Challenges in Expenditure: Sustainability in Public Investment Spending

HK Yong
Senior Fellow
ISIS Malaysia
(Institute of Strategic and International Studies)

11 June 2015
1. Towards more efficient public investment (Gerd Schwartz)

2. **Micro-Impact Evaluation of Infra Projects (Prof Yoshino and Dr Pontines)**
   - Demonstration of evaluation of ‘highway effect’ on tax and non-tax revenues using the DiD (difference-in-difference) analysis which shows the wider effects on the economy

3. **Indian Experience** (Dr Rathin Roy)
   - Fiscal deficits trending down from 4.1 to 3% 2017/18 (State – 2.7%)
   - Public investment 1.2% of GDP (State – 2.7%) – LOW?
   - Any fiscal space for more Public Investment? *(50% of GDP?)*
   - *India’s PPP and accounting in PIMS for PPP especially Annuity model?*

4. **Korea’s PIMS** (Dr Joon-Kyung Kim)
   - PFS since Year 2000 as a result of AFC (32 out of 33 projects of 1994-98 evaluated as feasible in FS)
   - Robust Analysis structure in PFS which has evolved to include other products that make up today’s PIMS
Comments on Presentations

- PFS saves time and cost (60% and KRW 120 trillion), better project-quality
- Extend to cover LG, PPP, SOE, PFI & non-infra
- Korea’s low debt/GDP – 36.7%, but concern over public corporations debts?
- Avoiding Political Capture – interesting correlation between re-election and scale of transport projects passed during term
- How do you account for PPP in PIMS?

4. Spending in the Philippines (Dr Rosario Manasan)
- Declining revenue and debt overhang – need to create fiscal space
- PPP riding to the rescue…… since Year 2010
- Now rated 7 out of 20 in Asia for PPP Readiness
How do you account for PPP in your PIMS?

PPP Vs PFI (& the On/Off Balance conundrum)
1. Reducing supply chain barriers (mainly through building infra) is 6x more impactful on GDP Growth than reducing trade barrier

2. Estimated investment requirement for infrastructure
   - Globally $50 trillion over next 20 years
   - Asia $8 trillion over next 10 years
   - Middle East $2 trillion annually

3. Governments do not have the financial resources to carry out all the infrastructure projects (10-20% or MORE of total funding requirements through some form of PPP)

** TS Zeti – WIEF 2014
*** OECD Report (2013)
The Temptation called ‘OPM’ (or PPP)

1. **Ample liquidity?**

2. **Pension** and insurance funds have estimated **USD80 trillion** for investment of which only **1% invested** in infrastructure (mainly in PFI projects in developed countries).

3. Asia has **high household saving rates** (up to 40%). Example, South Asia and SEA – annual infra need is $385 million; annual household savings is $1.3 trillion…… **3 x of infra funding needs**

4. **USD 95 billion** of Infrastructure **sukuk**s issued in more than 10 countries ****

5. **ODA** in 2014 was $135 billion and **Declining Trend** (0.7% of GNI – only 5 out of 28 OECD-DAC countries met target in 2014)

6. **Global Remittances** in 2014 was **$583 billion** (more than ODA and FDIs combined)

7. **CSR tax** (be more Development-focused rather than Business-focused) eg India’s Companies Act 2013 (2% of net profits will result in estimated **$1.8 billion** of funds)

8. **PPP** accounted for annual average of **USD180 billion** in last 10 years
How do you account for PPP in your PIM?

PPP Vs PFI (& the On/Off Balance conumdrum)
Who pays at the end of the day?

PPPs can be used for both Economic and Social Infrastructures

Users Pay (Economic) Concession

Government Pays (Social) Availability

Roads

Ports

Power

Water

Universities

Hospitals

PPPs contract obligate the government to pay over the period of concession?
IPSAS 32 (International Public Sector Accounting Standard)

It is **ON** Balance Sheet (aka *Financial Liability Model*) if the government:

1. Controls or regulates:
   - what services the private party must provide with the asset,
   - To whom it must provide them, and
   - At what price; and
2. Controls any significant residual interest in the asset at the end of the term of the arrangement (concession)

*For whole-of-life asset, only the conditions in para (1) need to be met*

**Bottomline**

IPSAS 32 can result in many PFI (social infra) projects being classified as **ON** Balance Sheet
Example - Impact in the UK?

1. UK has done more than £ 65 billion of PPPs (mainly PFIs)

2. £ 39 billion of PFIs was re-classified as ‘On Government’s Balance Sheet (Debt)’ under ‘new’ government

3. No worries – total country debt was £ 1.3 trillion

**Question** – what is the NPV of future obligations (the ‘Interest rates’ differential between private and public borrowings – more than 2x ?)
## Example – India (Progress of Road Projects)

