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EFFICIENCY OF ALTERNATIVE TENDERING MECHANISMS FOR ROAD PUBLIC-PRIVATE PARTNERSHIPS

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AGENDA

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- Conclusions

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INTRODUCTION

□ Our aim:

To enhance good practices in the launching phase of PPP transport infrastructure projects

□ Our outcome:

Higher transaction costs in negotiated procedures

Negotiations may be unnecessary in certain projects



EU Legal Framework: Procurement Procedures

- ❑ Procedures: There is a common legal framework for all EU countries, stemming from the EC Directive/2004/18/EC
- ✓ Open Procedure
- ✓ Restricted Procedure
- ✓ Negotiated Procedure
- ✓ Competitive Dialogue

In force since January 31, 2006



EU Legal Framework: Procurement Procedures

□ Open Procedure: Features

- Any economic operators may submit a tender
- Binding proposals, not to be changed or negotiated
- Contract awarded on the basis of the “most economically advantageous tender”
- Enhances Competition in the tendering phase
- Makes it easier the comparability of the proposals
- The PPP model must be precisely defined in advance by the Public Authority (advanced bidding documentation, clear understanding of goals and means)



EU Legal Framework: Procurement Procedures

- Negotiated Procedure: Features
 - Contracting authorities consult the economic operators of their choice
 - The terms of the contract are negotiated with some of those operators
 - Normally, the procedure is structured in different stages (pre-qualification, invitation to negotiate, Best and Final Offer, Preferred Bidder)
 - Negotiations still go on with the Preferred Bidder



EU Legal Framework: Procurement Procedures

- ❑ Preferred Procedures within the EU
 - ✓ Open Procedure (but also Negotiated)
 - ✓ Germany and Spain
 - ✓ Restricted Procedure
 - ✓ Greece
 - ✓ Negotiated Procedure (prone to Competitive Dialogue)
 - ✓ The UK, Netherlands, Ireland, Portugal, other.



Quantitative analysis of Transaction Costs: Methodology

REGRESSION ANALYSIS

$$Y_i = \beta_1 + \beta_2 X_i + \sum_{k=1}^m \beta_k Z_{ki} + \varepsilon_i$$

where:

- Y_i : (natural logarithm of) transaction costs in project i
- $\beta_1, \beta_2, \beta_k$: coefficients to be determined
- $X_i = 1$ for negotiated procedure
- $X_i = 0$ for open competition procedure
- Z_{ki} : other features of project i (capital value, type of project, etc.)
- ε_i : an error term

Quantitative analysis of Transaction Costs: Methodology

$$Y_i = \beta_1 + \beta_2 X_i + \sum_{k=1}^m \beta_k Z_{ki} + \varepsilon_i$$

- $H_0 : \beta_2 = 0$
 - If H_0 is rejected at a certain significance level:
 - There is a relationship between the procurement procedure used to launch the project and the transaction costs involved.
 - Analysis and testing the significance of other parameters β
- Variables in the Regression:
 - Procurement Procedure
 - K value
 - Type of Infrastructure
 - Number of Bidders



Quantitative analysis of Transaction Costs: Input data

Criteria for the sample projects:

- Road and Railway PPP projects in the European Union
- Mostly Greenfield projects but also Upgrading and Maintenance
- Data availability: data collected in six countries (Ireland, Portugal, UK, Spain, Netherlands and Austria)
- Transaction Costs for the Public/ Private Sector
 - Public partner: 18 observations
 - 12 Roads, 6 Railways
 - 8 Negotiated, 10 Open Procedure
 - Average Capital Value: €380 million
 - Private partner: 35 observations
 - 30 Roads, 5 Railways
 - 21 Negotiated, 14 Open Procedure

Quantitative analysis of Transaction Costs: Input data

- Data collected on PPP projects:
 - ✓ Transaction costs restricted to the procurement phase
 - ✓ Procurement Procedure (PP)
 - ✓ Project Size (Capital Value)
 - ✓ Type of Transport Infrastructure
 - ✓ Number of Bidders

 - ✓ EU Country (high correlation with PP)
 - ✓ Procurement Time (high correlation with PP)
 - ✓ Others:
 - Contract Length
 - Contract Authority
 - Project Description



