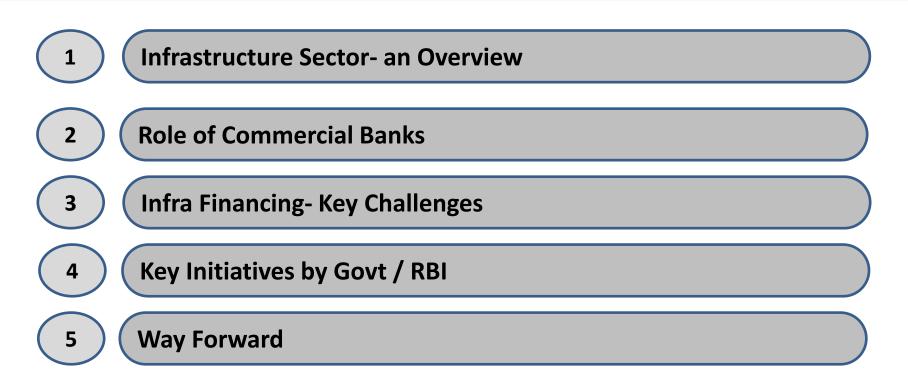
Bankers' Perspective on Infrastructure Sector

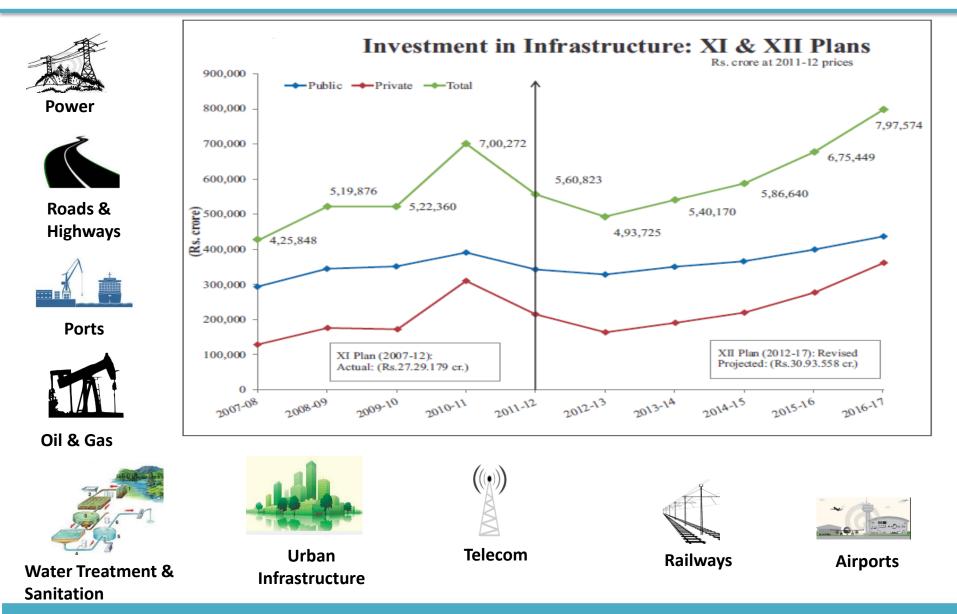
Gopal Agarwal Senior Vice President SBI Capital Markets Limited

November 2016

Presentation - Outline



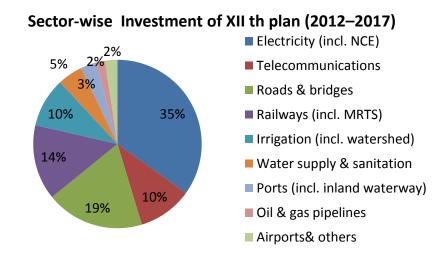
Infrastructure Sector – an Overview



Increasing Investment Requirements

X Plan	916,176 (5.02 % of GDP)
2007-8	425,848
2008-9	519,876
2009-10	522,360
2010-11	700,272
2011-12	560,823
XI Plan	27,29,179 (7.2% of GDP)
2012-13	493,725
2013-14	540,170
2014-15	586,640
2015-16	675,449
2016-17	797,574
XII Plan	30,93,558 (5.7% of GDP)

Infrastructure Investment

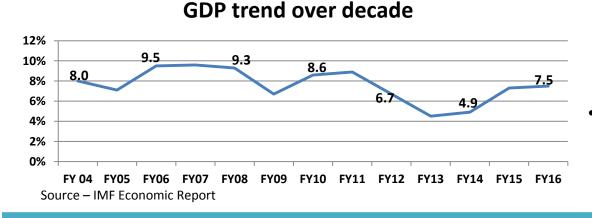


 Infra investment has increased from 23.3% in FY08 to 32.5% in FY16 of total investments

