

Public Procurement Thresholds and Data in Sweden

Av Roman Bobilev, Andrea Guglielmo, Elena Paltseva och Giancarlo Spagnolo på uppdrag av Konkurrensverket

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Förord

I Konkurrensverkets uppdrag ingår att främja forskning på konkurrens- och upphandlingsområdet.

Konkurrensverket har gett professor Giancarlo Spagnolo vid SITE på Handelshögskolan i Stockholm i uppdrag att, inom ramen för Konkurrensverkets uppdragsforskning, studera upphandlingar med värden strax under tröskelvärdena. Framförallt studeras fenomenet "sammanbuntning" vilket innebär onormalt stora koncentrationer av upphandlingar med värden strax under tröskelvärdena. Studien fokuserar även på frågan om tillgängligheten till svensk upphandlingsstatistik. Medförfattare är Roman Bobilev, Andrea Guglielmo samt Elena Paltseva.

Rapporten visar, enligt författarna, att upphandlande myndigheter ibland anpassar upphandlingarnas storlek så att de omfattas av de enklare reglerna under tröskelvärdena. Rapporten framhåller även att den svenska statistiken om offentliga upphandlingar har brister som begränsar möjligheterna till analyser och att det finns utrymme för förbättringar i detta avseende.

Till projektet har knutits en referensgrupp bestående av Magnus Arnek (Försäkringskassan), Mats Bergman (Södertörns högskola), Sofia Lundberg (Umeå universitet). Från Konkurrensverket har Arvid Fredenberg, Sven-Olof Fridolfsson, Stefan Jönsson, Jonathan Lukkarinen, Joakim Wallenklint samt Josef Ålander deltagit.

Författarna ansvarar själva för alla slutsatser och bedömningar i rapporten.

Stockholm, april 2014

Dan Sjöblom Generaldirektör

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Summary

This report contains the result of an exploratory study of Public Procurement in Sweden which focuses on three issues. The main issue is the presence of distortions in the design of procurements induced by the use of procurement value thresholds for regulatory purposes and revealed by "bunching", i.e. an anomalous concentration of procurements with values right below the regulatory thresholds. The other two issues this report touches on are Swedish procurement data availability, also in comparison to some other European countries; and the heterogeneity of contracting authorities' organization and behavior in public procurement.

To illustrate the questions related to regulatory thresholds that can be studied when procurement data are available (e.g. data on estimated values of the tenders, winning bids, and procurement outcomes), and how it can be done, we start with an analysis of bunching around regulatory thresholds for Italian construction works, for which we have access to the necessary data. One indication clearly emerging from this exercise is that to identify bunching and its effects on procurement outcomes, one needs to take into account that contracting authorities may be very heterogeneous in procuring incentives and behavior.

We then turn to Swedish data. We first summarize the data problems we encountered in trying to perform an analogous study, particularly in terms of availability and reliability of the data on estimated value, and our attempts to overcome some of them through indirect measures. We then perform a preliminary analysis of bunching based on the available (and limited) data. We indeed find signs of significant bunching below the EU threshold, but only for some types of contracting authorities, in line with the findings in the Italian example. We conclude by reporting some preliminary results of an interview-based case study of the procurement of elderly care services in Sweden (part of a wider and ongoing research project with Mats Bergman and Sofia Lundberg), indicating the presence of substantial heterogeneity in both procurement organization and behavior across different types of contracting authorities.

The findings of this report offer several relevant messages for procurement regulation design and policy-making in Sweden. First, procurement thresholds affect not only the associated transaction costs, but also the strategic aspects of procurement behavior and outcomes, with possibly more important consequences than changes in the amount of transaction costs incurred by public buyers and their suppliers. Second, there is considerable scope for improvement both in the collection of procurement data in Sweden and in the communication and coordination on this data with the European Commission. Finally, heterogeneity of contracting authorities matters for public procurement, appears substantial also in Sweden, and should be taken fully into account when devising procurement policies.

Sammanfattning

Denna rapport presenterar resultatet av en utforskande studie av offentlig upphandling i Sverige som fokuserar på tre frågor. Den huvudsakliga frågan gäller förvrängningar i utformningen av upphandlingar genom användningen av upphandlingar med värden strax under regelmässiga tröskelvärden. Sådana förvängringar tar sig uttryck genom "sammanbuntning" vilket består av en anomalisk koncentration av upphandlingar med värden strax under tröskel-värdena. De andra två frågorna vilka denna rapport berör är tillgängligheten av svensk upphandlingsstatistik, även i jämförelse med andra europeiska länder; och heterogeniteten i organisation och beteende hos upphandlande myndigheter.

För att illustrera de frågor gällande regelmässiga tröskelvärden som kan studeras när data finns tillgänglig (exempelvis gällande uppskattade värden av bud, vinnande bud, och upphandlingsutfall) och hur detta kan göras, inleder vi med en analys av sammanbuntning kring regelmässiga tröskelvärden för upphandling av italienska byggnationer, för vilken tillräcklig data finns tillgänglig. En tydligt framträdande slutsats från denna analys är att man, för att identifiera sammanbuntning och dess effekt på utfall av offentliga upphandlingar, bör ta i beräkning att de upphandlande myndigheterna kan vara mycket heterogena i incitamentsstrukturer och beteende.

Vi studerar sedan svensk data. Inledningsvis sammanfattar vi de datarelaterade problem som uppstod vid försök att utföra en liknande studie, särskilt i termer av tillgänglighet och tillförlitlighet hos datan över uppskattade värden, samt våra försök att överbrygga dessa svårigheter genom användningen av indirekta mått. Vi utför sedan en preliminär analys av sammanbuntningsbeteende baserat på tillgänglig (och begränsad) data. Vi bekräftar existensen av signifikant sammanbuntningsbeteende under EU:s regelmässiga tröskelvärde, men endast för vissa typer av upphandlande myndigheter, likt resultaten för Italien. Avslutningsvis rapporterar vi preliminära resultat från en intervjubaserad fallstudie av upphandlingen av äldrevårdstjänster i Sverige (del av ett bredare och pågående forskningsprojekt med Mats Bergman och Sofia Lundberg). Resultaten från denna studie indikerar existensen av heterogenitet i både organisation och upphandlingsbeteende bland de olika typerna av upphandlande myndigheter.

Resultaten av denna studie pekar på ett flertal viktiga slutsatser för regelutformning och policy gällande upphandling i Sverige. Tröskelvärden för upphandlingar påverkar inte endast de förknippade transaktionskostnaderna utan även de strategiska aspekterna hos upphandlingsbeteende och utfall. Det finns även stort utrymme för förbättring av insamling av upphandlingsdata i Sverige och av kommunikation och koordinering av denna data i samarbete med den Europeiska Kommissionen. Slutligen kan vi anmärka att heterogeniteten hos upphandlande myndigheter är betydelsefull för offentlig upphandling, denna tycks vara väsentlig även i Sverige, och bör tas i beaktande vid utformningen av upphandlingspolicyer.

1 Introduction

Governments are increasingly outsourcing the supply of publicly provided goods and services to external providers. Currently, public procurement accounts for between 15% and 20% of GDP in developed countries.² Moreover, the Europe 2020 Flagship Initiative - Innovation Union puts public procurement at the center of European policy-making on innovation, environment, social inclusion and market integration. The importance of public procurement is further strengthened by the economic situation: indeed, tighter public budget constraints no longer allow the extensive use of subsidies or tax breaks to stimulate innovation, environmental or infrastructural development, as was popular in the past.

Public Procurement (PP) is traditionally governed by ex ante legal rules, limiting or prescribing the actions of contracting authorities. This tradition has hidden the need to assess ex post performance, and to collect the data needed to do so, for a very long time. Recent research has shown, however, that even in hyper-regulated countries, PP performance varies widely across sectors and contracting authorities. Also, procurement rules are evolving, particularly in Europe, and ex post performance should be one crucial dimension on which to evaluate these rules.

Some of the rules used to regulate PP procedures apply only if the estimated value of the procurement is above certain value, so-called 'threshold'. For example, European procurement regulation imposes common rules for the entire Internal Market concerning procurement deals that exceed certain thresholds. Procuring deals with value below these thresholds typically have more flexibility in choosing procurement format etc. However, we still know very little about the effects of EU thresholds (or other thresholds) on procurement outcomes. Similarly, national regulations use analogous thresholds to regulate procurement below EU thresholds.

The recent Swedish debate on where to set procurement thresholds mostly focussed on the size of the transaction costs implied by an open competitive procurement, the procedure usually prescribed above thresholds.³ However, the way these thresholds should be set should also take into account how the thresholds affect behavior in the procurement market. The presence of these thresholds generate incentives for the contracting authorities to manipulate the project size to keep it below the threshold in order to be able to abide to the looser regulations. Even in hyper-regulated countries, contracting authorities mantain considerable discretion in the design of lots and degree of bundling, both across tasks and across time. There are plenty of way to justify the size of a lot and it is very difficult to prove that its size has been "fine tuned" to stay below the threshold triggering stricter

² See for example http://cordis.europa.eu/fp7/ict/pcp/key_en.html.

³ See e.g. Molander (2009), Upphandlingsutredningen 2010 (SOU 2011:73, 2013:12) and Molander (2013).

regulation (Grimm et al. 2006). It is therefore very difficult to ensure that lots are not strategically designed to avoid overcoming a threshold.

Keeping the size of the lot below the threshold allows contracting authorities to retain more discretion in the choice of the procurement procedure and of the contractor. This additional discretion, however, needs not be detrimental per se. Contracting authorities could use this freedom in procedure for positive aims (e.g. inviting only reliable firms or speeding the procurement) or for negative ones (e.g. inviting friends or collecting bribes). Ex-ante, we cannot argue whether such phenomenon is detrimental and wasteful. On one hand, a contractor may want to follow a faster and administratively cheaper procedure that allows more discretion to improve the efficiency of the procurement process. On the other hand, corrupt public servants can use the looser regulation to their favor for extraction of private benefits. We need empirical analysis to answer such a question.

These considerations serve as a motivation for the main focus of this report. We concentrate on three main issues. The first and main issue we investigate is the presence of strategic "bunching" of Swedish tenders below the EU procurement thresholds. In doing that, we came across the other two issues we then address: the availability and quality of the Swedish data on values in public procurement, that we assess also comparing it to that in some other EU Member States; and the heterogeneity of contracting authorities' in their procurement behavior and resulting outcomes, something that pops up in our analysis of threshold-induced distortions but that seems to have gone un-noticed in the economic literature on procurement (with the exception on the literature on procurement centralization; see e.g. Dini et al. 2006).

We proceed as follows. We start by summarizing the findings of other studies on the effects of thresholds on public procurement procedures and outcomes. Then as an example of the questions that may be answered with good quality procurement data, we offer an analysis of bunching for Italian data on construction works (Section 2). We find that bunching does occur, and that contrary to previous studies it is associated with improvements in procurement outcomes. We also find, however, that contracting authorities are very heterogeneous in procuring incentives and behavior, and this needs to be accounted for in studies of bunching and its effects.

In Section 3 we turn to the investigation of bunching under the threshold in Sweden. As the EU threshold rule is formulated in terms of estimated value, we first analyze the availability of estimated value data in Sweden, and compare it to other European countries. We find that Swedish estimated value data is very scarce, also as compared to other EU countries, and that the reason for this may lie in misinterpretation of the EU procurement regulation rather than in the absence of complience. Then, based on the available data, we proceed to study strategic bunching at the threshold in Swedish public procurement. We find significant strategic bunching, but only for some types of public buyers. Lack of systematic data on procurement outcomes, however, prevents us from acessing the efficiency consequences of this bunching.

To give a hint on the likely degree of heterogeneity among Swedish contracting authorities, Section 4 reports some preliminary results from an interview-based case study analysis of the characteristics of elderly care procurers in Sweden conducted within a wider research project jointly with Mats Bergman and Sofia Lundberg. In line with the above results, we show that there is considerable additional heterogeneity linked both to the organization/structure of these contracting authorities and to their management practices.

We conclude by offering some policy recommendations in Section 5.

1.1 Related studies

There are several empirical studies of public procurement that focus on the regulatory thresholds to evaluate how different degrees of discretion in the choice of the procurement format influence procurement design and outcomes.

Coviello and Mariniello (2014) and Coviello, Guglielmo and Spagnolo (2014) exploit two thresholds in the Italian procurement law to study different features of the procurement process in Italy. These two studies were the first to exploit thresholds in the regulation of public procurement to identify important economic features of public procurement, and did so by implementing Regression Discontinuity Design techniques. The former studies the effect of a wider publicity requirement on procurement outcomes; the latter studies the effects of increased buyer discretion by comparing the outcome of the traditional open auction – almost compulsory above threshold - to more flexible award mechanisms available below threshold. Coviello, Guglielmo and Spagnolo (2014) also find evidence of manipulation around the threshold.

Palguta and Pertold (2014) and Jascisens (2014) focus specifically on the manipulation of project size to avoid thresholds that trigger stricter procurement regulation. Both studies borrow part of their methodology from Chetty et al. (2011). The main purpose of the latter paper was to study how kinks in the marginal tax rate, generated by a transition to different tax brackets, affect the labor supply market. This is done by looking into a dataset filled with the tax information of Danish citizens from 1994 to 2001. A key step in their analysis is to estimate taxable income elasticities, which was done by calculating the bunching near changes in the tax brackets. Bunching is calculated by comparing the actual income distribution

with the predicted one that we would observe without the presence of the threshold.⁴

Palguta and Pertold (2014) try to detect the presence of manipulative and potentially corrupt behavior of the contracting authorities using this methodology. They use data from over 46,000 procurement contracts in the Czech Republic from 2005 to 2010. The main object of interest for this paper is the anticipated project size; this determines which requirements must be followed in the procedure. In 2006, a new threshold was introduced which eased the laws for contracts with an anticipated value under a certain threshold, allowing a less transparent process. This is what brought on the suspicions of contract manipulation. In Figure 1.1 we report two graphs from Palguta and Pertold (2014) to comment their results. The results showed that there was a statistically significant amount of bunching just below the thresholds (see Figure 1.1). The presence of bunching alone does not prove that there was serious misbehavior; officials could have been going under the threshold only to avoid the additional administrative costs associated with an open procurement process, which is the requirement if the value is above the threshold. To test for this, contrasts in anticipated and final contract values are studied before and after the threshold. Then these results are compared for verified winning contractors and anonymously owned contractors, under the belief that anonymously owned contractors are less transparent are more likely to be involved in corruption. The results show that a significant portion of contracts just below the threshold are won by anonymously owned contractors, and that a significant portion of these contracts end up having a higher final value than anticipated. In conclusion, this paper makes a strong case that the reason for the high number of contracts just below the threshold are the private benefits which result from manipulation of public procurement contracts, which in turn costs the citizens money.

⁴ The methodology requires few basic steps. First, divide the distribution of project size in bins of equal size; similarly to an histogram the number of observations in each bin is counted. Second, run a polynomial regression of the project size on the number of projects to test whether or not an unusual amount of projects were being bunched just below the threshold for less transparent policies; observation in the neighborhood of the discotinuity are excluded from the estimation sample of the polynomial regression. Third, predict the number of projects that would have been at the threshold without manipulation. The difference between the predicted and the actual number of projects measures the extent of the manipulation.



Figure 1.1 Palguta and Perold (2014) graph

Jascisens (2014) focuses on public works in Latvia, specifically the ones around the thresholds of 28,702 (EUR) for goods and services and 172,214 (EUR) for construction. The goal of the study is twofold. First, to test if officials avoid open procurement procedures. Second, if they did choose to avoid it, how the division was used to avoid the open procurement procedure. The first question was rather simple to answer, a histogram of the project size distribution quickly showed that there was bunching just below the threshold and this is strong evidence that officials are working to get below the threshold, where they are no longer required to follow open procurement procedures. They disregard the positive motivations for keeping below threshold we discussed above, and argue that motives for division can be broken down into two categories: passive and active waste. Passive waste would include inefficiencies linked to incompetence, red tape, cumbersome regulations, and so on. Active waste would be inefficiencies caused by deliberately bad behavior, like corruption and favoritism. To test for the presence of passive waste, the amount of projects divided was studied. If we expect passive waste we would expect that institutions not obtaining direct benefits from open contests, but still paying procedural costs, would divide procurement more often than those obtaining large benefits. The results do not support the presence of passive waste. In the case of active waste, there was a legislation change in 2009, which loosened the rules for projects below the threshold. Thus, it is logical to expect division to increase because of the lower probability of indictment. The results show strong evidence of an increase in division, which leads to the conclusion that active waste is a prevalent motive for division in the procurement process in Latvia.

