Off the Budget Sources of Infrastructure Finance in India: Challenges and Prospects

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Abstract

Inadequate infrastructure is bottleneck in the economic growth of India, to boost economic growth there is need to develop sound infrastructure and attract foreign investment. To bring economy back on the track of healthy economic growth, India has projected $1 trillion investment to develop infrastructure for 12th five year plan. Given the limited space of government funding, off the budget sources of infrastructure finance are projected to meet about 50% of requisite investment. The major off the budget sources of infrastructure finance which are projected to play the important role are commercial banks and corporate bond market, but these sources are also facing difficulties in funding infrastructure. In this paper an attempt has been made to examine what are the various challenges faced by commercial banks and corporate bond market in funding infrastructure and what are future prospects of these sources in funding infrastructure.

KEYWORDS: Infrastructure, Commercial Banks, Corporate Bond Market

Introduction

Sound infrastructure is necessary for the growth of an economy, lack of infrastructure can hurdle the growth, as sound infrastructure facilitates efficiency, improves competitiveness and also helps to attract foreign investment which is imperative to economic growth. As infrastructure has historically being given public good nature so was financed by public funding such as, government budget, foreign aid, borrowing through development banks etc. Since recent past government is looking towards private participation in funding infrastructure, as most common reason for private participation is lack of available public funding, with immediate need to upgrade and expand infrastructure and bring efficiency. Respective governments began to self impose constraints on public borrowing capacity and to take new infrastructure finance, they seek private source of capital and decided macroeconomic effect would be same irrespective of the undertaking sector (Quiggin, 1996). Private sector participants possess specialization in building infrastructure they can bring and develop innovation, in technology, design, construction, operation process and will provide competitive checks of the technical and economical viability of projects.

India's declining growth has been seen as result of many reasons such as, decreased investment, cyclic and global factors importantly slow reforms and delay in project implementation. The need of the hour is to provide an impetus to investment through policy and structural reforms, and to give more importance to infrastructure investment, because of not only generating jobs, but also lowering the cost of doing business in the country by generating long term benefits to sustain economic growth.

Given the magnitude of the infrastructure capital needs and the horizon, state and local governments has been forced to consider the alternative sources of financing, including the significant sources that can be provided by the emerging global infrastructure model of public private partnership. Apart from bridging infrastructure financing gap and relieve pressure on government budget, it can bring efficiency in construction, operation, and maintenance of projects. Public private partnership has potential to provide long term funds for projects, as public private partnership market are fueled by the enormous amounts of cash that pension funds and insurer companies need to invest in steady, predictable long term cash flows (Brown, 2007).

Table 1. Projected Infrastructure Fund for 12th Five Year Plan (Rs. 000, crores)

Year	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	Total
Projected Fund	748	860	996	1156	1378	5138

Source: *Interim report of the High Level Committee (Planning Commission)* - Aug 2012

In India since last two decades particularly since 2000, infrastructure financing trend has changed from Government funding to Market funding, possible reason are fiscal constraints faced by government and delay in project implementation. Private sources of finance can take pressure away from government budget by providing requisite infrastructure finance and bring efficiency in construction, design, operation and delivering service. As Government of India has realized the need of infrastructure finance while setting massive target of $1 trillion for infrastructure finance in 12th five year plan and funding gap is estimated to be Rs. 5000 billion. But the question arises from where the funds will be generated, as historically infrastructure were funded in India from government resources such as government budget, foreign aid, and development institutions, now faced with huge financial needs and limited fiscal space, raising finance will be a formidable task. In 12th five year plan it is estimated that about half of infrastructure finance will be met through private sector, the share of private sector will be raised from 37% in 11th plan to about 48% in the 12th plan (Chakrabarty 2013). As stated by, Kilachand and Patel, cited in (Patel and Bhattacharya 2010), faced with increasing fiscal constraints, the government, as part of a broad macroeconomic stabilization, and economic reform initiated in the early 1990s, has sought to attract private investment in the infrastructure sector. The internal private sector sources of finance mainly consists of commercial banks, bond market, pension and insurer funds etc, which have to meet the infrastructure finance need in 12th five year plan . In this paper commercial banks and corporate bond market are dealt, as in 12th five year plan much of the expectation has been put on these two sources of finance, as commercial banks are second largest infrastructure finance provider as it contributes 24% apart from budgetary sources with contributes 47%. As India has high rate of public savings which can be mobilized to provide infrastructure finance, corporate bond market has to play an important role through intermediation between public and Infrastructure Corporations. Although commercial banks and bond market are projected to play important role in 12th five year plan, but both sources are facing challenges. In this paper an attempt has been made to examine the various challenges faced by these two sources of finance in providing infrastructure finance and also to highlight the future prospects of these two resources in providing infrastructure finance.

