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Renegotiation Design in PPP Projects

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The presentation is based on a joint research with
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Agenda

Research question

Overview of contractual rules for renegotiation in PPPs

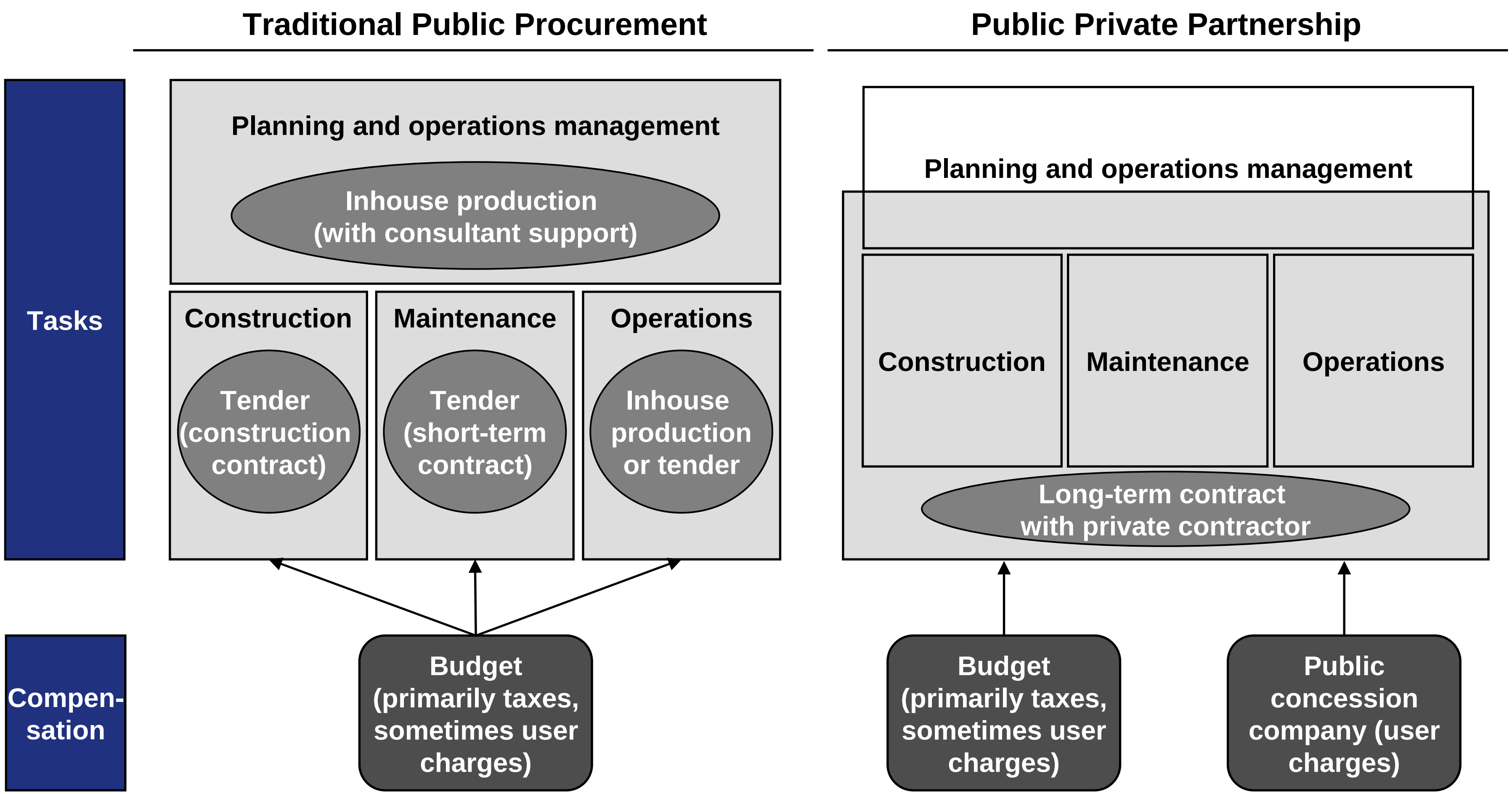
Variations

Termination rules and negotiation power

Conclusion

PPPs provide interrelated tasks in one contract

PPP characteristics compared to traditional public procurement



Assumption of many participants: PPP projects have a fixed price for the entire contract term

Renegotiations in PPPs are theoretically plausible and empirically verifiable

Transaction cost economics (Williamson)

- Uncertain, complex environment
- Transaction-specific investments
- Bounded rationality and opportunism

→ Long-term and (therefore naturally) incomplete contract → Probability of amendments (and renegotiations) not negligible

Empirical results (UK)

Adjustment of contracted services was needed in many PPP projects ...

