

# Buyer Heterogeneity in Public Procurement

Elena Paltseva and Giancarlo Spagnolo, SITE  
November 2015

*We show that different types of contracting authorities exhibit rather different behavior in public procurement. In particular, in Sweden strategic bunching below the EU threshold is only observed for a certain type of authorities. The identity of the strategically behaving group is also non-uniform across different types of procurement contracts or geographic localities. Similarly, in Italy's public works procurement only a specific type of public buyer seems related to bunching below the threshold. This suggests that the type of public buyer, and associated differences in incentives and outcomes, should be taken into consideration in designing procurement regulation and more general policy-making.*

Nowadays, both the policymakers and the academic researchers agree that the design of public procurement policies and more general regulatory framework can affect the incentives of authorities to behave strategically in public procurement, as well as the procurement outcomes.

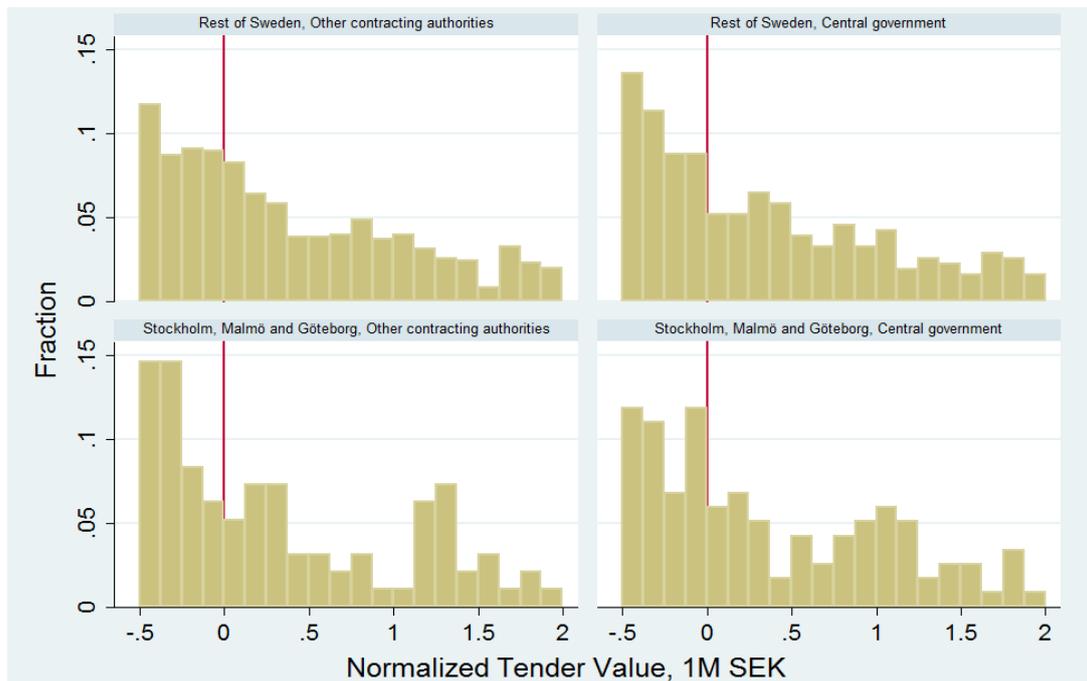
Whether this effect takes place in reality or not is an empirical question. In a previous policy brief ([Paltseva and Spagnolo, 2015](#)), we addressed strategic behavior of public buyers in Sweden. More specifically, based on Bobilev et al. (2015), we look into the impact of the EU procurement thresholds. The EU Public Procurement Directives require national tenders with a value above a certain “threshold” to be announced on an EU-wide platform and procured based on common EU-wide rules, with more stringent demands on procurement transparency and openness of the procedure to foreign bidders. We study whether these EU thresholds created incentives for Swedish public buyers to strategically lower the expected contract value to avoid being subject

to more a demanding regulation. Our findings show bunching below the EU thresholds, confirming the hypothesis of the impact of threshold rules in public procurement on the behavior of procuring entities.

However, it is important to study to which extent the impact of threshold rules on public procurement incentives is similar across different procuring authorities. If different authorities react differently to the incentives provided by the regulatory framework, this is likely to have significant implications both for the public procurement outcomes, and for policy design and implementation.

