

UNCTAD-ITD 2018 Regional Workshop on Phase 2 of IIA
Reform for the Asia-Pacific Region



Infrastructure financing and PPP in Asia-Pacific: Status and Policies

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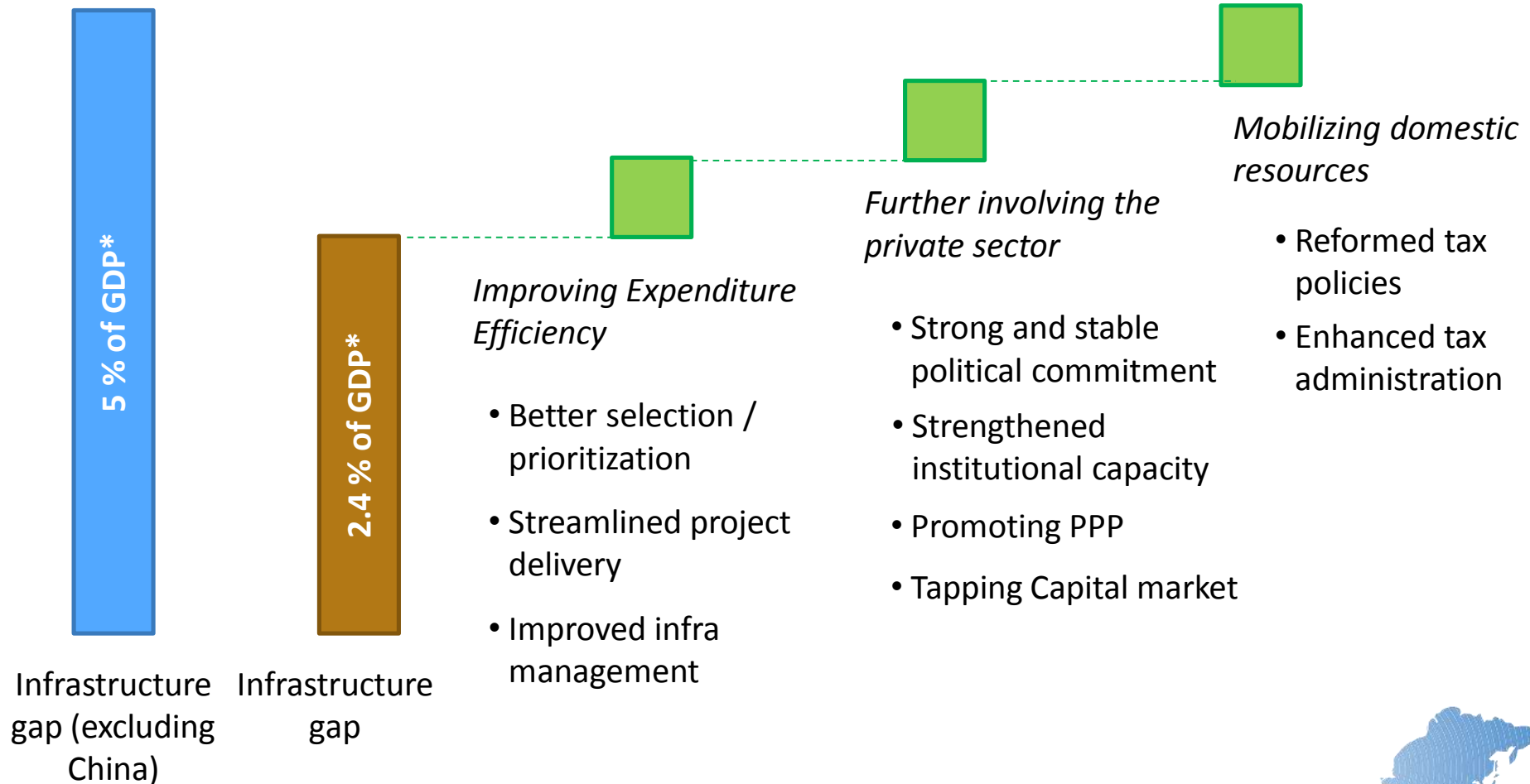
22 Feb 2017, Bangkok

Background

- **Infrastructure investments have traditionally been financed with public funds, given the inherent public good nature of infrastructure.**
- **Public deficits and increased public debt to GDP ratios have led to reduction in the level of public funds for infrastructure.**
- **Government needs to improve public expenditure efficiency and increase revenue mobilization.**
- **Private sector needs to play much more role to finance infrastructure gap**
- **In this context, regulatory and institutional reforms are required to make infrastructure more attractive to private investors:**
 - **Generate a pipeline of bankable projects**
 - **Deepen capital market to channel the region's substantial savings into infrastructure investment**



Infrastructure gap and strategies

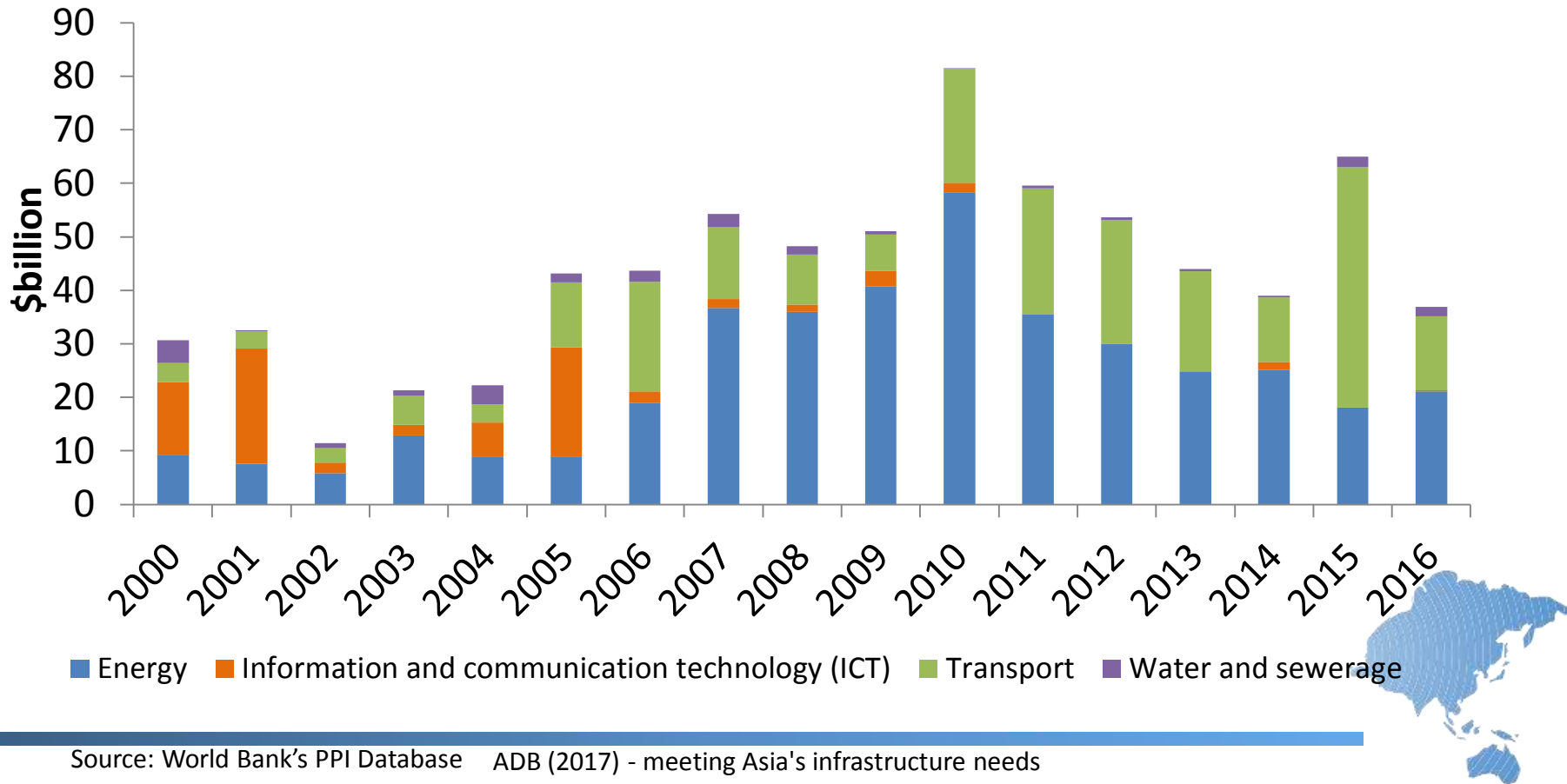


Note: * ADB estimate (2017)

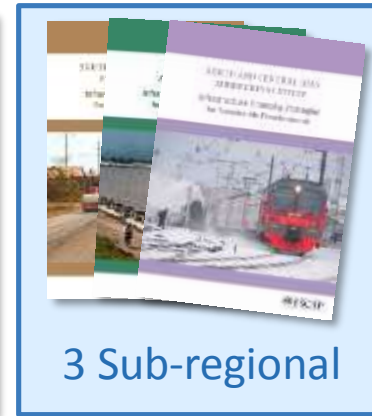
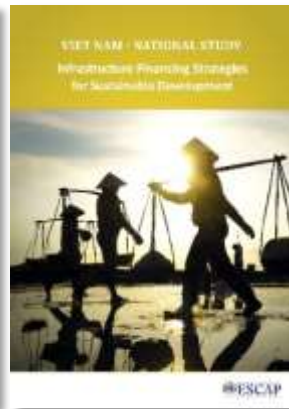
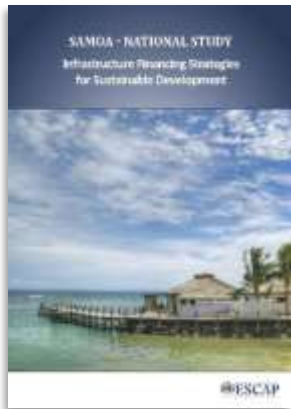


Scaling-up private investment in infrastructure is critical

To address infrastructure gaps, it is estimated that private investments should increase from around \$63 billion a year to as high as \$250 billion over 2016-2020



Five National Studies



National Workshop & Sub-regional Policy Dialogue
Kathmandu (Feb 2017)

National Workshop & Sub-regional Policy Dialogue
Manila (Aug 2017)

National Workshop
Apia (Jan 2017)

National Workshop & Sub-regional Policy Dialogue
Tbilisi (Jun 2017)

National Workshop
Hanoi (Oct 2017)



Strategy #1: Improving Public Expenditure Efficiency in Infrastructure Development

Typical issues with infrastructure projects

- Poor project selection (e.g. based on political considerations)
- Delays in design and completion of projects
- Corrupt procurement practices
- Cost over-runs / Incomplete projects
- Failure to operate and maintain assets effectively

Boosting productivity can reduce infrastructure spending by **40%** according to McKinsey

✓ Strengthening Planning and Prioritization

- Does the country have a National or Sub-National Infrastructure Plan? Does the country have guidelines for the appraisal of infrastructure projects?

