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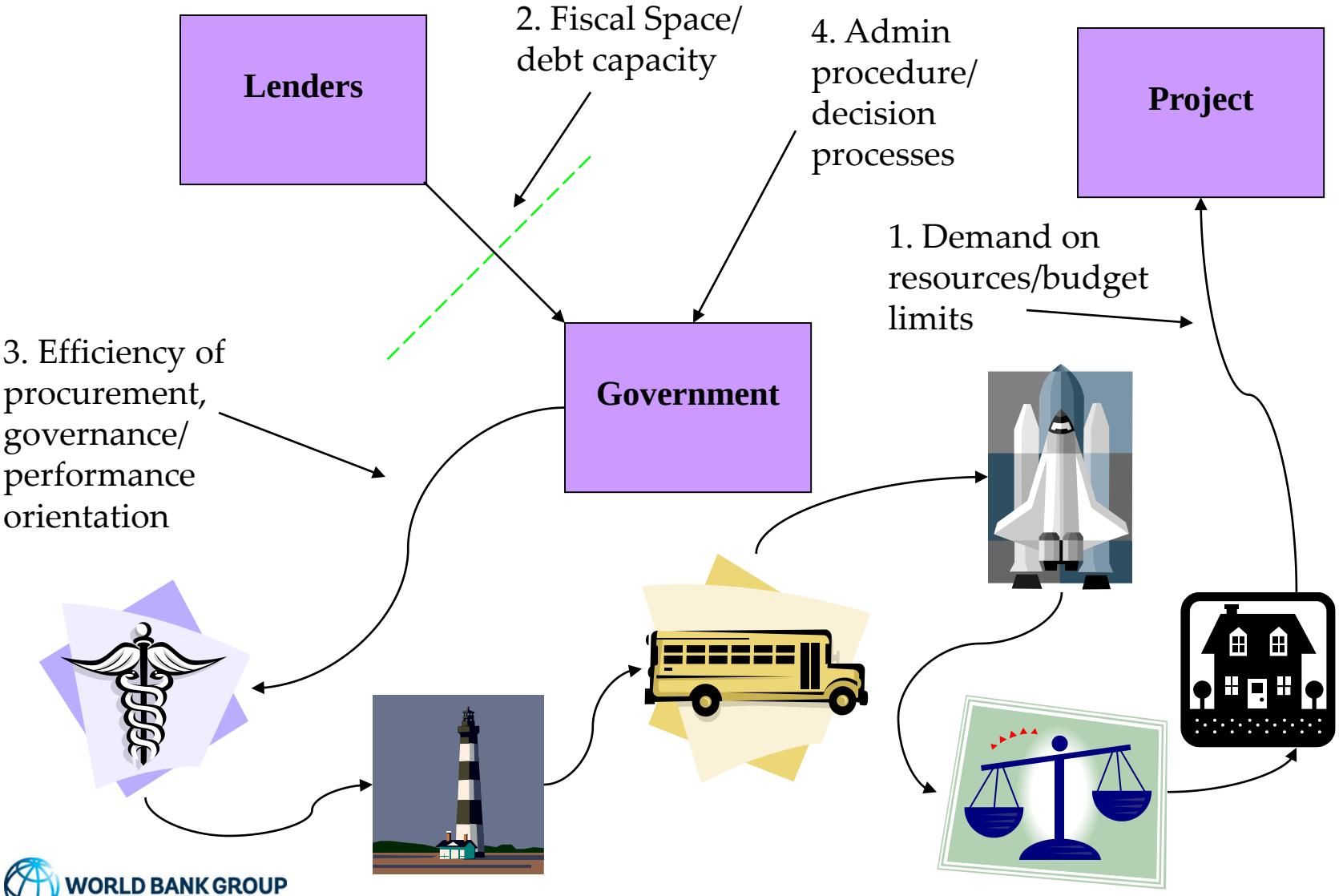
Municipal Public Private Partnerships Academy

Sao Paolo, Brazil

September 2019

Local Government Priorities



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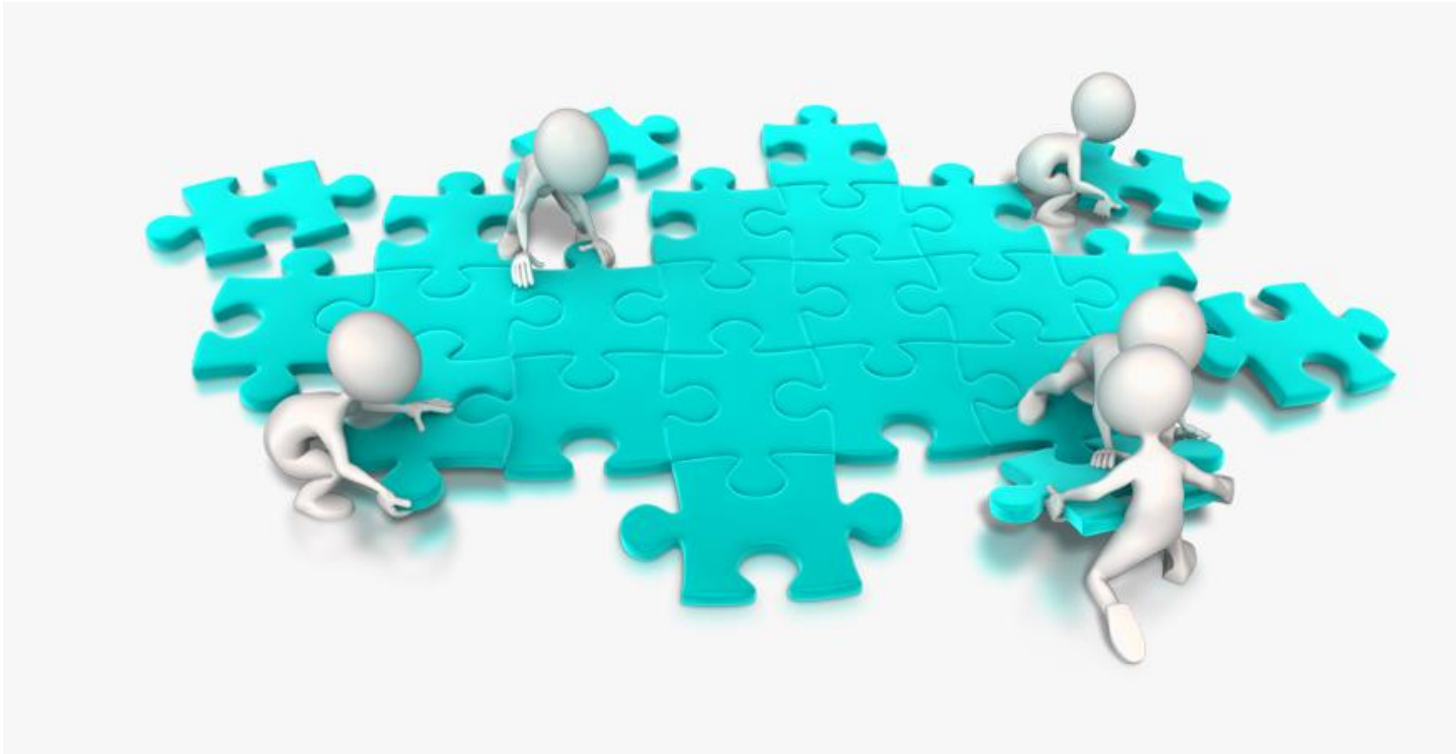
Institutions working together

Public and private working together

Public and public working together

Community



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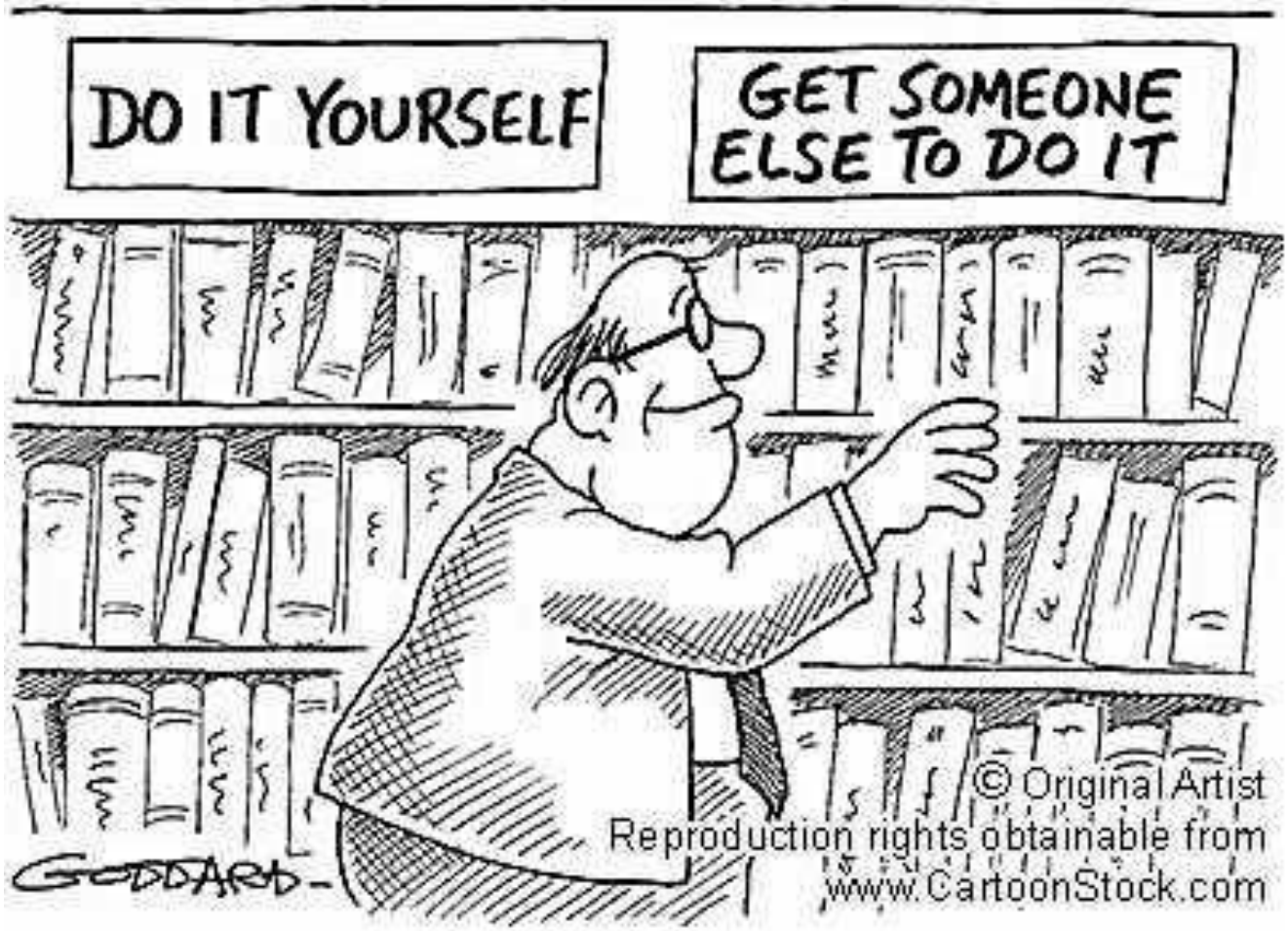
DO IT YOURSELF
GET SOMEONE ELSE TO DO IT
GODDARD
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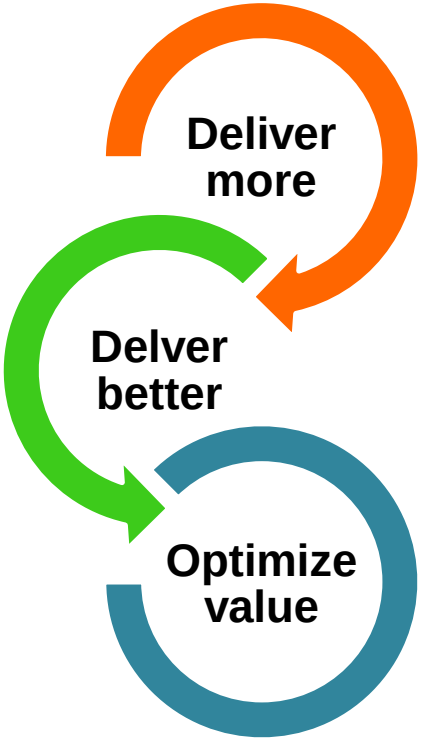
Why PPP?



