ADB

International Workshop Report

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People's Republic of China:
TA 8869: International Workshop: PPP Financing and Risk Management

12 June 2015
Beijing

Asian Development Bank

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议题一：PPPs 融资

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Summary

This report summarizes the presentations of the PPP Financing and Risk Management workshop held in Beijing on 12 June 2015. The workshop was organized by China PPP Centre, Ministry of Finance, PRC and the Asian Development Bank.

More than 80 participants attended the workshop from central governments, the financial and consulting sectors, academia, and development partner institutions. The workshop focused on PPP financing, risk management for PPPs and implications for the PRC.

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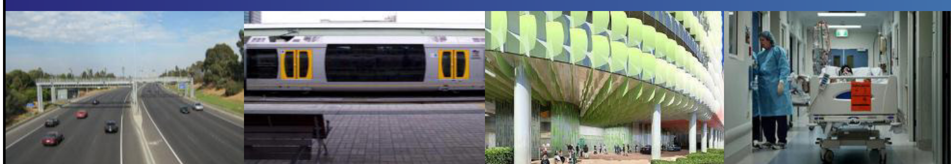
Strategic advisors

Risk Management of PPPs

Principles and Practice



Michael Schur and Alex Sundakov, June 2015

AGENDA

Issues in PPP risk management

- Reducing the cost of finance
- Reasons why a feasible project may still be too risky to be bankable
- Risk over the project cycle

Responses to these issues

- Credit enhancement measures
- Matching risk to investor preferences
  - Infrastructure is a popular asset class for Pension Funds
  - Infrastructure assets and Pension Funds in Australia

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The cost of finance can and should be reduced

- Projects may be viable but not bankable
  - Even though expected revenues cover costs it may be impossible to secure adequate finance due to concerns about the variability (risk) of costs or revenues, credit worthiness of counter parties and capability of public sector counterparties
- There's a benefit to thinking about how you can reduce risks to the private party => reduction in financing costs => reduction in funding required
- Two ways to do this:
  - Shift risk from the private to the public sector
  - Managing the risks allocated to the public sector

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Reasons why a feasible project may still be too risky

Risk allocation problem

Source of risk related to user fees…
- Demand risk: difficult to predict future demand
- Regulatory risk: user fees are often regulated by government

Source of risk related to finance…
- Refinancing risk
- Inflation

Risk management problem

Source of risk related to government obligations…
- The non-delivery of government financial commitments, which is influenced by the:
  - method of dispute resolution with the government
  - need to make multi year fiscal commitments under annual budgets
  - fiscal viability of local government and contracting agencies (sub-sovereign risk)
- The non-delivery of the government's non-financial commitments required to make the project viable. For example: acquire land, close streets, etc

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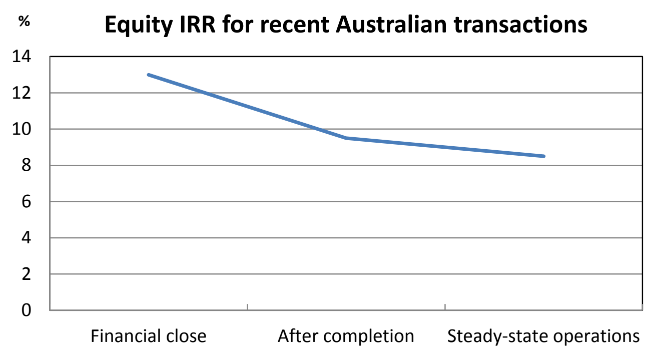
Risk changes over the project cycle

Falling risk leads to a fall in required returns → Different risk-return profiles appeal to different investors



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There are two responses to these issues

- Manage and minimise these risks through credit enhancement measures
- Match risk of project finance to risk appetite of different investors

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Credit enhancement measures can help make a project viable and bankable

Market risk mitigation measures can transfer the risk associated with user fees from the concessionaire to the government, for example:

- Minimum revenue guarantees
- Variable concession terms to maintain guaranteed minimum income

As more risk is transferred to the government, possible non-performance of the government will require greater credit enhancement, for example:

- Liquidated damages for non-performance of non-financial obligations
- Performance guarantees
- Debt and equity guarantees

The government will then need to manage any resulting contingent liabilities

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Allow flexibility for different investors over the project life cycle

PPPs offer investment opportunities for:

- project developers (short term, more risky finance)
- owners (long-term, less risky finance)

For example, **pension funds** are a dominant investor in long-term PPP finance

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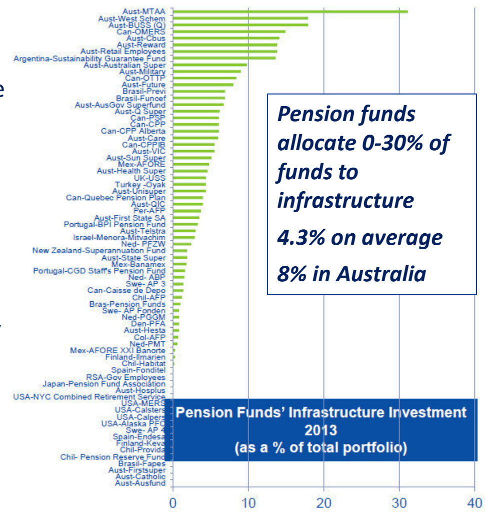
Infrastructure is a popular asset class with Pension Funds

- High barriers to entry and monopoly-like characteristics => infrastructure not as sensitive to the economic cycle as other assets
- Stable and growing demand for services + long-term protection of revenues => infrastructure investments are generally low risk
- Stable revenue => enables relatively high leverage
- Infrastructure assets are long-term => match tenor of liabilities
- Infrastructure assets provide protection against inflation



Source: BBVA (2015)

Successes and failures of infrastructure assets and Pension Funds in Australia

Sydney Desalination Plant

- Sale by the State Government of NSW
- 25 year contract with Sydney Water
- Regulated price
- Winning bid AUD2.3 billion – consortium of Pension Funds: Ontario Teachers Pension Plan, Alberta Asset Management Co, Hastings

Heavy Haul Rail, Western Australia

- An iron ore company which built its own heavy haul rail.
  - Carries approximately 180 million tonnes per year of iron ore 500 km
- Attempted to sell 49% stake in its rail subsidiary to Pension Funds
- No takers because nothing was done to fit the asset to Pension Fund requirements:
  - No long-term contractual arrangements with the mining subsidiary
  - Full exposure to commodity risk

Summing up…

Three key issues in risk management

- There is a feedback loop between finance and funding
- Some project risks can be re-allocated (those associated with users fees and finance) while others need to be managed (those associated with government obligations)
- Risk changes over the project cycle, and different risk-return profiles appeal to different investors

Two methods for dealing with these issues

- Manage and minimise these risks through credit enhancement measures
- Match risk of project finance to risk-appetite of different investors

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Infrastructure UK

Finance Incentives for PPPs
The UK Experience

Karineh Grigorian

June 2015

Infrastructure UK

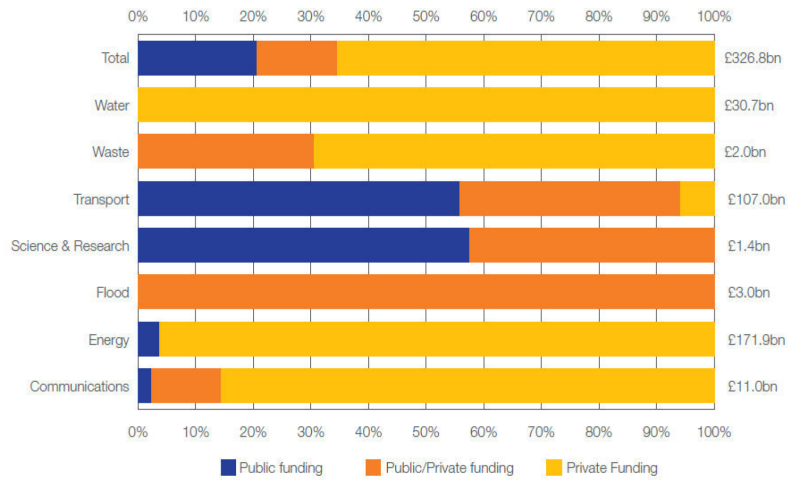
Infrastructure Challenge : The Picture in UK and around the world

As a result of recent and current fiscal conditions, countries around the world are looking to private finance as a means to develop their infrastructure and as an engine of growth to escape recession

- Estimated worldwide infrastructure capital spend required US $3.4 trillion p.a. (Standard and Poors - 2014)
- Transport, telecoms, energy, water infrastructure investment requirement 3.5% world GDP (OECD)
- UK - £466 billion pipeline. 65% private sector 15% PPP

Infrastructure financing
Sources of funding by sector

Funding mix of 2014 infrastructure pipeline, 2014-15 to 2020-21, by sector



Source: HM Treasury, Major Infrastructure Tracking Unit

HM TREASURY

Generic Funding/Financing Options

	Risk / Return	Characteristics	Examples
Regulated private ownership	Lower	• Monopoly businesses providing essential services • Independent regulation of return and duty to ensure financeability provides stability for investors	BT Openreach Electricity, gas & water transmission and distribution networks Some airports
Public contract/concession for service delivery		• Procured by public sector, under EU-led process • Largely social infrastructure / waste programme • Public-sector revenue stream - no/ limited market risks • Active secondary market for mature operating assets	PPP/ PFI social infrastructure such as schools, hospitals Local authority waste management
Private ownership with targeted support		• Business operates in private sector but under strong government-led market framework • Competitive but high barriers to entry	Electricity generation
Private ownership	Higher	• Competitive markets, although barriers to new entrants • Exposure to market/ volume risks • Investor requires higher returns reflecting greater cash flow volatility	Transport: Most airports, Ports Commercial waste Cable and mobile phone networks

HM Treasury

Infrastructure UK

Infrastructure financing issues : UK today

- Lending to UK infra pre-crash £6 billion p.a.
- Lending to UK infrastructure post-crash £3 billion p.a.
- Retreat of Monoline Guarantors
- Liquidity for safer PPPs
- Harder for higher risk projects
- New instititutional lenders - pension funds, life insurance
- Limited project credit expertise at institutional investors

Pension Investment Platform

- The Government, the National Association of Pension Funds (NAPF) and Pension Protection Fund (PPF) signed a MoU to create the Pension Investment Platform (PIP) in November 2011
- NAPF and PPF announced in October 2012 that ten major UK pension funds have signed up to the PIP as Founding Investors
- First fund launched 2014, target funding £2 billion, current capital £650million. Two thirds already invested in 41 projects. Second fund launched (solar).
- IUK will work with the PIP further to develop applications of UK Guarantees to address particular investment needs of PIP investors
- The Government has worked closely with NAPF and PPF to support the foundation of the PIP but it is fully independent of Government

HM TREASURY

Insurers' Infrastructure Investment Forum

- The Government agreed at AS11 to establish the IIIF to provide members of the Association of British Insurers (ABI) a dedicated line of communication with infrastructure policy and delivery teams
- The Forum aims to explore ways to maximise opportunities for insurance fund managers to invest in debt instruments that finance UK infrastructure
- Messages that have emerged from Forum members have informed the policy development of PF2 and UK Guarantees
- Several of these funds are either already involved or are establishing the capacity to lend to projects directly, in addition to participating in public bond issues
- IUK helps them to develop this capacity and contribute to the development of renewed capacity for long-term project finance debt

HM TREASURY

Infrastructure UK

New UK funding levers

- Capital contributions
- Guarantee scheme - £40 billion (managed by IUK)
- PF2 Equity fund
- Green Investment Bank
- Aggregator model
- Contracts for difference

Other countries

- Viability gap funding
- Debt underpin
- EIB and multilaterals
- Mezzanine funding

Infrastructure UK

PF2 Equity Investments

- Public sector equity – rationale
- Transparency
- Investment in schools projects
- Aggregator funding

Infrastructure UK

UK Guarantees Scheme. Why are we doing it?

- Enable infrastructure projects to access the capital markets
- Use the UK's sovereign credit rating
- Avoid delays to infrastructure projects caused by shortage of long-term financing
- Minimise impact on fiscal position
- While avoiding crowding out new private sector initiatives

Infrastructure UK

What is the Guarantee Scheme?

- Possible types of guarantee:
    - Debt guarantee
    - Counterparty obligation guarantee
    - Construction period support
- Commercial basis – no state aid
- Up to £40 billion available under Infrastructure (Financial Assistance) Act 2012
- Scheme open until 31 December 2016 – subject to policy of new government
- Must meet headline eligibility criteria: nationally significant; ready to begin construction within a year; financially credible; dependent on a guarantee to proceed; and good value for the taxpayer

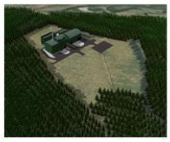
Infrastructure UK

Scheme progress to date

- Over 200 enquiries received to date and 39 projects with a capital value of £34 billion are pre-qualified for further consideration
- Sectors seen to date include rail, road, energy, waste management, housing and higher education projects
- Over 50 institutional investors, including life insurance and pension funds, funded infrastructure projects as a result of the scheme
- 7 guarantees issued (total £1.7 billion) including ….

UK Guarantees Scheme

Speyside CHP Plant



- £74million capex
- £48.2million guarantee
- 14 year bond

Ineos Grangemouth Ethane Import & Storage Facilities

- €600 million
- €285 million guarantee
- 5 year bond

Mersey Gateway

- £615 million funding requirement
- £257million guarantee
- 29 year bond

Northern Line Extension

- Up to £1bn can be borrowed
- £750m – Standby Refinancing Facility

SDC – UK Energy Efficiency Investment Fund

- £8.8m guarantee for payment obligations
- 4 year term
- Counterparty payment risk

Drax Power

- £650-700m capex
- £75m guarantee
- 5 year loan note

Blending EU Funds and PPP 2014-2020

Philip J Kelly Lawyer and Economist International PPP Adviser
Beijing June 12 2015

Outline of Presentation

- Note: The text of the presentation has been prepared in note form to assist understanding of the Chinese translation and is not in the more visually attractive powerpoint format

1. What are EU Blended PPP Projects and what EU funds are used?
2. What problems were found and what is being done to resolve these?
3. What next?

What are EU Blended PPP Projects?

- Blended PPPs are a financing scheme involving private funds (debt / equity), **and**
- A contribution from EU funds (grants / financial instruments)
- There may be similarities between China at national level and provinces / municipalities etc. if grant / loan funds used to support projects and activities at sub-national level can be extended to PPP projects

Why Blended PPP projects?

EU funds can assist PPP delivery although primary channel is to assist Government and conventional public procurement of projects and activities

- Risk mitigation mechanisms
- Bridging market gaps
- Provision of additional liquidity
- Increasing financial viability

Which EU funds and How are they used?

- European Structural and Investment Funds - ESIF (mainly: European Regional Development Fund (ERDF), Cohesion Fund, European Social Fund (ESF)), Connecting Europe Facility (CEF)

- Funds have Different Purposes and Means including grant co-financing, financial instruments, funding of advisory services and studies

Purpose of EU Funds: Strengthen Economic Social and Territorial Cohesion

- Article 174 / 175 of the Treaty on the Functioning of the European Union (TFEU) to strengthen economic, social and territorial cohesion, reduce disparities between the levels of development of regions and locations through the European Agricultural Guidance and Guarantee Fund, European Social Fund, European Regional Development Fund, European Investment Bank and other instruments.

