Challenges to Infrastructure Development in Asia

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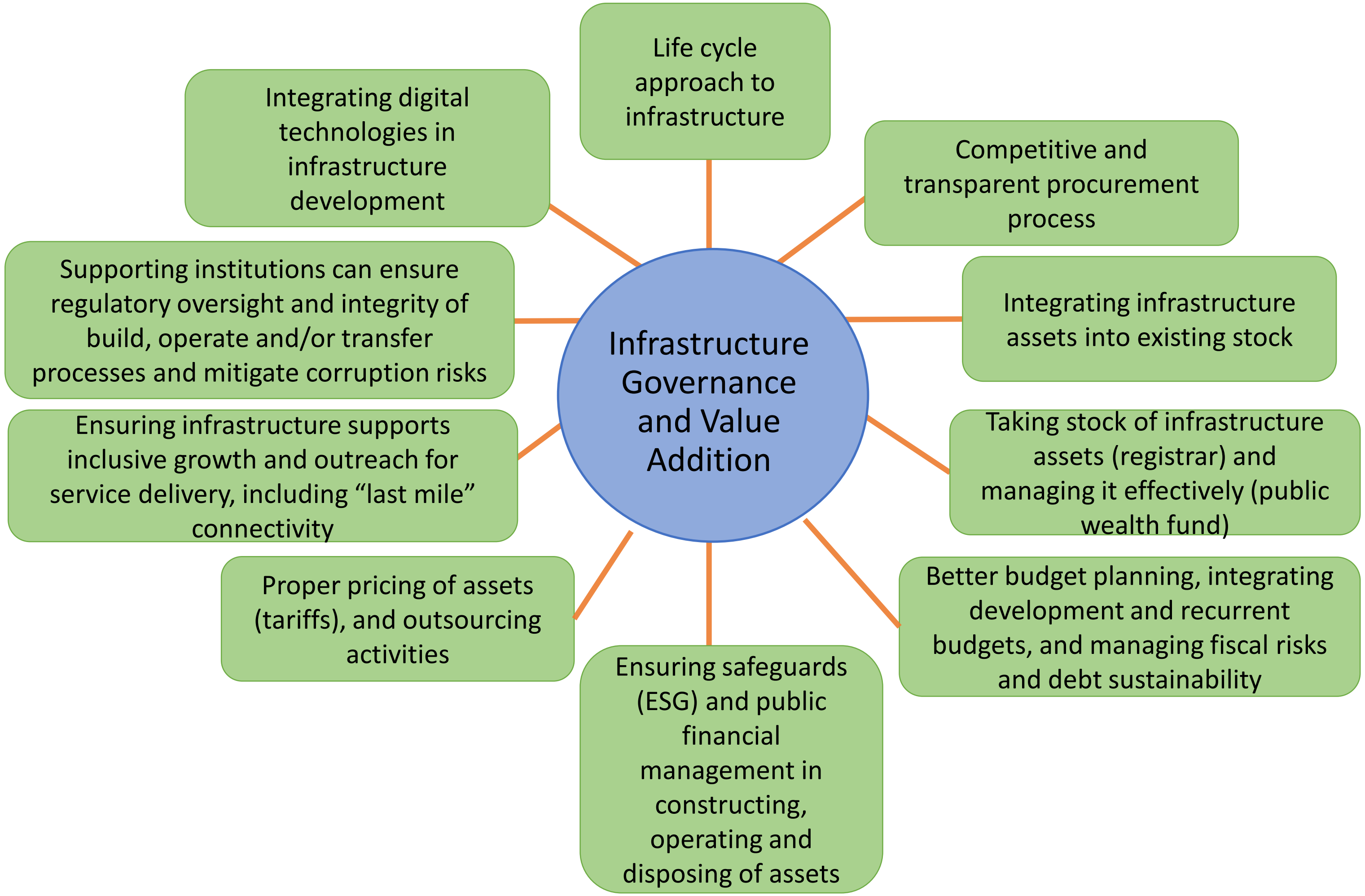
