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## **Is Public Procurement Efficiency Conditioned by Market Types? A critical test in the park and road sectors in Sweden.**

**Purpose:** to investigate the extent to which contracting out practices have led to perceived resource cuts in the Swedish park and road sectors.

**Design/methodology/approach:** E-survey sent to managers in park and technical departments in the municipalities. Response rate: 39.7%.

**Findings:** Decreased costs were found in 25% of the responding road departments and in 20% of park departments. 49% of the road departments responded “no change” or “increase” (48% parks). Findings indicate that tendering practices tend to be most commonly centered in Swedish metropolitan municipalities (Stockholm, Gothenburg and Malmö with suburbs), whereas such practices are not as common in medium-sized and rural municipalities. In addition, contracting out practices result from higher per capita budgets, rather than smaller ones.

**Research limitations/implications:** The research implications are that contracting out tends to occur “where the resources are”, whereas poorer municipalities either have to contract out — even if it is more expensive — or to combine contracting out with other provision models. The limitation of the data is that it based on managers’ perceptions, while hard data has been impossible to map.

**Practical implications:** The uniform assumption that contracting out saves public resources need to be considered in context and in accordance with the initial resources at hand. Contracting out is one option among several possible strategies, especially for medium-sized and smaller municipalities with small budgets.

**Social implications:** The rationalities of local government procurements are bounded by local market situations and local budget capacities.

**Originality/value:** This is the first study of manager’s perceptions in the Swedish park and road contexts.

**Keywords:** cost-efficiency, contracting-out, metropolitan municipalities, local park management, local road management

## 1. Introduction<sup>[1]</sup>

Since the initiation of procurement regulations in the public sectors, based on uniform models imported from the private sector it has generally been assumed that public procurement will reduce costs, (Murray, 2009). This paper argues that the extent to which contracting out practices has led to perceived resource savings depend on confounding factors such as municipal types and budget capacity. This study has used a quantitative approach to explore the attitudes of managers in the park and road sectors in Swedish municipalities — to date, few such studies have been carried out at micro-level in Sweden.

The article is part of the country comparison INOPS project, the overall aim of which is to investigate the maintenance practices in local park and road sectors across Denmark, Norway, Sweden, and the UK. INOPS focuses on *park* and *road* maintenance sectors at the municipal level, as previous studies, especially in the road sector, perceive this as the most useful case for testing public procurement practices because cost reductions are thought to be easier to find here (Blom-Hansen, 2003). In the INOPS project, a closely related sector, *parks*, has been added as a related sector area.

The authors aim to test the rationale behind private outsourcing, and more specifically whether contracting out leads to perceived resource cuts. To our knowledge, this attempt to further understand the general outsourcing practices in local governments has rarely been carried out in Swedish research.<sup>[2]</sup> Research into municipal procurement strategies is generally scarce in the literature and this paper contributes to addressing this gap.

The paper presents the empirical testing of two hypotheses derived from various elements of public procurement theory and discussion. Tested against the empirical data, the results contribute theoretically to the aspects of context and scale, which empirically implies that various contracting rationales may be activated dependent on which type of municipality they relate to. This is followed by a theoretical discussion of the central arguments from the previous discussions. The third section provides a contextual background prior to the discussion of methodological considerations in the fourth section. Section five presents the findings from the data, which are discussed further in section six. The conclusions are presented in the final closing section.

## 2. Marketization theory and its critics

Scandinavian states have undergone gradual marketization since the 1980s; however, these reforms lack evaluations, documentation, and research (Christensen and Læg Reid, 2011; Foss Hansen, 2011; Helby Petersen and Hjelmar, 2013). Especially after realising its membership in the European Union 1995, Sweden has stepwise adapted to its core procurement acts. Contracting out was initially introduced at the national level and subsequently also introduced at the local level. Compared to the Anglo-Saxon countries where privatization and contracting out have been more prominent, the Scandinavian countries have followed a more incremental trail. One thread of discussion has been concerned with the extent to which contracting out practices are due to liberal-conservative pressures. However, as previous findings suggest, there is no significant tension is expected to exist between these and opposing social democratic governments. We have therefore chosen to remove this aspect from our analyses (Pallesen, 2004; also confirmed by Sundell and Lapuente, 2012), especially as the park and road sectors are not typically seen as “election winning issues”.