- change mechanism was used in 50 % of the cases (Cambridge Economic Policy Associates (2005, p. 37))
- need for service adjustments in 70% of the projects (Partnerships UK (2006, p. 84))
- use of change procedure in 55% of the reviewed projects (NAO (2001, p. 15))

... and is also a future challenge

- two-thirds of public sector representatives believe that changes to contracted services will be needed in the future (4Ps (2006, p. 9))
- important issues for the future development of PFI projects: changes in the contract – 40% of respondents (Partnerships UK (2006, p. 36))

Research question	How should PPPs be structured to provide long-term efficient service even in the light of possible changes to original contracts?

Options for the structuring of renegotiations

Institutional context

Organisation of the procuring public body and institutional controls

- Expertise / capacity
- "Resistiveness"

Aspects of political economy in renegotiations in PPPs

Contract design

Derived from Crocker / Masten (1991), distinction of process rules and calculation rules

- Process rules: rules that govern the sequence of process steps – no specification of compensation calculation
- Calculation rules: rules that define a compensation scheme for amendments

Characteristics of change situation influence suitability of process and calculation rules

- Value of the amendment
- Complexity of the amendment
  - descriptiveness
  - predictability
  - interdependency with other service parts
- Frequency of comparable amendments

Similarity with TCE variables(1)

Our focus

(1) Asset specificity, complexity/uncertainty of the environment and frequency of interaction, e.g. in Williamson (1979, p. 239)

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Complex set of rules for amendments in the contracts

Process rules

<u>Process rules</u> defining the procedure in the individual escalation step

<u>Process rules</u> defining the transition to next step, e.g.
- conditions for invoking dispute resolution procedure
- termination reasons

Escalation steps for contract changes

1. **Variation rules**
2. **Dispute resolution rules**
3. **Termination rules**

Calculation rules

<u>Calculation rules</u> for the determination of the compensation for an amendment

<u>Calculation rule</u> for the determination of the termination compensation

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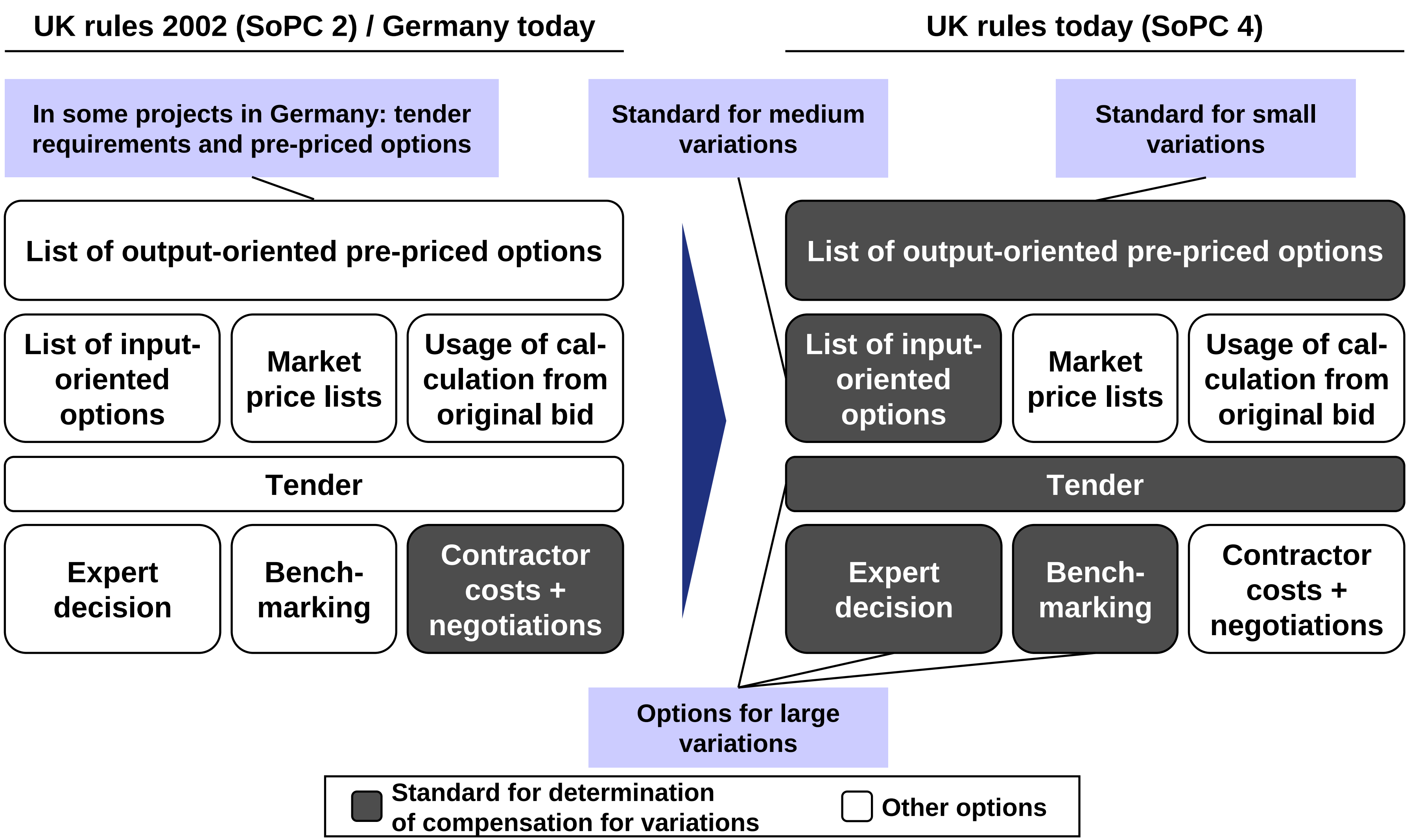
Overview of calculation rules from contracts