An example: bunching and outcomes in the Italian road construction

In this section we provide an example of the kind of analysis that can be undertaken to study the strategic effect of regulatory thresholds in public procurement. We use Italian public procurement of roads since we for this case have access to a sufficiently complete data set to perform the example in a reasonably satisfactory way.

The Italian procurement law requires all auctions for the procurement of work to be sealed-bid and single-attribute (i.e. technical and quality components of the offers are pre-specified by the contracting authority). Calls for tender specify the technical and financial requirements that bidders must satisfy in order to take part in the auction. Requirements are pre-determined by law, and are mainly based on the firm's turnover.⁵ Italian procurement regulations are also characterized by the presence of thresholds in the project size, linked to European regulation, such that public works below these thresholds obey different sets of rules than works above.⁶ The differences in regulation cover various aspects of the procurement process, such as the required publicity, award mechanism or certification requirements. Bigger projects are generally subjected to stricter regulation, which often leads to a more costly and slower process. On the other hand, smaller projects tend to follow a less restrictive and faster procedure. Naturally, exploiting these thresholds has proved useful for researchers studying the efficiency of various procurement regulations.⁷

The standard awarding mechanism is an open auction. However, as we have already discussed, procurement law is characterized by the presence of different thresholds that trigger various requirements and rules to follow in the procurement process. In particular, we are interested in the threshold at 300,000 Euros. Below this threshold, contracting authorities have more freedom in utilizing the award mechanism "Trattativa Privata", otherwise available in case of an emergency or natural disaster. "Trattativa Privata" allows contracting authority to invite a restricted number of firms that would then compete for the adjudication of the project.

2

⁵ These requirements do not vary with project value.

⁶ This feature is fairly common in a number of procurement laws in EU countries and US.

⁷ The threshold allows for the implementation of a statistical methodology called Regression Discontinuity (RD) that generates results comparable to a controlled experiment. The aim of RD is to compare projects just above and just below the threshold, such that they are identical other than the difference in the regulation changing at the threshold. This methodology has been widely used in different fields such as economics, psychology and education studies.

2.1 Overview of the market

We are using an administrative database collected by the Italian Authority for the Surveillance of Public Procurement (AVCP). It contains all the public works awarded in Italy between 2000 and 2005 with project values greater than or equal to 150,000 Euro. For each contract, we observe the number of bidders, the project value - that is the announced maximum price the buyer is willing to pay, the winner's rebate (the percentage discount relative to the project value offered by the winning supplier), the identity of the winning bidder, the type of work, the final cost, the date of delivery, and the type and location of the public administration. We are focusing on a subsample of works between 200,000 and 500,000 Euro that fall into a specific category, which must remain unnamed. For privacy reasons, we are unable to get into the specifics of this category, which would unveil the identity of the major contracting authority that deals in this category that will be of particular interest for this project. We have replaced the name of this major player with, "Big Player". The sample is selected for three reasons. First, we want to have fairly homogenous selection of works. Second, works in this range of values share the same regulation. Third, this particular type of projects could potentially allow for manipulation of project value or sorting below the 300,000 Euro threshold, as these type of projects are easy to divide relative to other works.

Table 2.1 reports the summary statistics (mean, standard deviation and median) of various variables of interest of our analysis. There are 7,565 total works. The mean of our project size is 308,000, roughly equal to the 300,000 Euro threshold. More than 50% of the projects are below this threshold. 8% of our data comes from works awarded with "Trattativa Privata". Additionally, we have also reported the indicator variables representative of the percentage of our data that is from the "BIG PLAYER". About 13% of our data comes from "BIG PLAYER", and we will look at how this department behaves differently than the others.

	# of Works	Mean	Standard Deviation	Median
Trattativa Privata	6,251	0.08	0.267	0
Project Value (1,000 Euro)	6,251	308.5	85.26	288.3
# of Bidders	6,251	37.54	34.74	28
Rebate	6,251	14.11	9.927	12.07
Work Length	4,591	311.7	183.5	288
Delay	4,591	124.0	134.2	90
Cost Overun	5,133	0.111	0.158	0.0570
Local Bid	5,634	0.546	0.498	1
Incumbent Winner	5,376	0.128	0.334	0
"Big Player"	6,251	0.131	0.337	0

Table 2.1. Summary Statistics

Figure 2.1 displays a histogram with the distribution of the value of the project. The 300,000 euro threshold is highlighted with a line. Inspecting the graph we can derive a few insights on the distribution of projects value. First, the number of projects awarded in our sample is decreasing as the size of the project is increasing. In other words we are more likely to observe a small project than a big one. Second, the distribution of the works is smooth, however there is a small jump right before the threshold of 300,000 suggesting possible manipulation of the project value by the contracting authorities.



Figure 2.1 Histogram of project values

In the next two sections, we will focus on heterogeneity in the sorting behavior across different contracting authorities, and how this sorting behavior could affect the efficiency of the procurement process. First, we compare the behavior of "BIG PLAYER" to the other contracting authorities. Then, we compare the contracting authorities according to their level of corruption, social capital and judicial efficiency.

2.2 Who does bunching below the threshold and with what consequences

In this section, we compare differences in the sorting behavior between "BIG PLAYER", the local administrations and other administrations. "BIG PLAYER" is a large, national government-owned company with the goal of managing the main types of projects we are interested in across the country. Local public authorities, like municipalities and provinces, generate most of the remaining projects in our sample of analysis. They are usually responsible for smaller and more local versions of these types of projects. Finally, the group "other administrations" contains the remainder of the projects awarded by the central government's other autonomous and non-elective branch. This category contains projects awarded by extremely heterogeneous administrations that rarely award these types of projects. The difference in size, experience and incentive between these three types of contracting authorities generates a nice comparison setup for our analysis.

Figure 2.1 displays the histograms of the project value distribution broken down by type of administration. Comparing the distribution of the projects' value around 300,000 Euro we can get insight on the potential heterogeneity in how administrations react to the presence of the threshold. There is a clear spike in the project distribution for "BIG PLAYER" right before the 300,000 Euro threshold, this is suggestive of a systematic manipulation of the project value by "BIG PLAYER" in order to be below the threshold. On the other hand, it is less clear if the local and other administrations exercise the same manipulation.



Figure 2.1. Histogram project value by administration type

We can test this hypothesis more formally following the approach used by Palguta and Pertold (2014) and Chetty et al. (2011). We can summarize the procedure as follows. First, we divide the distribution of the project value and we count the number of projects in each bin as in an histogram. In this case the bin size is 5,000 euro. Second, we estimate a polynomial regression on the number of projects in each size bin, excluding projects of size close to 300,000 euro because if there is bunching, they would distort the relation. In our specification, we exclude 3 bins around the threshold, equivalent to 15,000 euro and we use 7th degree polynomial.⁸ Third, we calculate the difference between the count of projects in those excluded bin in the neighbourhood of 300,000 euro and the count projects predicted by the regression model. Finally, this difference is adjusted to account for the fact that the area under the counterfactual should be identical to the area under the actual distribution of project value.⁹

In Figure 2.2. below, we plot the observed and the predicted project value distribution. The dots are the observed project value distribution, the same as the histograms of figure 2.2, while blue curve represents the predicted value distribution. There is clear, strong bunching in the distribution of project values for "BIG PLAYER". The number of observed works at the 300,000 Euro threshold is close to 3 times the predicted number. Instead for the local administrations, the difference in predicted and observed number of projects is around 14%. For the other administrations the difference is around 50%, however the distribution of the project values seems to be pretty discontinuous on both sides of the threshold, probably due to the small sample size. Therefore, we cannot draw clear conclusion for this group. These results suggest that "BIG PLAYER" is selectively manipulating the size of the projects to be below 300,000 Euro.

⁸ We tried different order of polynomial and the results are qualitatively comparable.

⁹ Standard errors for the estimate can be calculated using bootstrap procedure.



Figure 2.2. Bunching of project value by administration type

The presence of sorting is not by itself detrimental; if the additional discretion of "Trattativa Privata" is used to purse efficiency, it should be welcome. To further address this point, in Table 2 we compare various procurement outcomes in six cases: open procedure run by "BIG PLAYER", "Trattativa Privata" run by "BIG PLAYER", open procedure run by local administrations, "Trattativa Privata" run by local administrations, open procedure run by other administrations and "Trattativa Privata" run by other administrations.

"BIG PLAYER" Above 300,000 euro Below 300,000 euro Open Auction Trattativa Privata Open Auction Trattativa Priva	ita								
Above 300,000 euro Below 300,000 euro Open Auction Trattativa Privata Open Auction Trattativa Priva	ita								
Open Auction Trattativa Privata Open Auction Trattativa Priva	ita								
N Mean SD Median N Mean SD Median N Mean SD Median N Mean SD	Median								
Project Value 338 390.8 60.3 387.3 6 432.8 66.4 460.3 380 246.5 31.7 245.5 93 266.8 38.3	288.8								
Number of Bidders 338 83.04 43 80 6 9.333 3.83 8.5 380 61.96 38.84 58 93 11.83 5.736	15								
Rebate 338 26.21 9.76 30.04 6 14.52 7.921 14.02 380 22.85 10.32 28.01 93 13.82 5.066	14.14								
Work Length 279 190.3 121.8 161 5 169.4 83.58 154 287 206.4 132.1 175 73 117.2 100.2	90								
Delay 279 56.75 71.44 32 5 61.4 100.5 4 287 43.73 62.18 21 73 26.55 55.42	3								
Cost Overrun 162 0.026 0.051 0.0113 4 0.006 0.004 170 0.023 0.054 0.011 62 0.02 0.071	0.005								
Local Winner 177 0.328 0.471 0 3 0.333 0.577 0 192 0.302 0.46 0 84 0.548 0.501	1								
Incumbent Winner 194 0.242 0.43 0 3 0.333 0.577 0 233 0.215 0.411 0 75 0.56 0.5	1								
Local Administrations	ninistrations								
Above 300,000 euro Below 300,000 euro	Below 300,000 euro								
Open Auction Trattativa Privata Open Auction Trattativa Priva	Trattativa Privata								
N Mean SD Median N Mean SD Median N Mean SD Median N Mean SD	Median								
Project Value 2,118 389.2 56.7 387.3 87 387.2 56.2 385.6 2,524 241.2 28.6 237.7 244 245.8 31.2	243.8								
Number of Bidders 2,118 39.27 33.77 32 87 8.678 11.15 6 2,524 33.76 28.77 26 244 7.082 10.68	4								
Rebate 2,118 13.24 9.017 11.45 87 12.06 9.661 9.87 2,524 12.97 9.374 11.04 244 9.071 8.196	6.151								
Work Length 1,599 368.9 189.9 336 63 425.9 297.6 364 1,799 299.3 164.2 275 171 277.8 155	257								
Delay 1,599 151.6 147 123 63 217.2 249.2 158 1,799 121.7 123.6 93 171 115.6 112.6	93								
Cost Overrun 1,872 0.117 0.152 0.064 80 0.172 0.209 0.09 2,212 0.114 0.159 0.0592 215 0.135 0.215	0.0608								
Local Winner 2,033 0.532 0.499 1 83 0.747 0.437 1 2,391 0.578 0.494 1 234 0.769 0.422	1								
Incumbent Winner 1,902 0.102 0.303 0 76 0.211 0.41 0 2,257 0.113 0.316 0 228 0.206 0.405	0								

Table 2.2. Summary statistics by contractor/threshold/procedure

Other Administrations

Trattativa Privata

Above 300,000 euro

Ro

Open Auction

Below 300,000 euro

Trattativa Privata

Open Auction

18

	Ν	Mean	SD	Median	Ν	Mean	SD	Median	Ν	Mean	SD	Median	Ν	Mean	SD	Median
Project Value	228	394.7	58.4	391.2	9	370.9	49.8	381.3	180	245.2	28.3	243.5	44	256.2	35.3	255.9
Number of Bidders	228	29	32.88	20	9	2.778	1.394	3	180	23.49	24.91	16	44	3.5	2.698	3
Rebate	228	12.07	8.003	10.93	9	4.842	5.516	3.52	180	12.05	7.932	11.86	44	7.086	6.537	5.65
Work Length	154	369.2	195.6	331.5	7	178.1	147.2	160	124	335.5	192	309.5	30	230.1	175	206.5
Delay	154	149.1	146.2	112	7	41.29	72.62	6	124	143.2	137.6	111	30	98.8	116.2	67.5
Cost Overrun	183	0.136	0.168	0.0773	4	0.009	0.0101	0.006	137	0.146	0.184	0.084	32	0.127	0.174	0.0731
Local Winner	218	0.445	0.498	0	9	0.333	0.5	0	169	0.515	0.501	1	41	0.488	0.506	0
Incumbent Winner	191	0.089	0.285	0	9	0.333	0.5	0	166	0.0783	0.269	0	42	0.119	0.328	0

The average size of the projects is comparable across the procedures and contracting authorities. The number of bidders and the rebate is lower when "Trattativa Privata" is used; this is true regardless of the contracting authority or the size of the work. Additionally, the average (median) number of bidders and rebate is higher for "BIG PLAYER" compared to the other administrations. Instead, we observe consistent heterogeneity in the ex-post performance measures: delay, cost overrun and work length.¹⁰ "BIG PLAYER" projects tend to have lower delay and cost overruns compared to the local and other administrations. Finally, there is also substantial difference in terms of the identity of the winner. "BIG PLAYER" projects, compared to the remaining contracting authorities, have a lower probability of having a local winner, but a higher probability of winners with past experience with "BIG PLAYER".

We focus first on the projects below the 300,000 Euro threshold. "BIG PLAYER" is exploiting the additional discretion allowed below 300,000 Euro to use "Trattativa Privata" more frequently, utilizing it in about 20% of the projects. Local Administrations instead use "Trattativa Privata" in only 9% of the cases. The other authorities, similarly to "BIG PLAYER", use "Trattativa Privata" in about 20% of the projects. When using "Trattativa Privata" below 300,000 Euro, "BIG PLAYER" projects experience less delay, with similar cost overrun. Looking to the median, we also observe that "Trattativa Privata" provides better performance in terms of cost overrun. Additionally, the length of the work is substantially shorter. Furthermore, there is an increase in the probability of a local winner as well as winners with past experience with "BIG PLAYER". From these numbers, it can be argued that this is a beneficial use of "Trattativa Privata" by "BIG PLAYER". Conversely, we cannot state the same for the local administrations. Projects awarded via "Trattativa Privata" have similar delay and higher cost overruns. The remaining administrations have performance similar to "BIG PLAYER". The nature of the winners across procedures follows patterns similar to those observed for "BIG PLAYER". Winners tend to be more local and tend to have previous experience with the contracting authority.

We can further examine performances across contracting authorities looking at work above the 300,000 Euro threshold. Surprisingly, we find that "BIG PLAYER" has the lowest frequency of "Trattativa Privata" above 300,000 Euros. Consistent with the previous observation of "BIG PLAYER", compared to local administrations, they deliver better performance in terms of cost overrun and delay. This is especially true when they are using an open auction. We can draw less certain conclusions about "Trattativa Privata" because the number of projects using this procedure was rather limited in our sample. "BIG PLAYER" still performs better than the local administrations but worse than the remaining administrations. To further exploit the threshold, we compare the change in the rebate above and below the threshold, conditional to the procedure used. When

¹⁰ We define cost overrun as the difference between final cost minus the awarding cost (reservation price -discount) over the awarding cost.

using "Trattativa Privata", "BIG PLAYER" average rebate is 14.52 above the threshold and 13.82 below the threshold. This is equivalent to a 4.82% drop in the rebate. There is a 12.82% drop when using open auction instead. The opposite happens for the local authorities, with a 24.78% drop for "Trattativa Privata" and 2.04% for open auction. "BIG PLAYER" seems to perform better under this perspective. If we use the change in the open auction rebate as benchmark, "BIG PLAYER" seems to use "Trattativa Privata" better than local authorities given that the decrease in the rebate is lower than for the open auction. Conversely, the decrease in the rebate is higher for local authority when using "Trattativa Privata".

We conclude the discussion looking to the interaction between rebate and cost overrun, to fully account for the economic impact of "Trattativa Privata". We summarize our analysis using the example in Table 2.3. Let's consinder a 100,000 euro project under the four different scenarios (Above Threshold/Open Auction, Below Threshold/Open Auction, Above Threshold/"Trattativa Privata" and Below Threshold/"Trattativa Privata"). The "BIG PLAYER" has a higher difference in final cost between Open Auction and "Trattativa Privata". However, we should notice that for "BIG PLAYER" the spread between Open Auction and "Trattativa Privata" decreases below the threshold. Moreover, the spread for the local authorities is almost identical above and below the threshold. This result suggests that "BIG PLAYER" may be better suited to handle the higher discretion of "Trattativa Privata".

