

TRANSACTION COSTS IN THE PUBLIC PROCUREMENT: SELECTED FINDINGS IN CZECH AND SLOVAK CONDITIONS

**Marketa Sumpikova – Filip Busina – Matus Grega –
- Juraj Nemec – Marta Orviska**

Abstract

The savings achieved by the public procurement process cannot be assessed only in terms of the difference between estimated and contractual prices. Many other aspects play vital role here, especially transaction costs, which seems to be significantly higher in Czech Republic and Slovakia compare to other EU countries.

The goal of this paper is to provide some quantitative and qualitative information on the size of public procurement transaction costs in the Czech Republic and Slovakia. The base is Czech data – estimates of the level of transaction costs of building firms. Because these data are really negative, we investigate their validity and discuss most important factors behind. The very specific issue is high indirect costs of tendering which private firms bear. The data show that one of the causes might be too high percentage of cancelled tenders, as the ultimate result of a non-functional public procurement system. Large construction companies can bear higher procurement transaction costs than previously found by other researchers.

Key words: transaction costs, public procurement, Czech Republic, Slovak Republic

JEL Code: H57, H54

Introduction: literature review

Public procurement offices almost everywhere state that competition in public procurement saves an important sum of public money. For example, according to the Slovak data (Table 1) the difference between estimated and contractual prices was 10-15 % during the last few years.

Tab. 1: The difference between estimate and contractual prices in Slovakia (%)

	2009	2010	2011	2012	2013
Non-weighted difference	7.9%	8.8%	11.8%	15.0%	11.4%
Weighted difference (according to tender values)	-2.1%	6.2%	11.4%	13.8%	12.1%

Source: tender.sme.sk, 2015

However, the picture is not so simple. First, this difference is very problematic to measure, as discussed in many works (for example Pavel, 2013). Second, there is the issue of transaction costs – and some studies suggest that transaction costs can be higher than above indicated formal savings.

Coase (1937) as one of the first partly described the expression „transaction costs“ as an important part of company decision making. Williamson (1981) one of Coase’s followers analysed the theory of transaction costs in relation to public sector.

Akerlof (1970) defines transaction costs as costs for “dishonesty” – doing business in less developed countries is more difficult as distrust between business parties is high and thus transaction costs raise. As consequence of the “dishonesty” there are higher transaction costs in public procurement, especially during the public procurement preparation, contract creation and post contracting behaviour of the suppliers.

Out of Czech authors Pavel (2007) defined transaction costs within the context of public procurement as “costs connected with the realization of a given contract out of production costs”. Pavel (2007) divides transaction costs in terms of time to:

- preliminary,
- current,
- consecutive.

Transaction costs are incurred in both public and private sectors – the Table 2 shows the main examples of transaction costs in public procurement both in public and private sectors.

Tab. 2: Transaction costs in public procurement – main types

Time \ Sector	Ex-ante	During	Ex-post
Public sector	<ul style="list-style-type: none"> • Preparing public procurement documentation • Announcing public procurement • Cost of outsourced services (for experts used – legal, technical, etc.) 	<ul style="list-style-type: none"> • Explanations 	<ul style="list-style-type: none"> • Complaints solving costs • Legal cases costs • Costs incurred by hiring new supplier if first contract fails • Price increase if the first contract fails
Private sector	<ul style="list-style-type: none"> • Preparing bid • Purchases to be able to fulfil qualification criteria • Guarantees 	<ul style="list-style-type: none"> • Communication 	<ul style="list-style-type: none"> • Complaints costs • Legal solutions costs

Source: our own construction, based mainly on Pavel (2007), 2016

There exist many studies focusing on the transaction costs (for example several authors have dealt with a relationship between transaction costs and trustworthiness of the supplier-customer relations - Nishiguchi, 1994; Gulati, 1995, there exists a wide research of correlation between an opportunistic behaviour and transaction costs - like Hill, 1990). However, the number of studies with focus on calculation of transaction costs of public procurement is limited and such information is rather scarce in the Czech and Slovak literature.

In the Czech literature only one author systematically investigates transaction costs of public procurement – Jan Pavel. Transaction costs were the topic of habilitation (2007) and also of a focused research project (2013). Together with Vitek (2016) he estimated transaction costs on the side of the public sector and direct transaction costs on the side of private firms. Their findings are not very optimistic – these two (out of more) categories of transaction costs represent about 1.5 % of GDP – this equals estimated savings (difference between estimated and contractual price).

1 Methodology

To prepare this study we applied quantitative and qualitative research methods. The original quantitative data used in our research (the Czech Republic) were collected in late 2015. In total 47 building firms with focus on transport constructions responded to our questionnaire (Table 3).

Tab. 3: Structure of the interviewed firms

Number	Category	Employed	Turnover
0	Micro	<10	<
4	Small	<50	<150 mil CZK.
36	Medium	<250	<450 mil CZK.
7	Large	<500	<700 mil CZK.

Source: our own research, 2016

The secondary quantitative data were processed from the official public procurement statistics provided by national procurements offices (www.uohs.cz and www.uvo.gov.sk). To obtain a picture as full as possible we also interviewed some experts dealing with public procurement in building industry in the Czech Republic (qualitative data).