Sharing the road



Quantitative analysis of Transaction Costs: Results

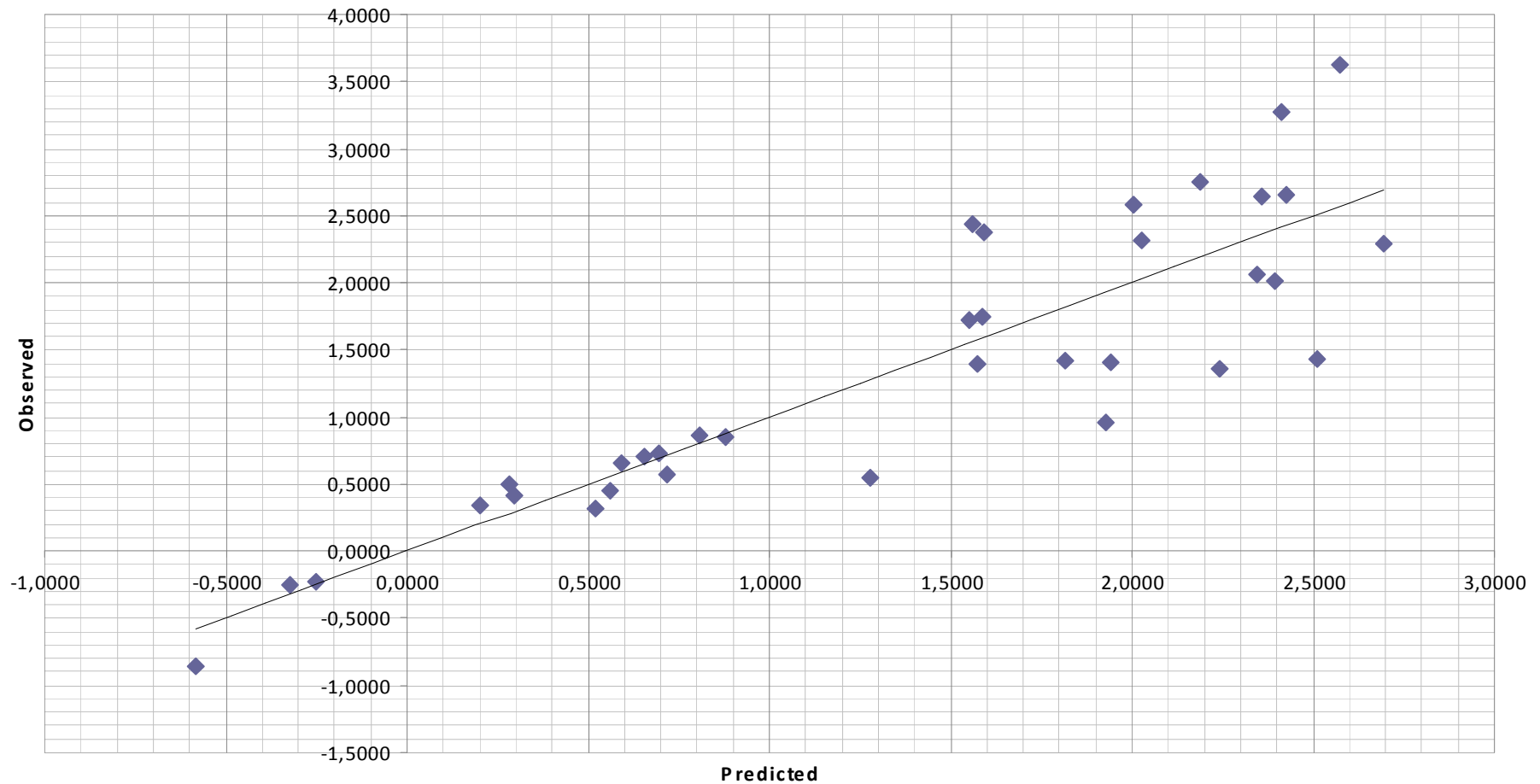
TTC for the Private partner. Results of the Regression Analysis

- Number of variables (including intercept) = 3
- Number of observations = 35
- R Squared = 0.7757
- Adjusted R Squared = 0.7617
- F = 55.3479

Variable	Coefficient β	Standard error	t- statistic
Intercept	-2.5356	0.6291	-4.0304
Procurement procedure	1.6576	0.1796	9.2307
Capital value	0.4946	0.1048	4.7208