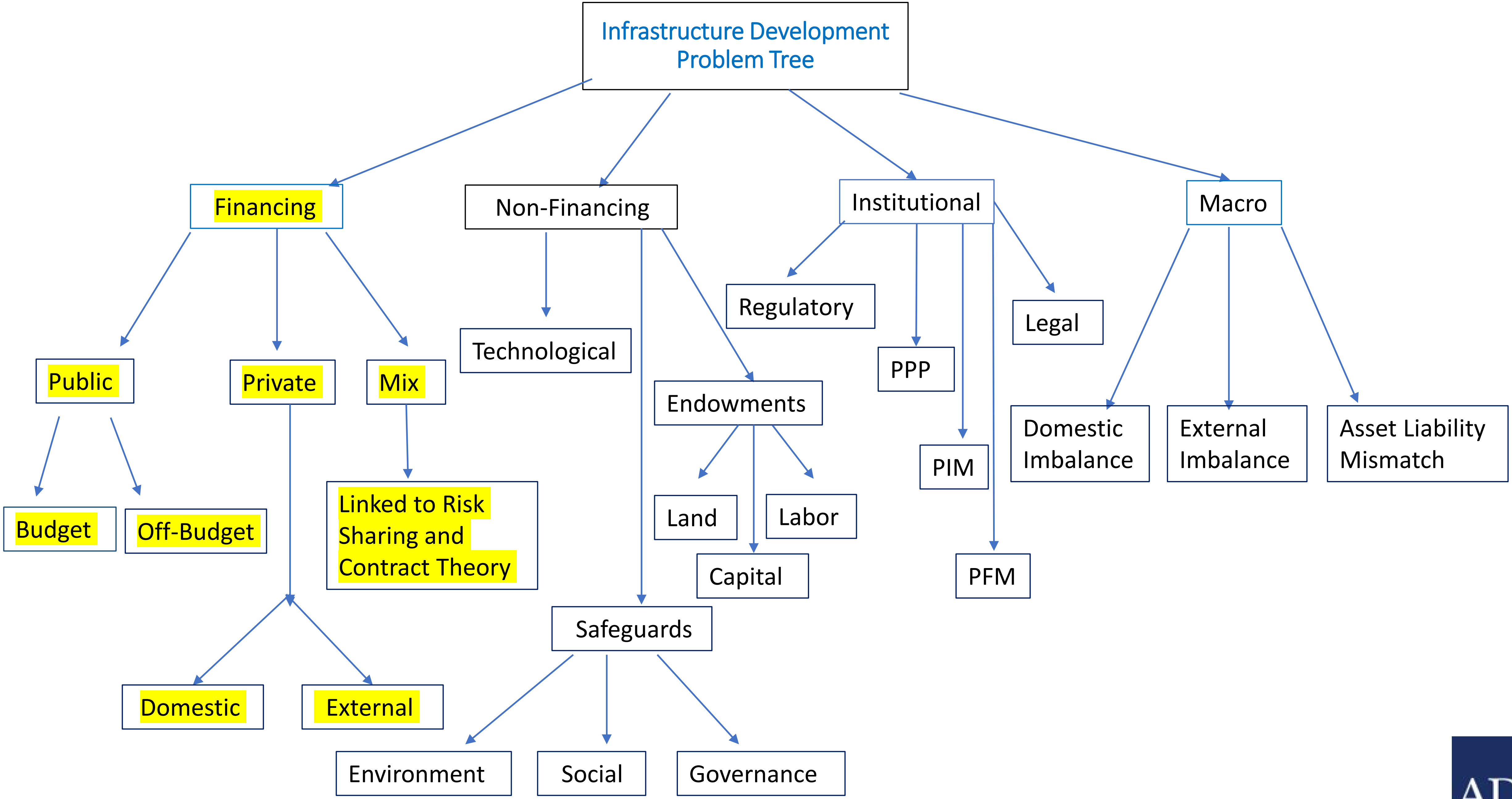
Infrastructure Governance
From “mind the gap” to “beyond the gap”




