

TIPCE 2019

**Lesson's from PPPs in Transport
Infrastructure Projects**

Professor G Raghuram
IIM Bangalore

Outline

- What is Infrastructure
- Characteristics of Infrastructure
- Drivers for Commercial Outlook
- Implications of Commercialisation/PPPs

Infrastructure in the News

Indian Railways plans to build first vertical-lift bridge

January 5, 2019

- Indian Railways is all set to build country's first vertical-lift bridge connecting Rameswaram to mainland India. Replacing the 104-year-old Pamban Bridge, the new vertical-lift bridge will allow ships and steamers to pass through without any hindrance.
- The two-kilometre-long bridge will cost Rs 250 crore and is expected to be ready in next four years.

<https://www.livemint.com/Politics/53LGroPXQ7v7Vlvz81496I/Indian-Railways-plans-to-build-first-vertical-lift-bridge-H.html>

Government to form panel to roll out in-flight mobile phone services by March

January 4, 2019

- The government on Friday decided to form an inter-ministerial panel to roll out in-flight and maritime mobile services within three months, an official source said.
- The inter-ministerial group will meet every 15 days to sort out issues and expedite the process of approvals till the rollout of in-flight and maritime connectivity (IFMC) services stabilises

<https://economictimes.indiatimes.com/industry/transportation/airlines/-aviation/government-to-form-panel-to-roll-out-in-flight-mobile-phone-services-by-march/printarticle/67386200.cms>

Infrastructure in the News

ICAO raises concerns over security of airports, aviation infrastructure in India

December 16, 2018

The International Civil Aviation Organisation (ICAO) has raised concerns over the security of airports and other aviation infrastructure in India following an audit at the Chennai airport and the Bureau of Civil Aviation Security (BCAS), the aviation security regulator.

<https://economictimes.indiatimes.com/industry/transportation/airlines/-aviation/icao-raises-concerns-over-security-of-airports-aviation-infrastructure-in-india/articleshow/67119238.cms>

Bogibeel Bridge: India's longest rail-cum-road bridge set to open on December 25

December 15, 2018

- Bogibeel Bridge, the longest rail-cum-road bridge on Brahmaputra river, is all set to be inaugurated on December 25 by Prime Minister Narendra Modi
- This will facilitate faster movement of troops to Arunachal Pradesh, the country's eastern-most state that shares border with China.

<https://economictimes.indiatimes.com/news/economy/infrastructure/bogibeel-bridge-indias-longest-rail-cum-road-bridge-set-to-open-on-december-25/bogibeel-bridge/slideshow/67103784.cms>

Infrastructure in the News

India's air connectivity grew fastest in five years, says IATA

December 12, 2018

India's air connectivity has grown the fastest in the last five years and there is "strong growth" ahead in terms of domestic passenger numbers though there are infrastructure challenges, according to global airlines' body IATA.

<https://economictimes.indiatimes.com/industry/transportation/airlines/-aviation/indias-air-connectivity-grew-fastest-in-five-years-says-iata/articleshow/67061841.cms>

Mumbai: State hikes stamp duty on properties by 1% to fund infrastructure

November 28 , 2018

The citizens of Mumbai will soon have to pay 1% additional stamp duty on property to fund transport infrastructure projects in the city, like metro and mono rail, bus rapid transport system, freeways and sea links. The state called it a surcharge that is a percentage of the land or property value. It will push up property stamp duty to 6% from the current 5%, making buying flats costlier in the city.

<https://www.timesnownews.com/videos/news/india/mumbai-state-hikes-stamp-duty-on-properties-by-1-to-fund-infrastructure/16452>

Infrastructure in the News

Surat railway station: IRSDC takes steps to make multi-modal transport hub project

November 20, 2018

- Indian Railways' Surat railway station, is soon going to be turned into a multi-modal transport hub (MMTH), integrating all modes of transport, is all set to transform the face of the city.
- The most interesting thing is, for this project, all the three levels of administration – Central (Indian Railways), state (Gujarat State Road Transport Corporation) and local authorities (Surat Municipal Corporation), have come together to pool their lands and also form an SPV named SITCO.
- The station will become the third one in India to get an international-standard renovation, the first two stations being Habibganj and Gandhinagar

<https://www.financialexpress.com/infrastructure/railways/surat-railway-station-irsdc-takes-steps-to-make-multi-modal-transport-hub-project-attractive-to-developers/1387681/>

Govt. of India approves leasing out of six airports through PPP mode

November 11, 2018

On November 8, the Union Cabinet chaired by Prime Minister Narendra Modi has approved the Ministry of Civil Aviation's proposal for leasing out of the six airports of Airport Authority of India viz. Ahmedabad, Jaipur, Lucknow, Guwahati, Thiruvananthapuram, and Mangaluru through the Public-Private Partnership (PPP) mode.