EU Blended PPP Projects Before 2014

- Before 2013 blending was not prohibited but was not widely known and was used in a small number of projects
- Limited public sector capacity in PPP and with using EU funds in PPP was the most important barrier to wider use of blending
- Some EU member states and private sector participants mistakenly thought that blended projects were seen negatively by EU institutions
- Government usually finalises conventional public procurement before filing grant applications under EU Funds but this not possible for PPP project
- Difficulties integrating PPP process with EU grant administration process
- Timing for procurement and grant application have an impact on the funding gap calculation and it is difficult to get timing right
- Timing for disbursing the grant to the project different from standard PPP funding practices
- Private sector uncertainty as to how EU grant amount is determined for revenue generating projects (funding gap calculations) and how certain and stable is that amount:
    - Difficulty in calculation of the funding gap (based on projections)
    - Risk of recalculation where the gap is materially different from projections
- Funds usually made capital contributions so that PPP availability payments presented new challenges
- Cut-off date (no payments possible beyond the eligibility period)

Steps to Address Challenges

- 2013 New Common Provisions Regulation (CPR) for the European Structural and Investment Funds (ESI Funds) http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013R1303&from=EN includes support for PPPs
- CPR defines *PPPs* broadly *"means forms of cooperation between public bodies and the private sector, which aim to improve the delivery of investments in infrastructure projects or other types of operations, delivering public services through risk sharing, pooling of private sector expertise or additional sources of capital"*
- CPR defines *PPP operation "means an operation which is implemented or intended to be implemented under a public-private-partnership structure"*
- CPR adapts common provisions on the ESI Funds to suit PPP
- Article 62 explicitly provides for blending stating that ESI Funds may be used to support PPP operations
- Flat rates are a new way to calculate the grant amount removing the funding gap calculation issue
- Grant may be made to the project and private partner previously only made to public sector entity
- Escrow accounts allow disbursements to continue until 2023 to allow for multi-year delivery of facilities and payments

PPP Private Partner can be the Beneficiary

- Public body initiating the operation ***OR*** private partner selected or to be selected to implement the operation can receive payments from ESIF
- A conditional approval can be issued before selection of the private partner - the selected private partner assumes the obligations of a beneficiary
- A replacement of private party possible without loss of grant (PPP step-in rights etc.)

Eligible Expenditure

- Expenses incurred and paid by the private sector are considered incurred and paid by the public sector beneficiary
- Payments are to be made in accordance with the PPP agreement, including termination payment
- Minimum requirements to be included in the PPP agreements, including provisions relating to contract termination and to audit and accountability

What should Governments do in programming blended PPPs?

- PPP Project identification / scope
- Government or user-pay PPP (revenue generation)
- Initial assessment of the PPP option (affordability, risks, bankability, value for money, deficit and debt treatment)
- EU Funding Eligibility (11 thematic objectives, Operational Programme)
- Selection of funding instrument (grant, financial instrument)
- Careful selection of well prepared candidates for blended PPPs

What Next?

- EC prepares rules and other provisions for implementing each fund
- Member states build networks facilitating EU grant blending applications including for PPP projects
- Governments identify PPP procurement opportunities in sectors covered by Operational Programmes
- Private sector identifies and prepares for PPP opportunities and develop structures for participation with Government in obtaining funds

Making PPPs Work

Craig Sugden, Principal PPP Specialist
East Asia Department
12 June 2015

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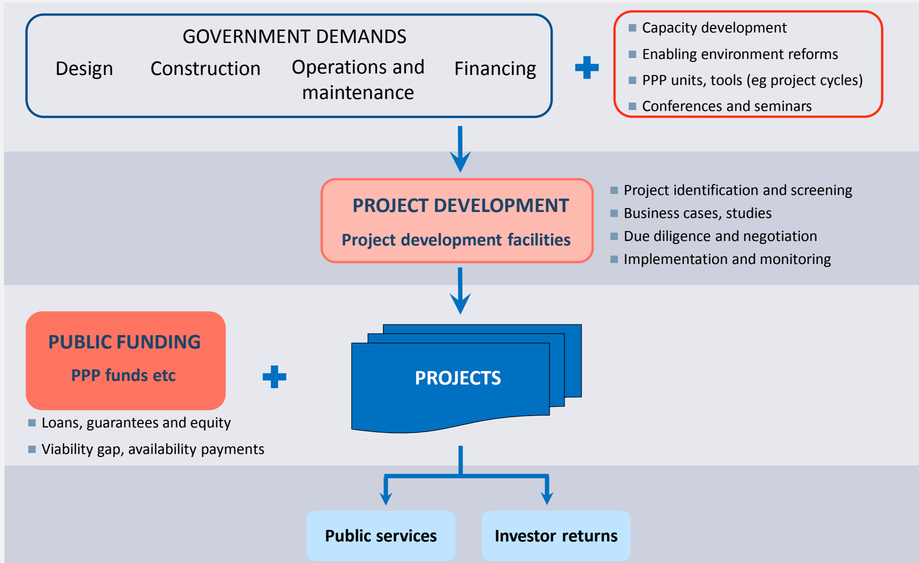
Background

ADB's PPP Operational Plan

Pillar 1 Advocacy and capacity development	Pillar 2 Fostering the enabling environment	Pillar 3 Project development	Pillar 4 Project financing
Create awareness, encourage leadership, identify the potential of PPPs, develop capacity	Help develop the policy, legal, regulatory, and institutional framework	Provide expert support, tool kits, funding costs of transaction advisors, or procurement support	Provide tailored financial support eg guarantees, equity, loans, viability gap funding

Source: ADB. 2012. Public-Private Partnership Operational Plan 2012-2020. Manila (available at http://www.adb.org/documents/public-private-partnership-operational-plan-2012-2020

Integrated support



PPP Project Development Fund (PDF)

The problem

PPPs bring additional challenges to project preparation

Governments often lack the expertise to prepare PPPs

- PPPs are more complex than conventional projects and require additional skills

Or may lack the funds needed to hire professional advisors

- PPPs are normally finalized by advisory teams comprising financial and commercial advisers, lawyers, technical advisors, economists etc
- Costs can be 3% to 5% of the project's capital cost

The international experience is that well equipped advisory teams improve project quality and pay for themselves

See Appendix 4 of ADB. 2012. Public-Private Partnership Operational Plan 2012-2020. Manila (available in English and Chinese at http://www.adb.org/documents/public-private-partnership-operational-plan-2012-2020)

Project development fund

Good project preparation is at the heart of a sound PPP program

A project development fund (PDF) helps governments prepare bankable PPP projects

The fund pays the up-front costs of project development, which are typically recovered from the winning bidder and re-used

Normally supported by a panel of advisors under retainer contracts, who are selected for projects on a competitive basis

Helps set market standards by implementing sound procedures and demonstrating good practices

Run by a PPP unit or part of a PPP fund

PDF examples

PDFs have been used or are used at the national and sub-national level in many places

- India Infrastructure Project Development Fund
- Philippines Project Development and Monitoring Facility
- Government of Sindh, Pakistan Project Development Facility
- World Bank Global Infrastructure Facility
- ADB Asia Pacific Project Preparation Fund
- South Africa Municipal Infrastructure Investment Unit
- Indonesia Private Sector Participation Development Facility
- Egypt Private Sector Participation Project Development Fund
- Bangladesh Private Sector Infrastructure Development Fund
- Sri Lanka Private Sector Infrastructure Development Facility

PDF examples

1 Philippines Project Development and Monitoring Facility (PDMF)

Objectives	Fund and facilitate pre-investment activities of potential PPP projects such as pre-feasibility and feasibility studies, and to develop a pipeline of viable projects for Implementing Agencies (IA) and Local Government Units (LGU).
Governance	The PPP Center screens and evaluates the application based on a set of eligibility criteria, and makes a recommendation to the PDMF Board. If application is approved, IA signs Technical Assistance Agreement with PPP Center. Board is composed of the National Economic and Development Authority (NEDA), Department of Finance (DOF), Department of Budget and Management (DBM), and PPP Center. PPP Center oversees the administration and management of the PDMF.
Eligibility criteria	Criteria are unique to the project, sector, and IA/LGU. Applications must meet the PDMF application requirements, and the project should be consistent with government priority infrastructure programs.
Nature of funding	The project development cost (plus a 10% administrative fee) is recovered from the successful bidder or directly from the IA/LGU. The IA/LGU repays 100% of the development cost and administrative fee when it fails to bid out the project, conclude the bidding process, or sign the contract with the winning bidder. IA/LGU refunds 50% of the development cost, plus administrative fee, when it fails to bid out the project after a failed series of re-biddings, conclude the bidding process, or sign the contract with the winning bidder.

See Philippine Public-Private Partnership Centre 2012..Project Development and Monitoring Facility at http://ppp.gov.ph/wp-content/uploads/2012/02/ThePDMF.pdf

Overview of a PDF for the PRC

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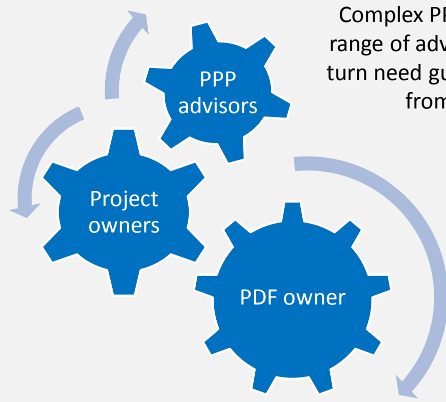
Objectives

To help prepare bankable PPP projects	Improve the quality of projects through better studies and transaction advisory support
	Offsetting the cost to governments of preparing projects so it is affordable
	To give good potential private partners the confidence to bid for PPPs and financers the confidence to invest
	To build the standard of advisors
	To lead by example ▪ A tool for a PPP unit to improve the overall quality of the PPP program through demonstration effects

The PDF: a partnership

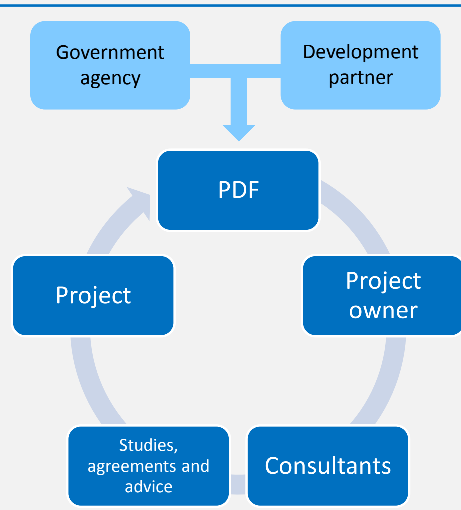
Complex PPPs normally require range of advisors, and advisors in turn need guidance and oversight from government

Project owners normally need to bring in extra capacity to ensure a successful PPP

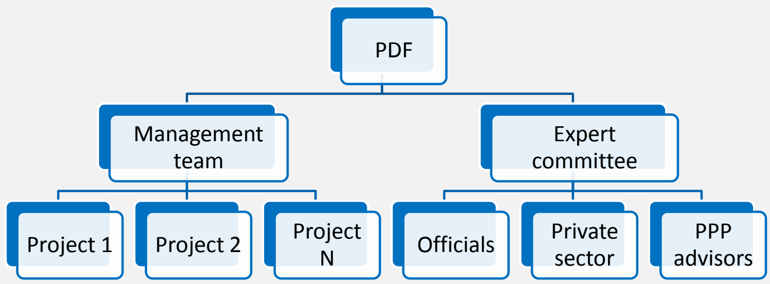


PPP units can use PDFs to extend their support to the project level

Flow of Funds



Governance: Example



Eligibility and conditions

Eligibility criteria should help set market standards for PPPs	
	Consistent with PPP procedures and guidelines issued by MOF, NDRC and other agencies
	Will demonstrate good practices e.g. commitment to value-for-money, affordable , and appropriate risk allocation
	Relevant project approvals secured
	Provides a representative sample of sectors and types of PPPs
	Willingness to procure advisors competitively
	Good track record and willingness to make studies and contract documents public

Roles

Project owner

- Identify projects
- Sets project objectives and constraints
- Provide high level guidance to project preparation
- Issue all key decisions

PDF

- Draft TORs
- Tender advisory work on behalf of the project owner
- Instruct and supervise advisors on a day-to-day basis
- Ensure compliance with the project cycle

Advisors

- Prepare project studies and PPP agreements
- Support evaluations of potential private partners and negotiations
- Provide advise on an as-needs basis

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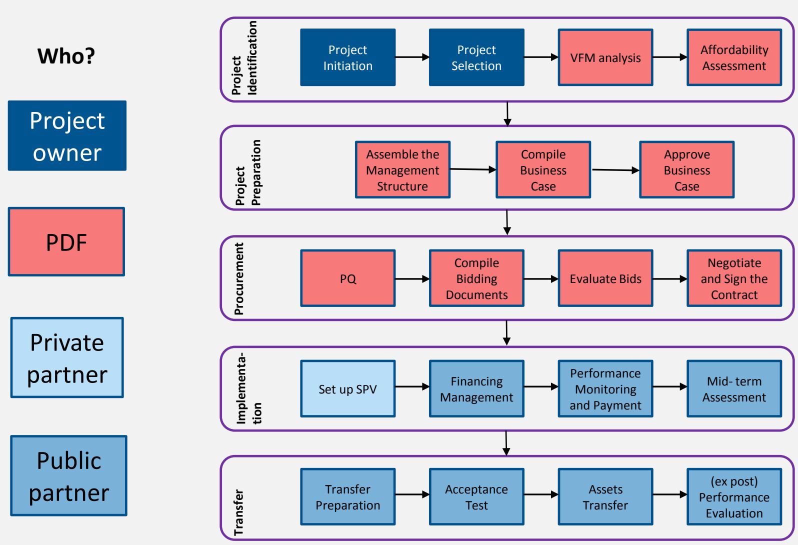
The scope



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PPP Funds for Government Contributions

MOF: Government contributions

User pays projects are to be prioritized

But

other PPP models are also accepted

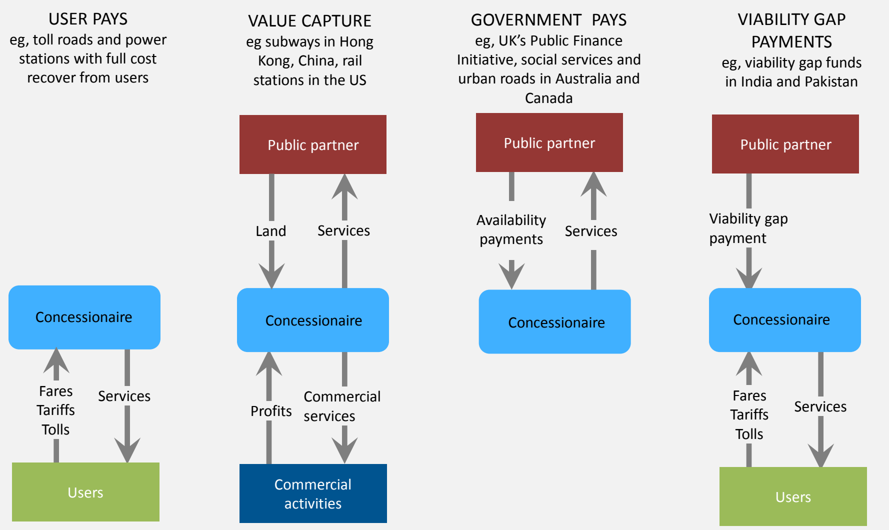
MoF will actively explore the use of existing special transfer payments to provide capital support for demonstration projects

Local finance departments at all levels may offer upfront cost subsidies, capital grants or other forms of financial support to demonstration projects based on your own fiscal strength and specific needs of projects

Local finance departments …shall gradually shift away from "subsidizing construction" to "subsidizing operation" and explore the establishment of a dynamic subsidy mechanism. The subsidies and other expenditure items shall be included in the government budget….

