## INFRASTRUCTURE FINANCE AND BOND MARKET

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#### **ABSTRACT**

The provision and enhancement of physical infrastructure has been a recurring theme within the area of growth and development economics ever since the time of inception of the topic. The popularity of the supply of social overheads by the state united of the three key functions, the jump in investment spending advocated by the theories of Rosenstien Rodan and therefore the like, all point to the pertinence of funds spent on infrastructure to growth and development of an economy. The fast growing needs for these infrastructure provisions let alone the tightening of fiscal purse strings points to the requirement for enhanced involvement of the private sector in infrastructure provision. This involvement will be expected to be in various capacities in addition as at various stages of infrastructure provision. The peculiarities of infrastructure as an asset end in its own challenges in engaging the private sector in a very meaningful way. The natural monopoly nature, no or limited recourse financing and long biological time make infrastructure an especially interesting asset class. Nevertheless, there's a powerful case for personal involvement emanating from various dimensions. The domain lacks strong theoretical base to form a meaningful understanding of the challenges emerging due to special nature of infrastructure as a sector. Hence, this thesis is, but, a unique try to understand the present trends, nature and challenges in infrastructure finance in India. The bond market in India has distinctly lagged behind even when the equity market has seen remarkable strides of development, strangely enough, India's steady and increasing rate of the last 20 years has been majorly financed by retained earnings and equity capital raised by public offerings. This can be unlike other countries because the corporate bonds market in India has had little or no role to play thus far. This perpetual underdevelopment of the bonds market manifests itself directly within the visible financing gap witnessed across industrial sectors, more so in infrastructure development, which are critical in enhancing growth. Dedicated efforts are needed to grasp the explanations for bond market underdevelopment through various dimensions. This article puts a light on efforts to urge a reliable estimate of infrastructure investment in India and to grasp the trends in infrastructure investment in India and to spot reasons for underdevelopment of the Indian bond market.

KEYWORDS: Bond, Capital Market, Infrastructure, Liquidity, Debt, Financing, Economic, Prosperity.

### Introduction

The development and enhancement of a country's infrastructure is an instrumental element for accelerating economic process. Any inadequacy in infrastructure provision limits the economy on the trail of self-reliance, thereby inhibiting economic development. Indian developmental planning efforts stem from the centralized structure, with the onus of funding falling largely on the state, via planned expenditure classification of heads. In fact, the legacy of state financing of infrastructure dates back to Adam Smith. Public service provision is one amongst the 'three duties' that Smith attributed to the government. However, the growing needs for these infrastructure provisions, the expansion of larger market players within the sector and most significantly, the tightening of fiscal purse strings have led to enhanced and ever rising involvement of the private sector in infrastructure provision. Same as development of a deep and liquid debt market is argued to be instrumental to infrastructure

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finance. However, the bond market in India continues to underdeveloped in all dimensions, the corporate segment all the more. The explanations for underdevelopment of the Indian bond market are explored by three approaches are Exploratory approach, Financial Crowding out approach and Market microstructure approach.

The primary and most one is Exploratory Approach. The exploratory approach spans all the possible factors in market infrastructure covering players (demand and supply) and instruments, and legal and institutional setup. It assesses the information on investor participation pattern, financing pattern of Indian companies, instruments traded etc. Since the govt segment has outgrown the company segment in the majority dimensions, the question of state borrowings crowing out long run private debt resources assumes importance.

