

# Infrastructure investment in India: Setting up the second wave

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# The jam in PPP development

- The first wave of infrastructure investment in India emphasised *development* of infrastructure projects through PPP.
- This process has got into a lot of trouble.
- Problems within the field of infrastructure: Clarification of the role of government.
- Problems in the institutional environment: courts, land, bankruptcy code, government procurement process, etc.
- A very large amount of investment is stuck at various stages in the pipeline.

# A problem of first order importance

- Few things in India are as important as this question.
- Vast pools of capital are stuck in these projects.
- The investment/GDP ratio depends on getting infrastructure investment back on track.
- The economy badly requires infrastructure.
- \$1 trillion of infrastructure investment in 5 or 10 years is a big number when compared with the overall economy.

## In parallel, a financing bottleneck

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- Actually there is no hard and fast number – this depends on the user charge and the traffic.
- If the user charges were sufficiently low, much more infrastructure is viable.

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- If the user charges were sufficiently low, much more infrastructure is viable.
- The financing methods used in the first wave – banks and quasi-banks – are not going to deliver the numbers that we require.
- E.g. if you believe \$1 trillion over 10 years then this is \$100 billion per year.
- A new approach is required.

# Shift private participation to operating assets

- Increasing sense that the right place for the private sector is to own and operate working infrastructure assets.
- Chapter 2, *Economic Survey*, July 2014.
- The development process is too messy and it just does not fit the private sector.
- The private sector should buy operating assets, and toll them.

# Key insight on the size of construction/development firms vs. operating assets

- If India has \$1 trillion of infrastructure investment, will the balance sheet size of L&T and HCC and so on go to \$1 trillion?
- This makes no sense
- L&T and HCC and so on are just the pipeline through which operating assets come out the front door.
- The pool of operating assets will become bigger and bigger and will eventually have a balance sheet of \$1 trillion.

# Examples of some recent transactions

Seller	Buyer	Name	Consideration (Rs. crore)
GMR	SBI Macquarie	GMR Ladcherla	204
Shapoorji Pallonji - IJM	SBI Macquarie	Trichy Tollway	275
HCC	IDFC India Infra Fund	Nirmal BOT	64
GMR	IDFC India Infra Fund	GMR Ulunderpeth	220
IJM	ISQ Asia Infrastructure	Jaipur Mahua	525
Madhucon / SREI	Tata Realty	Agra Jaipur	250



# Operating assets : How to finance

- Envision an asset that has worked for 1 full year
- Construction risk is over
- Hard data for toll income for one year is in hand
- Now all that remains is traffic risk and O&M skills
- This is a risk the private sector can take
- Now these assets can be bundled together in large listed companies
- Access the public equity and the public bond market
- A company with a balance sheet of \$20 billion with bonds of \$10 billion will have excellent liquidity of its securities, and global investor interest.
- Note: The bond issued by an infrastructure company is just a corporate bond.

# The importance of foreign investment

- Public equity is already a globally accepted asset class with near-complete capital account convertibility.
- Quasi-infinite debt investment is available, as long as we fix our mistakes on the Bond-Currency-Derivatives Nexus
- Rupee denominated debt must emerge as a second Indian asset class that is globally welcome.
- Currency risk is placed on the *investor*.

The only way to get to \$1 trillion of investment is to tap into these vast pools of capital.

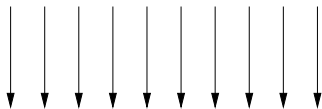
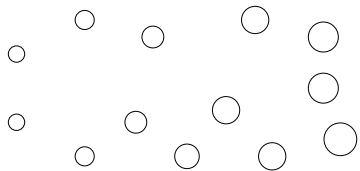
# Operating assets: How to get to low user charges

- Not much can be done to change the cost of steel and cement that goes into a project.
- The main raw material for an operating assets company is: Capital
- If the cost of capital comes down, the user charge goes down.
- How to get a lower cost of capital? Reduce the risk.
- *Make operating infrastructure boring*
- “Utilities” – low beta, low risk, low action.

