



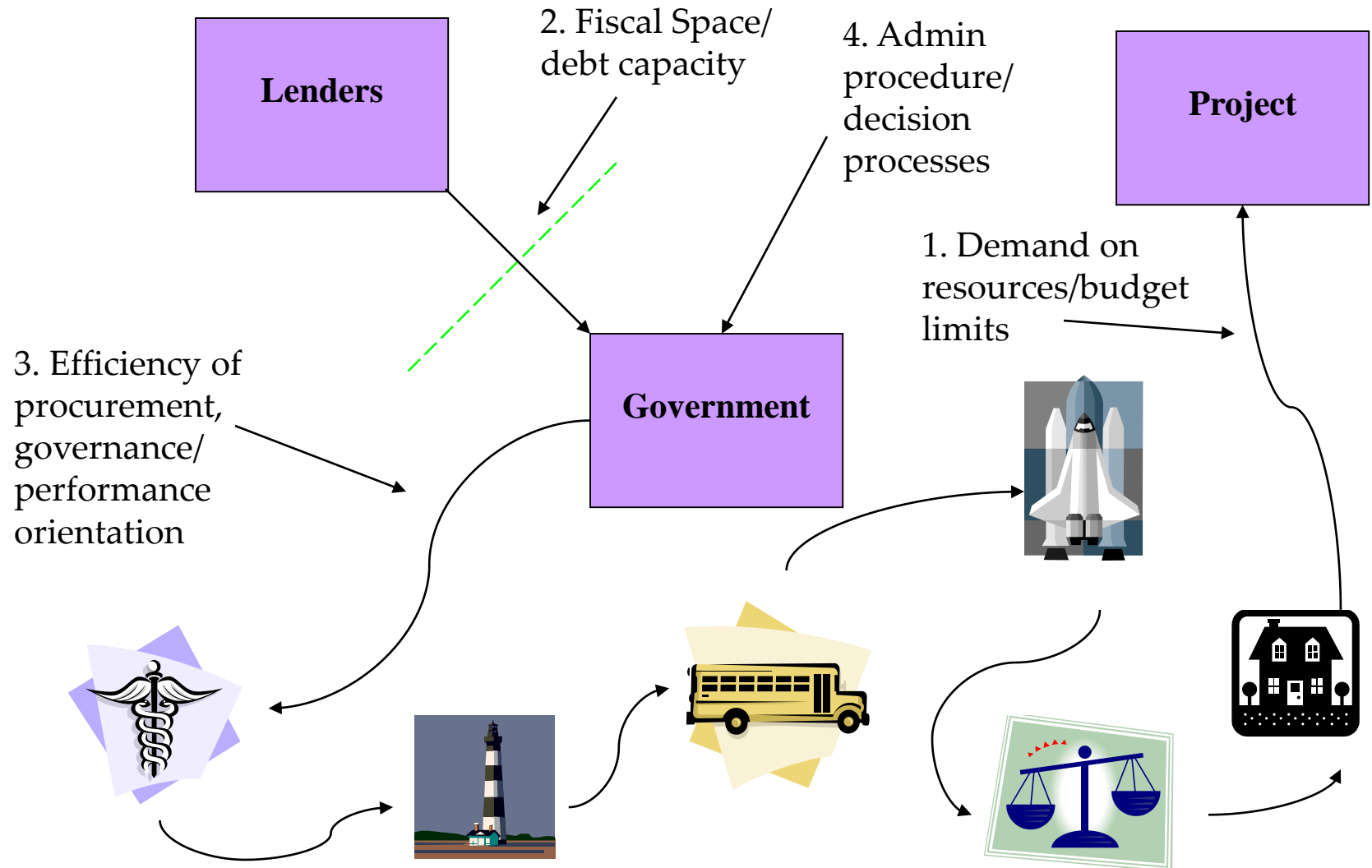
# Municipal PPPs : Opportunities and Challenges

Delhi, India  
October 30, 2017



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# Government Priorities





"Be patient, a few more strokes and I'll soon have the momentum going."

# What are Public-Private Partnerships?

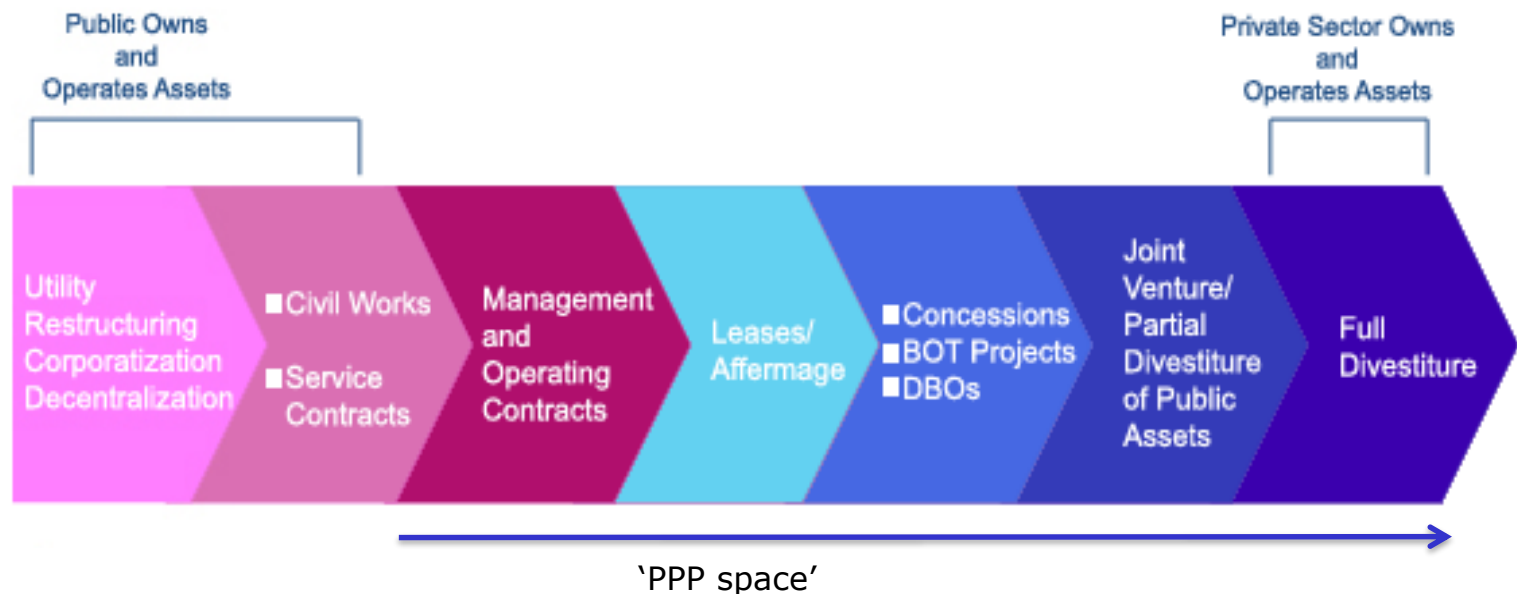
- A **long-term (5 to 30 year) contract** between a public entity and a private company to provide a **public service**:
  - design;
  - finance;
  - build;
  - maintain; and/or
  - operate
- Output orientation
- A form of fair and transparent **procurement process**