✓ Streamlining infrastructure project delivery

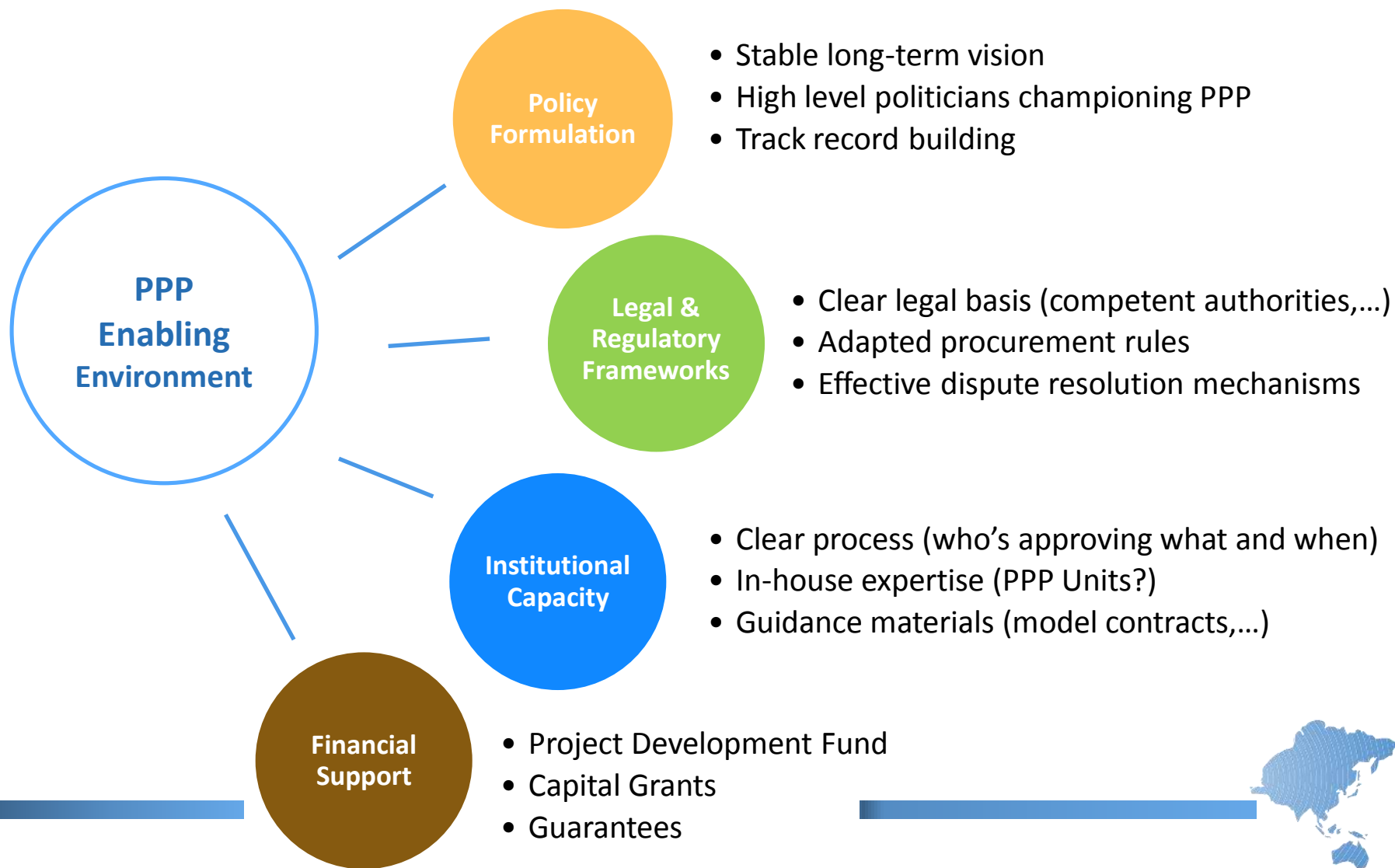
- Accelerating permit approvals and land acquisition, enhancing procurement practices

✓ Making the most of infrastructure assets

- Demand management techniques, timely maintenance, innovation,...



Strategy #2: Partnering with the Private Sector through PPP



Strategy #3: Tapping financial markets & institutional investors

- Dominant banking sector role → risk of an over-exposition / single borrower limits
- Capital markets → reduce the pressure on the banking system + fresh capital to finance / refinance infrastructure projects.
- Much attention on institutional investors given the long-term nature of their liabilities.

***Obstacles** for foreign investors: underdeveloped markets, capital controls, low credit rating*

***Possible solutions:** deepen capital markets, create investment opportunities, provide flexibility in investment mandates, develop credit enhancement mechanisms*

Investment Modalities

Infrastructure Companies

- Stock Market
- Corporate Bond

Infrastructure Projects

- SPV Listing
- Project Bond

Infrastructure Funds

Municipal Bonds



Strategy #4: Mobilizing domestic resources through tax reforms

- Public resources remain the backbone for infrastructure financing
- In most Asia-Pacific developing countries, **private** infrastructure investment is less than 1% of GDP, far below the normal infrastructure spending needs of 5-10% per year
- Tax to GDP ratio in the region is however among the lowest in the world
 - ✓ Rethinking tax incentives ?
 - ✓ Mobilizing resources at the Municipal level
 - ✓ Improving collection efficiency for VAT in A-P developing countries
 - ✓ Exploring the potential of direct taxes (Corporate and Personal Income Tax)



PPP Definition

Long term (relationship beyond construction phase)

Contract based

"A **long-term contract** between a private party and a government agency, for providing public services and/or developing public infrastructure, in which the private party bears significant **risk** and management responsibility, and remuneration is linked to performance "

~~Privatization~~

- ✓ Mobilizing resources
- ✓ Achieving a long-term solutions
- ✓ Transferring risks to the private sector



Why use PPP?

- PPPs make projects affordable
- Injection of private capital
- Better value for money over the lifetime of the project
- More efficiency in procurement
- Faster project delivery with more projects in a defined timeframe
- Risks are allocated to the party best able to manage the risk



PPP Limitations

- **Not free:** users and/or tax payers have typically to pay for the project to be delivered profitably
- **Public guarantees = contingent liabilities:** fiscal risk has to be properly assessed and monitored
- **Complex arrangement:** high transaction costs / internal capacity constraints / not suitable for all projects (limited flexibility)
- **Private sector capacity** to take such long-term commitments / enough competition?
- **Possible public resistance**

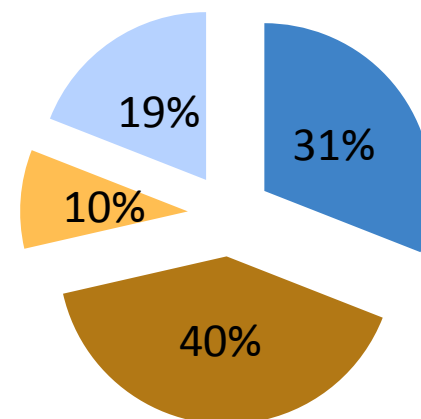


PPP Legal & Regulatory Frameworks

- Objectives, Scope and Models of PPPs
- Institutional Responsibilities (Approval, ...)
- Financial Support Mechanisms
- Procedures (Procurement, Dispute Resolution, etc.)

*Most countries have enacted **PPP Law** in the Asia-Pacific region ...*

*... but some countries have simply issued **guidelines / policy** documents (mainly in South Asia)*

