

Cronyism in Hungary

Empirical analysis of public tenders 2010-2016

István János Tóth* – Miklós Hajdu⁺

*CRCB, IECERS HAS: istvanjanos.toth@crcb.eu + CRCB, CUB: miklos.hajdu@crcb.eu

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About the research

- CRCB & IECERS HAS
- First steps from 2010 to 2014; and from 2015 the detailed analysis
- EU 7th Framework (Anticorrp); EU Commission, OTKA

Summary

- Evidence on cronyism in Hungary in the public procurement between 2010-2016
- Higher corruption risks
- Lower intensity of competition
- Lower rate of relative price drop (RPRD ≈ 0)

Motivations

Motivations

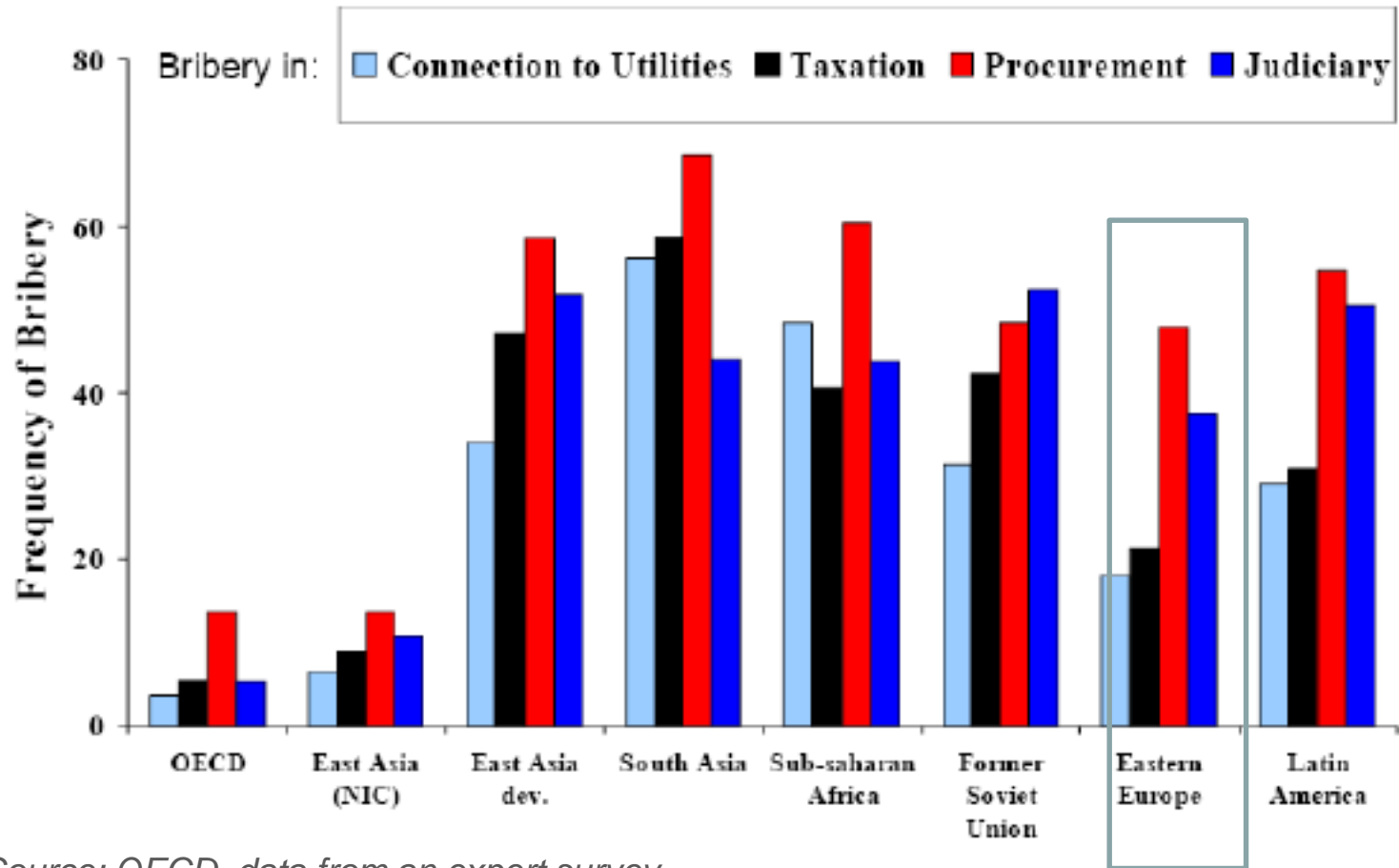
- Empirical investigation into cronyism in Hungary based on objective data
- Using big data approach
- in the public procurement (one of the main fields of possible corrupt activities)

Motivations

- statistical comparison
 - of the corruption risks,
 - intensity of competition
 - the strength of price competition

among tenders won by crony companies and that among tenders won by other, ordinary Hungarian firms.

Fields of corruption

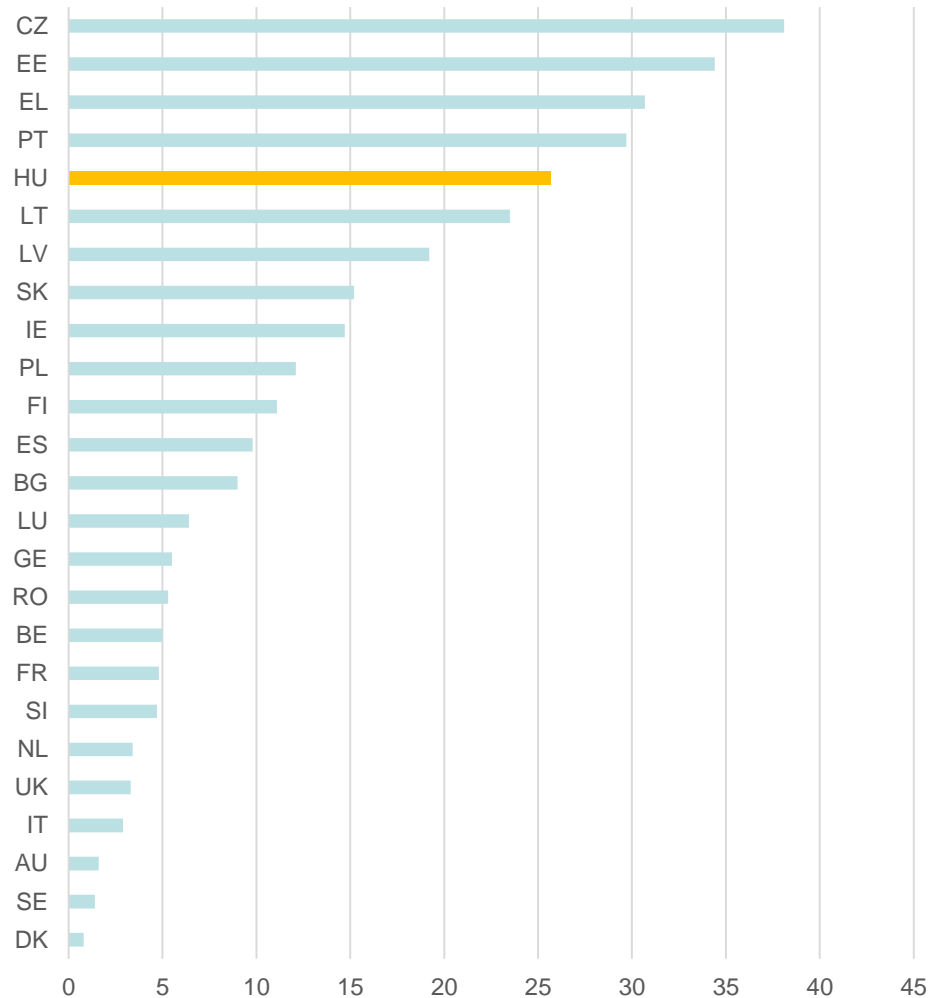


Source: OECD, data from an expert survey

Fields of corruption

- One of the most important fields of *grand corruption*
- In Hungary 15-20% of GDP
- cca. 15-20 Billion Euros per year

Share of EU funded PP in total number of PP in European countries, 2009-13, N = 1,777,955



Source: TED,
calculation by CRCB

2018.02.23.

Theoretical background & literature

Background

- *Autocracy*

Kornai described **the autocratic** characteristics of the Hungarian state administration and

the peculiar nature of the Hungarian **'autocratic capitalism'**:

the real aim of the regime is to strengthen the position of political power holders in the business realm.

(Kornai, 2016)

Background

- *Modern dictatorships* – without mass repression

Sergei Guriev and Daniel Treisman argue that in modern authoritarian regimes the dictators use propaganda and rewards instead of mass repression

the repression is not cost-effective—it makes **more sense to spend money on rewards** and propaganda

(Guriev and Treisman, 2015)

Background

- *Grand corruption and corrupt systems*

the corruption of high level officials /
business holders

and where the corruption is systematic

(Rose-Ackerman, 1978; Lambsdorff, 2007).

Background

- *Cronyism and kleptocratic system / state*

cronyism: when the state allocates its resources to the individuals and groups closely related to its leader

(Haber, 2002).

The extreme case of the cronyism is the *kleptocratic system* when par excellence the political leaders, their fronts and their families will be the beneficiaries the state then becomes an extortionary or kleptocratic state

(Rose-Ackerman, 1999).