# What are PPPs (cont) ?

- **PPPs** are fundamentally different than traditional government public procurement programs involving civil works contracts
- Selection of type of contract will depend on sector, country, project or benefits that Government is seeking from the PPP
- **Variety of sectors**



# What are PPPs (cont) ?

- Two basic types:
  - **users fees**, paid by the consumers of the service (e.g. utility tariffs, toll road charges, etc.)
    - Services the private sector can deliver and make enough from fees and **other commercial revenues**, and/or
  - **Government** pays on **delivery of services**, to a specified standard (eg payment from public utility or Government department);
    - Where private can deliver services cheaper and/or better



# Public Private Partnerships can help to:

## Improve access to basic services

# 1

- Output based performance - high quality service standards
- Regular maintenance and upgrade
- Innovation
- Value for money incentivizes project selection

## Increase efficiency

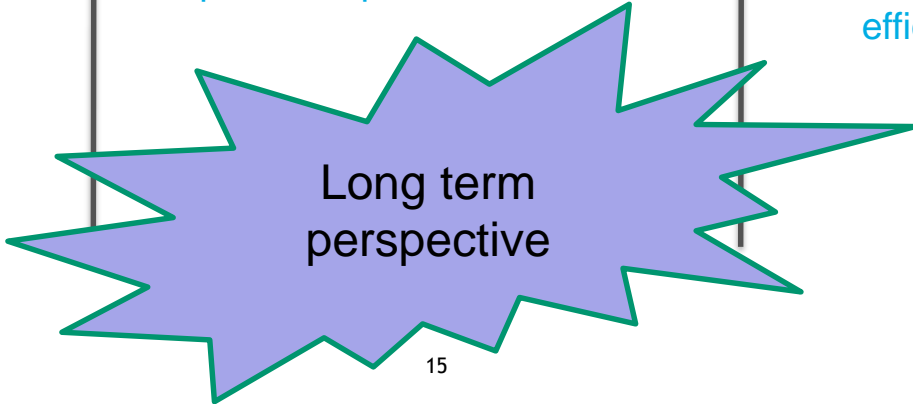
# 2

- Accelerated construction
- On-time and On budget delivery
- Risk borne by party best equipped to handle it
- Access to best practices and private expertise

## Mobilize capital

# 3

- Better fund-raising capabilities
- In-kind donations which increase fund flow
- Budgetary efficiencies
- Focus on revenues/commercial efficiency



Long term perspective

# Project Appraisal: Viability Factors

## Description

## Assessment

### Financial viability factors

- Signify the project's ability to generate sufficient cash inflows to meet all its cash outflows, and provide for future growth

- Usually assessed via (i) net present value analysis, (ii) internal Rate of return analysis, (iii) payback period calculation, and (iv) debt service cover ratio calculation, (v) Sensitivity analysis

### Economic viability factors

- Signify public "profitability" and the developmental effect of the project on the society/economy as a whole

- Usually assessed using (i) economic rate of return analysis, (ii) laws and regulations analysis, and (iii) current demand and demand growth analysis

### Technical viability factors

- Signify the project's basic design, availability of raw materials, basis of the cost estimation, construction schedule, implementation plan, performance and output specification
- Verification that this is the optimum solution

- Usually assessed by technical experts/ advisors relating to specific technical parts of the project

### Environmental and social viability factors

- Signify the identification of environment and social characteristic and the project's impact towards them

- Usually assessed using (i) environmental impact analysis, (ii) social impact analysis for the surrounding community, and (iii) land clearing planning

Source:: Adapted from Infrastructure procurement approaches – Engaging with the private sector by Ernst & Young



# Risk allocation matrix for PPP projects

	Types of risk	Public sector	Private sector
1.	<b>Location risk</b>		
	Land acquisition	Typically mostly public	
	Land condition (including pollution and environmental safety)	Typically mostly private	
2.	<b>Design, construction and operational test risk</b>	Typically mostly private	
3.	<b>Sponsor risk</b> Includes default of sponsor, contractor	Typically mostly private	
4.	<b>Financial risk</b> Includes failure to reach financial close, interest rate, exchange rate and inflation fluctuation (non-extreme)	Typically mostly private	
5.	<b>Operational risk</b> Includes provision of the facility, wrong estimation of O&M costs, etc.	Typically mostly private	
6.	<b>Market risk</b> Related to users' affordability and willingness lower than the feasibility level	Could be either	
7.	<b>Network connectivity risk</b>	Typically mostly public	
8.	<b>Interface risk</b>	Typically mostly public	
9.	<b>Political risk</b> Currency inconvertibility and non-transfer, expropriation, changes in legislation including on taxes and permits, GCA default	Typically mostly public	
	Reasonable changes in legislations	Typically mostly private	
10.	<b>Force Majeure risk</b>	Typically shared	
		Typically mostly private	

**Each project needs a unique structure which meets its specific needs: there's no 'set' risk allocation**

Source:: Adapted from *Infrastructure procurement approaches – Engaging with the private sector* by Ernst & Young

# Public Private Partnership Life Cycle

	Details	Output	Timeline		
<b>Phase I: Planning</b>	<ul style="list-style-type: none"> <li>Project identification and selection</li> <li>Project prioritization</li> </ul>	<ul style="list-style-type: none"> <li>List of priority project</li> <li>Project preliminary report</li> </ul>	<ul style="list-style-type: none"> <li>1-2 years</li> </ul>	Land acquisition	Govt Support
<b>Phase II: Project Preparation</b>	<ul style="list-style-type: none"> <li>Outline of business case</li> <li>Process for the required government support</li> </ul>	<ul style="list-style-type: none"> <li>Project preparation document</li> </ul>	<ul style="list-style-type: none"> <li>1-2 years</li> </ul>		
<b>Phase III: Transaction</b>	<ul style="list-style-type: none"> <li>Prefeasibility study completion</li> <li>Bid implementation</li> <li>Finalization and signing of PPP Agreement</li> </ul>	<ul style="list-style-type: none"> <li>Pre-FS document</li> <li>PPP Agreement</li> <li>Government support agreement</li> </ul>	<ul style="list-style-type: none"> <li>0.5-2 years</li> </ul>		
<b>Phase IV: Contract Management</b>	<ul style="list-style-type: none"> <li>Managing the implementation of the PPP Agreement</li> </ul>	<ul style="list-style-type: none"> <li>Financial close</li> <li>EPC contract and O&amp;M contract</li> <li>Periodic report on project implementation</li> </ul>	<ul style="list-style-type: none"> <li>10+ years</li> </ul>		
<b>Phase V: Handover and transferring</b>	<ul style="list-style-type: none"> <li>Handing back asset/facility to the government</li> </ul>	<ul style="list-style-type: none"> <li>Third party assessment of the condition of the assets to meet the required standards</li> </ul>	<ul style="list-style-type: none"> <li>3-6 months</li> </ul>		