As it turns out (and as was already mentioned in passing in our previous FREE policy brief), in our study, bunching is only observed for certain Swedish buyers and certain types of procurement deals. More specifically, when we addressed public procurement in goods and services, we find certain evidence of bunching for central government, but not for other levels of contracting authorities. On the contrary,

*Figure 1. Histograms of Contract Value by Geography and Type of Procuring Entity, Supplies and Services, Swedish Data.*



Source: Authors' own calculations based on VISMA data.

in procurement for public works, strategic bunching was more likely present for other contracting authorities than for central government (see Figures 1-3 in [Paltseva and Spagnolo, 2015](#)).

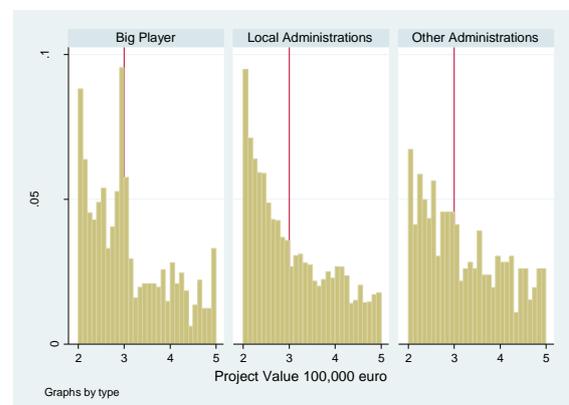
There were also noticeable differences in the behavior of Swedish procuring authorities by geographical location. Figure 1 represents the histograms of contract values stratified by geography and type of administration. Tender values are normalized by subtracting the year-dependent thresholds, so that the level to test for discontinuity around the threshold becomes normalized to zero, marked by the red vertical line. Figure 1 suggests that most bunching just below the threshold in supplies and services is driven by central administrations procuring in the three largest Swedish cities – Stockholm, Gothenburg and Malmö.

Moreover, this heterogeneity is by no means unique to Sweden. In the same report (Bobilev et al., 2015) we also address the question of strategic value manipulation in Italian procurement for construction works. Again, we

find evidence of bunching below the threshold, but non-uniformly so across different types of public administration.

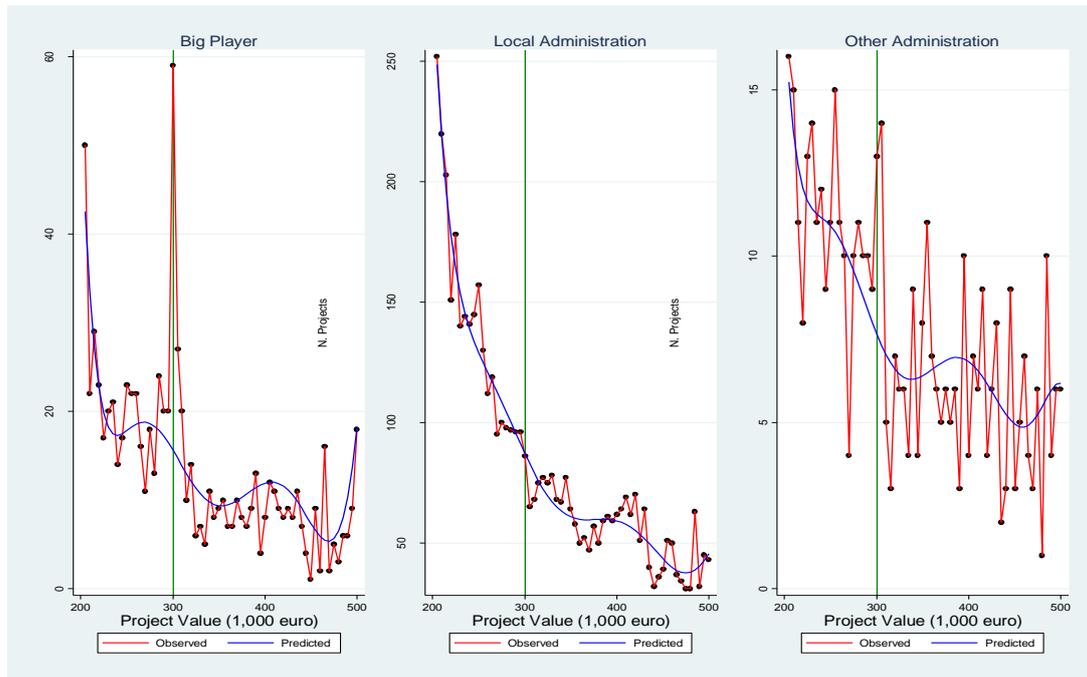
Specifically, most bunching is observed in procurement tenders of a certain major player in the industry, whose identity we cannot disclose for privacy reasons, and whom we

*Figure 2. Histograms of Contract Value Type of Procuring Entity, Construction Works, Italian Data.*



Source: Authors' own calculations based on Italian Authority for the Surveillance of Public Procurement data.