Source: Ministry of Finance. Notice on Issues Related to the Promotion of Public Private Partnerships No.76 [2014]. 23 September 2014

Sources of revenue



The problem

New mechanisms for financing need to be trialed and then rolled-out

Some PPPs will lack sufficient user revenue to meet their costs

- when tariffs, fees, or other charges are kept below full cost recovery

In others, ensuring bankability requires a government to share some project risk

- via a guarantee

Providing such government financial support to PPPs as normal budget allocations has a number of drawbacks

- relying on the annual budget process can delay project approvals and create uncertainty
- guarantees do not fit a normal budget appropriation

What does a PPP fund do?

Plays a catalytic role in market development by leveraging resources and specialized skills	Takes on an intermediary role, providing a technical team that identifies and examines projects on behalf of potential investors
	Builds relationships and market knowledge to develop a portfolio of projects against criteria identified by investors
	Shares costs across investors, lowering the costs they would face if acting individually
	Consolidates financing from investors otherwise deterred by high bid costs, long preparation processes, large required investments, and the 'patchy' deal flow of PPPs

PPP funds in other countries

The PRC does not yet have equivalent funds and guarantee schemes	Viability gap funds are used in Asia (e.g., in India and Pakistan) to provide an initial capital contribution by the government
	State-owned infrastructure funds, such as the India Infrastructure Finance Limited and Indonesia Infrastructure Finance, can provide loans to private partners to PPPs to facilitate the participation of private finance
	Government guarantee schemes, typically provided through financial intermediaries, are also being used in Asia, the UK, and Europe
	The UK is trialing a systematic approach to providing equity

Fund Examples

Government-supported funds

IIFCL—India Infrastructure Finance Company Limited	Provides long term, commercial loans, up to 20% of total capital costs, as part of a bank-led consortium. Also provides advisory services and a pilot guarantee scheme. Prioritizes PPPs. Partly financed by ADB loans ($1.2b).
IIF —Indonesia Infrastructure Finance	Private non-bank financial institution under MOF with independent management. Provides loans, guarantees and advisory support. Part financed by loans from ADB and other IFIs and bonds.
Marguerite 2020 Fund	Provides equity and quasi-equity to PPPs and other infrastructure investments in Europe in climate change, energy security etc. A joint initiative of the EC, the EIB, and other public financial institutions.
JESSICA	A joint venture between the EC and EIB, JESSICA provides financing as loans, equity and guarantees to municipal PPPs in Europe. Can also offer quasi-equity to reduce the credit risk for senior lenders.
Infrastructure Development Corporation (Karnataka), Tamil Nadu Urban Infrastructure Financial Services, etc	India has established many State-level entities to provide local government with the project development, structuring and financial skills to do PPP projects at the local level and to manage VG and other PPP funds

IIFCL

IIFCL has provided $5.2b in assistance to 299 projects worth $80b since 2006

Set up to act as a 'project finance' institution under the direct control of the government

IIFCL partners with other banks and financial institutions as a consortium to fund up to 20% of a project's debt

Also provides refinancing to banks and financial institutions, take-out financing and partial credit guarantees, and advisory support

IIFCL Mutual Fund raised $50b in early 2014 via a private placement for its maiden Infrastructure Debt Fund Scheme

Received substantial technical support from ADB

http://www.iifcl.org/

Marguerite 2020 Fund

€320m has been invested in 10 road, airport, wind, and waste to energy projects worth more than €4b

A long term equity fund targeting greenfield transport & energy infrastructure in EU 27

The Fund operates on market principles with an independent advisory team responsible for project origination, appraisal, execution, monitoring and asset management

All investments and disinvestment decisions are made by an Investment Committee

Six core sponsors (eg, KFW) have one representative on a Management Board, which also includes independent members and staff

A Supervisory Board oversees the fund

http://www.margueritefund.eu/

JESSICA

Funded in 2013 with €2 billion from the EU, it will grow to as much as €8b by 2020

The fund is a vehicle for investing EU grant funds in PPPs and other investment projects

Equity investments, loans and/or guarantees, are delivered to projects via Urban Development Funds or Holding Funds which invest in several funds

Areas of supports include urban infrastructure, heritage or cultural sites, university buildings, medical, facilities, and energy efficiency improvements

Returns from investments are reinvested in new urban development projects

http://ec.europa.eu/regional_policy/thefunds/instruments/jessica_en.cfm#1

PPP funds: Key issues

What, who, and how	
	What products does the market need? What projects will the fund support? - An equity fund is best suited to projects with enough user revenue to be commercially viable. Other projects will need different types of support (eg, a viability gap fund) What is the exit strategy?
	Who else will want to invest? Who will manage the fund?
	How will projects be identified? How will conflict of interest be managed? How long will a fund take to establish? How big should the fund be? How long should the fund operate for?

Thank you

PDF examples

ADB

PDF examples

1 India Infrastructure Project Development Fund (IPDF)

Objectives	Created to cover a portion of PPP transaction costs, to increase the quality and quantity of bankable projects, and to produce good feasibility reports to allow the Government to make informed decisions.
Governance	Located within the PPP Cell in the Department of Economic Affairs (DEA), Ministry of Finance. The PPP Cell screens requests for funding but the Empowered Institution (EI) approves funding. EI is composed of: Additional Secretary, DEA (Chairperson), Additional Secretary (Expenditure), a Representative of the Planning Commission, a Joint Secretary in the line Ministry dealing with the subject, and a Joint Secretary, DEA (Member Secretary).
Eligibility criteria	Varies, but criteria have included: Non-revenue-generating projects with high economic returns, revenue generating commercial projects with a high rate of return, efficiency enhancement/cost savings projects with a quick recovery of governmental payouts.
Nature of funding	Provides up to 75% of the project development expenses, which are then recovered from the successful bidder. If bidding process fails, the assistance is not recovered. Sponsoring Authority must refund the assistance if it does not conclude the bidding process or does not contract out the project. Sponsoring Authority co-funds 25% of the total development cost, including a pre-feasibility study to determine if the project is amenable to PPP.

See Department of Economic Affairs Ministry of Finance Government of India. 2007. Scheme and Guidelines

ADB

PDF examples

2 Philippines Project Development and Monitoring Facility (PDMF)

Objectives	Fund and facilitate pre-investment activities of potential PPP projects such as pre-feasibility and feasibility studies, and to develop a pipeline of viable projects for Implementing Agencies (IA) and Local Government Units (LGU).
Governance	The PPP Center screens and evaluates the application based on a set of eligibility criteria, and makes a recommendation to the PDMF Board. If application is approved, IA signs Technical Assistance Agreement with PPP Center. Board is composed of the National Economic and Development Authority (NEDA), Department of Finance (DOF), Department of Budget and Management (DBM), and PPP Center. PPP Center oversees the administration and management of the PDMF.
Eligibility criteria	Criteria are unique to the project, sector, and IA/LGU. Applications must meet the PDMF application requirements, and the project should be consistent with government priority infrastructure programs.
Nature of funding	The project development cost (plus a 10% administrative fee) is recovered from the successful bidder or directly from the IA/LGU. The IA/LGU repays 100% of the development cost and administrative fee when it fails to bid out the project, conclude the bidding process, or sign the contract with the winning bidder. IA/LGU refunds 50% of the development cost, plus administrative fee, when it fails to bid out the project after a failed series of re-biddings, conclude the bidding process, or sign the contract with the winning bidder.

Making PPPs Work

See Philippine Public-Private Partnership Centre 2012..Project Development and Monitoring Facility at http://ppp.gov.ph/wp-content/uploads/2012/02/ThePDMF.pdf

ADB

PDF examples

3 Government of Sindh, Pakistan Project Development Facility (PDF)

Objectives	To fund project development expenses of for PPPs so Government can make decisions based on good quality feasibility studies, and develop well-structured PPPs. Also to enhance the project management and technical capacity of the Government Agencies and PPP Unit to successfully undertake PPP projects.
Governance	Overseen by the PPP Policy Board and managed by the PPP Unit in the provincial government Finance Department. The PPP Policy Board sets policy directives, determines priority sectors, approves operational and management procedures, approves financial statements, and receives management reports on PDF utilization. The PPP Policy Board decides on applications for funding and on recovery of funds by PDF.
Eligibility criteria	Can be used in: Transport and logistics, mass urban public transport, energy projects, tourism projects, and certain industrial projects where public property is used to support private industry and manufacturing.
Nature of funding	Can only be used to finance services rendered by Consultants preparing PPP projects, providing advice on transaction advisory, and for capacity building of Government Agencies and the PPP Unit. Reimbursement of disbursed funds will be sought from the private sector partner upon signing of the PPP agreement, or from the Government Agency if it decides to stop pursuing the PPP project prior to concluding the PPP agreement (unless the decision can be justified based on economic, environmental, legal, technical, and financial considerations).

Making PPPs Work

See Government of Sindh. 2012. Pakistan Infrastructure Project Development Facility at www.sbp.org.pk

ADB

PDF examples

4 World Bank Global Infrastructure Facility

Overview	The platform will facilitate the preparation and structuring of complex infrastructure PPPs to mobilize private sector and institutional investor capital. The GIF platform will provide support, drawing on its array of technical and advisory partners, which will include private investors, to ensure well-structured and bankable infrastructure projects are brought to market. Its aim is to provide integrated support—using the wide range of skills and resources from within the World Bank Group and within the public and private sectors—to unlock a credible pipeline of viable and bankable PPP projects in emerging markets and developing economies.

See World Bank .New Global Infrastructure Facility. 2014. http://www.worldbank.org/en/news/press-release/2014/10/09/world-bank-group-launches-new-global-infrastructure-facility

5 Proposed ADB Asia Pacific Project Preparation Fund (AP3F)

Overview	A dedicated fund in support of PPPs in infrastructure development. The fund will meet the cost of preparing PPPs in economic infrastructure ADB member countries. Support will cover feasibility cycles through to procurement and the negotiation of agreements. Targeted assistance will also available for upstream activities in relation to project preparation. It will assist projects that can be financed by a range of investors and a variety of project concepts. The funds provided will be reimbursed to the facility by successful projects.

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New Thoughts Attentive Services

Thoughts on China's PPP Financing Route

SPD Bank
Zheng Dawei

June, 2015

Creation Sharing Common Development

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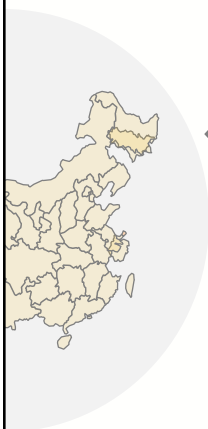

1 Significance of PPP promotion

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External policies and situation

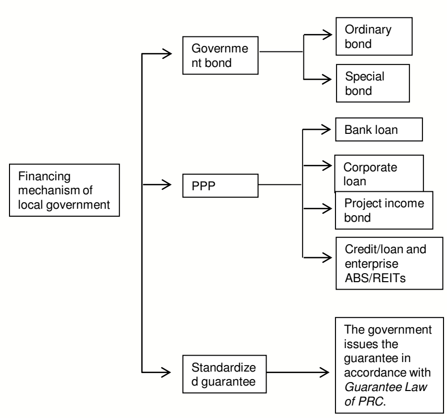
Guo Fa (2014) No. 43 *Opinions of the State Council on Strengthening Management of Local Government Debts*.

"Promote the use of public-private partnership mode". Encourage social capital to participate in the investment and operation of public welfare enterprises with certain benefits such as urban infrastructure construction by means of franchise. "

Cai Yu (2014) No. 351 *Clarification and Recognition Methods Concerning Incorporating Existing Debts of Local Governments into Budget Management*.

"Vigorously promote those existing projects to which PPP mode applies after recognition and selection; Give priority to PPP mode when pushing forward projects under construction"

"build legal channels and block illegal channels"



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Tri-win of government, public and social capital

Government

1. Stabilize growth and open up financing channels for infrastructure and public service sectors;
2. PPP mode will not aggravate government debts and will smooth fiscal expenditures;
3. It will effectively reduce government' s risks because governments are free from overly involving in planning, construction, financing and operation;
4. Adopt market-oriented method; introduce funds, technologies, experience and talents from social capital to reduce investment cost and enhance operation efficiency.

Social Capital

1. Social capital' s allocation need in assets with long-term stable return;
2. Gathering professional competence and experience of professional institutes and distribute risks rationally.

Public

Human-oriented philosophy and the need to obtain better and more efficient public services.