# How to reduce the risk of equity and debt of utilities

- Sound independent regulator which the private sector will trust
- Bond-Currency-Derivatives Market development so as to get to 30 year corporate bond issuance.
- Trust in the rupee – credible inflation targeting.
- Capital account convertibility – remove the risk of future capital controls.
- Get up to the orthodoxy:
  - Remove financial repression
  - Floating exchange rate
  - Inflation targeting
  - Modern financial regulation
  - No capital controls
  - Get comfortable with larger current account deficits

State: VC, Owner,  
Developer

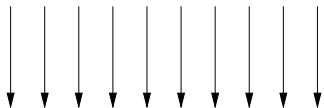
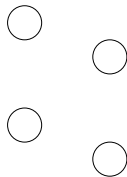
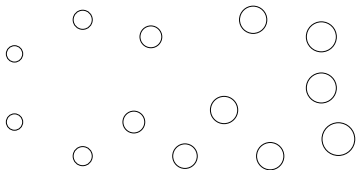


EPC to private firms

Build

State: VC, Owner,  
Developer

State:  
Operator,  
Regulator



EPC to private firms

**Build**

**Prove**

State: VC, Owner,  
Developer

State:  
Operator,  
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Operating  
infrastructure  
companies

EPC to private firms

Build

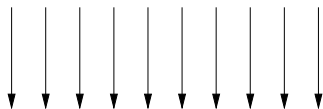
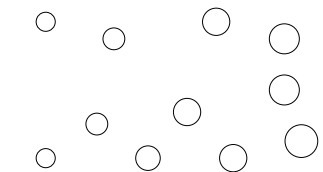
Prove

Operate

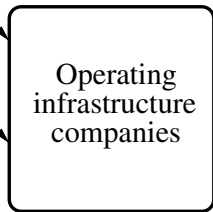
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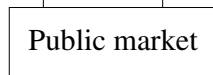


EPC to private firms



Debt

Equity



Domestic

Foreign

Build

Prove

Operate



# How to solve the logjam

- Let us assume the operating assets side starts working well
- The public market will bid up the value of operating assets
- That creates visible exit opportunities for projects under development
- Entrepreneurs and government agencies will see opportunities in solving the last x% of the barriers, finishing a project, and selling it off.

# The financing question

- If government is to be the VC for incubating projects until they work, does this call for a great surge of fiscal deficits?
- No, all we have to do is sell existing operating infrastructure assets in the hand of government.
- Vast portfolio of power plants, highways, trains, planes, etc. which can be sold.
- Government as VC will score a 2x return over 5 years.
- In a few years, the money coming in from exits will keep the process going.

# Reorientation of government

- Public policy should be classified as Planning, Contracting and Regulating.
- E.g. NHA did planning and contracting.
- There is value in pulling together related kinds of infrastructure e.g. ports and railway lines. An agency structure:

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Energy Ministry  
(Corporate Governance)

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Transportation Ministry  
(Corporate Governance)

National Energy Agency  
(Planning and contracting)

National Transportation Agency  
(Planning and contracting)

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Energy Regulator

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Transportation Regulator

- This requires an FSLRC-style law to setup the regulators and ensure they work properly.

# Work required in parallel

- The rest of the environment has to improve!
- Bankruptcy code, Land acquisition, Judiciary, etc.
- We should push on all those fronts.
- As and when this progress comes about, government as VC and Developer will reap the benefits.

# Let's get the foundations right

- If the underlying incentives are not correct, we have to go solve these
- Let us not inject steroids in the corpse:
  - Development financial institutions
  - Forcing banks to buy infrastructure assets
  - Surge in fiscal deficit
  - Specialised “infrastructure debt funds”
  - Tax exemption.
- None of these are big enough to shake the needle: \$1 trillion is a scary big number.
- The only way to get to \$1 trillion is to get the incentives right, and tap the vast global financial system.
- Let's privatise / close down IDFC, IIFCL, REC, PFC, “IDF” framework; let's remove tax exemptions; etc.

Thank you.