# **Municipal PPP**

# Why Municipal PPP is so exciting

- Closer to needs/business/commerce
- Dynamic and innovative
  - Commercially orientated
  - Land value capture
- Less political
  - National politics less present
  - Less pressure/weight/stress
- Small scale
  - local investors - local finance – forex risk
- Huge spectrum of opportunities
  - Public market places, bus and ferry terminals, parking, low-cost housing

# Intercity Bus Terminal - Amritsar, India

- Demolishing the existing terminal building and complex and development of a modern state of the art Intercity Bus Terminal.
- Under operation by a private operator since 2005 after an initial construction period of 2 years with a concession period of 11 years and 5 months.
  - project development fee of INR 350,000 and a lease of INR 50,000 per month.
- Revenue streams
  - Collection of “adda fees” i.e. charges payable by buses for use of terminal facilities,
  - Revenue from commercial rentals from shops located within Terminal complex
  - Other sources of revenue - sale of advertising rights, parking fees.
- On average, 1,100 normal buses and 600 mini buses a day, about 80-100 buses are parked overnight. At the project conceptualization stage, it was thought that 2000 to 3000 buses / day. Some buses started operating from outside the bus terminal to avoid paying adda fee.
- The project cost was expected to be approximately INR 190m at the time of project conception, but the project cost finally worked out to INR 213.4m

# Mandaluyong (Philippines) Public Market

- The previous Mandaluyong (Philippines) Public Market was razed by fire. The lot remained idle, creating congestion, waste and flooding problems.
- Public Market would cost Php 100 million, ie annual outlay of more than Php 10 million. The City Government ruled out huge loans.
- The developer provided a public market at the ground floor under the control and supervision of the City Government. The City Government in turn leases the building except the Public Market to the developer, including parking, theatres, restaurants, bowling, etc.
- The project provides for a Public Market controlled and supervised by the City Government and **additional income of 20 Million (instead of debt service of more than 10 million/annum)**
- Employment through new commercial district
- Traffic, flooding, pollution and garbage problems solved.





# Punjab Grain Silo Project, India



- The project consists of **4 fully equipped silos of 12500 MT** each for a total capacity of 50000 MT, to store grain for the government food subsidy operations.
- The private party is also responsible for procuring land for the project.
- 30 year concession period. **Total cost of \$ 7 million**
- The Authority is responsible for making payments based on **fixed and variable charges**. It is also responsible for setting standards and specifications, monitoring and verification of performance, and contract management.
- **Savings to government of \$ 6 million due to reduction in wastage and retention of grain quality.**
- The project needs to be of a size sufficient to ensure coverage of all costs and reasonable returns to the investor over a reasonable period of time without unreasonably increasing the tariff level.
- Standard contract document for silos needed.
- Financing is difficult to come by even with availability payments.

# James F. Oyster Bilingual Elementary School, Washington DC

- In 1993, the school was in danger of closure due to a crumbling, inadequate building and lack of public capital. Led by concerned parents, a PPP was formed between DC Public Schools and a national real estate development firm. They divided the school property in half to make room for a new school and a new residential development.
- The District of Columbia issued a thirty-five-year, USD 11 million tax-exempt bond for the construction costs, to be repaid entirely with the revenue generated by the private apartment building. The private partner agreed to pay USD 804,000 a year for thirty-five years to repay the bond. The school facilities included a computer lab, library, gym and classrooms designed to accommodate the school's bilingual programme and office space.



# Bhubaneswar Street-lighting Project, India

- Private party finances and installs retrofits, operate and maintain the city's street-lighting system for 10 years for 20,000 street lights. **Total cost \$ 4.8 million.** IFC supported.
- Public authority sets standards and specifications, monitors and verifies performance.
- Payments made based on the savings realized - 90% of energy savings realized plus an Operation and Maintenance fee for each light pole
- **Annual savings to government of \$100,000** by way of decreased energy consumption, operation and maintenance costs and emissions savings
- The project needs to be large enough to be viable and to realize sufficient savings in energy.
- Capacity issues at local level: government, equity investors, service providers and financiers, standardizing documents, process



# Gandhinagar Rooftop Solar Project, India

- Finance and install solar photovoltaic panels on the rooftops of public buildings and connect to grid. **Total cost of \$ 9 million** for a population served: 12000
- Public Authority provides access to rooftops of public buildings; facilitates Power Purchase Agreement (PPA); monitors performance standards
- The local power distributor buys the power according to the PPA and tariff set through bid.
- Emissions savings of 6000 tonnes
- Multiple agreements needed to be signed: rental agreements with residential owners and with public entities;
- No standardized documents – for example appropriate rental agreements for renting rooftop space had to be developed from scratch for this project.



# Others ...

- Parking
  - User pays versus Government pays
  - Additional commercial services
- Commercial facilities (SEZs, abattoirs)
  - Equity, share of profits, share of revenues
  - Developer – competition
- Parks, gardens, nature reserves
  - Hotels (local or linked), office, apartment
  - Betterment levy
- Low-cost housing

# St Petersburg Pulkovo Airport

- **Staff reduction** required to make airport more profitable
- **Limited experience** of Russia in PPP
- Project reached financial close in 2010, in the middle of the international financial crisis attracting more than **Euro 1.2 billion of private investment**
- Project elected “PPP transaction of the year” by Infrastructure Investors in 2011. Considered one of the first international PPP project in Russia and the first for St Petersburg

## Lessons:

1. **Experienced international advisers,**
2. A strong project team, senior officials and a strategic adviser (World Bank)
3. Practical approach in selecting the PPP model - **flexibility**





# **How to Make Municipal PPP Work**

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"My client has no problem with 'richer' and 'in health'. Our points of contention are 'poorer' and 'in sickness'."