	Above T	hreshold	Below T	hreshold	Above T	hreshold	Below Threshold		
	OA	TP	OA	TP	OA	TP	OA	TP	
Project Value	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	
Rebate	26.21	14.52	22.85	13.82	13.24	12.06	12.97	9.07	
Expected cost	73.79	85.48	77.15	86.18	86.76	87.94	87.03	90.93	
Cost Overrun	2.60	0.60	2.30	2.00	11.70	17.20	11.40	13.50	
Final Cost	75.71	85.99	78.92	87.90	96.91	103.07	96.95	103.20	
Difference in Cost	10.28		8.98		6.15		6.25		

Table 2.3. Comparison of Final Cost: "Trattativa Privata" vs Open Auction

Local Authority

Big Player

We saw that "Trattativa Privata" seems to induce higher cost, but as we discussed previously, it also delivers work faster and with a lower delay compare to Open Auction, especially when "BIG PLAYER" is using it.

These results seem to tell us that the procedure used in procurement is important, but the role of the contracting authority, disregarded by previous studies, is important as well. "BIG PLAYER" is the biggest and most experienced player in the market, procuring a large amount of work very frequently. It is therefore reasonable to think that they may have better institutional knowledge to exploit the flexibility of "Trattativa Privata" and that they may be better suited to leverage the "shadow of the future" to elicit good performance today than authorities with less experience in the procurement process. However, we should consider an important caveat of this analysis, "BIG PLAYER" and the other administrations might be using "Trattativa Privata" in projects inherently different than the ones using open auction. Therefore, the observed differences in the ex-post performance may be due to the nature of the project rather than the type of awarding procedure used. Checking this requires further analysis, but looking across various projects of different sizes we observed that "BIG PLAYER" is consistently performing better than the other authorities. Moreover, performances seem to improve once Trattativa Privata" is used, even above 300,000 Euros, where the use of this procedure is widely limited. To conclude, our results suggest that leaving the contractor some discretion during the procurement process may be beneficial, especially if the contractor is experienced and has institutional knowledge of the market, in line with findings in Coviello et al. (2014) and Bandiera et al. (2009).

We further enhance our analysis looking to different dimensions of heterogeneity of the contracting authority. In particular, we focus on three different variables which, in various manners, represent possible measures of propensity for a contracting authority to misbehave. The first is a measure of Social Capital.¹¹ The second aims to measure judicial efficiency by looking at the average time a civil case appeal takes in court. Lastly, we have a measure of corruption.¹² We rank Italian provinces according to their performance in these three measures and then group them in 3 quantiles: good, moderate and poor.

¹¹ Guiso et al. (2004) consider two measures of social capital based on the blood donation and referendum turnout; in our analysis we use the latter.

¹² Golden and Picci (2005) quantify corruption as the difference between the actual quantities of public infrastructures and the priced paid to accumulate that stock of capital.



Figure 2.3. Histogram of project value by measures social capital/judicial efficiency and corruption

In Figure 2.3 above we have our familiar histograms, with the three quantiles of our three variables of interest. The graphs are laid out such that each row represents one of our variables of interest, and the columns represent quantiles poor, moderate and good. We see the two main trends, which we saw earlier, a majority of the projects fall below the 300,000 Euro threshold and there is evidence of manipulation at or right before this threshold. In this case, insight is gained from these histograms by looking at where the bunching is greater. There are a number of interesting trends that could be the result of a multitude of factors. First, as the social capital decreases, we see less and less evidence of manipulation just below the threshold. Similarly, but to a lesser extent, as our corruption decreases, so does this bunching. Interestingly, the measure of judicial efficiency works opposite of corruption and social capital would lead us to believe. As the length of our civil trial increases the bunching is falling. Figure 2.4 provides further evidence of potential manipulation following the approach from Chetty et al. (2011). According to these bunching graphs, the greatest bunching occurs in areas with high Social Capital, low Judicial Efficiency and low Corruption. These three factors display wide heterogeneity in the sorting behavior of the different contracting authorities. For areas with high Social Capital, the amount of projects just below the threshold are close what is expected, in other words about 57% higher than expected for the first quantile and 73% more for the second quantile. The areas with lower Social Capital have roughly 10% less projects, right before the threshold. The picture is less clear for the judicial efficiency measure. Communities that observe large delays in their judicial system

have about 86% increase in expected projects just below the threshold, but also community with efficient judicial system have about 52% more projects around at the threshold. Lastly, communities with low corruption experience the largest jump, there is upwards of 84% more projects just below the threshold than expected.





As we already discussed, manipulation of the project value is not enough evidence to establish wrongdoing by the side of a public administration. In Table 2.4 - Table 2.6, we report summary statistics in the same fashion as Table 2.2. Again, the goal of this exercise is to understand how the discretion is used by the contracting authorities. This time the table is broken down by the three quantiles for each of our variables. To clear up any confusion, the quantiles were determined using the values at provincial level. So each quantile does not have the same number of observations because different provinces have different numbers of project in the sample period. We are still dividing our data by being above or below 300,000 Euros and whether it was an open auction or "Trattativa Privata".

Table 2.4 uses different levels of Social Capital as a way to study the familiar summary statistics. A few statistics stand out immediately, the number of bidders and the amount of rebate are increasing significantly as the level of social capital is, no matter the procedure or project size. Also, we are seeing less delay, though more cost overrun as our social capital measure increases. Below the threshold, we see

the work length increasing, yet the delay continues to fall inversely with social capital. When "Trattativa Privata" is used we see a great rise in local bids as the level of Social Capital rise. Finally, we observe that below the threshold, when more easily allowed, Trattativa Privata is used more often by administrations in area with higher Social Capital.

Table 2.5 presents the summary statistics broken down by Judicial Efficiency of the community. Not surprisingly, project size is almost identical across the board. Regardless of the auction procedure used or the size of the project we see a few interesting developments. Interestingly, we observe that rebate and the number of bidders is decreasing with the measure of judicial efficiency. In terms of work quality, we see that delay is increasing, but this is met with a decreasing cost overrun, as our measure of Judicial Efficiency is decreasing. Below the threshold we see more incumbent winners and less delay. For the former we do not observe substantial heterogeneity across different level of judicial efficiency. As for "Trattativa Privata" there are no prevalent trends across our measure, but we do see the same trends we are seeing before with regards to open auction vs "Trattativa Privata".

In Table 2.6, we rank the administrations according to our corruption measures. As we already observed for the previous comparison, project size is fairly comparable across procedures and level of corruption. Interestingly projects in areas with more corruption tend to have more bidders and higher rebate regardless the type of procedure and the size of the project. We observe again contrasting results in terms of ex-post efficiency, where more corrupted areas tend to have higher cost overrun but lower delay. This is true across projects of different size and type of procedure. We observe a similar probability of observing a local winner across different levels of corruption and project size. As expected we observe more local winner with "Trattativa Privata". We do not observe substantial differences in terms of incumbency across different level of corruption, in general with "Trattativa Privata" incumbent firm are more likely to win. Finally, below the threshold, we observe an increase in the use of "Trattativa Privata" for less corrupted areas.

The results of the second part of our analysis are less striking compared to the first part. The reason probably originates from the measure we use to categorize the public administrations. Even controlling for the level of corruption, judicial efficiency and social capital, administrations can widely differ in their goal and experience. Nevertheless, our results seem to confirm a fundamental fact we have already highlighted. The effect of increasing discretion is not unique; the administration plays a crucial role in the final outcome of the procurement regardless of the procedure used.

Fable 2.4. Summary statistics by social capita	1

	Poor																
				Above Th	resho	bld						Below T	hresho	old			
		Open .	Auction			Trattat	tiva Priva	ata		Open	Auction			Trattativ	/a Privata	a	
	Ν	Mean	SD	Median	Ν	Mean	SD	Median	Ν	Mean	SD	Median	Ν	Mean	SD	Median	
Project Value	607	388.4	58.30	383.8	14	390.3	59.63	374.4	741	241.9	29.00	239.4	29	251.2	31.66	248.4	
Number of Bidders	607	61.89	46.86	52	14	9.500	6.757	6	741	50.03	37.01	42	29	8.552	10.91	5	
Rebate	607	26.39	10.05	28.81	14	11.73	9.129	13.20	741	25.00	9.676	27.78	29	10.50	11.35	5.800	
Work Length	459	324.5	196.0	301	10	209	130.4	179.5	520	292.8	175.8	268	14	257.4	176.1	225	
Delay	459	123.8	145.7	81	10	75.30	96.70	20.50	520	105.0	131.0	59	14	87.43	119.6	29.50	
Cost Overun	409	0.137	0.201	0.0546	10	0.182	0.346	0.0517	513	0.143	0.198	0.0610	19	0.190	0.218	0.0921	
Local Bid	462	0.517	0.500	1	12	0.750	0.452	1	553	0.575	0.495	1	25	0.720	0.458	1	
Incumbent Winner	503	0.0855	0.280	0	14	0.214	0.426	0	593	0.0961	0.295	0	26	0.0769	0.272	0	
								Мо	derate								
				Above Th	resho	old			Below Threshold								
		Open .	Auction			Trattat	tiva Priva	rivata Open Auction						Trattativa Privata			
	Ν	Mean	SD	Median	Ν	Mean	SD	Median	Ν	Mean	SD	Median	Ν	Mean	SD	Median	
Project Value	1,322	388.8	56.55	388.0	61	387.9	57.97	387.7	1,517	242.5	29.04	238.9	219	251.3	34.93	248.9	
Number of Bidders	1,322	40.12	34.42	33	61	7.803	11.92	4	1,517	33.83	29.10	27	219	8.498	9.219	6	
Rebate	1,322	12.83	7.257	12.38	61	9.754	7.779	7.190	1,517	11.89	7.550	11.20	219	10.07	6.926	9.110	
Work Length	1,021	358.6	196.9	325	48	461.8	325.6	370.5	1,100	296.6	163.4	275	158	223.8	166.9	191	
Delay	1,021	136.7	143.1	102	48	242.4	275.1	166.5	1,100	113.9	119.1	88	158	86.66	109.7	47.50	
Cost Overun	1,151	0.112	0.146	0.0617	51	0.130	0.159	0.0825	1,272	0.107	0.159	0.0546	176	0.100	0.193	0.0342	
Local Bid	1,247	0.510	0.500	1	56	0.643	0.483	1	1,412	0.546	0.498	1	205	0.727	0.447	1	
Incumbent Winner	1,133	0.113	0.317	0	50	0.220	0.418	0	1,354	0.130	0.336	0	199	0.322	0.468	0	

	Good																
				Above Thi	resho	old						Below T	hreshol	ld			
		Open /	Auction			Trattat	tiva Priva	ata		Open	Auction			Trattativa Privata			
	Ν	Mean	SD	Median	Ν	Mean	SD	Median	Ν	Mean	SD	Median	Ν	Mean	SD	Median	
Project Value	755	392.9	57.65	390	27	388.7	55.61	390	826	241.5	29.21	239.0	133	253.7	34.93	258.2	
Number of Bidders	755	36.10	31.31	28	27	8.407	8.577	7	826	29.77	26.65	21	133	6.564	9.260	5	
Rebate	755	8.850	5.804	8	27	15.58	11.95	13.75	826	8.502	5.972	7.305	133	9.782	7.971	8.500	
Work Length	552	334.7	179.2	308.5	17	274.7	148.2	242	590	272.6	158.3	249.5	102	235.2	148.2	207	
Delay	552	153.6	138.3	132	17	111.2	111.1	94	590	117.4	116.5	91.50	102	95.54	104.2	63	
Cost Overun	657	0.0959	0.117	0.0618	27	0.199	0.215	0.150	734	0.0908	0.115	0.0548	114	0.114	0.194	0.0489	
Local Bid	719	0.503	0.500	1	27	0.778	0.424	1	787	0.558	0.497	1	129	0.612	0.489	1	
Incumbent Winner	651	0.134	0.341	0	24	0.250	0.442	0	709	0.118	0.323	0	120	0.233	0.425	0	

								Р	oor								
				Above Th	resh	old						Below Th	nresho	ld			
		Open	Auction			Trattat	tiva Priva	ata		Open	Auction			Trattat	iva Priva	ata	
	Ν	Mean	SD	Median	Ν	Mean	SD	Median	Ν	Mean	SD	Median	Ν	Mean	SD	Median	
Project Value	820	388.4	58.27	385.5	19	388.6	64.88	394.8	983	241.8	28.99	238.0	105	261.0	37.29	271	
Number of Bidders	820	55.76	44.84	44	19	6.421	4.004	6	983	42.66	34.63	34	105	10.73	7.856	12	
Rebate	820	20.67	12.29	22.18	19	8.388	7.053	6	983	19.03	11.84	18.25	105	12.45	7.468	13.25	
Work Length	630	338.2	195.8	310.5	13	310.8	193.6	246	704	296.7	172.8	275	75	150.0	126.1	95	
Delay	630	128.3	144.3	89	13	165.5	168.1	153	704	106.2	122.5	69.50	75	43.75	80.79	9	
Cost Overun	622	0.124	0.180	0.0552	17	0.116	0.268	0.0427	753	0.121	0.168	0.0598	77	0.0795	0.232	0.00539	
Local Bid	682	0.488	0.500	0	15	0.600	0.507	1	805	0.564	0.496	1	96	0.604	0.492	1	
Incumbent Winner	686	0.128	0.335	0	13	0.231	0.439	0	818	0.134	0.341	0	90	0.411	0.495	0	
								Мос	loderate								
				Above Th	resh	old			Below Threshold								
		Open	Auction			Trattat	tiva Priva	ata		Open	Auction			Trattativa Privata			
	Ν	Mean	SD	Median	Ν	Mean	SD	Median	Ν	Mean	SD	Median	Ν	Mean	SD	Median	
Project Value	746	390.4	56.29	388.2	38	381.3	57.31	374.8	786	242.5	29.46	240	134	248.5	31.81	245.6	
Number of Bidders	746	41.05	38.87	30	38	7.132	8.201	4	786	34.73	31.09	27	134	5.045	3.292	4	
Rebate	746	13.15	8.788	11.36	38	9.382	7.573	6.035	786	13.18	9.092	11.74	134	8.352	7.231	5.925	
Work Length	566	325.8	192.3	290.5	31	489.3	331.2	378	582	269.1	155.2	243	90	302.9	166.7	275.5	
Delay	566	139.1	148.4	98	31	233.5	293.5	125	582	108.4	118.6	68	90	122.2	117.8	106.5	
Cost Overun	641	0.110	0.137	0.0657	31	0.189	0.219	0.0829	671	0.114	0.150	0.0623	112	0.127	0.161	0.0666	
Local Bid	670	0.484	0.500	0	37	0.811	0.397	1	714	0.541	0.499	1	128	0.742	0.439	1	
Incumbent Winner	622	0.119	0.324	0	32	0.0938	0.296	0	680	0.128	0.334	0	123	0.146	0.355	0	

Table 2.5. Summary statistics by judicial efficiency

	Good															
				Above Th	nresh	old						Below Th	reshol	d		
		Open	Auction	1		Tratta	tiva Priva	ata		Open	Auction			Trattat	iva Priva	ata
	Ν	Mean	SD	Median	Ν	Mean	SD	Median	Ν	Mean	SD	Median	Ν	Mean	SD	Median
Project Value	1,118	390.6	57.21	389.2	45	394.4	53.84	390	1,315	242.0	28.91	239.1	142	249.0	34.20	248.1
Number of Bidders	1,118	37.14	29.18	31	45	9.844	13.54	6	1,315	33.28	28.63	26	142	8.303	12.96	4.500
Rebate	1,118	11.54	6.434	11.18	45	14.75	10.89	13.75	1,315	11.04	7.151	10.31	142	9.749	7.859	8.600
Work Length	836	361.7	188.9	329.5	31	313.5	256.8	274	924	296.3	164.9	275.5	109	224.3	149.1	197
Delay	836	145.5	137.2	122	31	157.6	198.8	134	924	120.5	121.9	93.50	109	95.27	105.5	66
Cost Overun	954	0.104	0.137	0.0588	40	0.149	0.158	0.0949	1,095	0.0989	0.155	0.0515	120	0.116	0.199	0.0503
Local Bid	1,076	0.539	0.499	1	43	0.628	0.489	1	1,233	0.558	0.497	1	135	0.689	0.465	1
Incumbent Winner	979	0.0981	0.298	0	43	0.326	0.474	0	1,158	0.104	0.305	0	132	0.295	0.458	0

