Intensity of Competition, Corruption Risk and Estimated Direct Social Loss in Public Procurement of Zagreb - 2011-2016

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CMS
Zagreb
CRCB

• Non-profit, non-partisan organisation
• From 2013
• recent topics:
  – Measuring corruption risk
  – Analysing corrupt system and kleptocratic state in Hungary with hard data
  – Measuring the quality of legislation with hard data
  – Corruption risks, price distortion & competition at EU level
research & analytical tool

• Analysis of 5,922 contracts of 4,483 public procurement issued by Grad Zagreb and Zagreb Holding

• Period of time: 2011-2016

• 1,197 winner companies
research & analytical tool

Database processing tool for the Croatian Public Procurement (DCPP)

• Analytical tool to analyse the Croatian Public Procurement

• On-line platform

• PP data and firm level balance sheet and ownership data

• Real time analysis
Database processing tool for the Croatian Public Procurement (DCPP)
MAIN RESULTS
1. The corruption risk of public procurement increased significantly. The share of tenders without competition increased from 25% to 34% between 2011 and 2016.
Share of tenders without competition (SB=1) by year, 2011-16, %, N = 5,922
Share of tenders without competition (SB=1) in selected European capitals, 2006-15, N = 3,407,027

- Europe: 23.3%
- Warsaw: 42.2%
- Zagreb: 39.4%
- Prague: 30.7%
- Budapest: 29.3%
- Ljubljana: 25.5%
- Rome: 22.7%
- Berlin: 11.5%
- Vienna: 11.0%
- Paris: 10.3%
- Amsterdam: 5.9%

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Share of tenders without competition (SB=1) in selected European capitals, 2006-15, N = 3,407,027

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Share of tenders without competition (SB=1) in City of Zagreb and Zagreb Holding, 2011-16, 2011-16, %, N = 5,922
2. The intensity of competition (ICI) decreased considerably from 0.65 to 0.55 points during the period.

\[0.301 \leq ICI \leq 1\]
The average value of Indicator of Competitive Intensity (ICI) by year, 2011-16, N = 4,238
The average value of Indicator of Competitive Intensity (ICI) by year, 2011-16, N = 4,238
Intensity of Competition and Corruption Risk in selected European Capitals 2006-15, N = 3,407,027

Source: CRCB’s own calculation form TED data; values in X and Y axis are coefficients from logit and ordered logit models, reference capital: Amsterdam, controls: year, sector, contract size (ln net contract value).
3. The price distortion was high in 2013 and in 2015
The weight of price distortion: the squared error (SE) of contract prices of PPZ from the theoretical (Benford’s) distribution by year, 2011-16, N = 5,922
The weight of price distortion: the squared error (SE) of contract prices of PPZ from the theoretical (Benford’s) distribution by sectors, 2011-16, \( N = 5,922 \)
4. 27% of the aggregate contract value was spent without competition. Between 2011 and 2016 the competition practically did not exist at more than the quarter of public money spent on public procurement. The highest value (43%) was in 2011 and the lowest one (21%) in 2015.
The share of money spent in PPZ without competition, %, 2011-16, N = 5,922

- 2011: 43%
- 2012: 27%
- 2013: 33%
- 2014: 22%
- 2015: 21%
- 2016: 23%
- Whole period: 27%
The sum of the value of PPZ without competition, in million HRK, 2011-16, N = 1,684
5. The median level of estimated direct social loss remained stable during the period and its value has moved between 31-34%
The median value of the ratio of estimated direct social loss in net contract value by year, %, 2011-16, \(N = 3,076\)
6. The results point to the existence of a positive link between corruption risks of public tenders and its importance in total sales of the company. If the role of the public procurement market is greater within the company's sales, the company typically won public tenders characterized by high corruption risks.

=> institutionalization of corruption (??)
The share of tender won by the winner company as single bidder in total number of tender by the weight of total contract value of public tenders in total net turnover of the company %, 2011-15, N = 878
7. New Data from 2017.01-2017.09

Evolution before and after the local election of 2017

before: considerable increase of corruption risks

after: sudden drop
The share of tender without competition (SB=1) 2011.01. – 2017.09., quarterly data, N = 6,076
Lessons

• Low intensity of competition

• High corruption risks

• High level of estimated direct social loss

• Corruption towards institutionalization
Lessons

• Need for a regular empirical analysis of the intensity of competition, corruption risks and direct social loss of public tenders.

• This is the first step towards to increase social welfare.
References

http://repec.iza.org/dp4939.pdf


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References


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Thank you for your attention!

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