Infrastructure Development Problem Tree
Financing
Non-Financing
Institutional
Macro
Public
Private
Mix
Technological
Regulatory
Legal
PPP
Endowments
Domestic Imbalance
External Imbalance
Asset Liability Mismatch
PIM
Budget
Off-Budget
Linked to Risk Sharing and Contract Theory
Land
Labor
Capital
PFM
Safeguards
Domestic
External
Environment
Social
Governance

Stylized Facts on PPPs in Asia Pacific

- Asia Pacific will require $1.7 trillion of financing to meet infrastructure development requirements.
- State funds currently finance 92% of Asia Pacific's infrastructure investment
- In developing Asia Pacific, number of PPP projects have grown by 11% annually from 1991 to 2015 and accounts for approximately 50% of PPP projects across developing economies worldwide of which 70% are in East and South Asia.
- Greenfield projects account for nearly 70% of all projects by numbers and value.
- PPP project cancellation in developing Asia Pacific was 6.3% equivalent to $41.6 billion during 1991-2015 resulting in (i) large efficiency losses, (ii) discouraging private investment, and (iii) disruption to services.
- Project survival is more assured with (i) economic stability, (ii) government support through subsidies and guarantees, and (iii) strategies for proper project planning, preparation and implementation.
- Major hurdles to PPP include: (i) governance, (ii) institutional structure and capacity constraints, (iii) weak PPP laws and policies, (iv) weak country and sovereign risk ratings.

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Drilling Deeper on Constraints

Governance Issues

- Inefficient government bureaucracy
- Corruption
- Political and government instability

Insufficient Institutional Capacity

- Absence of dedicated PPP Unit
- Inadequate PPP preparation
- Uncompetitive PPP procurement
- SOEs as partners
- Lack of capacity to manage contracts
- Unregulated contract renegotiation or modification
- Absence of clear dispute settlement mechanism

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Breaking Down Challenges to Infrastructure Development

What do Asian DMCs point to?
Constraint 1: Limited pipeline of infrastructure projects
Constraint 2: Scarcity of funding sources
Constraint 3: (unencumbered) Land

Fundamental Challenge – Information is constrained leading to excessive uncertainty
- No complete contracts (no perfect foresight)
- Too many ? in due diligence derived from information that is (i) mis-specified (incorrect), (ii), not specified (missing but available information), and/or (iii) "known unknowns".
- Contingencies are not well spelled out.

Diversification of Risks – Works within certain bounds of information
Project completion risk is increasingly a proxy for projects that fail to meet "readiness" filter conditions for many reasons fundamentally traced to poor planning, structuring of projects (bankability), and weak institutional capacity (analysis/assessment/evaluation).

If (i) and (ii) are properly specified, it can reduce high contract renegotiation rates and gain better outcomes!

