done based on the instruments issued I. e. Stock or Equity Market and Debt (Bond) Market.

Debt or Bond Market: The bond market (also known as the debt, credit, or fixed income market) is a financial market where participants issue, buy and sell debt securities, usually in the form of bonds.

Introduction of non-convertible debentures: One of the big Developments in the primary Capital Market was the Introduction of Non-convertible Corporate debentures (bonds). Corporate Bonds: In broader terms Corporate bonds are fixed income securities issued by corporate i.e. entities other than Government. In general Bonds are also known as debentures. And is defined in Section 2(12) in The Companies Act, 1956 as " Debenture" includes debenture stock, bonds and any other securities of a company, whether constituting a charge on the assets of the company or not; Corporate Bonds are Bonds issued by private or public sector companies in order to borrow funds from the market. The Indian Companies Act, 1956 has not made any distinction between Corporate Bonds and Debentures. The term Debentures have been defined as follows "debenture includes debenture stock, bonds and any other securities of a company, whether constituting a charge on the assets of the company.

Corporate Bond Market in India: The Corporate Bond Market in India is in existence since quite a long but in real sense it is in existence since December 2003, with the amendment in disclosure norms to make listing of companies made mandatory and with an initiative to provide a similar trading system for the bond market as like equity market. The objective being to provide a platform for corporate and investors to exchange and fulfill their needs i. e. Mobilizing the funds at affordable rate in the case of corporations and for investors, a good investment with good long term returns at less risk.

Need for a well-developed Corporate Bond Market

Funding the Indian Growth Story- A reasonably well developed bond market could supplement the banking system in meeting the requirements of the corporate sector for long term capital investment and asset creation.

Spare Tire Theory- A much cited simile coined by Alan Greenspan (2000) is that bond markets can act

like a spare tire, substituting for bank lending as a source of corporate funding at times when banks' balance sheets are weak and banks are rationing credit.

Huge Infrastructure Funding- A developed bond market can be an appropriate route of channelizing the savings of the country in capital formation. A constraint in bank funding of infrastructure projects is the long term nature of the infrastructure funds which cause an asset liability mismatch for banks.

Bank Funding Regulations- The banking industry faces several lending restrictions such as maximum position exposure, sector exposure etc. which play a role in the lending decisions. Debt market allows the corporate to raise funds directly from the public bypassing the intermediaries.

Mopping Public Savings- Corporate debt could also be an attractive investment alternative for investors as it provides them with higher returns as compared to time deposits; this would help in accelerating the mobilization of funds to savings which again can be used in the investment by the companies concerned.

II- NEED OF THE STUDY

To achieve the expected GDP growth of Indian Economy, Development of Corporate Bond Market has been the high priority agenda of the Government this being the highly untapped market. Many such reforms have been taking place since 2007 in full force. It is important to assess if the reforms are in a right direction by checking the contribution of Debt public issues into the Total resources generated and also by comparing it with the equity issue market, the most favored market of corporate in case of public issues.

III- OBJECTIVES & SCOPE OF THE STUDY

A) To study the meaning of Corporate Bonds, the need of a well-developed corporate bond market and the policy developments related to Corporate Bond Market.

B) To study the fund generation pattern of Indian Capital Market and the study of trends and shift in

trends in fund generation pre and post 2008-09 periods.

SCOPE AND LIMITATIONS OF THE STUDY

This research is related with the study of fund generation pattern of Indian Corporate, pre and post Corporate Bond Market reforms and the introduction of Non-Convertible Debentures. The study is limited for the period of 10 years (2004 to 2014) and is limited to the comparison of public issue trends and the contribution of debt public issues into total fund generation.

HYPOTHESIS

H1: The corporate bond market reforms increased the Total fund generation for the corporate sector in India.

H2: The corporate bond market reforms increased the fund generation from Primary Market for the corporate sector in India.

IV- RESEARCH METHODOLOGY

For the purpose of this research paper the secondary data source was applied for the collection of the data. The sources mainly being SEBI guidelines on issue of Debt Securities, RBI Handbook and SEBI statistics and ISMR statistics, for the period of 10 years i. e. from 2004 to 2014.

Data collected are edited and coded by using the excel bars. This helps in converting the gathered data into a tabulated grouped data. For the purpose of analysis the data is grouped in to two groups' i. e. 2004-05 to 2008-09 and 2009-10 to 2013-14.