	Poor															
			A	bove Three	esho	d						Below Th	reshol	b		
		Open /	Auction			Tratta	tiva Priv	ata		Open /	Auction			Trattati	iva Priva	ta
	Ν	Mean	SD	Median	Ν	Mean	SD	Median	Ν	Mean	SD	Median	Ν	Mean	SD	Median
Project Value	706	391.3	57.73	390.1	19	396.9	51.12	403.7	824	242.4	28.82	238.6	34	245.5	35.28	239.1
Number of Bidders	706	60.20	46.15	48.50	19	10.68	13.18	7	824	47.86	37.91	38	34	12.38	18.11	5
Rebate	706	23.75	11.22	27.38	19	10.33	7.949	9.870	824	22.34	11.26	26.84	34	10.45	10.06	8.290
Work Length	548	314.3	187.3	295	16	201.3	117.4	184	602	278.5	167.9	257.5	22	220.9	154.4	202
Delay	548	113.9	136.3	72.50	16	49.88	72.79	15.50	602	98.19	124.6	58.50	22	80.59	97.23	51.50
Cost Overun	515	0.127	0.197	0.0519	14	0.131	0.295	0.0490	600	0.123	0.194	0.0522	27	0.170	0.200	0.0921
Local Bid	554	0.552	0.498	1	17	0.706	0.470	1	642	0.581	0.494	1	29	0.517	0.509	1
Incumbent Winner	561	0.0909	0.288	0	19	0.263	0.452	0	657	0.0989	0.299	0	29	0.138	0.351	0
								Мос	lerate							
			A	Above Thre	esho	d		Below Threshold								
		Open /	Auction			Tratta	tiva Priv	ata		Open Auction				Trattativa Privata		
	Ν	Mean	SD	Median	Ν	Mean	SD	Median	Ν	Mean	SD	Median	Ν	Mean	SD	Median
Project Value	897	388.7	56.83	384.4	40	387.3	61.28	382.3	971	241.6	28.65	238	162	248.6	33.63	247.3
Number of Bidders	897	41.86	34.22	34	40	5.300	3.911	4	971	32.67	26.23	27	162	5.691	6.392	4
Rebate	897	13.72	7.747	12.75	40	9.209	8.115	5.800	971	12.95	7.711	12.23	162	8.884	7.627	6.405
Work Length	658	373.2	208.7	327.5	33	485.0	328.6	378	691	312.5	167.9	291	117	271.9	173.0	263
Delay	658	156.9	149.6	130.5	33	257.1	279.0	158	691	124.1	125.5	92	117	108.0	117.0	81
Cost Overun	757	0.118	0.150	0.0721	33	0.169	0.188	0.0936	807	0.125	0.162	0.0685	126	0.133	0.248	0.0565
Local Bid	828	0.471	0.499	0	37	0.676	0.475	1	887	0.517	0.500	1	156	0.673	0.471	1
Incumbent Winner	765	0.0837	0.277	0	32	0.156	0.369	0	851	0.114	0.318	0	150	0.233	0.424	0

Table 2.6. Summary statistics by corruption

	Good															
								e	000							
			ŀ	Above Thr	esho	ld						Below Th	reshol	d		
		Open	Auction			Tratta	ativa Priv	ata		Open	Auction			Trattati	iva Priva	ta
	Ν	Mean	SD	Median	Ν	Mean	SD	Median	Ν	Mean	SD	Median	Ν	Mean	SD	Median
Project Value	1,049	390.4	57.52	389.9	41	389.8	54.39	387.7	1,256	242.5	29.62	240.0	184	256.7	34.89	258.8
Number of Bidders	1,049	35.50	31.70	27	41	10.07	12.94	7	1,256	32.95	29.06	25	184	8.880	8.883	6
Rebate	1,049	9.833	6.269	9.030	41	14.92	10.55	13.75	1,256	9.840	7.042	9.005	184	10.94	7.145	10.23
Work Length	798	342.3	180.4	322.5	25	378.3	268.8	366	891	280.6	161.2	263	134	193.3	140.6	158
Delay	798	140.4	139.3	110.5	25	193.8	221.1	167	891	115.3	115.5	90	134	75	99.20	32.50
Cost Overun	913	0.0971	0.117	0.0587	39	0.162	0.187	0.0961	1,079	0.0908	0.129	0.0511	155	0.0818	0.133	0.0260
Local Bid	1,015	0.533	0.499	1	39	0.744	0.442	1	1,191	0.584	0.493	1	173	0.728	0.446	1
Incumbent Winner	933	0.150	0.357	0	37	0.270	0.450	0	1,120	0.134	0.341	0	166	0.331	0.472	0

Accessing bunching below threshold in Sweden

Sections 1 and 2 highlighted the importance of procurement thresholds for procurement behavior and procurement outcomes and indicated some available methodologies to evaluate possible distortions induced by them. In this section we offer a first tentative evaluation of the impact of regulatory thresholds in the Swedish public procurement system. Our main interest is to study whether there are signs of strategic manipulation of the value of procurement contracts in Sweden aimed at remaining below the EU thresholds to avoid stricter regulation aimed at increasing cross-border procurement from other EU countries.

3.1 Background and data concerns

The EU Public Procurement Directives¹³ establish that public procurement tenders with expected value exceeding certain predefined thresholds¹⁴ should be procured in line with the EU-wide rules. In particular, these tenders should be announced, and the awarding outcome recorded, in the Supplement to Official Journal of the European Union (OJEU) dedicated to European public procurement. The access to this Supplement is provided through its online version, TED (Tenders Electronic Daily). Further, national procurement legislation of the EU Member States should be brought in line with the demands of the EU Public Procurement Directives. In turn, public procurement tenders with the value below the EU threshold are regulated at national level, and the exact details vary across the EU Member states.

In the case of Sweden, public procurement is regulated by the Public Procurement Act (2007:1091 – LOU) and Act on Procurement within the Water, Energy, Transport and Postal Services Sectors (2007:1092 – LUF). They are aligned with the EU Public Procurement Directives in the part concerning the above-EU-threshold procurement tenders. In turn, for the below-EU-threshold tenders they describe the public procurement procedures, and stipulate that that public purchases above a certain relatively low threshold¹⁵ must be announced in a local public database. The database covering most of the Swedish public procurement tenders is called OPIC, which is managed by a private company, Visma Commerces AB (thereafter Visma).

3

¹³ For most of the data period considered in our investigation the appllicable Directives were Directive 2004/18/EC concerning public works, public supplies and public service contracts. Directive 2004/17/EC concerning the procurement procedures in the water, energy, transport and postal services and sectors. In all our subsequent discussions we refer to (and quote) these Directives. However, on 26 February 2014 they were replaced by Directive 2014/24/EU and Directive 2014/25/EU, respectively. The Member States have until April 2016 to transpose the new rules into their national law.

¹⁴ See more on the exact levels of these thresholds in section 3.4 on Visma data analysis.

¹⁵ Until June 1, 2014 this threshold has been around SEK 285,000. From June 1, 2014 it is raised to approximately SEK 505,000 for "traditional" supplies and services and SEK 940,000 for procurement in utilities sector.

Visma also maintains an electronic version of the database for commercial use.¹⁶ Visma kindly granted us access to important parts of its proprietary data set. Therefore, our two main sources of information for the analysis of this section are TED database - for the public procurement tenders above the EU threshold, and VISMA database – for Swedish public procurement tenders both above and below the EU threshold.

Our key question of interest is to assess whether there are any signs of strategic behaviour of Swedish public buyers around the EU threshold. Indeed, longer preparation time and EU-level publicity required by EU Directives for the tenders with the estimated value above the EU threshold may create incentives for public buyers to manipulate the tender value to avoid being subject to such rules. Indeed, Coviello and Mariniello (2014) showed that wider publicizing a public procurement auction has a strong causal effect on procurement participation and outcomes, with more publicized tenders being subject to more competition and resulting in lower costs of procurement. Similarly, the EU Anti-Corruption Report lists a shorter time to prepare (such as fast-track proceduers) as one of the ways corrupt buyers try to avoid participation of non-favored bidders.

Of course, this does not imply that the attempts to avoid the EU-level procurement regulations are necessariy ill-minded. As outlined in the introduction, public buyers may use the additional discretion they gain by setting the value under the EU threshold, for example, to speed up the procurement process, with the idea of making it more efficient without being aware of the potentially high cost of reduced advertisement and time to prepare in terms of reduced competition and entry by non-Swedish suppliers. However, this still implies that strategic considerations in relation to the EU procurement threshold may be present. Our goal in this section is to make an attempt to assess the existence of such a phenomenon in Sweden.

The EU Public Procurement Directives thresholds are explicitly formulated in terms of estimated value of the procurement tenders, as

"This Directive shall apply to public contracts which ... have a value exclusive of value added tax (VAT) estimated to be equal to or greater than the following thresholds..." (Directive 2004/18/EC, Article 7).

This implies that if some public buyers behave strategically, trying to avoid being subject to the EU procurement regulation, this behaviour should be revealed by their choice of the expected procurement value around the threshold. In our analysis we are interested in looking into the information on the expected value of the procurement both below and above the threshold.

¹⁶ The printed version of the information contained in the database is available for free in Anbudsjournalen and Upphandling24 through the Royal Library (Kungliga Biblioteket) from 1994 onwards.

However, this analysis may suffer from three potential complications. Two of them arise from the availability of Swedish procurement data: First, the estimated value data for the above-EU-threshold tenders is very limited. Second, there is simply no information on the estimated value for the below-EU-threshold data.

More specifically, TED database should in principle contain the data on the expected value, as the EU Public Procurement Directives prescribe publication of this value in contract award notices submitted to TED.¹⁷ In practice, this may not be the case. Indeed, the Swedish Competition Authority has looked into the frequency of cases with reported tender value and concluded that the share of such tenders in Sweden is both low and declining over time (e.g. Konkurrenseverket (2014), p.85). However, in its report the Swedish Competition Authority did not distinguish between the estimated and the final value of the tender. Further, their statistics is based on the values for the entire tender, while TED data allows studying the values for each separate lot of the tender. This calls for further investigation of the value information in the TED database. In turn, the value information contained in the Visma database on Swedish procurement tenders with value below the EU threshold addresses final, rather than estimated, values of the contracts. Swedish Public Procurement acts do not explicitly demand publication of this value. As a result, procuring entities typically do not publish this estimate even though they do establish it internally to decide whether the tender will be subject to EU or local procurement regulation. This decision (a self-reported binary variable "above"/"below") is the only information on the estimated value in Visma database. Were we to have sufficiently rich TED data on the distribution of the procurement rebate - i.e., the difference between the estimated and the actual final tender values - we would be able to use it to approximate the estimated value in Visma database. If instead the TED data on the rebate is scarce, we would have to base our analysis on the final value data only, which may potentially undermine the power of our results.

The third complication is that the EU Public Procurement Directives are not explicit in what is meant by "estimated procurement value". As we argue later in this chapter, this likely creates confusion in understanding of this term – it seems to be perceived differently in different EU Member States, resulting in limited comparability of the estimated value data in TED across countries. This may lead to certain difficulties in the analysis and interpretation of the Swedish procurement value data in TED, especially in cross-country data comparison.

¹⁷ Directive 2004/18/EC refers to expected value in the threshold articles 7-9. While the expected value is not explicitly mentioned in the Annexes listing the information to be included into the CAN, it appears again in the standard forms for CAN established by Commission Regulation (EC) 1564/2005. The actual final value of the contract is also required to be published in CAN, and is present in standard CAN form. Similar situation holds true for the "utilities" Directive 2004/17/EC, though in this case the final values may be exempted from publication in case "the awarding entity considers that publication thereof might be detrimental to a sensitive commercial interest" (Annex XVI).

3.2 Summary of the approach and results

In the view of the above, our approach is as follows. We start by analyzing the availability and quality of Swedish TED data on estimated and actual value of procurement tender. The better and the more complete is this data, the more transparent is the procurement process, which is likely to be of value to its participants, potential participants, controlling authorities, researchers and general public. We also look into how the extent of available information varies across countries/sectors/levels of administration. We compare our results for Sweden to those for some other EU Member States. Specifically, our "reference group" consists of four countries. We include Italy, Czech Republic and Latvia as examples of the cases for which the effect of the EU thresholds has already been investigated (as has been discussed in the literature review and the first part of this project). We also include Germany as one of the leading EU Member States and Denmark as another Nordic EU Member State.

We find that the account of Swedish data on both the estimated and the final value of procurement is limited, in line with Konkurrensverket (2013, 2014). Moreover, while the number of Swedish procurement awards reported to the EC increases over time, both the share and the absolute number of the awards with reported estimated and final value falls. In comparison to the other EU Member States, Sweden's value reporting seems to be in line with that of Germany and Denmark, but lagging behind the one of Italy, Czech Republic and Latvia. Swedish public entities more likely to report the values are those (i) in the central administration and public utilities sectors, (ii) procuring for the goods and services within the financial and insurance services and architecture and construction services industries. This suggests that the identity of the buyer may be important for both the procuring and reporting behavior, and likely also for the outcomes (see subproject 3 for a discussion on that issue). Further, we analyze the data on the procurement rebate in Sweden, and show that it is so scarce and likely suffering from misreporting that it cannot be used for approximating the estimated value data in the Visma database. This analysis also hints at the still very large differences in the interpretation of procurement regulation/procurement practices across the EU states.

Next, we turn to the analysis of Swedish procurement below EU thresholds.

We begin by checking and preparing parts of Visma database to extract the information on final value for the procurement tenders below the EU threshold. We again proceed to looking into the availability of value data across different levels of administration, industries and geographical locations. Then we address the main question of our analysis - of strategic manipulation of procurement contracts in Sweden around the EU threshold. Based on the available data, we study strategic bunching of contracts under the EU thresholds, and investigate to which extent it is influenced by different factors, such as the type of buyer or industry. We show that there is some evidence of bunching in procurement tenders for supplies and

services and for procurement in public works. For the supplies and services, the evidence is the strongest for procurement tenders undertaken by the central government authorities, and the discontinuity of value distribution at the threshold is statistically significant. For public works, the evidence of bunching is stronger for local procuring entities, though limited availability of the data results in lack of sufficient statistical power to confirm the presence of bunching by formal statistical tests. Similarly, data limitations do not allow studying the impact of strategic bunching on the procurement outcomes. Still, even with these reservations, our results point to the importance of improving transparency of Swedish procurement process by collecting better data.

3.3 TED data analysis

3.3.1 Data structure

The electronic version of the European Commission data, Tenders Electronic Daily (TED) incorporates information both on the contract notices and the contract award notices. We were kindly granted access to the recently cleaned TED data on Sweden from the European Commission. The version of TED database that we received from the European Commission (and that has also been sent to Swedish Competition Authority) includes only tenders which ended with a purchase. This information is organized in two levels: contract award notices (CANs) and contracts awards (CAs). The contract award notice summarizes information about the award of the entire tender, while associated contract awards presents the information for each of the awarded contracts covering (parts of) this tender; thereby each of the CANs is associated with one or more CAs. More specifically, each entry in this database is at a CA level, and contains both information on the encompassing contract award notice (i.e., for the entire tender) and information on one of the separately awarded contracts within this tender. The aggregate contract award notice information (such as the overall value of the tender or the identity of the procuring entity) is thus identical across all CA entries that are part of the same contract award notice. However, all such CA entries differ in their own respective information, such as the value of this specific contract or the number of bids for this contract.

This data set is used to find the initial estimated value and its corresponding final value. The estimated value is reported only at the CA level, for each separate contract of the entire tender. The final value is reported both at the CA level – for each contract - and at the CAN level – for the entire tender (so that the latter is the same for each of the contract awards which are part of this CAN). As we will show later, this data structure allows us to extract additional information about tender values.
3.3.2 Availability of data on estimated and final tender value

In this section we assess the quality of data on different kinds of values reported to TED by Swedish public entities. We summarize how the value reporting has evolved over time, which entities are more likely to report the value data, and how it is correlated with the industry of procurement, criteria for winning the award, and type of the contract. We also compare the results for Sweden to those for Italy, Germany, Czech Republic and Latvia.

Value reporting for contract awards (CA)

The total number of contract awards registered in TED by Swedish public entities has been gradually increasing over 2009-2014. However, the number of entities reporting information on the estimated and the final value of the contract follows the opposite trend, both in terms of the absolute number of awards, and the share in total recorded awards (Table 3.1). In particular, the share of the contract awards with reported estimated value has fallen from 20% in 2009 to bare 5% in 2014, and the figures for those with reported final value are generally even lower – they declined from 13% to 6%.

		Number of contract a	Share of cont	ract awards	
Year	total	with reported estimated value	with reported final value	with reported estimated value	with reported final value
2009	7070	1408	913	20%	13%
2010	7560	1139	683	15%	9%
2011	7786	1016	571	13%	7%
2012	9083	1064	485	12%	5%
2013	9623	626	372	7%	4%
2014*	7785	365	463	5%	6%

 Table 3.1.
 TED data on value for Swedish contract awards (CA)¹⁸

Source: Our own calculations based on the European Commission data. *The data for 2014 is preliminary and covers the period January 1st-Sep 30th.