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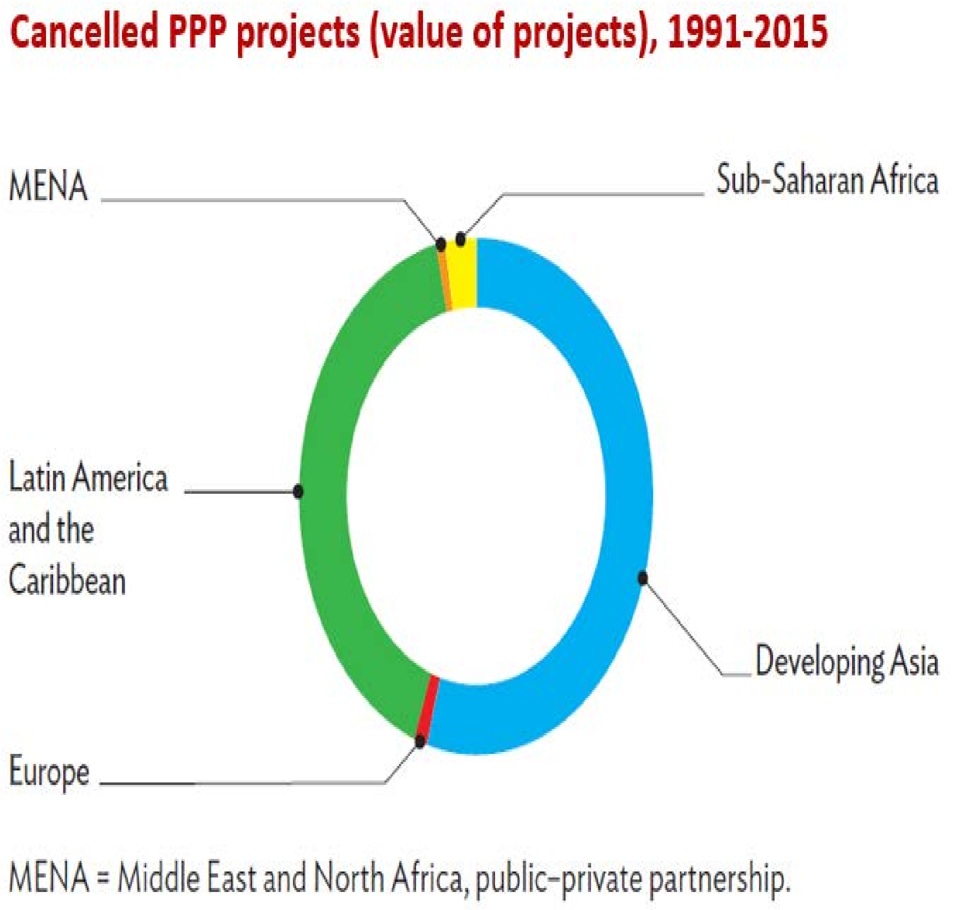
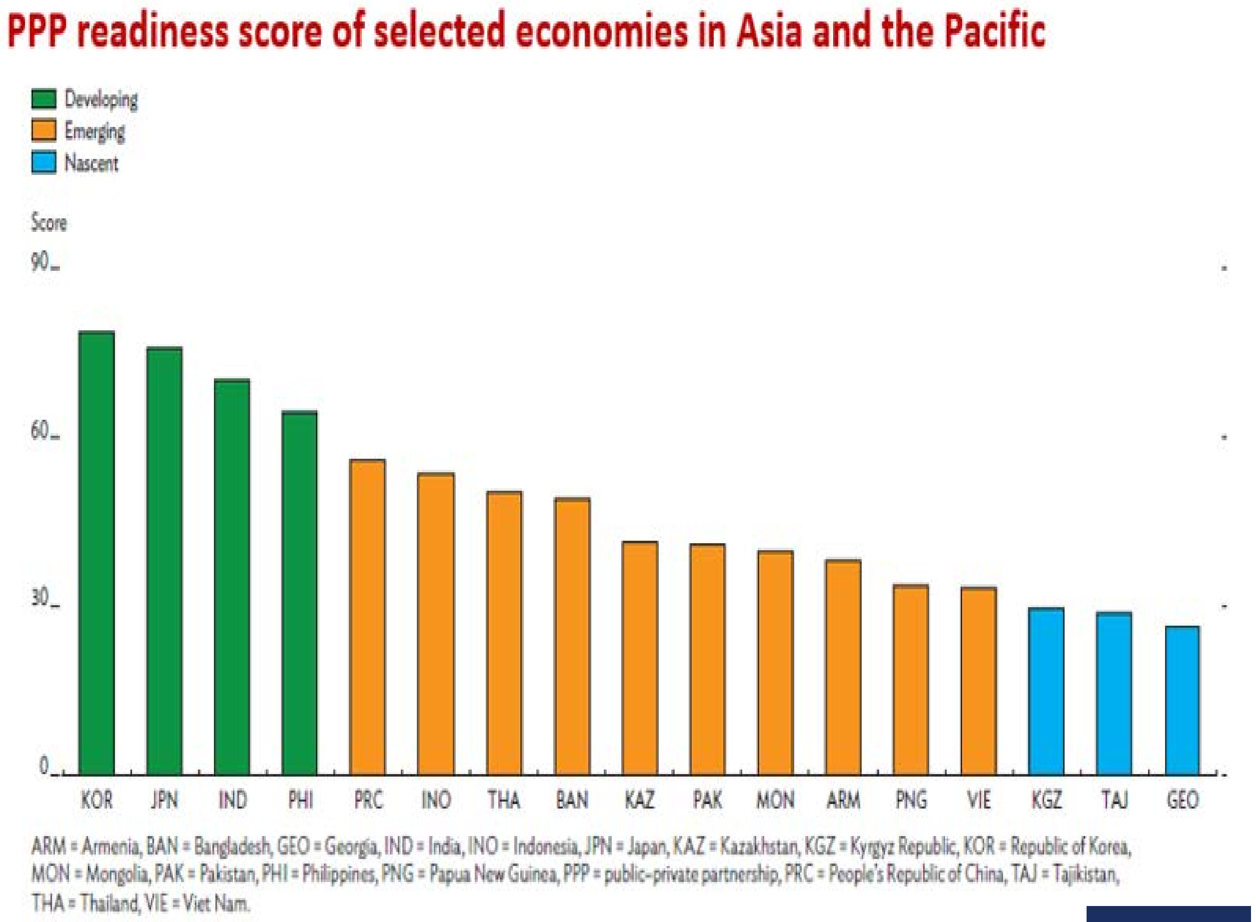
A Snapshot of Cancellation and Readiness Scores





Source: World Bank Private Participation in Infrastructure Database 2015 and Economist Intelligence Unit 2015.

