## Manipulation of Procurement Contracts: Evidence from the Introduction of Discretionary Thresholds

By Ján Palguta and Filip Pertold

**Online Appendix (not for publication)** 

TABLE A3 - Description of scandals in procurement related to anonymously-owned joint-stock firms

Scandal	Time period	Institution/s involved	Name of anonymously-owned firms	Type of procurement	Subject of the contract	Involvement of the anonymously- owned joint-stock firm	Potential loss	Charges, sentences
Opencard	2006- present	Capital city of Prague	Haguess	services	IT system for chip cards used in public transport	The Capital City's public transport company, owned exclusively by the City of Prague, approved a number of contracts awarded to companies with anonymous owners, including Haguess (now eMoneyServices), which was very closely linked to employees of the Prague City public transport company.	25 mil. CZK	A few people have been accused, including the former and current Mayor of Prague and former officers of Prague City Hall who reported the suspicious contracts to the police. The investigation is still in progress.
Kardio Port	2010- 2014	The Institute of Clinical and Experimental Medicine in Prague	Kardio Port	supplies	medical supplies	Kardio Port won a procurement contract worth 1.8 billion CZK on medical supplies to a Prague hospital as the only bidder. Even four years later, it is still not possible to determine who profits from the contract.	1.8 billion CZK	No one accused. EU closely watched the case.
EDS Holding	2012	Town of Kolin, The Waterways Directorate of the Czech Republic	EDS Holding	construction	highway bridge	EDS Holding is an anonymously- owned firm linked to the former Minister of Transport Ales Rebicek. The largest contract from June 2009 was worth almost 1.2 billion.	400 mil. CZK	Auditors from the European Court of Justice had already been investigating the tender. In 2011, the auditors questioned the usefulness of the bridge and the unprecedented increase of its cost by CZK 400 million. No one has been accused.

Scandal	Time period	Institutions involved	Name of anonymously-owned firms	Type of procurement	Subject of the contract	Involvement of anonymously-owned joint-stock firm	Potential loss	Charges, sentences
Neocity Ron	2012	Public Hospital in Mladá Boleslav	Neocity Ron	construction	hospital	Tender for building a new hospital pavilion. The winner had no experience, only one employee and no relevant financial history. Its owners were hiding behind offshore Cyprus companies.	500 mil. CZK	n.a.
IZIP	2002- 2012	General Insurance Company: Vseobecna zdravotni pojistovna	MD Access	services	IT system designed for processing personal health care data	MD Access, the winning company, was personally connected with the procuring official. It cannot be proven whether the official has shares in the company at the moment due to the anonymous structure of MD Access.		n.a.
Montegar	2009- present	The Road and Motorway Directorate (RSD)	Montegar	services	Rentals of highway rest stops	The Road and Motorway Directorate (RSD) rents highway rest stops to Montegar. This is a company with anonymous owners linked to Monster International, which has anonymous owners in Cyprus.	n.a.	Former RSD managers who signed the contracts are under police investigation.

TABLE A4 - Polynomial Regression Specification Checks – Choice of the Bin Size

	<b>Construction Works</b>	Goods	Services					
	Bin size: CZK 200,000							
$\hat{b}$	11.600***	2.210***	3.598***					
D	[2.041]	[0.257]	[0.279]					
$\hat{B}_N$	574	252	482					
	Bin size	e: CZK 250,000						
$\hat{b}$	9.352***	1.996***	3.027***					
D	[1.850]	[0.236]	[0.275]					
$\widehat{B}_N$	581	282	501					
Bin size: CZK 500,000								
$\hat{b}$	5.533***	1.901***	2.466***					
D	[0.868]	[0.227]	[0.284]					
$\widehat{B}_N$	677	498	757					
N	8,830	5,228	6,357					

Notes:  $\hat{B}_N$  denotes the estimated excess number of contracts below the threshold, and  $\hat{b}$  denotes the excess mass of contracts relative to the average density at the threshold. Standard errors are presented in brackets. The excluded area below the threshold always corresponds to 3 bins and the order of the polynomial fitted to the empirical distribution of the anticipated project value is seven. \*\*\*Estimates significant at the 1% level.