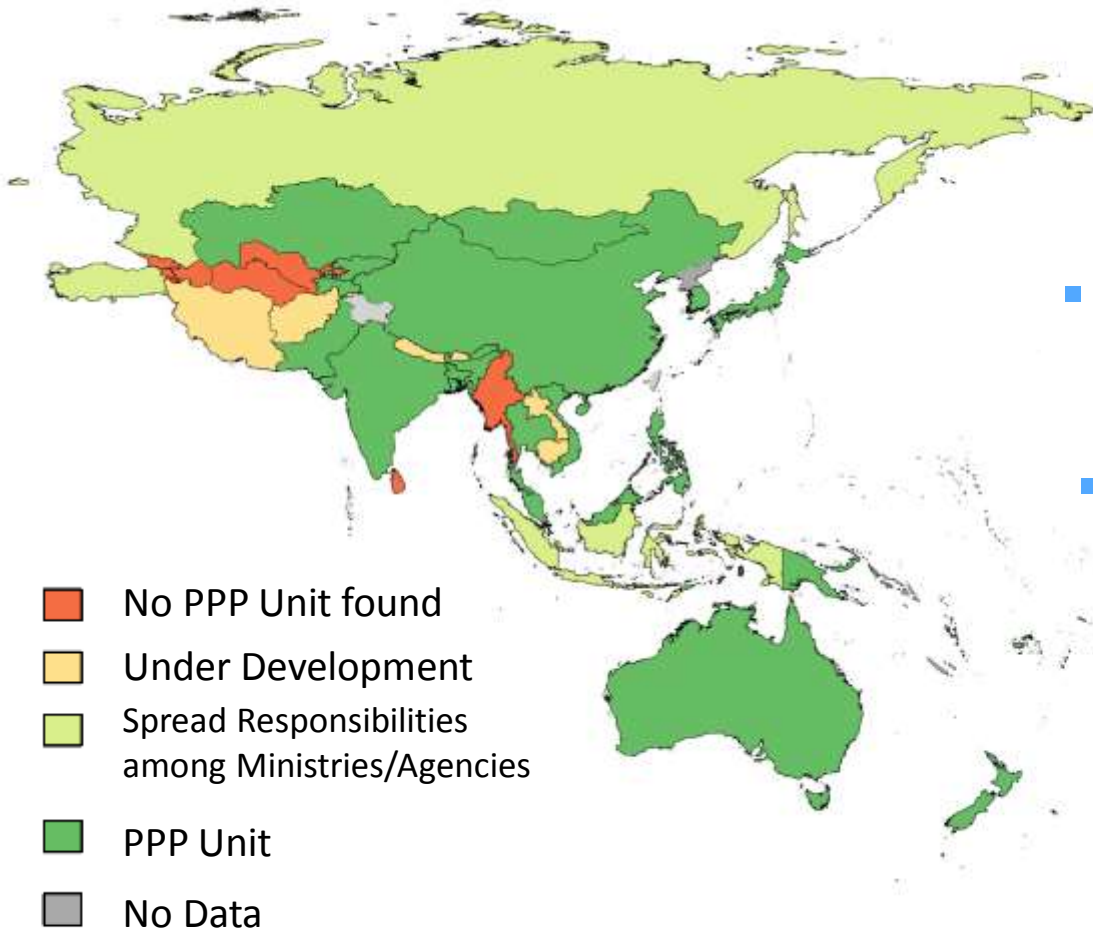


- PPP Guidelines
- PPP Law
- Concession Law
- No PPP Law / Guidelines



Institutional Arrangement

Asia-Pacific Situation



Among 42 countries reviewed:

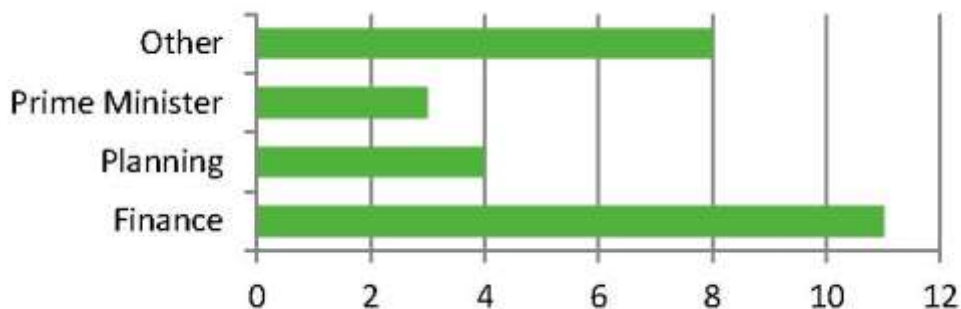
- 20 Central PPP Units
- 3 countries with multiple central entities responsible for PPP
- 6 PPP Units under development
- 13 countries with no central unit



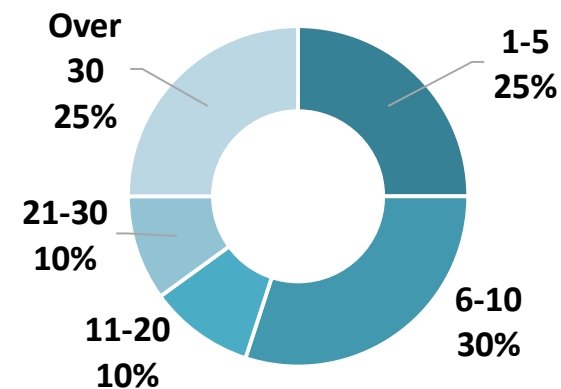
PPP Units

Location, Size and Role

- **Location:** Ministry of Finance , Planning, Prime Minister's Office



- **Size**
(No. of staff)



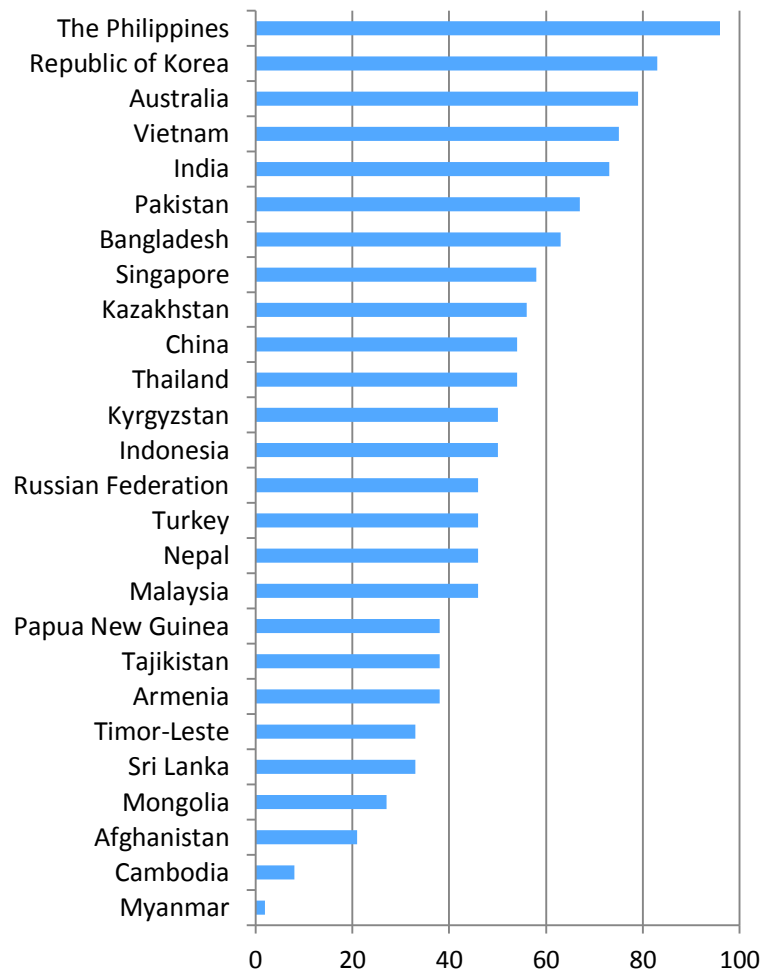
- **Role:** Policy Formulation, Standardization, Coordination, Capacity Building, Promotion and Technical Support

Internal center of expertise



PPP Preparation

Good Practices

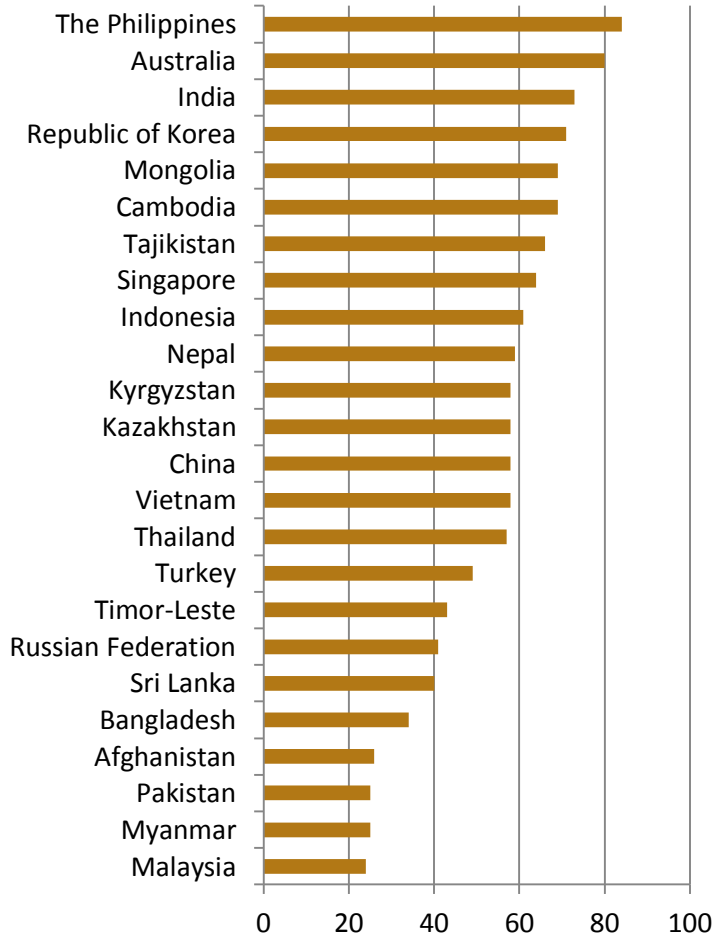


Good practices :

- Assessment of long-term financial implications (prior MoF approval)
- PPP project prioritized along other public investment (planning process)
- Project justified in terms of socioeconomic analysis, market assessment, procurement method, etc. (legal requirements + methodology)
- Standardized contracts / consistency



PPP Contract Management



Good Practices in contract management:

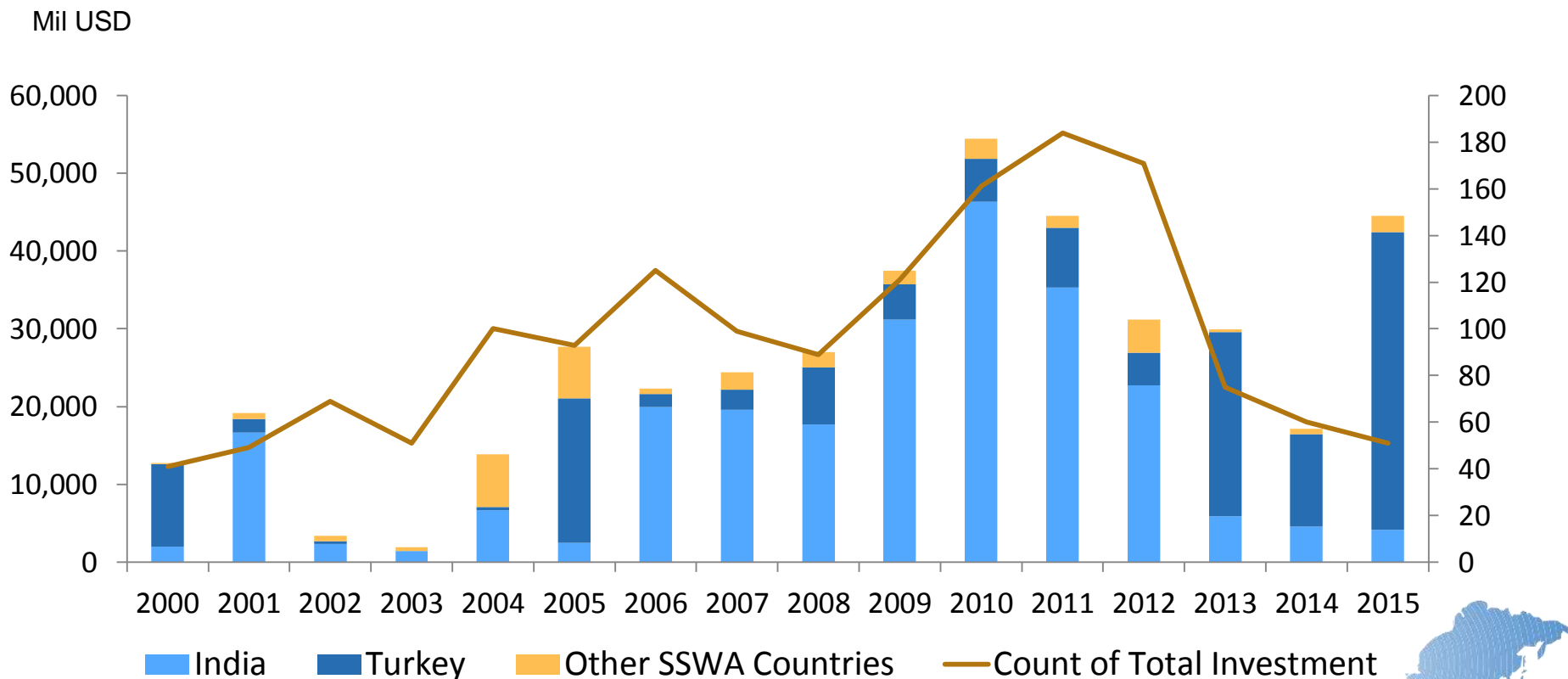
- Establishment of a PPP project management team;
- Regulation of contracts modifications;
- Dispute resolution mechanisms in place;
- Ground for termination are well-specified and associated consequences defined;
- ...



PPP Track record

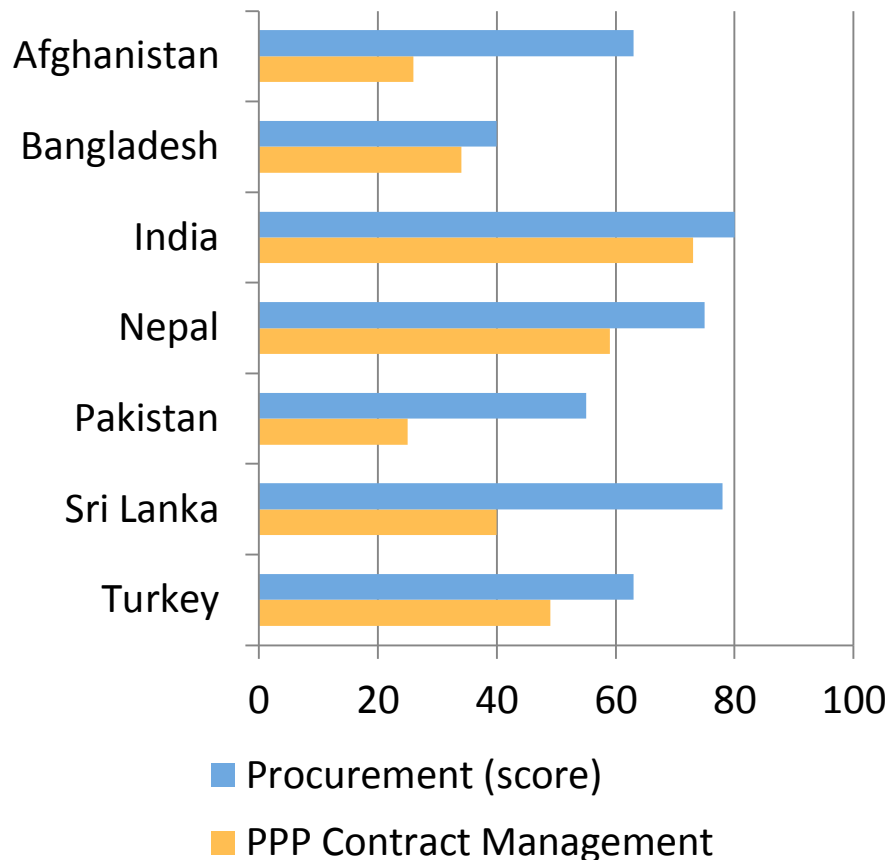
South and South West Asia

- Over \$ 40 billion mobilized in 2015 (driven largely by Turkey)
- Indian levels remain low compared to 2006-2012 period



PPP Enabling Environment

South and South West Asia



*Good Practices to ensure **transparent & fair competition** in procurement include:*

- *online publication of procurement and award notice,*
- *evaluation according to the criteria stipulated in the tender documents,*
- ...

*Good Practices in **contract management**:*

- *Establishment of a PPP project management team,*
- *Regulation of contracts modifications*
- *Dispute resolution mechanisms in place,*
- ...