#### Infrastructure Finance

Government led infrastructure financing and execution cannot meet the expansion requirement needs of the country in an optimal manner and hence emphasis has to be laid to interact more investors. The Indian national economy displays adequate liquidity but the chance aversion among Indian retail investors as well as the relatively small capitalisation (in comparison to long duration funding requirements of infrastructure finance and also the large quantum) of assorted financial intermediaries hints towards the necessity to relook the stringent regulatory scheme and also towards the innovative financial structures within the country. The danger capital required for the infrastructure sector are often clearly understood because the Explicit Capital brought in as equity by project sponsors and therefore the Implicit venture capital made available by the project lenders. The primary and foremost question that crosses one's mind is the question on quantum of funds actually channelized towards this sector. Subsequently, the split of this investment into public and personal components is of interest to induce any meaningful insight on the infrastructure provision within the country. The question sounds rather elementary in nature, but the hassle involved within the process is substantial. The term infrastructure is defined within the dictionary as 'the underlying foundation or basic framework'. The fundamental feature of economic spillovers from users to non-users is pervasive across all activities covered during this sector and lots of display economies of scale. State infrastructure is the life blood of any country because it is the basic requirement to facilitate any economic activity. Economic prosperity and infrastructure availability share a bi directional causal relation in theory because the latter fosters and facilitates even the foremost basic economic activities of consumption and production. It also exerts an employment generation impact due to the quantum of expenditure made involving many direct and indirect externalities. The improved provision of public capital has long been considered as a founding stone for growth and productivity raises by many macroeconomists. One classic case in point was the assumption that the 1973 productivity drop of the US was attributed to lower public capital investment.

### Infrastructure as an Asset Class

In general, it is defined because the physical framework of facilities which facilitate the assembly and provision of products and services to the general public. Infrastructure is, indeed, the life blood of an economy because the social overheads are imperative for facilitating any consumption and production activity. Moreover, it assumes all the more importance within the context of a developing economy like India if this momentum in growth is to be, at least, sustained. Any spurt of economic process would require substantial dedication of funds towards the availability of infrastructure, the expansion and development theories of Rostow, Rosenstein Roden, Ragan Nurkse. etc. provides a rather direct relevance the crucial role played by the investment in these social overheads for an economy to start up the trail of growth. Within these overheads, physical infrastructure covers a large spectrum of activities like power generation, transmission and distribution, transportation, telecommunications, water system, disposition, urban mass transport systems, port-handling facilities, other urban infrastructure and irrigation. As an element and parcel of economy structure, the state had been the only real provider of physical infrastructure with limited participation from the private sector. However, with the tightening of fiscal purse strings, a greater involvement of the private sector is increasingly encouraged in numerous capacities and at various stages of project lifetime of physical infrastructure provision and maintenance. Having said this, private involvement in infrastructure provision on a sustainable basis entails a distinct set of questions on the soundness of the world as an asset class. Infrastructure is alleged to display some stylised characteristics as an asset compared with different sectors. The industry is marked by high barriers to entry which could be a direct results of huge investment requirement. Hence, most subsectors have some of massive players, albeit with contracting

and subcontracting to smaller and native players as a pervasive feature. The need of big fixed charge also yields explanation to the perpetual provision of certain infrastructure services by the state because of the natural monopoly nature. The demand for infrastructure services is comparatively inelastic and this offers pricing power to the provider. However, the scope of this can be limited for a state like India where the problems of poverty and inequality often assume paramount importance in election seasons. The investment is thus assumed to supply stable cash flows and this is often even truer for giant listed firms. This makes infrastructure an especially interesting sector as an investment. In India, the downside is that the cost and time overruns which mar the profitability and stability of infrastructure assets. The economics and operational bottlenecks of infrastructure warrant a trial to know the risk-return and volatility performance of the world in comparison to others, together with the exploration of some idiosyncratic features unique to the current sector.

# Bond Market - Underdeveloped

This is crucial because the policy implications emerging from specializing in certain aspect are usually spontaneous and hence not sustainable. The event of a deep and liquid long run marketplace for debt has been argued to be a panacea for several ills constraining the Indian economy in multiple dimensions. However, this is often one area which witnesses loss of resolve very soon after an initial spurt of enthusiasm to form room for a few other economic emergency. Retained earnings and equity capital raised by public offerings has been the mainstay of financing India's steady and increasing rate of growth witnessed during the last twenty years. This is often a dissimilar fact with most other countries because the role played by corporate bonds has been rather minimal within the Indian narrative. The numerous financing gap plaguing the industry especially infrastructure may be a direct manifestation of the underdevelopment of the bonds market within the country. Various governments appointed committees have attempted to invigorate the company bond market once they set out with detailed recommendations for its improvement. These efforts have, however, met with only limited success as there still exists a robust preference to lift funds through international debt offerings among Indian firms. Realistic reform process to encourage bonds market must imperatively consider the economics of regulation during this area. The conscious choice that the state made to develop, through deregulation or re-regulation, equity market and not debt market merits attention for these past regulatory ghosts still haunt the economy. This differential value more highly to equity impinged upon the laws that needed reforms. If one looks at the equity side, shareholders and management favored reforms and hence it yielded more room for negotiation. However, on the debt side, necessary changes were needed within the domain of labour laws, bankruptcy procedure and legal enforcement mechanism. These laws essentially make dismissal of labour quick and straightforward. Given the fact in the Indian adoption of liberalization policies, labour unions held a powerful foothold within the arena, any tweaks to labour laws or bankruptcy procedure doesn't appear politically feasible. This also had a detrimental effect to manufacturing sector growth.