# How

1. Choose carefully
2. Invest in success
3. Keep it simple

# 1. Choose carefully

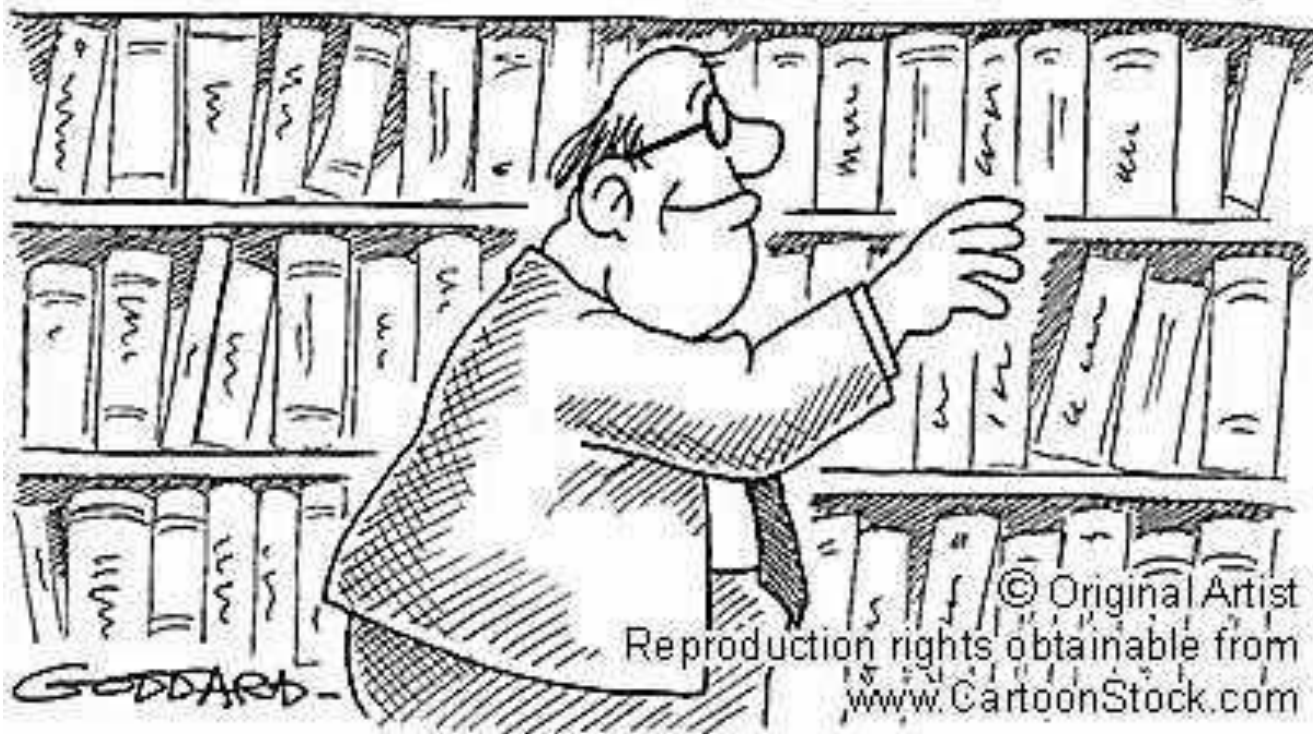
- Establish clear **criteria** for public investment management that includes PPP allocation
- Approve the list of projects at highest level and publish it (make sure list is valid and feasible, do not oversell)
- Decide which projects are to be PPP, and **stick with it**
- Decide based on **value for money**, cost-benefit
- Don't compromise, make them **compete** – no side deals!
- Get buy-in from the highest levels and give clear orders
- Dutch: PPP unless; Chile: Only 35% of PPPs make the cut; UK: PFI credits

## 2. Invest in success

- Do not “try” PPP; do it
- Invest **time and money** in preparing PPP - best transaction advisers
- Project teams need the resources to do their jobs
- Set **performance indicators** and milestones and monitor progress
- Project development **funds**: UK PFI Credits; India IIFCL, VGF, IDFC; Brazil: BNDES; RSA: DBSA
- Create, staff and fund a PPP Node/team
- Report project assessments and pipeline periodically

DO IT YOURSELF

GET SOMEONE  
ELSE TO DO IT



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### 3. Keep it simple

- Keep it simple for Municipalities to use PPP and for investors to understand
- Not too many **institutions** – coordination - PPP Committee
- Limited number of **approvals/steps, standard forms/contracts, pooling**
- PPP Unit: A **one stop shop**



- Delmon, Jeffrey, Public Private Partnerships in Infrastructure: An Essential Guide for Policymakers, pp. 200 (2ed, Cambridge University Press, 2017)
- Delmon, Jeffrey, Private Sector Investment in Infrastructure: Project Finance, PPP Projects and PPP Programs (3ed., Kluwer International, 2016)
- Delmon, Jeffrey, Public Private Partnership Programs: Creating a framework for private sector investment in infrastructure (Kluwer International 2014).

# Thank you!

Jeff Delmon

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# Mohali, India Bus Terminal and Commercial Complex

- Greater Mohali Area Development Authority (GMADA), Government of Punjab (GoP) and PIDB
- Development of three towers on an area of ~ **7 Acres** with a project cost of INR 4,320m along with the bus terminal operations.
  - Tower A = Bus Terminal and passenger amenities with a BUA of 117,000 sq.ft
  - Tower B = Hotel cum retail with BUA of 200,000 sq.ft
  - Tower C = Commercial cum retail with a BUA of 400,000 sq.ft
- The landmark of the project is the development of a 17 story building with **Helipad**. The project was awarded on the basis of highest upfront consideration of INR 57Cr (reserve price was INR 52 Cr.) for 20 years, plus:
  - INR 12.5m project development fee to GoP
  - INR 28.5m annual concession fee with 15% escalation every 3 years
- The concession period is 20 years for Bus terminal and 90 years for commercial complexes.
- The estimated potential bus trips per day ~1940 buses / day. Revenue via “Adda fee” for private and public sector buses, rentals from commercial and hotel facilities, parking, and advertisement rights on the terminal.

# Risks of PPP



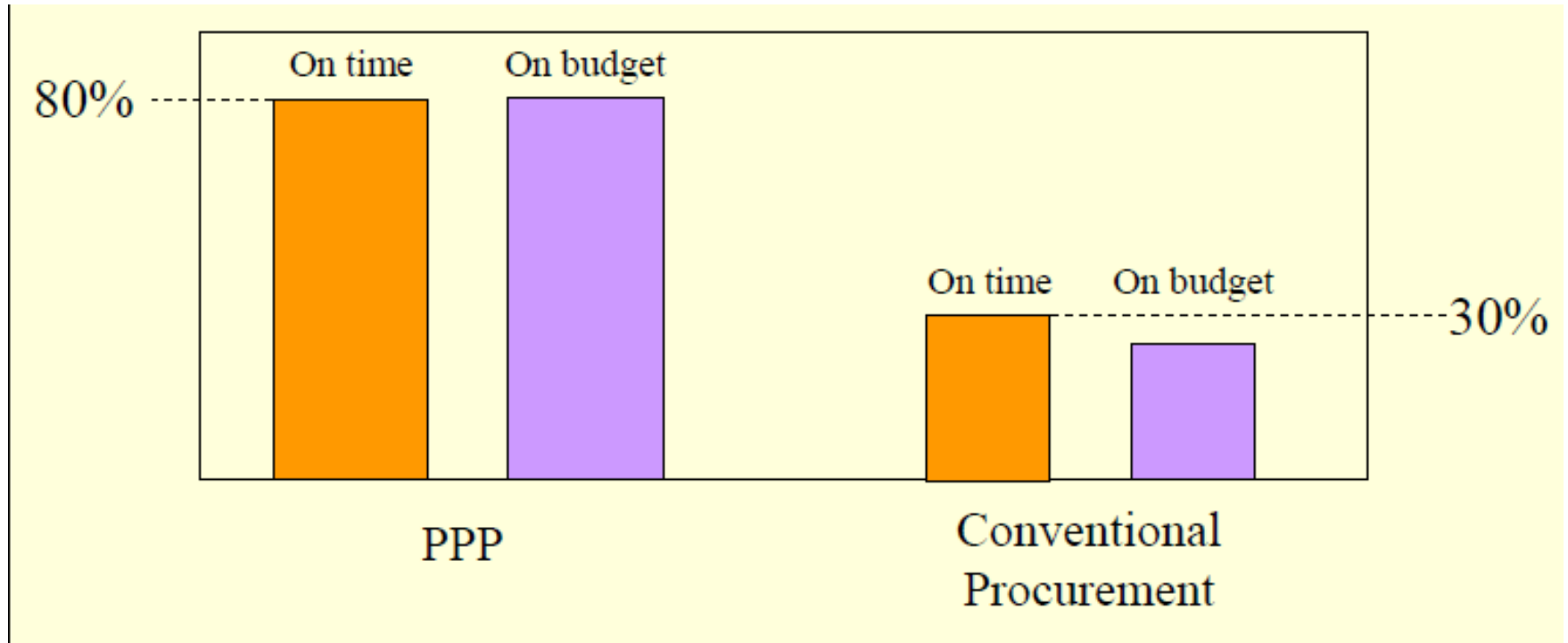
**Lack of capacity** –  
Government must negotiate  
complex commercial  
arrangements with  
sophisticated private investors.