Advisors for restructuring of state-owned assets

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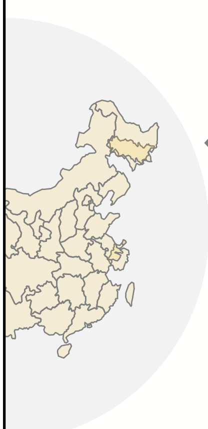

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PPP risk aversion (I)

Policy risks

- Legal and policy risks will be assumed by the government

Risks in government’s contract performance

- Demonstration of government’s risk tolerance and evaluation of VFM
- Incorporate government’s payment into middle-long term financial budget

Normative risks

- Adopt standardized operation procedures and contract texts
- Government’s public disclosure of terms and conditions of contracts, performance test report, mid-term evaluation report and major changes in project

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PPP risk aversion (II)

Borrower’s risks

- Adopt bid invitation and other methods for government’s procurement (prequalification and publicity); rating in accordance with financial strength and operating capability

Project construction risks

- Performance guarantee for construction
- Adopt single-period and other methods to control risks in project completion
- Transfer constructional risks through EPC

Project operation risks

- The government assumes the minimum demand risk and feasibility gap subsidy
- Set rational pricing and price adjustment mechanism
- “Take or Pay”, “Supply without delay”,
- “uniqueness clause”
- Letter of guarantee for operation and maintenance
- Government’s right of intervention

Evaluation of overall risk

Risks are relatively controllable

- Adhere to the principle of "A risk shall be assumed by the most appropriate party"
- Standard operational procedures and contract texts and relatively clear long-term contractual relationship
- Incorporating government subsidies into budge and the predicable cash flow is stable
- Government authorities supervise the entire life cycle of the project and evaluate its performance

Contents

PPP financing routes

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PPP financing routes

Financing intelligence

Financing

- Assist government in formulation of PPP implementation plans and screening of pilot projects
- Establish the social investor pool and interface with the government's PPP projects
- Assist in designing PPP project plans (including project transaction architecture)
- Lead the design of investment & financing plans for PPP projects
- Lead the implementation of investment & financing plans for PPP projects

Basic plan for PPP financing: Structured equity financing + project income notes/ project loans/ consortium loans/ +ABN/loans of operating period

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Changes in the PPP project financing ideas

- In terms of client choice, change from government platform marketing enterprises to PPP project investors (social capital) and project companies holding;
- In term of ideas of credit extension, change from single focus on government' s financial strength and measure to enhance credit to more attention to risk distribution and financial feasibility evaluation of PPP projects;
- In terms of guarantee methods, change from government' s disclosure which is relatively vague to benefits under PPP contracts and project asset protection which are relatively clear;

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SPD Bank PPP comprehensive finance services

Services at the government side

- Project screening and implementation plans
- Introduction of PPP investors
- Project transaction structure
- PPP investment and financing plans
- Design of the structure of PPP benefit distribution and risk sharing

Services at the social capital side

- Interface with government projects
- Introduction of multi-investors or multi-investment funds
- Establishment of the project company
- Design and implementation of financing plans without recourse with limited recourse
- Design of the structure of benefit distribution and risk sharing

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PPP comprehensive service plan

Early stage of project → Construction stage of project → Operation and handover stages of project

Early stage of project

- project screening and demonstration plan
- Project and social capital docking plan
- Design plans for optimization of government debt structure
- Design professional plans of transaction structure
- Design professional benefit distribution and risk sharing plan
- Design establishment plan of project company
- Design one-stop (share, bond and loan) investment and financing

Construction stage of project

- Provide one-stop (equity, bond and loan) financing plan
- Provide third party credit enhancement supporting plan
- Provide factoring and other supply chain financing plan

Operation and handover stages of project

- Provide one–stop (share, bond and loan) financing
- Provide asset securitization plan
- Provide financing and consultation services for merger & acquisition
- Provide fund supervision and trusteeship service plan
- Provide settlement, account management and other professional services

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PPP comprehensive service & product system

Early stage of project	Construction stage of project	Operation and handover stages of project
◆ Government's financial advisor ◆ Project evaluation ◆ Equity structured financing (introduction of project fund)	◆ Letter of commitment and letter of guarantee for loans ◆ Project loans, consortium loans ◆ Intermediary credit by Agence Française de Développement ◆ Project income notes ◆ Medium-term note, perpetual bond ◆ Supply chain financing (factoring) ◆ Financing lease ◆ Introduce trust, securities, insurance and wealth management funds in a structured manner	◆ Loans during operation period of project ◆ Asset-backed note (ABN) ◆ Financing lease ◆ Merger & acquisition financing and consultation

Basic plan for PPP financing: Structured equity financing + project income notes/project loans/consortium loans + ABN/loans of operation period

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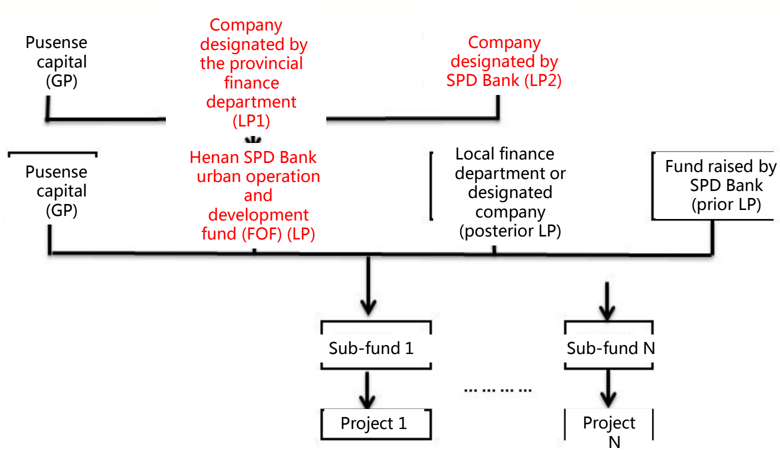
(I) Architecture of FOF and sub-funds



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(III) Investment objects for sub-funds

1. Government debt replacement sub-funds	The focus should be placed on the replacement of existing debts involving relatively a large sum
2. Land purchase and reserve sub-funds	Underline support for urban development and take the income from land sale as the source for repayment
3. PPP sub-funds	For infrastructure projects with certain cash flow or benefits, satisfy capital financing follow the PPP mode
4. Competitive industry sub-funds	Strategic new industries, market-oriented investment strategies

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Case 2 (early stage of project): PPP fund—BA fund projects

- In order to improve urban infrastructure construction and enhance investment in people's livelihood, it is hoped to start marching forward into urban sewage treatment industry across the country.
- B city has granted the sewage treatment of downtown area and utilization service of recycling water to B Group in the form of concession with a term of 30 years. Meanwhile, B Group will perform relevant construction tasks.
- An affiliate to G signed agreement with B Group to jointly establish a BG Development Limited Liability Company through the fund which is controlled by G. Such company will be the operating entity as the project company undertakes businesses such as sewage treatment, recycling water production and sludge disposal from B Group as well as the entity to be listed in stock exchange in future.
- BG contributes 3 billion yuan as the posterior and jointly contribute capitals with social security fund, SPD Bank and other banks to establish BA Fund (limited partnership) so as to invest the water-related projects such as sewage treatment and recycling water utilization included in the "three-year plan" of B city and quality water projects which are not included and quality water projects of other cities.

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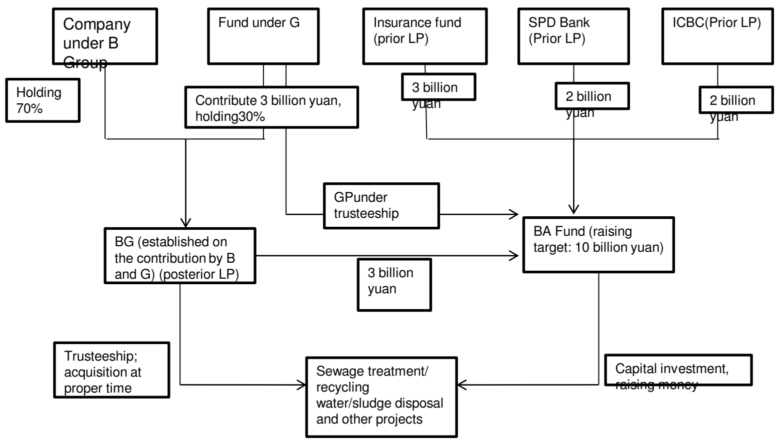
Transaction structure



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Case 3 (construction period of project): Consortium loan

Client: Shanghai L Solid Waste Comprehensive Development Co., Ltd.

Main Business: Investment of environment and municipal utility projects, design, construction, investment consultation and operation management and etc. of environment and municipal utility projects

Project background:

1. Inland river project of the comprehensive utilization base of old port;
2. Old port comprehensive landfill project, phase I;
3. Waste leachate emergency discharge project of the base of waste solid comprehensive utilization of old port;
4. Old port recycling energy utilization center project
5. Anti-pollution isolating greenbelt project at the north side

Financing plan: Consortium loan 2.3 billion yuan with a term of 15 years

Sources of repayment: Special repayment fund calculated at the settlement price of 40 yuan/ton by the municipal waste management and old port waste solid company

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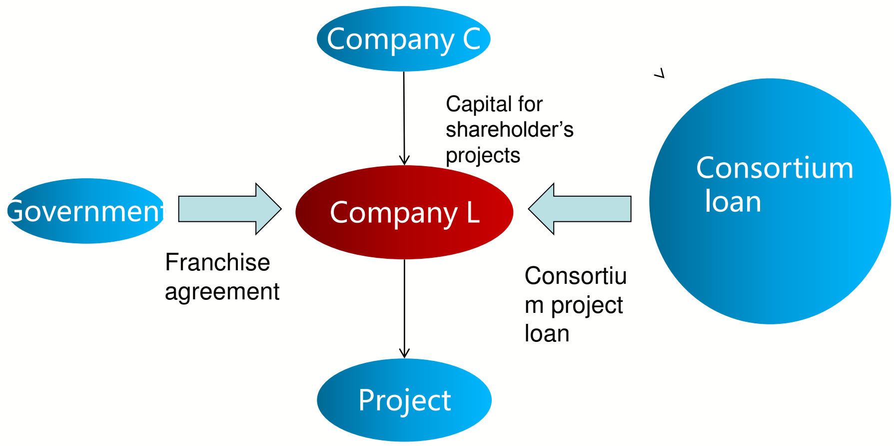
Case 3: consortium loan



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Case 4: A case of debt financing tool (operation period)

Client: A Group Co., Ltd.

Main business: Sewage treatment

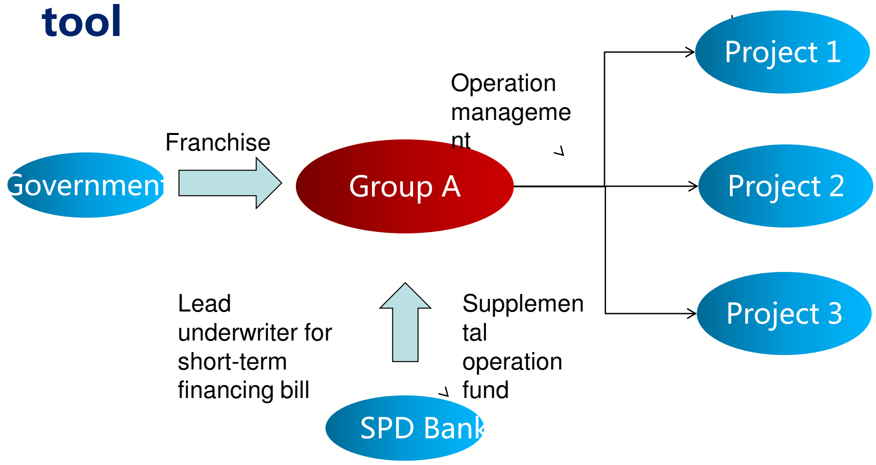
Project: Invest, operate and manage 63 domestic sewage treatment plants, which require growing operating cost.

PPP mode: Since 2012, A Group has been granted the franchise for the sewage treatment for the downtown with varied concession terms from 8 to 30 years (different terms for different projects)

Financing demand: 250 million yuan

Financing plan: SPD Bank serves as the lead underwriter of the 250 million yuan of short-term financing bill of A Group, proving fund guarantee for daily operation of the company.

Case 4: issuance of debt financing tool



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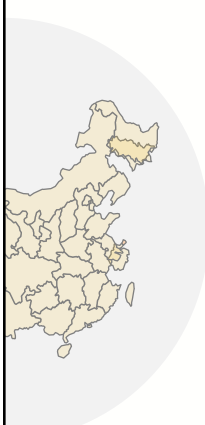

4 Ideas for PPP promotion

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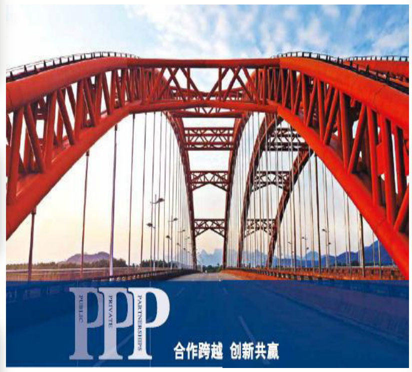
SPD Bank’ s ideas for PPP promotion

- Introduce and promote PPP mode to all levels of governments and social investors through the bank platform
- Establish project pools and social capital pools at both head office and branch levels, which assist government in absorbing social capitals
- Assist government and social investors in establishing cash pool for PPP projects



- Actively organize researches on basic transaction architecture and investment & financing structure under PPP mode for all kinds of industries and sectors
- Enhance platform establishment. Besides government, financial department and other departments, cooperate also with banks, insurance companies, securities brokers, law firms, and consultation companies to establish fund and technical assistance channels
- Establish a professional PPP team by strengthening talent cultivation so as to lay a solid foundation for the growth of PPP financing services

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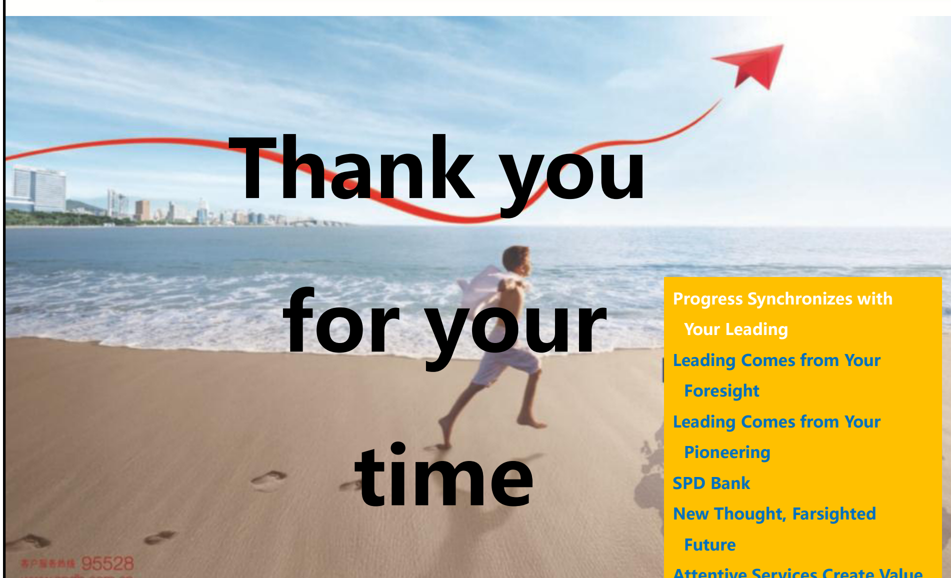

Thank you for your time

Progress Synchronizes with Your Leading
Leading Comes from Your Foresight
Leading Comes from Your Pioneering
SPD Bank
New Thought, Farsighted Future
Attentive Services Create Value
Progress with Your Being

WORLD BANK GROUP

PPPs: Risk Management

Beijing, June 12, 2015

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1. PPI Overview
2. PPPs Risks and Success Factors
3. World Bank Group and PPPs

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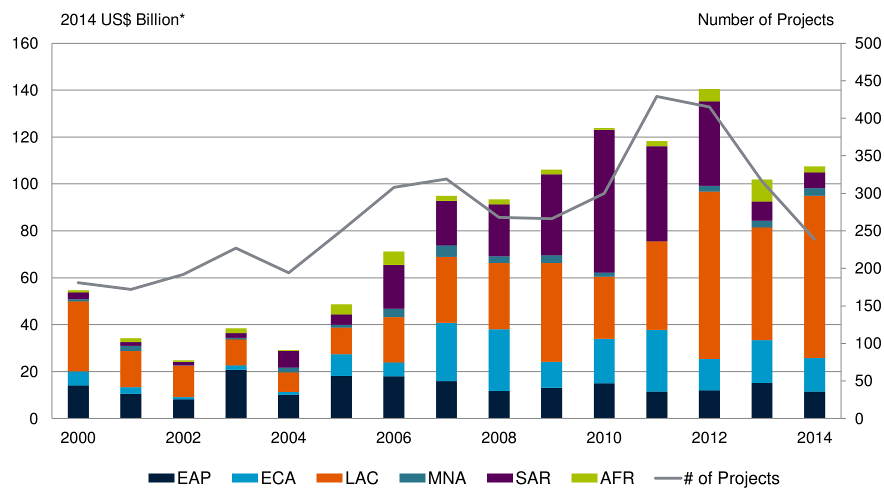
Private Participation in Infrastructure in EMDEs



Source: World Bank and PPIAF, PPI Project Database.