### *The contracting out argument*

Early studies in the field of marketization in the 1980s and 1990s commonly concluded, or took for granted, that contracting out reforms were most likely to result in cost savings (Domberger and Jensen, 1997; Savas, 1987). These conclusions were set against the private sector (Murray, 2009), and based on assumptions about *economies of scale*, *the ownership argument*, *sharing of risks*, *increased flexibility and transparency*, and *cutting the labor costs*. It was assumed that contracting out uniformly would be a more advantageous solution for most governments, national, local, and worldwide (Blom-Hansen, 2003; Domberger & Jensen, 1997; Savas, 1987; Sultana *et al.*, 2012). Ideally, contracting out occurs when the public agency (in-house municipal administration) specifies what should be purchased and a number of potential private bids are collected. The most advantageous bid in relation to what was asked for in the procurement protocol wins. Lindholm (2009) studied the use of competitive tendering and contracting out within green space management in a number of Danish and Swedish municipalities, and stated that this was typically justified and applied with the aim of improving economic performance by reducing the cost of service provision. Fundamentally, these arguments stem from a rational choice research tradition.

### *The contracting out criticism*

One of the most significant criticisms of contracting out stems from transaction cost economy theory (Williamson, 1981). Carr *et al.* (2009, p. 407) have continued to discuss the risks, stating that:

*... city officials must weigh the anticipated efficiency against the risk the external supplier will fail to fulfill the terms of the agreement and the costs involved in minimizing this risk. Therefore, local officials must choose between producing services in-house, which may result in unnecessarily high production costs, and relying on another unit of government or on a private supplier to produce the service, which carries the risk of uncertainty and high transaction costs.*

The above quotation illustrates that the strategic choices are not made easily — nor measured. Arguments against contracting out, or limited such, are that *quality may decrease, in-house competence is needed in order to identify efficient contracts, effective contracting depends on effective monitoring once the contract has been awarded (and sanctions need to be imposed if the department responsible has been cheated)*. The risk of sub-contracting may be that it results in a loss of quality. Effective and competent control must be undertaken after park and road services are delivered, which demands up-to date competence from the tenderer. The *free-riding incentive* explains the kind of risk-taking that could be at stake in these relationships; however, for actors that are striving for renewed contracts it would be important to maintain decent standards of delivery and trust in the trading relationships. Therefore, continuity and the time dimension are also of theoretical importance, neither of which are discussed further here. The critical stance of marketization theory relies on the assumption that the public sector is driven by value systems that are different to those in the private sector, assuming that the qualities of their activities are worlds apart (Helby Peterson and Hjelmar, 2013; Vrangbæk *et al.*, 2013). From these somewhat opposing approaches to contracting out, we aim to test the extent to which the data at hand responds to the theoretical expectations.

#### ***Expectation 1: does contracting out cut costs?***

Theoretical expectations from contracting out are first and foremost directed to the expected cost reductions (Domberger and Jensen, 1997; Savas, 1987). Blom-Hansen investigated the Danish road sector and found a cost saving potential of 2.5 percent of the country's road maintenance budget (Blom-Hansen, 2003). Studies from Australia indicate possible savings of between 15 and 38 percent (Sultana *et al.*, 2012). Hodge (2000) found a potential saving of 6–12 percent and he also noted that documentation is most sufficient in technical areas such as garbage collection and cleaning (rather uniform processes), in contrast to welfare services. He therefore concluded that “expecting contracting to be a panacea for all public services, though, would be foolish” (*ibid.*, p. 246f; cf. Balle Hansen, 2010, p. 260). Other scholars found hefty transaction costs (Brown and Potoski, 2005), and market concentration and lack of competition (Dijkgraaf and Gradus, 2007). A meta-analysis of solid waste and water-services by Bel *et al.* (2010) found no evidence of cost reductions with private provision. In sum, the expectations of cost reductions are far from agreed upon among scholars, and potentially depend on specific circumstances of a cultural and situated nature. However, in this article we aim to test this argument by testing: *(a) whether contracting out has reduced costs in the municipal park and road sectors in Sweden.*

*Expectation 2: is contracting out dependent on municipal and market types?*

A second theoretical issue deals with the importance of market types in the municipalities that actively contract out. Johansson (2008) concludes that “[it] is ... shown that larger municipalities situated in metropolitan areas use external suppliers to a greater extent” (p. 258), a conclusion supported by Levin and Tadelis (2010). Larger municipalities seem to attract contractors, or be more likely to engage in tendering processes, compared to smaller municipalities (Kjær Foged, 2016; Vrangbæk et al., 2013). The aspect of *market character* consequentially also encompasses the urban-rural dimension.