 India's overall infrastructure ranked 81st out of 140 economies (WEF Global Competitiveness Report 2016)

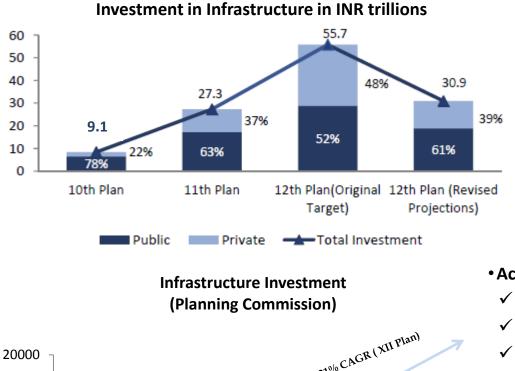
Source: Second Report of High Level Committee on Infrastructure Financing dated June 2014

Source: Planning Commission – Plan Doc

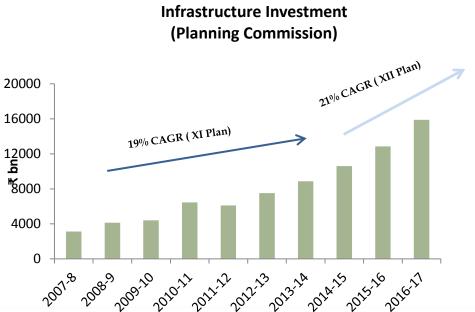


- As per Planning Commission revised projections, investment in infra is expected to reach 6.52% of GDP in the terminal year (2016-17) of the XIIth Plan.
- The average investment for the Twelfth Plan as a whole is likely to be about 5.71% of GDP vis-à-vis 7% during the XIth Plan.

Infra Investment: Key Facts



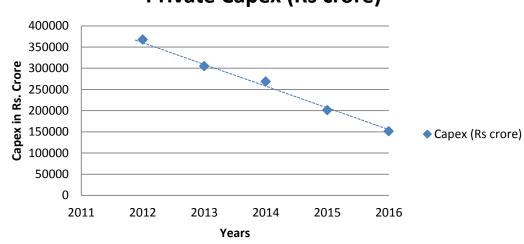
- Around 39% of total infrastructure investment is done by private sector
- Of all infra sectors, Power sector has received more than half of the total investments



Actual Infrastructure Investment in

- ✓ X Plan: ₹9.1 Trillion (100% of Original estimates)
- ✓ XI plan : ₹27 Trillion, (85% of OE)
- ✓ XII plan: ₹19 Trillion for first 3 years (against the target of ₹27 Trillion)
- ✓ As per mid year review of XIIth plan, estimated investment of ₹55Trillion was brought down to ₹31 Trillion; ₹19 Trillion has already been achived and balance ₹12 Trillion is expected in 2016 and 2017.

Declining Corporate Investments



Private Capex (Rs crore)

- Private capex has been declining for the last five years
- Last year, the capex came down to Rs 1512 bn
- The estimate for the current financial year is also around Rs 674 bn only

Source: RBI

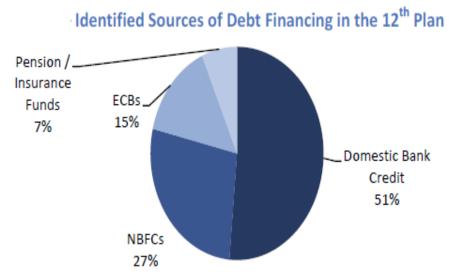
FY	Mega Project*	Share (%)#
2012	9	33%
2013	7	46%
2014	5	29%
2015	1	12%
2016	1	6%

* Worth Rs 5000 crore or more

[#] share of total cost of projects

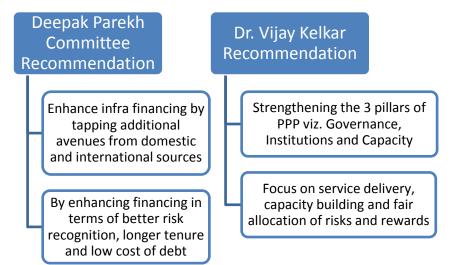
- Large size projects have also shown a declining trend in private sector
- Share of large projects out of total investments has also come down
- With turning of investment cycle and improved sentiments, the figures may go back to earlier levels