<https://urbantransportnews.com/govt-of-india-approves-leasing-out-of-six-airports-through-ppp-mode/>

Infrastructure in the News

Varanasi terminal: Modi's ambitious project to speed up economy

November 12, 2018

- The first container vessel had sailed from Kolkata for Varanasi on October 30, carrying cargo belonging to PepsiCo (India) on the Ganga river.
- PM Modi's reception of the vessel launched the first multi-modal terminal on the Ganga river in Varanasi under a project aimed at promoting inland waterways as a cheaper and more environment-friendly means of transport.

<https://economictimes.indiatimes.com/news/economy/infrastructure/varanasi-terminal-modis-ambitious-project-to-speed-up-economy/printarticle/66587045.cms>

Kolkata is India's most commuter-friendly metro; Delhi offers best roads

November 2, 2018

- According to Ola's first-ever 'Ease of Mobility Index', Ultra-low fares and robust infrastructure for public transport have put Kolkata at the top of a list of Indian metros in terms of how easy commuters find it to go from point A to point B.
- Half the people in Mumbai prefer public transport over personal vehicles, while Delhi offers the best surface quality to ride on. Hyderabad, on the other hand, is the front runner in shared mobility

https://www.business-standard.com/article/current-affairs/low-fares-easy-availability-make-kolkata-most-commuter-friendly-metro-118110101543_1.html

Infrastructure in the News

Inland Waterways Authority of India forays into PPP

October 29, 2018

Inland Waterways Authority of India (IWAI) will make its foray into Public Private Partnership (PPP) on Tuesday when it hands over the operation and management of its terminals in Kolkata to M/s Summit Alliance Port East Gateway (India) Pvt Limited (SAPEL) on a supply, operate and maintain (SOM) model.

<http://www.millenniumpost.in/kolkata/inland-waterways-authority-of-india-forays-into-ppp-325087>

Russia may invest in DMIC, smart cities, railways, public transport: Suresh Prabhu

October 28, 2018

Russia has expressed interest in investing in projects like Delhi-Mumbai Industrial Corridor (DMIC) and smart cities besides railways, and public transport, Commerce and Industry Minister Suresh Prabhu has said.

<https://economictimes.indiatimes.com/news/economy/infrastructure/russia-may-invest-in-dmic-smart-cities-railways-public-transport-suresh-prabhu/printarticle/66413361.cms>

Infrastructure in the News

India on track to buy 18 bullet trains from Japan for Rs 7,000 crore

September 05, 2018

- India will purchase 18 bullet trainsets from Japan at a total cost of about Rs 7,000 crore in a deal that includes a pledge to transfer technology for local production
- In parallel, Indian Railways will start the process of setting up a bullet train assembling facility in India on a public private participation (PPP) basis that will cater to future needs

<https://economictimes.indiatimes.com/industry/transportation/railways/india-on-track-to-buy-18-bullet-trains-from-japan-for-rs-7000-crore/articleshow/65678899.cms>

Rs 5,000 crore masala bonds: Kerala Infrastructure Investment Fund Board gets BB+ rating

September 01, 2018

- In a big boost to Kerala's overseas fundraising plans, international rating agencies have assigned a good rating for Kerala Infrastructure Investment Fund Board's (KIIFB) Rs 5,000-crore masala bonds issue, slated to hit the market in the coming weeks.
- The rating agencies have assigned a rating which is a notch below India's sovereign rating. India's sovereign rating is 'BBB-'. One notch below the sovereign rating is 'BB+'.

<http://www.newindianexpress.com/specials/2018/sep/01/rs-5000-crore-masala-bonds-kerala-infrastructure-investment-fund-board-gets-bb-rating-1865825.html>

Infrastructure in the News

India to construct 100 airports worth \$60 billion

September 04, 2018

- India plans to construct 100 new airports with an investment of close to USD 60 billion (about Rs 4.2 lakh crore) in the next 10-15 years
- Amid the country's domestic aviation sector recording double-digit growth for more than three years on the back of rising demand, the government is working on ways to bolster the infrastructure for the sector.

<https://economictimes.indiatimes.com/industry/transportation/airlines-/-aviation/india-to-construct-100-airports-worth-60-billion/articleshow/65667498.cms>

India Aiming To Reduce Logistics Cost To Less Than 10% Of GDP By 2022

August 24, 2018

- India's logistics sector is highly defragmented and the aim is to reduce the logistics cost from the present 14% of GDP to less than 10% by 2022, according to an update from the Department of Commerce.
- A National Logistics Portal is being developed by the Ministry of Commerce and Industry to ensure ease of trading in the international and domestic markets. The portal will link all the stakeholders of EXIM, domestic trade and movement and all trade activities on a single platform.

https://www.business-standard.com/article/news-cm/india-aiming-to-reduce-logistics-cost-to-less-than-10-of-gdp-by-2022-118082400367_1.html

Infrastructure in the News

Bengaluru, Delhi airports in world's top 10 fastest growing airports

Aug 22, 2018

Two Indian airports have been ranked in the top 10 list of top 10 list of the world's fastest growing airport in the world during January to June this year, with one of them securing the second spot, shows a recent study. While Bengaluru airport made second place, Delhi's Indira Gandhi International Airport. came in at the sixth spot.