Objectives

- To examine what are prospects and challenges faced by private sources of infrastructure funds in India.
- To suggest some measures to overcome infrastructure funding problem in India.

Commercial Banks

Commercial banks have played prominent role in providing infrastructure finance as has been provided in (Table 2). Infrastructure finance by commercial banks has increased from Rs. 113 billion in 2001 to Rs. 6300 billion in 2012. The rising lending to infrastructure projects is result of banks stepped up lending by unwinding their investment in government securities maintained as SLR, as share of SLR to deposits came down from 47.3% in FY05 to 29% in FY 2011 and credit deposit increased. Infrastructure lending by commercial banks has grew faster pace than total lending and the share of infrastructure in gross bank credit rose from 6% in mar 2007 to 11% in March 2011. Banks were able to provide about half of debt finance needs of infrastructure finance. As infrastructure funds are of long term rapid growth of bank lending to infrastructure has resulted in greater concentration of risk in banks due to asset-liability mismatch and exposure ceiling. Now commercial banks seems have to reached its potential in providing infrastructure finance and being highly leveraged institutions more dependence on commercial banks for finance are more vulnerable to financial crises (Bhattacharyay, 2010).

Table 2. Commercial Banks Credit to infrastructure sector *(INR Billion)*

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Infrastructure sector	113	241	313	513	727	1,128	1,433	2,051	2,699	3,798	5,266	6300
Primary Comprising												
Power	52	167	221	337	430	601	731	950	1,244	1,878	2,691	3309
Telecommunication	36	40	41	84	130	184	194	380	503	593	1,004	940
Roads & Ports	25	35	52	92	168	196	249	345	470	735	925	1109
Others	-	-	-	-	-	145	250	375	482	591	709	941

Source: *Handbook of Statistics on Indian Economy 2012-2013.*

Infrastructure projects need long-term funds with high gestation period such as for 10-15 years, commercial banks by providing more and more infrastructure finance seems to caught in asset-liability mismatch trap, particularly when such financing is not in conformity with profile of bank liability(EPW 2009) (Table 3). As the table shows the position of commercial banks in terms of term deposits, the longer maturity period deposits are declining, particularly term deposits with maturity of more than 5 years are declining sharply, shows the changing preference in saving pattern of depositors. The declining long term deposits are cause of concern for both commercial banks and infrastructure projects when it comes to financing. The major part of term deposits in commercial banks are of less than two years maturity as high as 70%, financing projects with long-term funds could bring undesirable consequences for commercial banks.

Table 3. Maturity pattern of term deposits in commercial banks in India *(Percentage %)*

Year	< 1 year	> 1year, but < 2 years	> 2 years, but < 3 years	> 3 years, but < 5 years	> 5 years	Total
Mar-90	12.8	15.6	31.6	16.9	23.1	100
Mar-95	26.0	29.8	15.5	17.3	11.4	100
Mar-2000	28.9	22.6	15.6	22.1	10.8	100
Mar-05	39.4	23.4	10.7	18.1	8.4	100
Mar-06	39.5	26.5	9.5	16.1	8.3	100
Mar-07	37.4	32.7	7.2	15.4	7.3	100
Mar-08	**	**	**	**	**	**
Mar-09	27.8	41.5	10.6	12.6	7.6	100
Mar-10	29	37.9	12.3	12.4	8.3	100
Mar-11	26.4	40.8	12.8	11.00	8.8	100

Source: *RBI, Banking Statistics* 2011-2012.

Infrastructure loans are of 10-15 years duration, while most of bank deposits have tenure of one-two years, in last year not much disbursement has taken place, and now every bank in sitting on huge sanctions waiting to be disbursed, this going to create a major problem as we won't have deposits of equal maturity (Chairman and MD public sector bank). By realizing the need of financing infrastructure on one hand and pressure on commercial banks balance sheet RBI have came out with some measures, to find out solution for such a complex problem the measures are:

a. Take-out Financing
b. Freedom to Issue long term bonds
c. Investment in unrated bonds
d. Refinancing facility

Corporate Bond Market

As India is facing financial constraints to finance its undeveloped infrastructure, earlier funded by government sources and commercial banks which are no longer much reliable sources, as government is facing fiscal constraints, commercial banks are facing asset-liability mismatch, and heavily dependence on commercial banks are not feasible as has been witnessed in 1997 Asian financial crisis. Corporate were heavily dependent on commercial banks for their financial needs, while other types of finance were underdeveloped such as bond market, as banks are highly leveraged institutions more dependence on commercial banks for finance are more vulnerable to financial crisis (Bhattacharyay, 2013). In such a situation where on one hand government are in desperate need to develop infrastructure as its hindering it economic growth on other hand government is facing financial constraints. At this juncture corporate bond market has to play its role.

