Value for Money in PPP Projects: An Introduction

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• Introduction to the concepts of Value for Money (VfM)

• Measuring VfM: The Public Sector Comparator and the UK’s previous approach

• UK’s revised approach (2006)

• Drivers of good VfM in PPP projects

• Conclusions
Introduction

• What is VfM?
  “The optimum combination of whole-of-life costs and quality (or fitness for purpose) of the good or service to meet the user’s requirements. VfM is not the choice of goods and services based on the lowest cost bid.”

• VfM is a comparative concept

• VfM and Affordability

• VfM and Compliance

• Why assess VfM?
  – Decision making
  – Presentational issues
VfM and the delivery of public services

• **Starting Point:**
  – Major capital investment options

• **Desired End point:**
  – Delivery of the sought-after benefits (at the right price)

• **Achieved (in part) by:**
  – Optimum and enforceable risk allocation to the private sector partner (at the right price)
  – Competition
Previous UK Approach

• Numerically based system

• Public Sector Comparator (PSC):
  – Same outputs as specified for the PFI/PPP project
  – Sensible costing (use of financial advisers)
  – Retained risks are explicitly identified and quantified (expected value)
  – Resulting cash-flows turned into a Net Present Value (NPV)
  – PSC NPV compared with NPV of the PFI/PPP unitary charge

• PSC also helps to estimate:
  – indicative project costs (as a benchmark for affordability)
  – The value of risks - retained and transferred
Technical Adjustments

- Unbundled discount rate - time preference rate of 3.5%
- *Optimism Bias* factored in to investment appraisal
- Monetisation of *non financial benefits and costs*
- Material *tax differentials* recognised and monetised
Public Sector Comparator

Typical Profile of Net Present Cost of PSC vs. PFI

- Total value of public sector delivering same outputs over life of contract
  - Design and build costs
  - Operating costs

- NPV of PSC risk transfer

- NPV of PSC cash flows

- Risk retained by Authority

- Total net present value of PPP Co’s unitary charges, over life of contract

- NPV of PPP cash flows

- Risk retained by Authority
Public Sector Comparator Methodology

• Policy / legislative context

• Advantages – helpful with political /public perception/presentation issues

• Challenges:
  – Timing of final output does not help with decision making process
  – Reliant on a single-point, cost-based test based on Net Present Values
  – Needs empirical data and sector experience (limited at start of programme)
  – Reliant on assumptions that can be manipulated (e.g. optimism bias calculation)
  – Danger of double counting
UK’s Revised Approach (2006)

A phased assessment conducted in 3 stages:

- Programme level
  - Suitability of using private finance

- Project level (pre-market launch)
  - The main decision point

- Procurement level
  - A check that procurement will deliver the forecast VfM benefits
UK’s Revised Approach – Process (1)

**Strategy**
Development of departmental capital strategy and programme - Specific investment options identified and appraised - Capital projects prioritised within Department’s capital programme - areas which may be suited to PFI/PPP identified

**Stage 1 Programme Level Assessment**
Applied to the subset of investment identified as potentially suitable for PFI to coincide with agreement of departmental budgets

**Output**: Publish investment programme. Pass Stage 1 assessment onto project teams within the programme

**Note**: Need to ensure that there is sufficient flexibility within the overall investment programme for projects not found to be VfM as PFI later in assessment process, to continue as alternative procurements

**Stage 2 Projects Level Assessment**
Constitutes part of the Outline Business Case for each project. Analysis from Stage 1 updated with project specific information and key VfM issues identified. Undertaken prior to publishing the OJEU Notice

**Output**: An overall VfM judgement for or against PFI/PPP made based on qualitative and quantitative assessments
UK’s Revised Approach - Process (2)

Does PFI/PPP offer VfM for the project?

If VfM is demonstrated then this assessment is noted in the OBC

Launch Procurement

If VfM is not demonstrated, then consider alternative procurement routes. Project should not proceed as PFI

Stage 3 Procurement Level Assessment
Continuous assessment of whether drivers of value for money are maintained until financial close. Processed with procurement ensuring there are no material changes such as market failure.