<https://timesofindia.indiatimes.com/business/india-business/bengaluru-delhi-airports-in-worlds-top-10-fastest-growing-airports/articleshow/65502164.cms>

India to be power surplus in 2018-19: Central Electricity Authority

August 05, 2018

The Central Electricity Authority (CEA) has pegged energy and peak power surplus at 4.6 per cent and 2.5 per cent, respectively, this fiscal, indicating that India will be a power surplus country in 2018-19.

<https://economictimes.indiatimes.com/industry/energy/power/india-to-be-power-surplus-in-2018-19-central-electricity-authority/articleshow/65278344.cms>

Infrastructure in the News

Union Cabinet approves extension of CFS for infrastructure projects abroad

August 2, 2018

- The Union Cabinet, chaired by Prime Minister Narendra Modi, on Wednesday approved the first extension of Concessional Financing Scheme (CFS) to support Indian Entities bidding for strategically important infrastructure projects abroad for five years till 2023.

<http://www.india.com/news/agencies/union-cabinet-approves-extension-of-cfs-for-infrastructure-projects-abroad-3200174/>

India to build 2,000 kms of international roads by 2022: Minister Mandaviya

July 19, 2018

- The government is planning to build 1,911 kilometres of international connectivity roads over the five year period ending 2022 under its flagship Bharatmala scheme.
- Moreover, is also planning to 3,319 kms of border roads with an outlay of Rs 25,000 crore over a period of five years from 2017-18 to 2021-22 in a phased manner

<https://economictimes.indiatimes.com/news/economy/infrastructure/india-to-build-2000-kms-of-international-roads-by-2022-minister-mandaviya/printarticle/65058654.cms>

Infrastructure in the News

India Needs A Chicago Every Year To Meet Urban Demand: Housing Minister

July 12, 2018

- From now till 2030, India has to build 700 to 900 million square metres of urban space every year to meet its massive urban demand as 40 per cent of the country's population is projected to reside in urban areas by 2030
- India still had to build 70 per cent of the new urban infrastructure required by 2030 and this has to be green and resilient.

<https://www.ndtv.com/india-news/india-needs-a-chicago-every-year-to-meet-urban-demand-housing-minister-1882073>

Railways for easier PPP norms to revamp 600 stations

April 19, 2018

- The railways ministry plans to soon seek cabinet clearance to ease norms for private investment in the railway station redevelopment programme
- Indian Railways has identified 600 stations for redevelopment and the ministry is of the view that the existing public private participation (PPP) norms for the station redevelopment programme are stringent, officials said.

<https://economictimes.indiatimes.com/industry/transportation/railways/railways-for-easier-ppp-norms-to-revamp-600-stations/articleshow/63823644.cms>

What is Infrastructure

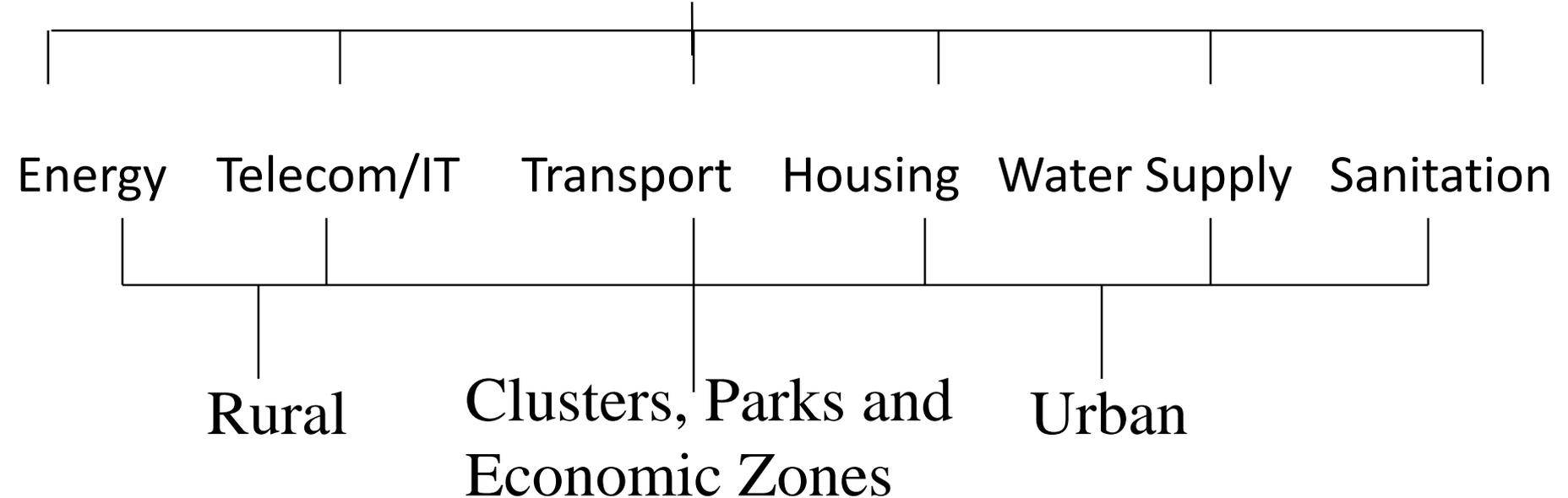
What is Infrastructure ?