Starting from a discussion of economies of scale, Bel (2012, p. 19) reviewed much of the earlier findings in the contracting out debate; he concluded:

*It should be noted that the size of the municipality in a given setting may be of central importance: increasing returns to scale are more frequent in countries where municipalities have a small average size (population), such as the US and Spain. In contrast, in countries where the average size (population) is substantially higher, such as Sweden and the Netherlands, economies of scale are usually absent. This is often the case of economies of density, which are more often than not absent.*

Market type is also closely related to municipal size, measured in population numbers, a factor that has also been in focus in relation to make-or-buy discussions. The positive effects of population size have been frequently reported (Houlberg and Dahl, 2010; Kjær Foged, 2016; Sundell and Lapuente, 2012), whereas no, or mixed results have been found by other scholars (Bel and Fageda, 2009; Bhatti, Olsen and Pedersen, 2009). This argument relates to earlier Danish research discussions on municipal economies of scale, the technical and administrative competencies of small municipalities, and the availability of private contractors. Pallesen (2004) found modest size effects in Denmark but was surprised to find that more prosperous municipalities were most likely to contract-out.

The investigation of market type is clearly a matter that is relevant in relation to contracting out practices. Based on these theoretical findings, we also aim to investigate: *(b) whether or not the municipal type and market character explain the practice of contracting out.* We deliberately chose not to work on “municipal population size” as this variable would be too incomplete. Instead we will work on types of municipalities that are associated with diverging market characteristics.

### 3. Why test the assumptions in Sweden?

The formulated propositions, (a) and (b), could easily be tested wherever public procurement reforms have been implemented. A country comparison would be complicated as we would have to deal with different contexts, diverging degrees of procurement implementation, and possibly various specifications of how policy sectors are divided. By choosing to focus on the local governments of one country we gained the advantage of not dealing with variation that relates to diverging national characteristics. Instead we acquired a sample of 290 local government units. Several local government studies have already been carried out in Denmark (Balle Hansen, 2010; Blom-Hansen, 2003; Houlberg and Dahl, 2010; Kjær Foged, 2016; Lindholst, 2009; Pallesen, 2004; Helby Petersen and Hjelmar, 2013; Vrangbæk *et al.*, 2013), but as there are very few similar studies in Sweden we thought it would be a good idea to compare the earlier Danish findings with those that result from research in a neighbouring country with a similar constitutional setting. But how were the tool of contracting out introduced in Sweden in the local park and road sectors?

The Law on Public Procurement (LOU) first applied to the state level when it was introduced in 1986. Local governments were not initially mentioned in the law. The present law (2013:2007:1091) on public procurement, that came into effect in January 2008, supports the EU directive 2004/18/EG on public procurement (from 2004/17/EG and 2004/18/EG to the most recent updates).

More than 60 bill. €are subject to the public procurement regulations out of the Swedish public share of GDP.<sup>[3]</sup> The central point of discussion in Sweden has been whether LOU applies in municipalities when buying services from municipally owned companies.<sup>[4]</sup> The revised version of LOU that came into effect in January 2013, allow municipalities to buy from own companies without applying LOU (a specific “in-house” exception). This means that municipalities that run park and/or road services in the form of a publicly owned company, or in association with other municipalities, do not necessarily need to activate LOU in order to maintain their everyday tasks. Nor does the state regulate how the municipalities should organize these activities. As a matter of fact, it is currently considered impossible to gain a general overview of the level of public tendering in Sweden.

The (national) Swedish Forest Agency does not support or maintain forest land. Rather, it acts as the governmental authority in relation to predominantly private forest owners. The primary task of the Forest Agency is to ensure that forest laws and regulations are respected. Most of the existing park responsibilities relate to the municipal owned resources. Randrup and Persson (2009) found that in Sweden 60 percent of the park authorities carry out control functions. In 2005, 26 percent of green maintenance costs in Swedish municipalities went to private companies.

There are two major national agencies in the road sector. The Swedish Transport Administration is responsible for the long-term planning of the railways, roads, shipping, and air transport systems. In addition, it is responsible for construction and maintenance of state roads and railway networks. The Swedish Transport Agency is in charge of devising regulations, supporting the quality of the transport services, and maintaining registers of transport vehicles. The analysis of the local road sector in this study relates only to the roads that are managed by the second tier of government, the municipalities.