Use private capital to increase the amount of infrastructure that can be delivered within the same fiscal space

Private companies do some things better, e.g. innovation, service delivery, commercial orientation, operational efficiency – leverage the distinct incentives and capabilities of private partner to create “win-win” arrangements

Well designed / managed PPPs can deliver high-quality infrastructure at a better cost to the municipality as compared to traditional, public delivery

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Municipal PPP Framework

- Guidance Note
- 20 Modules
- 100 Project Summaries

www.thegpsc.org

www.worldbank.org/ppplrc

Modules:
1 Municipal Readiness
2 Project Concept Assessment Tool
3 Sample Project Concept Note
4 Feasibility Study
5 Managing Consultants
6 Sample Consultant ToRs
7 Procurement
8 Sample RFQ
9 Sample RfP for Single-Stage Bid Process
10 Sample RfP for Two-Stage Bid Process
11 Sample Municipal PPP Agreement
12 Contract Management
13 Capacity Building
14 Communication Strategy
15 Sector Issues
16 Harnessing Land Value Capture
17 Capturing Commercial Value
18 Community Engagement
19 Private Sector Context
20 Summary Practical Advice for Decision Makers

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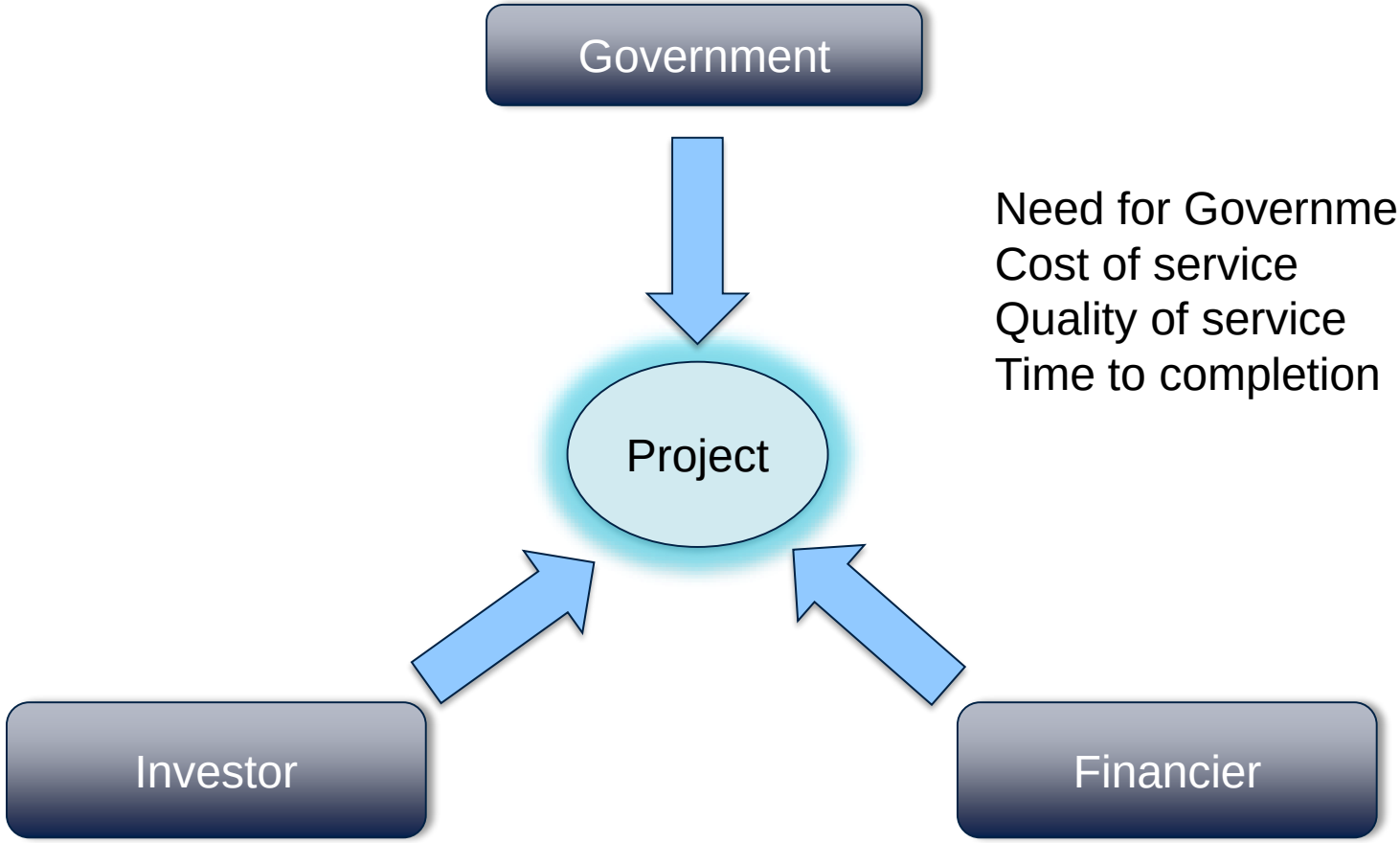
(Un)Common Interests

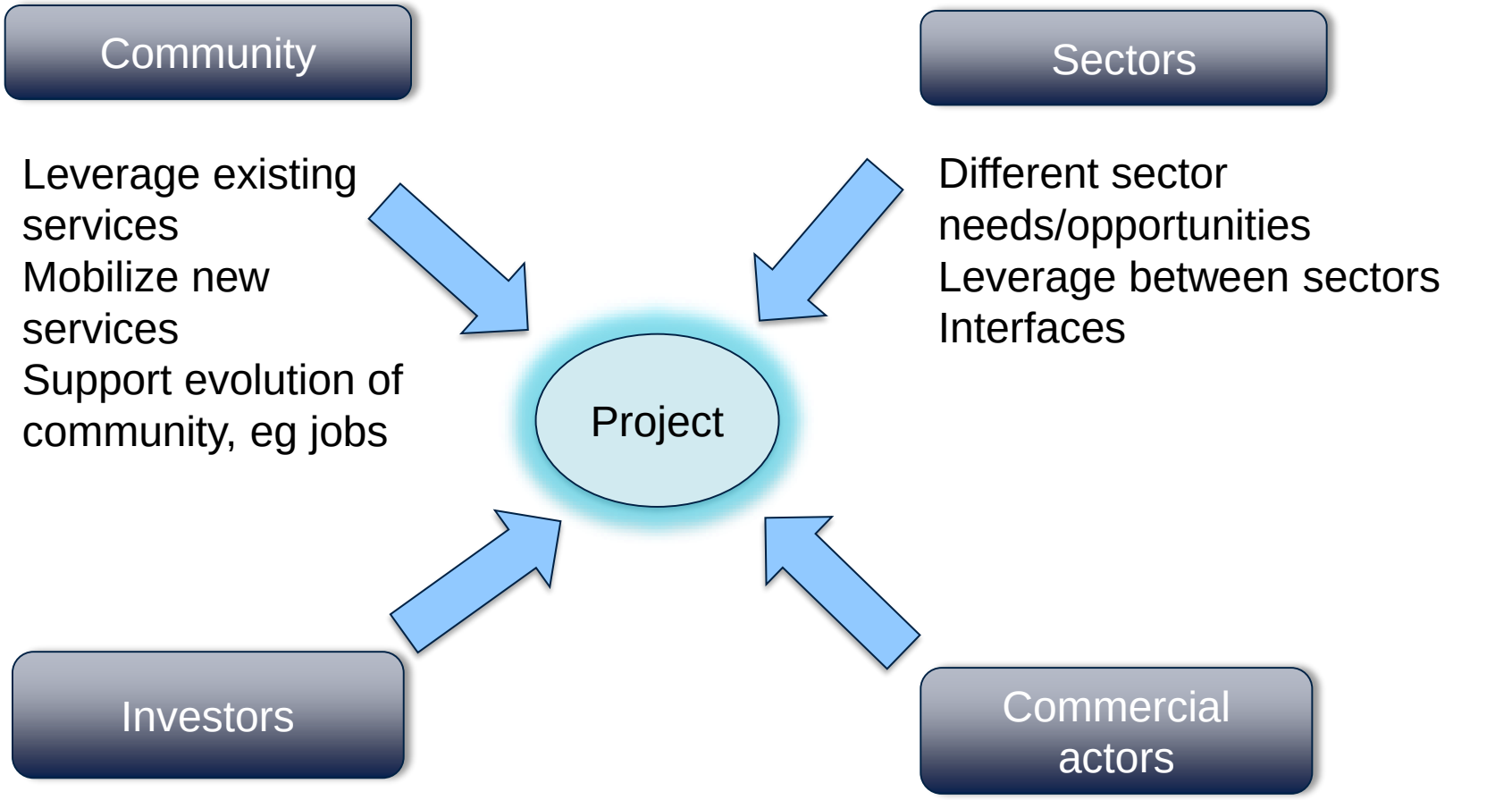


Need for Government support
Cost of service
Quality of service
Time to completion

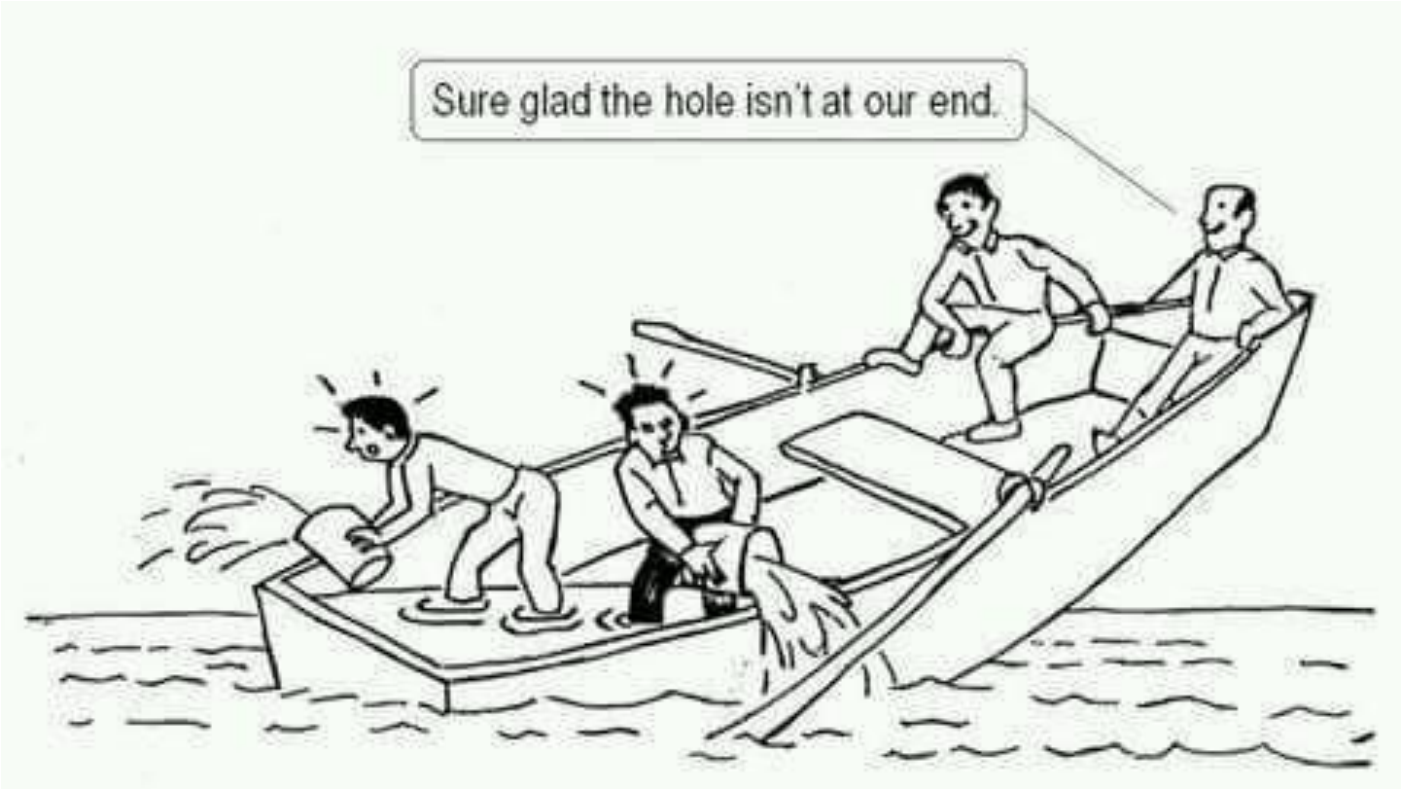
Construction risks/returns
Equity returns
Control of project
Political/country risks

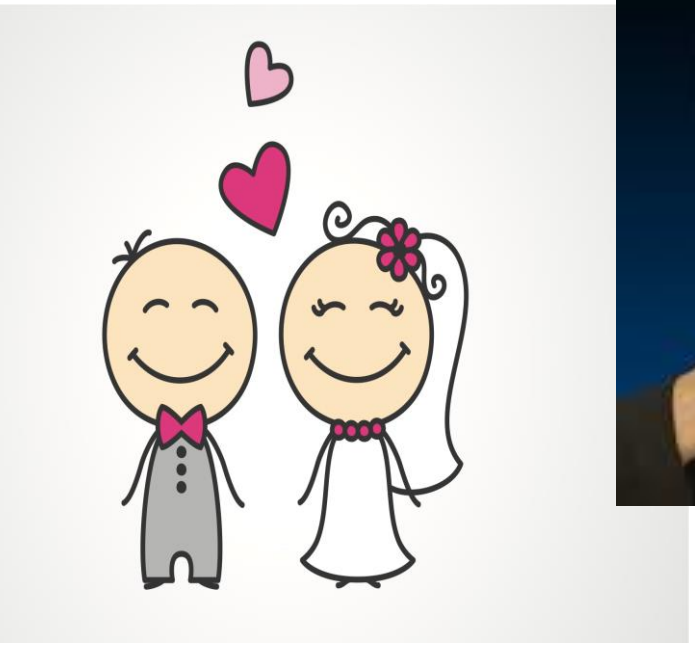
Certainty of revenue stream
Cushion in returns
Political/country risks
Protection in extremis

(Un)Common Interests



We are in this together





A divorce is Messy and Expensive

SYNERGY

$1 + 1 = 3$

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The Alphabet Soup of PPP

Management of Service provider

Private

Mixed

Public

Public Water Co.