- Social Overhead Capital
- Infrastructure Supports
 - Economic growth
 - Poverty alleviation
 - Sustainable natural environment

Source: World Bank

Infrastructure

Economic Social



Infrastructure service essential to derive the benefit of economic infrastructure.
However, service 'cost' is relatively less [if high: Social infrastructure like Health, Education, Police, Judiciary]

Characteristics of Infrastructure

Characteristics of Infrastructure

- High investment costs : decreasing average costs
 - Economies of scale & scope leading to natural monopolies: need for regulation
- Use of a key “national” resource
 - Need for regulation
- Benefits from users to non users
 - Framework for fiscal cycle and concessions

1	2	3	4
Both	ERR	FRR	
	FRR	ERR	Both

Hurdle Rate

ERR – Economic Rate of Return

FRR – Financial Rate of Return

Characteristics of Infrastructure

- Hence, infrastructure was traditionally developed by public sector
- However, governments have not achieved their own goals
- Hence, there is need for commercial outlook (managerial effectiveness, financing and incentive compatibility)

Drivers for Commercial Outlook

Framework for Commercialization

Improve Asset Creation Efficiency	Improve Asset Management Efficiency	Improve Service Delivery Effectiveness & Efficiency
Increase Stakeholding	Increase Accountability	Increase Autonomy