* Adjusted by 2014 US CPI

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Top 10 EMDEs PPP Markets

TOP 10 DEVELOPING COUNTRIES, 1990-2014					
Country	**Ranking**	**Total Value (US$ Billion)**	**Number of Transactions**	**Global Share (%) By Value**	**PPI/Population Ratio (2013)**
Brazil	1	363.7	707	22%	112
India	2	263.8	805	16%	6
China	**3**	**150.8**	**1,200**	**9%**	6
Turkey	4	81.3	170	5%	228
Argentina	5	81.1	210	5%	20
Mexico	6	74.9	224	5%	51
Russia	7	70.0	151	4%	3
Malaysia	8	63.6	96	4%	57
Philippines	9	54.7	116	3%	14
Chile	10	48.8	155	3%	385

*Source: The latest data for population (2013) was from The World Bank

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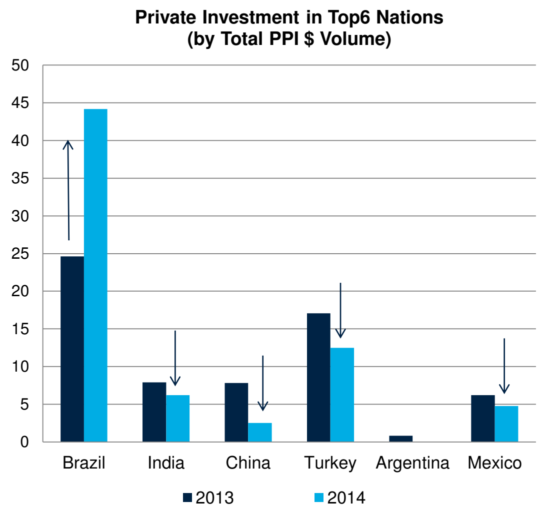
Top 6 Countries 2013 Versus 2014



- In 2014, there were significant increase (79%) in Brazil, due to strong activity in the Transport Sector (US$ 32.6 billion).
- Total investment in other five top countries all declined.
- Investment declined 68% in China in 2014, reaching the lowest investment since 2010.

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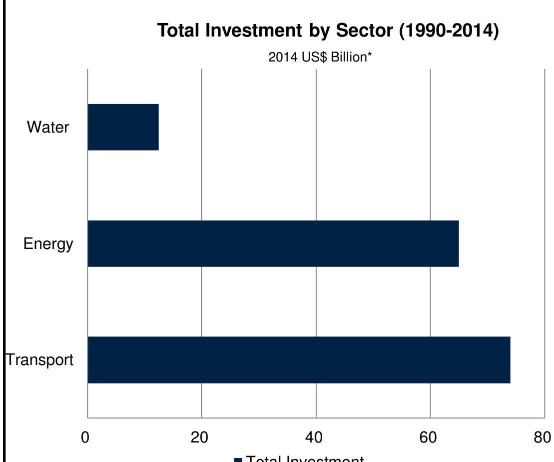
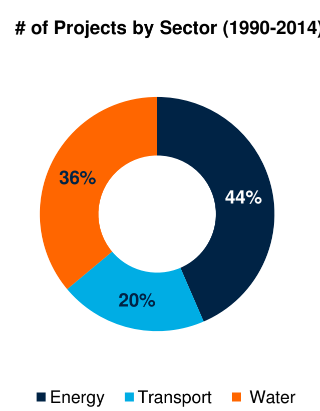
PPI in China: Sector Overview





Transport: Larger average project size and the highest investment commitments

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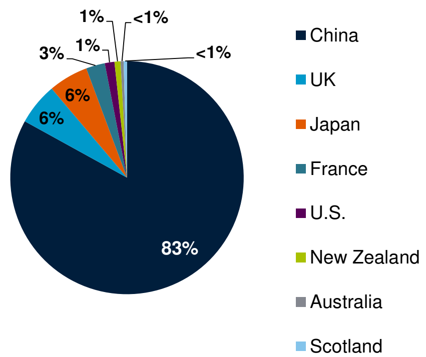
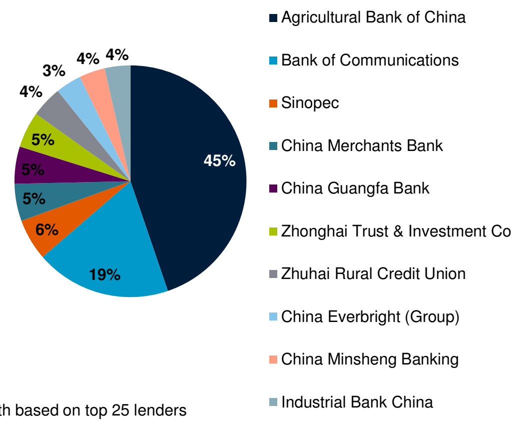
Lenders in China

Lenders in China by Country *



Top 10 Chinese Lenders*



*Source: Infrastructure Journal. The analysis above were both based on top 25 lenders

-Top 3 Lenders: **China** (**83%**) UK(6%) Japan (6%)

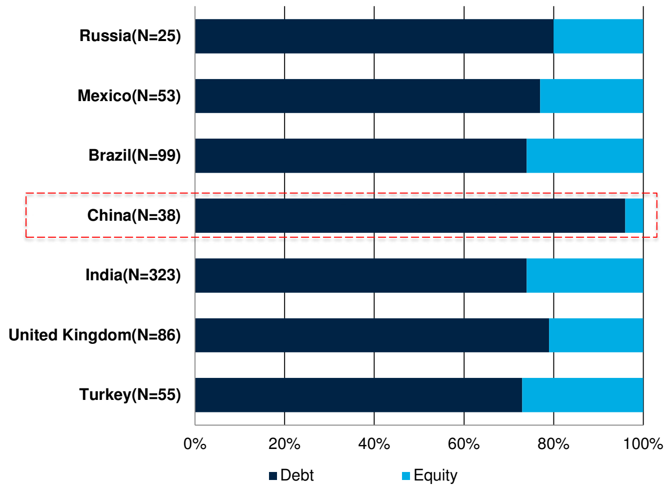
Top 10 Lenders in China (2005-2014)

TOP 10 PROJECT FINANCE LENDERS IN CHINA, 2005-2014				
Company	Country	Total Value (US$ Million)	Number of Transactions	Market Share (%) By Value
Agricultural Bank of China	China	4,152	14	33
Bank of Communications	China	1,753	9	14
Standard Chartered Bank	United Kingdom	643	15	5
Sinopec	China	536	1	4
China Merchants Bank	China	482	4	4
China Guangfa Bank	China	481	2	4
Zhonghai Trust & Investment Co	China	467	1	4
Zhuhai Rural Credit Union	China	403	1	3
China Everbright (Group)	China	333	1	3
China Minsheng Banking	China	333	1	3

Source: Infrastructure Journal

Standard Leverage Ratios and Debt Tenors

Average Debt/Equity Ratio (%), by Country



Debt/Equity Ratio:

-China: 96:4

-**Average :79:21**
(including China)

Source: Infrastructure Journal, N=sample size

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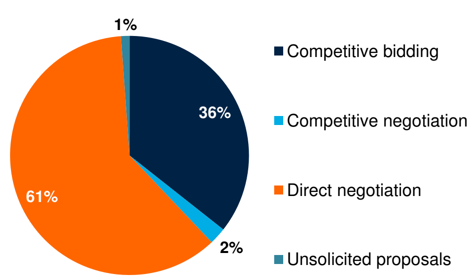
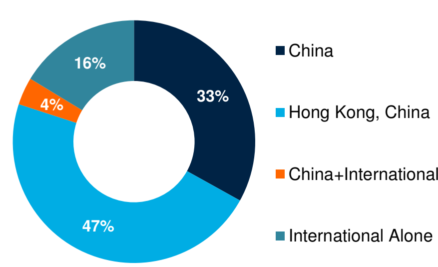
Transport Sector-Procurement Methods

Award Method



*The analysis was based on 81 available projects

Diversity of Sponsorship (by # of Projects*)



* Analysis was based on 242 available projects

-Most of the projects were awarded by direct negation (61%)

-Dominated by domestic sponsors (China and/or Hongkong): 80%

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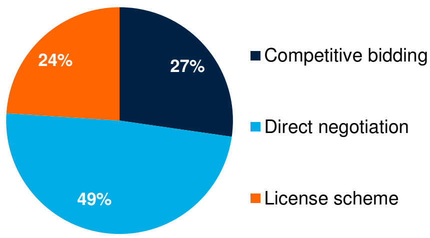
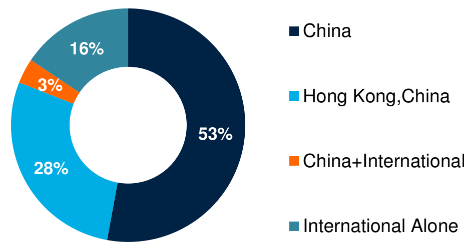
Energy Sector-Procurement Methods

Award Method *



*The analysis was based on 121 available projects

Diversity of Sponsorship (by # of Projects*)



*The analysis was based on 522 projects

-Nearly half of the projects were awarded by direct negation (49%)

-Dominated by domestic sponsors (Chinese and/or Hongkong): 81%

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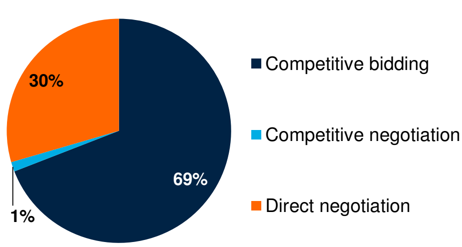
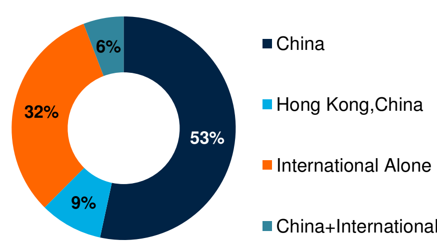
Water Sector-Procurement Methods

Award Method*



*The analysis was based on 228 available projects

Diversity of Sponsorship (by # of Projects*)



*The analysis was based on 433 available projects

-Nearly 70% of the projects were awarded by competitive bidding

-Dominated by sponsors from the mainland of China (53%)

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1. PPI Overview

2. PPPs Risks and Success Factors

3. World Bank Group and PPPs

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PPPs: some issues…

Design

Laws & Regulation

Land acquisition

Traffic

Zoning

Environmental issues

Financing

User Fees

Resettlement

Safety & Security

Land value capture

Level of service

Government support

GDP growth

Subsidy

Force Majeure

Exclusivity

Termination

Competition

Utilities

Road access

Devaluation

Refinancing

Inflation

Lenders

Concession fee

Investors

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Risk transfer lies at the heart of effective PPP design

- Each of the participants involved in PPPs faces risks → evaluation, allocation and management of these risks is crucial
- Risks should be borne by the party that controls them → Rationale: That party can bear the risks at the least cost
- Problems at the risk allocation stage can delay project negotiations
- Project contracts are used as a means to mitigate these risks
- Residual risks, such as political force majeure and regulatory risks, are mitigated through guarantees and insurance
- Risks not mitigated are borne by the consumer → higher tariffs

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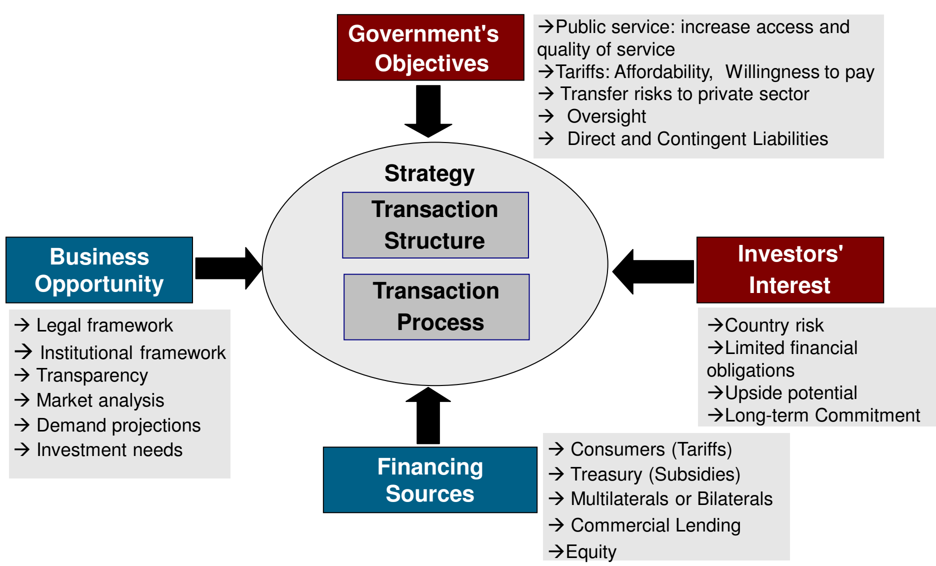

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Risk Allocation

Risk	Description	Private	Public
Site	Availability and quality of the project site, such as the cost and timing of acquiring the site, needed permits or assuring rights of way for a road, the effect of geological or other site conditions, and the cost of meeting environmental standards	x	X
Design, Construction, Commissioning	Risk that construction takes longer or costs more than expected, or that the design or construction quality means the asset is not adequate to meet project requirements	X	x

Risk	Description	Private	Public
Financing	Raising of equity and debt to implement project	X	x
Permits	Obtaining necessary permits and licenses to implement project	x	X
Operation and maintenance	Risks to successful operations and maintenance, including the risk of interruption in service or asset	X	
Demand	Risk that usage of the service is different than was expected, or that revenues are not collected as expected	x	X

Risk	Description	Private	Public
Change in legal framework	Risk that a change in general law or regulation adversely affects the project, such as changes in general corporate taxation, or in rules governing currency convertibility, or repatriation of profits		X
Regulatory or Political	risk of regulatory or political decisions or changes in the sector regulatory framework that adversely affect the project. For example, this could include failure to renew approvals appropriately, unjustifiably harsh regulatory decisions, or in the extreme, breach of contract or expropriation	X	X

Risk	Description	Private	Public
Economic	Risk that changes in interest rates, exchange rates or inflation adversely affect the project outcomes		X
Force Majeure	Uninsurable risk that external events beyond the control of the parties to the contract, such as natural disasters, war or civil disturbance, affect the project		X

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Mitigation of Risk ?