#### *Applying LOU for parks and road administration at municipal level*

Local governments primarily operate under the Municipal Law (1991:900), together with complementary national laws. Local governments exercise and execute these laws and regulations. Local governments must adapt to local circumstances of geography, population, development needs, public opinion, and economy by passing political decisions through each and every local parliament, or possibly through their park or road boards. These boards are rarely devoted solely to these responsibilities. Rather, these responsibilities are normally integrated into the work of the boards with labels such as, *the city building board*, *the traffic board* (including parks and local roads), *the environment and traffic board*, etc. The people responsible for tendering issues might be located in the administration within these boards, but such roles might also be located in a general *tendering office* that carries out most of the public procurement for all sectors of the municipality. This complicated and non-systematical organization is one important reason why tendering statistics of this type are non-existent,, because they are merged with several different policy fields, and because contracting out issues are not generally located in one single point in the local governments but in a number of such nodes.



#### **4. Study design and methodological considerations**

A desirable strategy for testing the formulated questions would have been a pre-existing source of data on the contracting out practices in the park and road departments. Unfortunately, such a register does not exist and the team decided it would be too costly to put this database together ourselves. The INOPS project chose the second best option, to construct a survey and distribute it among the managers in focus. We estimate that the targeted managers have the expertise and the most in-depth knowledge of the field under scrutiny.

The data collection process began with the establishment of a register of all likely responsible chief administrators in the park and road sectors in Sweden.<sup>[5]</sup> In order to create an up-to-date e-mail register, our research assistant helped us to survey all the 290 municipalities using webpages and telephone calls when necessary. The e-questionnaire was sent out to the municipalities in May and June 2015 using the survey program, SurveyXact. Initial invitations were followed-up by reminders. This resulted in 115 responses, equivalent to 39.7% of the 290 municipalities. Bias was tested with respect to regional distribution and the sample reflected the total population well (for full details see the technical report, Lindholst *et al.*, (2015). Thus, we found the survey to be representative for the municipal level.

In order to test the research questions, which comprise of two different dependent variables (resource savings, contracting out or not), the authors constructed an initial model (Figure 1).

Figure 1

The data presentation below will elaborate on the different contracting out rationales, and will then test for cost-efficiency. We will also test for how the choice of market outsourcing relates to possible explanations, such as municipal market types and budgetary capacities.

## 5. Findings from the municipal park and road sectors in Sweden

Let us first consider the various management rationales; how management tasks are solved in the public administrations of local parks and roads. Table 1 provides an initial mapping of the mixed practices in the two sectors.

Table 1

In-house provision (only) is more common in the park sector (42%) than it is in the road sector (17%). Equally, contracting out (only) is slightly more common in the road sector (19%) than in the park sector (12%). The main bulk of management is produced using mixed rationales: 42% in the park sector (33+9) and 62% in the road sector (56+6). An additional management alternative is engaging in co-owned municipal companies, which comprise only a small fraction of the total sample (4% in parks, 2% in roads). This initial finding that mixed rationales are used is an important step, but it complicates the research. This means that the sectors under scrutiny cannot be judged as dummy variables (full contracting out vs. none), and therefore a more nuanced approach needs to be exercised. Contracting out or not is not a single “yes” or “no” issue; rather it is “sometimes”.

### *What about cost efficiency?*

The theoretical assumption behind contracting out practices is first and foremost that “contracting out reduces costs”, as was presented in argument (a): *does contracting out reduce costs in the municipal park and road sectors in Sweden?* In the INOPS e-survey, a question on possible cost cuts, decreases, or no change, was formulated as: *“How much cheaper or more expensive do you calculate that the procured maintenance services were in the latest procurement?”* Figure 2 reveals that the assumptions of cost savings in the park and road sectors are confirmed only in a small number of the responding municipalities.

Figure 2

Cost savings were registered in 16 municipalities in the case of roads (25%), and in only 9 in the case of parks (20%). It was more likely that tendering municipalities experienced *no cost changes*, or even *increased costs*, which occurred in 15+6 of the local park sectors (together, 48%), and in 32 of the local road sectors (together, 49%). From the municipalities who reported any of the responses *cost decrease*, *no cost change*, *cost increase*, or *don’t know*, a surprisingly small number reported “cost decreases”, a finding that does not provide overwhelming support for the theoretical assumption in this regard.