2 Research results and their discussion

During our research in the Czech Republic the interviewed firms were first asked to estimate two elements of transaction costs occurred to them when participating in public procurement. The direct costs (Table 4) are those to prepare a bid (such as a drafting budget, a technical proposal, bank guarantees, etc).

Tab.4: Direct costs of tender preparation by firms

Direct costs to prepare a tender	Micro	Small	Medium	Large
>2% of estimated price	**			
3 – 5% of estimated price	*	**		
6 – 10% of estimated price		*	**	
10 – 15% of estimated price			*	***
15 – 20% of estimated price				
<20% of estimated price				

Source: our own research, 2016

The firms responded that the core direct costs connected with the preparation of tenders are especially the salaries of involved employees, IT costs (especially purchasing of necessary software), necessity to purchase additional equipment (cars, copy machines, telephones), training of employees responsible for preparing a bid.

At the second stage the firms estimated indirect costs connected with their participation in tenders during the phase between submitting a tender and the final contract signature by the winner (such as legal costs in case of complaints and reviews, fees for complaints and others). Other parts of transaction costs – such as contract management costs have not been investigated. The estimates of indirect transaction costs are really high and partly surprising (Table 5).

Tab. 5: Indirect costs of a tender preparation by firms

Indirect costs to prepare the tender	Micro	Small	Medium	Large
>2% of estimated price	***	*		
3 – 5% of estimated price		**	*	
6 – 10% of estimated price			***	**
10 – 15% of estimated price				*
15 – 20% of estimated price				
<20% of estimated price				

Source: our own research, 2016

The data above, representing the opinion of firms in the Czech Republic, revealed that the firms had very negative opinions of the size of indirect transaction costs. We tried to discover causes for this situation – through our own secondary data search and also direct interviews.

The most frequent statement of experts was that the building firms are the subjects of “dirty” competition practices during tenders – a visible manifestation of this is the very high number of complaints submitted to the regulator, Urad pro ochranu hospodarske souteze [The Office for the Protection of Competition]. When a complaint is submitted, the tender is slowed down and extra time is required for negotiations. Owing to the problems that result from such complaints, the firms need to hire expensive legal services. Moreover, in most cases the firms have to contract or purchase extra technology and human capacities to fulfill tender requirements. If these capacities are not used because of tender delays, huge costs occur.

We also asked for explanation why large building firms also confirm the highest levels of direct transaction costs – this is not in line with another research (as mentioned by Pavel and Vitek, 2016), where economies of scale are visible – transaction costs of a bigger contract are for sure higher in absolute values, but should not be so in relative values. The only response was that this is caused by specific period of 2015, with very few tenders which caused existential problems to large firms with high fixed costs.

The support for the very high level of indirect transaction costs can be found in the recent research done by Placek et al. (2016). Their data show that the probability of complaint and revision procedures is relatively high in the Czech Republic – almost 1.5% of all open tenders are subject to revisions by the regulator. The total amount of fees by the regulator for procurement mistakes was 72 million CZK (almost 3 million EUR) in 2014, and the total amount of financial cautions from firms (cautions are necessary to start the revision procedure by the regulator) was 130 million CZK. Almost 20% of complaints are approved by the regulator; this is a very high percentage. The data also reveal one more important and negative aspect: in the Czech Republic, there is a relatively high number of cancelled tenders. In such a situation, all of the direct and indirect costs the firms incurred are just wasted resources, with a very negative impact on the procurement system.

Following their line of research, we checked one extra dimension of complaint process – numbers of cancelled bids in the Czech Republic and Slovakia. The Table 6 and 7 is really disappointing.

Tab. 6: Number of cancelled tenders in Slovakia

	2015	2014	2013	2012	2011	2010
Total number of tenders	7613	5766	8896	7813	5254	5168
Cancelled total	1404	1079	687	939	805	790
Cancelled %	18.44%	18.71%	7.72%	12.02%	15.32%	15.29%
Goods	2015	2014	2013	2012	2011	2010
Total number of tenders	x	2305	4048	3532	2128	1488
Cancelled total	x	433	304	383	268	187
Cancelled %	x	18.79%	7.51%	10.84%	12.59%	12.57%
Services	2015	2014	2013	2012	2011	2010
Total number of tenders	x	1550	2177	2287	1481	1743
Cancelled total	x	276	227	309	171	129
Cancelled %	x	17.81%	10.43%	13.51%	11.55%	7.40%
Works	2015	2014	2013	2012	2011	2010
Total number of tenders	x	1911	2671	1994	1645	1937
Cancelled total	x	370	156	247	366	474
Cancelled %	x	19.36%	5.84%	12.39%	22.25%	24.47%

Source: www.uvo.gov.sk, 2016

Tab. 7: Number of cancelled tenders in the Czech Republic

	2015	2014	2013	2012
Total number of tenders	6910	8161	7275	5766
Cancelled total	2909	4568	4915	2807
Cancelled %	42.10%	55.97%	67.56%	48.68%