- Project preparation and optimal risk allocation

- Public financing support:
  - loan or grant finance directly to the project company
  - government guarantee on a commercial loan
  - governments retain the financing function

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1. PPI Overview

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Role of the World Bank Group (WBG)

	IBRD International Bank for Reconstruction and Development Est. 1945	IDA International Development Association Est. 1960	IFC International Finance Corporation Est. 1956	MIGA Multilateral Investment and Guarantee Agency Est. 1988
Role:	To promote institutional, legal and regulatory reform	To promote institutional, legal and regulatory reform	To promote private sector development	To reduce political investment risk
Clients:	Governments of member countries with per capita income between $1,025 and $6,055.	Governments of poorest countries with per capita income of less than $1,025	Private companies and governments in member countries	Foreign investors in member countries
Products:	▪ Technical assistance ▪ Loans ▪ Policy Advice	▪ Technical assistance ▪ Interest Free Loans ▪ Policy Advice	▪ Equity/Quasi-Equity ▪ Long-term Loans ▪ Risk Management ▪ Advisory Services	Political Risk Insurance

Twin Goals: Reduce Absolute Poverty and Boost Shared Prosperity

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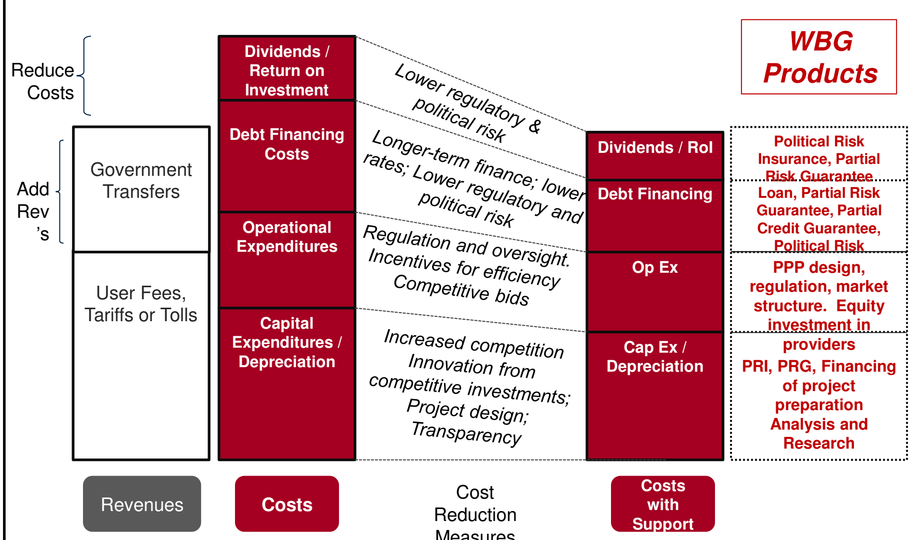
WBG Products to Improving Bankability of PPPs



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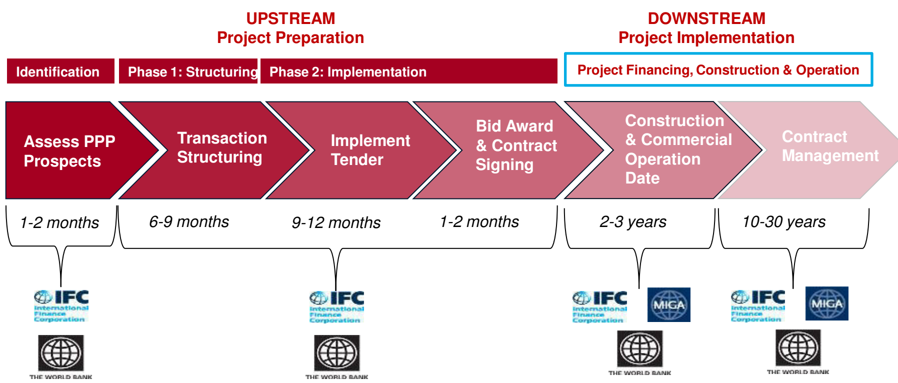
WBG Support for Infrastructure Projects



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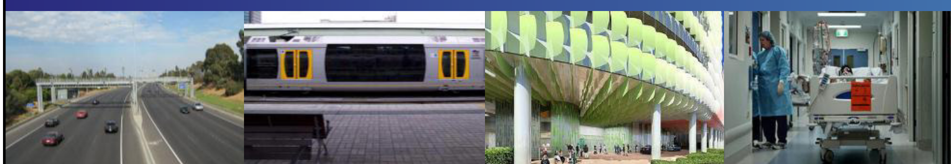
World Bank PPP Group in Singapore

CASTALIA
Strategic advisors

Risk Management of PPPs

Principles and Practice



Michael Schur and Alex Sundakov, June 2015

AGENDA

Issues in PPP risk management

- Reducing the cost of finance
- Reasons why a feasible project may still be too risky to be bankable
- Risk over the project cycle

Responses to these issues

- Credit enhancement measures
- Matching risk to investor preferences
  - Infrastructure is a popular asset class for Pension Funds
  - Infrastructure assets and Pension Funds in Australia

CASTALIA

The cost of finance can and should be reduced

- Projects may be viable but not bankable
  - Even though expected revenues cover costs it may be impossible to secure adequate finance due to concerns about the variability (risk) of costs or revenues, credit worthiness of counter parties and capability of public sector counterparties
- There's a benefit to thinking about how you can reduce risks to the private party => reduction in financing costs => reduction in funding required
- Two ways to do this:
  - Shift risk from the private to the public sector
  - Managing the risks allocated to the public sector

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Reasons why a feasible project may still be too risky

Risk allocation problem

Source of risk related to user fees…

- Demand risk: difficult to predict future demand
- Regulatory risk: user fees are often regulated by government

Source of risk related to finance…

- Refinancing risk
- Inflation

Risk management problem

Source of risk related to government obligations…

- The non-delivery of government financial commitments, which is influenced by the:
  - method of dispute resolution with the government
  - need to make multi year fiscal commitments under annual budgets
  - fiscal viability of local government and contracting agencies (sub-sovereign risk)
- The non-delivery of the government's non-financial commitments required to make the project viable. For example: acquire land, close streets, etc

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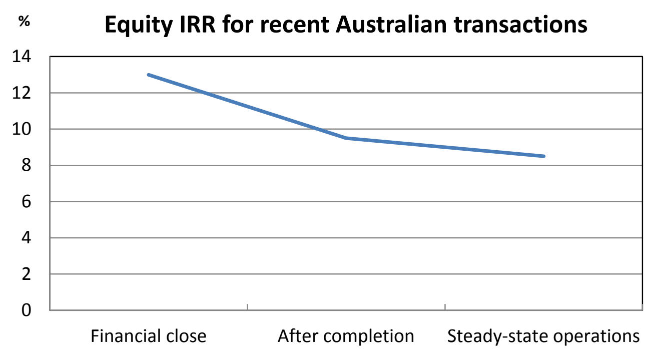
Risk changes over the project cycle

Falling risk leads to a fall in required returns → Different risk-return profiles appeal to different investors



There are two responses to these issues

- Manage and minimise these risks through credit enhancement measures
- Match risk of project finance to risk appetite of different investors

Credit enhancement measures can help make a project viable and bankable

Market risk mitigation measures can transfer the risk associated with user fees from the concessionaire to the government, for example:

- Minimum revenue guarantees
- Variable concession terms to maintain guaranteed minimum income

As more risk is transferred to the government, possible non-performance of the government will require greater credit enhancement, for example:

- Liquidated damages for non-performance of non-financial obligations
- Performance guarantees
- Debt and equity guarantees

The government will then need to manage any resulting contingent liabilities

Allow flexibility for different investors over the project life cycle

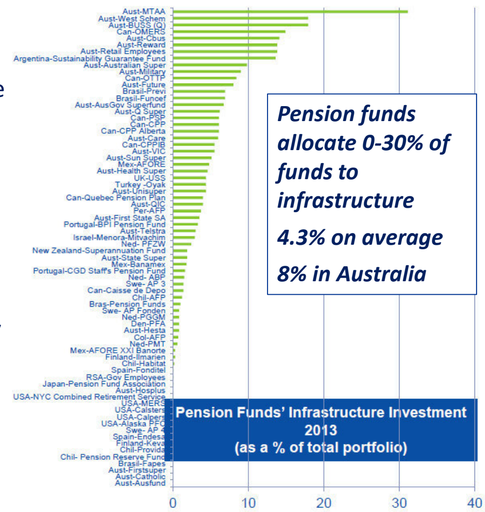
PPPs offer investment opportunities for:

- project developers (short term, more risky finance)
- owners (long-term, less risky finance)

For example, **pension funds** are a dominant investor in long-term PPP finance

Infrastructure is a popular asset class with Pension Funds

- High barriers to entry and monopoly-like characteristics => infrastructure not as sensitive to the economic cycle as other assets
- Stable and growing demand for services + long-term protection of revenues => infrastructure investments are generally low risk
- Stable revenue => enables relatively high leverage
- Infrastructure assets are long-term => match tenor of liabilities
- Infrastructure assets provide protection against inflation



Source: BBVA (2015)

Successes and failures of infrastructure assets and Pension Funds in Australia

Sydney Desalination Plant

- Sale by the State Government of NSW
- 25 year contract with Sydney Water
- Regulated price
- Winning bid AUD2.3 billion – consortium of Pension Funds: Ontario Teachers Pension Plan, Alberta Asset Management Co, Hastings

Heavy Haul Rail, Western Australia

- An iron ore company which built its own heavy haul rail.
  - Carries approximately 180 million tonnes per year of iron ore 500 km
- Attempted to sell 49% stake in its rail subsidiary to Pension Funds
- No takers because nothing was done to fit the asset to Pension Fund requirements:
  - No long-term contractual arrangements with the mining subsidiary
  - Full exposure to commodity risk

Summing up…

Three key issues in risk management

- There is a feedback loop between finance and funding
- Some project risks can be re-allocated (those associated with users fees and finance) while others need to be managed (those associated with government obligations)
- Risk changes over the project cycle, and different risk-return profiles appeal to different investors

Two methods for dealing with these issues

- Manage and minimise these risks through credit enhancement measures
- Match risk of project finance to risk-appetite of different investors

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Infrastructure UK

Risk Transfer in PPPs

Karineh Grigorian

June 2015

Infrastructure UK

The Core Characteristics of PFI/PF2 are…
私人融资计划的核心特点是…

- Capital at risk 资本有风险
  - Incentives to complete and deliver on time and at cost 激励按时按照预算完成和提供服务
- Fixed Price 固定价格
  - Certainty of whole-life costs 全程成本的确定性
  - Certainty of whole-life investment 全程投资的确定性
- Output-based 以产出为基础
  - Payment relates as closely as possible to delivery of the desired 'outcomes' rather than of inputs 尽可能在提供所需预期结果时付款，而不是根据投入

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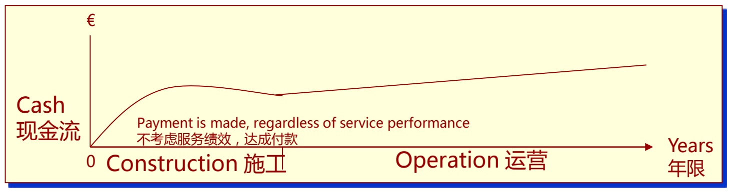
Public Sector Cash Expenditure Profiles
公共部门的现金支出概况

(A) Conventional (input-based) procurement 传统的（以投入为基础的）采购



(B) PFI / PF2 (output-based) procurement 私人融资计划（以产出为基础的）

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The private sector will price risk

So to achieve best Value for Money:

Risk should be allocated to parties best able to manage it!

Beware of transferring too much

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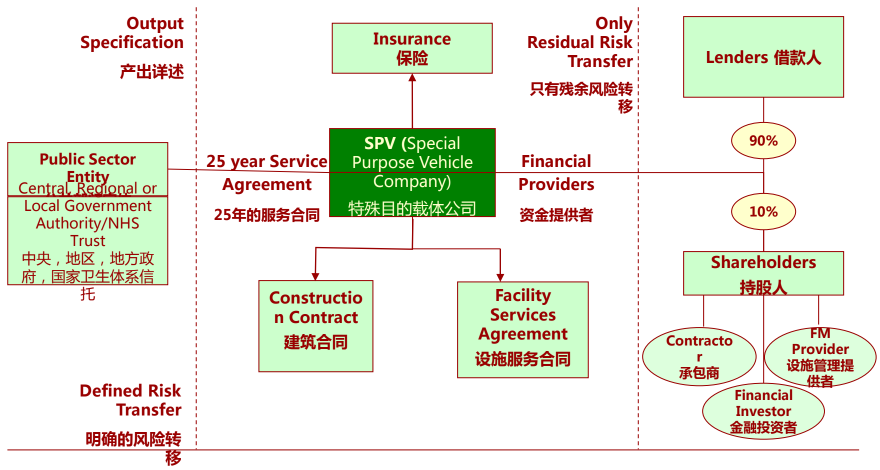
Overview: Typical PFI/PF2 Structure
概述：典型的私人融资机构的结构



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Typical Risk Allocation in PPPs for:

- Design
- Construction
- Operations
- Financial
- Demand

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Risk Allocation on Design Aspects

	Public Authority	Private Contractor	Shared
Cost overrun caused by design		X	
Construction delay caused by design		X	
Operating inefficiencies caused by design		X	
Obtaining land ownership & warranting good title to land.	X		
Relocation of people	X		
Obtaining planning permission and other consents			X

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Risk Allocation on Construction Aspects

	Public Authority	Private Contractor	Shared
Construction problems cause time overrun		X	
Contractor becomes insolvent		X	
Change to legislation in build phase		X	
Public sector delay or restrict site access	X		
Force Majeure causes delay			X
Force Majeure causes cost over run		X	
Facility never satisfies handover requirements / Private sector abandons construction		X	

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Risk Allocation on Operations Aspects (Cont.)

	Public Authority	Private Contractor	Shared
Public Sector reclaims building or ends contract early.	X		
Force Majeure causes cost overrun		X	
Public sector changes performance standards	X		
Recurring persistent breaches		X	

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Risk Allocation on Financial Aspects

	Public Authority	Private Contractor	Shared
Inflation rate changes	X		X
Private sector costs are higher than budgeted		X	
Change in general tax		X	
Discrimination or project specific change in law	X		
Public sector changes performance standards	X		
Public body is not authorised to sign contract or exceeds powers. New government or newly elected officials seek to overturn contract.	X		
Private sector found guilty of corrupt practices		X	

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Risk Allocation on Demand Aspects

	Public Authority	Private Contractor	Shared
Low user numbers			X
Change of tariff (other than as allowed for in indexation)	X		
Public sector build competing infrastructure nearby and demand goes down	X		



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New Challenges of Risk Management under China's Public-Private-Partnership (PPP) Mode

Dr. Chen Chuan

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Engineering Management Professor with the Business School of Sichuan University/ Doctoral Advisor/ Head of Engineering Management Department

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Risk is everywhere. Risk is a kind of ubiquitous phenomenon and unavoidable. All of us face risks--some people prefer to face risks than others. Although some people worry about risks, while others are excited to seek risks. Risks are around us. However, we could neither always detect them nor effectively deal with them.

Edward and Bowen (2005)

Characteristics of high risk projects

Characteristics of high risk projects

What makes a project risky?