Joint Venture

Divestiture

Lease contract,
Affermage

Concession,
Output contract,
Outsourcing

Corporatisation

Management contract,
Franchizing, O&M,
Performance contract

Service
contracts

BOT, BOOT, RLT,
ROT, DBFO,
DCMF, IPP, BOO

Municipal
or Provincial Authority

Cooperative,
Twinning

Public

Mixed

Private

Control of Assets

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Understanding PPP – Myth vs. Reality

- PPP is not "free money"
  - *Someone* will pay – users, other beneficiaries, government
- Revenue is the lifeblood of a PPP
  - Carefully select the fairest, most sustainable revenue source(s) – tariffs, ToD, public contributions/support
- PPP is not "cheap" or "easy"
  - Project preparation – time and cost
  - Direct and/or contingent liabilities for public partner
- PPP can and should be *better*
  - Compared to other options for delivering the project, i.e. "value-for-money"
- PPP is not "privatization"
  - Project assets are owned by government or ultimately revert to government ownership
- PPP transfers significant, long-term control to the PSP
  - Cannot be undertaken lightly
  - Requires strong engagement/communication with affected communities and stakeholders

Risk Transfer – How Much is Too Much?

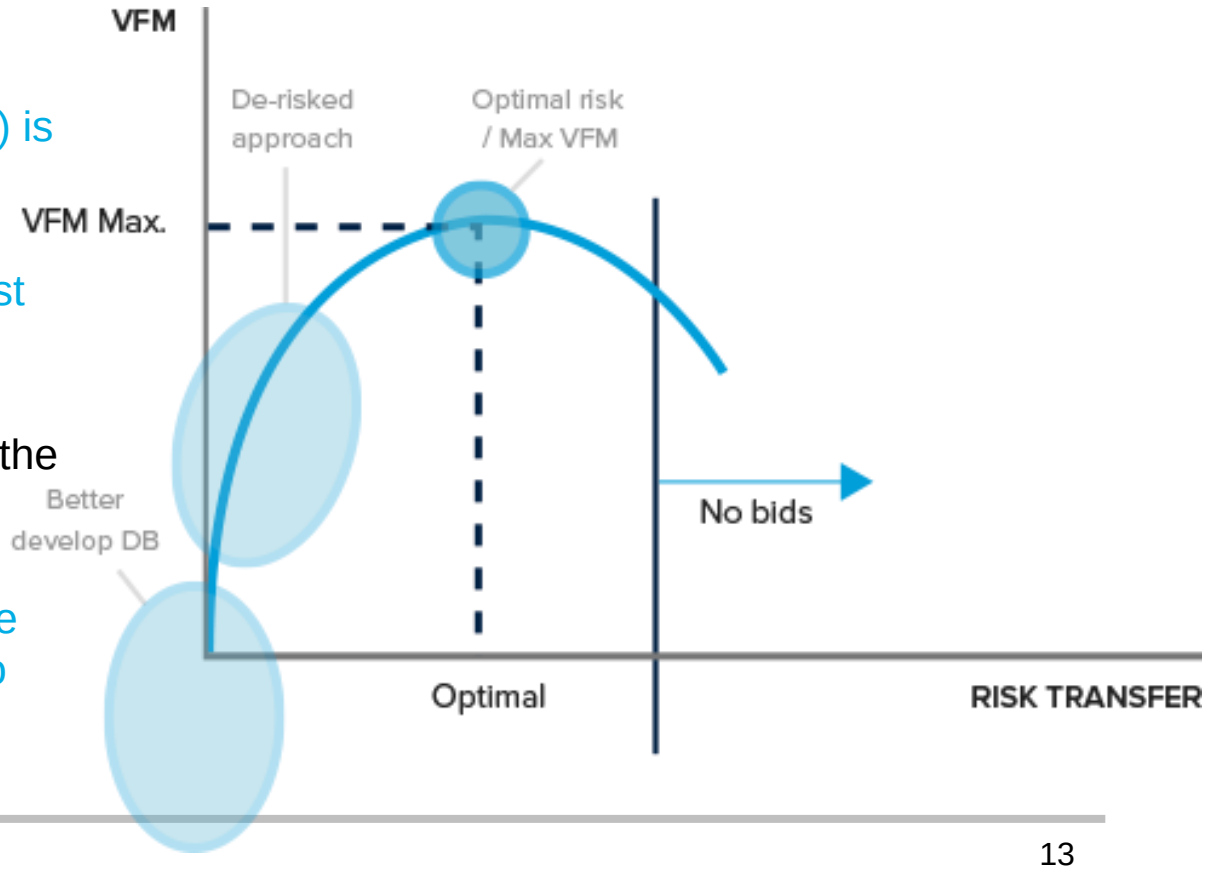
Proper risk allocation is at the heart of a good PPP

Transferring risk to the PSP (financing, construction, demand) is a key benefit to the Municipality

But transfer too much risk and it may lead unduly increase the cost of capital and/or lead to project failure

Project structure largely dictates the risk allocation

As the PSP's control over the project increases, so too does the amount of risk it may be asked to bear (and vice versa)



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Country and Political risk

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Who takes which risk?

Project Specific Risks
"non sovereign risks"

- **Completion Risk** (engineering & construction cost, time, performance, defects)
- **Operational Risk** (technology, quality, cost, technical & operational know-how)
- **Environmental and Social Risk** (future liabilities, project delays, costs overruns)
- **Credit Risk** (project leverage)

Country (Economy wide) Risks
"sovereign risks"

- **Political Risk** (expropriation, political violence, Gov't breach)
- **Regulatory Risks** (pricing formulas, right of way, currency convertibility & transfer)
- **Legal Environment** (rule of law, judicial system, access to justice and arbitration)

Offtake risk (how liberalized is the market?)

Environmental Risk (past liabilities)

Pricing Risk (regulated and non-regulated)

Financial Risk Inflation, refinancing risk, interest rate and exchange rate fluctuations

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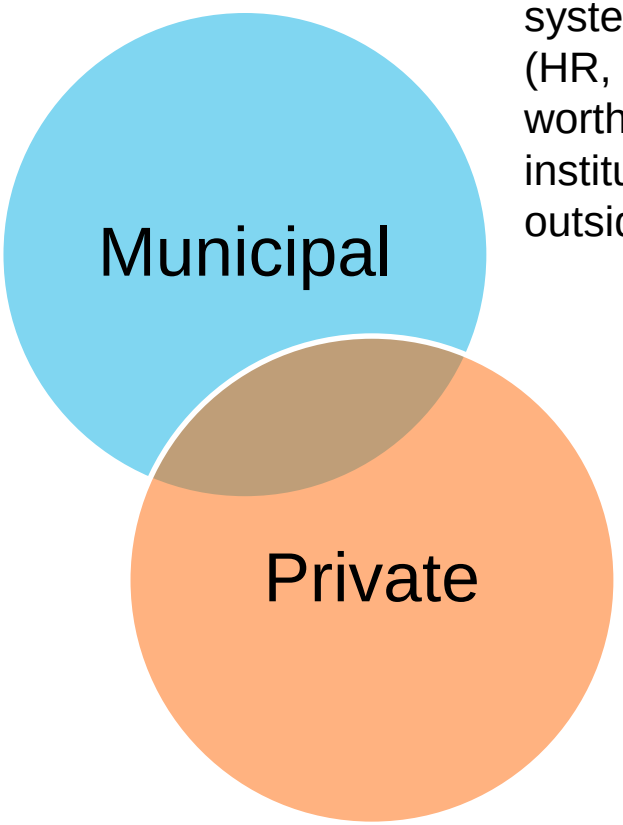
Sample risk allocation matrix for PPP projects

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

Know Your Context



Planning/budgeting systems, internal capacity (HR, funding), credit-worthiness, legal & institutional framework, outside assistance

Distinct concerns of importance to private investors – what makes a good investment?

Tool

Module 1: Municipal Readiness Assessment - framework for assessing a municipality's readiness to implement PPP

Module 19: Private Sector Context - in-depth discussion of private sector concerns

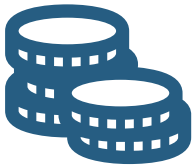
Project Appraisal: Viability Factors

	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	▪ Usually assessed by technical experts/ advisors relating to specific technical parts of the project
Environmental and social viability factors	▪ Verification that this is the optimum solution ▪ 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

Funding PPP – Who Pays?

1. Sustainable revenues from direct beneficiaries (e.g. tariffs)
2. Capture a portion of any land value increase (LVC)
3. Maximize potential commercial revenues (e.g. advertising)
4. Consider public support (grants, payments, guarantees)



Recall that *someone must pay* (users, taxpayers) – so allocate cost in the most equitable, sustainable manner possible

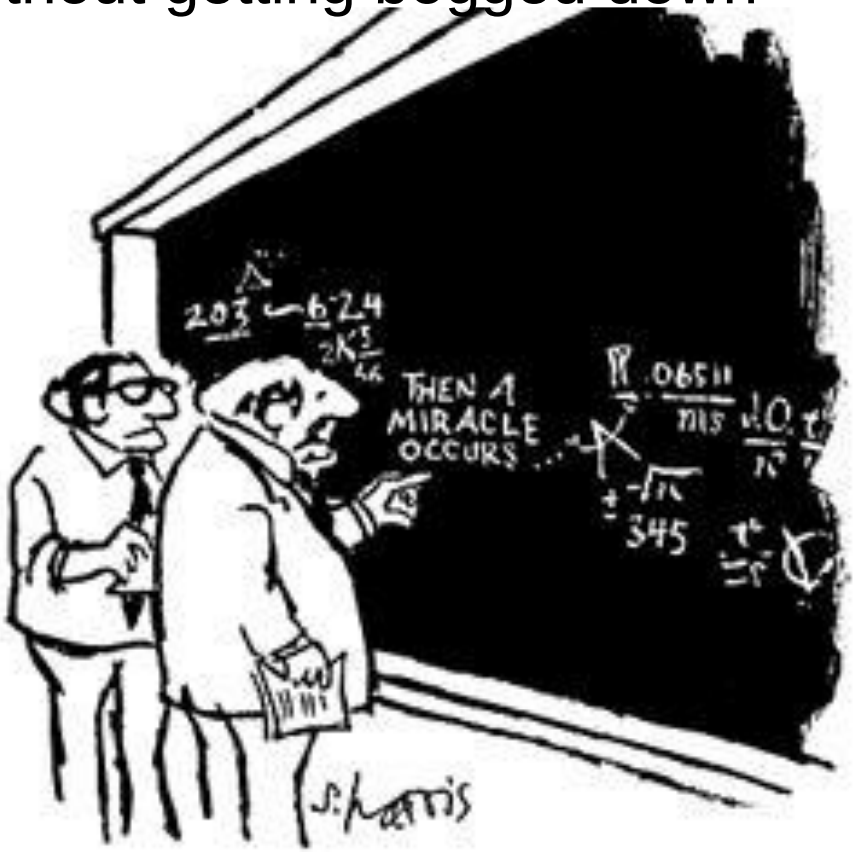
Tools

Module 16: Harnessing Land Value Capture
Module 17: Capturing Commercial Value

- Information on maximizing revenues from a PPP project

Think differently about infrastructure

- Don’t focus on the asset, think about the opportunity.
- Consult with all stakeholders, without getting bogged down
- Get the right partners
- Don’t let the financing lead
- Show me all of the money
  - ✓ Service revenues
  - ✓ Other service revenues
  - ✓ Land value capture
  - ✓ Commercial value capture
- ✓ Other public benefits



"I think you should be more explicit here in step two."

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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.

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.

Forecast 2000 to 3000 buses / day, actual average of 1,100 normal buses and 600 mini buses a day, about 80-100 buses are parked overnight. Some buses started operating from outside the bus terminal to avoid paying adda fee.

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A BUS TERMINAL

- ✓ Bus operations
- ✓ Maintenance, petrol, bus parking
- ✓ Hotel, restaurants, cafes
- ✓ Commercial facilities – warehouses, chillers
- ✓ Transit hub – modes, logistics, efficiency
- ✓ Advertising, residential, office space, parking, entertainment, solar generation
- ✓ Public services – post office, tax office
- ✓ Green space, public facilities

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.

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James F. Oyster Bilingual Elementary School, Washington DC

In 1993, the school was in danger of closure due to an 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.

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Redevelopment of Library and Fire Station in Washington, D.C., United States

Washington, D.C. needed to refurbish the West End Library and West End Fire Station, and develop additional, centrally located low cost housing. The library and fire station were almost functionally obsolete; their renovations would be extremely costly. D.C. was able to acquire new, modern facilities while also providing affordable housing by leveraging the air rights above the library and fire station. The high-end family sized condominiums provided additional tax revenue.

D.C. awarded, through a competitive bid process, a concession to EastBanc WDC Partners. The proposal included US$149 million of investment in a new fire station and library, approximately 150 condominiums, 52 low-cost rental units, and retail space. Financial assistance was provided by D.C. to build affordable units.