How can this finding be understood? What about departments that have awarded several tenders as compared to those who have only awarded one? One possibility is that larger savings occur early, but decrease with the number of procurements. Table 2 shows that for nine municipalities in the park sector, and for 15 in the road sector, cost decreases have occurred. However, for those who have only awarded one or two tenders, the likelihood that they would end up with *reduced cost changes* is 5 to 7 (*no cost changes+increased costs*) in the park sector, and 3 to 8 in the road sector. Similarly, those who awarded three or more tenders would end up with reduced costs with a likelihood of 4 to 12 in the park sector, and 12 to 20 in the road sector.

Table 2

This means that our guess that reduced costs would be most easily achieved from the early tenders was confirmed for the park sector (chance of 0.71), but disconfirmed for the road sector (0.38). Chances increase in the road sector with several numbers of tenders (0.6), which disconfirms our expectations. However, cost reduction expectations are confirmed in the park sector,  $0.33 < 0.71$ .

A question can be raised here as to why the neutral middle category should be counted together with the category of increased costs. The argument here is that we are testing for decreased costs against other alternatives, which in this case are “no cost change” and “increased costs”. Indeed, more municipalities experienced decreased costs than increased costs (both parks and roads), but if we respect the importance of the middle category in relation to the theoretical expectation, the chance that a municipality ends up with neutral or increased costs (opposing argument) is greater than the chance of ending up with decreased costs (tested argument).

### *Which role do municipal types play for contracting out?*

Let us continue to delve into the municipal market type argument, as presented in (b) earlier. We will make use of the original nine municipal categories used by the Swedish Association of Local Authorities and Regions (SALAR), which builds on various characters and traits among the municipalities.<sup>[6]</sup>

Indeed, it would have been nice to work with the full nine categories, but as we are dealing with a small n material, we need to collapse the categories into three. Furthermore, it is clear that the metropolitan category is associated with higher population numbers, whereas the rural category is related to small population numbers. We argue that it is preferable to work with the SALAR-classification as even small municipalities can be embedded into metropolitan regions. These categories cover *market type*, *population density*, and the *urban-rural dimension* in one single variable. Hence, the *metropolitan* category includes the major three cities and their surrounding suburban municipalities. The *medium-sized* category includes commuter municipalities, tourist municipalities, and commodity producing municipalities. Finally, the *rural* category includes various rural classifications.

When testing the relationship between tendering practices (one or several times=1; never=0), municipal types, and per capita budget for the two sectors, Table 3 reveals a clear linearity in the road sector where metropolitan municipalities also tend to have larger per capita budgets among municipalities that exercise contracting out, whereas medium-sized and rural municipalities manage smaller budgets, especially among those who do not contract out ( $\eta^2=0.17$ , regressed  $r^2_{adj.}=0.08$ ). The relationship is much weaker in the park sector ( $\eta^2=0.064$ , regressed  $r^2_{adj.}=0.00$ ), but it is clear that the budget-level is higher in the contracting out metropolitan municipalities. The standard deviations for budgets are surprisingly large across the municipalities, with a mean  $\min_{parks}=13.00$  SEK per capita and a  $\max_{parks}=4\ 406$ , and  $\min_{roads}=1,30$  SEK per capita, and a  $\max_{roads}=3\ 901$  SEK per capita.

Table 3

Finally, we tested for municipal size, contracting out, and resource change, and as can be seen in the columns to the far right, they all indicate cost savings. This is good news for the initial forecast about cost-savings, but how do these 2% savings in the park sector and 3% savings in the road sector relate to our findings in Figure 1 and Table 2?

Figure 1 clearly shows that 20% of the municipalities decrease their park costs (mean=-15%), which relates to nine municipalities. In Figure 1 we also learned that 25% of the municipalities decreased their road costs (mean=-16%), which accounted for 16 municipalities. This implies that few municipalities experience a substantial decrease, which is distributed across all municipalities when we calculate a general crossover mean. This might lead to false conclusions, or expectations. Table 2 shows that there are some conditional aspects involved; chances for resource savings are not guaranteed, even if odds are roughly the double for entering the park sector than the road sector at first strike. Table 3 shows that there are no cost efficiencies in the road sector in rural municipalities, and a

linear relationship of  $\eta^2=0.10$  is found here. The corresponding relationship is weaker in the park sector,  $\eta^2=0.06$ .