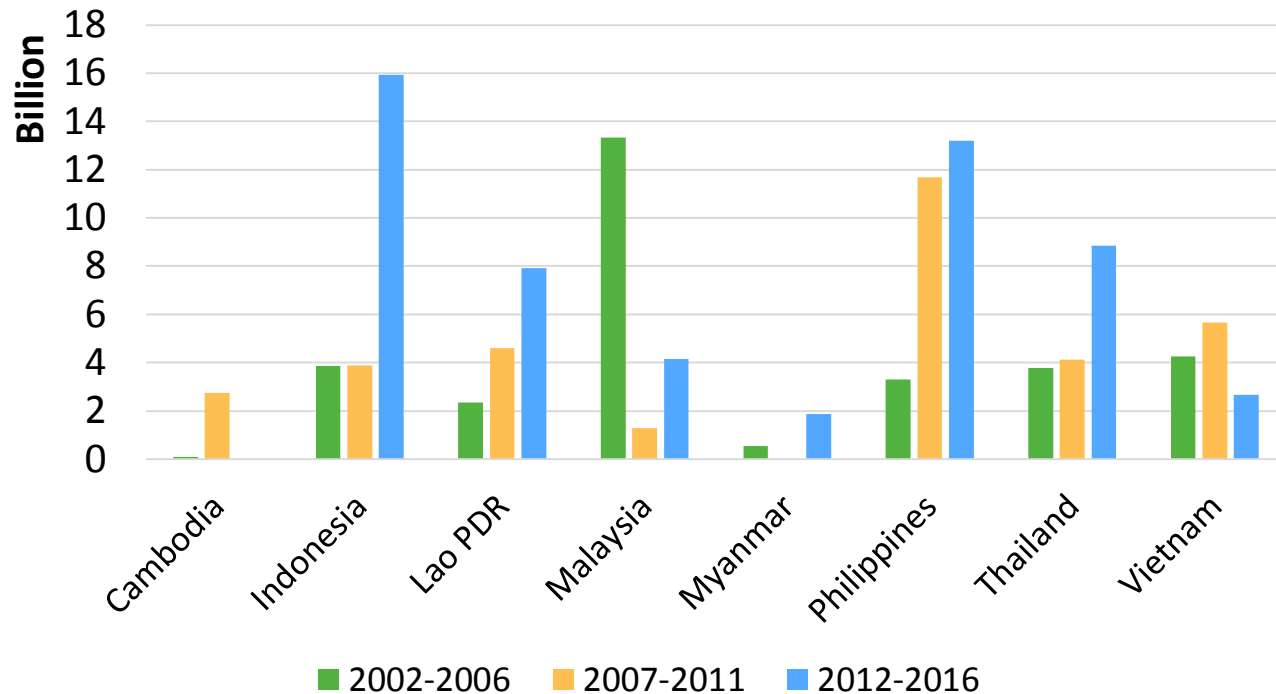


PPP Track record in South-East Asia

Country Breakdown

- Indonesia / the Philippines = largest market recently

... Lao PDR proportionally highest share of private investment



Private Investment
(2012-16) as % of GDP

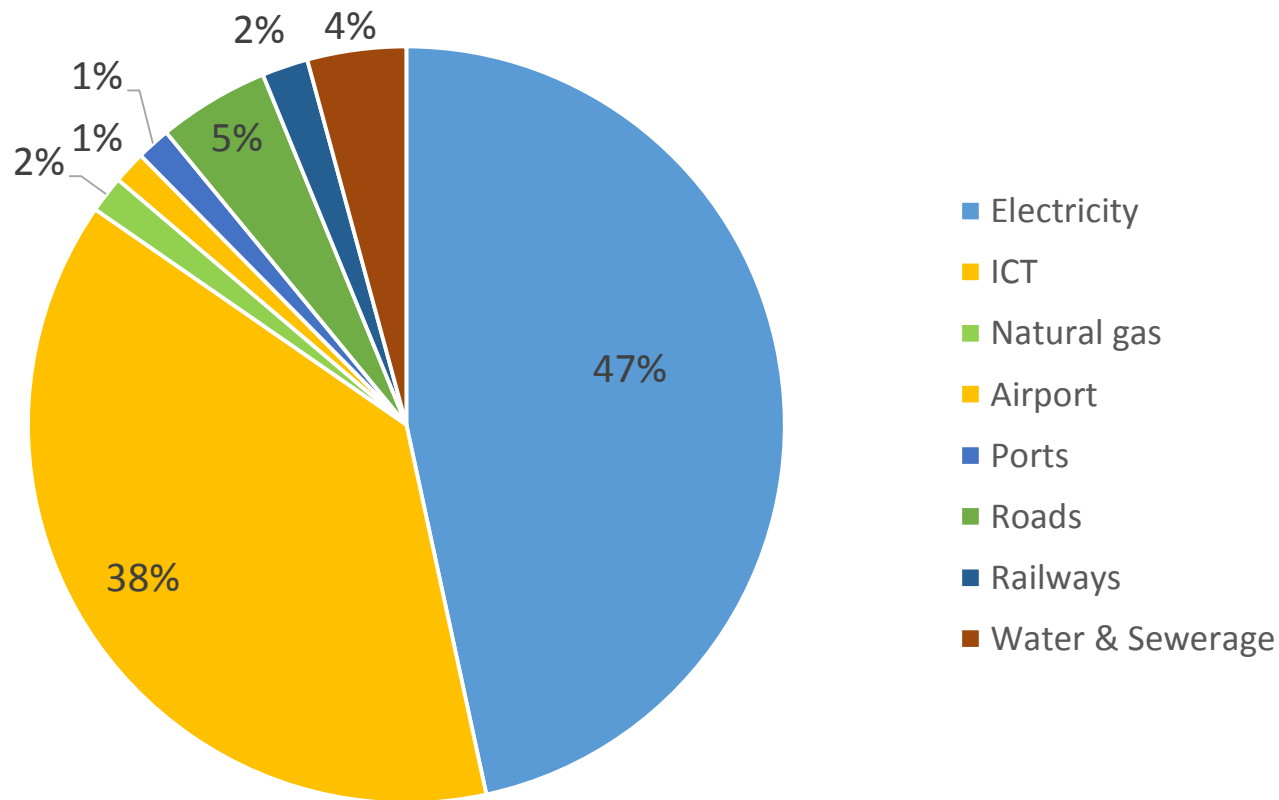
Cambodia	0.0%
Indonesia	1.8%
Lao PDR	59.6%
Malaysia	1.2%
Myanmar	2.9%
Philippines	4.6%
Thailand	2.2%
Vietnam	1.4%



PPP Track record in South-East Asia

Sectoral breakdown

- Private investment in infrastructure, 2000-2016
- Mainly in electricity sector, followed by ICT



Institutional Arrangements South-East Asia

Country	Institutional Framework	Ministry	Location
Brunei Darussalam	No formal PPP Unit	N/A	N/A
Cambodia	PPP Unit under development	Finance	Ministry of Economy and Finance
Indonesia	Several central PPP Units		
Lao PDR	PPP Unit under development	Planning	MPI
Malaysia	PPP Unit	Prime Minister	Prime Minister's Department
Myanmar	No formal PPP Unit	N/A	N/A
The Philippines	PPP Unit	Planning	PPP Center under NEDA
Singapore	No formal PPP Unit	N/A	N/A
Thailand	PPP Unit	Finance	SEPO under Ministry of Finance
Vietnam	PPP Unit	Planning	PPP Office under MPI
Timor-Leste	PPP Unit	Finance	Ministry of Finance



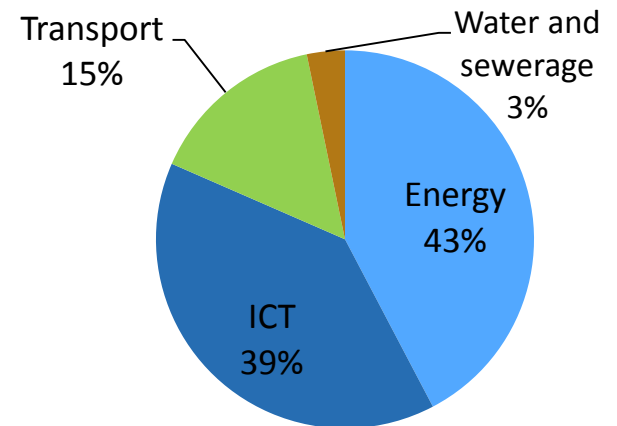
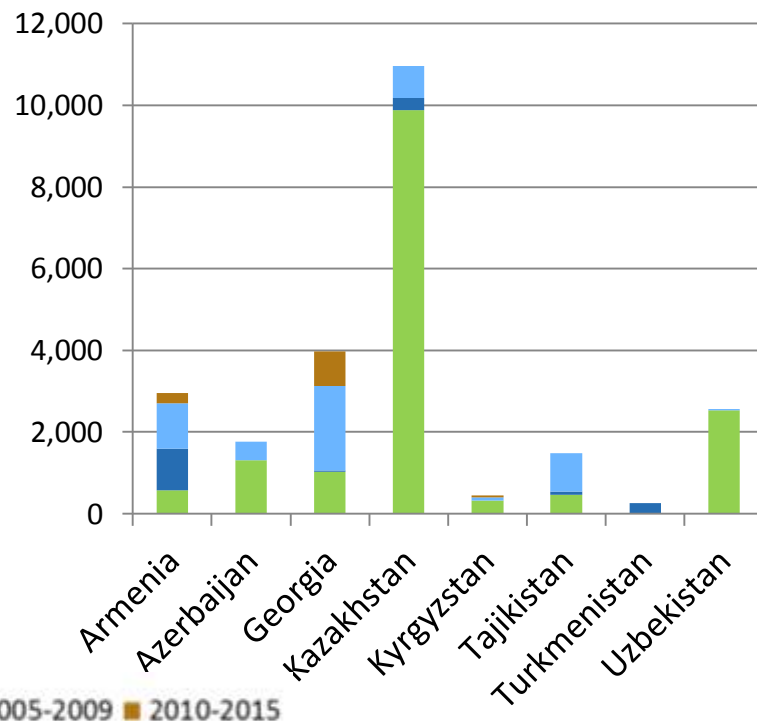
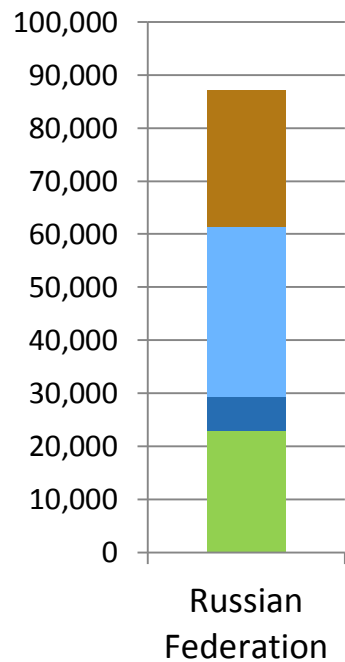
PPP Procurement Practices in South-East Asia

Country	Preparation (score)	Procurement (score)	Management
Cambodia	8	20	69
Indonesia	50	70	61
Malaysia	46	43	24
Myanmar	2	40	25
The Philippines	96	85	84
Singapore	58	75	64
Thailand	54	63	57
Vietnam	75	85	58
Timor-Leste	33	70	43



PPP Track record in North and Central Asia

- Over \$ 100 billion mobilized since 1995 (mainly driven by Russian Federation)... but limited deal flow in recent years.



■ 1995-1999 ■ 2000-2004 ■ 2005-2009 ■ 2010-2015



PPP Legal & Regulatory Frameworks

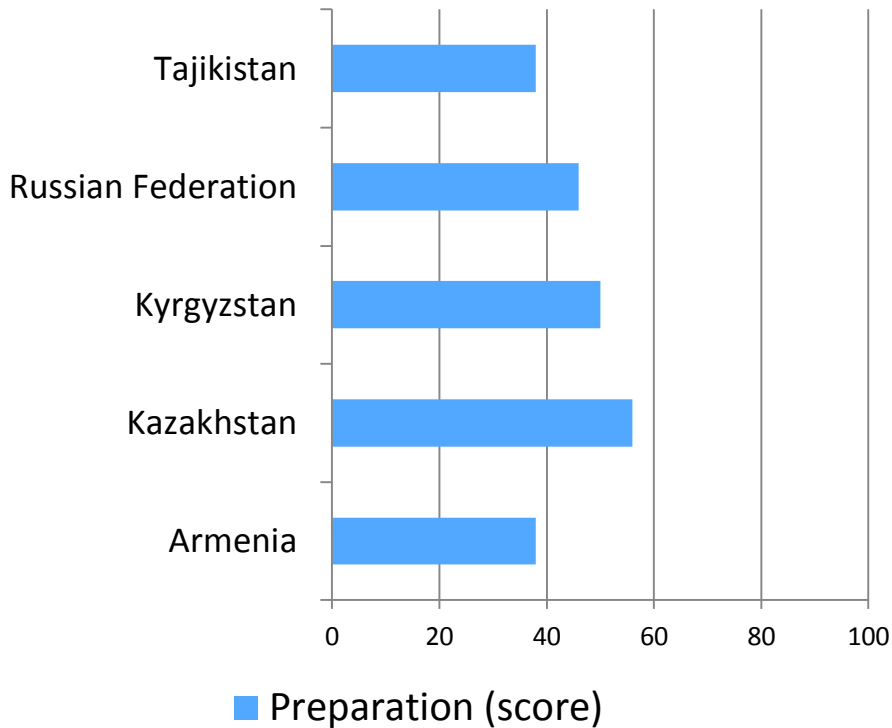
North and Central Asia

Country	Regulatory Framework	Remark
Armenia	No PPP Law / Guidelines	Procurement Law covers PPP calls for open bidding or competitive dialogue
Azerbaijan	No PPP Law / Guidelines	Law on Public Procurement sets the basis for procurement, rules of tenders, selection of contractor, etc.
Georgia	No PPP Law / Guidelines	PPPs are governed by general public procurement and investment laws
Kazakhstan	PPP Law	Law on PPPs and Law on Concession (2015)
Kyrgyzstan	PPP Law	PPP law from 2012
Russian Federation	PPP Law	Federal Laws On Concession Agreements (2005); and On Public-Private Partnership and Municipal-Private Partnership (2015)
Tajikistan	PPP Law	
Uzbekistan	Concession Law	
Turkmenistan	Concession Law	Law on Foreign Concession is the most relevant for PPPs, but needs improvements