**Cost** - time and  
money to prepare  
projects well

**Capture** - political,  
Govt to Govt or  
business to  
business

**Government resistance** – direct or  
indirect - change in practices/  
perspective – coordination of  
Government inputs

# Why PPP (cont)



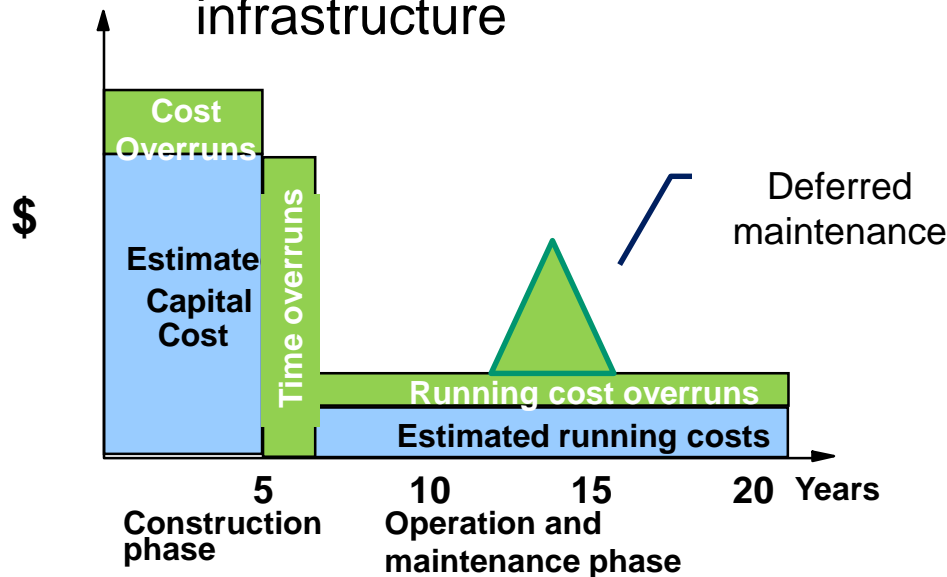
Source: National Audit Office-UK Parliament-  
Expenditure Auditor





# Why PPP (cont)

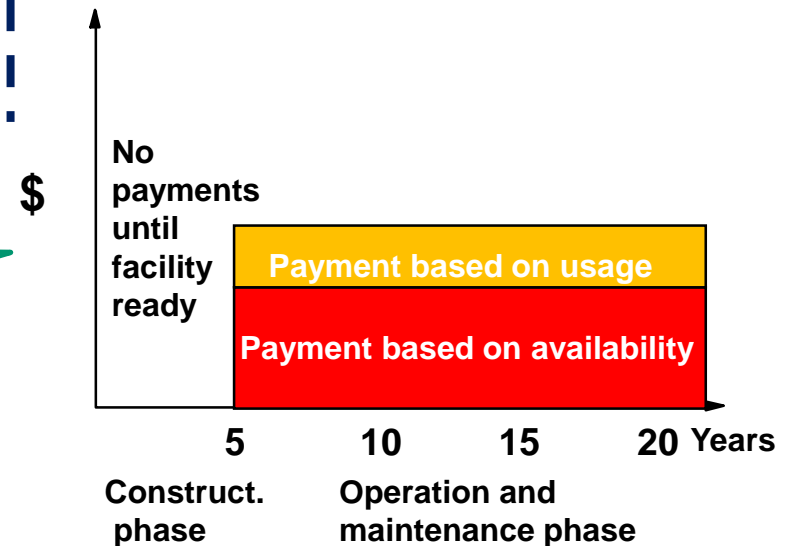
Typical payment profile for an ordinary public procurement of infrastructure



Delivers affordable infrastructure services – sources/types of finance

Typical payment profile for PPP

- a) User pays
  - Largely or entirely privately funded
- b) Government pays
  - Payment against services
  - Maintenance/life cycle



# Recipe for success

**Monitoring and implementation**  
– partnership maintenance

**Government buy-in**, change in perspective  
capacity building

**Clear PPP processes** –  
legal, regulatory, institutional framework

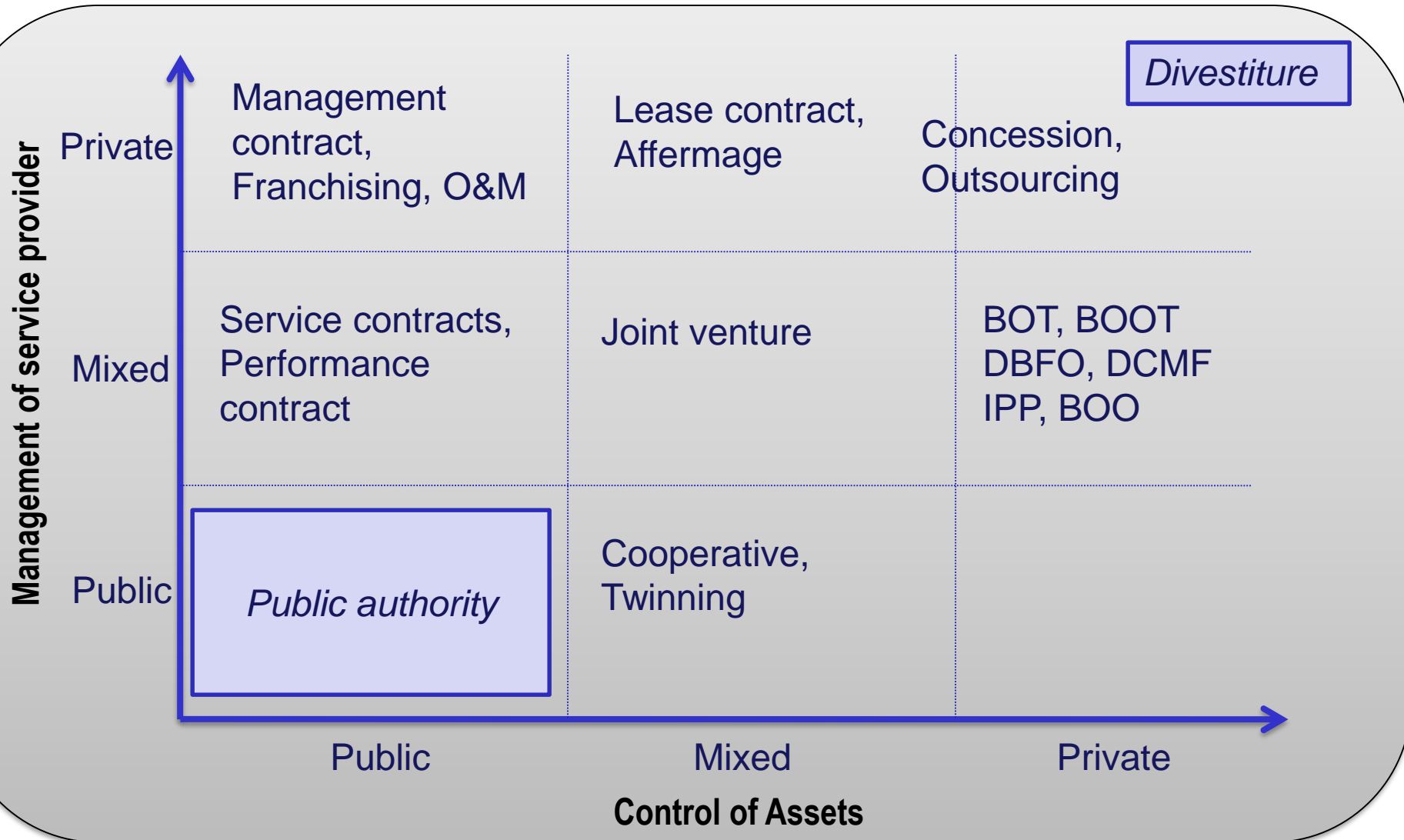
Open, transparent **competitive bidding** – avoid distractions from direct negotiations and unsolicited bids