Issues of incentive compatibility

Increase Stake Holding



Privatization ← Monopoly



Appropriate Bundling ←

- Horizontal
- Vertical

Increase Accountability



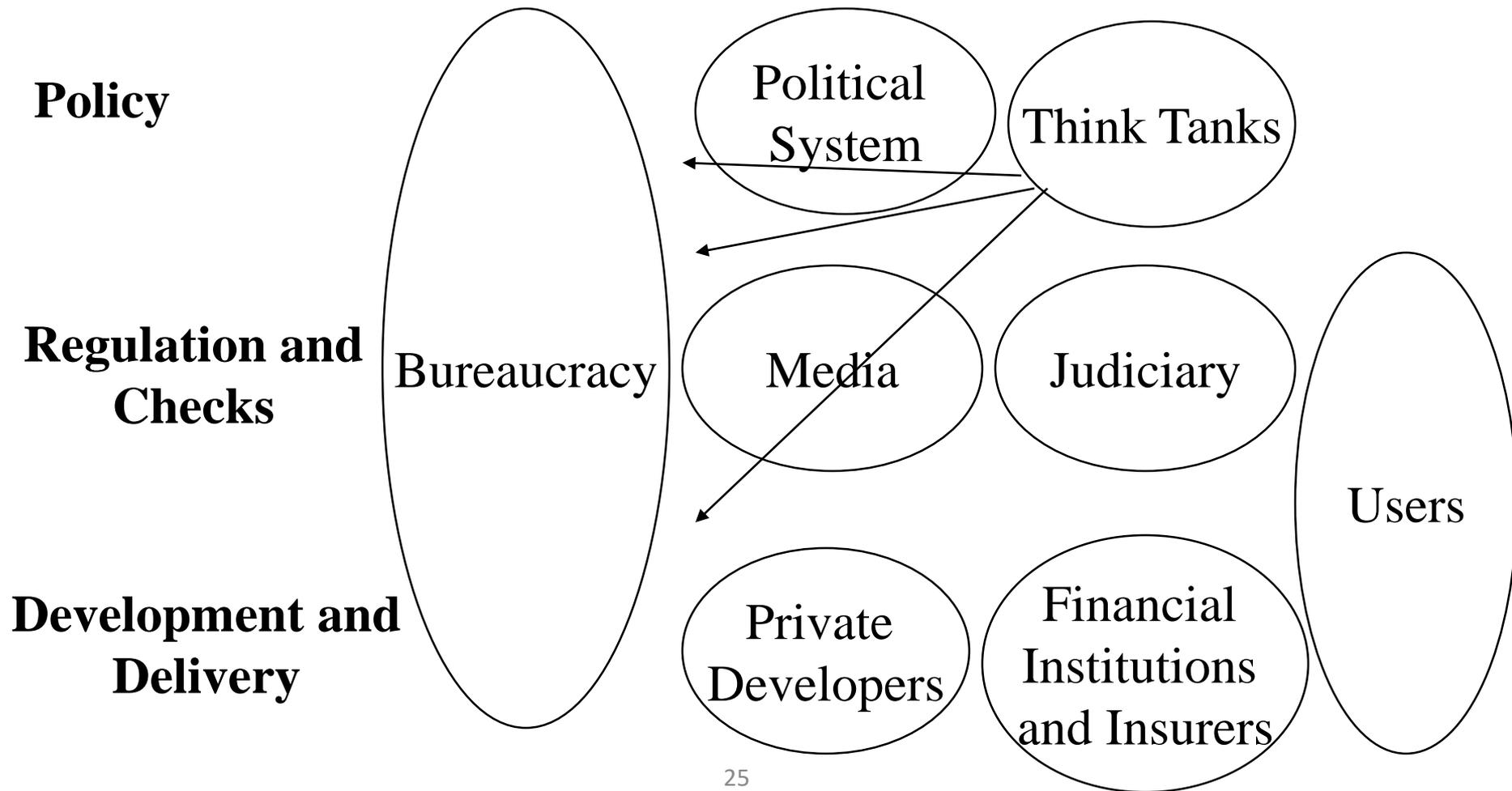
Competition

- From substitutes
- From markets
(Multiple providers)
- From right to access the market

Increase Autonomy

- Corporatisation
- Focused goals & accountable management
 - Performance
 - Management contracts
 - Service contracts

Actors in Infrastructure



Implications of Commercialisation

Key Implications

- Project structuring
- Appraisal, risk assessment and risk management
- Sourcing of funds
- Tendering and bidding
- Legally tenable concession agreements
- Project management
- Post project ownership
- Regulatory and dispute resolution framework

Case Examples

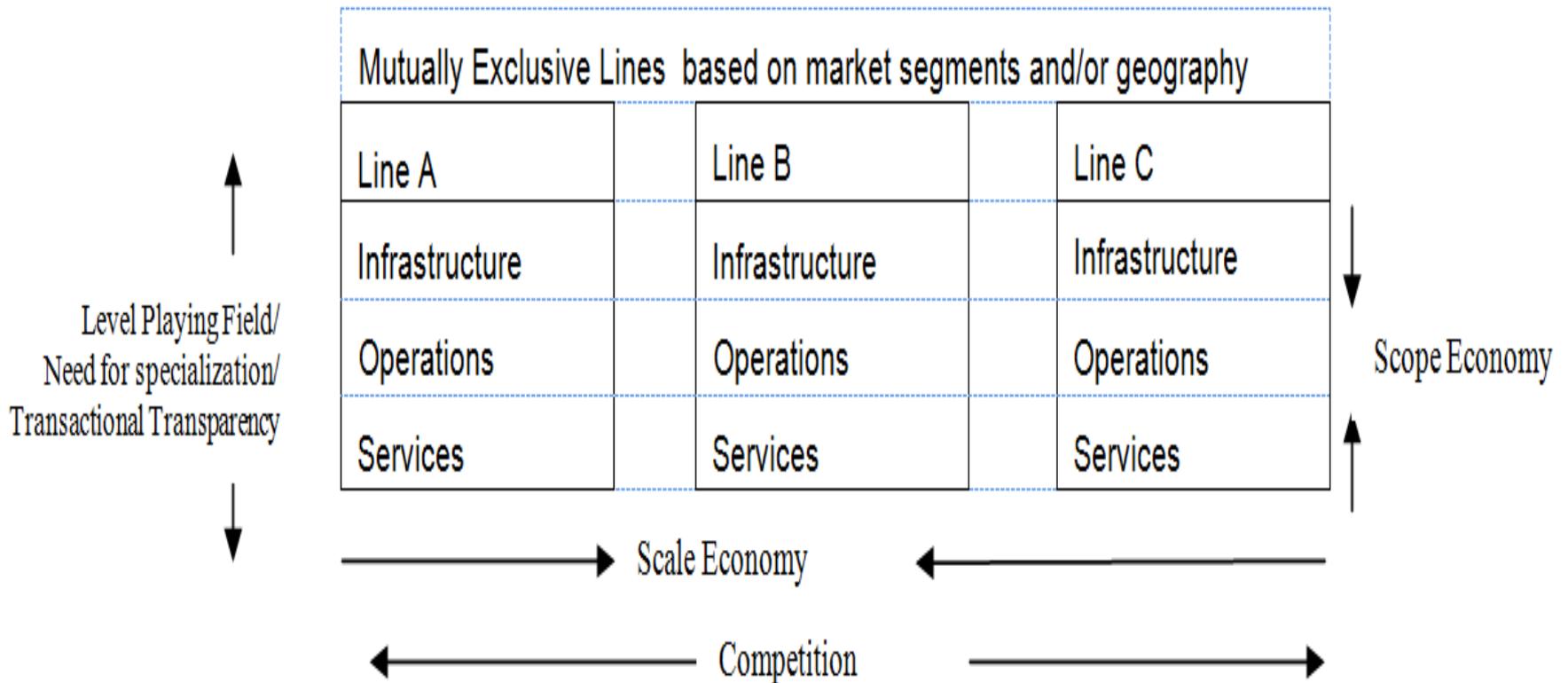
- Delhi Airport Line
- Yamuna Expressway
- Road Development (GQ, NSEW, Coimbatore Bypass)
- Ports (JNPT)
- Airports (Delhi, Mumbai, Bengaluru)