Source: www.dmped.dc.gov; www.dcclims1.dccouncil.us
Image sources: https://alankarchmer.com/ten-arquitectos

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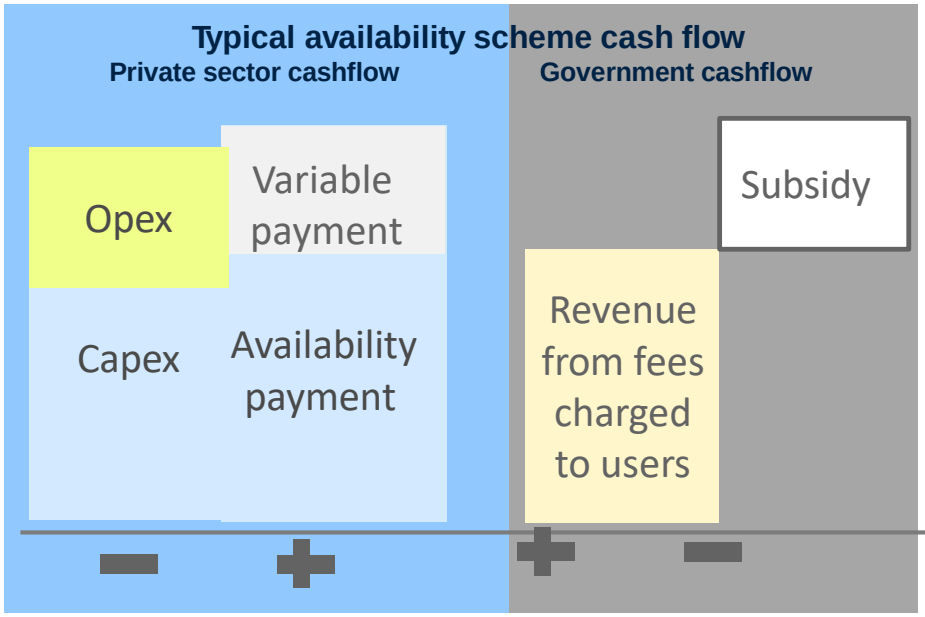
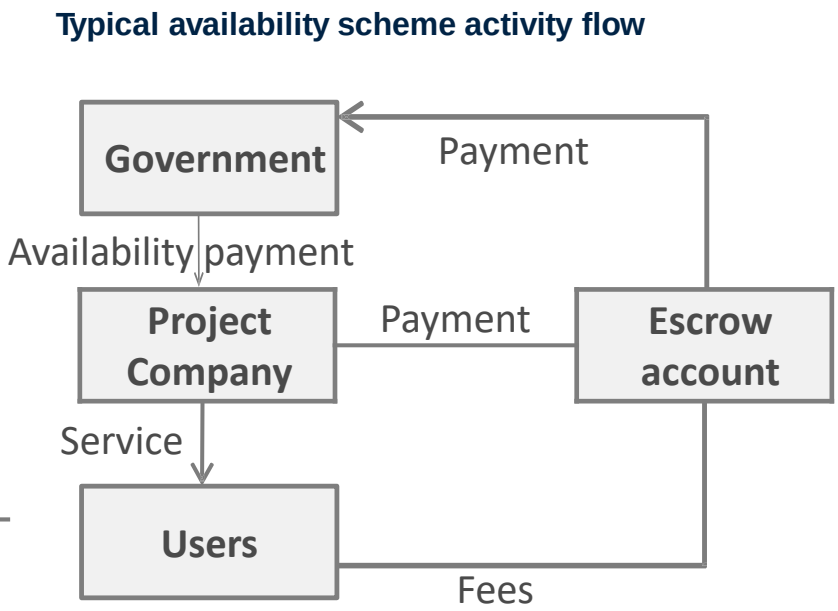
Availability payment mechanism





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

- Availability payments work well for projects where the user revenue stream is uncertain, or the government has a comparative advantage relative to the private sector in **ensuring demand** materializes
- Project remains financially viable for investor regardless of the actual amount of services delivered. The fees from users goes to the government, government compensates shortfall, **receives upside**
- As the revenue obtained from user fees is unpredictable, there arises an unbudgeted portion of the subsidy which represents **fiscal risk for the government**

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.

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

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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: 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.

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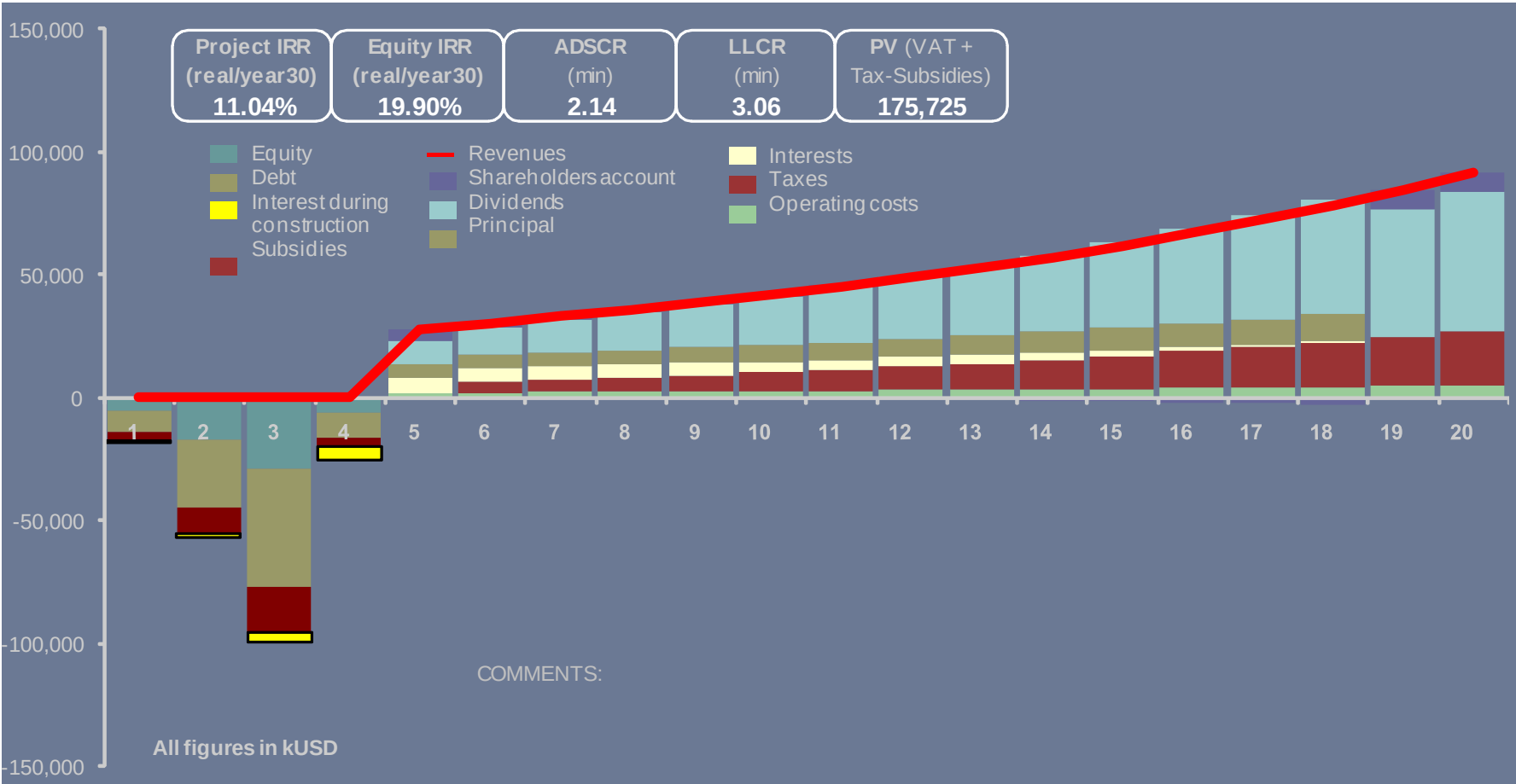
Project IRR (real/year30)	Equity IRR (real/year30)	ADSCR (min)	LLCR (min)	PV (VAT + Tax-Subsidies)
11.04%	19.90%	2.14	3.06	175,725



COMMENTS:

All figures in kUSD

Concession life	Construct. cost	Operation Cost	Initial Daily Traffic	Traffic Grow th	Toll rate VAT incl.	Investment Subsidies	Equity	Debt maturity	Interest Rate	Grace Period	Inflation rate	Corporate tax rate
30	170,000	1,000	20.6	4.0%	3.7	20%	30%	18	6.0%	4	4.0%	30.0%

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How to Make PPP Work

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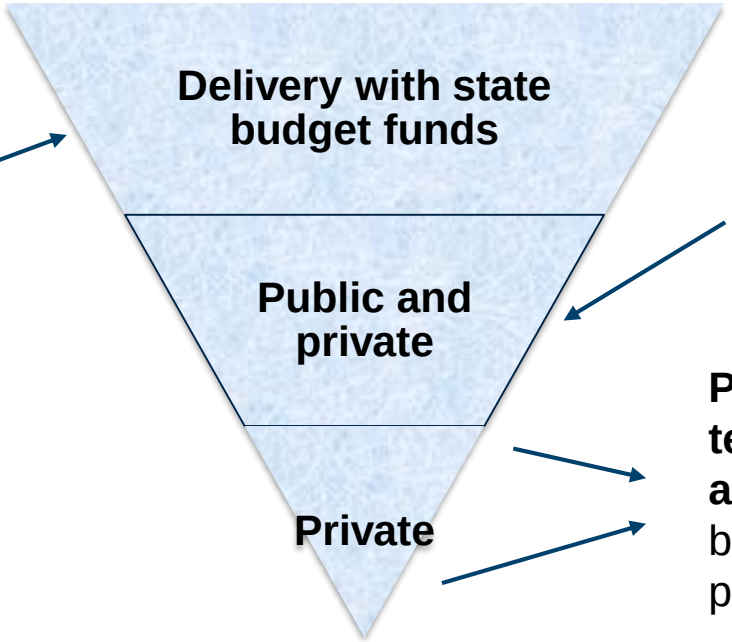
Choose project carefully

The public investment framework needs to leverage private financing systematically

Usual approach: Project identification **asks first which projects should be publicly funded**, then which should be funded with public and private and lastly whether to use fully private – the **inverse of best practice**

Projects are **submitted for public funding** based on **little preparatory work and inconsistent screening**

Decisions on private financing options are made **too early**, before much is known about the project



Projects are often directly awarded, in lieu of competitive tender

Preparation and competitive tendering process only applies after a decision has been made not to pursue public options

Need to Flip the Pyramid

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Overview of the PPP Project Cycle

Tool

Module7: Procurement
- Process to deliver a PPP project

Module 20: Lessons Learned
- Key success factors for delivering PPP

- Process is *fluid*
- Expect / allow projects to move back and forth between stages
- Continually ask: Is this project a good deal for the municipality?

- Be flexible, responsive and patient as new information comes in
  - Good PPPs do not happen overnight
  - There is no “one size fits all” solution

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Project Selection – Screening

- Uniform evaluation and screening of all projects, using common and objective criteria

Core Project Screening Criteria

- Strength of rationale (need, cost benefits)
- Institutional and project readiness
- PPP Suitability

Tool

Module 2: Project Concept Assessment Tool

Module 3: Sample Project Concept Note

Remark

This may require changing, even reversing, established / customary approaches to infra investment planning and budgeting

Caution

Beware the temptation of new build

Small projects can be viable – but small size does not necessarily mean small liability

Project Selection – Prioritization

Of the potential projects, prioritize in view of:

- Development priorities
- Capacity to deliver (staffing and funding),
- Market appetite and trajectory – is not infinite

Remark

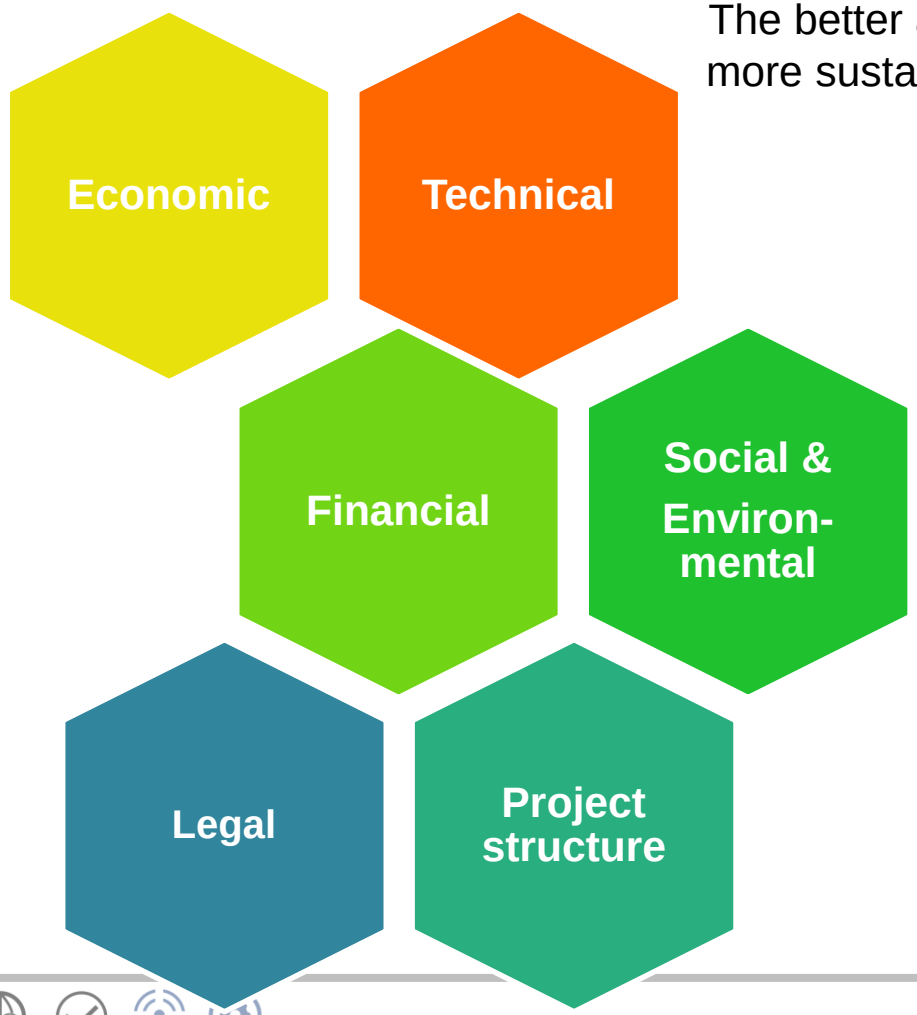
The amount / quality of data is likely to be limited at this phase, final decisions should not be made w/ preliminary data, with a view to repeating / revising project assessment as new data is accessible.