Spend money and time on **preparation** – use top, experienced transaction advisers

**Select projects** based on viability and value for money



# Variety of PPP arrangements

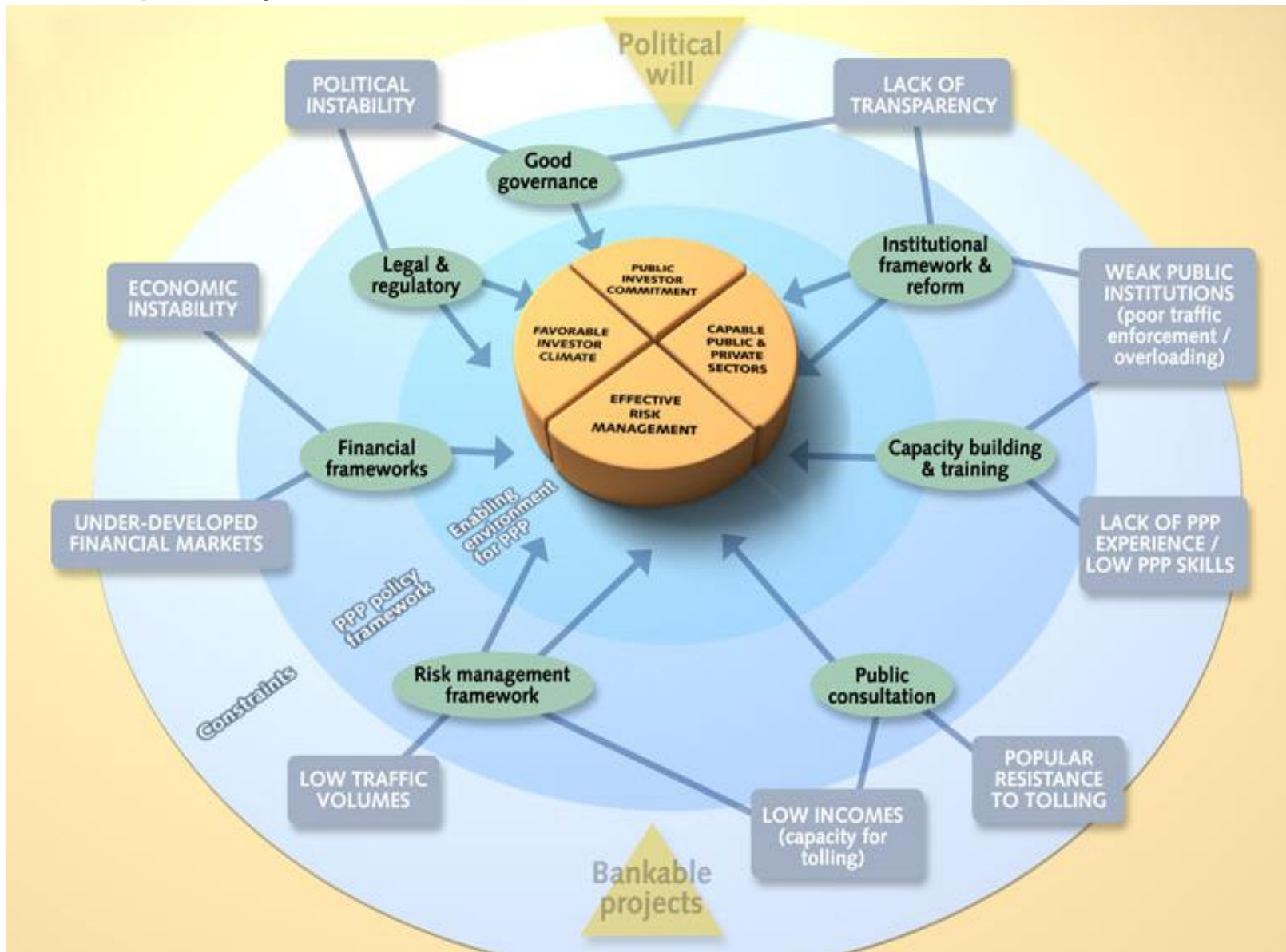


# The Classification Model

Business	Construction Obligations	Private Funding	Service Delivery	Source of Revenues
New	Build	Finance	Bulk	Fee
Existing	Refurbish		User	Tariffs