Corporate bond market in India has been remained stagnant despite robust financial sector reforms over two decades ago, for under development of Indian commercial bond market host of issues and challenges are responsible, ranges from legal to market. The financial sector reforms in India generally has tremendously benefitted to the capital market by bringing liquidity, transparency, vibrancy & integration. The benefit of financial sector reforms has shared only by equity and gilt edged market while corporate bond market has been neglected and remain underdeveloped. Underdevelopment of bond market is not feasible for economy particularly country like India which is developing one, as several risks are attached to the underdevelopment of bond market. The lack of well functioning bond market may have adverse impact on the efficiency and may increase vulnerability to financial crisis (Hakansson, 1999).

The underdevelopment of corporate bond market can be seen as it contributes only 5% share to total bond market in India, bond market is overwhelmed by gilt edged securities, compared with international scenario Indian bond market is quite underdeveloped, Indian corporate bond market in absolute terms is miniscule at $45 billion, compared to $570 for Korea and $170 billon for China (Wells & Zibell, 2008). On one hand it shows challenges Indian corporate bond market are facing, while on other hand potential of corporate bond market in India is visible, that it can contribute in financial development due to its untapped potential, especially in funding infrastructure.

Challenges faced by Corporate Bond Market

Despite the huge potential and importance of corporate bond market, as its capacity to mobilize funds and become alternative source of corporate finance particularly long term finance with high gestation period to finance infrastructure, little attention has been paid towards its development. Developing stable and liquid bond market will reduce the dependence of the corporate on banks and foreign currency financing. Through the local bond market, the corporate sector can borrow longer maturity periods in local currency which matches their investments needs and thus could help them avoid balance sheet mismatches (Plummer & Click, 2005). To develop the efficient corporate bond market in India there is need to address the issues and challenges corporate bond market are facing in both primary and secondary market.

Private Placement

In Indian corporate bond market there is almost complete absence of retail investors. Corporate bond market contributes only 5% share in total bond market, this 5% share is dominated by financial institutions through private placement, as much as 90% corporate bonds are held by financial institutions. The private placement is carried through, negotiations and is not required to disclose full information leads to underdevelopment of corporate bond secondary market.

Legal Issues

Banks can play important role in the development of corporate bond market. The presence of well developed banking system with large size is required to develop a liquid and properly functioning bond market as they play role of dealers and market makers (Hawkins, 2002). In India banks have played undoubtly an important role in development of government gilt edged market as commercial banks held almost half of government securities. SLR requires banks hold one-fourth of its assets in government bonds. When it comes to corporate bond market, there is regulatory asymmetry in treatment of loans and bonds as a result banks are more eager to advance loans rather to subscribe to bonds issued by same company (Deepak Parekh Committee). Commercial banks are also not allowed to invest in unrated debt instruments, and only to invest up to 10% of their SLR in unlisted debt papers. Banks are also prevented from investing in bonds of lower rated corporations which may include infrastructure companies. Banks have a tendency to buy and hold bonds, because extant regulations required bonds to be market to market if it is part of trading portfolio, whereas they can be valued at cost if held to maturity (Mitra, 2009).

Secondary Market Issues

Financing that is in the form of (liquid) traded securities benefits from almost continuous repricing that reflects the latest information. Liquid securitized claims are widely dispersed and implied greater risk sharing in economy. Economy which is sustained to large extent by liquid claims has great ability to absorb exogenous shocks to the system (Anshuman, 2004). Indian bond market is suffering from underdevelopment due to its lack of liquidity and transparency. There is minuscule participation of retail investors, as most of issues are privately placed as high as 90%. The players in corporate bond market in India are mostly financial institutions such as banks, insurer, pension funds etc, as they are long term investors there is no need to list them on stock market. Another problem which keeps retail investors at bay is lack of transparency, as securities with same maturity and spread should reflect inherent risk as compare to Government securities which are risk free. But corporate bond market faces information asymmetry due different dissemination information by different trading and reporting organizations such as NSE, BSE, OTC, FIMMDA (EPW 2011).

Prospects of Corporate Bond Market in India

House Hold Savings

As Indian are known for their saving attitude, corporate bond market can play important role intermediation to mobilize fund from public and channel them into corporates especially infrastructure. As government has projected need of $1trillion for infrastructure development corporate bond market can help to bridge this gap by tapping household saving although India's infrastructure investment are very ambitious, but its domestic savings rate is also very high (table 4).