The decision to pursue a potential PPP should include a decision to provide funding for project preparation

- Municipal resources
- Regional / national extra-budgetary support (PPP units, project development funds)
- National / bilateral / multilateral development banks and donors

How to be the perfect partner

Project Development – Feasibility Study



The better and more complete the feasibility study, the more sustainable the project will be – <u>don't cut corners</u>

- Comprehensive assessment of all aspects of the project
- Options analysis to determine best delivery model / risk allocation
- Potential revisions to project scope/ design

Remark

Even large, well-staffed municipalities will usually require help from an external adviser or firm to complete the feasibility study

Tools

Module 4: Feasibility Study
Module 5: Managing Consultants
Module 6: Sample Consultant ToR

Project Development – Stakeholder Engagement

Speak to potential investors (market consultations) to understand:

- Project structures that meet market requirements
- Market appetite for the project

Proactive engagement w/ affected communities (direct and indirect) on key issues:

- E.g. affordability, resettlement, employment, service delivery standards
- Address any aspects unique to potentially underrepresented groups (poor, women, minorities, disabled, elderly)

Tools

Module 14: Communication Strategy
Module 18: Community Engagement

Choose partner carefully

Decide which projects are to be PPP, and stick with it

Don’t compromise, make them compete – no side deals!

Keep it simple, not too many institutions or approvals

➡ coordination

How to find the perfect partner

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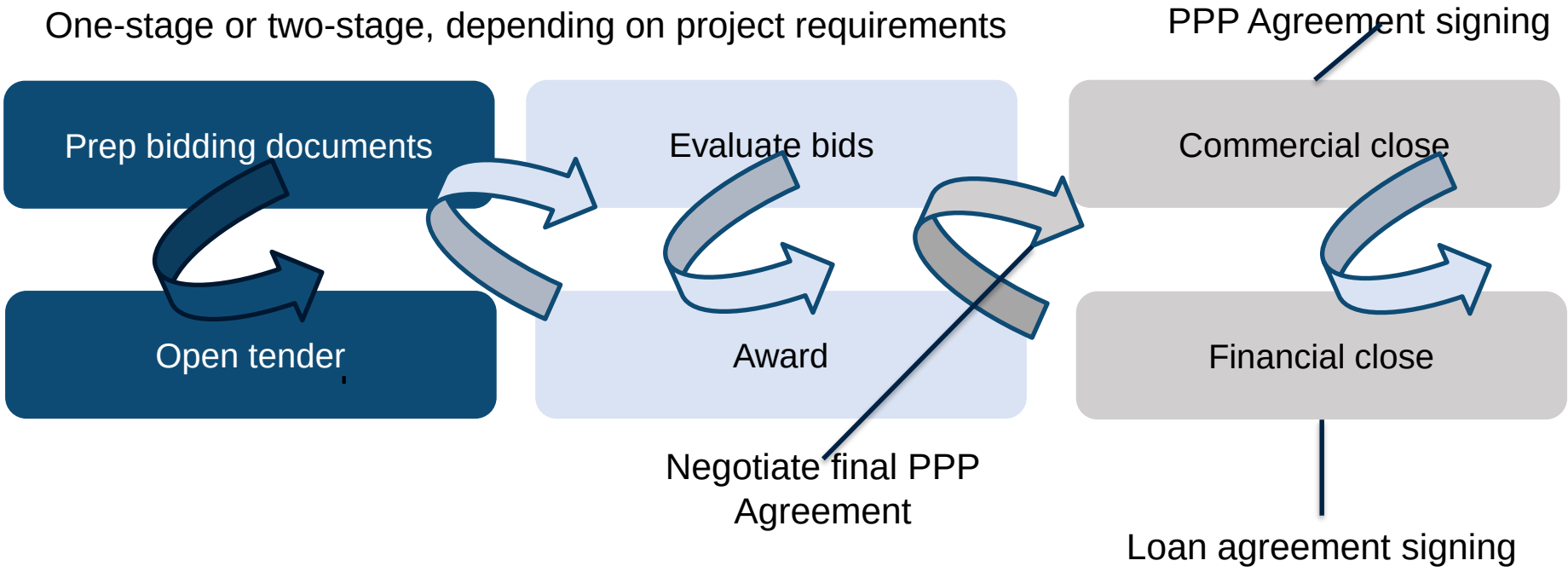
Procurement and Award – Overview

Rate qualifications, technical / financial proposals, etc., using criteria that embody municipality's aims for the project

One-stage or two-stage, depending on project requirements



Procurement and Award – Tools & Assistance

Tool	Remark
Module 6: Sample Consultant Terms of Reference	
Module 7: Procurement • Detailed discussion of issues related to procuring a qualified PSP	As with the FS, municipalities will usually need help from external advisers to complete procurement
Module 8: Sample Request for Qualifications (RfQ)	
Module 9: Sample Request for Proposal (Single-Stage)	
Module 10: Sample Request for Proposal (Two-stage)	
Module 11: Sample Municipal PPP Agreement	

Project Implementation — Overview

1. Pre-construction

- Land acquisition, design review, permitting

2. Construction

- Supervise/verify progress, testing, commissioning, payments due

3. Operation

- Performance monitoring/reporting, contract events, payments due, renegotiations, refinancing, disputes

4. Handback

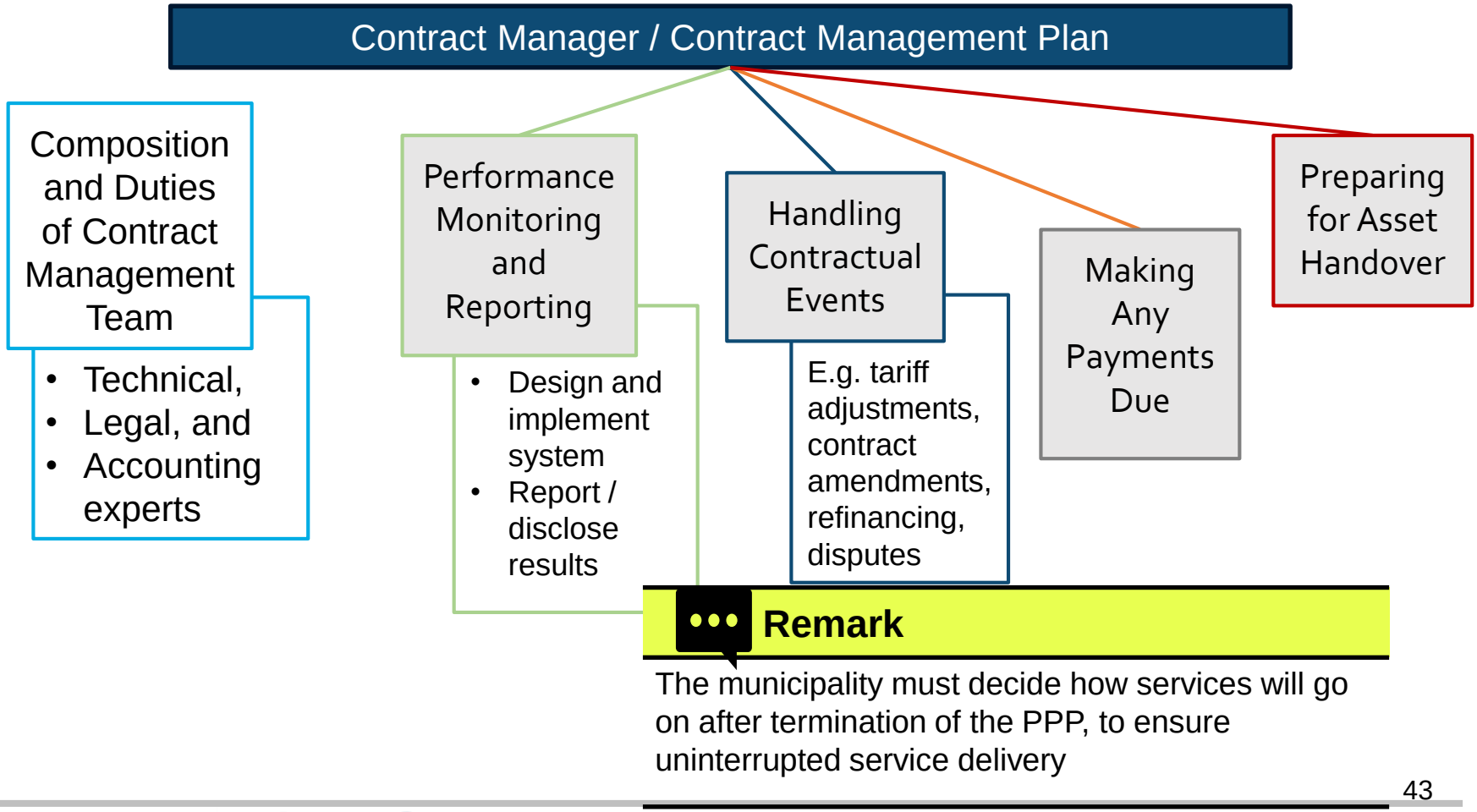
- Test asset condition, maintenance and refurbishment plan, handover of the project assets to the municipality

Municipal roles in implementation

Remark

A good relationship between the public and private partners is key to the long-term success of a PPP. Generally, PPP is flexible and can adapt to crises, changes in circumstances and other unexpected events, provided both partners are willing to proactively work together to manage disputes, avoid defaults, and deliver public services.

Project Implementation – Management

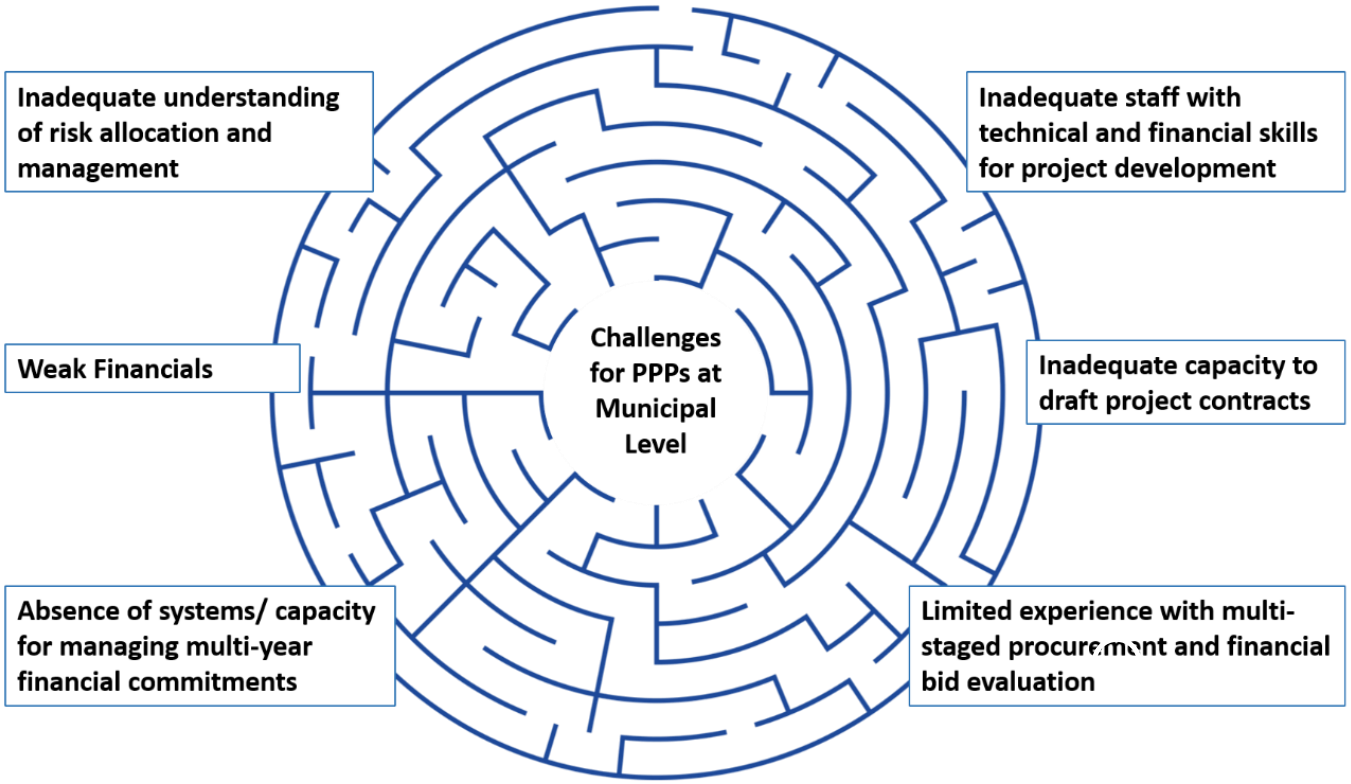


Invest in success

Do not “try” PPP; do it

- Invest **time and money** in preparing PPP - best transaction advisers
- Monitor progress
- Create, staff and fund a PPP Node/team