Table 3 illustrates another interesting piece in the puzzle: that contracting out practices seems to go hand in hand with municipalities allocating larger budgets for road maintenance (the relationship is weaker for the park sector, but also evident). This can be interpreted in two ways. Either, contracting out is not possible where contracts are perceived as “too small”, or, contracting out is not a viable strategy if it is perceived as “risky” or not cost-saving. This evidence rather strongly supports the conclusion that the *municipal market character*, together with the *budget share per capita*, contribute to the explanation of whether contracting out practices are present or not —proposition (b). We have also shown that resources are saved with 2 per cent in the park sector, and 3 per cent in the road sector, which is not a negligible amount, and which favors metropolitan municipalities in the road sector. However, municipal type seems redundant for the park sector. This confirms proposition (a) with a partial condition from proposition (b). However, we should bear in mind that the resource decreases that are in evidence here relate to a small number of municipalities that experience considerable savings. For the great bulk of municipalities there is no change at all in the cost, and a few end up with increased costs. Therefore, cost saving is not a given outcome.

## 6. Theoretical implications and practical lessons

Contracting out in the park and road sectors in Swedish municipalities can save economic resources, but this is not inevitable. The cost effects found were -2% for the park sector, and -3% for the road sector, but this result is only for the few and could also be a consequence of perceived measures among the study population. The majority of the municipalities who contract out end up with no cost change, or even increased costs. The cost saving argument (a) was applicable for 20–25% of the respondents (parks-roads), but not for the remainder. Therefore, the cost-saving argument is accepted, but with conditions. Contracting out seems to be more common and rational in city regions with well-developed markets and higher budget-shares per capita (Johansson, 2008; Kjær Foged, 2016; Levin & Tadelis, 2010; Vrangbæk *et al.*, 2013). The findings also support the Danish finding by Pallesen (2004), who concluded that, “*contracting out is the politics of “good times”, rather than a tool to solve local government economic problems*” (p. 575). This result rejects the suggestion that “contracting out will save your money”; rather, it should be complemented with “it saves your money, if you are lucky”. Municipalities with smaller budgets in the study were less likely to take the risk of ending up with no savings or with increased costs, which support the transaction cost type of arguments in previous studies (Carr *et al.*, 2009; Williamson, 1981). The municipal economy of scale argument, proposed by Houlberg and Dahl (2010) and Kjær Foged (2016), is supported here. *No cost*

*change* is the most likely outcome and, hence, contracting out is a possible, but not necessarily an attractive, option compared to other strategic possibilities, or to the *status quo*.

A possible objection to this is that “saving does not come immediately”, and our study also shows that this is true in the Swedish local road sector where perceived savings appears later. Yet, for the Swedish park sector, perceived savings tend to appear early and decrease later. Therefore, this argument provides no general rule of thumb.

Further, our study shows that the assumption of cost-cuts is not universal; it must be conditioned by market-type and, possibly, also whether there is a larger or a smaller budget to begin with. Contracts go where the money is, and resource cuts are more likely to happen where the budgets are already at high levels. However, contracting out is not “the only kid in town” and a large number of municipalities exercise mixed rationales that deserve further research attention.

Hence, as a result of this study we are less sure that full contracting out is the ideal way to go. It should not be used as a blueprint, disconnected from local context and scale. Rather, a mix between contracting partners for relevant purposes and in-house maintenance for other aims is probably the more realistic goal. This is not least because efficient contracting out depends on having a qualified in-house capacity to formulate tendering specifications, to be able to monitor that services and standard qualifications are delivered as agreed, and to be able to implement sanctions in cases of free-riding. Effective post-controls also have a price tag. The lessons learned here are:

- Contracting out sometimes saves money, most likely not.
- The risks of not saving, or even of increasing costs, are holding medium-sized and smaller municipalities back from the contracting out rationale.
- Municipalities with larger per capita budgets, and hence a larger risk-capacity, are more likely to contract out. This most often corresponds with metropolitan regions and effective markets.

The limitations of the data, however, are that it is based on managers’ perceptions and not on hard data. We believe that micro-studies help us to further understand the strategic considerations in play. Future research should employ in-depth case studies to investigate smarter management rationales, contracting out, and other issues.

## 7. Conclusion

The hypothesis of cost efficiency in the park and road sectors of the Swedish municipalities holds for “the few lucky ones”, as it is more likely that newcomers end up with no cost change, or even with increased costs. Cost efficiency is often conditioned by municipality market type and budget size. Cost efficiency holds true for the metropolitan city regions (Stockholm, Gothenburg, Malmö) with regard to roads, but less so for parks. In addition, budget sizes per capita effects who is or is not contracting out, especially in the road sector. This reflects the fact that local context matters, but also its resources, as resource cuts seem to relate to the already high spenders. Contracts go where the resources are. However, medium-sized or rural municipalities may employ contracting out as a strategy because they sometimes lack in-house capacity or because they prefer flexibility in choosing forms of maintenance. This, approach, however, is not necessarily cheaper.

