



# 城市改变中国——2008 “CPN中国周”

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# Improving the Effectiveness of Public Private Partnerships in China

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# Overview

1. Why PPPs for transport infrastructure in China
2. Forms of PPP for transport infrastructure
3. Internationally recognised requirements for PPPs
4. Current status of PPP in China
5. Dealing with strategic behaviour

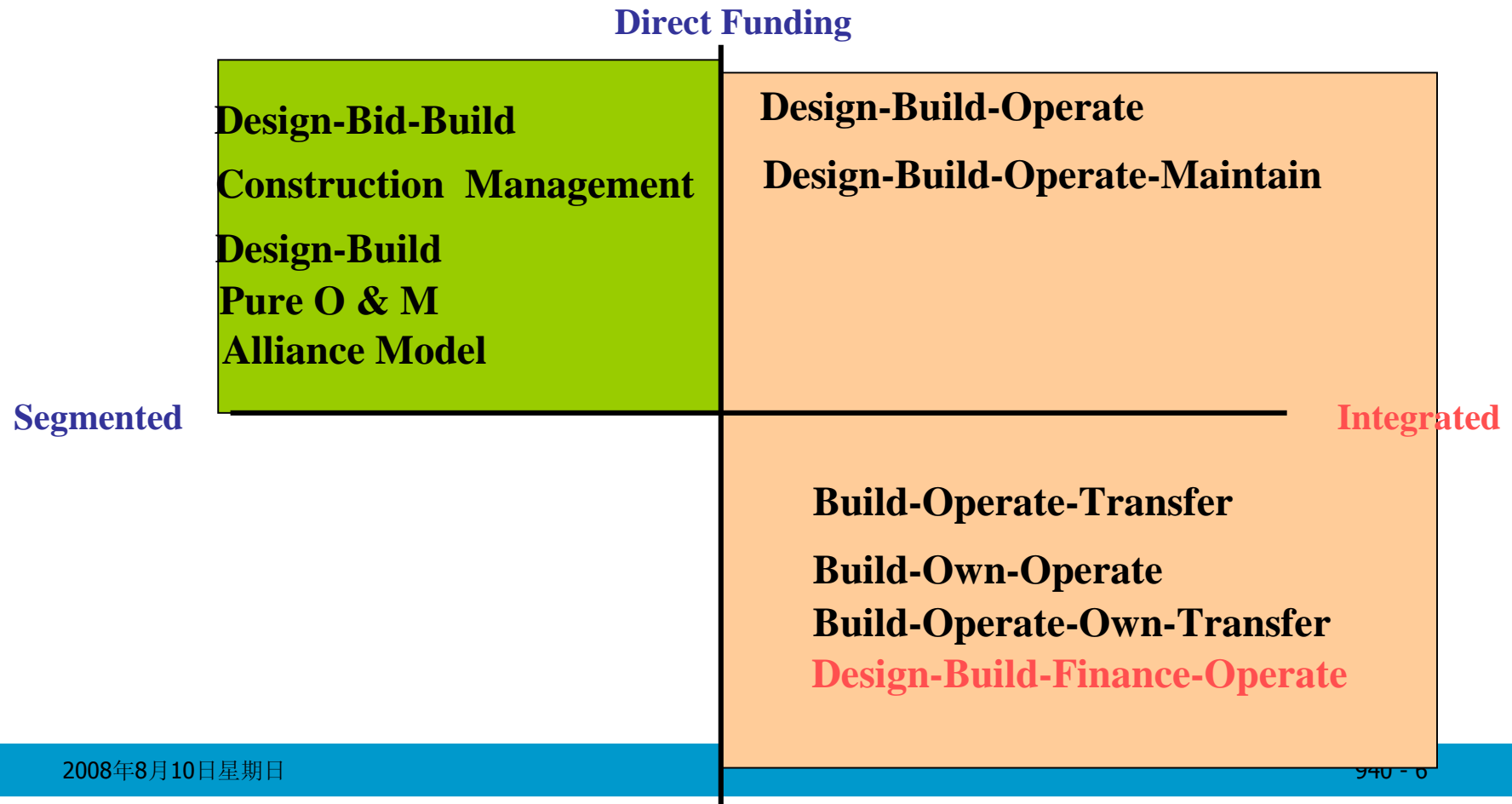
# Why use PPPs for transport infrastructure in China?

1. Private finance fills gaps in public budget
2. Speed up infrastructure network extension
3. Competition leads to higher efficiency
4. Investment risks allocated to players that can carry them best
5. Clear procedures lead to higher transparency
6. Private sector (banking, construction, consultancy) can deploy activities and acquire skills in new market
7. Debts of public enterprises can be reduced
8. Decision-making becomes more 'scientific' and 'quantitative'
9. Productive way to spend enormous national saving surplus

# Forms of PPP for transport infrastructure (1)

- Two axes:
  1. Design, build, operate, maintain: packages integrated or separate?
  2. Finance: public, private or mixed sources?
  