1. Huge capital investment
2. Cash flow Unbalanced
3. The adoption of new technology
4. Novel Procurement arrangement
5. Novel Operational requirements
6. Very large scale
7. Very complex projects
8. Some project stakeholders lack experience
9. Harsh time limitation
10. Strong sensitivity to performance/quality
11. Strict, inconsistent, or changing legal requirements
12. Sensitivity to co-environment
13. Strong sensitivity to politics/culture
14. Ever-changing forms

Risk management procedure

01 **Risk identification**

Identify which risks may affect the project and document their characteristics

02 **Qualitative risk analysis**

Evaluate and comprehensively analyze risk probability and impact, prioritize risks and provide a basis for subsequent analysis

03 **Quantitative risk analysis**

Quantitative analysis of the impacts of identified risks on overall project goals

04 **Risk response**

In line with project goals, formulate plans and measures improving opportunities while reducing threats

Risk management procedure (continued…)

Risk response

- No measures adopted
  1. Cost-benefit analysis, the cost of risk response exceeds potential benefit
  2. Risks are within acceptable range
  3. Risk response may lead to other problems or reducing opportunities
  4. Risks may disappear in the future, while opportunities may increase
  5. No action does not mean forgetting risks. Ongoing monitoring
- Adopted measures
  - Risk aversion — Ideal selection
  - Risk mitigation — In most circumstances, more practical choices
  - Risk transfer/sharing — Risk allocation between insurance/project partners. Risk transfer also needs costs
  - Risk retention — Risk lovers may retain risks rather than transfer

1. Aims to reduce potential costs
2. The sequence of response measures: Aversion, mitigation, transfer or share or retention

The essence of PPP mode

Government technology and resource

- Responsibilities for citizens
- Public services
- Economic regulation
- Undertaking risks that could not be controlled by private sector

Technology and resource of social capital

- Creativity
- Management technology
- Efficiency
- Investment and financing potential

PPP

"Win" for government

- New investment
- Economic stimulus
- Government debt management
- High-quality infrastructure etc.

"Win" for social capital

- Benefits
- Reputation

- Challenge 1: Establish new PPP risk management procedure based on partnership

PPP risks

The principles of PPP risk allocation

A Under PPP model, risks are allocated through **contracts**

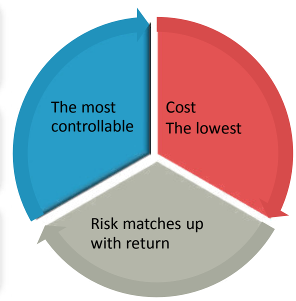
B Aim to match up risks and corresponding returns. Returns are

C Generally, government intends to transfer risks to social capitals that could impact the results.

D From the projects signed previously, it could be found that some risks are

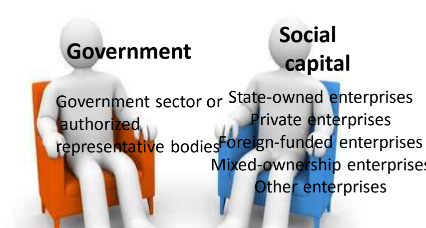
E The remaining risks need to be negotiated when allocating risks.

F The major benefit of transferring risks to partners rather than



The specialty of China's PPP

- Western PPP mode is an operational model for promoting the cooperation of infrastructure and public utility construction between public and private sectors, adopting the **discourse system of western economies**;



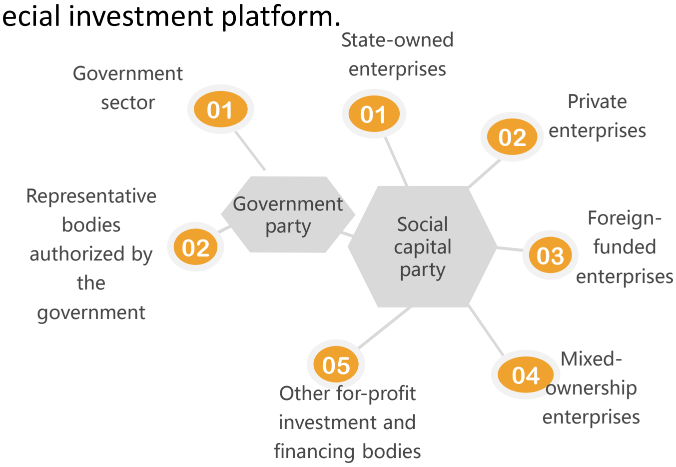
- The project of "**government and social capital cooperation**" is a new concept based on international PPP mode and in line with China's situation.
- China's economy is dominated by **public-ownership economy**. Based on this, the current investment and financing system classifies national economic sectors into two parts: "**government**" and "**enterprises**".

The specialty of China's PPP

- China's government sector or representative bodies attract social capital in infrastructure and public utility construction. Different from the cooperation between "public sector" and "private sector" in western countries, China's model is not traditional stead, it adapts and localized PPP

The specialty of China's PPP

- The cooperation between government and business enterprises could adopt either the franchising model granted by the government to the company, or PFI model where government invests capital to the company through special investment platform.



- Challenge 2: How to reasonably allocate risks between state-owned enterprises and investors?

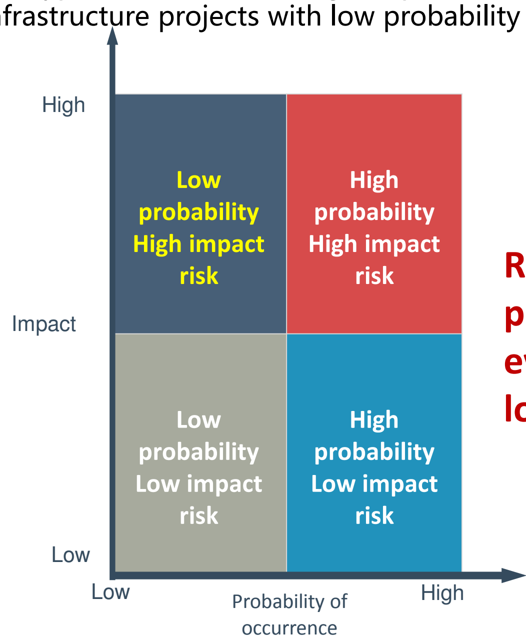
PPP mode does not change the public welfare nature of infrastructure

1. PPP should not become an excuse of government to levy “second fees” from taxpayers.
2. PPP should not become a measure for government to transfer its “public service” liability for taxpayers.
3. PPP shall not become a tool for government to shirk its responsibilities. The attitude of “only reforming” public utilities is dangerous, irresponsible and unsustainable.
4. PPP shall not become a route to transfer financial risk.

PPP mode does not change the public welfare nature of infrastructure

- PPP mode needs to both meet the “profitability” of private sector and consider its public goods nature.
- Both economic and social benefits need to be considered.
- In any cooperation models, the public sector investment projects need to strike a balance between maximizing social benefits and protecting investors, maximally meeting public demands and ensuring the operating enterprises to make certain profit.

The type of risks threatening the public welfare nature of infrastructure projects with low probability and high impact



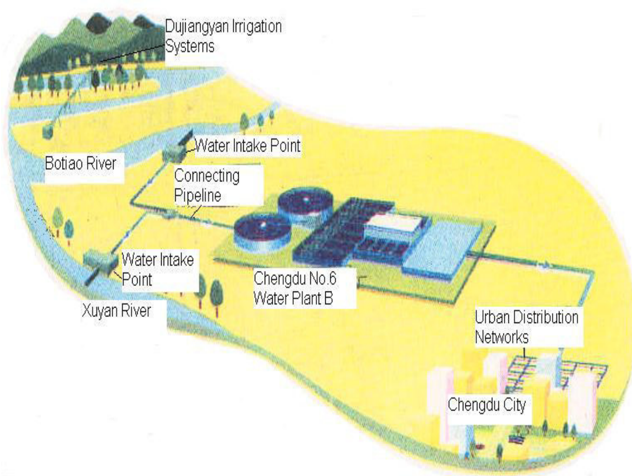
Risk = the probability of risk event occurrence X loss or income

- Challenge 3: How to deal with risks that threatening the public welfare nature of PPP projects with high probability and high impact？

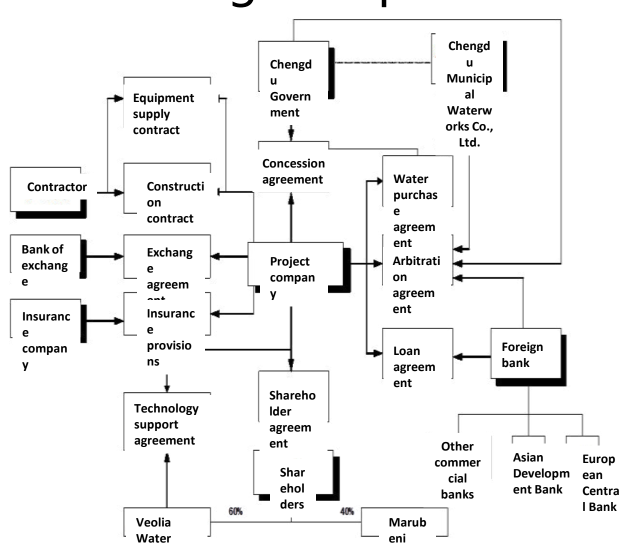
PPP risk management case: Plant B of the 6th Chengdu Tap Water Plant

- The Plant B of the 6th Chengdu Tap Water Plant is the first pilot BOT project in China approved by the State Development Planning Commission.
- The project officially invited international bidding. 33 foreign companies or consortia bid for the project.
- The bid winner is the consortium consisting of General des eaux of France and Marubeni Corporation.
- On August 11, 1999, Chengdu Government officially signed the concession agreement with Chengdu General-Marubeni Water Supply Co., Ltd (project company).
- After the construction for two and a half years, the project was completed and put into operation on February 11, 2002.

PPP risk management case: Plant B of the 6th Chengdu Tap Water Plant



PPP risk management case: Plant B of the 6th Chengdu Tap Water Plant



PPP risk management case: Plant B of the 6th Chengdu Tap Water Plant

Risk allocation plan:

Risk type	Code	Risk	Government	Social capital
Political risk	P1	Cancel, expropriation and seizure risk	√	
	P2	Exclusiveness risk		√
	P3	Legal change risk		√
	P4	Development approval risk	√	√
	P5	Adverse government behaviors or negligence	√	√
	P6	The provision of public infrastructure	√	
	P7	Increasing tax rate	√	√
	P8	Political force majeure	√	
	P9	The concession agreement termination due to government reasons	√	
	P10	Payment failure by urban utility company	√	
Construction risk	C1	Land acquisition	√	√
	C2	Land compensation fee		√
	C3	Cost overruns		√
	C4	Increasing financing costs		√
	C5	Project delay		√
	C6	Quality risk		√
	C7	Contractor mistakes		√
	C8	Environmental damage during the construction period	√	√
	C9	Geology and historic relics protection	√	
	C10	Franchisor mistake	√	√
	C11	Natural force majeure during the construction		√
	C12	Non-natural force majeure	√	

PPP risk management case: Plant B of the 6th Chengdu Tap Water Plant

Risk allocation plan (continued...):

Risk type	Code	Risk	Government	Social capital
Operational risk	O1	Government mistake	√	
	O2	Franchise company mistake		√
	O3	Agreement is terminated by the franchisor	√	√
	O4	Environmental damage during the operation period		√
	O5	Natural force majeure		√
	O6	Non-natural force majeure	√	
	O7	Labor risk	√	√
	O8	Technology risk		√
	O9	Equipment maintenance risk		√
Market and income risk	M1	Insufficient income	√	
	M2	Fluctuation of water demand	√	
	M3	Project handover failure	√	
	M4	Water fee collection problems	√	
	M5	Raw water supply	√	
Financial risk	F1	Inflation risk		√
	F2	Interest rate risk		√
	F3	Foreign currency availability	√	
	F4	Exchange rate risk during the construction period		√
	F5	Exchange rate risk during the operation period	√	√
	F6	Currency exchange and remittance risk	√	

PPP risk management case: Plant B of the 6th Chengdu Tap Water Plant

- After Plant B was constructed, water usage in Chengdu dropped significantly. The water usage was affected by industrial restructuring (the secondary industries transformed to the tertiary industries), and Asian financial crisis.

- To consume 400,000 tons water per day, Chengdu Municipal Waterworks Co., Ltd. had to shut down Plant II and Plant V, with daily production capacity of 230,000 cubic meters and 150,000 cubic meters respectively. 2/3 water fees charged by Chengdu Municipal Waterworks Co., Ltd. is paid for purchasing purified water for Plant B. So, the company lost RMB 150 million from profit in the first year after Plant B was put into operation.

- Challenge 4: Risks of PPP Project Risk Management

Thank You

Risk Sharing in the Operational Guidebook for Public-Private-Partnership (PPP) Mode

Xu Xiangdong

International Seminar onPPP FINANCING AND RISK MANAGEMENT

June 12, 2015

Xu XiangdongProfile

Mr. Xu Xiangdong, a Chemical Engineering and Law major, has worked in large central SOEs, private enterprises, Top 500 multi-national corporations, and intermediary institutions. He has held the positions of senior legal advisor, investment director, vice president, government advisor. Mr. Xu is now a partner and Deputy Director of Beijing ICS Law Firm, as well as a senior advisor of Beijing Caizhinan Consulting Co., Ltd. Since getting involved in the operation and implementation of PPP projects in 2002, Mr. Xu has gained the overall experience in project development, business mode and transaction architecture design, bidding/tendering, contract drafting and negotiation, investment and financing, finance and taxation, engineering and construction, operation & maintenance. He has participated in many PPP projects inside and outside China, including the National Stadium, water park, electricity generation from waste incineration, and water supply projects.

Xu Xiangdong Profile (Continued)

As an appointed expert, Mr. Xu has participated in the compilation of the NDRC's *Infrastructure and Utilities Franchise Law*, *Measures for Management of Infrastructure and Utilities Franchise*; the Ministry of Finance PPP Center's *Guideline for PPP Project Contracts* (Trial), *Measures for Management of Government Procurement in PPP Projects*, *Interim Measures for Management of Competitive and Consultative Procurement Mode in Government Procurement*, and *Guidebook for VFM Assessment of PPP Projects*. Mr. Xu also holds the titles of an expert of China PPP Specialty Committee, an expert of China PPP Research Institute, the chief legal expert of Central University of Finance and Economics PPP LAB, the leader of MOHURD Zhongjian Zhengyan Experts Committee Legal Team, the PPP training expert of NDRC Training Center, and the post-project assessment expert of China International Engineering Consulting Corporation.

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I. What is China PPP?

1. An old concept

- It has been nearly 30 years since the earliest China PPP project (the BOT project of Shenzhen Shajiao B power plant in 1988);
- It has been 20 years since the earliest China PPP policy (the *Notice on Matters Concerning Management of Examination and Approval of Foreign-invested Franchise Projects* promulgated on August 21, 1995);
- Public utilities PPP projects reached a climax upon the promulgation of *Measures for Management of Public Utilities Franchise* (MHURD Directive No. 126) by the former Ministry of Housing and Urban-Rural Development on March 19, 2004.