Empirical evidences on crony systems

- From Africa,
- Latin-America
- Asia

(Harm and Charap, 1999; Haber, 2002; Kang, 2002; Diwan, Keefer and Schiffbauer, 2015; Nucifora, Churchill and Rijkers, 2015; Rijkers, Freund and Nucifora, 2017)

- Hungary

Indicators & data

Indicators

- Corruption risk
- Intensity of competition

Corruption & Corruption risks

- Corruption:
 - "misuse of the powers of Public officials (appointed or elected) for private financial or other benefits" (OECD)
 - micro level phenomenon
 - a transaction between two or several actors
 - hidden in both side (seller and purchaser)
 - a sign of the lack of integrity in an institution / institutions or in a whole institutional system

Corruption & Corruption risks

- Corrupt activity in public procurement:
 - Limit the competition / intensity of competition
 - To achieve monopolistic position
 - Creating corruption rent ($P_{\text{corruption}} > P_{\text{market}}$)

$$(P_{\text{corruption}} = P_{\text{market}} + R_{\text{corruption}})$$

Corruption & Corruption risks

- Corruption risks relate to the existence of favourable conditions of corruption
- The actors who want to behave in a corrupt way will create the conditions which meet the planned corrupt transaction
- Corruption risks measure the extent to which effective conditions for corruption have been created

Intensity of competition

- Micro phenomenon
- From weak competition to strong competition
- The strength of competition is measurable at transaction level

Indicators: corruption risks

1. Single bidder (*SB*); $[0, 1]$:

the tender is competitive or non-competitive

(Coviello & Gagliarducci, 2010; OCDS, 2017; Heggstad et al. 2010; Fazekas et al. 2013b; Fazekas et al. 2016; Tóth-Hajdu, 2017).

SB = 1 if the tender was conducted with only one bid

SB = 0 if there were more than one bid

Indicators: corruption risks

2. *CR3*; [0, 0.33, 0.66, 1]:

components:

1. SB
2. open vs. not open tender
3. contract price rounded by 10.000 or not

(Nigrini, 2012; Kossovsky, 2015; Fazekas et al. 2013b; Fazekas et al. 2016; Tóth – Hajdu, 2016; Tóth-Hajdu, 2017).

*CR3 = 0 means low corruption risk,
CR3 = 1 means high corruption risk*

Indicators: intensity of competition

3. *ICI (index of competition intensity):*

The ICI is related to the number of bids (NB). ICI has missing value if $NB = 1$, because we assume that if there is only one bid, then there was no competition that could be measured.

$$ICI = \lg NB \quad \text{if } 1 < NB \leq 10$$

$$ICI = 1 \quad \text{if } 10 < NB$$

$$0.301 \leq ICI \leq 1$$

(Tóth – Hajdu, 2016; Tóth-Hajdu, 2017).

Indicators: price competition

4. *RPRD (relative price drop)*

The estimated value is determined by the issuer and indicates the highest price that was estimated based on a market analysis, and sometimes it could also signal how much money was available to implement the project.

$$RPRD = \frac{(P^* - P)}{P} * 100$$

if $P^ > P$ and $RPRD < 100$*

(cases in which $RPRD \geq 100$ were excluded from the calculations because we assume that they are affected by data inconsistencies)

where P^ is the estimated net value and P is the net contract value.*

If $RPRD \approx 0$, the contract prices are close to the estimated value, then this should be interpreted as a 'red flag', a sign of possible corruption

(Heggstad et al. 2010)

Crony companies: the MGTS group

5. MGTS [0, 1]: the companies owned by Orban's cronies

Lőrinc Mészáros

A close childhood friend of the Hungarian Prime Minister; a gas fitter; the mayor of Felcsút (the village where Viktor Orbán spent his childhood). A Hungarian billionaire since 2013 (<http://bit.ly/1nKficQ>). Many experts assume that he serves as a front (straw man) for Viktor Orbán's business dealings (<http://on.ft.com/2BSL2qp> and <http://bit.ly/2Dy7R09>). While he was an ordinary citizen without any considerable wealth in 2009, according to estimates by Forbes Hungary in 2017, his wealth had reached \$392 million (<http://bit.ly/2DBEeLq>, <http://bit.ly/2DAnk05>, <http://bit.ly/2E7pEMZ> and <http://bit.ly/2GeKF97>).

Istvan Garancsi

Hungarian businessman, owner of the Videoton FC football team, president of the Hungarian Association of Hikers; close friend of Viktor Orbán's (<http://bit.ly/2DIKt3p>). Many assume that he serves as a front for Viktor Orbán's business dealings (<http://bit.ly/2DMIprv> and <http://bit.ly/2Bs57jc>).

István Tiborcz

Hungarian lawyer and businessman; son-in-law of Viktor Orbán, Hungary's prime minister (<http://bit.ly/2DxhgoN>).

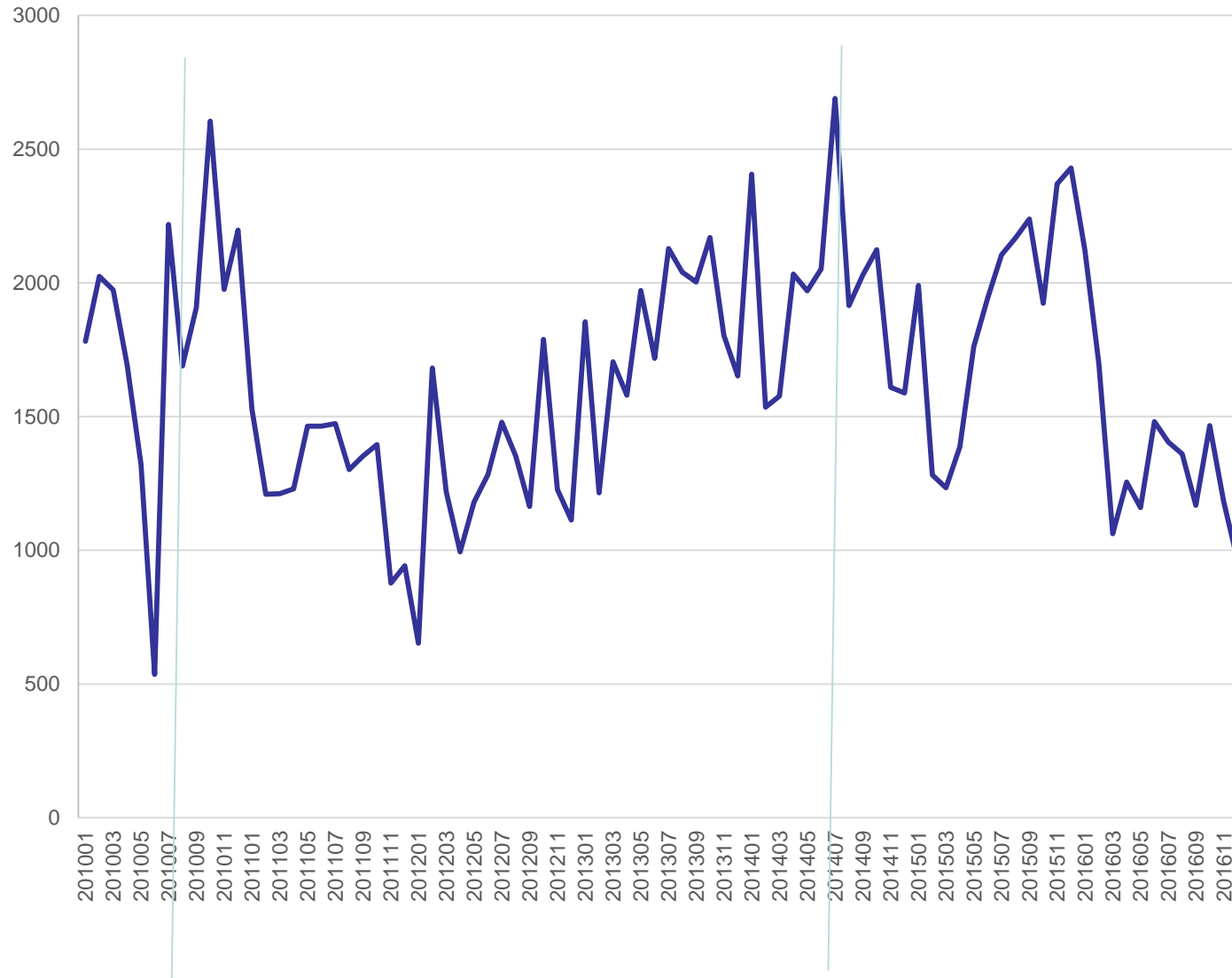
Lajos Simicska

Hungarian businessman, owner of Hungarian TV news channel Hír TV and one of Hungary's leading dailies, Magyar Nemzet; Hungary's 11th richest person estimated by napi.hu on its list of the 100 richest Hungarians; Viktor Orbán's dormitory roommate. Later, he held several positions: Fidesz treasurer, President of the Hungarian Tax Office, and general manager and CEO of Mahir, one of the market leaders in advertising in Hungary. He fell out with Viktor Orbán on 6th February 2015 (<http://politi.co/2rBxFap> and <http://bit.ly/2dY2TA4>).