Comparing these characteristics for Sweden to those for Czech Republic, Denmark, Germany, Italy and Latvia one can outline a few important patters (see Figure 3.1). First, consider the share of contract awards with reported estimated value. Sweden, Denmark, and, to a lesser extent, Germany have a noticeably lower level of this indicator than the other countries in our analysis.

¹⁸ Our figures differ from those presented in Konkurrensverket (2013, 2014) for three reasons: 1) the total number of the notices in their analysis includes both the contract award notices and the (pre-award) contract notices and thereby counting also the tenders that were either not awarded or chose not to submit the data. Our version of TED data contains only contract award notices. 2) KKV counts as "contracts with value" all contracts with *any* value reported, while we distinguish between the estimated and the final value, which leads to lower reporting percentage in your data. 3) KKV looks into the CAN level, while in the above table we address the CA data level.

Second, when it comes to the share of awards with final value, one can again identify two groups of countries: Italy, Latvia and Czech Republic have more than 80% of their contract awards to report final value, while Germany, Denmark and Sweden are lagging behind. Even in this latter group Sweden shows the lowest reporting rates, consistenly below 20%. Also the share of awards with final value is either stable or increasing over time for Denmark, Italy, Latvia, and Czech Republic, while declining for both Sweden and Germany.



Figure 3.1. Cross-country comparison for the share of CAs with reported value

Source: Our own calculations based on the European Commission data.

Value reporting for contract award notices (CAN)

Our next step is to look at similar statistics at the CAN (i.e., entire tender) level. This is of interest for at least two reasons. First, the EU thresholds are formulated at the CAN level, so the availability of CAN value data is important for our analysis. Second, turning to CAN level analysis may potentially improve the quality of the final value data. Indeed, recall that the final value is reported both at the contract award (CA) level, and at the CAN (entire tender) level, so these two can be combined to get additional information. More specifically, a missing final value at a CAN level can be substituted by the sum of the final values across all related CAs, which may yield additional data points.

At the same time, computing estimated value at the CAN level is likely to decrease the number of available data points. This is due to the fact that the estimated value is only reported at CA level, so we are bound to do the aggregation across CAs to get the estimated value for the entire tender (CAN) level.¹⁹

¹⁹ Further, the estimated data across the CAs within the same CAN is sometimes present only for part of the CAs. In such a case the estimated value for the entire CAN cannot be computed, implying further loss of information.

In line with the above logic, statistics at CAN level yields noticeably more data points for the final value than those at CA level, at the cost of estimated value data loss (Table 3.2). The share of CANs with reported values is higher than the respective share of CAs, implying that the tenders that report the value are likely to be those with fewer contract awards per tender.

However, the position of Sweden in international comparison is not significantly affected by transition to the CAN level statistics. As concerns estimated value, Sweden, Denmark and Germany are still reporting data for approximately the same proportion of contract award notices, but noticeably less than Italy, Czech Republic and Latvia. For the final value, Sweden is again lagging behind in the quality of data reporting (Figure 3.2).

	Num	ber of contract award	Share of contract award notices		
Year	total	with estimated value**	with final value***	with estimated value**	with final value***
2009	3099	813	1215	26%	39%
2010	3409	725	941	21%	28%
2011	3505	639	761	18%	22%
2012	3880	557	578	14%	15%
2013	4164	438	484	11%	12%
2014*	3003	239	310	8%	10%

 Table 3.2.
 TED data on value for Swedish contract award notices (CAN)

Source: Our own calculations based on the European Commission data.

*The data for 2014 is preliminary and covers the period January 1st-Sep 30th

** Estimated value for a CAN is computed by summing up the estimated values for all associated CAs

*** If final value is not reported at a CAN level, it is substituted by the sum of the final values for all associated CA





Source: Our own calculations based on the European Commission data.

3.3.3 Characteristics of Swedish tenders with reported value

In this section we analyze the characteristics of Swedish procurement tenders that report the estimated and the final value of the contract to the TED database. We ask the following question: are there any (statistical) differences between the tenders with reported value and the overall patterns of the Swedish TED entries. In this comparison we look at the patterns at CAN level for the characteristics that are common for all contract awards within the respective contract award notice (e.g., the type of the procuring administration), and at the CA level for the characteristics that differ across CAs of the same CAN (e.g., the number of bidders for each award).

No bias in reporting across services/supplies/works contracts

There seems to be not much difference in reporting patterns across the three types of procurement tenders: public service tenders, public supply tenders and public works tenders. Roughly 54% of all Swedish public tenders procured under the EU regulation are within services, followed by approximately 35% of supplies and 11% works, and similar shares are preserved across the contract award notices with reported estimated/final value (Figure 3.3). If anything, the public works awards tend to report the values slightly more often than the other types.



Figure 3.3. TED contract award notices by type of contract

Source: Our own calculations based on the European Commission data.

Central government and utilities are more transparent in value reporting

Central government and state agencies, as well as the authorities in the utilities and telecommunication sector, are relatively more transparent in their value reporting, especially for the final value (Figure 3.4). In turn, regional and local authorities and agencies tend to underprovide the data (relative to their representation in Swedish TED award notices sample), and especially so for the data on the final value.

Tenders with reported value have slightly fewer bids per contract award.

We have already mentioned earlier that the tenders with reported value are overrepresented in the group of contract award notices with fewer contracts per tender. It is also interesting to see how they differ in terms of the number of bids per each contract. As the data on the number of bids is highly skewed, ranging from zero bids per contract to up to as many as 319 bids (both are likely to be data mistakes), we choose the median number of bids as our preferred indicator. ²⁰

²⁰ We exclude the framework agreements that are likely to have different reporting pattern for the number of bids.



Figure 3.4. TED contract award notices by type of the authority

Source: Our own calculations based on the European Commission data. "Central" includes central government and national/federal agencies and offices; "Local" includes local authorities and regional and local agencies and offices; "Utilities" includes water, energy, transport and telecommunication sectors.

For public services (supplies) the contracts with reported value tend to have 1 (2) fewer bids per each awarded contract than the median numbers of bids for respective groups of all Swedish entries in TED. For public works, there is no difference between the reporting and non-reporting award notices (Figure 3.5).



Figure 3.5. Median number of bids for contract awards in TED

Source: Our own calculations based on the European Commission data.

Value reporting is uneven across industries

Another important parameter is the relationship between the quality of the value reporting and the industry of the procurement. We define industry groups based on 2-digit Common Procurement Vocabulary (CPV) codes and look into the 6 most represented in TED industries. (These industries also turn out to be those and the only ones with the share of the contract awards exceeding 5% of the sample with reported estimated/final value).

Figure 3.6 shows that value reporting is much more common in the financial and insurance services (CPV code 66), and architecture and construction services (CPV code 71). While the estimated value is slightly underreported in construction sector (CPV code 45), final value is again provided more often relative to the representation of this sector in overall TED data for Sweden. In turn, medical equipments sector (CPV 33) and business services (CPV 79) are relatively less transparent on both the estimated and the final values of their contracts.



Figure 3.6. Share of contract awards by industry of the contract

Source: Our own calculations based on the European Commission data.

Contract award criteria affect the probability of value reporting differently for supplies/services and works

Finally, we also look into relation between value reporting and contract award criteria. Most economically advantageous award criterion turns out to be relatively more frequent for the value-reporting award contracts both in public supplies and public services (

Figure 3.7. However, for public works the situation is exactly the opposite. The share of the award contracts that are based on the best price award criterion is lower for all works awards than for the works contract awards with reported estimated value. Further, public works awards with this criterion are even more likely to report the final value.



Figure 3.7. Distribution of contract awards by the winning criteria

Source: Our own calculations based on the European Commission data.

3.3.4 Winner rebate data: availability and patterns

In this section we turn to the analysis of TED value data – to the procurement winner rebate. In countries like Italy, with compulsory announcement of the reservation value (i.e., a maximum acceptable price) it is immediate to define the (final) rebate as the percentage discount on the reservation value offered by the winning supplier. For countries like Sweden where a reservation price is typically not announced, it is less straight-forward to talk of the winner rebate.

The simpler and more transparent solution is to define the winner rebate as a percentage discount of the final contract value relative to the estimated value.

$$Rebate = 1 - rac{Final \, Value}{Estimated \, value}$$

The winner rebate is important for our analysis for at least three purposes. First, if there is sufficiently wide and representative data on the rebate in TED, we can use it to build an approximation for the estimated tender value based on the final tender value in Visma data.

Second, it will allow us to indirectly assess quality of the reported data by comparing the magnitudes of the estimated and the final value.

Third, we can compare the Swedish winner rebate data to the data from other EU Member States, which would shed some light on the interpretation of the estimated value in Sweden and internationally. Clearly, the value of the rebate is sensitive to the interpretation given to the term "estimated value" in different countries. For instance, if the "estimated value" is interpreted as the most likely acquisition price, it will yield a lower rebate relative to the one calculated with the "estimated value" interpreted as the reservation value (the maximum acceptable price tends to be higher than the expected acquisition price, thereby implying a higher rebate for the same final price). It is important to use this observation to access cross-country comparision with caution.

For example, as we mentioned, in Italy the suppliers participating in a procurement auction formulate their offers in terms of a percentage reduction (i.e., the rebate) with respect to the announced project value (which is widely perceived to correspond to the estimated value of the project in TED data. Conditional on the auction design and the award criteria, the rebate may thus be seen as an indicator of the competitiveness in procurement. However, it is far from clear whether the same logic applies in Sweden. In particular, the underreporting of the estimated value in Sweden questions the interpretation of this value as a reservation price, and/or raises concerns about the transparency of it for the auction participants. That is, the rebate may not necessarily characterize the competitiveness of the Swedish procurement.

Winner rebate: availability and quality of the data

If we consider the number of contract awards/contract award notices in TED that have both the estimated and the final value data (so that the rebate can be calculated), we again see the division of our countries in consideration into two subgroups: Sweden, Denmark and Germany have way less availble data than Italy, Czech Republic and Latvia (Table 3.3). Also, the number of such contracts for Sweden turns out to be considerably smaller than the (minimum of) same figures for these values separately. This further exacerbates concerns about availability of the Swedish value data.

Country	Share of al	l contract awa	ard notices	Share	of all contrac	t awards
	with estimated value	with final value	with rebate/ both values	with estimated value	with final value	with rebate/ both values
SE	11%	7%	3%	16%	20%	9%
CZ	75%	92%	69%	77%	97%	75%
DE	17%	50%	15%	21%	65%	19%
DK	12%	29%	6%	17%	55%	14%
IT	57%	83%	52%	62%	88%	59%
LV	49%	86%	43%	48%	90%	44%

Table 3.3.Share of TED data with estimated, final and both values for CAs
and CANs

Source: Our own calculations based on the European Commission data. The data period is Jan 2009-Sep 2014.

Our next step is to look into the values of the rebate to assess the reliability of the value data. For example, a rebate value of zero is suspicious for a reporting mistake, as it corresponds to the case when the estimated value is exactly the same as the final one. If the estimated value is made public before the contract is awarded, the competition should normally preclude this from happening. If instead the

estimated value is not made public, the chance that the winner guesses it precisely is probably even smaller. Thereby, such rebate value is also very likely to represent a reporting mistake or reporter's misunderstanding of what should be reported as an estimated and what as a final value. Table 3.4 summarizes the number of observations if we exclude all zero rebate values.

Country	Contrac	ct awards	Contract award notices		
	Number of CAsShare of non-zerowith non-zerorebate CAs inrebate datatotal data		Number of CANs with non-zero rebate data	Share of non-zero rebate CANs in total data	
SE	461	1%	576	3%	
CZ	26735	62%	17419	65%	
DE	23127	13%	18461	17%	
DK	1095	4%	922	8%	
IT	53757	48%	22306	49%	
LV	4645	8%	1138	17%	

Table 3.4. Non-zero winner rebate data in TED

Source: Our own calculations based on the European Commission data. The data period is Jan 2009-Sep 2014.

Comparing Table 3.3 and Table 3.4 we immediately see that our suspected reporting error only marginally affects the availability of the data in Italy, Germany, Denmark and Czech Republic. Instead, Latvian reporting pattern reveal a huge drop in the amount of data due to exclusion of zeros. While the drop in percentage points may be not as large for Sweden, the situation with the quality of winner rebate data is worse than for all other considered EU Member States: a bare 1 % of contract awards / 3 % of contract award notices report the data that is potentially usable for calculating the rebate.

Another concern is the extreme values of the rebate data. For example, if the value of the rebate is negative and large in absolute value it means that this is likely a reporting mistake, as final value greatly exceeds the estimated value. Similar issue arises with the values of the rebate close to 1, as those correspond to unrealistically high reduction in the contract value. All countries in our sample have a certain (limited) share of these unreliable observations, which further decreases the sample size.²¹

These observations immediately imply that our original plan to use the Swedish TED rebate data to approximate the estimated tender value in Visma data base cannot be implemented. Instead, our bunching analysis of Visma data is bound to be based on the final value.

²¹ There seem to be other kinds of misunderstandings too, for example, whether the value reported for CA is the value for the entire CAN, which costs to include in terms of years, options, VAT etc. In some cases the value per contract is filled as the total tender value, while the estimated value is filled per contract, etc.

Winner rebate: characterization of the available data

Of course, Swedish rebate data is highly limited and very likely unrepresentative of the entire set of Swedish procuring contracts in TED. Still, it is interesting to compare the values of the (available) Swedish rebate data to the ones in other EU Member States. In view of the extreme values problem mentioned above we look into the median value of rebates across countries, summarized in Table 3.5.

Country	Median rebate value				
	CAs with non-zero rebate data	CANs with non-zero rebate data			
SE	0.07	0.02			
CZ	0.10	0.08			
DE	0.07	0.07			
DK	0.08	0.05			
IT	0.14	0.12			
LV	0.10	0.07			

Table 3.5. Median winner rebate value

Source: Our own calculations based on the European Commission data. The data period is Jan 2009-Sep 2014.

The estimated rebate for Sweden seems to be at the lower end of the comparison for both the contract awards and contract award notices. For example, for contract awards it means that a median rebate-reporting authority experiences a 7% value saving in its procurement relatively to what it originally estimated (the same measurement for the contract award notices in Sweden would be around 2%).

Notice that this observation does not imply that Swedish public procurement is neccesarily less competitive than, say, in Italy (which has the rebates of 14% and 12% correspondingly). Instead, if may simply imply different interpretations of what EU Public Procurement Directives mean by estimated value. Indeed, as mentioned earlier, in Italy the "estimated value" is generally interpreted as the reservation price ("the maximum acceptable price") for the procurement auction, which tends to inflate the rebates calculated with respect to the truly "expected" price.

The same concern about differences in interpretation of the "estimated value" meaning arises when we turn to the distribution of the rebate. Again, due to the extreme values problem we only graph the rebate data between -0.5 and 0.5. Also, for the sake of space we only present the graphs at CAN level, but the situation is very similar at CAN level. The results, presented in Figure 3.8, illustrate an important difference. For Italy, Latvia and Czech Republic most rebate values are positive and the density of the distribution drops abruptly just below zero. This implies that reported estimated value is indeed likely to be the value that is publicized in a contract announcement and used as a reservation value for procurement auction, so that the final value represents a discount from the

reservation value.²² In turn, the picture for Sweden, Denmark and Germany suggests either differently arranged procurement procedures or different understanding of the value reporting requests from the EC and different compliance to these requests.





Source: Our own calculations based on the European Commission data. The data period is Jan 2009-Sep 2014.

For example, in the case of Sweden one potential reason for issues with value reporting can be the observation that Swedish Public Procurement acts also do not stress the distinction between the "estimated" and the "final" value. The

²² One may be concerned that these results may be affected by the contract award criteria. However, for all countries in the sample the distributions of the rebate are only marginally altered when limiting the sample to the "best price" contracts (results available on request).

formulation in LOU 2007:1091 corresponding to the above-quoted article²³ of the EU Procurement Directive 2004/18/EC is "Denna lag ska tillämpas på kontrakt vilkas värde beräknas uppgå till minst de belopp (tröskelvärden) som Europeiska kommissionen vid varje tid har beslutat eller lämnat meddelande om...". "Beräknas" in this context could be understood both as "estimated" and "calculated", and the latter may as well be interpreted as a realized/final contract value.

This discussion suggests that there is a need in clarification of the EU procurement regulation, and, perhaps, a better alignment between the EU legislation and different cross-country procurement practices . Better communication between the EU and the national authorities is likely to contribute to better transparency of procurement data, and ultimately to more efficient public procurement.

3.4 Public Procurement below EU Thresholds in Sweden

The main objective of this section, the core section of this report, is to study whether the EU thresholds influence the procurement design (specifically, the manipulation of procurement size to be below the thresholds) in Sweden.

