Special Session 3

Greek Motorway Concessions in Distress:

Examples from abroad

Prof. José Manuel Vassallo
Universidad Politécnica de Madrid
Toll highway concessions in Spain
Toll highway concessions in Spain II

Toll highway concessions have been developed in two different periods.
Toll highway concessions in Spain III

• Main features of concession contracts in Spain
  – Awarded on the basis of the “open procedure”, which makes the contracts rather incomplete
  – Business plans are required in the offer, but financial close after awarding the contract
  – Average and maximum toll levels are capped in the contract and indexed to CPI
  – Force Majeure risk is taken on by the government
## Risk Allocation in Spain

<table>
<thead>
<tr>
<th>Risk Category</th>
<th>Example</th>
<th>Risk Allocation in Spain</th>
<th>Partner Likely Well Suited to Manage the Risk. OECD.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Force Majeure</strong></td>
<td>Loss from war and natural disasters</td>
<td>Change in the economic balance of the contract</td>
<td>Public</td>
</tr>
<tr>
<td><strong>Regulatory/Political Risk</strong></td>
<td>Project delays, changes in law/policy affecting revenue</td>
<td>Change in the economic balance of the contract</td>
<td>Public</td>
</tr>
<tr>
<td></td>
<td>Land acquisition</td>
<td>Private</td>
<td></td>
</tr>
<tr>
<td><strong>Revenue/Demand Risk</strong></td>
<td>Deficient revenue due to low traffic volume or lower price due to demand elasticity</td>
<td>Private</td>
<td>Mostly public – Some Private</td>
</tr>
<tr>
<td><strong>Design/Technical Risk</strong></td>
<td>Engineering or design failures</td>
<td>Private</td>
<td>Private</td>
</tr>
<tr>
<td><strong>Construction Risk</strong></td>
<td>Cost escalation due to delay or faulty techniques</td>
<td>Private</td>
<td>Private</td>
</tr>
<tr>
<td><strong>Operating Risk</strong></td>
<td>Costly operation and life-cycle maintenance</td>
<td>Private</td>
<td>Private</td>
</tr>
<tr>
<td><strong>Environmental Risk</strong></td>
<td>Damage and liability/mitigation costs from adverse environmental events</td>
<td>Private</td>
<td>Private</td>
</tr>
<tr>
<td><strong>Financial Risk</strong></td>
<td>Cost of inadequate revenue hedging and debt management</td>
<td>Private</td>
<td>Mostly Private – Some Public</td>
</tr>
<tr>
<td></td>
<td>Subordinated Public Participation Loans</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Project Default Risk</strong></td>
<td>Project bankruptcy from any/all of the factors above</td>
<td>Mostly Public</td>
<td>Shared Public/Private</td>
</tr>
</tbody>
</table>
Consequences of the recession in Spain I

**Real GDP Growth Rate**

- **SPAIN**
- **EU - 15**

**Unemployment Rate**

- **SPAIN**
- **EU - 15**
Consequences of the recession in Spain II

Deficit and Debt

Contribution to GDP growth

Figure 1
Government balance and debt

Figure 3
Contributions to GDP growth

Source: Oxford Economics
Impact on traffic and revenues I

- Before the recession notable traffic growths were recorded (ramp up period)
- During the recession traffic levels decreased at a greater pace than the GDP
- Nowadays revenues of most of toll concessions are around 40% - 60% of their original estimates
Unlike other countries such as Chile, traffic was not mitigated with a minimum income guarantee.
### Traffic deviations in toll highway concessions in the Madrid Metropolitan Area

<table>
<thead>
<tr>
<th>Toll Highway</th>
<th>Estimates</th>
<th>Traffic deviations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2003</td>
</tr>
<tr>
<td>R-2</td>
<td>Government</td>
<td>-50.86%</td>
</tr>
<tr>
<td></td>
<td>Concessionaire</td>
<td>-62.68%</td>
</tr>
<tr>
<td>R-3</td>
<td>Government</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Concessionaire</td>
<td>-</td>
</tr>
<tr>
<td>R-4</td>
<td>Government</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Concessionaire</td>
<td>-</td>
</tr>
<tr>
<td>R-5</td>
<td>Government</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Concessionaire</td>
<td>-</td>
</tr>
</tbody>
</table>