PPP Preparation

North and Central Asia



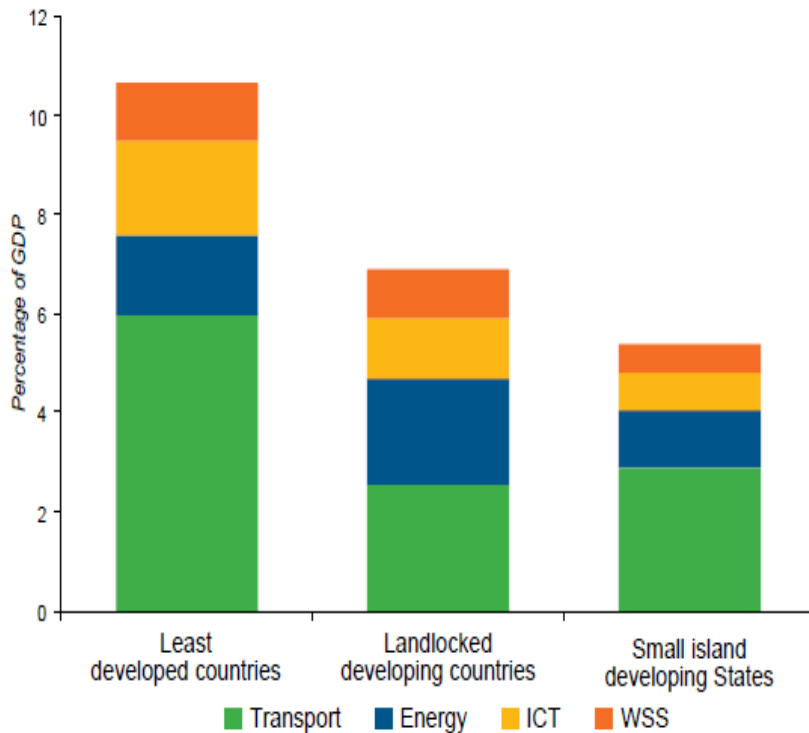
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- Standardized contracts / consistency



Infrastructure financing needs for CSN countries

Annual infrastructure financing needs, 2016-2030

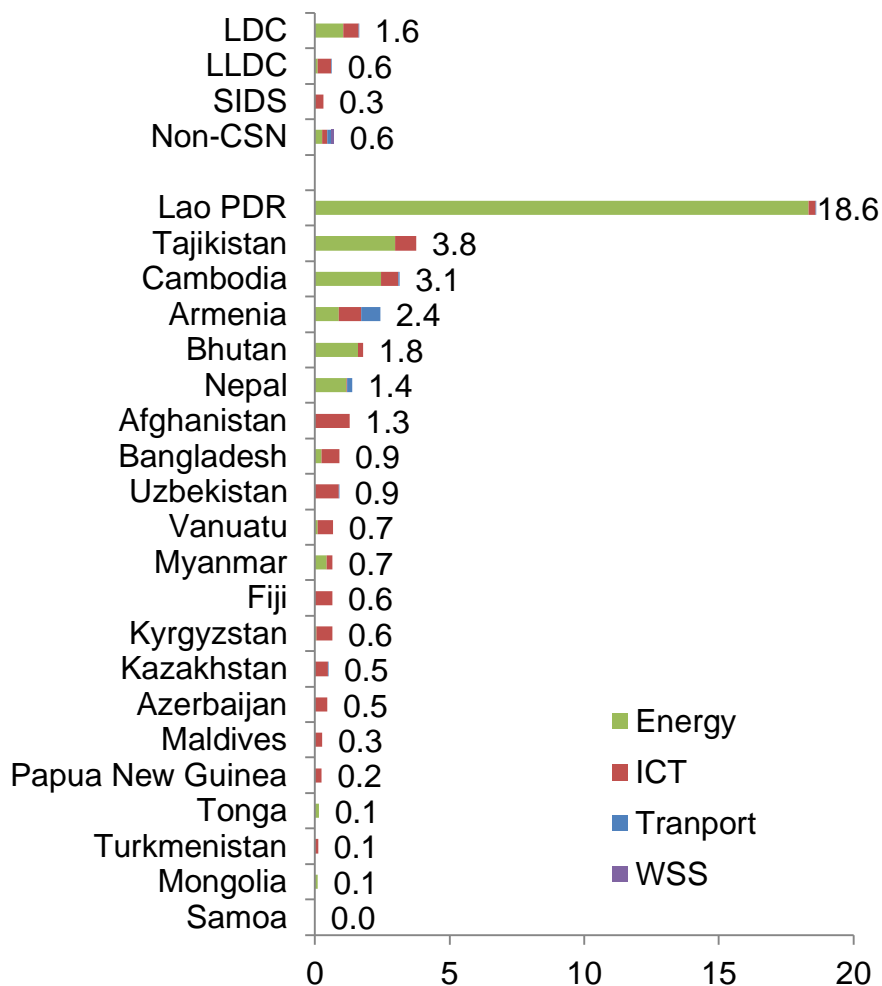


- Large infrastructure financing needs: **10.5% of GDP annually**
- A major portion is in the transport sector, but needs are growing for ICT and energy



Public and private sectors

PPP, 2006-2015, % of GDP



- Domestic public finance
 - Traditional sources of finance
 - Expected to remain a significant source
 - Should be used to *crowd in* private investment
- Private sector participation
 - Concentrated in a few mega energy projects and privatization of ICT infrastructure
 - Has potential to play a bigger role but requires a stable “investor-friendly” climate



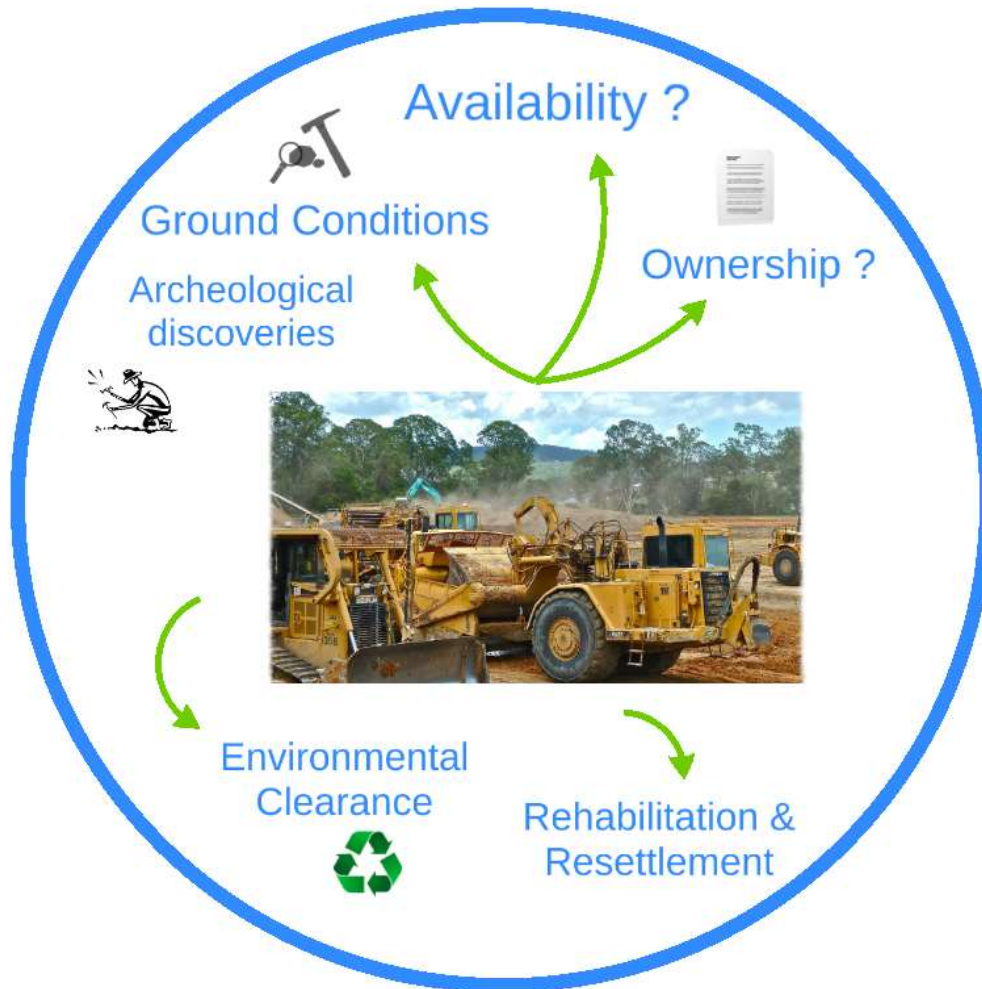
Project Bankability – Risk allocation

“Willingness of banks to advance the funds based on the agreed risk share amongst the project participants”

- Risk allocation is key
 - ✓ *Land acquisition*
 - ✓ *Demand risks*
 - ✓ *Currency risks*
 - ✓ *Repatriation*