Project structuring

- This is the most fundamental aspect of infrastructure development where we decide what set of activities constitute a project.
- This should enable a match between what needs to be done (demand side of infrastructure) and what competencies are available along with incentives sought (supply side of infrastructure).
- An appropriate bundling of activities needs to be considered, keeping in view competition, scale economies, specialization and scope economies, rather than just technological logic

Project structuring

- Bundling/Unbundling at Macro Level



Project structuring

- It would also mean judiciously combining consequential non-core revenues with the core activity revenue.
- Over the years, we have experimented and learnt what dimensions of structuring should be policy driven and what can be context driven.
- Formats such as Build-Operate-Transfer (BOT), Design-Build-Finance-Operate-Transfer (DBFOT), Operate-Maintain-Transfer (OMT) and many others have evolved to suit contexts.
- The project is executed through the idea of a Special Purpose Vehicle (SPV).

Appraisal, risk assessment and risk management

- The structured project needs to be appraised for viability and risks.
- Over the years, we have moved from just an economic or financial return analysis to a risk inclusive analysis, including how we manage the risks.
- The risk allocation between the government (authority) and the private party (concessionaire) have changed over the years in a manner that the party which can better bear a risk gets to bear it. (Land Acquisition, BOT to HAM)
- For the private party, project risks are contained within the SPV.

Sourcing of funds

- Traditionally, project funds were sourced from government budgets (taxes and subsidies) and to an extent, direct revenues.
- Today, a whole host of innovative sources including indirect revenues, equity, grants and debt instruments that match the risk appetite, longer tenure and lower interest needs are available.

Tendering and bidding

- The documentation and processes have changed to include multiple stake holders and multiple stages.
- Similarly, bid criteria have been experimented with, resulting in greater openness in seeking the most appropriate for a given context.
- Bid criteria from concession periods to royalties to lumpsum payments to revenue share to annuities to hybrid models have been considered.
- Further, open competitive bidding has become the norm rather than strategic partnerships which may not have gone through required due diligence.

Legally tenable concession agreements

- We have transitioned from contracts to concession agreements, models for which have been continuously innovated over the past two decades.
- Greater clarity in agreements have come in with lesser scope for interpretation.
- Going forward, one would hope that legal cases due to issues of interpretation would reduce.

Legally tenable concession agreements

- Specification
- Time frames
- Review triggers
- Termination conditions
- Consistency

Legally tenable concession agreements

- Competition
- Scope Increase
- Other Revenue Sources
- Tariff Setting
- Ownership
- Common Use Vs Captive
- Targeting the BoP/Non Viability
- Step In/Termination/Transfer

Project management

- Project activities get to be assigned to the authority or the concessionaire depending on the risk bearing capacity.
- For example, in the early PPP years, land acquisition was considered the responsibility of the concessionaire, but has subsequently changed hands as the responsibility of the authority.
- Even here, the extent of land that should be made available for the start of the project has been changing in a manner favourable to the concessionaire.
- This has brought in greater 'ownership' in project management, leveraging government accountability and private stake holding to the extent possible.
- Over the years, principles of construction management have significantly improved, though there is room for further improvement.

Post project ownership

- There are different forces that bring in the need to change ownership of an SPV.
- A balance needs to be struck as to when and under what conditions can ownership be changed, without making it either speculative or restrictive.
- Over the years, we have been open to defining conditions and processes for restructuring, including mergers and acquisitions.

Regulatory and dispute resolution framework

- Significant innovations have happened here, resulting in new institutions and instruments.
- Regulatory agencies are being set-up to regulate a variety of domains.
- These domains include
 - Licensing (attributes that define who would be eligible to provide a specific infrastructure)
 - Environmental Impact
 - Safety
 - Security
 - Tariff
 - Quality of service
 - Dispute resolution.