The data analysis methods used are as follows. Percentage Analysis is applied to represent the collected data for better understanding.

Correlation coefficient analysis is used to measure the strength of the linear relationship between two attributes of debt market investments.

Regression and R square analysis are used to show the significance of the relationship between the variables.

T test (sample for two means) is used to do the critical analysis.

V- ANALYSIS OF DATA AND ITS INTERPRETATION

The study of literature and the developments made in the Capital market in India and specifically Corporate Bond Market in India are with a view to increase the resources mobilized by the corporates and make the Debt Market a strong debt market. And it can be seen that a major step towards it was taken in the year 2008 with the introduction of Non-convertible Debentures. Despite the policy initiatives, the corporate debt constitutes a small segment of the debt market in India. While the primary market for debt securities is dominated by the private placement market, the secondary market for corporate debt is characterized by poor liquidity, although this has improved just slightly in recent years.

One of the reasons for the unfavored treatment towards Public issues is Private Placements market. Due to the advantages the Private placement brings with it, it became the most favored source of funding for corporate even taking over the Equity Market Issues and amount generated.

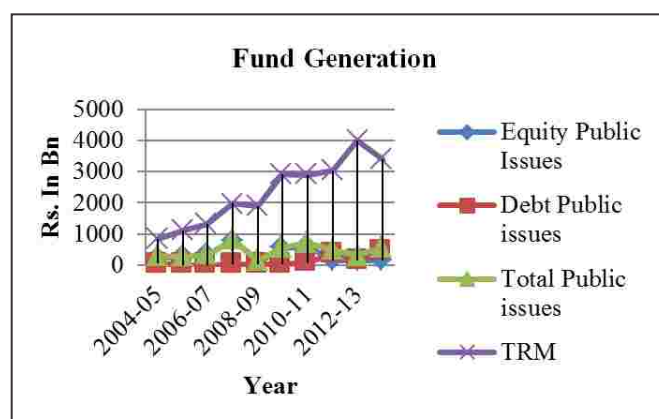
Table No. 1 - Proportion of Equity and Debt IPO's Tofunds generated through IPO's and Total Resources Mobilized.

Year	Equity public Issues	Debt public Issues	Total public Issues	% of EPI to TPI	% of DPI to TPI	TRM	% of EPI to TRM	% of DPI to TRM
2004-05	245	39	284	86.27	13.73	838	29.24	4.65
2005-06	274	0	274	100.00	0.00	1092	25.09	0.00
2006-07	329	4	333	98.80	1.20	1322	24.89	0.30
2007-08	797	16	813	98.03	1.97	1968.58	40.49	0.81
2008-09	142	15	157	90.45	9.55	1900.02	7.47	0.79
2009-10	549	25	574	95.64	4.36	2901.28	18.92	0.86
2010-11	607	95	702	86.47	13.53	2882.49	21.06	3.30
2011-12	129	356	485	26.60	73.40	3032.62	4.25	11.74
2012-13	154	170	324	47.53	52.47	4001.97	3.85	4.25
2013-14	137	424	561	24.42	75.58	3394.99	4.04	12.49

Source: SEBI Handbook of Statistics

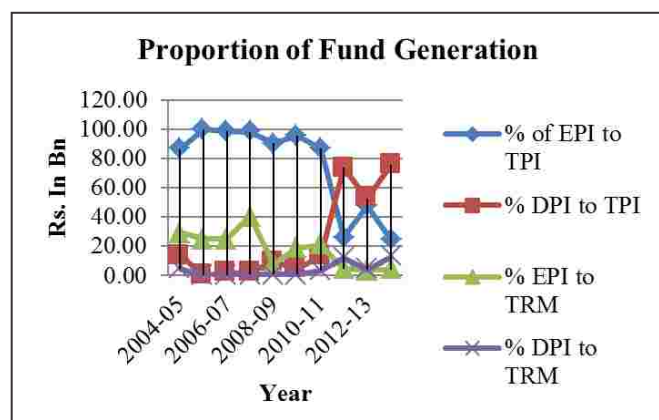
The above table shows the data related to the Resources generated by corporate through Equity and Debt Public Issues, Total resources mobilized through Public Issues and Total Resources mobilized by the corporate overall and Proportions. The above tables, clearly show the preferences of corporate when it comes to fund generates.

Chart No. 1: Resource Mobilization through Public Issues (Rs.)