Table 4. Savings and Infrastructure investment needs (% of GDP)

	FY12	FY13	FY14	FY15	FY16	FY17
Infra Investment	7.5	9.0	9.5	9.9	10.3	10.7
Gross Domestic savings	33.7	37.8	40.6	42.9	45.5	48.2
0/w Financial Savings	22.0	24.8	27.2	29.1	31.1	33.4
Incremental Infra Investment	0.3	0.6	0.5	0.4	0.4	0.4
Incremental Financial saving	2.8	--	2.4	1.9	2.0	2.3
Infra Investment as % of financial savings	34	36	35	34	33	32
% share of Incremental Infra in Incremental Financial savings	--	--	21	21	20	17

Source: *Mid-Term Appraisal Eleventh Five Year Plan, Reports submitted by Sub-Groups on Household Savings.*

Infrastructure investment can be met domestically as it constitutes almost one-third of financial savings and would entail as much as 21% of the incremental financial savings being directed to infrastructure. Only adequacy of domestic savings will not matter there needs a proper intermediation which can mobilize and channel these savings in infrastructure projects. Strengthening, integrating, and deepening local corporate bond market in local currency can play a significant role in mobilizing the required savings and reduce the dependence of corporate on commercial banks and foreign loans.

Developed Government Debt Market

A well developed government debt market is essential for the development of the corporate bond market, as government bonds are usually considered risk free in nature, they can play a role of benchmark for the development of the corporate bond market. As far as government bond market are concerned in India it is well developed as it share is 95% in total bond market. Here is very good opportunity for the development of vibrant, transparent and integrated bond market.

Conclusion

India is facing slowdown in its economic growth from the past some years, the likely reasons are slowdown in growth of world economy after 2009 financial crisis, lack of inflows of foreign direct investment, more importantly inadequate infrastructure and delay in project implementation. By realizing the importance of healthy infrastructure Govt. of India has set a massive target of $1 trillion for infrastructure funding in 12th five year plan. Given the limited fiscal space, Current account deficit, it will be formidable task to fund infrastructure from budgetary resources. In 12th five year plan government have projected to meet its 50% of infrastructure fund from private sector. The various private sector sources which have been projected to meet required need of funds comprises of, commercial banks, bond market, pension and insurer fund, ECBs, etc. commercial banks have played very important role in development of infrastructure in India, apart from Govt. budget which accounts 47% of fund, commercial banks are second which accounts 24% of funds in 11th five year plan. In 12th five year plan commercial banks have to again play very important role in providing infrastructure finance, but commercial banks are likely seems to be caught in asset liability mismatch. Infrastructure projects needs long term funds with high gestation period, commercial banks have mainly its funds of medium term maturity, if used extensively to finance long term infrastructure projects will result in asset-liability mismatch. To tackle with the problem of asset liability mismatch RBI has come out with some policies such as, refinancing facility; take out financing, freedom to issue long term bonds, investment in unrated bonds. Given the limited fiscal space and asset liability mismatch problem of commercial banks, and heavy dependence on commercial banks are more vulnerable to financial crisis.

Corporate bond market can play an important role in bridging the infrastructure finance gap in India. Corporate bond market has remained underdeveloped despite robust financial reforms, as it contributes only 5% in total bond market in India. There are host of problems which are responsible for the underdevelopment of corporate bond market ranges from legal to market such as, private placement as high as 90%, restrictions on commercial banks, pension funds, insurer funds in investing in corporate bond market especially in low rated and unrated bonds. Retail investors are not showing confidence in corporate bond market, due to lack of liquidity in secondary corporate bond market. India has high magnitude of gross domestic and financial savings, which can be channelized into infrastructure funding through corporate bond market. Depositor's preferences have shifted from long term deposits to short and midterm deposits, above five year term deposits have decreased from 23% in 1990 to 8.8% in 2011 and less than two year deposits have increased from 29% in1990 to 67% in 2011 of total commercial bank deposits, it would not be an easy task for corporate bond market to mobilize the savings without efficient, vibrant and integrated corporate bond market. Gilt edged security market in India can play an important role development of corporate bond market by providing benchmark for yield to maturity. Commercial banks and corporate bond market can support each other in providing infrastructure finance, while at inception stage commercial banks will provide requisite infrastructure finance and on development stage corporate bond market can provide requisite finance and release commercial banks outstanding. There needs to place in a proper mechanism of risk sharing between commercial banks and corporate bond market.

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