Data

- Public Procurement Database built by CRCB
- Period of time: 2010-2016
- 126,330 contract (without framework agreements)
- Dates, CPV codes, contract value, estimated contract value, number of bidders, name of winners, EU funds [0,1]

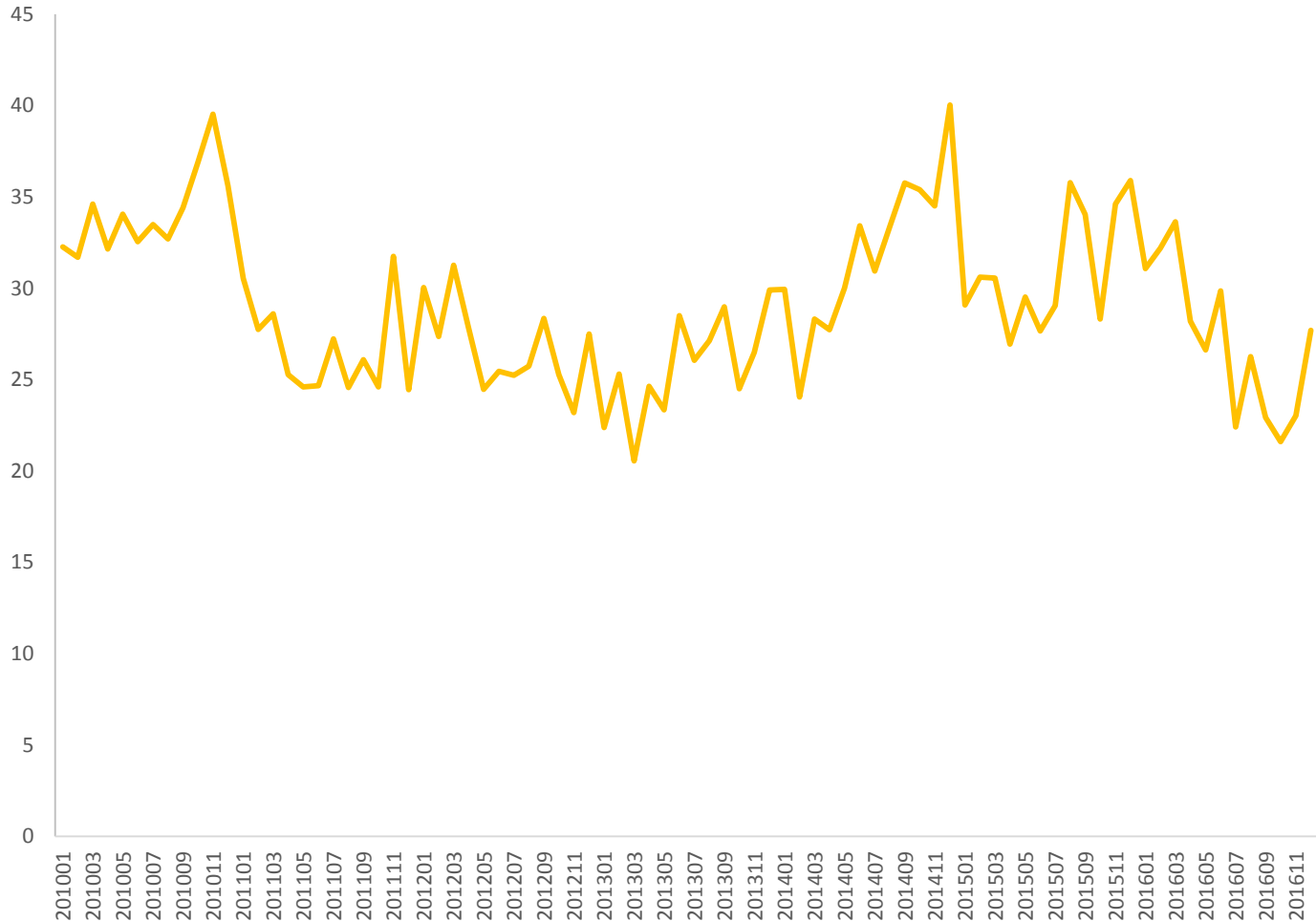
Number of contracts by year, 2010-2016, N=126,330