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A life cycle approach to infrastructure development

	Planning	Preparation	Procurement and Financing	Implementation
PHASE	**Planning**	**Preparation**	**Procurement and Financing**	**Implementation**
TASKS	• Needs Identification • Sustainable Infrastructure plan • Infrastructure pipeline • Project Selection	• Feasibility Studies - *Technical* - *Economic* - *Environment* - *Social* - *Legal/regulatory* • WLCC analysis • Government Funding	• Select procurement strategy - Public procurement - PPP • Select financing strategy • Contractual efficiency	• Design • Construction • Operation • Maintenance • Disposal • Monitoring and Evaluation
DECISION	**Investment decision**	**Validation of investment decision**	**Procurement and financing strategy decision**	**Asset management strategy decision**

Source: ESCAP.
Note: Whole life cycle costing (WLCC)

The Four Pillars of ADB's Public-Private Partnership Operational Framework

Pillar 1	Pillar 2	Pillar 3	Pillar 4
Advocacy and capacity development	Enabling environment	Project development	Project financing
• Create awareness • Invoke leadership • Identify PPP potential in sector planning and the private sector development agenda • Development capacity of government and ADB staff • Enhance external knowledge management links	• Develop policy, legal, regulatory, and institutional framework to facilitate, guide, and manage the development of PPPs (country- or sector-specific)	• Align ADB project cycle to the PPP development process • Assist in the development of pathfinder projects • Provide support (including advisory support) throughout the process up to contract award and/or financial close that can come as expert support, tool kits, funding costs of transaction advisors, or procurement support	• Provide credit enhancement products, e.g., equity, long-term debt, refinancing subordinate debt, cofinancing, and guarantees • Establish credit guarantee facility • Provide public sector financial support through schemes such as viability gap funding
Regional Department Responsibility			**Private Sector Operations Department and Regional Department**

PPP = public–private partnership.
Source: Asian Development Bank.