Time of price and quantity determination for an amendment		Options for determination of the compensation (calculation rules)		
ex ante (before change)	Prices and quantities determined in the original contract	List of output-oriented pre-priced options		
	Prices determined in original contract, quantities before (or after) the change	List of input-oriented options	Market price lists	Usage of calculation from original bid
	Prices and quantities determined immediately before the change	Tender		
ex post (prices and quantities determined after change)		Expert decision	Benchmarking	Contractor costs

Importance of process rules

Differentiated rules developed in UK

Compensation rules in UK and Germany



Improvement in rules due to economic considerations

Development in the UK and conclusions for contract design

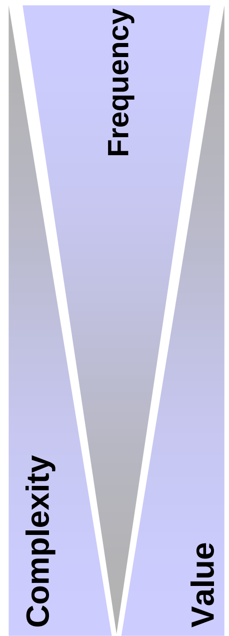
Problems identified in the UK before 2002

- Transaction costs of negotiations
- Incentive problems (hidden action, hidden information/cost padding)

Evaluation of options from SoPC 4

Compensation rule	Advantages	Disadvantages
Output-oriented pre-priced options negotiated during contract tender	• Limited risk for the contractor • High incentives • Competitive pressure during price negotiations	• Transaction costs during negotiations • Weighting of appraisal criteria for main service and options
Input-oriented pre-priced options negotiated during contract tender	• Limited risk for the contractor • Competitive pressure during price negotiations	• Transaction costs - Negotiation of input prices - Monitoring • Weighting of appraisal criteria for main service and options • Incentives for hidden action
Expert decision	• Limited risk for the contractor	• High transaction costs
Tender requirement	• High competitive pressure	• High transaction costs

Suitability



Conclusions for contract design

- Inclusion of additional calculation and process rules in the original contract can be reasonable in preparation for later renegotiations
- Trade-offs need to be considered for the choice of rules, e.g. between risk costs and incentives

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Four types of termination reasons included in contracts

	Reason for termination	Legal consequence	Economic reasoning
I	Contractor default	Typically, lenders step in – contractual obligations remain valid, but with new partners	• Prevention of (gross) violations of contractor's obligations
II	Authority default	Contract obligations are terminated – authority looks for new solution of the procurement problem • in-house production • new tender of the contract	• Prevention of violations of the authority's payment obligation
III	Force Majeure		• Major disruption event, which is not a project party's fault, prevents service provision – continuation not to be expected from project parties
IV	Voluntary termination by the authority		• Strengthening of the authority's negotiation position • Increase of authority's flexibility in the light of a changing environment

Our focus

Compensation rules for termination

Classification and examples from PPP contracts

Aspects to be considered:
- Limiting contractor's risk cost
- Low incentives for provoking terminations
- Consideration of asset quality at termination

Level of compensation →

Caluclation method	Amortisation of capital + breakage costs of the SPV	Amortisation of capital + breakage costs of the SPV + penalty payment for SPV	Amortisation of capital + breakage costs of the SPV + lost profit of the SPV
Specified in the tender documents by the authority		Chile: standard for road PPPs	
Negotiation during contract award		UK: additional option in SoPC 4 for voluntary termination by the authority: Authority break points	
Derivation from financial model			UK: option for voluntary termination by authority(1)
Determination of market price by 3rd party expert			UK: option for voluntary termination by authority Austria: used in road PPP
Negotiation before the termination			Germany: no early voluntary termination right for the authority ⇨ compensation for damages incl. lost profit

(1) Base Case IRR from Financial Model for the whole contract term or future cash flows

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Conclusions

- Variations of contracted services and accompanying renegotiations are of high importance in many PPP projects
- Appropriate contract design, i.e. suitable process and calculation rules, allows for efficient handling of renegotiations
- Suitability of particular process and calculation rules depends on change characteristics (frequency, complexity, value)
- Trade-offs to be considered for the choice of renegotiation rule
- Introduction of voluntary termination rules may strengthen authority's position during negotiations for amendments and increase its flexibility
- Appropriate compensation in this case includes amortisation of outstanding capital, breakage costs of the project company, but not necessarily the entire lost profit of the equity holders