Share of contracts with single bidder, 2010-2016, %, N=125,066

Median: 0.0000
 Mean: 0.2947
 St.dev. 0.4559

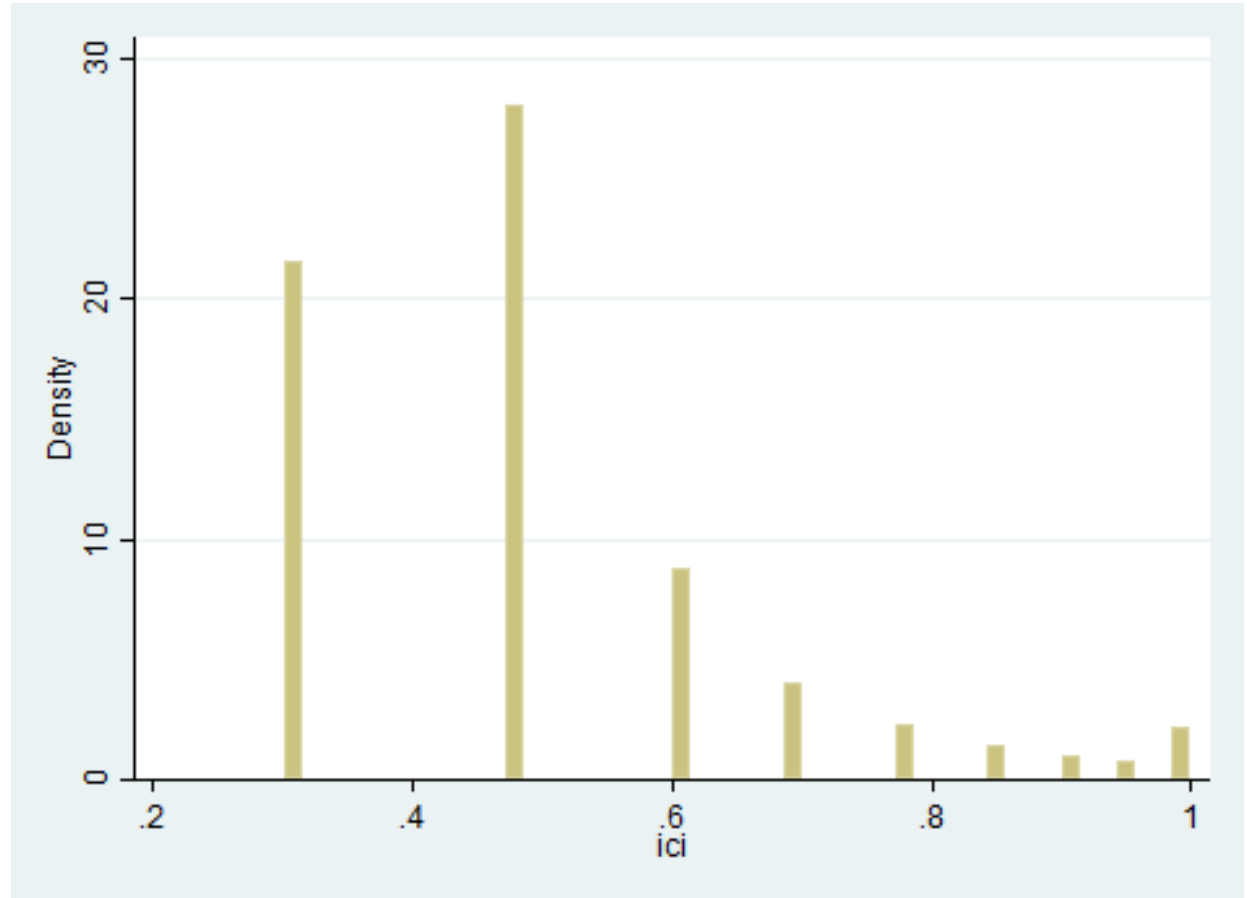
 N: 125,066



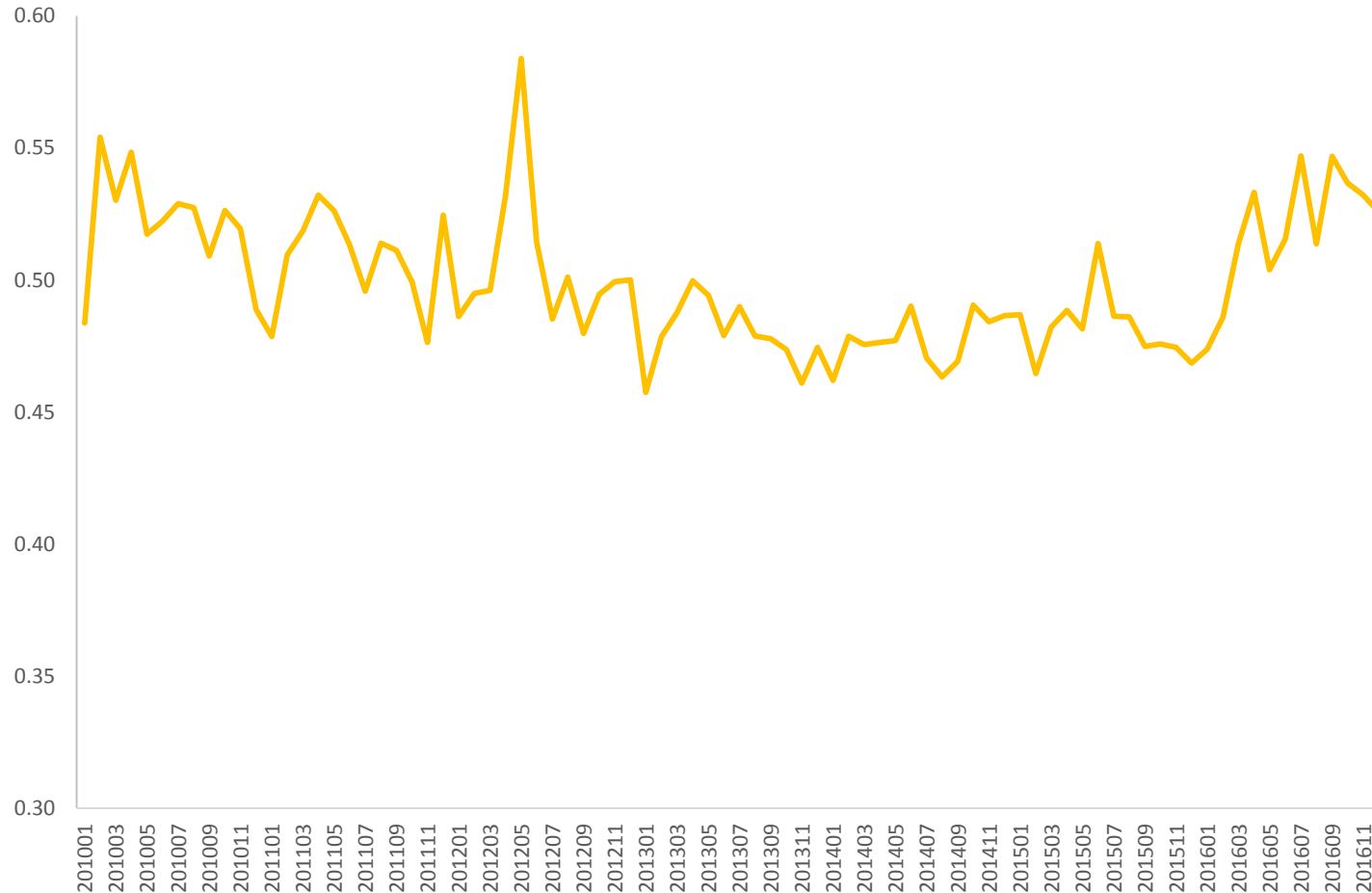
Histogram of ICI, 2010-2016, N = 87,464

Median: 0.4771
Mean: 0.4964
St.dev. 0.1825

N: 87,464



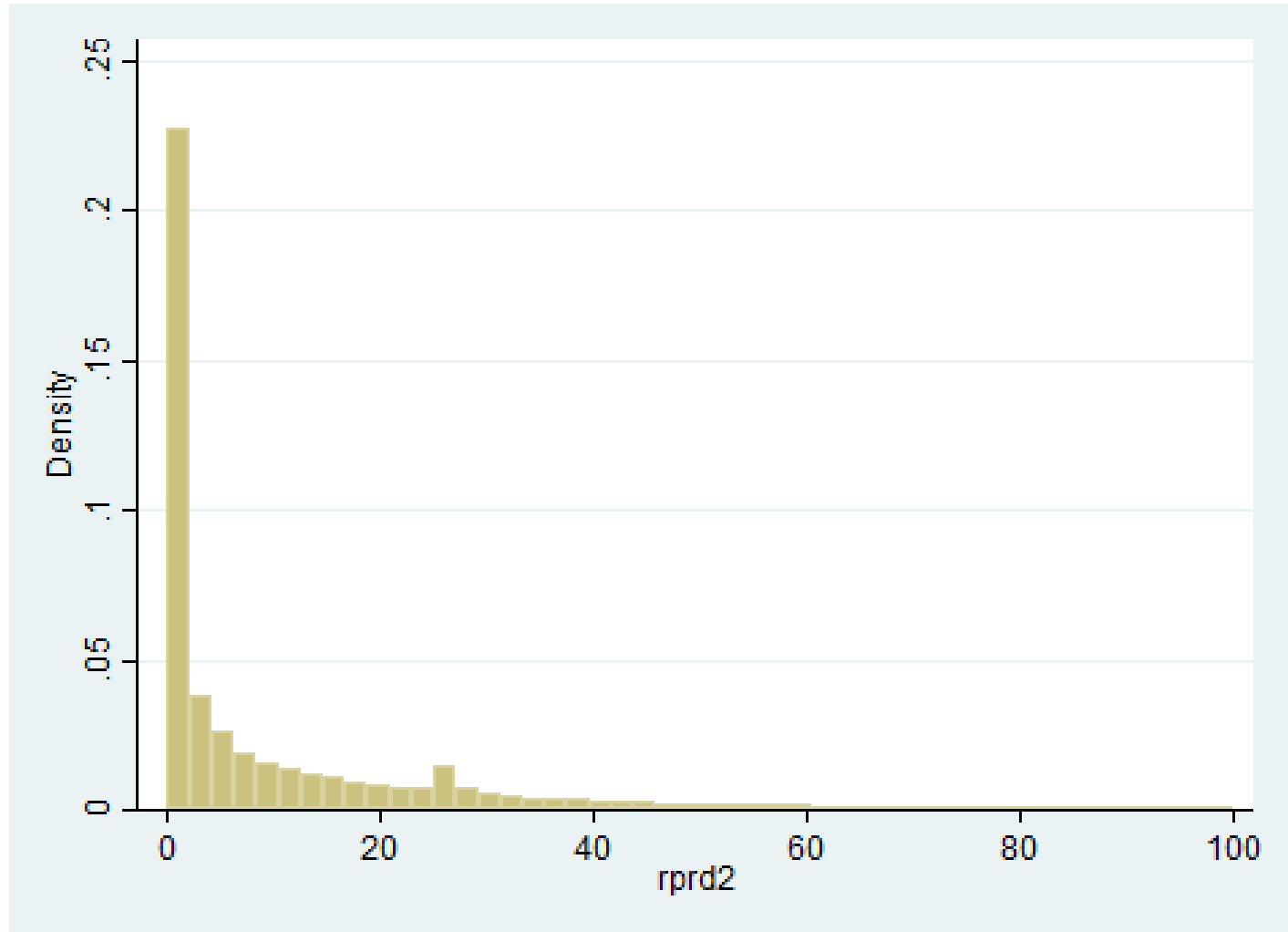
Mean value of ICI by months, 2010-2016, %, N = 87,464



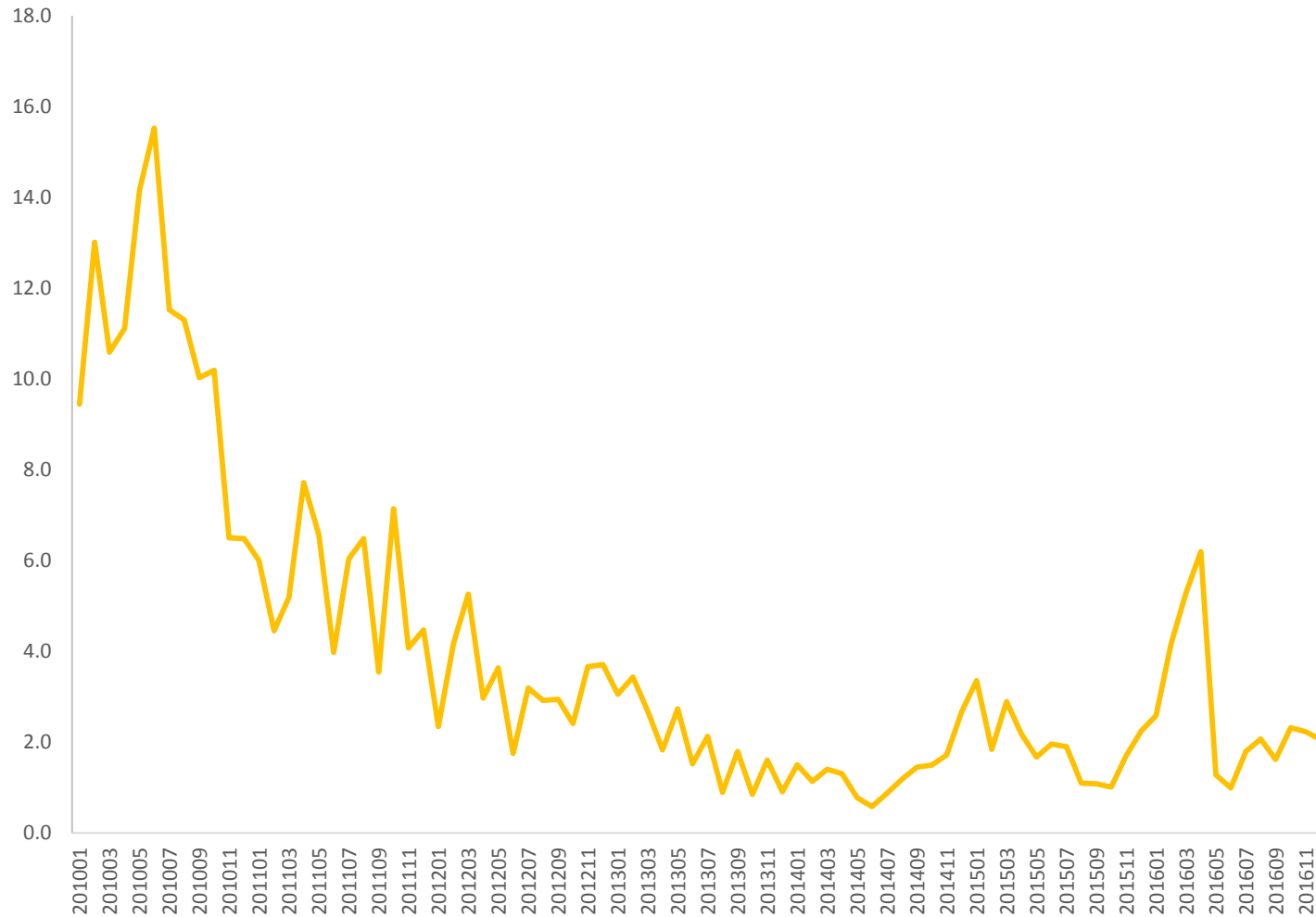
Histogram of RPRD, 2010-2016, N = 69,010