As was discussed and illustrated in the earlier sections of this report, there could be different reasons for choosing the tender value so as to fall below externally set threshold values, and different outcomes of such choices. A procuring entity might decide to lower the value of the tender that otherwise would exceed the threshold value (and thus would be subject to European, not local regulation) to decrease administrative burden and associated time and administrative costs, regarding such unbundling as beneficial for the public (not beying aware of the reduced competition and worse outcome for the taxpayer that this may determine). At the same time, a decision to reduce the tender value below the threshold may be motivated by the intention to limit international competition in favor of local (and possibly colluded) contractors, resulting in less favorable tender terms and waste of public resources. But before addressing the reasons and consequences for such strategic behavior, we need to assess whether there are indeed signs of bunching of Swedish procurement tenders just below the EU thresholds.

Identification of bunching, ideally, requires the data on estimated tender values and explicit knowledge of a threshold applicable for each of the tenders. As discussed in the TED data section of the report, while the data on estimated value of the contracts above the EU threshold is readily available for some of the European countries, for Sweden, however, this is rarely the case. Further, as the Swedish law on public procurement does not explicitly require publishing estimated contract or tender value, this information is simply not available for procurement below the

²³ "This Directive shall apply to public contracts which ... have a value exclusive of value added tax (VAT) estimated to be equal to or greater than the following thresholds..." (Directive 2004/18/EC, Article 7).

European thresholds. As a result, we resort to the analysis of the final value of the procurement tenders, which should be highly correlated to the estimated value, and try to detect bunching using this measure.

For our analysis we use the database covering public procurement below European threshold values that is collected and maintained by Visma Commerce AB. This database also incorporates the information on the above-the-threshold Swedish tenders procured at the EU level, due to cooperation between the European Commission, OJEP and Visma.

Based on this data, we assess the extent of bunching around the EU thresholds. We first provide illustrative histograms of tender values around the relevant thresholds. We then normalize the value of the tenders with the relevant EU threshold and formally test for irregularities in number of contracts at the threshold using the density tests as in McCrary (2008). We also separately analyze bunching for different types of procuring entities, biggest industries as indicated by CPV codes, and by geographical location of the procuring entity.

Our results broadly suggest that there is some evidence of bunching around the threshold, especially for procurement tenders undertaken by the central government authorities for public supplies and services. While there is also some evidence of bunching for tenders in public works, these results should be viewed with caution as the dataset we are using has very incomplete coverage of tenders in public works.

Due to the data limitations –in particular the complete absence of data on ex post performance (quality, delays etc,) we had to stop short of the next natural question that arises in the view of our above results: what is the impact of strategic bunching on the procurement outcomes in terms of value for taxpayers' money and on the competitiveness of the auctioning process. However, even at the current stage, our results indicate the importance of improving procurement data availability, quality and transparency for Sweden.

3.4.1 Data: availability and descriptive statistics

Visma database and availability of value information²⁴

The data for this part of the report comes from Visma Commerce AB and covers the time period from 2009 to 2013. The unit of observation is a tender. For each of the tenders we have certain information on the individual bidders, but no information on the separate lots (i.e. if the contract has been split). This per-bidder organization of information implies that, we cannot distinguish a single large bid from several smaller bids submitted by the same bidder for different lots.

²⁴ See also Upphandlingsutredningens delbetänkande (2011).

Information on the bidders consists of the value of their (final) bid, respective unit (total value, value per year, per hour, etc.), status of the bidder (winner, loser, and applicant) and ranking of the bid within the tender. Information on the overall tender includes year of contract notice, name and contact details of the procuring entity, classification of the procuring entity into 6 broad types (municipality, municipal enterprise, county, state agency, state enterprise and other), indicator for contract establishing a framework agreement, type of the procurement procedure (most importantly, open vs. simplified), indicator for estimated tender value being above or below the threshold as reported by the procuring entity, number of bidders per tender, and award criteria (lowest price, most economically advantageous bid).

There are 97,435 tenders in the database and 311,810 entries for bids (including both the winning and the non-winning bids) submitted within these tender, with 11 bids per tender on average and median of 6 bids. Of these, only 73,035 bids and 21,186 tenders have some information about the value of the bids; correspondingly, average number of bids decreases to 5.6 and median to 5 bids. Since thresholds are defined for the tender value as a whole, we sum up the winning bids for each tender to arrive at an estimate of the total value of the tender. We also filter out observations that list anything else other than total value for units of the bid (e.g. per year, per hour, per ton, etc.). Recovering information about total value for such bids is indeed possible, but requires manual examination of the supporting documentation for each of the tenders, an effort clearly outside of the scope of the current report. The resulting dataset contains 13,177 tenders²⁵ over the four-year span.

Thresholds

The thresholds established by EU Public procurement directives differ with respect to types of procurement and levels of public administration. There are four main threshold levels – for supplies and services procured by central government departments and offices, for supplies and services, procured by other authorities (such as, e.g., regional and local authorities), for supplies and services procured within the utilities sector, and for public works tenders.²⁶ The values of these thresholds are updated at the EU level in every two years, and the change occurred both in the Euro value of the thresholds and in their respective values in national currencies of non-Euro EU Member States. A summary of Swedish threshold levels (exclusive VAT) for the period covered by our data is presented in Table 3.6.

²⁵Alternatively, we also include in the dataset the contracts that lack any description for the unit, assuming that the total value is reported. This procedure results in 19,161 observations, but the results change only marginally.

²⁶ The actual split into the groups by the threshold level is finer, including a range of special rules and exclusions.

	2009	2010-2011	2012-2013
Threshold 1 – Supplies and services, Central Government	1233901	1243375	1233401
Threshold 2 – Supplies and services, Other Authorities	1911155	1919771	1897540
Threshold 3 – Utilities	3822309	3849489	3795080
Threshold 4 – Public Works	47778869	48193215	47438500

Table 3.6. Threshold levels in SEK.

Source: European Commission (2007, 2009, 2011)

Descriptive statistics of the data with values

Comparing the initial database and the sample resulting from manipulations described above, we can note that the division with respect to administrative level of procuring entity is at large preserved. Overall, there are 65,520 (21% of total) bids for the tenders in procurement by the central government authorities in the original dataset, 14,197 of those have non-missing data for the value of the bid (corresponding to 19.4% of all tenders with non-missing data for the value), and there are 2,666 tenders conducted by the central government authorities out of 13,177 (20.23%) tenders with non-missing total value of the tender. The breakdown of the resulting sample by years and by type of procuring entity is presented in Table 3.7.

Table 3.7.Tenders with non-missing total values, by types of procuring entity
and by years

Type of Procuring Entity / Year	2009	2010	2011	2012	2013	Total
Municipality	30	141	1,632	2,166	2,908	6,877
Municipal Enterprise	7	43	584	814	1,166	2,614
County	16	53	224	255	398	946
State Agency	11	78	650	821	1,076	2,636
State Enterprise	0	0	1	4	9	14
Other	0	1	5	27	46	79
Total	64	316	3,096	4,087	5,603	13,166

Source: Our own calculations based on Visma database

In terms of the industry structure, there are three large groups of contracts with value by CPV codes – Construction (CPV=45), Construction Services (CPV = 71) and Transport Equipment (CPV = 34). The industry structure of the sample with value is somewhat less similar to the entire sample, with, for example, construction sector being overrepresented in the sample with values. However, the same tender often covers multiple CPV codes, so it is not always straightforward to assign an industry code to the tender. As a result, the outcomes of the comparison of the two samples are sensitive to the assignment procedure chosen. As this is not in the focus of our

exercise, and for the sake of space, we refrain from providing these different versions of comparison.

Recall that the thresholds vary not only with respect to the type of the buyer (central government or not), but also with respect to the nature of the project (services and supplies, utilities, works). Unlike in TED data, this latter classification of the contract is not available in Visma database, so we cannot always precisely identify a relevant threshold level. This is particularly difficult for public works and utilities, so for this analysis we distinguish only between 3 threshold levels: threshold for supplies and services set at about 1.2M SEK for central government and state agencies,²⁷ at about 1.9M SEK for supplies and services for other contracting authorities, and 48M SEK threshold for public works. For the latter group, we classify a tender as being subject to a higher threshold for public works based on the existing information about CPV codes for each procurement contract. Specifically, a tender will be considered a construction project if at least one of CPV codes associated with this tender is equal 45 ("Construction")²⁸.

Summary statistics for the selected variables is presented in the Table 3.8.

Variable	Mean	St.Dev.	p25	p50	p75	N
Total Value of a Tender, SEK	6522010	32166853	439000	1236708	4137000	13177
Is Central Government?	0.20	0.40	0	0	0	13177
Is Framework agreement?	0.20	0.40	0	0	0	13177
Is Construction?						
(CPV 45)	0.53	0.50	0	1	1	13177
Is Construction Services?						
(CPV 71)	0.08	0.27	0	0	0	13177
Is Transport Equipment?						
(CPV 34)	0.07	0.25	0	0	0	13177
Number of bids	3.43	2.38	2	3	4	13177

Table 3.8. Summary Statistics for selected variable

Source: Our own calculations based on Visma database

The distribution of total value of the contracts has the median at about 1.2M SEK that is much smaller than the mean at about 6.5M SEK. Overall, the distribution of values is heavily positively skewed; that implies that we will not be able to depict

²⁷ We also checked the lists of public entities procuring according to the rules for central government, available from the Official Journal of the European Union and corrected misclassifications in the types. ²⁸ However, due to the fact that single biggest entity procuring in public works, the Swedish Transport Administration (Trafikverket) frequently uses other publicly available databases and own web page to advertise upcoming tenders, the dataset at hand therefore describes only a fraction of procurement in this sector. Note also that with this classification ("at least one CPV code is from a respective industry") overlaps between different industries are possible.

or analyze distribution of total tender values as a whole. Instead, we will have to consider subsamples of our data that are relatively close to the threshold.

3.4.2 Analysis of bunching around EU threshold

Histogram-based analysis

The histograms in Figure 3.9 illustrates the fraction of tenders and the total value of the tender averaged over 100,000 SEK bins for procurement in supplies and services and over 2,000,000 SEK for procurement in public works. We include construction tenders only in calculations for public works; vertical lines indicate relevant thresholds for each of the types of procuring entities, without accounting for overthe-two-year-period difference.



Figure 3.9. Histograms of tender values

Comparing the unmodified distribution of tenders' value along with approximate thresholds, we can observe how administrations decide on their procurements around the threshold values. Overall, there seems to be a spike in number of procurements before the threshold for central government procurement in supplies and services. For the non-central government procuring entities in public works tenders, there seems to be a drop just after the threshold; that can also be suggestive of systematic manipulation of tender value around the threshold.

This pattern is even clearer in the histograms of normalized tender values. Here we adjust for the year-specific threshold values, subtracting from the value of the tender the relevant thresholds for each year as in Table 3.6, so that the level to test for discontinuity around the threshold becomes normalized to zero. The results are presented in Figure 3.10.



Figure 3.10. Histograms of normalized tender value

Maintaining the division with respect to the type of procuring entity, we provide similar illustrations for the most represented industries (identified by CPV codes) present in our sample, Construction Services (CPV 71) and Transport Equipment (CPV 34), see Figure 3.11.



Figure 3.11. Histograms of normalized tender value for main CPV codes

For procurement in both construction services and the transport equipment, there seems to be a large drop in normalized tender value just after the relevant threshold.

As for the geographical dimension, we separate the three biggest cities (Stockholm, Malmö and Göteborg) from the rest of Sweden and provide similar histograms by

the type of buyer. Unfortunately, insufficient number of observations here does not allow for finer division by geographic regions.



Figure 3.12. Histograms of normalized contract value

These histograms broadly suggest that an increased number of procurement tenders in supplies and services just below the threshold is due to procurement happening in the biggest 3 cities and on the central government level.

Evidence of bunching as based on McCrary density discontinuity test

The graphs presented so far show that there are reasons to suspect presence of bunching at the threshold level. We formally test for this using a density test technique as in McCrary (2008). This is essentially a test for absence of discontinuity of data density at the threshold. If we detect a discontinuity, this may be indicative of significant manipulation of procurement values by public buyers. The test is a two step procedure. First, we generate a finely-gridded histogram in a spirit of the graphs presented earlier; the bins of the histogram are carefully defined so that not one of the bins includes observations to the left and to the right of the expected discontinuity point. Then, we smooth the histogram using local linear regression separately to the left and to the right of the discontinuity point; the midpoint of the bin is treated as independent variable, and number of observations in each bin as depent variable. The graphs in Figure 3.13 and

Figure 3.14 below present these resulting smoothers and associated 90% confidence intervals (which corresponds to testing the bunching hypothesis at 10% significance level) together with the histogram plots resulting from the first step, with each circle mark on a graph corresponding to the height of a respective histogram bins. We normalize the value of tenders attributed to each of the thresholds at the threshold itself; therefore, discontinuity, if any, should be expected at zero, thus resembling closely the illustrative histograms. As before, for supplies and services, we exclude construction projects (CPV 45); construction projects are presented at separate graphs for public works. Since the testing procedure is naturally sensitive to the choice of bandwidth and the bin size, we report several specifications.



Figure 3.13. McCrary density tests for Supplies and Services, 90% confidence intervals



Figure 3.14. McCrary density tests for Public Works, 90% confidence intervals

Overall, the results are in line with earlier visual inspection of the data: there is some evidence of bunching of tenders just below thresholds. Discontinuity is especially pronounced, and statistically significant at 10%, in procurement of supplies and services undertaken by the central government authorities. It is also distinctly noticeable in procurement in public works undertaken by non-central government authorities, though in this case the test does not have sufficient power to reject the absence of discontinuity. This loss of statistical power appears to be due to data-driven selection of bin size and bandwidth, resulting in small sample size for the density tests, while these tests normally require a relatively large amount of data around the threshold to achieve statistical significance.²⁹ For the same reason, more refined analysis of bunching by industry and by geographic location is not informative with the current dataset due to limited data availability, although we present these graphs in Appendix A.

The next logical step would be to analyze the effects of bunching at the threshold on the outcome measures of the public procurement: the quality of the tenders, competitiveness of the auctioning process, and resulting litigation. However, the data at hand is too restrictred to allow for this type of the analysis. For example, when it comes to the potential measures of competitiveness, the number of bidders

²⁹ Similarly, if we increase the significance level to e.g. 5% instead of considered 10%, the hypothesis of the discontinuity at threshold will not be confirmed even for central government public procurement in supplies and services, see Appendix A.

is available only for the entire tender and not per lot, and there is no data on the winner rebate. The data on post-award performance measures such as cost overrun or work delays is either not available, or present in non-machine readable form, such as scanned copies of court proceedings, so it requires significant effort in manual processing. These limitations of the data, as well as relatively small number of observations, preclude us from studying the consequences of bunching, so we leave this for further research.

If anything, our analysis of Swedish procurement data suggests that more and better data would be needed for a thorough analysis of bunching of procurement tenders below the thresholds, and effects of such bunching on the quality of the outcomes of tenders and on competitiveness of the auctioning process. Heterogeneity of contracting authorities: a case study

Previous sections have clearly highlighted how important it is to take into account differences in the characteristics of contracting authorities, like their size, location and whether they are central or local administration, to understand what is really going on, in the specific case in terms of bunching of tenders below regulatory thresholds. In this section we give a taste of the the extent of heterogeneity in the organization and behavior of Swedish contracting authorities, by briefly reporting some of the results of an interview-based survey conducted together with Mats Bergman and Sofia Lundberg within a wider research project on the procurement of Swedish elderly care. We administered this survey to most Swedish elderly care buyers, all of them municipalities, on which we had some preliminary information from a previous data collection effort (summarized in Bergman et al. 2014). Because all of the surveyed contracting authorities are municipalities, in this chapter we will use the two terms interchangingly as perfect synonyms.

4.1 The Survey

Telephone interviews were held with 79 managers responsible for quality control of private nursing homes in 73 different municipalities. Both Stockholm and Gothenburg have separate quality control for each city district and for Gothenburg, we interviewed all three districts that have procured elderly care. For Stockholm we chose to interview five of the districts with the most experience.

The goal was to interview all the 81 municipalities that to our knowledge procure or previously have procured nursing home management. Unfortunately eight of them have been dropped from our sample. Two municipalities had no private nursing homes or involved staff at the municipality office. For three other municipalities we could not get in contact with the right person, and the last three did not answer on the scheduled time. No municipality however declined to participate.

The survey, in Appendix B, contains four different sections. The first section (Section 1) is about the organization of procurement of elderly care services. The second (Section 2) focuses on how to maintain good quality of service in procured elderly care with special focus on nursing homes. In the third section (Section 3) focus lies on how the contract is built and managed, in particular with respect to formal penalties such as fines. Finally, the fourth section (Section 4) is directed at the experiences from individual contracts.