Obtain the Capacity Needed to Succeed



Identify any weak points and make a plan for overcoming them

Tool

Module 13: Capacity Building – guide to implementing a municipal PPP capacity building program

Look for help - fiscal (project development funding) and technical (advisory services)

- National / regional PPP units and other gov't entities w/ PPP experience
- Global / regional multilateral and bilateral development partners

How to be the perfect partner

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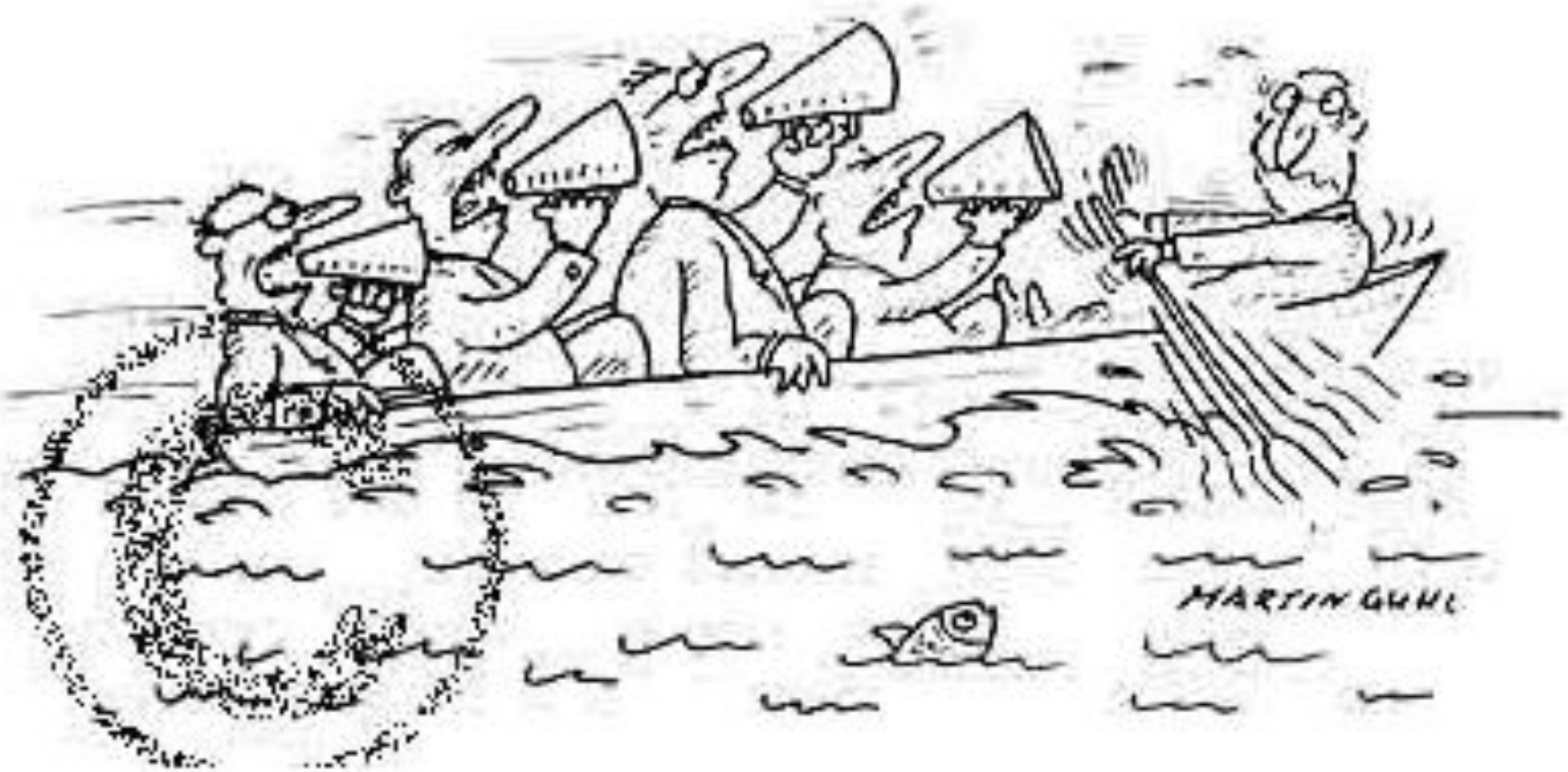

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If you want to go fast, go alone.

If you want to go far, go together.

-African Proverb

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Municipal PPP Framework

- Guidance Note
- 20 Modules
- 100 Project Summaries

www.thegpsc.org

www.worldbank.org/ppplrc

Modules:
1 Municipal Readiness
2 Project Concept Assessment Tool
3 Sample Project Concept Note
4 Feasibility Study
5 Managing Consultants
6 Sample Consultant ToRs
7 Procurement
8 Sample RFQ
9 Sample RfP for Single-Stage Bid Process
10 Sample RfP for Two-Stage Bid Process
11 Sample Municipal PPP Agreement
12 Contract Management
13 Capacity Building
14 Communication Strategy
15 Sector Issues
16 Harnessing Land Value Capture
17 Capturing Commercial Value
18 Community Engagement
19 Private Sector Context
20 Summary Practical Advice for Decision Makers

Thank you!

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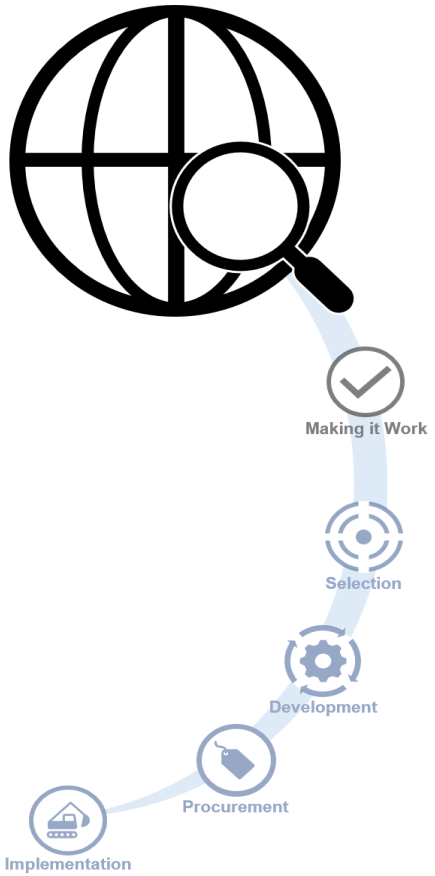
Municipal Public-Private Partnerships Framework. www.worldbank.org/ppplrc

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).