- Separated packages and public funds are seen as 'traditional'
- But success of new approaches is context-dependent
- Tendering and monitoring costs are sometimes very high
- Private finance is NOT responsible for high Value For Money

# Forms of PPP for transport infrastructure (2)



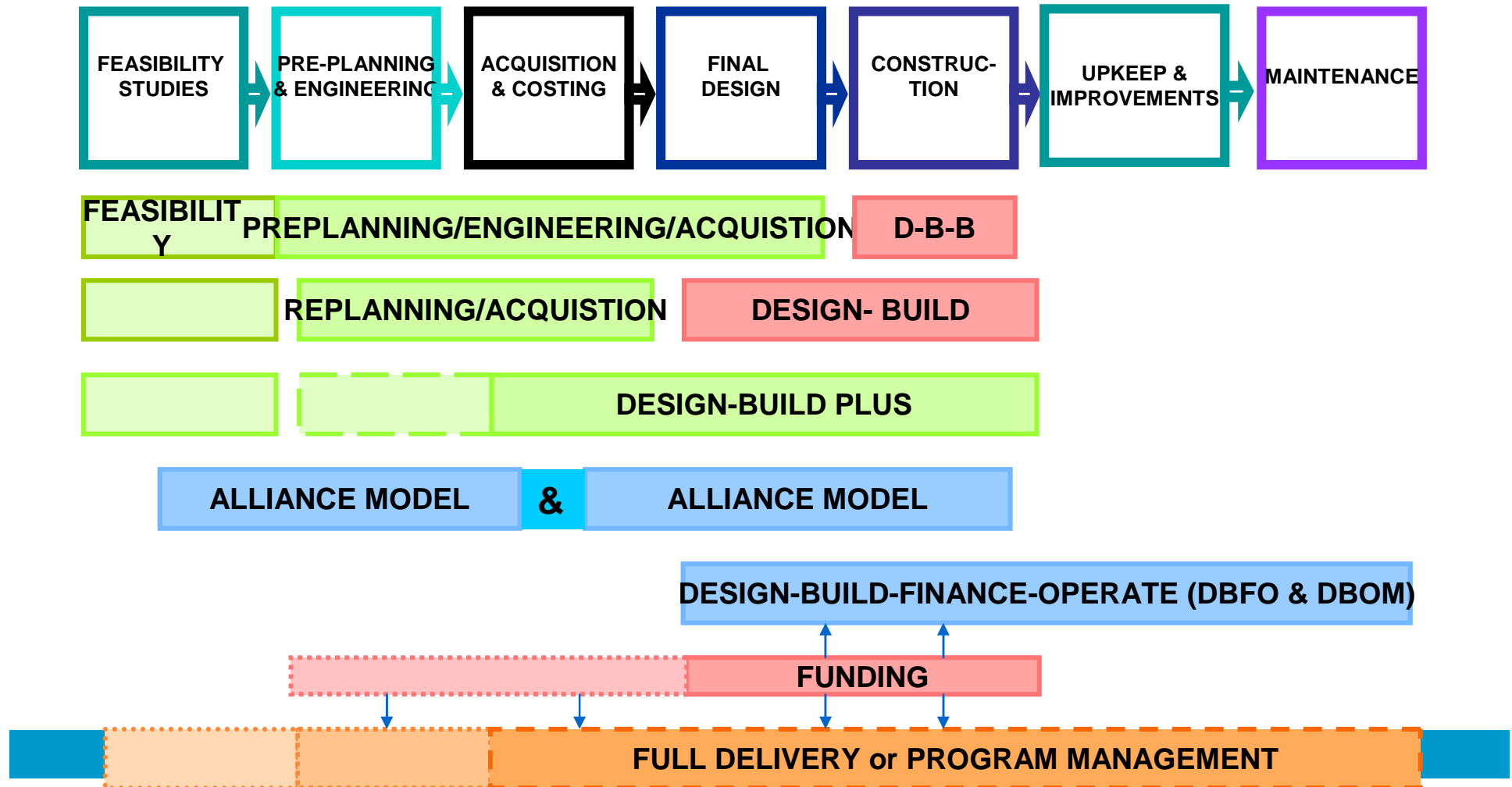
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Indirect Funding