Figure 3. Bunching of Project Value by Administration Type, Italian Data.



Source: Authors' own calculations based on Italian Authority for the Surveillance of Public Procurement data.

refer to as “Big Player”. It is a large, national government-owned company with the goal of managing projects across the country. Local administrations and other (smaller) central administration buyers seem to exercise much less of strategic manipulation, as indicated by the histograms in Figure 2.

We test this hypothesis more formally using the same approach as Palguta and Pertold (2014) and Chetty et al. (2011). In this procedure, we predict the distribution of project value around the threshold by smoothening the histogram while excluding a few distribution bins around the threshold. We then compare the predicted distribution with the actual one, where large differences between the two indicate non-regularities in the data, such as bunching.

In Figure 3, we plot the observed and the predicted project value distributions. The dots connected by the red line correspond to the observed value distribution, the same as the histograms of Figure 2, while the blue curve represents the predicted value distribution.

Figure 3 demonstrates strong signs of bunching

below the threshold in the distribution of project values for “Big Player”, while no systematic differences for the two other types of public administration.

Importantly, unlike the above Swedish data, the Italian data allows us to draw some conclusions about the effects of such value manipulation on procurement outcomes. Contrary to common perception, it turns out that, in this particular case, the authority that does the most bunching is also associated with the more efficient procurement tenders. In particular, “Big Player” seems to use the value manipulation to resort more frequently to a specific procurement procedure – so called “Trattativa Privata” – which allows for more buyer discretion. However, for “Big Player” the use of this procedure is statistically associated with less cost overruns and shorter delays in project delivery, which is not the case for local administrations. In other words, “Big Player”, being the biggest and most experienced player in the market, is likely to be more able to use the specific features of “Trattativa Privata” to elicit good performance from suppliers than other authorities with less experience and weight in public procurement.

## Conclusions

The above discussion clearly illustrates that different types of contracting authorities react rather differently in response to public procurement regulation, and that this phenomenon is not specific to one particular country.

In many earlier discussions on improving the efficiency of public procurement, the main focus has been given to designing the appropriate mechanisms to limit and control strategic behavior of procurement actors. However, the above discussion suggests that that while the procedure used in procurement is important, the characteristics of the contracting authority is likely to be as important.

Therefore, the design of procurement policies and related more general regulatory framework will benefit from accounting for the type of public buyer, and associated differences in incentives and outcomes.

## References

- Bobilev, R., Guglielmo, A., Paltseva, E. and Spagnolo, G. (2015). "[Public Procurement Thresholds and Data in Sweden](#)", KKV Report 2015:3,
- Chetty, R., Friedman, J. N., Olsen, T., & Pistaferri, L. (2011). "Adjustment Costs, Firm Responses, and Micro vs. Macro Labor Supply Elasticities: Evidence from Danish Tax Records." *The Quarterly Journal of Economics*, 126(2), 749-804.
- Paltseva, E. and Spagnolo, G. (2015). "[Public Procurement Thresholds in Sweden](#)", FREE Policy Brief,
- Palguta, Ján, and Filip Pertold (2014). "Corruption and Manipulation of Public Procurement: Evidence from the Introduction of Discretionary Thresholds." Mimeo

## Giancarlo Spagnolo

Stockholm Institute of  
Transition Economics (SITE)  
Giancarlo.Spagnolo@hhs.se



<https://sites.google.com/site/giancarlospagnoloshomepage/>

Giancarlo Spagnolo (M.Phil. Cambridge; Ph.D., Stockholm School of Economics) is Senior Research Fellow at SITE – Stockholm School of Economics and Professor of Economics at University of Rome II. He is also research fellow of CEPR, EIEF and ENCORE. His main competences and interests are in Antitrust and Anti-corruption Policies, Banking and Corporate Governance, Game and Contract Theory, Industrial Organization, eCommerce and Procurement. He has published widely quoted scientific articles in these fields and co-edited Cambridge University Press's Handbook of Procurement.

## Elena Paltseva

Stockholm Institute of  
Transition Economics (SITE)  
Elena.Paltseva@hhs.se  
<http://www.paltseva.com>



Elena Paltseva is a Research Fellow at SITE, Stockholm School of Economics and a Visiting Professor in Economics at the New Economic School, Russia. She received her PhD in Economics from Stockholm School of Economics in 2006. Paltseva's main research interests are Political Economics, Applied Microeconomics and Industrial Organization.