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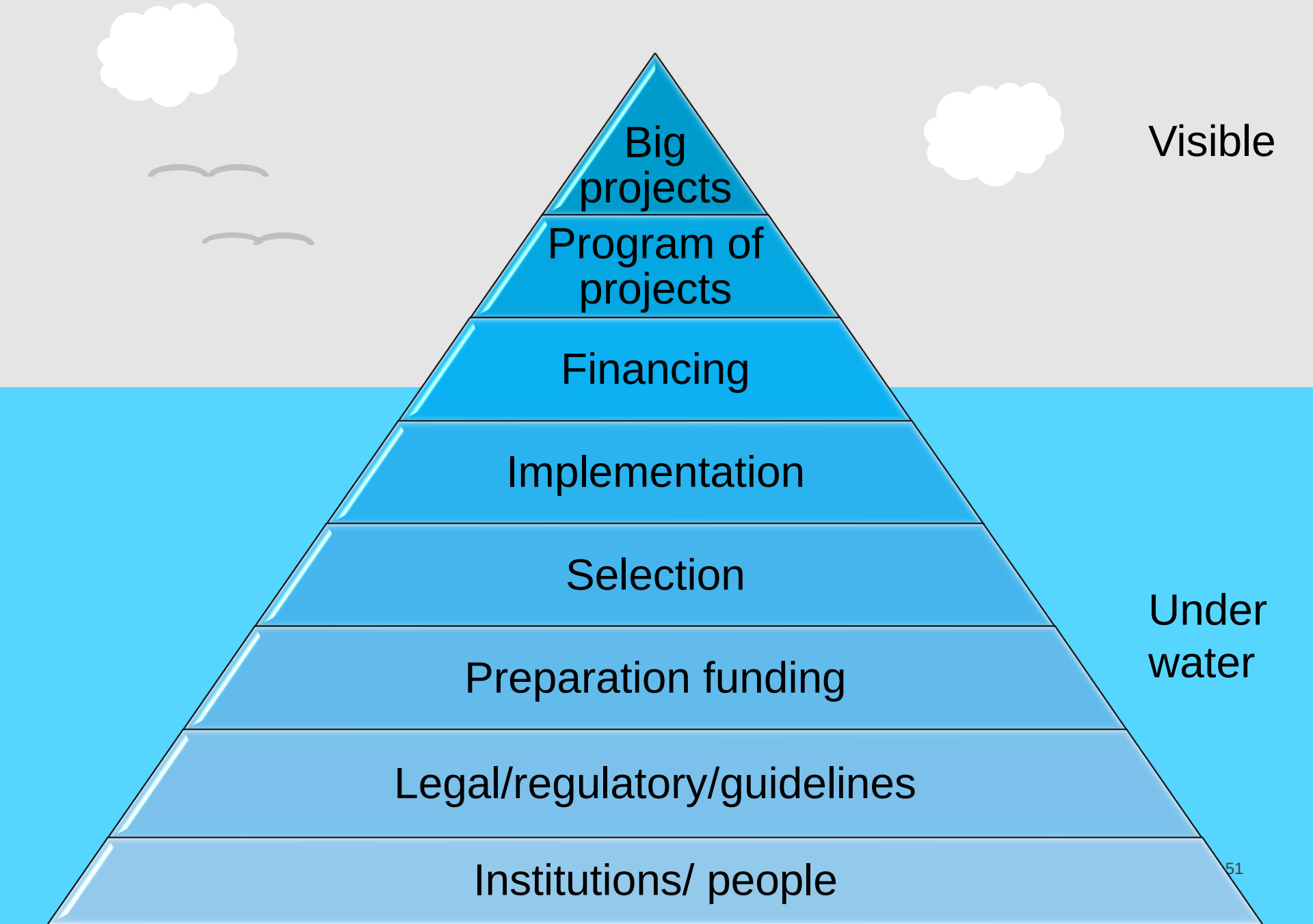
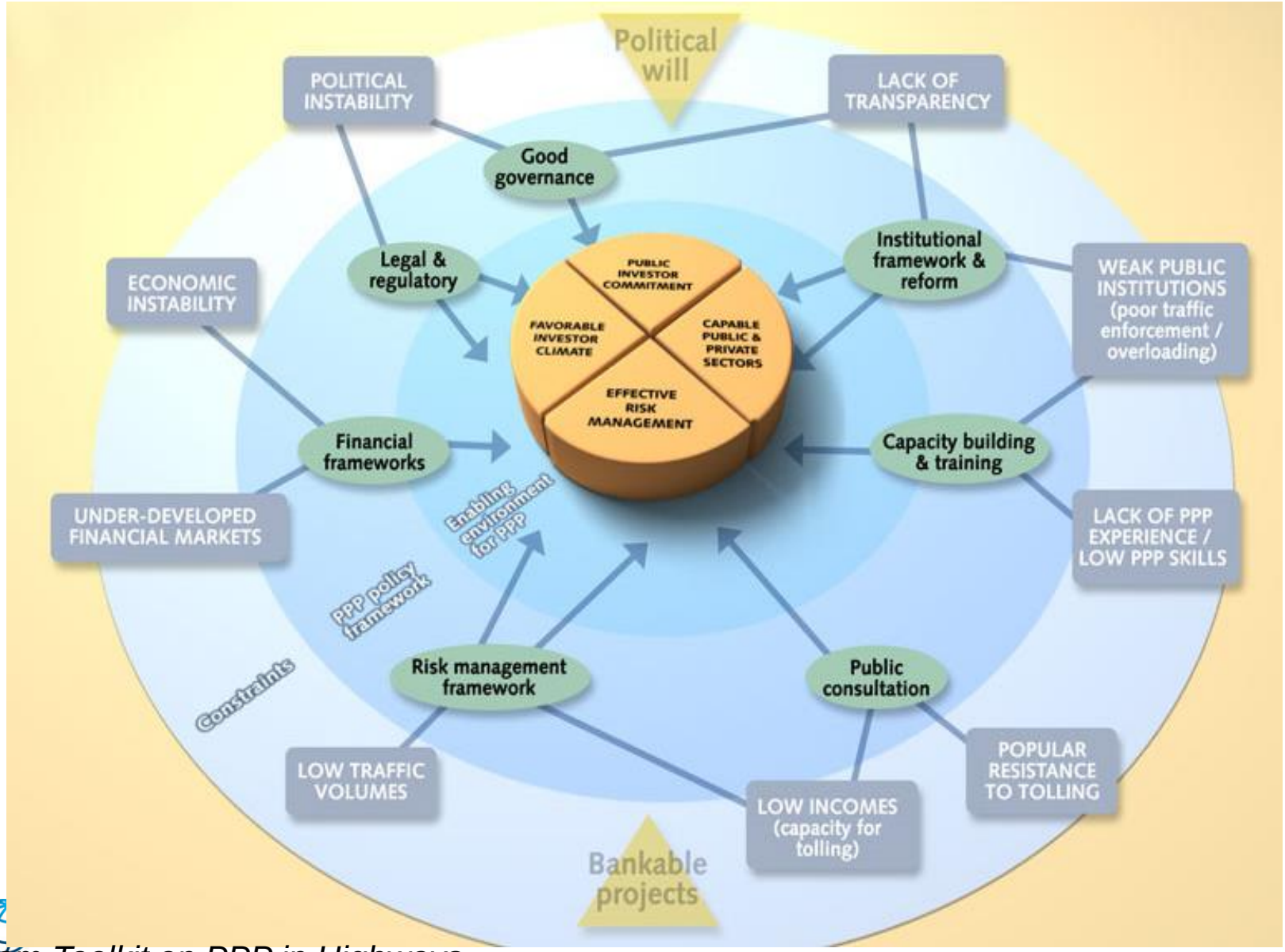
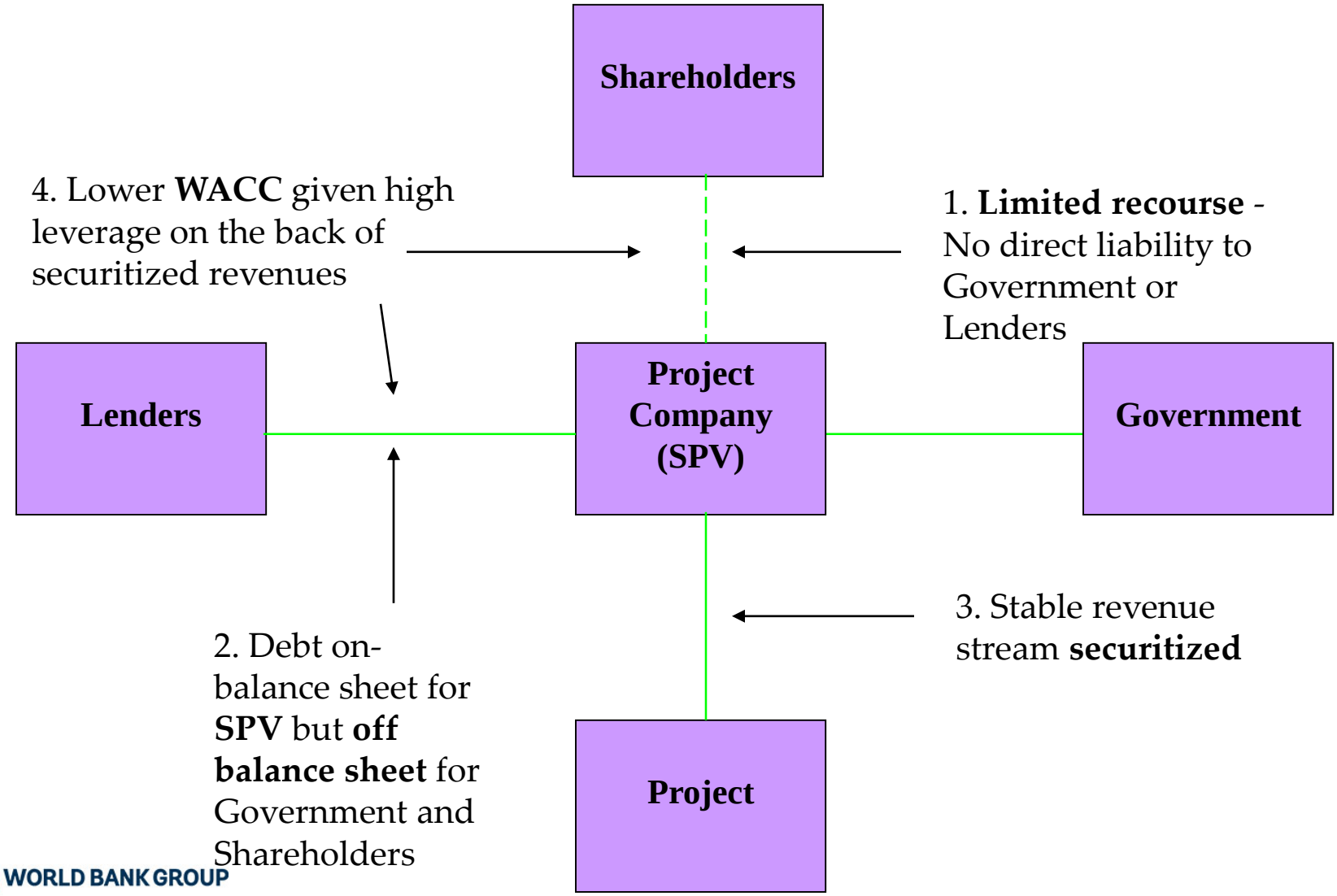

Big projects
Program of projects
Financing
Implementation
Selection
Preparation funding
Legal/regulatory/guidelines
Institutions/ people
Visible
Under water

Creating an enabling environment through sound PPP policy framework



From Toolkit on PPP in Highways

Why Project Finance



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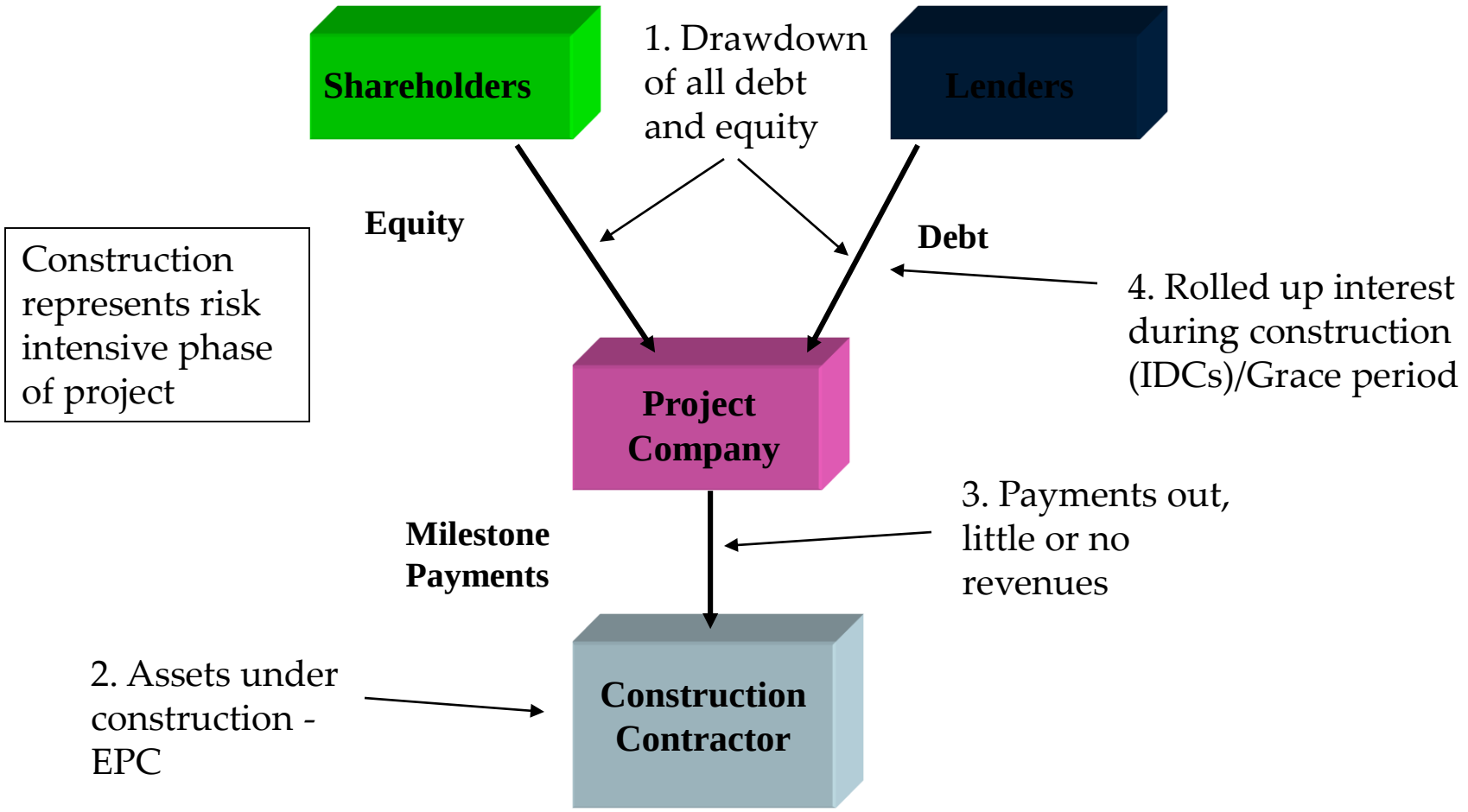
Construction Phase