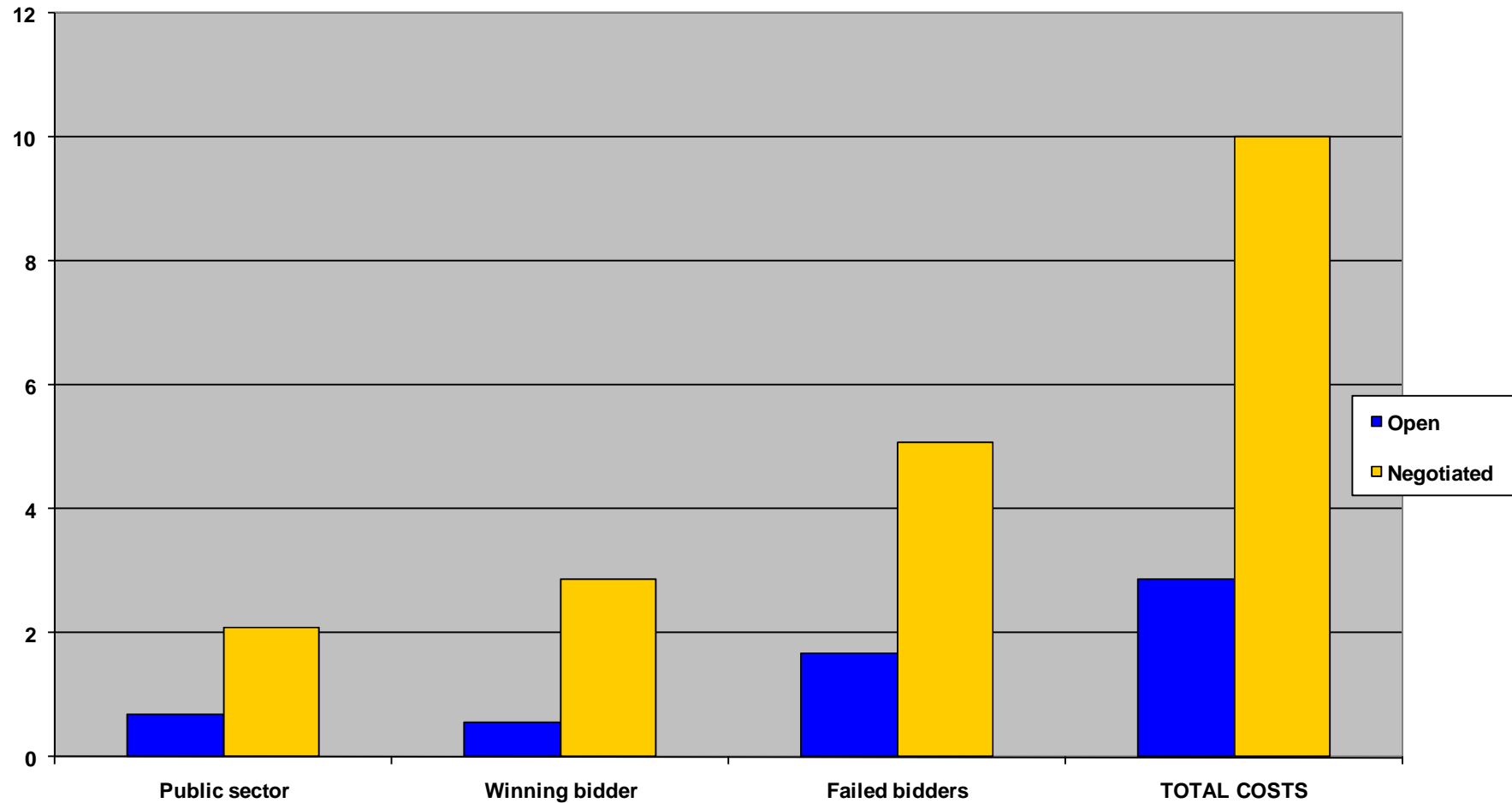
Quantitative analysis of Transaction Costs: Results

Private sector model. Observed/predicted values for (logarithm of) transaction costs



Quantitative analysis of Transaction Costs: Open vs. Negotiated Procedures

Transaction Costs (% on Capital Value)



CONCLUSIONS

- ✓ One of the principal reasons for high transaction costs in PPPs is the use of the Negotiated procedure
- ✓ There is room for important savings in tendering PPP projects, by using an Open procedure. Negotiations may be unnecessary in most PPP transport projects.
- ✓ To ensure VFM: Strong competition among bidders in the Open procedure.

CONCLUSIONS

- ✓ No negotiations do not imply that the Open Procedure cannot ensure:
 - Enough risk-transfer to the private sector
 - ✓ Competition for the risk-transfer structure (Awarding criterion in the bid specifications)
 - Technical innovations achieved through:
 - ✓ Technical awarding criteria
 - ✓ Definition of quality indicators



THANK YOU!

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