Questions remain

- Are there concerns of crony capitalism?
- Are there concerns of project stalling by the promoter?
- Are there contexts with high vulnerability to the blame game between the authority and concessionaire? (Metro)
- Should public sector be a bidder?
 - Conflict of interest due to proximity to the planner/authority
 - Public funds vs private funds

Thank You

IDEA, VODAFONE MAY LOSE CUSTOMERS, REVENUES DUE TO DELAY IN MERGER CLOSURE

June 30, 2018

- An unforeseen delay in closure of Vodafone India-Idea Cellular merger could disrupt operations of the two companies in transition, leading to customer and revenue losses and even potential HR complications.
- Even a couple of months delay in the merger closure could see the combined entity suffering a 150 basis points (bps) reduction in RMS (revenue market share), which means it stands to lose Rs 600-1,000 crore revenue share for every two-month delay

<https://economictimes.indiatimes.com/industry/telecom/telecom-news/merger-delay-may-cost-idea-vodafone-customers-revenue/articleshow/64801588.cms>

ADANI PORTS ACQUIRES 97% IN MARINE INFRASTRUCTURE FOR RS 19.50 BILLION

June 28, 2018

- Adani Ports on Thursday acquired 97 per cent in Marine Infrastructure for Rs 19.50 billion, further strengthening its presence in the east coast.
- Alongside, GMR Infrastructure announced developing through its subsidiary a deep-draft, multi-cargo greenfield port 30 km north of Kakinada city. Once operational, this new port will have an initial capacity of 16 million tonnes.

https://www.business-standard.com/article/companies/adani-ports-acquires-97-in-marine-infrastructure-for-rs-19-50-billion-118062801356_1.html

GOVERNMENT PLANS TO SPLIT AIRSPACE FOR BETTER AIR SAFETY

June 23, 2018

Concerned by the number of near misses in the Indian skies, the aviation ministry has decided to apportion the Indian airspace into two categories to ensure focused monitoring by the Air Traffic Controllers' office.

<https://economictimes.indiatimes.com/industry/transportation/airlines/-aviation/government-plans-to-split-airspace-for-better-air-safety/articleshow/64703846.cms>

GST WILL LEAD TO 112 PER CENT GROWTH IN WAREHOUSING

June 22, 2018

- India will see 112 per cent increase in warehousing space by 2021 as GST is pushing companies to re-structure their portfolio and bring in larger and supply chain-efficient warehouses rather than focusing on tax saving through smaller facilities.
- Implementation of GST has had a positive effect on warehousing due to diminishing state boundaries and has made way for cost and operationally efficient hub and spoke model. Further, the government's support through policy initiatives like establishment of logistics division, granting logistics 'infrastructure status' and establishment of MMLPs is paving way for boosting the logistics industry

<https://www.thehindubusinessline.com/economy/logistics/gst-will-lead-to-112-per-cent-growth-in-warehousing/article24231066.ece>

CENTRE PLANS TO SET UP NATIONAL DISCOM

Jun19,2018

- The Union government plans to set up a national power distribution company that will handhold state discoms in electricity distribution activities and ensure time-bound implementation of central schemes.
- The proposed company will compete with private firms and contractors to bag contracts of state-run distribution companies for appointing franchisees or engineering tenders, officials said.

<https://energy.economictimes.indiatimes.com/news/power/centre-plans-to-set-up-national-discom/64641667>

JSPL TO ADANI LOGISTICS, PRIVATE SECTOR BIGWIGS JOIN RAILWAYS WAGON SCHEME

June 18, 2018

- The opening up of private investment in general-purpose wagons (GPWS) by the railways has invoked interest from at least eight big companies. These are from cement, steel, iron ore and aluminium sectors.
- The scheme of allowing firms to own wagons, of the fleet of Indian Railways, is likely to attract more investors. State-run Coal India (CIL), too, is set to join, with likely orders of Rs 20 billion, for around 500 rakes.
- There were earlier schemes for private investment in special wagons and container train operators (Liberalised Wagon Investment Scheme, Wagon Leasing Scheme, Automobile Freight Train Operator Scheme and Special Freight Train Operator Scheme). This programme will permit companies to have their own wagons in colours designed by them. The routes will be specified.

https://www.business-standard.com/article/current-affairs/jspl-to-adani-logistics-private-sector-bigwigs-join-118061800043_1.html

INDIA'S INFRASTRUCTURE SET FOR BIG BOOST! OVER 300 HIGHWAY PROJECTS TO BE COMPLETED BY MARCH 2019

June 15, 2018

- The infrastructure sector of the country will soon witness a massive boost as around 300 big infrastructure projects have been identified and expedited by the Ministry of Road Transport and Highways.
- Out of these, around 100 projects are likely to be completed by the end of this year
- targeted deadline for the completion of the 127 NHAI projects and 153 Ministry projects has been changed from June 2019 to March 2019. Also, around 100 ongoing projects are scheduled to be completed by December 2018

<https://www.financialexpress.com/infrastructure/roadways/indias-infrastructure-set-for-big-boost-over-300-highway-projects-to-be-completed-by-march-2019/1207463/>

UDAN SCHEME MAY HIT KANNUR FLIGHT PLANS

Jun 14, 2018

Joining the bandwagon of regional flights under the Centre's Ude Desh ka Aam Naagrik (UDAN) scheme has put the upcoming Kannur international airport in a catch-22 situation.