TABLE A5 - Polynomial Regression Specification Checks - Choice of the Order of the Polynomial

	Construction Works	Goods	Services				
Order of the Polynomial: 7 <sup>th</sup>							
$\widehat{b}$	9.352***	1.996***	3.027***				
D	[1.850]	[0.236]	[0.275]				
$\widehat{B}_N$	581	282	501				
Order of the Polynomial: 6 <sup>th</sup>							
$\widehat{b}$	10.74***	2.196***	3.261***				
D	[2.179]	[0.245]	[0.284]				
$\widehat{B}_N$	600	298	520				
Order of the Polynomial: 5 <sup>th</sup>							
$\widehat{b}$	10.63***	3.057***	4.295***				
D	[1.955]	[0.321]	[0.341]				
$\hat{B}_N$	598	356	588				
N	8,830	5,228	6,357				

Notes:  $\hat{B}_N$  denotes the estimated excess number of contracts below the threshold, and  $\hat{b}$  denotes the excess mass of contracts relative to the average density at the threshold. Standard errors are presented in brackets. The bin size always corresponds to CZK 250,000 and the excluded area below the threshold always equals 3 bins. \*\*\*Estimates significant at the 1% level.

TABLE A6 - Polynomial Regression Specification Checks – Excluded Area below the Threshold

	Construction Works	Goods	Services			
	Excluded area below the threshold: 3 bins					
$\hat{b}$	9.352***	1.996***	3.027***			
D	[1.850]	[0.236]	[0.275]			
$\widehat{B}_N$	581	282	501			
	Excluded Area below the threshold: 4 bins					
$\widehat{b}$	9.038***	2.767***	4.067***			
D	[2.051]	[0.295]	[0.329]			
$\widehat{B}_N$	570	383	656			
	Excluded area below the threshold: 5 bins					
$\hat{b}$	11.23***	2.731***	4.133***			
D	[2.739]	[0.349]	[0.412]			
$\hat{B}_N$	684	378	663			
N	8,830	5,228	6,357			

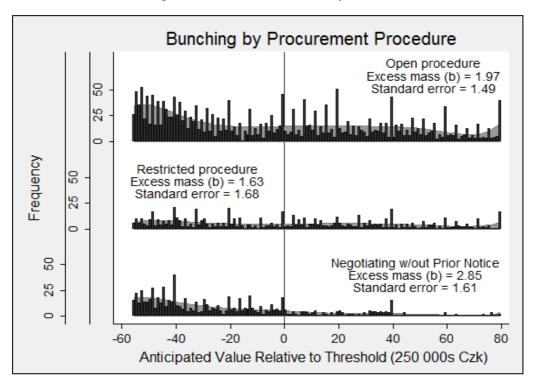
Notes:  $\hat{B}_N$  denotes the estimated excess number of contracts below the threshold, and  $\hat{b}$  denotes the excess mass of contracts relative to the average density at the threshold. Standard errors are presented in brackets. The bin size always corresponds to CZK 250,000 and the order of the polynomial fitted to the empirical distribution of anticipated procurement value is always seven. \*\*\*Estimates significant at the 1% level.

TABLE A7 - Polynomial Regression Estimates of Excess Mass below the Threshold by CPV code

	Building constructio n work	Engineerin g works and constructio n works	Construction work for pipelines, communication and power lines, for highways, roads, airfields and railways; flatwork	Construction work for water projects	Other building completio n work
CPV code -4 digits	4521	4522	4523	4524	4545
$\widehat{b}$	4.276***	5.854***	6.265***	3.064	3.783***
D	[0.962]	[2.254]	[0.985]	[1.926]	[1.178]
$\widehat{B}_N$	108	48	286	14	36
N	1,939	589	2,974	469	608

Notes:  $\hat{B}_N$  denotes the estimated excess number of contracts below the threshold, and  $\hat{b}$  denotes the excess mass of contracts relative to the average density at the threshold. Standard errors are presented in brackets. The excluded area below the threshold always corresponds to 3 bins. The bin size always corresponds to CZK 500,000. \*\*\*Estimates significant at the 1% level.

FIGURE A1 - Anticipated Value Distributions by Procurement Procedure



Notes: The figure shows distributions of the anticipated value of procurements around "placebo" thresholds (demarcated by the vertical line at 0) in three contract-awarding procedures, which are not restricted by a procurement threshold. Only construction contracts from 2006 –2010 are considered in the figure. The "placebo" threshold is located at the point where a simplified negotiation threshold would apply. The series shown in bars are histograms of the anticipated value of procurements relative to the threshold. Each bar shows the number of observations in CZK 250,000 bins. The solid distributions beneath empirical distributions are seventh-degree polynomials fitted to empirical distributions, excluding points CZK 750,000 or fewer below the threshold. The top subfigure shows the series for contracts procured in an open procedure. The middle subfigure depicts the series for procurements in a restricted procedure. The bottom subfigure considers procurements from a negotiating procedure without prior public notice.