<table>
<thead>
<tr>
<th>Phases</th>
<th>Total length (km)</th>
<th>Already 4/6 lanes</th>
<th>WIP</th>
<th>Balance for Award (km)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Golden Quadrilateral</td>
<td>5,846</td>
<td>5,846</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>N-S, E-W Phases 1&amp;2</td>
<td>7,142</td>
<td>6,305</td>
<td>420</td>
<td>417</td>
</tr>
<tr>
<td>Port Connectivity</td>
<td>380</td>
<td>379</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>NHDP Phase 3 (4-lanes)</td>
<td>12,109</td>
<td>6,214</td>
<td>4,210</td>
<td>1,685</td>
</tr>
<tr>
<td>Phase 4 (single to 2-lanes)</td>
<td>14,799</td>
<td>610</td>
<td>5,246</td>
<td>8,943</td>
</tr>
<tr>
<td>Phase 5 (4 to 6 lanes)</td>
<td>6,500</td>
<td>1,869</td>
<td>2,212</td>
<td>2,419</td>
</tr>
<tr>
<td>Phase 6 (expressways)</td>
<td>1,000</td>
<td>0</td>
<td>0</td>
<td>1,000</td>
</tr>
<tr>
<td>Phase 7</td>
<td>700</td>
<td>22</td>
<td>19</td>
<td>659</td>
</tr>
<tr>
<td>NHDP Total</td>
<td>48,476</td>
<td>21,245</td>
<td>12,108</td>
<td>15,123</td>
</tr>
</tbody>
</table>

Source: NHAI 2014
Evolution of PPP Models – Indian Roads

Direct Nego
- 1993 – 12 km Pithanpur Road
- 1995 – Nandi Corridor (partially built), land cross subsidy
- Disappointing

JV Model
- 1997-2001 – only 4 built
- Eg Delhi Noida Toll Bridge, $100 million, low traffic 30 years extended to 70 years plus 30 acres of prime land
- Disappointing

Annuity-based
- 2001 – Panagarth-Palsit Highway, 65km, 2-4 lanes, Gamuda, 15 year, thought to be Off B/S,
- 18-21% Equity IRR
- **20% of total NHDP highways**

Hybrid Annuity
- Govt pays for part of highway (up to 50%)
- Grant + Annuity
- Second Karnataka State Highway Improvement Project
- Possible to have Toll + Annuity

Shadow Toll
- Proposed in 2009
- None done so far

Toll Roads
- First preference of Govt
- Toll. Rate per km standardised
- Favoured model

Land Dev rights
- Bangalore-Mysore Expressway; Delhi Noida Toll Bridge
- Using land development to cross-subsidise
- Not successful - Different skills set.

Add’l Toll Augmenting
- Coimbatore Bypass project, toll on existing bridge to subsidise toll road
- Not successful

VGF
- 2005
- Up to 40% of project cost
- $800 million approved, $2.8 billion ‘in-principle’
Projects Cancelled or Distressed (% of total investment)

Sri Lanka 0
Nepal 0
Mongolia 0
Thailand 1
Bangladesh 2
Pakistan 3
China 4
India 5
Vietnam 8
Philippines 10
Indonesia 12
Malaysia 24

Question: Loss to private & public investors?
What is the impact on Public Finance and Sustainability?
THANK YOU

hkyong@isis.org.my
hkyong98@yahoo.com
(019 322 4760)
The Changing Role of the Public Sector

Government moves from role of Developer & Operator of Public Infra
To
Facilitator and Enabler (fund flows)

Developer & Operator

Facilitator & Enabler

Creating the ENABLING ENVIRONMENT

To Boldly Go……..

1. Policy Framework
2. Legal Framework
3. Investment Framework
4. Operational Framework
5. Capital Market Framework
# Road Development – NHDP India

<table>
<thead>
<tr>
<th>Phases</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Augmenting - Connecting 4 largest metropolis</td>
</tr>
<tr>
<td>2</td>
<td>Augmenting – North-South, East-West Corridors</td>
</tr>
<tr>
<td>3</td>
<td>Creating 4-lanes, connecting State Capitals</td>
</tr>
<tr>
<td>4</td>
<td>Upgrading single-lane to 2-lanes</td>
</tr>
<tr>
<td>5</td>
<td>Expanding 4-lanes to 6-lanes</td>
</tr>
<tr>
<td>5</td>
<td>Building 1,000 km of expressways</td>
</tr>
<tr>
<td>7</td>
<td>Building ring roads, bypasses, underpasses, flyovers, etc</td>
</tr>
</tbody>
</table>

Source: NHAI 2014 & NHDP 1998
WHY DO PROJECTS ON PPP BASIS? (Possible Reasons)

1) Government’s Funding Gap (fiscal deficit) & OPM (UK, initially)

2) Capacity constraints (Ireland, Middle East)

3) Benchmarking public sector to the private sector (Singapore, UK Prison Services)

4) PPP also ensures that cost and time overruns are not borne by the Government – VfM (UK)

5) Off Balance Sheet!

**Conventional public procurement:**

- Estimated capital cost
- Time overruns
- Running cost overruns
- Estimated running cost

**Payments**

- Construction phase: 0-5 years
- Operation phase: 5-20 years

**PFI procurement:**

- No payments until facilities ready
- Payment based on usage
- Payment based on availability

- Construction phase: 0-5 years
- Operation phase: 5-20 years

*Risks of cost and time overruns passed to Private Company*
After the Asian crisis (1997) and Subprime crisis (2008), credit agencies are enhancing their focus on **contingent liabilities**, and governments are facing higher pressure from parliaments, general public and international organisations to take safeguards against risk involved with contingent liabilities.

**Contingent liabilities** are potential financial obligations associated with a guarantee granted by the government, where the timing & magnitude on the occurrence of some uncertain future event outside the control of the government. They should be disclosed in government’s account.