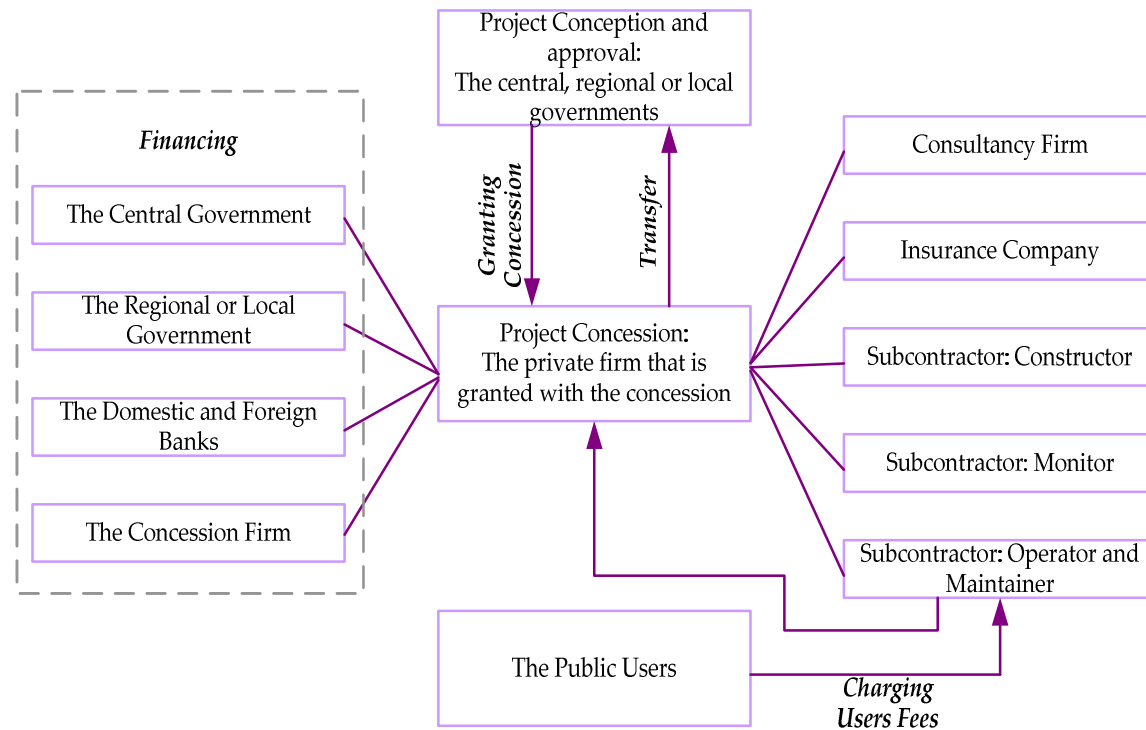
# Forms of PPP for transport infrastructure (3)



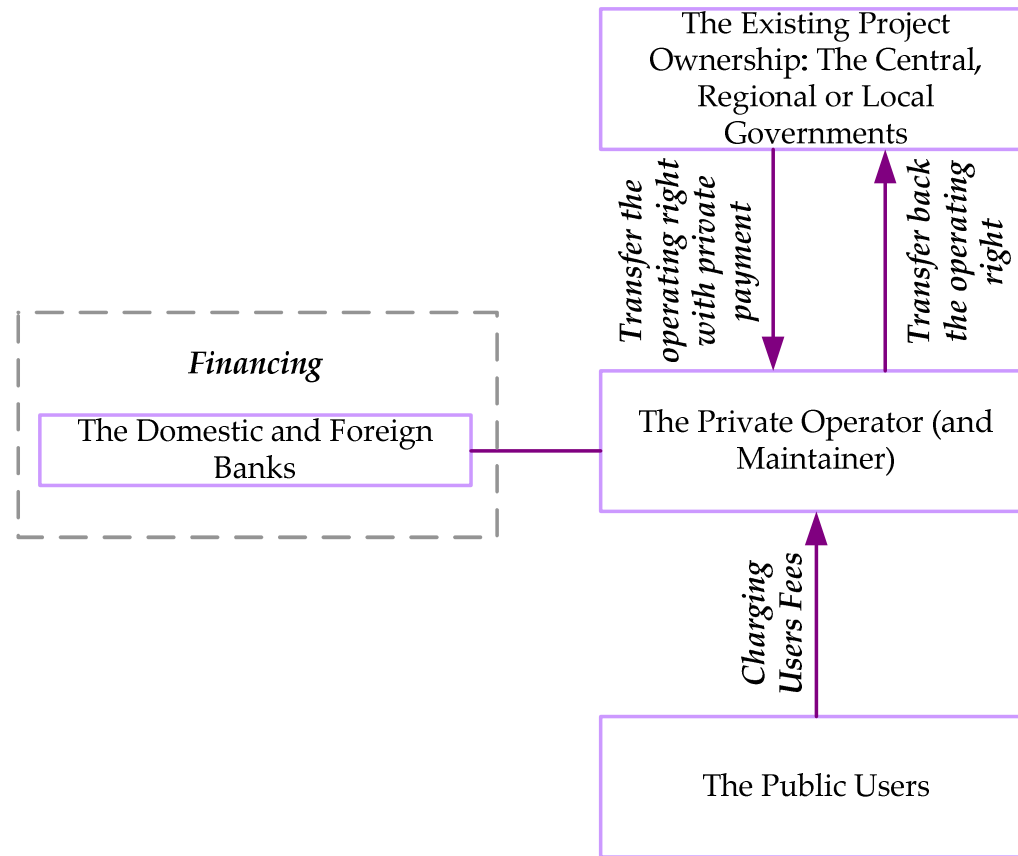
# Forms of PPP for transport infrastructure (4)