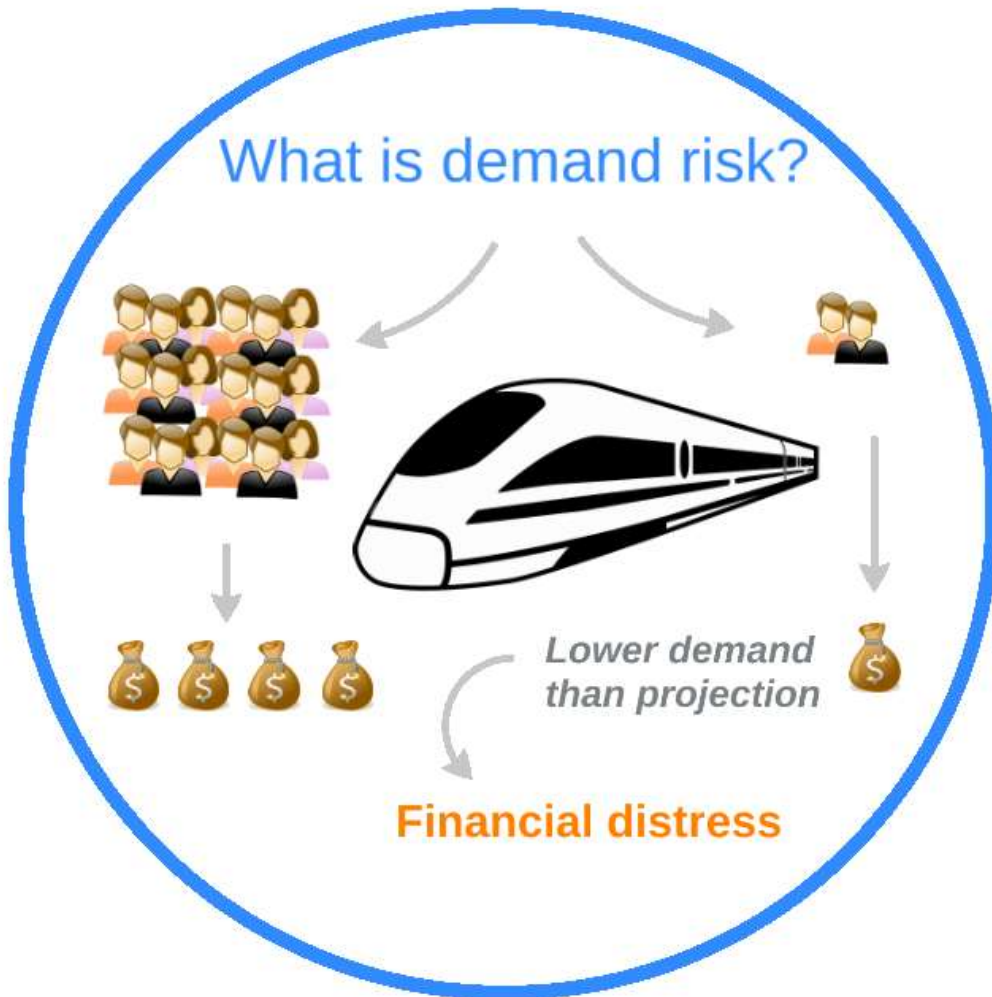
Main risks (1): Land acquisition



- ✓ *Banks are unlikely to provide loans before land is secured*
- ✓ *Government might be in a better position to acquire land*
- ✓ *Securing land before launching tenders*



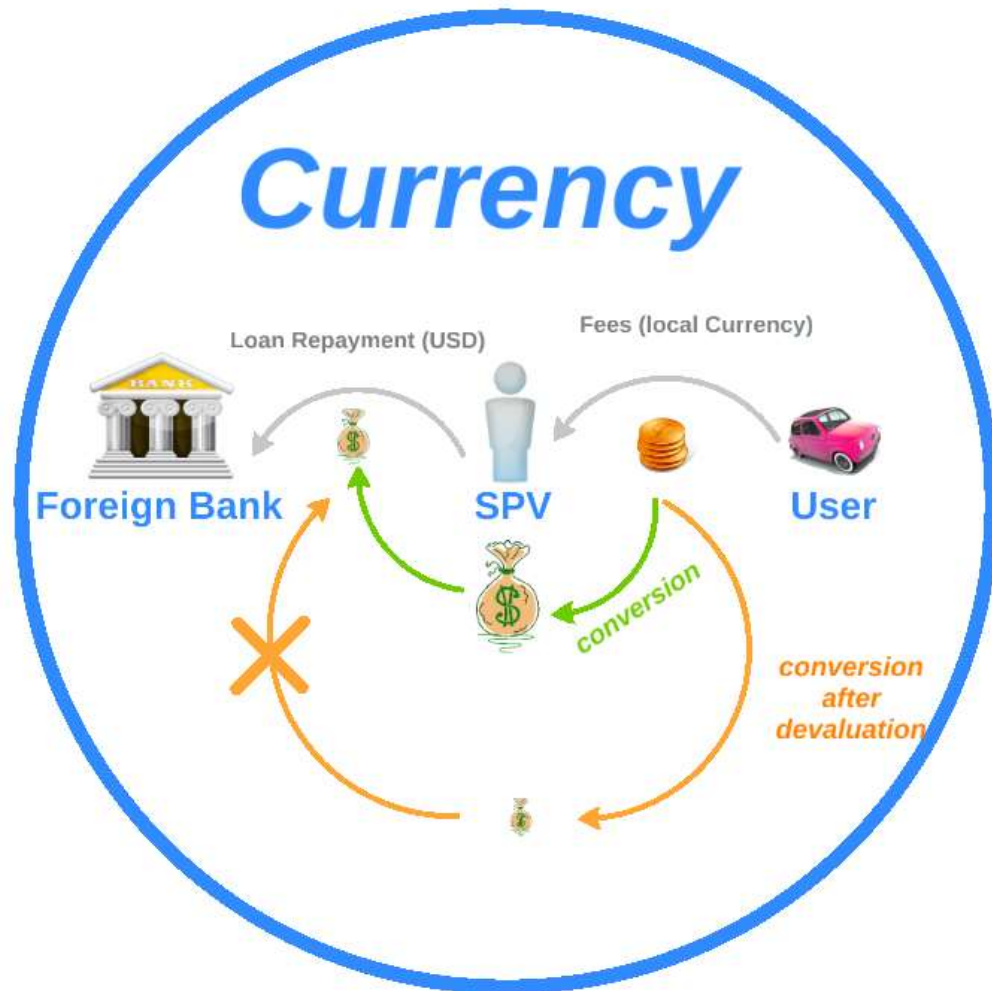
Main risks (2): Demand risk



- ✓ *Demand is extremely difficult to forecast*
- ✓ *Strong feasibility analysis required*
- ✓ *Government have provided guarantees in some countries*



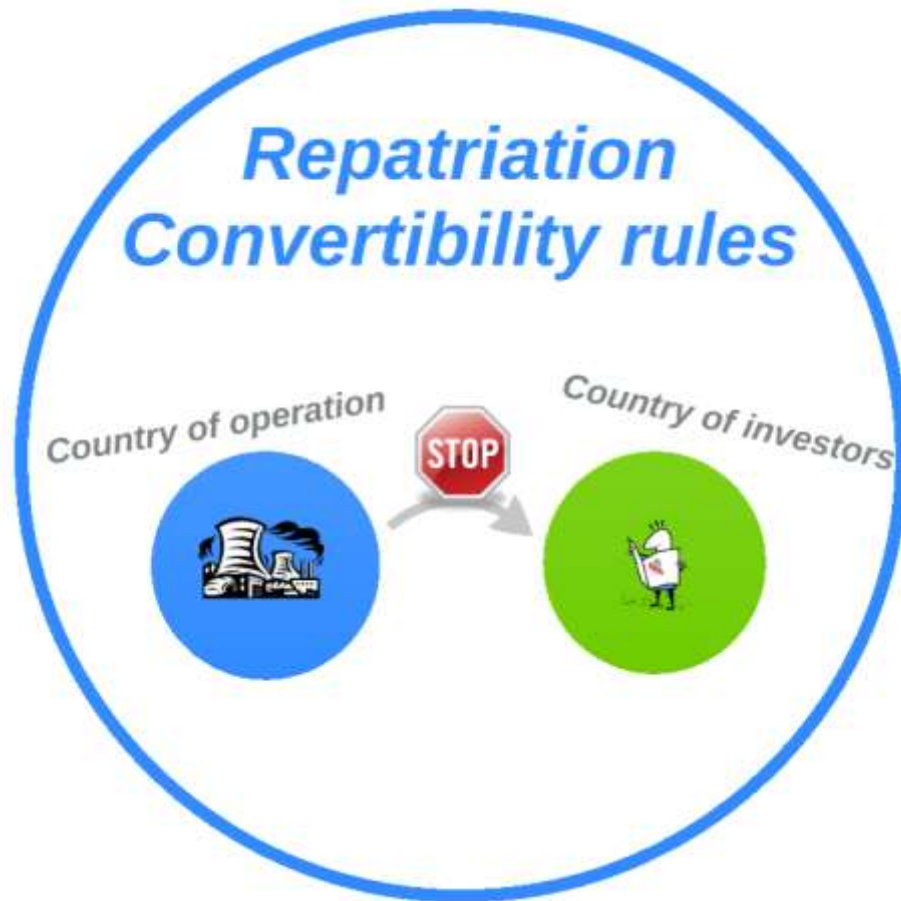
Main risks (3): Currency risk



- ✓ *Private sector cannot control this risk*
- ✓ *Ideally, loans should be in local currency*
- ✓ *Guarantees?*



Main risks (4): Repatriation



- ✓ *Pay back is often outside the country*
- ✓ *Capital controls can represent a risk for foreign lenders*



Some reform efforts

Projects should be based on appropriate processes and due diligence from the prefeasibility study stage onwards

- **Philippines:** Government's commitment to introduce well-prepared projects through the establishment of the Project Development and Monitoring Facility
- **India:** Strengthened its policy framework by issuing a PPP toolkit, guidance papers, and enhanced selection procedures
- **Indonesia, China, Bangladesh and Pakistan:** Amended PPP policies to streamline procurement and bidding processes
- **PNG, Thailand and Viet Nam:** Refined alternative dispute mechanisms by including mediation and arbitration procedures
- **Kazakhstan:** Established independent PPP units dedicated to providing project guidance and technical support



Financing Infrastructure

Financing

Public (domestic and foreign)

- Government budget
- Public borrowing
- International grants

Private (domestic and foreign)

- PPP
- Infrastructure companies
- Commercial banks
- Capital markets



The role of private sector: Key issues

- Private financing and innovative instruments are important where the private sector carries the majority of the risk, e.g. concession contract, where more complex financing instruments are required
- In general, infrastructure projects tend to be highly leveraged, with equity accounting for only 25% of total capital on average (ADB, 2017).
- Limitations of bank dominant system
 - increase the risk of an overexposed banking system
 - Inherently short-term nature of deposits
 - Basel III regulations will increase capital buffer and require better asset-liability mismatch risk management
- Capital markets would reduce the pressure on the banking system while also making available fresh equity to finance / refinance infrastructure projects.