# **Issues and Challenges to Corporate Bond Market Development**

It usually suffices to explain any market by studying essentially the 2 elements. First, the market infrastructure, which incorporates the players and also the instruments they exchange. Second, the principles of the sport within which the market structure operates. The latter may be a reflection of the deep set institutional and legal structure. We caution that there can be some overlapping within the set of things so it should be kept in mind that the aim isn't to compartmentalise these constraints but rather to search out out common threads and suggest ways to tie these lose ends towards the event of a liquid and vibrant bond market within the country. With this in perspective, we identify the assorted possible factors that impede the event of bond certificate market in India and do a close analysis of the identical. Since the company bond market is seemingly stuck in a very low level equilibrium trap, the answer that emerges from Nelson's theory entails a giant push. Government stock exchange development usually precedes the event in corporate bonds segment. Hence, there are reasons to believe that this big push could come from the government segment, an expansion that might generate the critical minimum mass within the market from which bond market develops. However, the flipside of this might be financial crowding out, meaning a fall within the bond market size because of a hike in interest rates induced on account of increased government borrowings within the bond market. This aspect merits attention and hence it's been concerned further very well in Chapter 6. Liquidity feeds on liquidity. However, efficient price formation and cheap transactions are the prerequisites for liquidity of a financial claim. Due to limited transaction volume and sparse trading, the company bonds could be priced incorrectly.

#### Conclusion

Fiscal prudence leaves little scope for further extension of finances from the government's kitty during this domain. Also, there are lumpy investments already locked in stalled/ shelved projects under the general public ownership. The case for further involvement of personal sector hence merits attention, and this can be despite the recent uptick within the number of stalled/ shelved projects. The question really is about the source of this private finance. Commercial banks are increasingly involved in directing credit towards this sector. However, the staggering share of this sector is the GNPAs of the banks raises concerns on the suitability of bank finance for this sector. Market based finance seems better given the long gestation and nonrecourse/ limited recourse financing nature of infrastructure projects. A marketplace for future debt may well be a panacea for the perils facing the arena yet because the stressed banking sector. Overall, the article finds the sectoral equity performance of infrastructure to be marginally below that of a broadly diversified index. The world responds relatively more to charge per unit volatilities, maybe because of enhanced foreign involvement as a recent trend. The larger firms enjoy rent like returns on the past installed capacities as reflected within the stable income as against the littlest ones with meagre, if in the least positive, cash flows. The larger ones also seem to enjoy the strategic advantage in reporting of off record items and leverage because of the operation of subsidiaries which isn't present for tiny firms. This highlights the scope for market based finance within the borrowing potential of those firms. Hence, a robust case exists for the role of market based debt finance in infrastructure sector. But, the bond market in India is seemingly stuck in a very low level equilibrium trap. The study then attempts to explore the underlying causes for this. It finds the investor participation to be extremely thin and lopsided in favour of economic banks. Further, the distinct deleveraging trend of the Indian corporates partially explains the relative unimportance of debt finance within the face of growing reliance on internally generated resources. Since the company bond market is seemingly stuck during a low level equilibrium trap, the answer that emerges from Nelson's theory demand an enormous push. Government exchange development usually precedes the event in corporate bonds segment. Hence. there are reasons to believe that this big push could come from the govt. segment, an expansion that would generate the critical minimum mass within the market from which bond certificate market develops.

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