Financial Close
UK’s Revised Approach - Methodology

- Balance between qualitative and quantitative assessment
- Considers project and market features
- Embeds an evidence-based approach
- Uses generic quantitative models for the PSC and “should cost” PPP solution
- Models include technical adjustments (Optimism Bias, tax etc.)
Revised approach - Qualitative Assessment

• Viability
  – Measurable and definable outputs, clear scope
  – Operational flexibility
  – Equity/efficiency reasons for private sector service provision

• Desirability
  – Do the benefits outweigh the costs?

• Achievability
  – Market interest, time scales
Good VfM in PPPs - *Enablers*

- Definable and contractible outputs
- Balance of assets and non-asset based services
- Whole life costing
- Adequate size and duration
- Competition
Good VfM in PPPs - **Necessary**

- Stable/ defined requirement/ long term need
- Stable delivery – technology
- Private sector can manage risks and be responsible for delivery
- Procurement costs are proportionate
Revised approach - Quantitative Assessment

1. Identify cost inputs
2. Adjust costs for Optimism Bias
3. Factor in finance cost assumptions
4. Adjust for:
   - Flexibility
   - Tax
   - Life cycle investment
## VfM Analysis – Input Sheet

### General

<table>
<thead>
<tr>
<th>Timings</th>
<th>Years</th>
<th>Rates - Escalators &amp; Discount</th>
<th>Rates (%)</th>
<th>Base Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract period</td>
<td>29</td>
<td>CapEx escalator</td>
<td>4.5%</td>
<td>0</td>
</tr>
<tr>
<td>Initial CapEx period</td>
<td>5</td>
<td>OpEx (non employment) escalator</td>
<td>2.5%</td>
<td>0</td>
</tr>
<tr>
<td>Year when OpEx is first incurred</td>
<td>5</td>
<td>OpEx (employment) escalator</td>
<td>3.5%</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unitary charge escalator</td>
<td>50%</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Real discount rate</td>
<td>3.5%</td>
<td>NA</td>
</tr>
</tbody>
</table>

### Costs

#### Whole Life

<table>
<thead>
<tr>
<th></th>
<th>PSC</th>
<th>OB Pre (%)</th>
<th>OB Post (%)</th>
<th>PFI</th>
<th>OB Pre (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial CapEx (£'000)</td>
<td>65,250</td>
<td>10%</td>
<td>30%</td>
<td>71,775</td>
<td>10%</td>
</tr>
<tr>
<td>Lifecycle costs at each LC date (£'000)</td>
<td>6,535</td>
<td>10%</td>
<td>30%</td>
<td>1,076</td>
<td>10%</td>
</tr>
<tr>
<td>Lifecycle intervals (yrs)</td>
<td>NA</td>
<td>NA</td>
<td>1</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>OpEx (employment per person) (£'000)</td>
<td>1,075</td>
<td>10%</td>
<td>30%</td>
<td>1,183</td>
<td>10%</td>
</tr>
<tr>
<td>OpEx (employee number)</td>
<td>25</td>
<td>NA</td>
<td>25</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

#### Pre Tax IRR Targets

- **High** 18%
- **Medium** 15%
- **Low** 13%

### Third Party Income

<table>
<thead>
<tr>
<th></th>
<th>PSC</th>
<th>OB Pre (%)</th>
<th>OB Post (%)</th>
<th>PFI</th>
<th>OB Pre (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income (p.a.) (£'000)</td>
<td>475</td>
<td>10%</td>
<td>10%</td>
<td>575</td>
<td>10%</td>
</tr>
</tbody>
</table>

### Flexibility

<table>
<thead>
<tr>
<th></th>
<th>PSC</th>
<th>PFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scope change year</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Probability factor (%)</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>Level of scope change (%)</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>Premium flexibility factor (%)</td>
<td>0</td>
<td>10%</td>
</tr>
</tbody>
</table>

### Indirect VfM Factors

<table>
<thead>
<tr>
<th></th>
<th>PSC</th>
<th>PFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount (Npv)(£'000)</td>
<td>0</td>
<td>2,200</td>
</tr>
</tbody>
</table>