There were about 40 questions and each interview took about 45 minutes. The descriptive analysis below aims to give an informative picture of the four different

4

sections. In the first three parts the data is at the contracting authority/municipality level whereas the fourth part is at the individual contract level, as far as it was possible to remember each contract.

The Interview Questionnaire consisted of four sections organized in a somewhat chronological manner, which was a well suited structure to undertake the interviews. In order to analyze the data and construct preliminary summary indicators, however, besides appropriately re-arranging scales to reflect intensity and to introduce dummies where needed, at the coding stage we also re-classified some of the answers/variables into some smaller subgroups linked to their type. We created four different groups: Group S, Group B, Group O, and Group E.

Group S (for Structural) relates to the quality of the organizational structure of the contracting authority. These questions also aims at determine the organization of the contracting authority's resources in terms of personnel, the personals educational achievements etc. Additionally, the questions referring to Group S determine which department within the municipal that is performing the procurement of elderly homes and if that similar for all possible elderly care services procured in the municipality.

Group B (for Behavioral) mostly consists of variables from Section 2 but also includes some variables from Section 3. It focuses on the managerial practices of the contracting authorities, in particular on how they monitor quality in the elderly homes. One measure of monitoring is inspections. If they are performed, we are interested in whether the information they produced is stored, processed and used. Group B also includes the contracting authority's behavior towards contracts. That is, how the contract is embodied, if this was affected by the bid and moreover, if any financial guarantees was requested and the possibility for sanctions, if there is any contract clause available.

Group E (for Experience) consists of variables trying to capture the experience of the contracting authority and the maturity of contracts. Moreover, it gives an insight of how many procurements have been achieved per year and by whom. This group contain mostly variables from Section 1.

Group O (for Outcomes) contains a fairly equal distribution between the variables from all sections, except Section 1. Outcomes are of two forms; they include observations from the general experiences by the contracting authority and from experiences from specific contracts. The general experience provides information if failure to meet quality demands have been detected at inspections, the failures have been ranked according to severity and frequency, the general quality of the elderly care the municipals are producing themselves. We have also specific information if the contracting authority have terminated any contract prior to maturity, if there have been any legal proceedings, specific quality measure, how well the cooperation has functioned within the different contracts etc. We then used this classification to produce some preliminary summary indicators of the characteristics of the surveyed organizations.

4.2 Summary Indicators and Degree of Heterogeneity

To highlight the degree of heterogeneity, we construct a set of preliminary summary indicators for three of our four groups, contracting authority's organizational structure, its behavior or "management style" as well as the outcomes.

Structural Indicators

For the variables in group S, mainly capturing the structural characteristics of the organization, we have constructed two sub-indicators. These try to determine how well the contracting authorities are organized, and the amount of staff resources for quality control available.

The first sub-indicator is determining how well the firms are organized in terms of elderly care procurement and is named S-O_indicator. It is constructed by combining the first three questions on the organization of procurement and availability of external help. The indicator is increasing in value if the organization is of higher quality.

The second structural indicator is named S_S_indicator_home and gives us an insight of the amount of staff available for quality control. The sub-indicator is constructed by dividing the total amount of staff resources available for quality control by how many contracts they supervise for homes for elderly care. The contracts are weighted by the average maturity as the workload will increase with more frequent procurement processes.

Behavioral Indicators

For the group of behavioral variables capturing management practice we have contracted two indicators relative to two different aspects we find particular important.

The first indicator BQ_INDEX is a flat sum of variables indicating quality of management practice, including knowledge sharing, information collection and processing, inspections etc.

The second indicator BL_INDEX50 is a measure of how "legalistic" the process is, i.e. based on the arm's length individual contract rather than more informal or long terms considerations, like past performance and reputation. The index is increasing if the behavior is more legalistic.

Outcome Indicators

We have considered two possible indicators from this group of variables, to capture perceived outcomes both in terms of quality of output and of business relationships.

The first indicator OQ_index reflects the outcomes in a qualitative way, it is a combination of the variables incidence of failures (weighted by the seriousness), perceived problems in terms of delivered quality. The indicator is increasing with good quality.

The second indicator, OL_index captures outcomes in terms of litigation processes or early termination of contract, and increases in the amount of litigation and early contract terminations experienced.

Below are histograms for these preliminary indices. The degree of heterogeneity of these very preliminary indicators appears indeed very large. Of corse, this was a very preliminary assessment, following "ad hoc" euristic criteria in the construction of indicators, so we should take what we observe for what it is, a very preliminary exploration with no statistical significance. Still, this preliminary exploration appears to confirm that even in a very specific and homogeneous "procurement market" such as that of eldely care services, the amount of heterogeneity among public buyers appears very large.



Figure 4.11 Histogram of placement along the S_S Indicator and S_O Indicator

The figure above shows the survey outcomes for the S_S indicator, measuring the amount of staff available for quality control, and the S_O indicator, measuring how well the firms are organized in terms of how elderly care procurement is structured. For both measures, the contracting authorities appear to differ quite substantially from one another.



Figure 4.12 Histogram of placement along the BQ_INDEX and BL_INDEX50

The BQ_INDEX indicator to the left in Figure 4.12 above consists of a flat sum of variables indicating quality of management practice. The BL_INDEX50 indicator to the right provides a measure of "legalistic" behavior. We see a fairly large spread across both of these indices.

Figure 4.13. Histogram of placement along the OQ_Index and OL_Index



Lastly, in Figure 3.14 above we see the spread across observations of the OQ_index indicator, measuring outcomes in terms of perceived quality of care, and the OL_index indicator, measuring the outcomes in terms of amount of litigation or early contract termination. Also here, we find observations over a broad range of values for the indices.

5 Concluding remarks

This report has highlighted a number of issues relevant to the public debate and policy-making on public procurement in Sweden.

- Thresholds rules in public procurement affect the behaviour of procuring entities both in Sweden and internationally, as indicated by the related studies addressed in Section 1.1, and confirmed by the results of Sections 2 and 3. These findings should be taken into consideration in the debate on the procurement threshold levels in Sweden that has been taking place at least since 2009. Indeed, the level of a theshold does not only affect transaction costs of public procurement deals, which has been one of the main focuses in the above debate. It is also likely to distort incentives and/or alter decision-making of public buyer. While it is not immediately clear if these distortions will lead to improved or worsened economic outcomes, they should definitely be accounted for in regulation design.
- Different types of contracting authorities behave rather differently in public procurement. Therefore, the type of public buyer, and associated differences in incentives and outcomes, should also be taken into consideration in designing regulation and more generally in policy-making.
- There is an indication of strategic bunching of Swedish tenders under the EU threshold. However, the limitations of the existing data such as the inability to measure the number of bids per lot, and not per tender, the absence of other data from which to estimate the degree of competitiveness, and most importantly the complete lack of data on post-award outcome measures such as quality of the supply, cost overrun or delivery delays make the task of assesing the impact of the thresholds on the procurement outcomes very difficult, if at all possible. Swedish government may, thus, consider investing into improved collection and reliability of Swedish procurement data.
- The analysis of TED data on tender values suggests that the interpretation (and implementation) of the EU procurement regulation in its part concerning value reporting varies a lot across the EU Member States. This finding calls for better communication between the EU and the national public procurement authorities, which is likely to contribute to better transparency of procurement data, and ultimately to more efficient public procurement in the EU.

6 References

Bandiera, O., Prat, A. and Valletti, T. (2009). "Active and Passive Waste in Government Spending: Evidence from a Policy Experiment." *The American Economic Review* pp. 1278-1308.

Bergman, M., Lundberg, S. and Spagnolo, G. (2014), "Contract Design, Awarding Rule, Bidding Behavior ad Contract Enforcement: Explorative Evidence from Swedish Elderly-Care Procurement," paper presented at IPPC 6, Dublin.

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), pp. 749-804.

Coviello, D., and Mariniello, M. (2014). "Publicity requirements in public procurement: Evidence from a regression discontinuity design." *Journal of Public Economics* 109, pp. 76-100.

Coviello, D., Guglielmo, A., and Spagnolo, G. (2014). "The Effect of Discretion on Procurement Performance" Mimeo

Dini, F., Dimitri, N. and Piga, G. 2006, "When should procurement be centralized?" Ch. 3 in N.Dimitri, G.Piga and G. Spagnolo (Eds.), Handbook of Procurement, Cambridge University Press.

European Commission (2004a). Directive 2004/17/EC of the European Parliament and of the Council of 31 March 2004 coordinating the procurement procedures of entities operating in the water, energy, transport and postal services sectors.

European Commission (2004b). Directive 2004/18/EC of the European Parliament and of the Council of 31 March 2004 on the coordination of procedures for the award of public works contracts, public supply contracts and public service contracts

European Commission (2007). Communication from the Commission. Corresponding values of the thresholds of Directives 2004/17/EC and 2004/18/EC of the European Parliament and of the Council, (2007/C 301/01)

European Commission (2009). Communication from the Commission. Corresponding values of the thresholds of Directives 2004/17/EC, 2004/18/EC and 2009/81/EC of the European Parliament and of the Council, 2009/C 292/01

European Commission (2011). Communication from the Commission. Corresponding values of the thresholds of Directives 2004/17/EC, 2004/18/EC and 2009/81/EC of the European Parliament and of the Council, 2011/C 353/01 European Commission (2014a). Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement and repealing Directive 2004/18/EC

European Commission (2014b). Directive 2014/25/EU of the European Parliament and of the Council of 26 February 2014 on procurement by entities operating in the water, energy, transport and postal services sectors and repealing Directive 2004/17/EC

Guiso, L., Sapienza, P., and Zingales, L. (2004). "The Role of Social Capital in Financial Development." *The American Economic Review* 94.3 pp.526-556.

Golden, M.A., and Picci, L. (2005). "Proposal for a new measure of corruption, illustrated with Italian data." *Economics & Politics* 17.1 pp.37-75.

Grimm V., R. Pacini, Spagnolo G. and Zanza, M. 2006, "Division in Lots and Competition in Procurement," Ch., in N.Dimitri, G.Piga and G. Spagnolo (Eds.), Handbook of Procurement, Cambridge University Press.

Jascisens, V. (2014). "To Divide or Not - Threshold Effects in the Below Threshold Procurement in Latvia", Mimeo

Konkurrensverket (2011). Bättre statistik om offentliga upphandlingar, Konkurrensverket rapport 2011:5.

Konkurrensverket (2013). Siffror och fakta om offentlig upphandling. Statistik om upphandlingar som genomförts under 2012, Konkurrensverket rapport 2013:9

Konkurrensverket (2014). Siffror och fakta om offentlig upphandling. Statistik om upphandlingar som genomförts under 2013, Konkurrensverket rapport 2014:1

Lagen (2007:1091) om offentlig upphandling (LOU)

Lagen (2007:1092) om upphandling inom områdena vatten, energi, transporter och posttjänster (LUF)

McCrary (2008). "Manipulation of the Running Variable in the Regression Discontinuity Design: A Density Test". Journal of Economic Literature 142(2), 698– 714

Molander, P. (2009). "Regelverk och praxis i offentlig upphandling". Rapport till Expertgruppen för studier i offentlig ekonomi, 2009:2. Finansdepartementet.

Molander, P. (2013). "Höjd nivå för upphandling blir dyrt för skattebetalarna". Dagens Nyheter 11 May.

Palguta, Ján, and Filip Pertold (2014). "Corruption and Manipulation of Public Procurement: Evidence from the Introduction of Discretionary Thresholds." Mimeo

SOU (2011:73). "På jakt efter den goda affären – analys och erfarenheter av den offentliga upphandlingen". Delbetänkande av Upphandlingsutredningen 2010. Stockholm 2011.

SOU (2013:12). "Goda affärer – en strategi för hållbar offentlig upphandling". Slutbetänkande av Upphandlingsutredningen 2010. Stockholm 2013.

Appendix A: Bunching: density tests



Figure 3.1. Density tests for selected industries, 90% confidence intervals

Figure 0.2 Density tests for selected geographic entities, 90% confidence intervals





Figure 0.3. Density tests for Supplies and Services, 95% confidence intervals

Figure 0.4. Density tests for Public Works, 95% confidence intervals




Figure 0.5. Density tests for selected industries, 95% confidence intervals

Figure 0.6. Density tests for selected geographic entities, 95% confidence intervals



Appendix B: Interview questionnaire

In the following pages, the interview questionnaire underlying this particular compiled dataset is presented.

Sektion 1 Äldreenheten och upphandlingsfasen

Vi sparar den gamla numreringen även om frågor är flyttade eller borttagna inför stansningen av de första intervjuerna.

Org_proc

1.1. Vem upphandlar särskilda boenden?

- 1. Äldrenämnden eller motsvarande
- 2. Upphandlingsenheten eller motsvarande

Org_proc_b

1.1b Är det samma för hemtjänst, enstaka platser för äldre, andra tjänster inom omsorgsområdet?

- 1. Ja
- 2. Nej

External

1.2. Får kommunen extern hjälp för genomförandet av upphandlingen av kontrakt för äldreomsorg och i så fall av vem? (Olika svar är möjliga. Indikera i så fall per typ av tjänst, t ex särskilda boenden, hemtjänst, enstaka platser...)

- 1. Nej, kommunen upphandlar själv Ja, av:
- 2. En närliggande kommun/en grannkommun eller av ett kommunförbund.
- 3. Ett företag specialiserat på upphandling där kommunen/kommuner eller ett av deras förbund är huvudman så som: SKL, Kommentus, Inköp Gävleborg eller Upphandlingsbolaget.
- 4. Ett kommersiellt bolag, en advokatbyrå eller annan likvärdig konsultfirma som har kommunens uppdrag att genomföra upphandlingen.
- 5. Annat, (förklara gärna)

Workers

1.3. Hur många anställda (inkl. administrativ personal och/eller

"deltidsengagemang") har den enhet (eller motsvarande) som arbetar med kvalitetskontroll (och evt upphandling av äldreomsorg om detta inte görs av upphandlingsenheten)? (Här räknar vi alltså inte in utförande personal, som jobbar praktiskt med social omsorg, och inte heller biståndsbedömare, oavsett om det finns sådan personal som är underställd den här enheten eller har gemensam chef.)

- Totalt:
- Educ_a: Med juristexamen:
- Educ_b: Med universitetsexamen inom ekonomi, ingenjörsexamen eller inom privat eller offentlig förvaltning?
- Educ_c: Med sjuksköterske- eller socionomutbildning eller motsvarande:
- Educ_d: Med gymnasieutbildning inom vård och omsorg.

Nu försöker vi ta reda på hur stor erfarenhet de har av upphandlingar. Vi behöver nödvändigtvis inte fråga om både 1.6 och 1.8, det räcker om vi vet hur långa kontrakten är (1.9) så räcker antingen 1.6 eller 1.8 för att räkna ut den resterande frågan.

1.4. På ett ungefär, uppskatta hur många upphandlingar som genomförs på den eller de enheter som upphandlade de/t aktuella kontrakten/t per år (upphandlingsavdelningen eller motsvarande eller äldreenheten eller motsvarande) Fokus äldrevård eftersom vi vet särskilt boende:

- Proc_year_tot: Totalt omsorgsrelaterat (inte kontorsmaterial etc även om det används i omsorgen):
- Proc_year_elderly: Hur många av dessa avser äldrevård?
- Proc_year_home: Hur många av dessa avser drift av särskilt boende respektive hemtjänstområde, dvs. inte bara enstaka platser.

Other_dept_a: Vi måste vända oss till annan avdelning:

Other_contracts:

1.4b Vid enstaka platser, är det individavtal eller ramavtal? Vi ramavtal, hur många företag?

- 1. Individavtal
- Ramavtal
 2b Antal:

1.5 Hur många kontrakt skriver/administrerar äldreenheten under normala förhållanden under ett år/vid en given tidpunkt?

- Contracts_tot: Totalt, alla kontrakt, omsorgsrelaterat:
- Contracts_elderly: Kontrakt rörande äldreomsorg:
- Contracts_home: Kontrakt avseende drift av särskilt boende eller för hemtjänstområde:

1.6 Length: Hur långa är kontrakten (ungefär)?

Vi måste vända oss till annan avdelning:

Utgå från att antal kontrakt = kontraktens löptid x nya kontrakt per år. Kanske är det lättare för dem att säga att de har 100 kontrakt med en typisk löptid på 4 år. Då kan vi räkna ut att de upphandlar 25 kontrakt per år. Eller så kan de säga att de upphandlar 25 kontrakt per år med en löptid på 4 år, då kan vi räkna ut att de förvaltar cirka 100 kontrakt. Osv.