Source: research study

Chart No. 2: Resource Mobilization through Public Issues (%)



Source: research study

The reforms implemented in Corporate Bond Market specially the Regulations on Issue and Listing of Debt Securities gave a new instrument to generate funds for Indian Corporate, Non-Convertible Debentures.

The First Issue of NCD's came in the year 2009 by Tata's. And since then there has been a tremendous growth in using this instrument for resource mobilization. Equity has always been the preferred source of funds generation for the Indian Corporates when it comes to the Primary Capital markets. But as has been seen in Table No. 1 the Private debt placement has taken over drastically over the Equity both in terms of number of issues and amount generated. And now with the introduction of NCD's the change in preferences can be clearly seen. It is not that no steps have been taken to develop the equity markets. In fact it has always got the preferred treatment and many reforms have taken place recently. But with all those drastic changes as well the NCD's have taken over the place of equity as a most favored instrument.

The proportion of Equity as a source of funds has gone down significantly over the years. If observed it can be seen that there has been a drastic fall in equity proportion in total resource mobilization since the year 2008-09 onwards. At the same time it can be seen that Debt public issue proportion has been growing consistently since the Issue guidelines have been put in force. The proportion of NCD's has gone up from less than 1% to more than 12 % in just a span of 6 years and from less than 5% to more than 75% when compared with Total resources mobilized Through Public Issues. The exactly reverse trends can be seen in equity proportion. The change can be clearly seen in the following tables. The following tables show the change in trends pretty clearly.

The percentage change in resources mobilized clearly is a signal of change in trends. The table shows that the proportion of equity which was increasing continuously and had even reached nearly 100% mark in the years 2005 to 2007 started falling and has reached just 7% in the year 2013-14 and the newly introduced NCD's proportion has gone up drastically to reach 93% in total resources mobilized by the Corporates through public issues.

But at the same time how much this new instrument is contributing to the total resources generated by the corporate and what is the contribution of Non-convertible Debentures in to the growth of funds generated is yet to be tested. Though the percentage analysis shows a significant increase in the proportion of resources generated through NCD's to total resources generated but if it has been because of the introduction of NCDs only is an unanswered question. For the purpose further analysis is important.

The analysis helps us state that Debt issue have been replacing Equity public Issues over a period of time. Further it also helps us state that Total resources mobilized are also on an increasing trend. But it is important to understand the relation between the Debt Public Issues and the Total resources mobilized and Total Resources Mobilized through public Issues to find out if the Introduction of NCDs has been the reason for increase in Total resources mobilized. The correlation table will help us understand the same.

Table No. 2: Correlation between Total Resources mobilized Resources Mobilized through Public Issues and Debt Public Issues between 2004-05 to 2008-09 and 2009-10 to 2013-14

	TRM	RMTPI	DPI
TRM	1		
RMTPI	0.4463	1.0000	
DPI	-0.2457	0.0147	1.0000
TRM	1.0000		
RMTPI	-0.8376	1.0000	
DPI	0.2369	-0.2074	1.0000

Source: research study

From the above correlation analysis, we can interpret that

1.The analysis suggests that the relation between Debt Public Issues and Total Resources Mobilized has turned positive from negative post reforms.

2.The relation between Debt public Issues and resources mobilized through Public Issues has turned negative from slight positive i.e. from .0147 to -.2074 suggesting negative relation between the two.

3.The relation between Total Resources mobilized and Resources mobilized through public issues has turned negative post reforms, from somewhat positive to strong negative.

Table No. 3: Growth in Total Resources mobilized

Growth in Resources Mobilized								
Year	TRM	RMPI	Equity PI	Debt PI	Growth in TRM	Growth in RMPI	Growth in EPI	Growth in DPI
2003-04	716	232	189	43				
2004-05	838	284	245	39	0.1704	0.2241	0.2963	-0.0930
2005-06	1092	274	274	0	0.3031	-0.0352	0.1184	-1.0000
2006-07	1322	333	329	4	0.2106	0.2153	0.2007	4.0000
2007-08	1968.58	813	797	16	0.4891	1.4414	1.4225	3.0000
2008-09	1900.02	157	142	15	-0.0348	-0.8069	-0.8218	-0.0625
2008-09	1900.02	157	142	15				
2009-10	2901.28	574	549	25	0.5270	2.6561	2.8662	0.6667
2010-11	2882.49	702	607	95	-0.0065	0.2230	0.1056	2.8000
2011-12	3032.62	485	129	356	0.0521	-0.3091	-0.7875	2.7474
2012-13	4001.97	324	154	170	0.3196	-0.3320	0.1938	-0.5225
2013-14	3395.12	561	137	424	-0.1516	0.7315	-0.1104	1.4941