### Tax

<table>
<thead>
<tr>
<th></th>
<th>PSC</th>
<th>PFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSC adjustment factor (%)</td>
<td>6%</td>
<td>NA</td>
</tr>
</tbody>
</table>

### Lifecycle Related Adjustments

<table>
<thead>
<tr>
<th></th>
<th>PSC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lifecycle VfM adjustment</td>
<td>40%</td>
</tr>
<tr>
<td>Residual cost benchmark</td>
<td>50%</td>
</tr>
<tr>
<td>PSC residual cost factor if lower than benchmark</td>
<td>70%</td>
</tr>
<tr>
<td>PSC residual cost factor if higher than benchmark</td>
<td>35%</td>
</tr>
</tbody>
</table>

### PFI Funding

<table>
<thead>
<tr>
<th>Gearing (%)</th>
<th>Sterling swap rate (%)</th>
<th>Credit spread (bps)</th>
<th>Bank margin (bps)</th>
<th>Tail for bank debt (yrs)</th>
<th>Commitment fee (bps)</th>
<th>Uptfront fee (bps)</th>
<th>Grace period (yrs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>90%</td>
<td>5.15%</td>
<td>12</td>
<td>100</td>
<td>2</td>
<td>50</td>
<td>90</td>
<td>1</td>
</tr>
</tbody>
</table>

### Unitary Charge

<table>
<thead>
<tr>
<th>Initial CapEx period payment (%)</th>
<th>NA</th>
</tr>
</thead>
</table>

### Pre-FBC Optimism Bias

<table>
<thead>
<tr>
<th>OB Pre</th>
<th>OB Post</th>
<th>Post-FBC Optimism Bias (for PSC only)</th>
<th>PFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>NA</td>
<td>NA</td>
<td>Pre-FBC Optimism Bias</td>
<td>NA</td>
</tr>
</tbody>
</table>

### Public Sector Comparator (i.e. conventional procurement)

<table>
<thead>
<tr>
<th>Input required</th>
<th>Hard-wired Assumption - no input required</th>
</tr>
</thead>
</table>

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**Notes**:
- **bps**: Basis Points
- **CapEx**: Capital Expenditure
- **LC**: Lifecycle Costs
- **NA**: Not Applicable - no input required
- **OB Pre**: Pre-FBC Optimism Bias
- **OB Post**: Post-FBC Optimism Bias (for PSC only)
- **PFI**: Private Finance Initiative
- **PSC**: Public Sector Comparator (i.e. conventional procurement)

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Capturing Non-financial benefits?

• Accelerated delivery: receiving benefits earlier
• Enhanced delivery e.g. better asset condition, design, outcomes
• For renewed schools that were fully rebuilt via a PPP, educational attainment improved at a rate that was over 90% faster than in fully rebuilt conventionally financed schools
• Wider societal benefits: e.g. greater cost transparency, procurement disciplines
<table>
<thead>
<tr>
<th>National Audit Office – Evaluation Matrix</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategic analysis</strong></td>
</tr>
<tr>
<td>Fit with business needs</td>
</tr>
<tr>
<td>Appropriate delivery mechanism</td>
</tr>
<tr>
<td>Stakeholder support</td>
</tr>
<tr>
<td>Quality of project management</td>
</tr>
<tr>
<td>Balance of cost, quality and finance</td>
</tr>
<tr>
<td>Quality of risk management</td>
</tr>
</tbody>
</table>
Observations

- PPPs can deliver benefits, but not suitable at any price or in every circumstance.
- PPP projects normally deliver what is asked of them.
- Justifications for PPP may be unclear: use of questionable quantitative analysis.
- Institutional incentives may encourage the use of PPP.
- Evaluation of PPP: benefits assumptions, comparative data.
- Competition is vital.
- Delivery of real risk transfer depends on a good contract.
- Private finance projects require very careful project management.
- Political will to ensure agreed risk transfer is implemented.
Conclusions

• VfM is a concept that compares options
• Affordability and Compliance are constraints
• VfM is important:
  – Decision making
  – Presentation issues
• The assessment of VfM is a balance between qualitative and quantitative factors
• UK uses a phased approach (3 stages)
• UK has a standardised quantitative VfM model which includes various technical adjustments