I. What is China PPP? (continued)

2. It is rather a new concept (Guo Ban Fa [2015] No. 42)

- It is an important innovation for the public service supply mechanism;
- It helps accelerating the transformation of government functions, the separation of government administrative functions and enterprises' management, the separation of government and business functions, and driving the modernization of China's governance system and capability;
- It helps breaking the restrictions on industry access, stimulating economic vitality and creativity;
- It helps improving the financial input and management modes, improving the effectiveness in using fiscal funds, smoothing the fluctuations of government expenditures between fiscal years, as well as preventing and solving government debts.

China PPP is rather a new concept

I. What is China PPP? (continued)

3. Public-Private-Partnership (PPP) Mode

- *Decision of the Central Committee of the Communist Party of China on Some Major Issues Concerning Comprehensively Deepening the Reform* (Adopted at the Third Plenary Session of the 18th Central Committee of the Communist Party of China on November 12, 2013): ...We will establish a transparent and standardized investment and financing mechanism for urban development, allow local governments to expand the channels of financing for urban development by issuing bonds and other means, allow private capital to participate in urban infrastructure investment and operation by franchise and other means, and study the possibility of setting up policy financial institutions for developing urban infrastructure and housing...
- The concept of China PPP was unified by the *Guidelines for Making Innovations in the Investment and Financing Mechanism of Key Areas and for Encouraging Non-governmental Investments* (Guo Fa [2014] No. 60) promulgated by the State Council on November 16, 2014.

China PPP is the Public-Private-Partnership Mode

II. Risk Sharing in China PPP

1. Reasonable sharing of risks is key to success of PPP projects

- The PPP project contract, the core document of PPP project, is called the "Royal Contract" or "Constitutional Contract". The nature of PPP project contract is to reasonably distribute risks between governmental and non-governmental investments, to define the rights and obligations of contract parties, so as to ensure the smooth implementation of PPP project and the realization of value for money;
- Reasonable sharing of risks is key to success of PPP projects. A successful PPP project should not be the one that all risks and responsibilities are borne by one party only;
- Reasonable sharing of risks is the most important content in the risk management of PPP projects.

II. Risk Sharing in China PPP (Continued)

2. Five principles of risk sharing

- The party bearing risks should have control over the risks;
- The party bearing risks should be able to reasonably transfer risks (e.g. by purchasing relevant insurances);
- The party bearing risks should have larger economic benefits or motives in controlling the risks;
- It is most effective for the said party to bear the risks;
- In the event that the risks take place eventually, the party bearing the risks should not transfer the costs and losses incurred to the other party to the contract.

II. Risk Sharing in China PPP (Continued)

3. Risk matrix

Risk factors	Government	Social capital	Sharing
Politics (expropriation, control, nationalization)	△		
Financing		△	
Design and construction		△	
Operation & maintenance		△	
Handover		△	
Market			△
Force Majeure			△
Changes in law – Controllable by government	△		
Changes in law – Uncontrollable by government			△
Systematic financial risks			△

III. Sharing of Major Risks in Guidebook for PPP Operation

1. Guidebook for PPP operation - main basis for the
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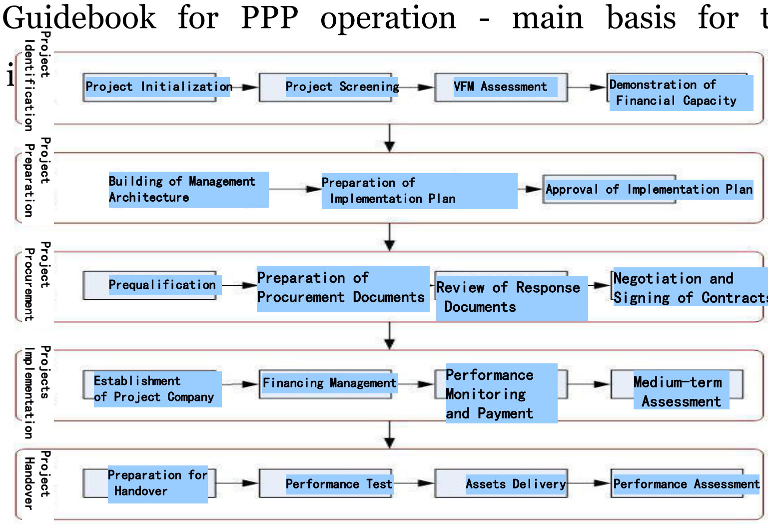

III. Sharing of Major Risks in Guidebook for PPP Operation (Continued)

2. Project identification

- Project initialization:

① Government initialization: The government should be responsible for whether it can successfully pass the assessment and screening, become a backlog project, and be included into the annual and medium-term development plan;

② Non-governmental investment initialization: The non-government investment should be responsible for whether it can successfully pass the assessment and screening, become a backlog project, and be included into the annual and medium-term development plan;

III. Sharing of Major Risks in Guidebook for PPP Operation (Continued)

2. Project identification

- VFM assessment: The qualitative assessment focuses on the comparison between PPP mode and the traditional government procurement mode: whether the former mode will increase supply, **optimize risk distribution**, improve operation efficiency, promote innovation and fair competition. The optimization of risk distribution is mainly scored according to risk analysis in the project materials. Clearly identifying, optimizing and distributing risks is a major driver to value for money.

① Whether it can pass the VFM assessment is a risk to be borne by the government;

② However, the optimized risk distribution in the VFM analysis is the initial distribution between governmental and non-governmental investments, and to some extent decides whether the PPP project in question can be continued.

III. Sharing of Major Risks in Guidebook for PPP Operation (Continued)

2. Project identification

- **Demonstration of financial capacity:**

a) The expenditures of all PPP projects in a year that are part of budget should not exceed 10% of public budgetary expenditures. Provincial-level financial departments may determine the specific percentage in line with local situations, register the number with the Ministry of Finance, and make it public.

① The risk of invisible government debts arising from the overuse of PPP mode and excessive expenditure percentage should be borne by the government:

② As for non-governmental investments, nevertheless, it is possible to back-calculate the upper limit of budgetary expenditures of all PPP projects in a year, so as to control the risks of government payments or feasible gap subsidy.

III. Sharing of Major Risks in Guidebook for PPP Operation (Continued)

2. Project identification

- **Demonstration of financial capacity:**

b) For those PPP projects that have been "demonstrated" and approved by the people's government of the same level, financial departments at various levels should put them into the PPP project catalogue, and budget their expenditure responsibilities in medium-term financial plans.

① If a PPP project enters budget without the demonstration of financial capacity, the risk will to be borne by the government;

② In order to ensure that the actual payments can be made in the government expenditures, non-governmental investment must confirm the project has undergone the demonstration of financial capacity.

III. Sharing of Major Risks in Guidebook for PPP Operation (Continued)

2. Project identification

- **Demonstration of financial capacity:**

c) When signing the contract for a PPP project, the financial department (or PPP Center) should review the contract to ensure that the contract contents are consistent with the demonstration of financial capacity, so as to prevent material changes in government expenditures due to adjustments in contract contents. The financial department should strictly abide by the contract terms, make payments in a timely manner, earnestly protect the credibility of local government and guarantee the effective supply of public services.

① The risk of inconsistencies between contract contents and the demonstration of financial capacity should be borne by the government;

② Non-governmental investments must confirm that the financial department has participated in reviewing the project contract.

III. Sharing of Major Risks in Guidebook for PPP Operation (Continued)

3. Project preparation

- Building of management architecture: Specific coordination mechanism and project implementer

① The establishment, authorization and working of specific coordination mechanism and project implementer belong to the risks to be borne by the government;

② Non-governmental investments may avoid, by building the management architecture, repetitive examination and approval as well as poor coordination among departments.

III. Sharing of Major Risks in Guidebook for PPP Operation (Continued)

3. Project preparation

- Project implementation plan: Whether it can be approved, and changes in implementation are risks to be borne by the government. Meanwhile, the basic framework of risk distribution in the implementation plan is one of the important contents.

① Distribute project risks between governmental and non-governmental investments in accordance with the principles of risk distribution optimization, equal risk incomes and controllable risks, and by comprehensively considering the government's risk management capability, project return mechanism and market risk management capability;

② In principle, the risks of project design, construction, finance, operation and maintenance are to be borne by non-governmental investments; the law-, policy- and minimum demand-related risks are to be borne by the government; and the risks of force majeure will be borne by both governmental and non-governmental investments.

The basic framework of PPP risk sharing will be further confirmed through the procurement procedure

III. Sharing of Major Risks in Guidebook for PPP Operation (Continued)

4. Project procurement

- **The risks of procurement procedure's legality and success will be undertaken by the government:**

① In accordance with project needs, prequalification files should be prepared, prequalification announcement should be released, non-governmental investments and their collaborative financial institutions to participate in the prequalification of project;

② When at least 3 non-governmental investments have passed the prequalification, the preparation of procurement documents can be continued;

③ A special working group for confirming and negotiating procurement results should be set up to sign and confirm negotiation memos;

④ Publicity for at least 5 working days. Announcement within 2 working days after signing the project contract

III. Sharing of Major Risks in Guidebook for PPP Operation (Continued)

5. Project implementation

- **Financing risks will be undertaken by non-governmental investment:**

① Project financing will be undertaken by non-governmental investment or project company;

② The financial department) and project implementer should do a good job in supervision and management, so as to prevent the transfer of enterprise debts to the government;

③ For those projects that have not completed financing according to project contract, the government take corresponding measures ranging from requesting for performance security to the termination of project contract.

④ Creditors may request, according to direct involvement agreement or clauses, non-governmental investment or project company to improve management.

III. Sharing of Major Risks in Guidebook for PPP Operation (Continued)

5. Project implementation

- **Systematic financial risks or force majeure are to be shared by governmental and non-governmental investments:**

① Government, non-governmental investment or project company may revise the contract's financing clauses in accordance with the agreement of project contract.

- **Risks in establishing a project company will be borne by non-governmental investment:**

① Project implementer and financial department (PPP Center) should supervise the non-governmental investment to establish a project company with sufficient capital in accordance with the agreement of procurement documents and project contract.

III. Sharing of Major Risks in Guidebook for PPP Operation (Continued)

5. Project implementation

- **Government payment-related risks will be borne by the government:**

① The government's payment obligations, along with medium- and long-term financial plan, will be incorporated into the budget of the same-level government and be fulfilled according to regulations related to budgetary management. A government payment account should be established to strictly control the government's financial risks. The government's payment obligations should be presented in the government's combined financial report.

- **Operation and maintenance risks will be borne by non-governmental investment:**

① Payments should be made in full and in a timely manner against actual performance and according to the output as stipulated in the project contract;

② For performance not up to agreed standards, punishment clauses or remedy measures will be implemented.

III. "Shortcut" in the Risk Management of China PPP

5. Project implementation

- **Supervision-related risks will be borne by the government:**

① Supervising the fulfillment of contract obligations, monitoring the performance indicators of project output, and preparing quarterly and annual reports;

② Medium-term assessments will be conducted every 3-5 years, so as to timely assess the risks of identified problems and take corresponding measures;

③ Relevant functional departments will fulfill their administrative and supervision responsibilities, attach importance to the quality of public products and services, pricing and charging mechanism, safety production, environmental protection and the rights and interests of workers;

④ The general public and project stakeholders may apply to the government's functional departments for supervision and inspection.

III. Sharing of Major Risks in Guidebook for PPP Operation (Continued)

6. Project handover

- **Handover risks will be borne by non-governmental investment:**

① If performance test results are not up to standards, non-governmental investment or project company should conduct restorative repairs, make updates and/or resets, or resort to handover & maintenance warranty;

② For those project assets, intellectual property rights, technical and legal files that are satisfactory to performance test requirements, non-governmental investment or project company should make legal transfer or management power handover to the project implementer or other government-designated institution. Non-governmental investment or project company should provide cooperation for the smooth transition of project operation.

III. Sharing of Major Risks in Guidebook for PPP Operation (Continued)

7. Risk sharing is present in the entire process of PPP project implementation

- Risk sharing is present in the entire process of PPP project implementation, instead of in some phases or at some points;
- The guidebook for PPP operation, providing a basic framework of risk sharing, is of very great guiding significance.

Thank you!

No. 1 WeChat Interaction and
Exchange Platform for China PPP

Smart China - PPP Club -
Humanity Section
Smart China - PPP Club - Justice
Section
Smart China - PPP Club -
Courtesy Section
Smart China - PPP Club -
Wisdom Section
Smart China - PPP Club -
Integrity Section

PPP FINANCING AND RISK MANAGEMENT

International Consultation Workshop
12 June 2015
Beijing

FINAL AGENDA

Xindadu Hotel，Huaxinggong Room, Beijing	
Opening Session	
8:30 – 8:45	Speech by Mr. Xiaoping Jiao, Deputy Director General, China PPP Centre, Ministry of Finance, PRC
	Speech by Mr. Hamid Sharif, Country Director, East Asia Department, Asian Development Bank (ADB)
Session 1 PPPs Financing **Moderator:** Mr. Xia Yingzhe, Director, China PPP Centre, Ministry of Finance, PRC	
8:45– 9:15	Mr. Michael Schur, Managing Director, Castalia and former Secretary of the New South Wales Treasury, Australia Mr. Alex Sundakov, Executive Director, Castalia Topic: Funding and financing of PPPs：Principles and Practice
9:15– 9:45	Ms. Karineh Grigorian, Office of International, Infrastructure UK Topic: Finance Incentives for PPPs,The UK Experience
9:45 –10:15	Mr. Philip Kelly, International Consultant Topic：Blending EU Funds and PPP 2014-2020
10:15–10:30	*Question and Answer*
10:30–10:45	Tea/coffee break
10:45-11:15	Mr Craig Sugden, Principal PPP Specialist, East Asia Department, ADB Topic: Making PPPs Work
11:15–11:45	Mr Zheng Dawei，Financing Expert, Shanghai Pudong Development Bank Topic: Thoughts on China's PPP Financing Route
11:45–12:00	*Question and Answer*
12:00–14:00	Lunch
Session 2 Risk Management for PPPs **Moderator:** Mr Philip Kelly, International Consultant	
14:00–14:30	Ms. Towfiqua S. Hoque, Senior Infrastructure Finance Specialist, PPP Group, World Bank (Singapore)
14:30–15:00	Mr Michael Schur, Managing Director, Castalia and former Secretary of the New South Wales Treasury, Australia Alex Sundakov Executive Director, Castalia Topic: Risk Management of PPPs：Principles and Practice
15:00-15:10	*Question and Answer*
15:10–15:20	Tea/coffee break
15:20–16:00	Mr Chen Chuan, Professor, Sichuan University Topic: New Challenges of Risk Management under China's Public-Private-Partnership (PPP) Mode

Xindadu Hotel，Huaxinggong Room, Beijing	
16:00–16:40	Mr Xiangdong Xu, Partner, Beijing Zilue Law Firm Topic: Risk Sharing in the Operational Guidebook for Public-Private-Partnership (PPP) Model
16:40–17:00	*Question and Answer*
17:00–17:10	**Open Conference End**
Internal Discussion: Implications for the PRC **Summary:** Mr Ying Qian, Director, East Asia Department, ADB	
17:10–17:30	**Panellists:** - The Consultant Team of ADB Technical Assistance for Financing PPPs