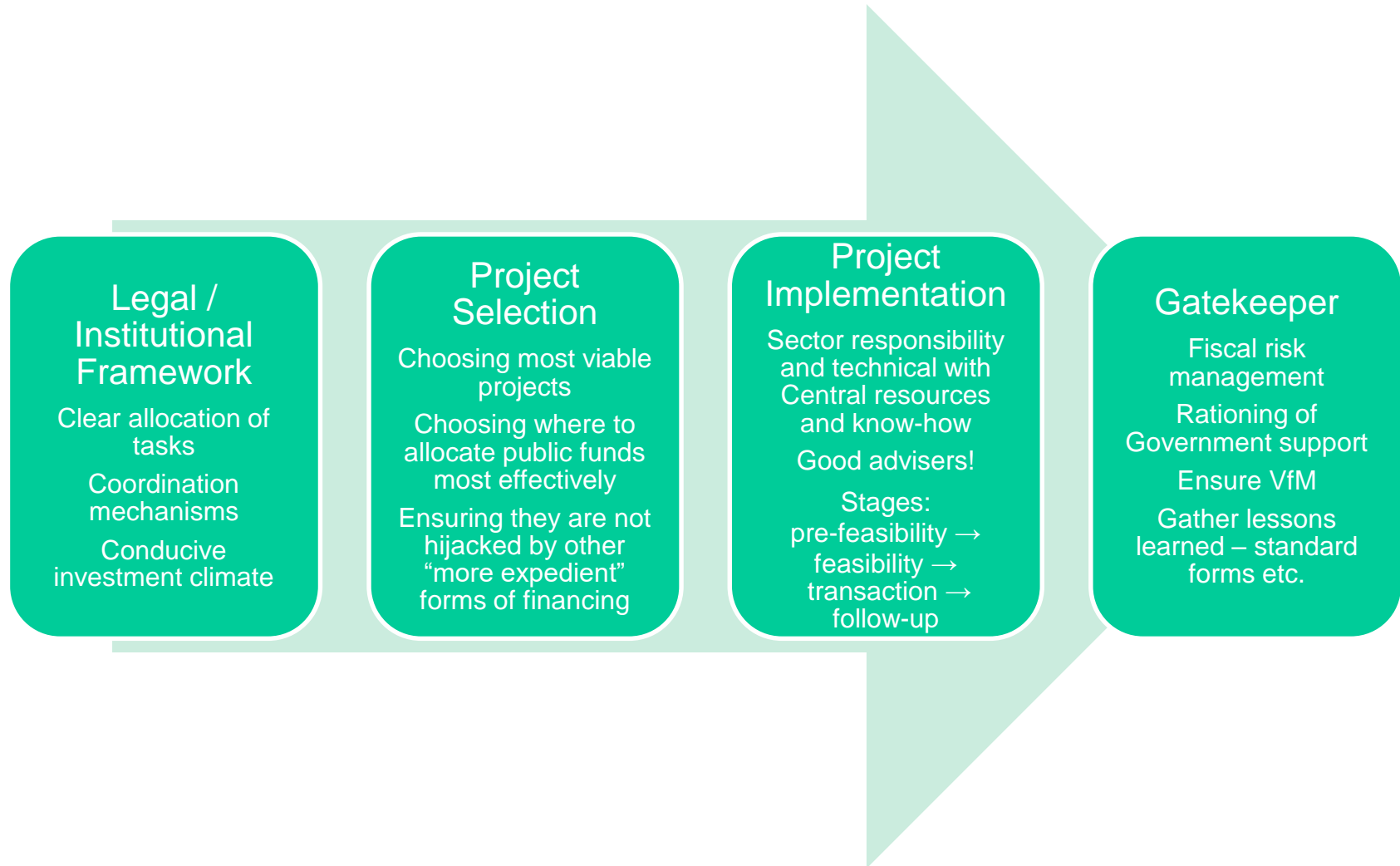
Source: Delmon, "Understanding Options for Public Private Partnerships in Infrastructure: Sorting out the forest from the trees - BOT, DBFO, DCMF, concession, lease . . ." (World Bank Working Paper 2010).