Debt Financing for Infrastructure

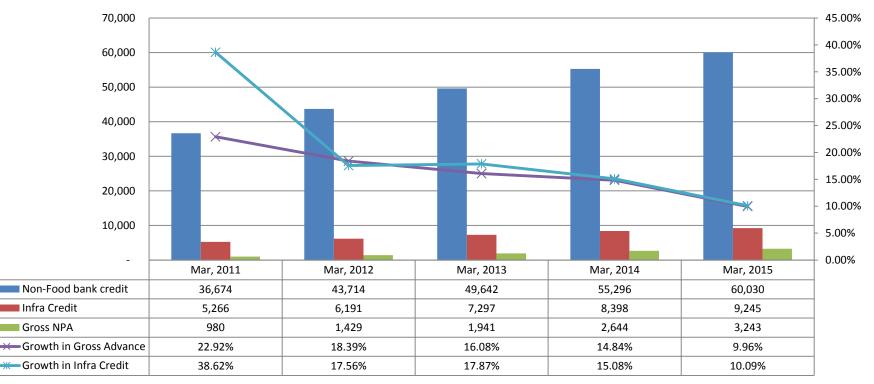


 To address the challenges in infra financing, important recommendations were made by the HLC on Financing Infrastructure chaired by Deepak Parekh Committee and the Committee on Revitalising PPP model of Infra chaired by Dr. Vijay Kelkar

- Likely debt resources of INR 23 trillion in the XIIth plan
- Large funding needs for Infrastructure Sector estimated at Rs. 40 trillion in next 5 years.
- With increasing stress levels, Banks need huge capital funding of around Rs. 3.6 trillion crore in next 3 years to meet Basel III norms and keep momentum with future funding requirements.
- Banks are currently averse to lend to Infra projects with long tenor



Role of Commercial Banks

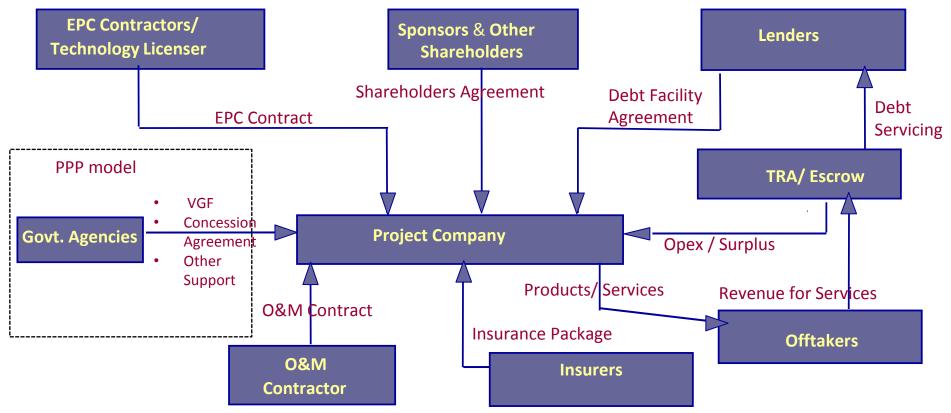


Gross Non Food Bank Credit (Rs. Billion)

- During the last six years (2011 2016), non food bank credit grew from Rs. 36,674 bn to 65,469 bn (CAGR 10.14%). However, the growth has been declining in last three years.
- Bank credit for infrastructure sector constitutes ~15% of non-food bank credit
- Gross NPA as % of Gross Advance has increased from 2.25% in FY 2011 to 5.4% in FY 2015 (further increased to 7.6% in FY 2016)

Typical Infra Financing Structure

Typical structure in Infra Finance



- Project finance structure is usually based on non-recourse; involves extensive appraisal
- Lenders have charge on project assets
- Cash flow generated from project is available for debt servicing and thereafter residual cash flow is available for equity-holders

Infra Financing - Major Areas of Evaluation

Managerial Evaluation				
Past track record and group performance	Project Team			
Managerial Competence	Financial Strength			
Technical Evaluation				
Technology (availability, appropriateness)	Raw material and other inputs (adequacy) – fuel supply; water			
Equipment Suppliers (reputation, basis of selection)	Implementation schedule (feasibility, single point responsibility)			
Terms of supply (Scope, LDs)	Site selection – access, connectivity, route survey			
Adherence to regulations, process and quality standards				
Market Assessment				
Marketing arrangements	Competition			
Demand supply projections	Contractual Obligations			
Price trends – cost plus/ competitive basis				
Financing & Regulatory Risk				
Project Financial Viability	Funding appetite among financial markets			
Asset- Liability mismatch for lenders	Limited resources of promoters			
Changing Regulatory Landscape (RBI, Land bill, Sector specific regulations etc.)				