Source: research study

Table No. 4: Regression analysis Between Total resources mobilized to Debt Public Issues

Year	R Square	Significance	P-value	
			Intercept	X Variable 1
2004-2008	0.156110976	0.510345926	0.174572249	0.510345926
2009-2014	0.406450393	0.247219729	0.142019686	0.247219729

Source: research study

Table No. 5: Regression analysis Between Total resources mobilized through Public Issues to Debt Public Issues

Year	R Square	Significance F	P-value	
			Intercept	X Variable 1
2004-2008	0.325302969	0.315363859	0.92977045	0.315363859
2009-2014	0.043471762	0.736467188	0.431082753	0.736467188

Source: research study

Analysis

The r-square in Table No 4 has shown an increase from .15 to .40 indicating that Debt public issues were more than the non-debt issues by Indian corporate. Further, the change in the TRM can be largely being attributed to these issues rather than no-debt issues.

And in Table No. 5 r-square has gone down showing a reverse impact post reforms, suggesting total resources mobilized though Public Issues now contribute less to Total Resources mobilized post reforms.

But the significance, F value and P value do not support the above statement. So to further check the reliability of Data Two tailed sample T test has been used for the analysis.

Table No 6: T test for sample means

Particular	T Value	Critical Value for One tailed test	P Value for One tailed test	Critical Value for Two tailed test	P Value for Two tailed test
TRM	17.21	2.13	3.33773E-05	2.77	6.68E-05
DPI	2.51	2.13	0.032941084	2.77	0.065882
TRMPI	1.1	2.13	0.20241257	2.77	0.404825

Source: research study

Total Resources Mobilized

T value (17.21) is much higher than the Critical test for a one tailed test (2.13) so we can state that there is a significant increase in Total Funds generated post 2009.

The same result can also be reached because of the p value for a one tailed test is less than alpha (0.05). P value is (0.0000333773120038582)

T value is 17.21 is larger than the critical t value for the two tailed test (2.77) means it can be stated with 95% certainty that there has been a change in the means from before to after.

P value for two tails is (0.0000667546240077164) less than alpha supporting the above statement.

Debt Public Issues: T value (2.51) is greater than the critical test for a one tailed test (2.13)so we can state with 95% certainty that there has been an increase in total funds generated through Debt IPO post 2009.

Same result can also be reached because of the p value for one tailed test is less than alpha.

T value is 2.51 is lesser than the critical t value for the two tailed test (2.77) means it can be stated with 95% certainty that there hasn't been a change in the means from before to after.

P value is greater than alpha supporting the above statement

Resources Mobilized through Public Issues

T value (1.10) is lesser than the critical test for a one tailed test (2.13) so we can state with 95% certainty that there hasn't been a significant increase in total funds generated through IPO post 2009.

The same result can also be reached because of the p value for one tailed test is more than alpha.

T value is 1.108 is lesser than the critical t value for the two tailed test (2.77) means it can be stated with 95% certainty that there has been a change in the means from before to after.

P value is greater than alpha supporting the above statement.

Analysis

From the results of Regression Test and T test it can be said that

H1: The corporate bond market reforms increased the Total fund generation for the corporate sector in India is proved and accepted

H2: The corporate bond market reforms increased the fund generation from Primary Market for the corporate sector in India is rejected.

VI - CONCLUSION

Capital markets are the backbone of the economy of a country because of the major role it plays to generate funds the Corporates. Over the years, it was seen that equity was the most favored instruments when it comes to fund generation through public issue.

With the introduction of Non-convertible Debentures there has been a shift in preference by the corporation. NCDs have now become the most favored sources of fund generation through public issue.

And further are contributing significantly to the total resources mobilized by the corporation. But at the same time the relation between Debt public issues and resources mobilized through public issues has turned negative post reforms. So it can be said to be a start of new era as far as Total resource generation is concerned. And it can also be said that the efforts are put in a right direction as they are generating expected results. Still the regulatory authorities need to introduce few more corporate and investor friendly reforms to continue the trend by making the issues more corporate friendly so that to end up contributing more to the fund generation.

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