Challenges of private financing

- Large international commercial banks, which had previously provided a significant portion of infrastructure financing have been deleveraging.
- Institutional investors allocate a very small fraction of their investments to infrastructure assets in both developed and developing countries.
- Most institutional investors continue to invest in liquid assets, often with a short-term investment horizon.
- Situation is worsened by the lack of bankable projects



Private sector and capital market

Infrastructure Companies

Infrastructure Projects

Infrastructure Funds

Municipal Bonds

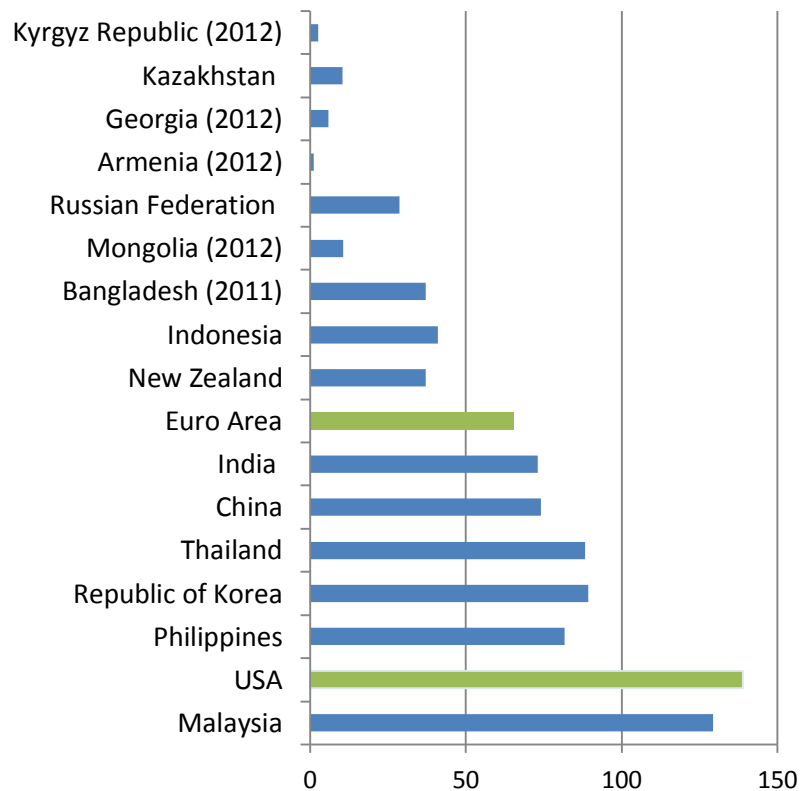
- Stock market
- Corporate Bond

- SPV Listing
- Project Bond



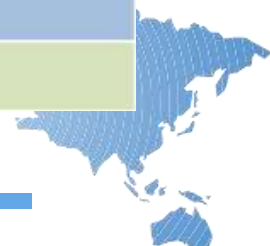
Investment Modalities (Infrastructure Companies-Stock Market)

- Stock Market Capitalization of Domestic Listed Companies To GDP%-2015



- Stock Market Turnover Ratio (2015)

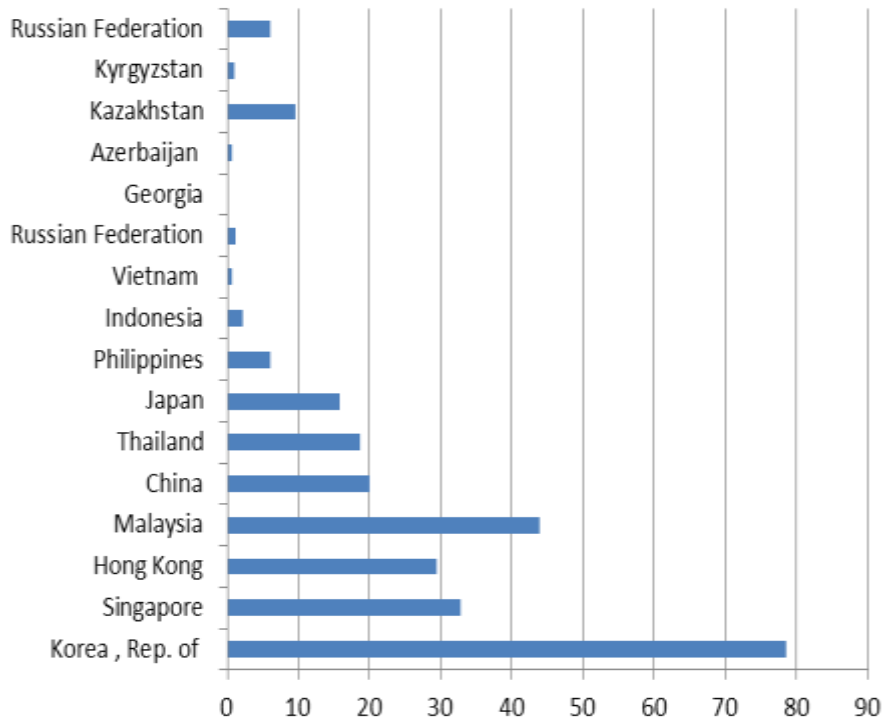
Countries	Stock Market Turnover Ratio (Domestic Shares) (2015)
Kyrgyz Republic (2012)	3.3
Kazakhstan	7.6
Georgia (2012)	0.2
Armenia (2012)	0.8
Russian Federation	29.8
Indonesia	21.2
Euro Area (2014)	87.9
India	50.9
Republic of Korea	149.8
China	480.2
World	162.9



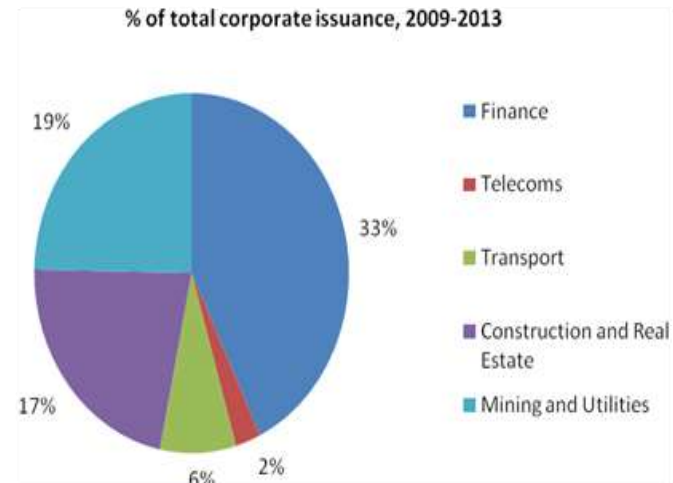
Investment Modalities (Infrastructure Companies-Bond Market)

- While US and Europe have \$22 and \$18 trillion outstanding corporate bond issues respectively, Asian has only \$3 trillion outstanding bond issues as of 2014

Corporate Bond Outstanding (GDP%-2015)



- Percentage of total corporate bond issuance in Asia



Infrastructure Projects

SPV Listing

- Establish a dedicated project company known as a “Special Purpose Vehicle (SPV) to acquire financing and implement project activities.
- This legally isolates the parent organization from direct exposure to the financial risks associated with a project.
- If the SPV is listed on the stock exchange, investors can invest directly in the project

Project Bond

- Project bonds are a debt instrument used for financing stand-alone infrastructure projects, issued by SPV.
- The creditworthiness of this bond depends on the cash flow performance of the underlying infrastructure project.
- The volume of project bonds is \$36 billion in world (2013). In Asia, the volume ranged between \$1 billion and \$ 3 billion.
- Average maturity of the bonds is 8 years in Asia, compared to 15 years in advanced economies.



Infrastructure Funds

- Another intermediary mechanism between investors and infrastructure projects.
- Serve as a vehicle to pool resources, skills and experiences from different investors while achieving economies of scale.
- Specialized skills are required for structuring and assessing infrastructure investments.



Municipal Infrastructure Bonds

- With rapid urbanization, municipalities are under strong pressure to deliver infrastructure services.
- Municipal bonds are debt instruments issued by local governments to finance infrastructure projects.
- These bonds normally attract funding at low cost given the implicit government guarantee and are subject to less stringent level of oversight than the corporate bond market.



International Collaboration

- ESCAP is an active partner in the PPP Knowledge Lab together with 11 international organizations



- ESCAP contributed to the 3rd edition of the Reference Guide published in 2017

- Experts contributing to the activities organized by the different partners
- Joint research with the Korean Development Institute (KDI)



Experience sharing

PPP and infrastructure financing Network

- Promote exchange of information / best practices among the countries of the region



Sub-regional and national workshops

PPP Ministerial Conferences
(Seoul 2007 – Jakarta 2010 – Tehran 2012)



Financing for Development,
(Yearly regional consultation since 2014)



Way forward: Private sector engagement

- Private sector engagement has been severely hampered
 - Risk-return profile needs to be adjusted by Government support measures
- Governments can also
 - Enhance coordination across Government agencies to establish a bankable infrastructure project pipeline
 - Facilitate innovative PPP
 - Develop capital market
- Governments and SDGs
 - Ensure infrastructure development gains are shared in an equitable and sustainable manner
- ESCAP upcoming activity
 - PPP and infrastructure financing network in Asia and the Pacific (tentatively Q3/2018, *Beijing, China*)





Thank you