Infra Financing- Financial Market Challenges

Issues related to Financial Markets

- Institutions, markets, instruments needed for providing long term funding solutions for infrastructure
- Bank centric financing
 - Alternate sources not developed
 - Large DFIs have become extinct.
- Underdeveloped derivatives/ hedging market currency, interest rate
- Negative sentiments in the lending community
- Savings not channelized towards infrastructure projects
- Commercial banks reaching sectoral exposure caps
- Project appraisal/monitoring skill unevenly distributed
- Sub-standard fiscal discipline among lending institutions

Infra Financing- Pvt. Sector Challenges

Issues related to Private Sector Developers

- Short comings in project preparation/ development
 - Unrealistic assumptions/ expectations, e.g. project/operating cost, revenue estimation
- Cost Overrun and Delays
 - Many infra projects are facing cost overrun and implementation delays leading to very high project cost, lack of funding and distressed viability
- Inadequate capacity to execute infrastructure projects. Integrated execution model adopted SPV and EPC contractor within the same group
 - Risks not diversified / divested (essential for project financing)
- Equity scarcity
 - Reliance on internal accruals/ borrowing for equity
 - Limited appetite for PE investors
 - Aggressive bidding by developer to acquire projects
 - Lack of financial discipline/ corporate governance
 - Large infra companies are highly leveraged and not able to handle/manage stress
 - Reluctance to divest as warranted

Infra Financing- Regulatory Challenges

Issues related to Government

- Multiplicity of approvals/ consents
 - Leading to delays, uncertainty
- Land acquisition
 - Resistance from affected communities
- Lack of structured coordination/ information exchange between central and state agencies – poor planning
- Weak regulatory /dispute resolution mechanisms corrective action is needed
- Changing Regulatory landscape
 - Changing regulations changes the economics of the the projects under implementation
- Non-compliance by Government agencies
 - Project authorities do not discharge their obligations in time, flawed risk sharing

Infra Financing- Other Challenges

Regressive impact of Aggressive bids

- Several bidders have considered speculative assumptions while bidding which has adversely impacted RoE across sectors
- Some Bidders have considered aggressive technical parameters impacting project viability and thus delayed financial closure.
- Constraints in power evacuation
- Lack of off-take on account of poor financial health of discoms
- Poor health of discoms has adversely impacted the payment security mechanism in power sector thereby creating liquidity issues for developers

Challenging Times

Rising levels of 'stressed advances' – NPA + std. restructured.	 Banks are faced with growing levels of stressed loans. As per RBI Financial Stability Report (June'2016), in Mar'16, 'industry' accounted for the highest stressed advances ratio – 19.4%. Among sub sectors - infrastructure (Industry) had 33% share in the total stressed advances.
Revival of Stalled projects	 Investment over Rs. 11 lakh crore stuck up. Besides power, roads, etc. sectors like steel, textiles facing severe hardships
Global Developments	 Lower economic activity and other factors have resulted in lower demand and surplus capacities Impact on exports, as also rising cheaper import levels further impacting domestic players.
Corporate Woes	 High leverage Equity constrained, fresh lending conservative/ constraints Bad track record of Corporate Governance, Compliance standards and Fiscal Discipline Transparency concerns- all stakeholders Cost and time over-run in projects
Higher Capital Requirement for Banks	 Under the new Basel III requirements, higher capital requirement s of banks Budgetary support not enough Expected capital requirement around 3.6 lakh crore in the next 3 years
Regulatory Restrictions	 RBI exposure norms- higher provisioning requirements Restriction on Exposure concentration- sectoral and group limits

Key Initiatives- Government

Power	 UDAY scheme* for discoms Major impetus to Renewable Energy generation - to achieve 175 GW by 2022 - ~INR 6700 bn investment Transmission capacity of 23000 ckm proposed to be added in FY17
Road	 Investment of Rs. 5 trillion planned by 2019 Target addition of 30 km per day of NH, Hybrid Annuity Model
Ports	 Sagarmala Project' aims at transforming existing ports and creating new ones. ~INR 750 billion required for development of 12 major ports of which some would be developed through PPP model
Railways	 Large capital expenditure planned (Rs 121,000 crore for FY17) 100% FDI under automatic route permitted for approved projects – cumulative FDI flow (2005 – May 2015) ~INR 43 bn
Urban Infra	 Govt unveiled a list of 98 cities, including 24 state capitals for its ambitious Smart Cities project. MRTS is under implementation in multiple cities; Centre has allocated Rs 70.6 billion for Smart Cities in the budget of 2014-15.