Median: 2.6574
Mean: 11.7377
St.dev. 18.5909

N: 69,010



Median value of RPRD by months, 2010-2016, N = 69,010



Median value of RPRD by CR3 and number of bidders, 2010-2016, N = 68,725

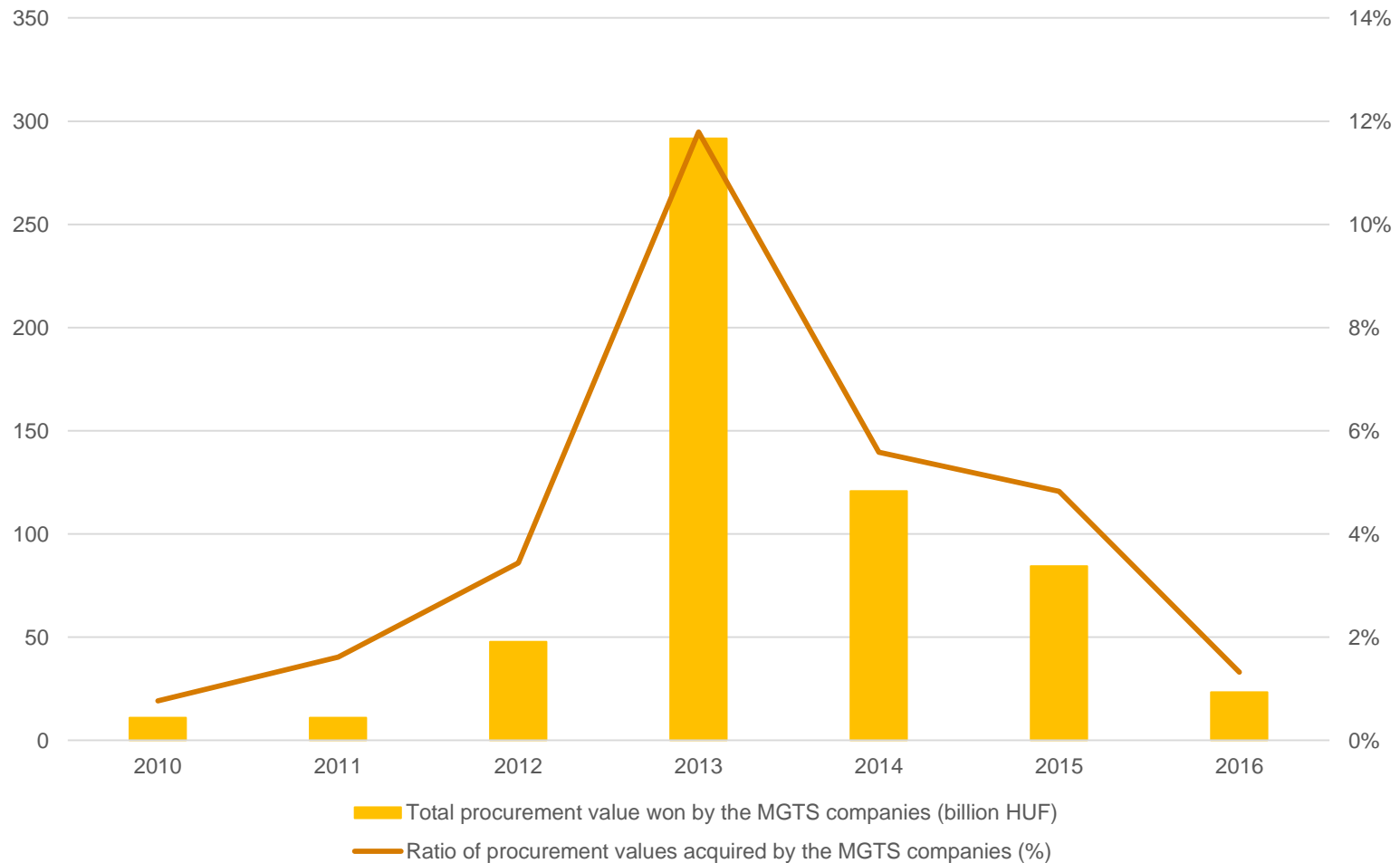
	Corruption risks (CR3)			
Number of bidders	0	0.33	0.66	1
1		3.81	0.63	0.04
2	11.06	2.57	0.80	
3	12.57	1.66	0.96	
4	16.86	4.90	0.89	
5	20.07	10.62	3.44	
6 or more	23.01	7.70	0.00	
N	13,929	28,902	21,671	4,223

The weight of MGTS

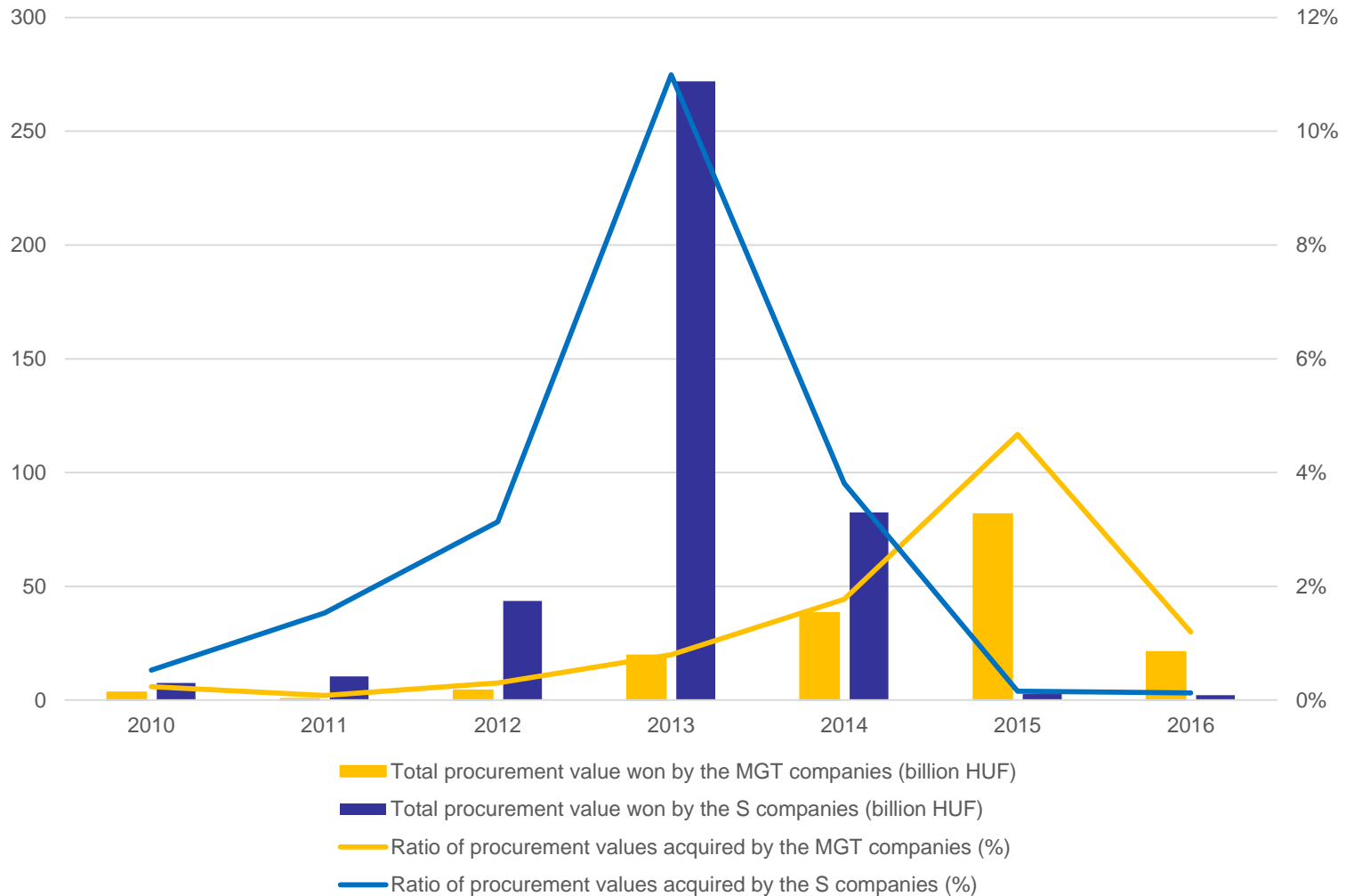
Weight of the MGTS group

- Won 510 contracts out of 126,330 (0.4%)
- \$2.5 billion out of \$49.3 billion on public procurement;
- 5.1% of the total value of public procurement between 2010-2016