Impact on traffic and revenues IV

Traffic and GDP growth % (1st year of operation to 2007)

Scenario before the economic recession

- Low competition
- High competition
- GDP
Traffic and GDP growth % (2007 – 2008)

Beginning of the economic recession

- Low competition
- High competition
- GDP
Traffic and GDP growth % (2008 – 2009)

Economic recession

- Low competition
- High competition
- GDP
Financial requirements for project finance deals before and after the economic recession

<table>
<thead>
<tr>
<th>Concept</th>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spreads</td>
<td>150 basic points</td>
<td>375 basic points</td>
</tr>
<tr>
<td>Terms</td>
<td>25 years</td>
<td>7 years</td>
</tr>
<tr>
<td>ADSCR</td>
<td>1.2</td>
<td>1.5</td>
</tr>
</tbody>
</table>
What has been done? I

• The government decided to bail out the concession contracts for several reasons:
  – Bankruptcy would imply a higher cost for the government
  – Bankruptcy would imply the lost of reputation for the Spanish concession system
  – The final outcome of some risks (such as expropriation and traffic) was unpredictable

• The bail out respected the competition rules imposed by the EU
• Measures adopted
  – In 2010 the economics of some concession contracts were rebalanced because of expropriation cost overruns
    • When they are higher than 175% of predicted
  – The government provided **Subordinated Public Participation Loans (SPPLs)**
    • These loans will have to be eventually paid back
    • Interest rates depend on the ultimate traffic levels over the life of the contract
  – The terms of some concessions were extended to help the concessionaire to pay back the SPPL
Subordinated Public Participation Loans
(*Préstamo Participativo*)

- **Equity**
- **Subordinated Debt**
- **Senior Debt**
- **Private**
- **Public (SPPLs)**

- Very low interest rate if the traffic is low
- Very high interest rate if the traffic is high
Main characteristics of SPPLs:

– Capital contributions from the Government
– They are raised from the budget, but they do not affect the public deficit
  • Financial investment by the Government
– They are subordinated to other private senior loans
– Their interest rate varies according to the level of traffic
– The EU regards this solution as a fair way of helping the concessionaire because of unpredictable events
In 2011 the government approved public contributions (Cuenta de compensación) to concessions with low traffic

- Difference between 80% of the expected revenue and the actual annual revenue will be paid to the concessionaire
- Only applicable for three years (2011, 2012 and 2013)
- The government will fund it with public debt
- The concessionaire will have to reimburse these contributions to the government (principal plus interests) if in the future traffic levels become higher than expected

In 2011 the contributions by the government amounted to €80.1 Millions
• In 2012 it was clear that, despite the first bail out, the economics of the concessions were not viable in the long term

• The government is studying several measures:
  – To encourage mergers between “good” and “toxic” concessions assets
  – To tender the old brownfield concessions that are close to their end to get money to extend the compensation accounts
  – To nationalize the concessions whose level of traffic hardly covers the operation costs
  – To turn fixed-term concession contracts into variable-term concession contracts (on the basis of the least present value of the revenues LPVR)

What happens right now?
Variable duration of the contract

- Traffic higher than expected
- Expected traffic
- Traffic lower than expected

Accumulated revenues

Construction

\( T_H \), \( T_E \), \( T_L \)
• The huge economic recession has demonstrated that certain risks such as traffic or expropriation risks are hardly manageable by the private sector. Future contracts should look for mechanisms to mitigate those risks.

• The severity of the economic recession has demonstrated the weaknesses of the financial markets in providing long-term financing to megaprojects.

• In the future PPPs and project financing will have to move towards approaches where the governments will play a greater role in mitigating risks and facilitating long-term financing.
Thank you!
Ευχαριστώ

Further information:
Josemanuel.vassallo@upm.es