ÖPPNA FRÅGOR

Organization:

1.7 Hur förhåller sig de tre funktionerna egenregiomsorg, biståndsbedömare och kvalitetskontroll till varandra? Har dessa tre funktioner en gemensam chef? Är de organiserade i separata enheter med egna underchefer? Ungefär hur många anställda finns inom de tre delarna? Be även om organisationsschema.

Coordination:

1.8 (Om den upphandlande och den ansvariga enheten inte utgör samma organisatoriska enhet). Hur koordinerar den upphandlande och den avtalande enheten arbetet med upphandlingen? (Öppen fråga)

Knowledge:

1.9 Förmedlas de kunskaper och erfarenheter som äldreenheten får under kontraktets löptid till de som sedan ska genomföra nya upphandlingar? I så fall, hur går detta till? (Ge exempel på möjliga svarsalternativ)

- 1. Nej, det görs inte alls
- 2. Medarbetare från äldreenheten deltar i en referensgrupp, eller liknande, som fungerar som stöd vid nya upphandlingar.
- 3. Medarbetare från äldreenheten tillfrågas systematiskt och regelbundet om hur utförarna lever upp till avtalet.
- 4. Medarbetarna från äldreenheten ombeds att skriva en rapport/ett omdöme i slutfasen, det vill säga när kontraktet löper ut
- 5. Utförarnas prestation av kontraktsuppfyllande bedöms regelbundet och systematiskt (vi återkommer nedan med frågor om hur sådan utvärdering går till)
- 6. Annat, nämligen:

Sektion 2 Kvalitetsuppföljning och resultat för särskilda boenden för äldre

A. Kvalitetsuppföljning och granskning

Routins_same

2.1 Har ni samma rutiner för boenden som drivs i egen regi, upphandlade boenden och LOV-boenden? Om inte, ange för fråga 2.2 till 2.11 vilka skillnader som finns.

- 0. Nej
- 1. Ja

Inspections_announced:

2.2. Genomför ni förannonserade granskningar/inspektioner av entreprenörerna/utförarna på plats.

- 0. Nej
- 1. Ja,

Om ja, vilka gör dem och hur ofta?

Inspections_surprise:

2.3 Har ni någon rutin att genomföra oannonserade granskningar/inspektioner på plats? (Om de inte svarar tydligt, ge exempel på svarsalternativen. Spontana observationer "när man ändå är på plats" i annat ärende räknas inte som en oanmäld granskning, det måste vara en planerad sådan.)

- 0. Nej, vi har inte avtalsenlig rätt att göra det?
- 1. Vi har möjligheten att göra det, men gör det inte/väldigt sällan. Om vi har misstanke om att företaget missköter sig kan vi göra det.
- 2. Ja, oregelbundet
- 3. Ja, regelbundet

Om ja, hur ofta görs detta i genomsnitt per kontrakt (boende)?

Surveys:

2.4 Använder ni egna enkätundersökningar för att utvärdera genomförandet (kvaliteten) av uppdraget, utöver den Socialstyrelsen gör? (Notera en frekvens för vardera typen av undersökning, där den viktigaste är den som riktar sig till användarna av tjänsten.)

- 0. Nej
- 1. Ja, riktade till användarna av tjänsten
- 2. Ja, riktade till personalen
- 3. Ja, riktad till utförarna, inkl. egen regi, t ex verksamhetscheferna.

Surveys_freq: Om ja, hur ofta? (Markera per ovanstående alternativ, 1- 3.) Om 1, hur skiljer sig den från Socialstyrelsens enkät? Om 2: Är det de medarbetarundersökningar som riktar sig till offentlig verksamhet eller fokuserar de även på kvalitetsfrågor (ej enbart hur personalen trivs etc)

2.5 Hur utvärderas/sammanvägs utfall av inspektioner?

Inspection_base:

a. Vilken är utgångspunkten för utvärderingen? (Ange helst ett enda svarsalternativ)

- 1. En checklista, lika för alla. (Baseras den i så fall helt eller delvis på de krav som anges i ett standardiserat förfrågningsunderlag? Eller krav som anges i lag? Vem har tagit fram checklistan? Följer de några allmänna riktlinjer såsom SKL:s uppföljningsguide, eller är det en egen lista?)
- 2. Det är upp till de tjänstemän som utför utvärderingen
- 3. Annat, nämligen:

Inspection_result:

- b. Hur bedöms resultaten? (Flera svar är möjliga)
 - 1. Men en numerisk poäng, totalt och/eller per delområde
 - 2. Med ett övergripande kvalitativt omdöme
 - 3. I löptext, olika beroende på situationen
 - 4. Med både text och numeriska poäng
 - 5. Annat:

Report:

2.6 Tar ni regelbundet fram en rapport som sammanfattar utfallet av uppföljning av genomförande för varje enhet? (Till exempel årligen)

- 1. Nej. Vi använder oss av olika instrument för att mäta enheternas kvalitét, men vi sammanfattar dem inte i en rapport.
- 2. Skriftligt på annat sätt, nämligen:
- 3. Ja i en årlig rapport

Report_public: Om ja, vilka får ta del av den? Är den offentlig? Kan vi få den? Om nej \rightarrow 2.7 och 2.8 Om ja \rightarrow 2.8

Collect_results: 2.7 Hur katalogiseras/samlas granskningsresultaten? (Ge exempel på svarsalternativ)

- 1. I en eller flera databaser
- 2. På kalkylblad i Excell, eller liknande
- 3. På papper
- 4. Annat, förklara
- 5. Inte alls.

Result_saving:

2.8 Hur länge och på vilket sätt sparas granskningsresultaten (Flera alternativ möjliga)

- 1. I kommunens reguljära arkiv.
- 2. I en särskild databas där uppgifterna rensas ut när kontraktet löpt ut eller efter viss tid (och i så fall, efter hur lång tid?)
- 3. I pärmar eller motsvarande som gallras när kontraktet löpt ut eller efter viss tid (och i så fall, hur lång tid?)
- 4. Annat, nämligen:

Contract_standard_bid:

2.9a En fråga om hur kontraktet "ser ut". Är det ett standardkontrakt, lika för alla tänkbara vinnare, där anbudet bifogas som bilaga? (Så när som på att priset kan variera om upphandlingen helt eller delvis baseras på pris.) Eller innehåller kontrakten förutsättningar som är olika beroende på vad utföraren erbjöd? T ex extra hög bemanning, större valfrihet kring maten, fler utflykter...

- 1. Standardkontrakt
- 2. Enl budgivning

Bid_inspections:

2.9b Om olika, påverkar det utvärderingen vid inspektioner?

Nej, samma för alla oavsett bud
 Ja,

Om ja, hur?

2.10 Händer det att inspektionerna visar på förhållanden som på ett negativt sätt avviker från era förväntningar och/eller de villkor som anges i kontraktet. Ange på en skala från aldrig till väldigt ofta i vilken mån du stöter på problem som kan betraktas som mindre, betydande, allvarliga respektive mycket allvarliga. *Obs: Ej Lex Sarah utan frågan avser vad som framkommer vid plats-inspektionerna. Fokus: huruvida åtgärder krävs, hur går detta till? Den här frågan gäller enbart upphandlade boenden.*

(Indikera ett svar för varje kolumn.)

	Problemets allvarlighetsgrad			
Frekvens	Mindre	Betydande	Allvarliga	Mycket allvarliga
Aldrig 1				
Sällan 2				
Ibland 3				
Ofta 4				
Väldigt ofta 5				

Failure_small: Med "Mindre" menas en brist som påpekas, men det kommunen *inte nödvändigtvis följer upp* att bristen åtgärdas.

Failure_significant: Med "Betydande" menas en brist som kommer att *kontrolleras vid nästa reguljära inspektion,* t ex om ungefär ett år. Man ser detta som en del i ett utvecklingsarbete, men det är inte akut.

Failure_serious: Med "Allvarlig" menas en brist som måste *åtgärdas omgående,* kanske också med en åtgärdsplan, och där kommunen kontrollerar att så skett inom högst 1-2 månader. Problemet diskuteras troligen med chefen för äldreenheten eller ännu högre upp i hierarkin.

Failure_very_serious: Med "Mycket allvarlig" menas en brist som leder till att kommunen börjar agera för att *häva kontraktet*. Det kan vara en allvarlig brist som påtalats men som inte åtgärdats inom rimlig tid. Eller problem som är så stora att man direkt bedömer att utföraren inte har kapacitet att lösa dem.

Failure_municipal:

2.10b Följdfråga: Hur ser det ut kommunens egna boenden?

- 1. Mindre vanligt med brister
- 2. Lika vanligt med brister
- 3. Mer vanligt med brister

Sektion 3 Kontrakt, kontraktsbrott, viten mm

A. Allmänna frågor om kontraktsrisk, kontraktsbrott, hävning av kontrakt mm

Dessa frågor gäller särskilda boenden

Financial:

3.1 Efterfrågar ni finansiella säkerheter från utförarna när ni upphandlar äldreomsorg, för varje kontrakt? *Se särskilt till att få svar på huruvida bankgarantier och liknande används.* (2)

- 0. Nej
- 1. Ja, vi försöker att säkerställa att utförarna har god ekonomi och åtminstone en viss minsta accepterad kreditnivå/betyg.
- 2. Ja, vi kräver att de tillhandahåller bankgarantier eller liknande försäkringar som täcker kostnaderna för fortlöpande verksamhet om utförarna skulle gå i konkurs.
- 3. Annat, nämligen

Om 2, gå vidare till 2.14 annars till 2.15

Financial_comments:

3.2 (Om 2 valdes som svarsalternativ ovan) Vilken typ av finansiell garanti efterfrågar ni från utförarna? Hur stora? Dvs. hur många månaders drift täcks?

Break_firm:

3.3 Har ni någonsin haft en leverantör som på eget initiativ avbrutit ett kontrakt innan löptiden gått ut?

- 0. Nej
- 1. Ja, till följd av konkurs
- 2. Ja, av andra anledningar

Break_firm_comments: Om ja, förklara varför och vad som hände sen? Blev det exempelvis en förlikning där företaget fick betala skadestånd?

Discontinue_firm:

3.4 Har en leverantör avböjt förlängning av ett kontrakt?

Nej
 Ja
 Discontinue_firm_comments: Om ja, varför?

Break_mun:

3.5 Har kommunen hävt något kontrakt i förtid?

0. 0. Nej

1. 1. Ja

Break_mun_comments: Om ja, hur ofta, när och varför? Beskriv också under vilka förutsättningar och av vilken anledning?

Discontinue_mun:

3.6 Har kommunen avstått från att utnyttja en förlängningsoption?

0. Nej

1. Ja

Discontinue_mun_comments: Om ja, hur ofta, när och varför? Beskriv gärna.

B. Viten, skadestånd och andra sanktioner

Fine_resp:

B3.7a Har ni kontraktsklausuler som ger kommunen rätt att göra avdrag på ersättningen till leverantören om den inte lever upp till en viss miniminivå enligt olika kvalitetsindikationer eller för vissa typer av konkreta kvalitetsavvikelser? Eller, alternativt, vitesbelopp som utfaller "automatiskt" med i förväg fastställda belopp. (Allmänna skrivningar om att underlåtelse att uppfylla avtalsvillkoren kan leda till att kommunen yrkar på skadestånd i allmän domstol räknas som nej.)

Nej
 Ja
 Om ja, besvara även 2.21b-d och 2.22.
 Annars gå vidare till fråga 2.23.

Fine_cause:

3.7b Om ja, vad kan utlösa ett sådant avdrag/sanktion eller "automatiskt" vite?

- 1. Avtalad minimibemanning understigs
- 2. Lågt brukaromdöme enligt brukarenkäter
- 3. Trycksår, fallskador, eller andra rapporterade fysiska skador
- 4. Medicinsk felbehandling, rapporter från medicinskt ansvarig sjuksköterska (MAS)
- 5. Dålig hygien vid inspektion
 - i. 6. Bristfällig dokumentation (rutiner,
 - personaldokumentation, osv) som påvisats vid inspektion.
- 6. Annat, nämligen:

Fine_freq:

3.7c Om ja, hur ofta gör ni i praktiken avdrag på ersättningen? T ex i snitt minst en gång per år eller månad per kontrakt, någon gång per år sammantaget för alla kontrakt, nästan aldrig...

Fine_discuss:

3.7d Om ja, diskuterar/förhandlar ni med leverantören innan ni genomför avdraget/sanktionerna efter att ni har påvisat att minimikravet för kvalité inte uppfyllts? (Efter att de fått en chans att åtgärda felet)

- 0. Nej
- 1. Ja

Court:

3.8 Har ni någonsin haft en tvist i allmän domstol gällande någon extern utförares äldreomsorg? (Vi bortser här från överprövningsärenden i förvaltningsdomstol kring själva upphandlingsprocessen)

- 0. Nej
- 1. Ja
- 2. Om ja, hur många gånger?
- 3. Court_comments: Om ja, vad rörde tvisten och vad hände?

Court_why_not:

3.9 Vilken är den främsta anledningen till att inga/så få tvister förekommer?

Performance_proc:

3.10 Påverkas valet av framtida entreprenörer av deras tidigare prestation?

- 0. Nej
- 1. Ja men enbart underförstått/Ja, något.
- 2. Ja

Performance_proc_comments: Om 2, förklara hur:

Sektion 4 Kvalitet och avtalsrelation i förhållande till specifika kontrakt

A. Information om det enskilda kontraktet. Om möjligt ställs samtliga frågor i denna sektion för samtliga kontrakt som ännu är gällande och för nyligen avslutade kontrakt, framför allt dem vi har data för.

Vår bakgrundsinformation:

- 1. Kontraktsnummer
- 2. Datum för tilldelning av kontraktet
- 3. Kontraktets startdag
- 4. Datum för beslut om förnyande om kontrakt/förlängning (om sådan möjlighet förelåg)
- 5. Sista dag då kontraktet fortfarande gällde

Award_problem:

4.1 Minns du om det förelåg några problem med att tilldela utföraren det här kontraktet?

0. Nej 1. Ja Om ja, förklara

Award_court:

4.2. Blev det någon form av tvist angående själva upphandlingen? Som gjorde att någon av de potentiella utförarna antingen hotade att gå till domstol eller faktiskt gick till domstol?

0. Nej 1. Ja Om ja, förklara

Quality:

4.3 Vilket är det allmänna intrycket av tjänstens genomförande med avseende på detta kontrakt? Om kontraktstiden ännu inte gått ut kan du svara utifrån hur du upplever att det är idag.

- 1. Exceptionellt bra
- 2. Väldigt bra
- 3. Bra
- 4. Tillfredställande
- 5. Inte tillfredställande
- 6. Med anmärkningar/problematiskt

Quality_mun:

4.4 På samma skala, hur vill du beskriva kvaliteten på den kommunala äldreomsorgen?

Quality_coop:

4.5 Hur skulle du vilja beskriva den affärsmässiga relationen till den aktuella leverantören? Dvs. hur smidigt har samarbetet mellan kommunen och utföraren fungerat? Här vill vi att du inte tar hänsyn till kvaliteten på själva tjänsten.

- 1. Exceptionellt bra
- 2. Väldigt bra
- 3. Bra
- 4. Tillfredställande
- 5. Inte tillfredställande
- 6. Med anmärkningar/problematiskt
- 7. Övrigt/annat:

Prolonged:

4.6 Förnyades det här kontraktet? (Frågan gäller bara om det funnits tillfälle att förlänga kontraktet.)

0. Nej, Om nej, varför? 1. Ja

Om nej, gå vidare till fråga 3.8

Consideration_discont:

4.7 (Om ja,) Fanns det några särskilda omständigheter som gjorde att ni övervägde att inte förnya kontraktet inom äldreenheten och/eller diskuterades det med utföraren, eller båda?

0. Nej1. JaOm ja, av vilken anledning?

Fine:

4.8 Har någonsin frågan om kostnadsavdrag för underprestation diskuterats, för det här kontraktet, inom äldreenheten eller med utföraren, eller båda?

0. Nej

- 1. Ja men det gjordes inte
- 2. Ja och det har också skett

Om ja på 2, varför?

Renegotiation:

4.9 Har det skett någon revidering eller omförhandling avkontraktet vad gäller pris, kvalité, avtalsförpliktelser eller tilläggstjänster mm efter att kontraktet tilldelats den här utföraren? Detta gäller både om det initierats av kommunen eller av företaget.

0. Nej 1. Ja Om ja, beskriv gärna hur.

Risks_court:

4.10 Har det förelegat några risker för rättstvister gällande det här kontraktet?

0. Nej

1. Ja

Om ja, blev det någon rättstvist? Vad handlade den om och vad hände? Om inte, varför? Blev det någon förlikning och vad innebar den?



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