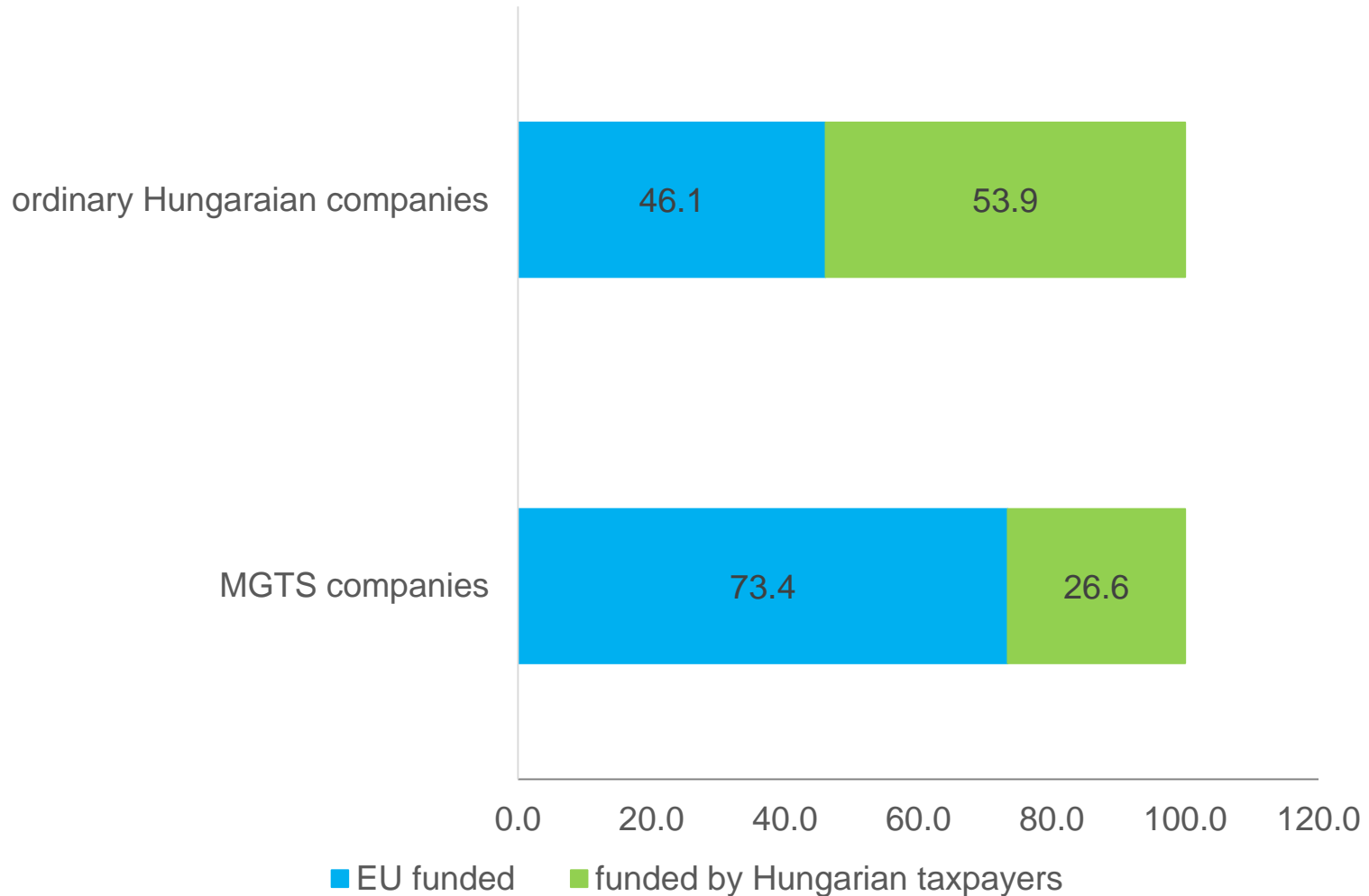
Value and share of contract won by MGTS in total value of contract by years, 2010-2016, N=123,649



Value and share of contract won by MGT and S in total value of contract by years, 2010-2016, N=123,649



Value of EU funded and Hungarian funded projects in total contract value by type of winners, 2010-2016, N=123,649



Models

Hypothesis

H0: There are no significant differences among tenders won by MGTS and other ordinary Hungarian companies concerning

Corruption risks (SB)

Intensity of competition (ICI)

Relative price drop (RPRD)

Hypothesis

H1: The MGTS' companies won tenders with highest corruption risks, lower competitive intensity and lower value of RPRD than the ordinary Hungarian companies

→ evidence of political favouritism & cronyism

Models

$$SB = f(MGTS, X)$$

$$ICI = f(MGTS, X)$$

$$RPRD = f(MGTS, X)$$

$$ERPRD = \beta_0 + \beta_1 CR3 + \beta_2 NB + \beta_3 SECTOR + \varepsilon$$

$$ERPRD = f(MGTS, X)$$

The controls (X) are year; EU [0,1]: EU funding; lnC: logarithm of contract value; S [1,2]: construction vs. other sector

Method used

Propensity Score Matching (PSM)

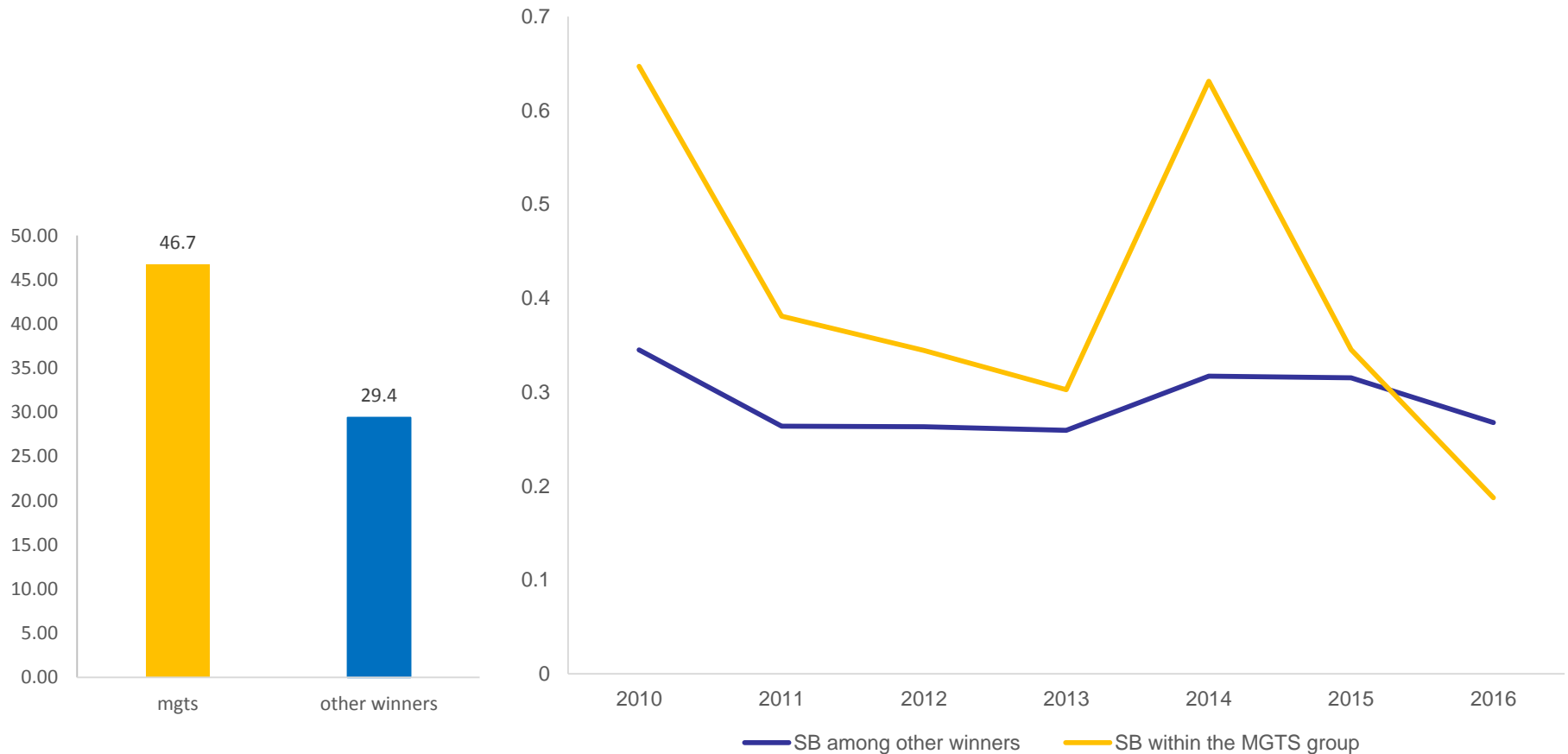
to avoid the selection bias

(our previous research shows that MGTS has chosen special group of tenders:

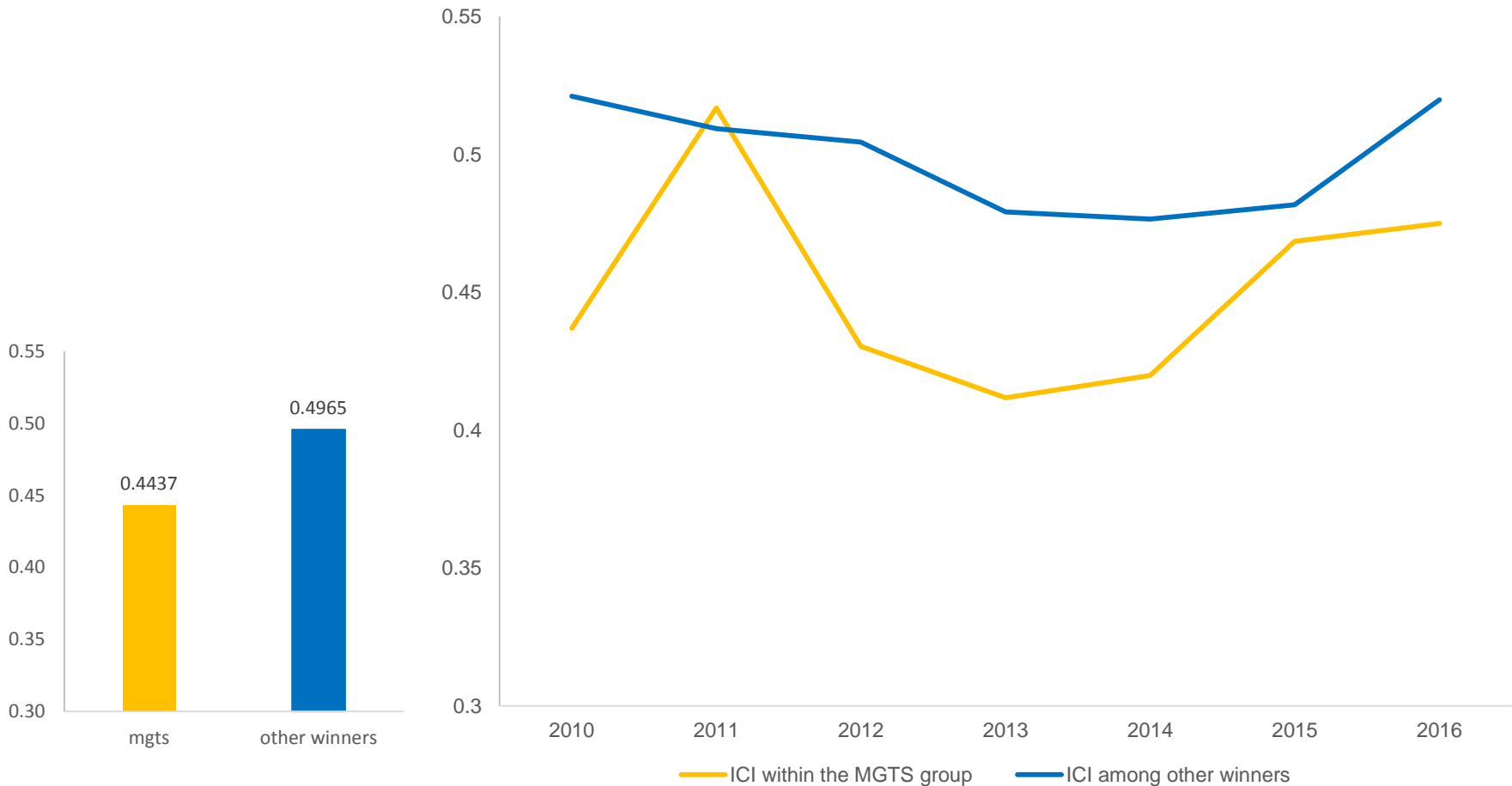
- a) financed by EU funds*
- b) large projects*
- c) in construction sector)*

Results

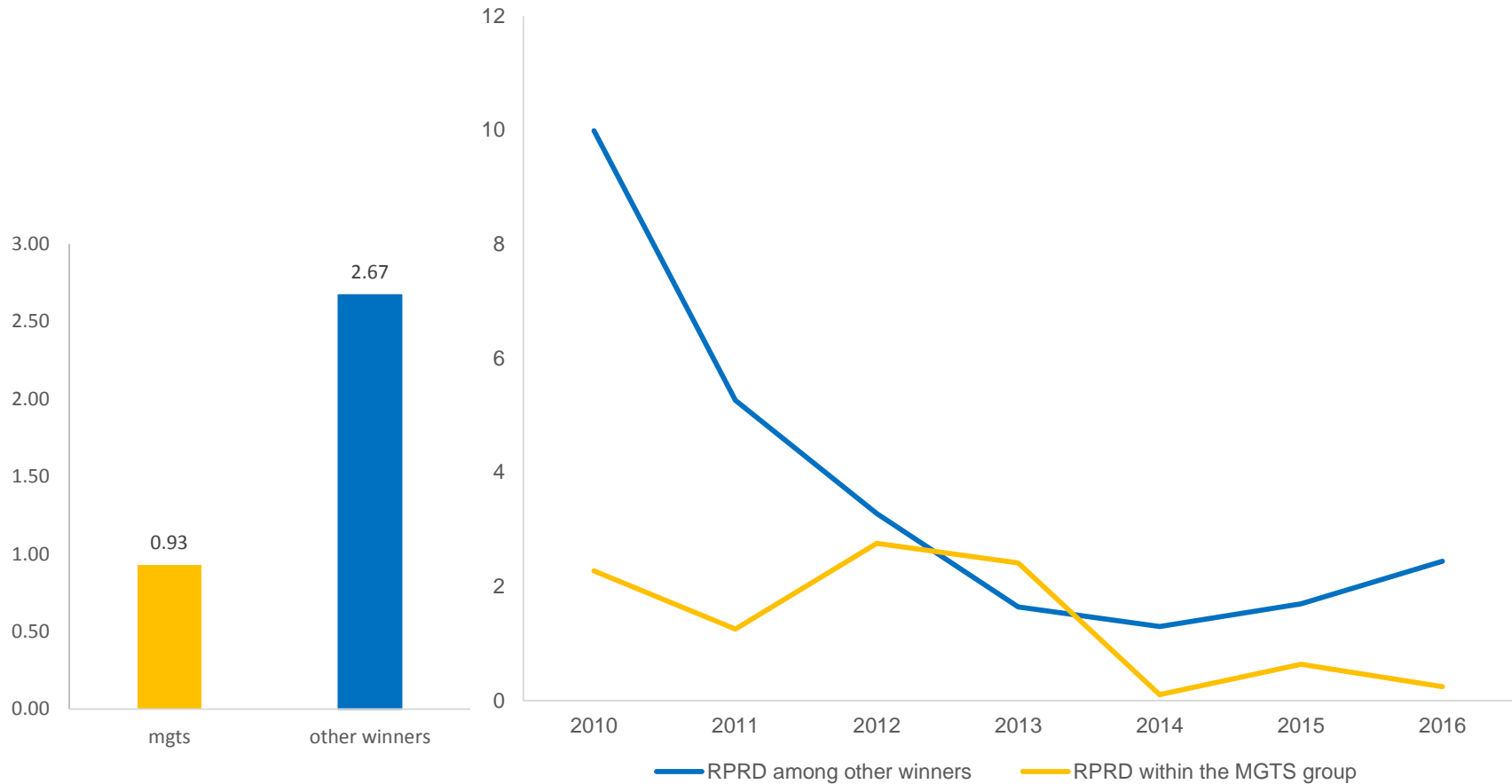
Corruption risks (SB), mean values



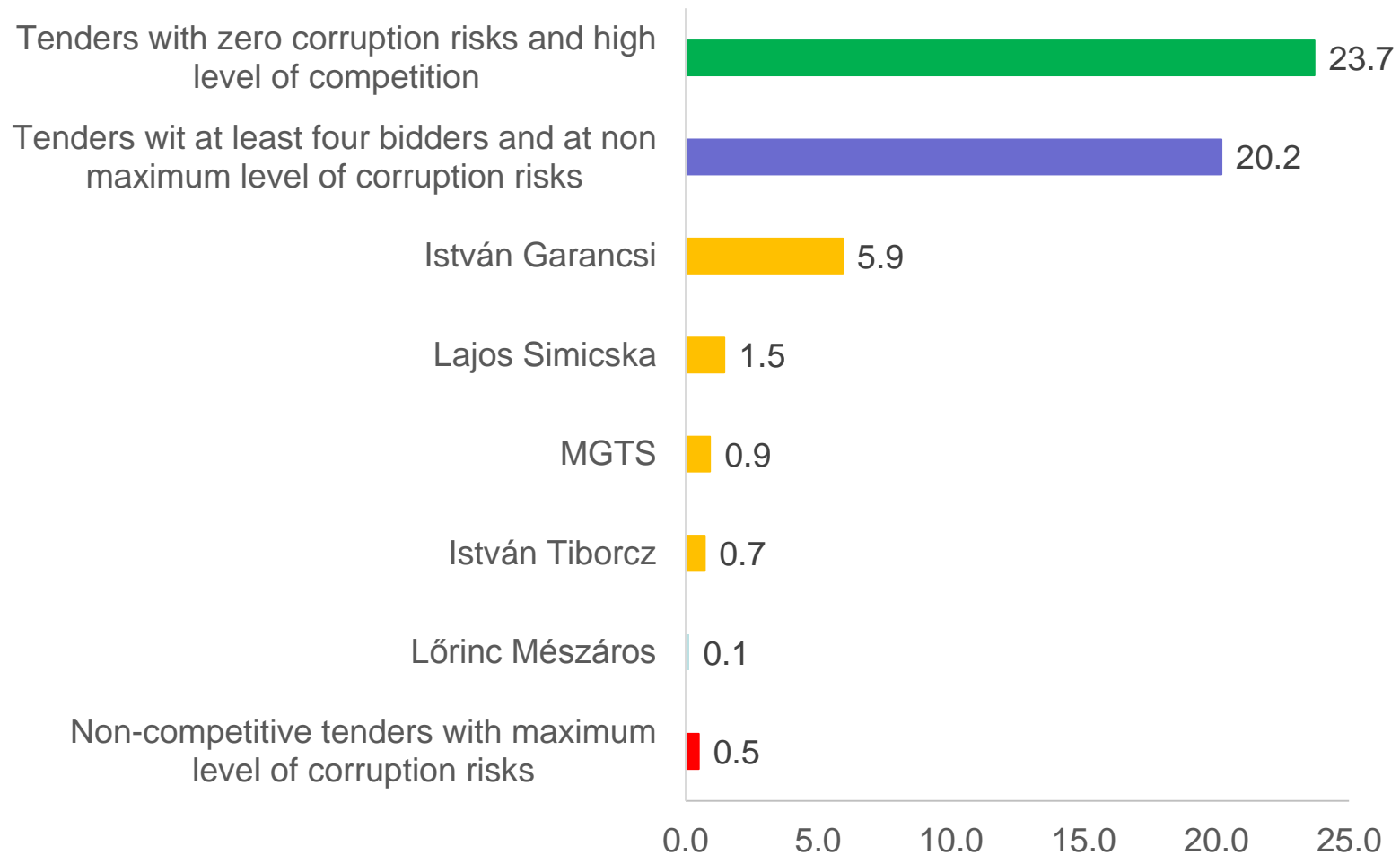
Intensity of competition (ICI), mean values