* This scheme was launched to provide financial turnaround for the state-owned power distribution companies by helping overcome outstanding debt of INR 4300 bn as on March 2015

These initiatives will result into positive investment scenario in the country; Will require huge amount of capital

 banks to play a critical role

Key Initiatives- Government

NIIF	 National Infrastructure and Investment Fund (NIIF) Maximize economic impact through investments in commercially viable Initial corpus INR 400 bn, which may be raised from time to time.
РРР	 PPPs are encouraged in the infrastructure sector Build Operate Transfer (Toll) Build Operate Transfer (Annuity) Hybrid Annuity Model (HAM) Toll Operate Transfer (TOT) Engineering Procurement Construction (EPC)
REITs / InvITs/ IDF	 Provide liquidity for real estate & infrastructure players, giving investors an opportunity to invest in stabilized assets through a listed platform These are trusts that behave like mutual funds offering individual and institutional investors regular yields and liquidity IDFs are also getting popular - for completed road projects
SWF	 Sovereign wealth funds (SWFs) and pension funds are allowed to invest in infrastructure projects. They provide longer time horizons

Key Initiatives- RBI/ Banks

RBI Guidelines

- Additional provisioning and risk weight for large corporate groups
 - For incremental exposure if total exposure crosses a threshold (Rs 25,000 crore in FY18 gradually being reduced to Rs. 10,000 crore)
- Facilitating alternate source of funding Subscription to bonds
 - Banks permitted to provide partial credit enhancement upto 50% of debt amount
- Other Initiatives
 - Allowing 5/25 structure for financing Infra Projects elongated loan tenor
 - Refinancing of commissioned projects with elongated tenor loans
 - Change in Management (SDR and outside SDR)

Changing Banking Practices

- Gradually evolving views on project financing
- Consortium approach has become a must
- Intensive appraisal system with cautious approach
 - Banks also look at cash flow of project (debt / EBITDA) apart from asset coverage
 - Sufficiency of equity; water tight contractual structure

Way Forward – Structural Changes

Macro Factors

- Facilitate quicker Approvals & Clearances
 - Single window concept with standardised processes and procedures across various agencies/ ministries
- Perspective planning across all interdependencies detailed plan for the sector with inputs from all the concerned ministries/ agencies
- Land Acquisition Act to be revisited
 - Well planned, efficient and demonstrable rehabilitation packages, simplification of procedures for linear projects like transmission, roads, railways, etc.
- Supportive legal/Regulatory framework bankruptcy, recovery, M&A, etc. provisions strengthened
 need to create eco system for achieving desired outcome
- Improving private sector capacity/capability
 - Broad basing the number of participants by encouraging foreign participation expertise/technology for executing large complex projects
 - Allowing exit options as allowed in case of road assets/ invIT inspired structures
 - Restriction on the number of projects undertaken by private players at a time which would ensure availability of resources for timely implementation
 - Financial ability to invest equity or various ways of raising equity from external sources

Way Forward – Structural Changes

Development of Alternate Capital Markets

- Broad-base domestic investor participation to address Asset- Liability mismatch concerns of banks
 - Participation by domestic insurance, EPF & Pension funds, retail investors through fiscal incentives
 - Mechanism to allow banks to ammortise the provisioning requirement over a longer tenor
- Attract foreign capital Sovereign Wealth Funds, Global insurance and pension funds
- Foreign debt ECB/Multilateral agencies/ ECA
- Standby debt and equity/ Mezzanine Funding specialised institutions may be developed to offer last mile funding
- Debt securitisation
- Corporate bonds
- Equity Divestment
- Encourage greater market for deep discount bonds and partial credit enhancement by way of guarantees from financial institutions enabling refinancing by lenders with an appetite for long term funding for operational projects
- ✓ Entire landscape of project financing and infrastructure financing going to change
- Banks to use all the learning acquired during previous investment cycle to play active role in financing in future but with caution

Thank You