- In China, public funds, public bank loans and overseas loans to SOEs used to be most common (Design-Bid-Build, Design-Build)
- Recently, TOT (Transfer-Operate-Transfer), BT (Build-Transfer), BOT (Build-Operate-Transfer) and complex joint ventures through Special Project Vehicles (SPV) have grown more common, in metropolises and South
- BDOT (Build-Develop-Operate-Transfer) most innovative
- Roads and subways differ because of different toll-good features and externalities

# BOT model



# TOT model



# Internationally recognised requirements for PPPs (1)

- Institutional preconditions:
  1. Necessary legislation in place (competition, private property rights, 'PPP legislation')
  2. Effective recourse to the law
  3. Risks allocated to players that can carry them
  4. Transparent book-keeping and accountability
  5. Checks and balances between players
  6. Trust between public and private players
  7. Solid CBA/MCA and EIA studies in advance

# Internationally recognised requirements for PPPs (2)

- Long-term commitment/trust public & private players
- Credible, knowledgeable, experienced private players
- Life cycle view: explicit link D-B-O-M
- Explicit definition/listing of quality requirements
- Conscious use of financial and other incentives
- Pro and counter-expertise for cost-benefit estimates
- Private interest rates should not far exceed public ones
- Commercial exploitation land around transport links

# Current status of PPP in China (1)

## Most common:

- Public Enterprises fed with public funds and loans from public banks
- D-B-O-M mostly separated (DBB), but under common SOE as concessionaire
- SOEs often heavily indebted to banks (public guarantee), but loans are likely to be paid back as a result of impressive traffic growth
- Management and accounting opaque, leading to substantial cost overruns

# Current status of PPP in China (2)

## New trend:

- Only a few years of experience, mainly in BT, BOT, BDOT and less risky TOT
- Financial constructions can vary a lot across the country
- Some institutional and other pre-conditions are missing
- Sometimes transparency or solvability problems
- Low trust levels can make large packages in long-term contracts still risky
- Various forms of strategic behaviour have become more visible
- In spite of some failures, overall results are promising

# Current status of PPP in China (3)

## Use of PPP for subways

- Beijing: BOT with public funds and loans
- Shanghai: Joint ventures with various sources, including foreign loans
- Shenzhen: rich variety of BT, BOT and BDOT, based on Hong Kong examples

## Use of PPP for motorways

- Usually TOT or BOT
- Used mostly in Southern China with overall good results
- Absence of transparency and professional tendering, presence of corruption and malafide constructors often mentioned as problematical

# Dealing with strategic behaviour (1)

- Agency theory
- Information asymmetry between principal and agent
- Adverse selection
- Moral hazard
- Fewness: small numbers of contractors, making their position too strong
- Position: some players are larger and know clients better than others

# Dealing with strategic behaviour (2)

- Moments when strategic behaviour can occur:
  1. Political preference without rigorous study
  2. Political pressure during feasibility studies
  3. Bias in assumptions, evaluation criteria and calculations
  4. Trespasses during tendering process (breach of confidentiality, regional protectionism, invited tendering, fallacious lowest price, collusion)
  5. Low-quality materials used during construction
  6. Suboptimal maintenance investment
  7. Unjustified increases in toll charges
  8. Subcontracting to unknown and unproven players

# Dealing with strategic behaviour (3)

- Institutional incentives against opportunism (1):
  - Institutional requirement to publish feasibility and have reactions
  - Organize public consultation and hearings at the beginning of the process
  - Open rather than invited tendering, with more participants
  - Certification and reputation building (pre-qualification) for players
  - Punish demonstrated collusion heavily
  - Transparency and monitoring, and openness in bidding process
  - Players do not interfere in each other's operations

# Dealing with strategic behaviour (4)

- Institutional incentives against opportunism (2):
  - Counter-expertise against optimism bias
  - Hold responsible players to what they promised (risk)
  - Make payments to contractors at shorter intervals
  - Reward actual performance and hold managers personally responsible
  - Systematic benchmarking against PSC or good practices
  - Develop smaller packages in short run to prevent abuse and large-scale failure while learning
  - Develop higher levels of trust across time for the benefit of all in the long term