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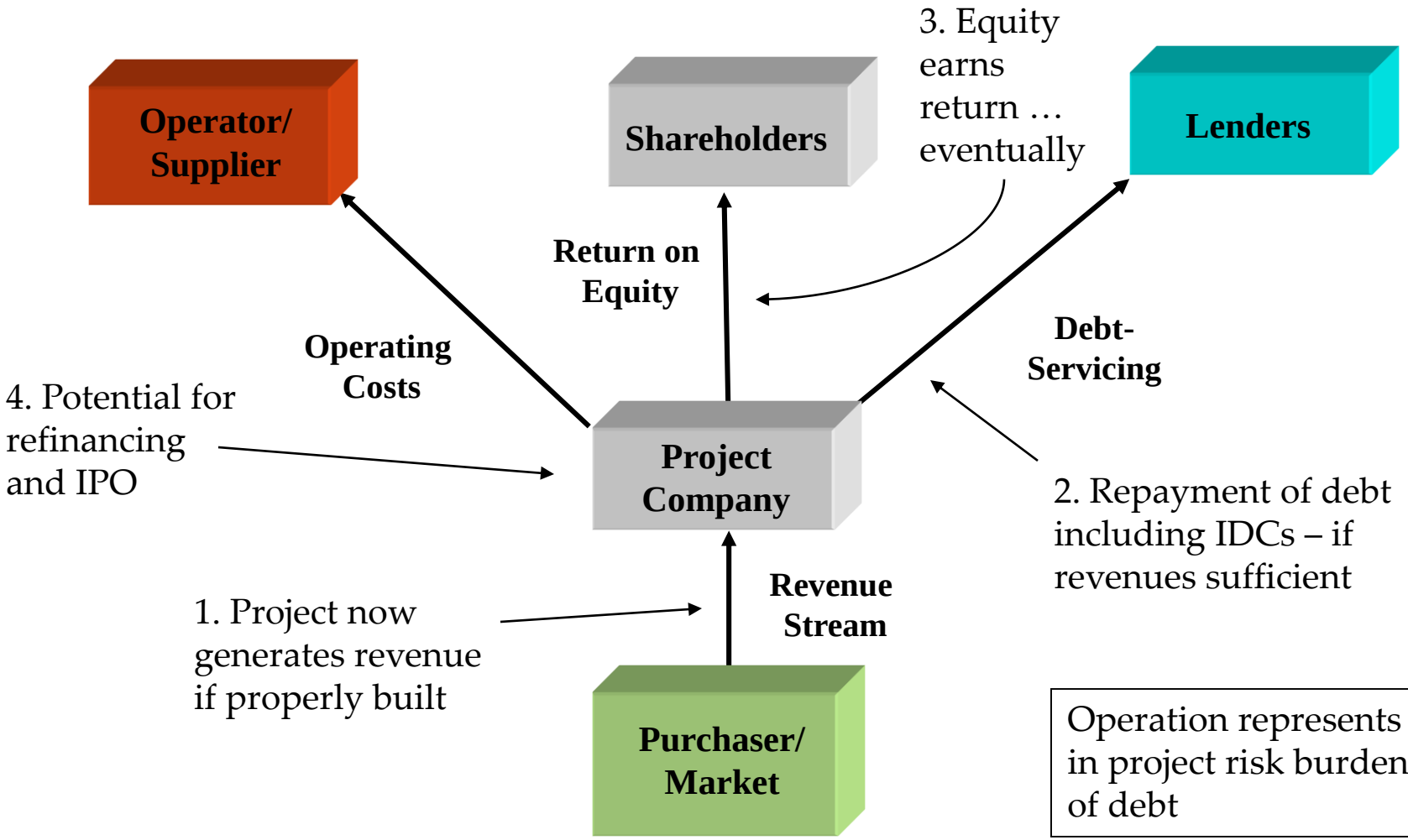
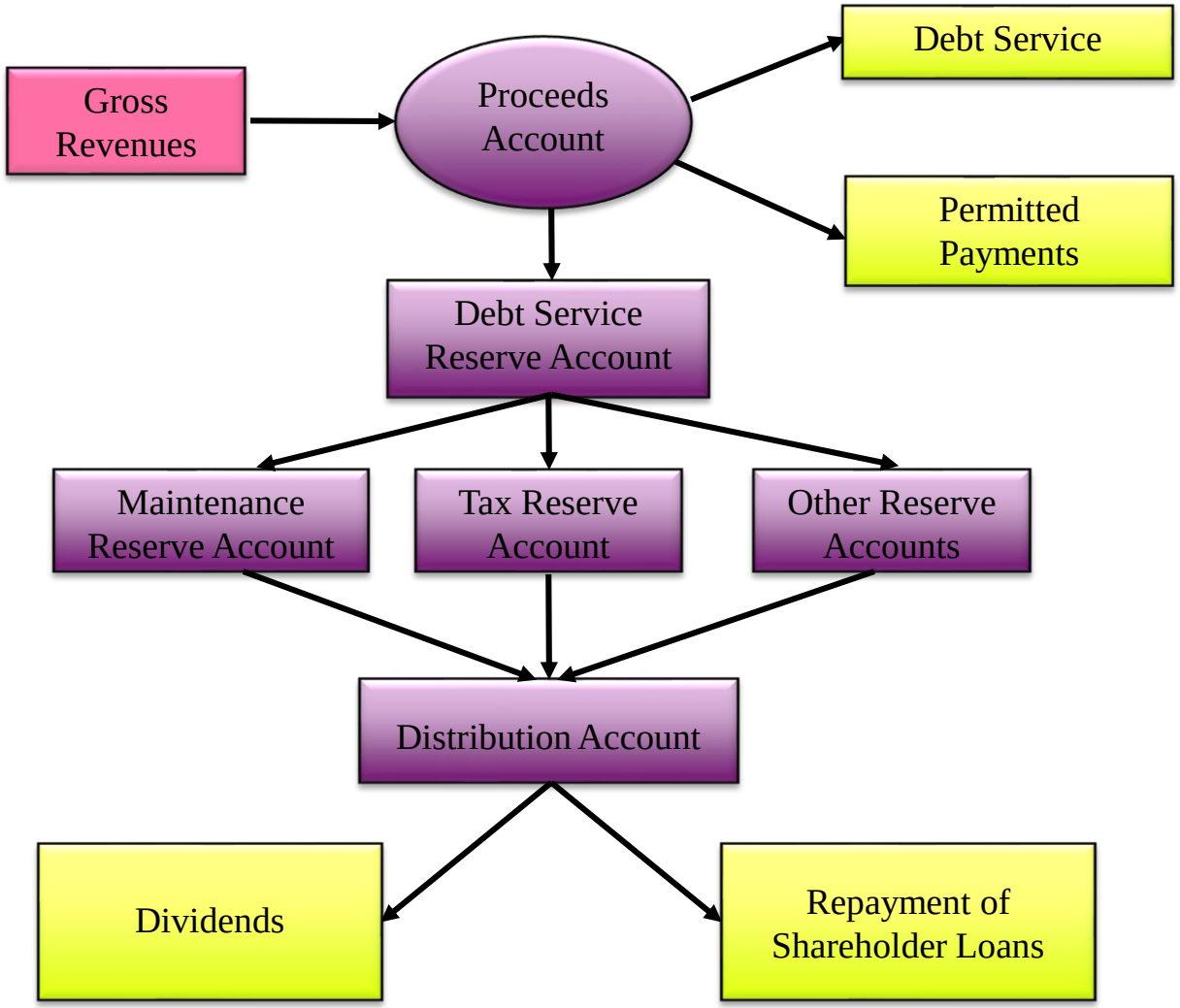
Operation Phase

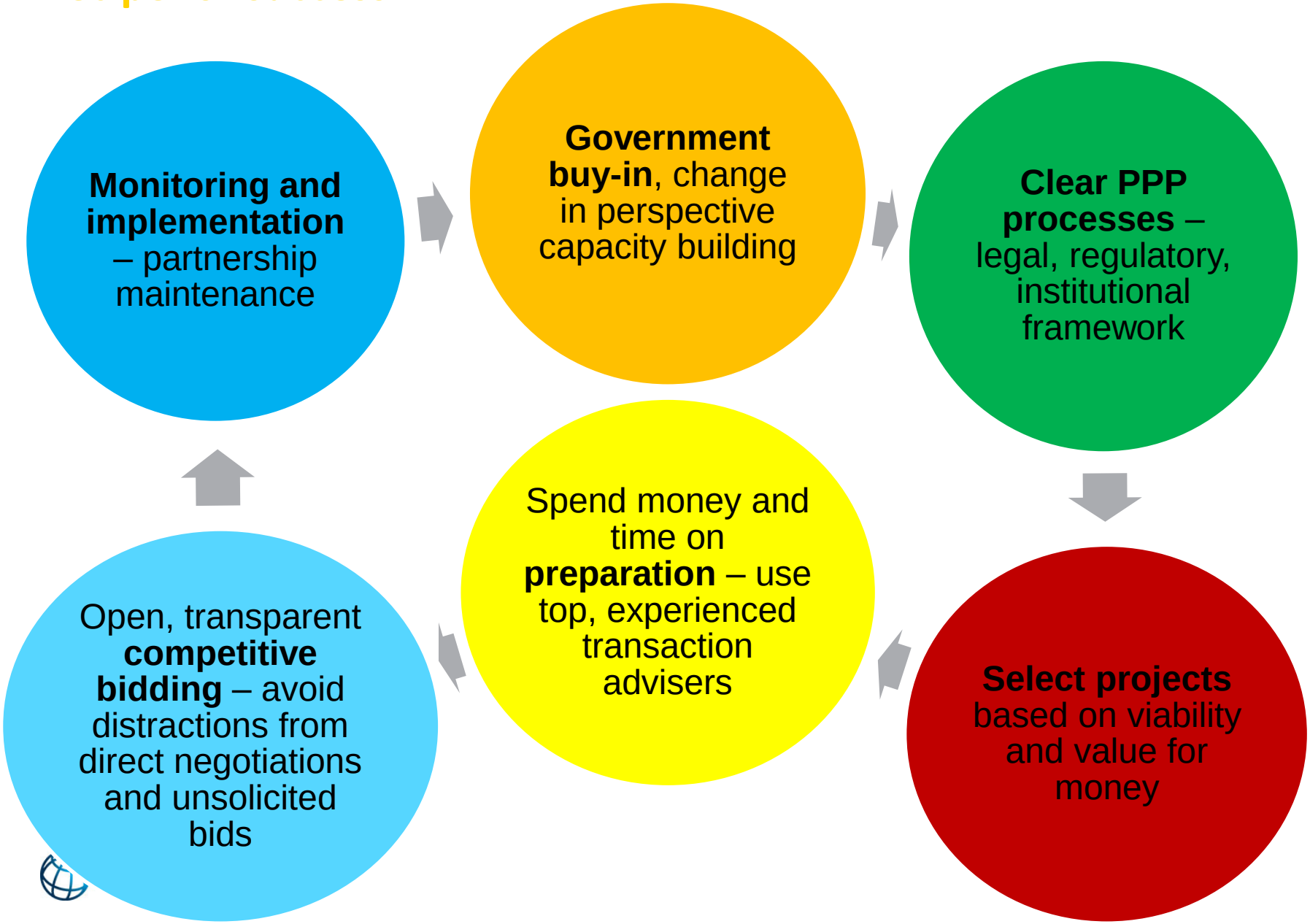


Operation represents shift in project risk burden; cost of debt

Cash Flow Waterfall



Recipe for success



Leverage

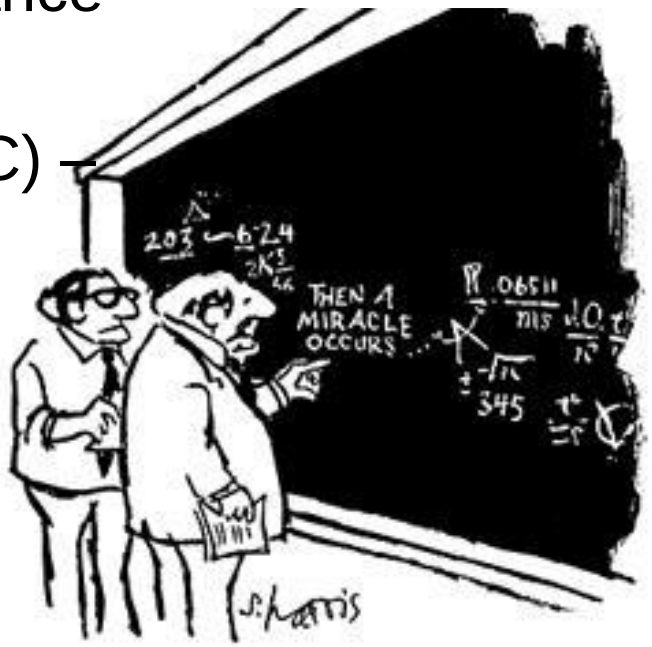
Debt v. Equity – debt is cheaper, but has no up-side (only down-side) making it risk sensitive.

Debt/Equity – how much cushion do lenders need? Based on project, sector and country risks. 90:10 to 50:50

Allows limited investor capacity to finance a large project

Weighted Average Cost of Capital (WACC) – project IRR is combination of Equity IRR and cost of debt:

IRR of 10% is low for investors, but if D:E of 75:25 and debt at 7%, then equity return is 19%, a significant leverage effect.



"I think you should be more explicit here in step two."

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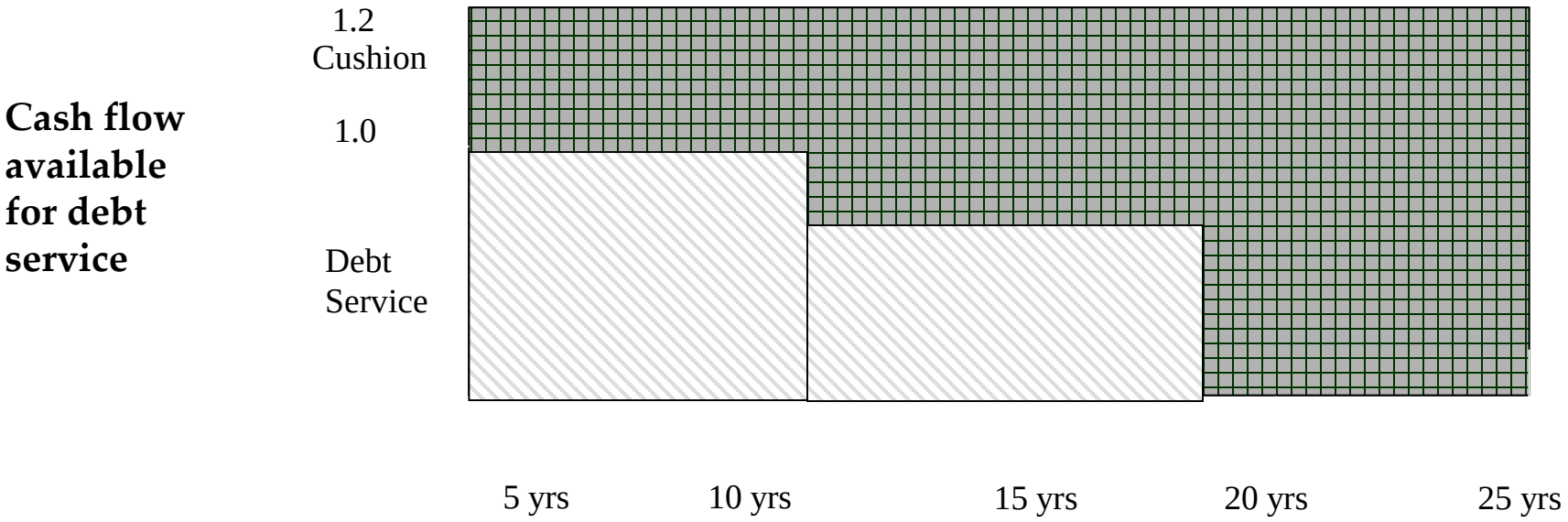
DSCR



Revenues available for distribution or other use (Cushion)

Revenues available for debt service

$$\text{DSCR} = \frac{\text{Revenues available for debt service}}{\text{principal + interest}}$$

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