Goods	2015	2014	2013	2012
Total number of tenders	3205	3413	2848	2441
Cancelled total	1729	2488	2737	1376
Cancelled %	53.95%	72.90%	96.10%	56.37%
Services	2015	2014	2013	2012
Total number of tenders	1487	1499	1716	1602
Cancelled total	660	1233	1434	932
Cancelled %	44.38%	82.25%	83.57%	58.18%
Works	2015	2014	2013	2012
Total number of tenders	2218	3249	2711	1722
Cancelled total	520	841	742	493
Cancelled %	23.44%	25.88%	27.37%	28.63%

Source: www.uohs.cz, 2016

Especially the data for Czech Republic – as calculated from the official statistics – are really frustrating. We checked their validity and in reality the situation is not so bad. The total number of tenders does not also include small scale procurements, but the statistics of cancelled tenders yes. In reality the percentage should be much lower, but still higher compared to Slovakia.

The fact that 30 – 40 % of tenders are cancelled in the Czech Republic represents a “horrible” finding of our research – and by surprise it is not sufficiently discussed in academic literature and not at all on the political level.

Conclusions

Transaction costs in general have the potential to limit (or remove) potential savings in public tenders. The data collected on the sample of Czech building firms indicate that the level of transaction costs in the Czech Republic can be very high. Especially the opinions of firms of indirect transaction costs were very surprising and negative. We tried to explain them, also by

connecting elements of a non-functional public procurement system, including very high numbers of complaints and cancelled procedures. Our findings are considerably important, up to the present day insufficiently discussed in academy and almost missing in political debates – and this is why our team is planning to investigate them further in a future research.

Acknowledgment

This research was completed with support from the research project “Performance Management in Public Administration: Theory and Practice in the Czech Republic and Other CEE Countries”, ID (CEP) GA16-13119S, and from the Faculty of Business Administration research project IP 307 055, “National and Corporate Competitiveness from the Perspective of the Endogenous Growth Model”.

References

- Akerlof, G. A. (1970). The Market for "Lemons": Quality Uncertainty and the Market Mechanism. *The Quarterly Journal of Economics*, 84(3), 488-500. doi:10.2307/1879431
- Barzel, Y. (1985). Transaction Costs: Are They Just Costs? *Journal of Institutional and Theoretical Economics*, 141(1), 4-16.
- Coase, R. H. (1937). The Nature of the Firm. *Economica*, 4(16), 386-405.
- Demsetz, H. (1968). The Cost of Transacting. *Quarterly Journal of Economics*, 82(1), 33-53.
- Grega, M., Nemeč, J. (2015). Factors Influencing Final Price of Public Procurement: Evidence from Slovakia. *Procedia Economics and Finance*, 25(1), 543–551.
- Gulati, R. (1995). Does Familiarity Breed Trust? The Implications of Repeated Ties for Contractual Choice in Alliances. *Academy of Management Journal*, 38(1), 85-112.
- Hill, C. W. (1990). Cooperation, Opportunism, and the Invisible Hand: Implications for Transaction Cost Theory. *The Academy of Management Review*, 15(3), 500-513.
- Mericková, B. (2011). Alternatívne spôsoby zabezpečovania verejných služieb. In: Benco, J., Kuviková, H., Mericková, B., Sebo, J., Strangfeldová, J.: *Ekonomika verejných služieb*. Banská Bystrica: EF UMB.
- Nishiguchi, T. (1994). *Strategic Industrial Sourcing: The Japanese Advantage*. New York: Oxford University Press.

Pavel, J. (2007). *Ekonomické aspekty veřejných zakázek – habilitační práce*. Brno: Masarykova univerzita.

Pavel, J. (2013). *Veřejné zakázky a efektivnost*. Prague: Ekopress.

Pavel, J., Vitek, L. (2016). Transaction costs of the Czech public procurement. *Paper presented at the IRSPM Hong Kong conference*

Placek, M., Ochrana, F., Schmidt, M., Pucek, M. (2016). The Effectiveness Activities of the Office for Protection of Competition in the Conception of the Model Input, Process, Output, Outcome. *Journal of Public Administration and Policy*, 9(1), forthcoming

Tadelis, S. (2012). Public Procurement Design: Lessons from the Private Sector. *International Journal of Industrial Organization*, 30(2), 297-302.

Williamson, O. (1981). The Economics of Organization: The Transaction Cost Approach. *The American Journal of Sociology*, 87(3), 548-577.

Contact

Marketa Sumpikova
University of Economics Prague
W. Churchill Sq. No. 4, Prague, Czech Republic, CZ-130 67
sumpik@vse.cz

Filip Busina
Moscow State Technological University «STANKIN»
3A, Vadkovsky per., 127055 Moscow, Russian Federation
filipbusina@seznam.cz

Matus Grega
University of Matej Bel, Faculty of Economics
Tajovského 10, 975 90 Banská Bystrica
matus.grega@umb.sk

Juraj Nemec
Masaryk University Brno, Lipová 41a, Brno, Czech Republic, CZ-602 00
juraj.nemec@umb.sk

Marta Orviska
Matej Bel University, Tajovského 10, Banská Bystrica, Slovakia, SK-975 90
marta.orviska@umb.sk