<https://www.thehindu.com/news/national/kerala/udan-scheme-may-hit-kannur-flight-plans/article24157687.ece>

FAST PACE OF NH BUILDING DOUBLED JOBS IN LAST 4 YEARS

June 12, 2018

- The increased pace of highway construction has more than doubled employment generation in the past four years, according to an estimate by the road transport ministry.
- While during 2013-14, only 45,600 man-days of jobs were generated due to highway construction it increased to about 1.1 lakh during last fiscal year.

<https://economictimes.indiatimes.com/news/economy/infrastructure/fast-pace-of-nh-building-doubled-jobs-in-last-4-years/articleshow/64553731.cms>

INDIA BECAME NET POWER EXPORTER IN LAST FOUR YEARS: POWER MINISTER R K SINGH

June 5, 2018

- India became a net exporter of electricity for the first time during the last four years and aims to achieve the target of universal household electrification by the year-end three months ahead of the original deadline, Power Minister R.K. Singh said on Tuesday.
- "India became a net exporter of electricity for the first time during the last four years, and 7,203 million units were supplied to Nepal, Bangladesh and Myanmar in the last financial year," Singh said.

<https://energy.economictimes.indiatimes.com/news/power/india-became-net-power-exporter-in-last-four-years-power-minister-r-k-singh/64466443>

RELAXATION IN CABOTAGE LAW TO BENEFIT INDIAN PORTS

June 02, 2018

- The Centre' move to relax cabotage law may be a 'game changer and transform India's ports into a major transshipment hub
- Indian ports can now attract cargo originating from or destined to foreign ports, leading to cargo growth in India. This move would also have a positive impact on the competitiveness of the Indian traders and manufacturers by reducing the supply chain lag time and transshipment cost at a foreign port.

<https://www.thehindu.com/business/Industry/relaxation-in-cabotage-law-to-benefit-indian-ports/article24067871.ece>

HYBRID ANNUITY MODEL REVIVES INVESTMENTS IN INDIA'S HIGHWAYS SECTOR: MOODY'S

May 28, 2018

- Under HAM, a variant of public private partnership (PPP) launched in January 2016, the government bears 40% of the project cost and gives money to the developer.
- In 2017-18, the National Highways Authority of India awarded around 3,396 km of HAM projects valued around Rs76,500 crore compared with 2,434 km and Rs36,300 crore in 2016-17.
- HAM projects accounted for around 46% of total awards in terms of highway length and 63% in terms of total value (Rs76,500 crore) in the 12 months to March 2018

<https://www.livemint.com/Politics/YOpwQgXNcO2nUkjJcY7thI/Hybrid-annuity-model-revives-investments-in-Indias-highways.html>

NPA-LADEN BANKS TURN CAUTIOUS ON INFRA LENDING

May 8, 2018

- Banks are increasingly becoming wary of financing infrastructure projects as they scramble to clean up their balance sheets before lending afresh in 2018-19.
- Most private banks, while announcing their annual results over the last few weeks, have indicated that they would focus on retail and corporate lending this fiscal and remain “conservative” to lending to infrastructure projects.
- This could pose a big challenge for the government, which has been hoping for a revival in private investment to spur economic growth, especially after its massive recapitalisation plan of public sector banks (PSBs).

<https://www.thehindubusinessline.com/money-and-banking/npa-laden-banks-turn-cautious-on-infra-lending/article23815610.ece>

RAILWAYS TO INVEST RS 75,000 CRORE ON SIGNALLING SYSTEM PROJECT: PIYUSH GOYAL

March 8, 2018

- The Indian Railways would invest Rs 75,000 crore on a signalling system project to be implemented across India.
- South Western Railway officials have prepared the pre-feasibility report for the long-pending Bengaluru suburban railway and come up with a Rs 12,000 crore investment plan.

<https://economictimes.indiatimes.com/industry/transportation/railways/railways-to-invest-rs-75000-crore-on-signalling-system-project-piyush-goyal/articleshow/63223616.cms>

PRIVATE AIRPORT OPERATORS URGE GOVERNMENT TO BAR AAI FROM BIDDING FOR PPP PROJECTS

Feb 13, 2018

Private airports have urged the government to bar the Airports Authority of India (AAI) from bidding for public-private partnership or PPP in any new airport project on the grounds that this will defeat the purpose of attracting private investment in the sector.

<https://economictimes.indiatimes.com/industry/transportation/airlines/-aviation/private-airport-operators-urge-government-to-bar-aaai-from-bidding-for-ppp-projects/articleshow/62894992.cms>

Issues in Agreements

- Specification
- Time frames
- Review triggers
- Termination conditions
- Consistency

Issues in Agreements

- Competition
- Scope Increase
- Other Revenue Sources
- Tariff Setting
- Ownership
- Common Use Vs Captive
- Targetting the BoP/Non Viability
- Step In/Termination/Transfer

Regulatory and Institutional Framework

- Market failures
 - Licensing
 - Environmental Impact
 - Safety
 - Pricing
 - Service Levels
 - Dispute resolution
- Institutions and Instruments