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## 8. References

- Balle Hansen, M. (2010), “Marketization and economic performance”, *Public Management Review*, Vol. 12, No. 2, pp. 255–274.
- Bel, G. (2012), “Local government size and efficiency in capital intensive services: what evidence is there of economics of scale, density and scope?”, working paper 12–15, International Center for Public Policy, Atlanta.
- Bel, G. and Fageda, X. (2009), “Factors explaining local privatization: a meta-regression analysis”, *Public Choice*, Vol. 139, No. 1, pp. 105–119.
- Bel, G., Fageda, X. and Warnerm, M. E. (2010), “Is private production of public services really cheaper? A meta-regression analysis of solid waste and water services”, *Journal of Policy Analysis and Management*, Vol. 29, No. 3, pp. 553–577.
- Bhatti, Y., Olsen, A. L. and Pedersen, L. H. (2009). ”The effects of administrative professionals on contracting out”, *Governance*, Vol. 22, No. 1, pp. 121–137.
- Blom-Hansen, J. (2003), “Is private delivery of public services really cheaper? Evidence from public road maintenance in Denmark”, *Public Choice*, Vol. 115, No. 3–4, pp. 419–438.
- Brown, T. L. and Potoski, M. (2005), “Transaction costs and contracting: the practitioner perspective”, *Public Performance & Management Review*, Vol. 28, No. 3, pp. 326–351.

- Carr, J. B., LeRoux, K. and Shrestha, M. (2009), "Institutional ties, transaction costs, and external service production", *Urban Affairs Review*, Vol. 44, No. 3, pp. 403–27.
- Christensen, T. and Lægreid, P. (Eds.) (2011), *New Public Management*, Ashgate Publishing Ltd, Farnham, Burlington.
- Dijkgraaf, E. and Gradus, R. H. J. M. (2007), "Collusion in the Dutch waste collection market", *Local Government Studies*, Vol. 33, No. 4, pp. 573–588.
- Domberger, S. and Jensen, P. (1997), "Contracting out by the public sector: theory, evidence, prospects", *Oxford Review of Economic Policy*, Vol. 13, No. 4, pp. 67–78.
- Foss Hansen, H. (2011), "NPM in Scandinavia", in Christensen, T. and Lægreid, P. (Eds.), *New Public Management*, Ashgate, Burlington, pp. 113–129.
- Helby Petersen, O. and Hjelm, U. (2013), "Marketization of welfare services in Scandinavia: a review of Swedish and Danish experiences", *Scandinavian Journal of Public Administration SJPA*, Vol. 17, No. 4, pp. 3–20.
- Hodge, G. (2000), *Privatization — An International Review of Performance*, Westview Press, Boulder.
- Houlberg, K. and Dahl, P. S. (2010), "Konkurrenceudsættelse i Danske kommuner — kommunalreformen som fødselshjælper", *Politica*, Vol. 42, No. 2, pp. 163–182.
- Johansson, T. (2008). "Municipal contracting out: governance choices, misalignment and performance in Swedish local government", *Financial Accountability & Management*, Vol. 24, No. 3, pp. 243–264.
- Kjær Foged, S. (2016), "The relationship between population size and contracting out public services: evidence from a quasi-experiment in Danish municipalities", *Urban Affairs Review*, Vol 52, No. 3, pp. 348–390.
- Levin, J. and Tadelis, S. (2010), "Contracting for government services: theory and evidence from U. S. cities", *The Journal of Industrial Economics*, Vol. 58, No. 3, pp. 507–41.
- Lindholst, A. C. (2009), "Contracting-out in urban green-space management: instruments, approaches and arrangements", *Urban Forestry & Urban Greening*, Vol. 8, No. 4, pp. 257–268.
- Lindholst, A. C., Balle Hansen, M. and Severin, M. (2015), "INOPS Survey data report Sweden", Unpublished. May be obtained upon request from acl@dps.aau.dk.
- Murray, J. G. (2009), "Improving the validity of public procurement research", *International Journal of Public Sector Management*, Vol. 22, No. 2, pp. 91–103.
- Pallesen, T. (2004). "A political perspective on contracting out: the politics of good times. Experiences from Danish local governments", *Governance*, Vol. 17, No. 4, pp. 573–587.
- Randrup, T. and Persson, B. (2009). "Public green spaces in the Nordic countries: development of a new strategic management regime", *Urban Forestry & Greening*, Vol. 8, No. 1, pp. 31–40.
- Savas, E. S. (1987), *Privatization: the key to better government*, Chatham House Publishers, Chatham.
- Sultana, M., Rahman, A. and Chowdhury, S. (2012), "Performance based maintenance of road infrastructure by contracting — a challenge for developing countries", *Journal of Service Science and Management*, Vol. 5, No. 2, pp. 118–123.
- Sundell, A. and Lapuente, V. (2012). "Adam Smith or Machiavelli? Political incentives for contracting out local public services", *Public Choice*, Vol. 153, No. 3–4, pp. 469–85.
- Vrangbæk, K., Helby Petersen, O. and Hjelm, U. (2013). "Is contracting out good or bad for employees? A review of international experience", *Review of Public Personnel Administration*, Vol. 35, No. 1, pp. 3–23.
- Williamson, O. E. (1981). "The economics of organization: the transaction cost approach", *The American Journal of Sociology*, Vol. 87, No. 3, pp. 548–77.