# Creating an enabling environment through sound PPP policy framework

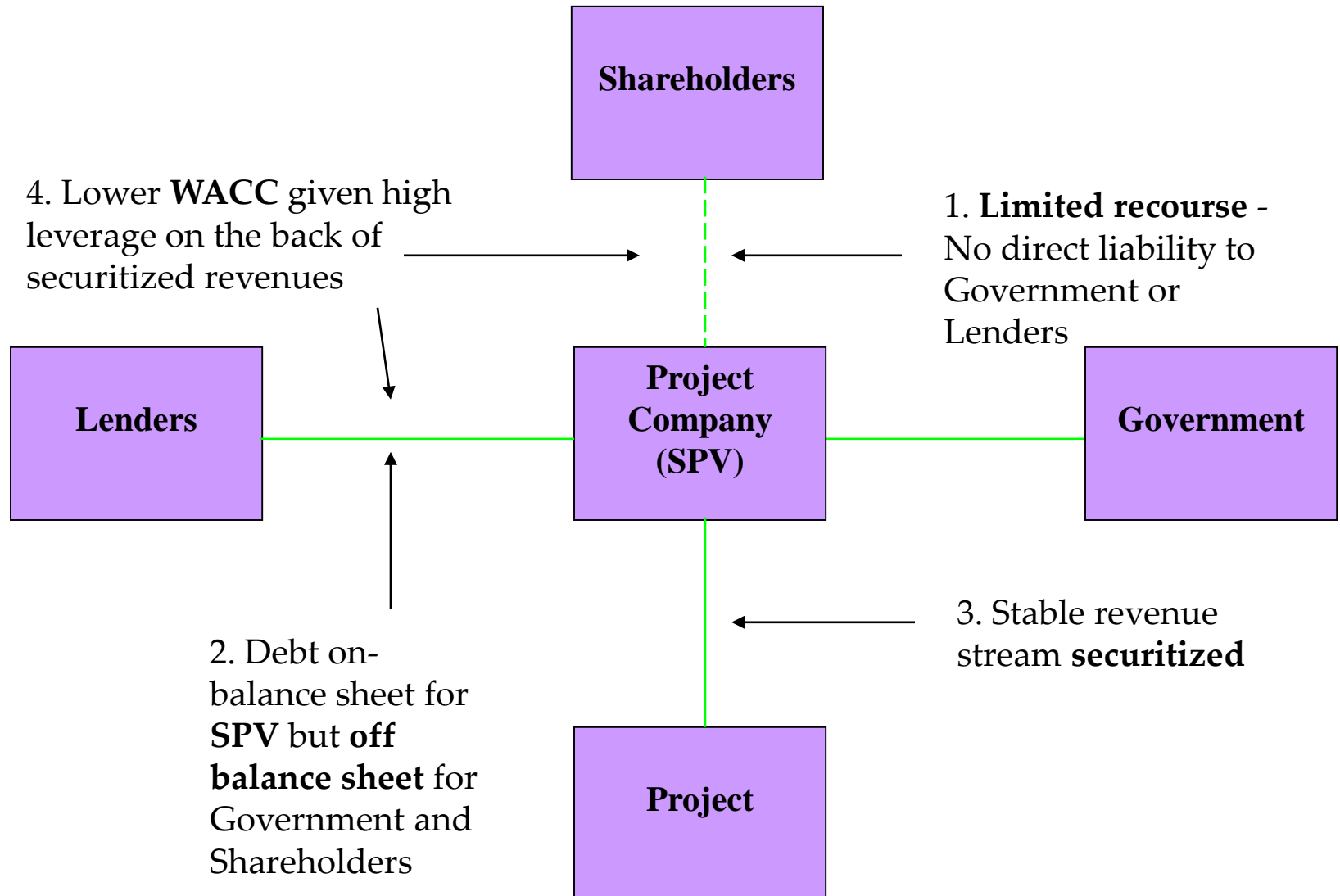


*From Toolkit on PPP in Highways*

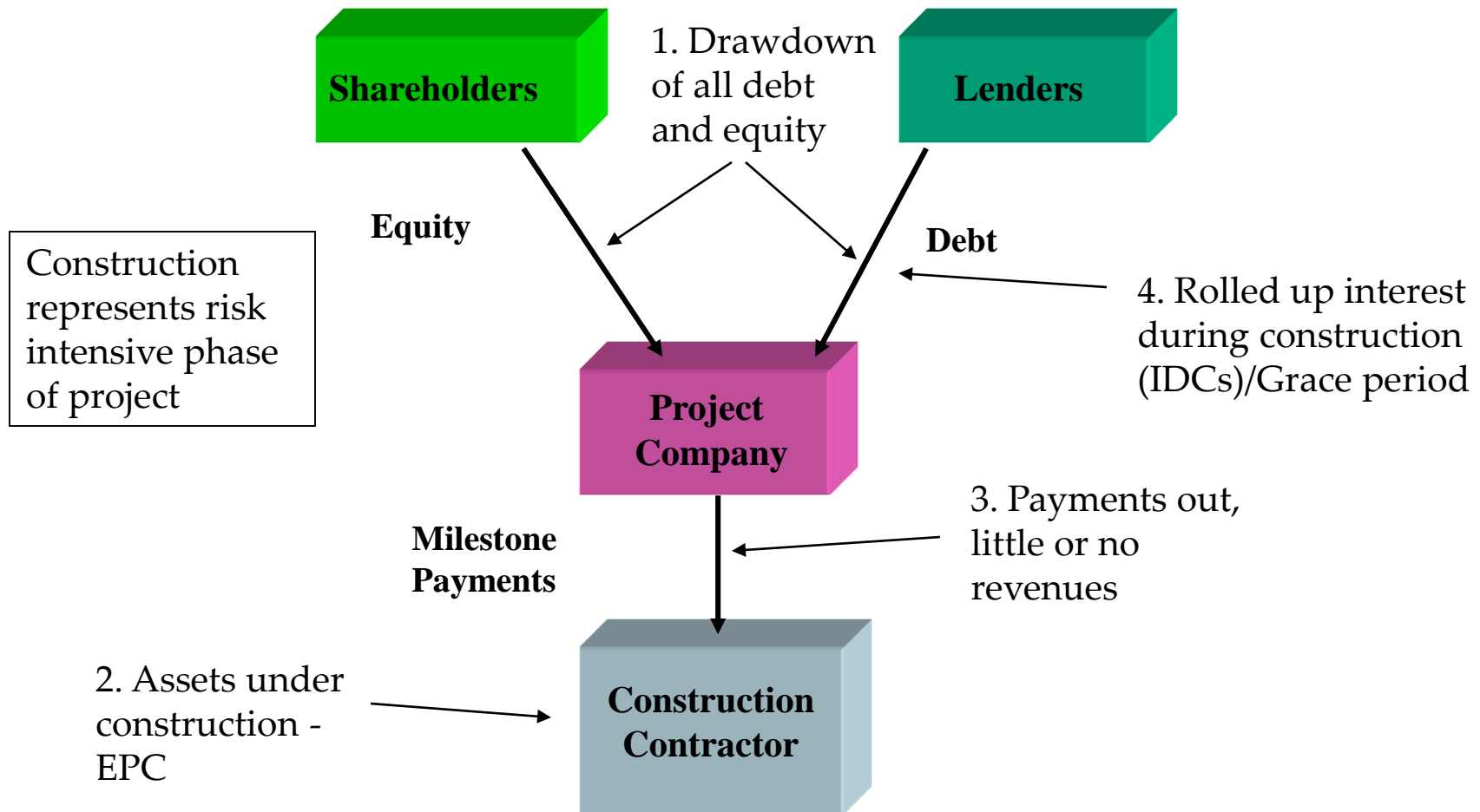
# Government Inputs



# Why Project Finance

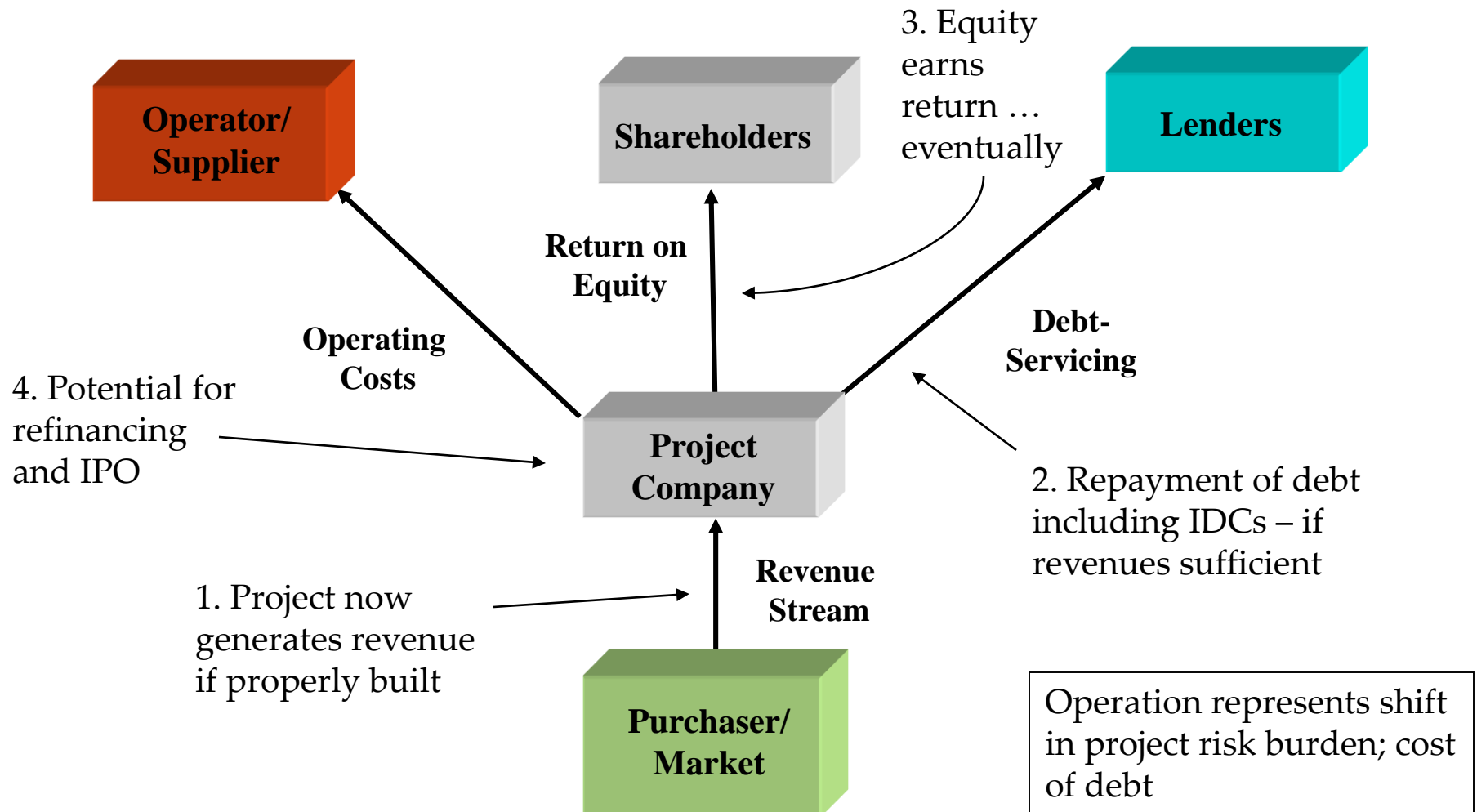


# Construction Phase





# Operation Phase



# Cash Flow Waterfall