Source: Public-Private Partnership Operational Plan 2012-2020, ADB

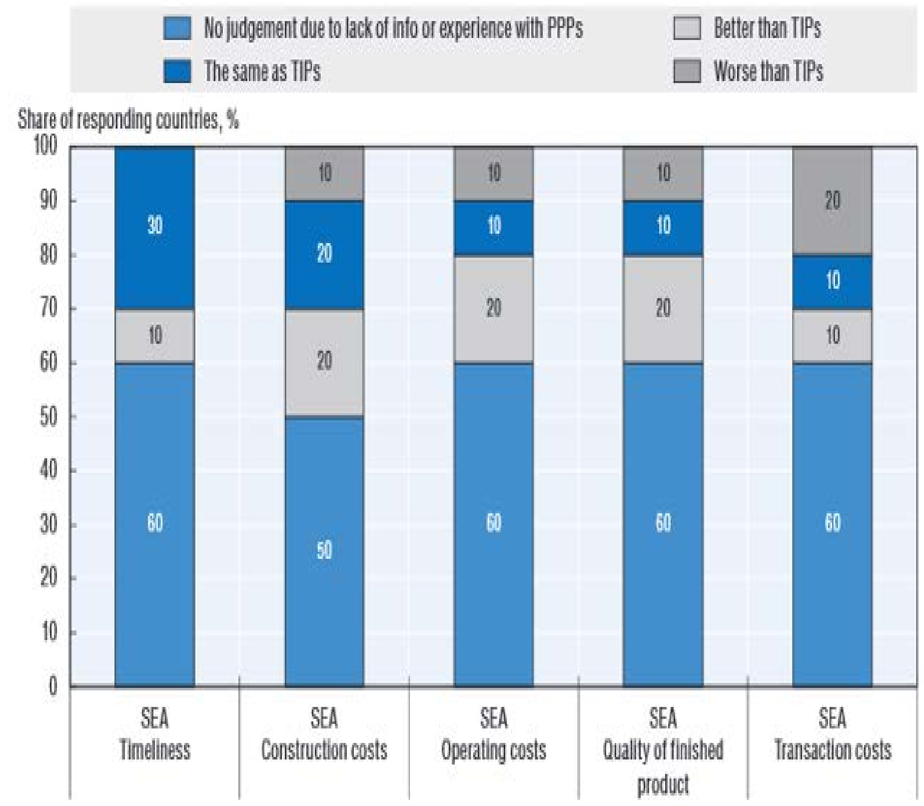
Value for Money Assessment

Dedicated PPP units and value for money assessment of PPPs and TIPs, 2018

	Use of public private partnerships	Existence of PPP unit				Use of relative value for money assessments	Use of absolute value for money assessments	
		Dedicated PPP unit reporting to Ministry of Finance	Dedicated PPP units reporting to line ministries	Other PPP unit	No dedicated PPP unit exists in central/federal government	For PPPs	For PPPs	For TIPs
Brunei Darussalam	✓	✓				⦿	⦿	□
Cambodia	✓	✓				⦿	●	●
Indonesia	✓	✓				⦿	●	●
Lao PDR	✓				✓	●	●	●
Malaysia	✓			✓		●	●	●
Myanmar	✓				✓	○	○	○
Philippines	✓		✓			●	●	●
Singapore	✓				✓	○	○	○
Thailand	✓	✓				●	●	●
Viet Nam	✓		✓			●	●	●
SEA Total	10	4	2	1	3			
● Yes, for all projects						5	7	7
○ Yes, for those above certain monetary threshold						2	2	2
⦿ Yes, ad hoc basis						3	1	0
❍ Yes, other						0	0	0
□ No						0	0	1
Australia	✓		✓			●	●	●
Japan	✓	✓				○	●	●
Korea	✓							
New Zealand	✓	✓				●	●	○
OECD Total	26	12	8	2	11			
● Yes, for all projects						9	11	9
○ Yes, for those above certain monetary threshold						5	4	5
⦿ Yes, ad hoc basis						2	2	1
❍ Yes, other						5	3	4
□ No						5	6	5
x Not applicable / survey not answered						0	0	2

Sources: For SEA countries, OECD (2018) Budget Practices and Procedures Survey for Asian Countries. For OECD countries, OECD (2018) Capital Budgeting and Infrastructure Governance Survey.

Countries' assessments of PPPs relative to TIPs along various dimensions, 2018



Source: For SEA countries: OECD (2018) Budget Practices and Procedures Survey for Asian Countries.

Source: Government at a Glance Southeast Asia, ADB and OECD

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Own Experience

- **Adopt PPPs selectively** – PPPs can be a financially advantageous if the price of transferring risks to the private sector according to risk preferences and management capabilities is lower than the higher cost of finance that the private sector partners face in the market.
- **Pre-requisites for Value for Money in PPPs** – Maintaining competitive tension in pricing of risk between parties. In addition, (i) private sector access to better technology, (ii) more effective project execution including revenue collection, and (iii) benefits from bundled construction and management follow in importance.
- **Strengthen Public Investment Management** - Countries with stronger public investment management institutions have more predictable, credible, efficient, and productive investments, and can avoid the main sources of chronic renegotiation cycles: unsolicited proposals and opportunistic bidding (optimism bias).
    - PIMA extension to cover procurement, maintenance, independent review and portfolio management is positive step to address risks by expanding bounds of information.
    - Most countries must still benefit from building stricter oversight of PPPs and a better integration between national strategic planning with fiscal budgeting and PPP planning.
- **Avoid the "see-saw" effect -** In efforts to attract private sector participation in infrastructure development, authorities tend to assume (advertently or inadvertently) disproportionate risks ("risk bearer of last resort") resulting in heightened fiscal fragility
- **Ensure sequencing** - Many jurisdictions have either weak policy and regulatory frameworks in place and/or limited experience in assessing the level of "subsidy" required to ensure bankability. Typically arises in VGF operations.

Returning to PPPs and finances

- Asia is largely described as a bank based financial system
- Efficiency considerations would suggest maturity transformation from bank financed projects during construction phase to bond financed during less riskier post construction phase.
- This would free up capital from exposure limits and allocate capital more efficiently as well as substantially reducing the refinancing risk.
- However, the reality is that pricing is more relationship-based than risk-based and as bank margins are squeezed it results in "limited wiggle room" (i.e., missed repayment or other credit event can easily undermine project viability).
- In countries such as India, with weak bank balance sheets and limited prospects on search for higher yield – new greenfield projects - there tends to be a "bad equilibrium", i.e., the incentives to sell off performing loans is largely muted.
- Potential game changer: Basel 3.
  - Sets limit on credit exposure to a single counterparty to 25% of a bank's core capital
  - Requires 100% high-quality liquid assets for the kinds of SPVs often used in infrastructure project finance

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Thank you!