Relative price drop (RPRD), median values



The median value of RPRD in several groups of winners, 2010-2016, N =69,010



Estimations

Result of PSM estimations, 2010-2016

	Corruption risks (SB)	Intensity of competition (ICI)	Relative price drop (RPRD)	Estimated relative price drop (ERPRD)
MGTS	0.190 ^{***}	-0.067 ^{***}	-2,526 [*]	-1.159 ^{***}
Sector	Y	Y	Y	Y
EU	Y	Y	Y	Y
LNNCV	Y	Y	Y	Y
YEAR	Y	Y	Y	Y
N	122,582	85,658	68,823	119,240

***: $p < 0.01$ **: $p < 0.05$ *: $p < 0.1$

Discussion

Discussion

- MGTS group as winner ← **political favouritism**
- Higher corruption risks
- Lower intensity of competition
- Lower rate of relative price drop (RPRD ≈ 0)
- Evidence on cronyism in Hungary **in the public procurement between 2010-2016**
- Cronyism & kleptocratic system = destruction of competition => negative effect on the economic performance

Discussion

- Estimation of rent /social loss due to **cronyism**
- Detection of collusion / effects of consortiums on corruption and intensity of competition
- In wider perspective other channel of cronyism needs to be considered:
 - Restriction of the entry to the market
 - Market allocation to the cronies
 - Preferential loans
 - Discounted sale of state property
 - Tax policy, tailor made taxation
 - Fines & penalties against the „hostile companies”
 - Enforcement of exit, etc.

References

- Acemoglu, D, and Robinson, J. A. (2012). Why nations fail: The origins of power, prosperity, and poverty. New York: Crown Business.
- Campos, J. Edgardo Campos - Sanjay Pradhan.(2007). The Many Faces of Corruption: Tracking Vulnerabilities at the Sector Level. Washington D.C., USA: The World Bank.
- Charap, J., and Harm, C. (1999). Institutionalized corruption and the kleptocratic state. IMF Working Paper No. WP/99/91. Washington, DC: International Monetary Fund.
- Coviello, Decio and Gagliarducci, S. (2010). Building Political Collusion: Evidence from Procurement Auctions in Italy, <http://bit.ly/2xvMDkf>
- CRCB. (2015). Impact assessments, public consultation and legislation in Hungary 2011–2014. Budapest, Hungary: CRCB, <http://bit.ly/1q8oGXQ>.
- Diwan, I., Keefer, P., and Schiffbauer, M. (2015). Pyramid capitalism: Cronyism, regulation, and firm productivity in Egypt. CID Working Paper No. 291. Cambridge, MA: Harvard University, <http://bit.ly/2aLiPP>.
- Dreher, Alex; Klasen, Stephan; Raymond, James; Werker, E. (2010). The costs of favoritism: Is politically-driven aid less effective? CEGE Discussion Papers, Number 97 – March 2010, Georg-August-Universität, Göttingen. <http://bit.ly/2wYgZJ4>.
- Fazekas, M. and Tóth, I. J. (2017). Corruption in EU Funds; Europe-wide evidence of the corruption effect of EU-funded public contracting, In: Bachtler, John; Berkowitz, Peter; Hardy, Sally; Muravska, Tatjana (eds.). EU Cohesion Policy. Reassessing performance and direction. pp. 186-205. Routledge, Abingdon, UK.
- Fazekas, M., Tóth, I. J., King, L. P. (2016). “An Objective Corruption Risk Index Using Public Procurement Data”. European Journal on Criminal Policy and Research, First Online: 25 April 2016 doi: 10.1007/s10610-016-9308-z.
- Guriev, S. and Treisman, D. (2015). How Modern Dictators Survive: An Informational Theory of the New Authoritarianism. 21136. Cambridge, <http://bit.ly/2nIQgMq>.
- Gürakar, E. Ç. and Bircan T. (2016). Redistribution or Crony Capitalism? Favoritism in Public Procurement Contract Award Processes. In Gürakar, E. Ç. (Ed), Politics of Favoritism in Public Procurement in Turkey. Reconfigurations of Dependency Networks in the AKP Era. (pp. 67-106). New York: Palgrave Macmillan. DOI: 10.1057/978-1-137-59185-2

2018.02.23.

References

- Haber, S. (2002). Introduction: The political economy of crony capitalism. In S. Haber (Ed.), *Crony capitalism and economic growth in Latin America: Theory and evidence* (pp. xi–xxi). Stanford, CA: Hoover Institution Press, <http://hvr.co/1pOI0tY>.
- Harm, C. and Charap, J. (1999). 'Institutionalized Corruption and the Kleptocratic State', IMF Working Papers, p. 1. doi: 10.5089/9781451851496.001.
- Heggstad, K., Frøystad, M., and Isaksen, J. (2010). *The basics of integrity in procurement: A guidebook*. Bergen, Norway: Chr. Michelsen Institute, <http://bit.ly/2n1shZp>.
- Kang, D. C. (2002). *Crony capitalism: Corruption and development in South Korea and the Philippines*. Cambridge: Cambridge University Press.
- Kornai, J. (2016). 'The system paradigm revisited', *Acta Oeconomica*, 66(4), pp. 547–596. doi: 10.1556/032.2016.66.4.1.
- Laki, M. (2015). 'Restructuring and re-regulation of the Hungarian tobacco market'. *Corvinus Journal of Sociology and Social Policy*. Vol.6 (2015) 2, pp. 39–71. DOI: 10.14267/cjssp.2015.02.03, <http://bit.ly/2BNJGJA>
- Lambsdorff, J. G. (2007). *The Institutional Economics of Corruption and Reform: Theory, Evidence, and Policy*, Cambridge University Press. doi: 10.1017/CBO9781107415324.004.
- Lind, Nancy S., Cara E. Rabe-Hemp (eds.). (2017). *Corruption, Accountability and Discretion*. UK: Emerald Publishing Limited.
- Magyar, B., Vászárhelyi, M. (eds.) (2017). *Twenty-five sides of a post-communist mafia state*. Budapest: CEU Press in association with Noran Libro.
- Murphy, K. M., Shleifer, A., and Vishny, R. W. (1993). Why is rent-seeking so costly to growth? *The American Economic Review*, 83(2), 409–414, <http://bit.ly/2C1apGV>.
- Nucifora, A., Churchill, E., and Rijkers, B. (2015). Cronyism, corruption, and the Arab Spring: The case of Tunisia. In T. Miller and A. B. Kim (Eds.), 2015 index of economic freedom (pp. 47–56). Washington, DC, and New York: Heritage Foundation and Wall Street Journal, <http://bit.ly/2b3dmbS>.
- OECD. (2009). *Guidelines for Fighting Bid Rigging in Public Procurement*. Paris, France: OECD, <http://bit.ly/2DtoSg5>.

References

- OECD. (2010). Collusion and Corruption in Public Procurement. Paris, France: OECD, <http://bit.ly/2abxvZR>.
- OECD. (2012). Recommendation of the Council of Fighting Bid Rigging in Public Procurement. Paris, France: OECD, <http://bit.ly/2G1sbZl>.
- OECD. (2016). Fighting bid rigging in public procurement. Report on implementing the OECD Recommendation. Paris: OECD, <http://bit.ly/2DwUi4t>.
- OCP. (2016). Red flags for integrity: Giving the green light to open data solutions. Open Contracting Partnership, <https://www.open-contracting.org/resources/red-flags-integrity-giving-green-light-open-data-solutions/>
- Piga, G. (2011). A fighting chance against corruption in public procurement? In Rose-Ackerman, S. and Søreide, T. (Eds.), International Handbook on the Economics of Corruption. Volume Two (pp.141-181). Cheltenham: Edward Elgar.
- Rijkers, B., Freund, C., and Nucifora, A. (2014). All in the family: State capture in Tunisia. Policy Research Working Paper No. 6810. Washington, DC: World Bank, <http://bit.ly/2aLk9s4>.
- Robinson, J. A. (2001). When is a State Predatory? <http://bit.ly/2nu2PMq>
- Rose-Ackerman, S. (1978). Corruption: A Study in Political Economy. New York: Academic Press.
- Rose-Ackerman, S. (1999). Corruption and government: Causes, consequences and reform. Cambridge: Cambridge University Press.
- Rose-Ackerman, S. & Søreide, T. (2011). International Handbook on the Economics of Corruption, Volume Two, Edward Elgar, Cheltenham, UK & Northampton, MA, USA
- Søreide, T. (2006). Corruption in international business transactions: the perspective of Norwegian firms. In Rose-Ackerman, S. (Ed.), International Handbook on the Economics of Corruption. (pp. 381-414). Cheltenham: Edward Elgar.
- Tóth, I. J., and Hajdu, M. (2017a). Intensity of competition, corruption risks and price distortion in Hungarian public procurement – 2009–2016. Working Paper Series: CRCB-WP/2017:2, Budapest, Hungary: CRCB, <http://bit.ly/2prJVsw>.
- Tóth, I. J., and Hajdu, M. (2017b). Haveri kapitalizmus Magyarországon a kommunikációs szolgáltatások piacán. In Z. Boda and A. Szabó (Eds.), Trendek a magyar politikában 2. A Fidesz és a többiek: pártok, mozgalmak, politikák. (pp. 344–371). Budapest: Napvilág Kiadó

Thank you for your attention!