## Notes

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INOPS stands for *Innovations in the organization of public-private collaboration in an international perspective with a focus on technical maintenance services*. See the technical report by Lindholst, Balle Hansen and Severin (2015).

<sup>2</sup> The authors are aware of two studies of public procurement in Sweden, but these have little relevance for our study here. The first used politicians' attitudes data, to ask whether decisions to contract out are made for ideological reasons or, were triggered by electoral competition and hindered by larger numbers of veto-players, where the latter aspect were the major finding (Sundell and Lapuente, 2012). The second study discusses make-or-buy choices in the elderly care sector, dealing with transaction costs. The study shows that the use of external suppliers are more common in metropolitan areas, less common with left-wing governments, and that too much vertical integration leads to higher costs (Johansson, 2008). Both of these studies deal with data that are quite different from the kind of data in the present INOPS-project. However, their conclusions are, nevertheless, of great interest for contracting out discussions.

<sup>3</sup> The national agency with special responsibility for this and for surveys and competition issues is the Swedish Competition Authority. All tendering activities are channeled through a number of private actors; see, for example, [www.opic.com](http://www.opic.com), [www.visma.se](http://www.visma.se), [www.upphandlingsstod.se](http://www.upphandlingsstod.se) and <http://upphandling24.idg.se>. However, no central database exists for this information. A cost-free alternative is [www.e-avrop.com](http://www.e-avrop.com).

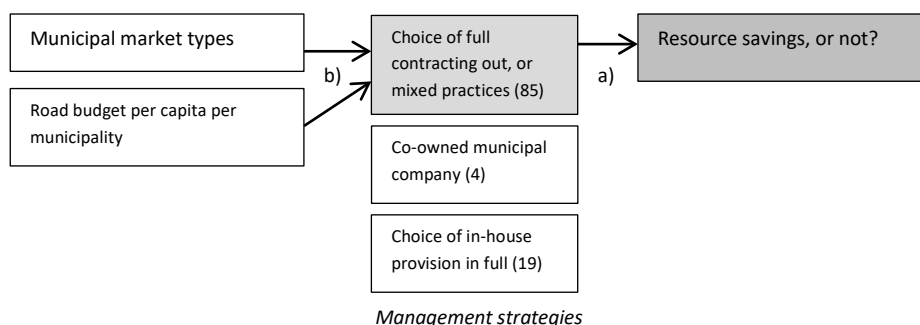
<sup>4</sup> There has been an on-going discussion for many years as to whether public agencies had to publicly tender a service. In the Teckal-criteria expressed in Swedish law in 2013 (based on the Teckal case from 1999, C-107/98 Teckal), public agencies can buy without tendering from their own companies or from associations in which the municipality is a member if the tendered service/products are the primary activity of that company or association.

<sup>5</sup> We are deeply indebted to research assistant Johanna Selin for the detailed and responsible help INOPS received at this fatal stage of the project. Thank you for all the telephone calls and documentation!

<sup>6</sup> Detailed specifications on the definitions of the municipal types can be found at <http://skl.se/tjanster/kommunerlandsting/faktakommunerochlandsting/kommungruppsindelning.2051.html> (accessed 15<sup>th</sup> May, 2015).

**Figure 1.**

**The contracting out rationale – a model**



*Comment: numbers relate to number of municipalities exercising different rationales in the road sector. Cf. Table 1.*

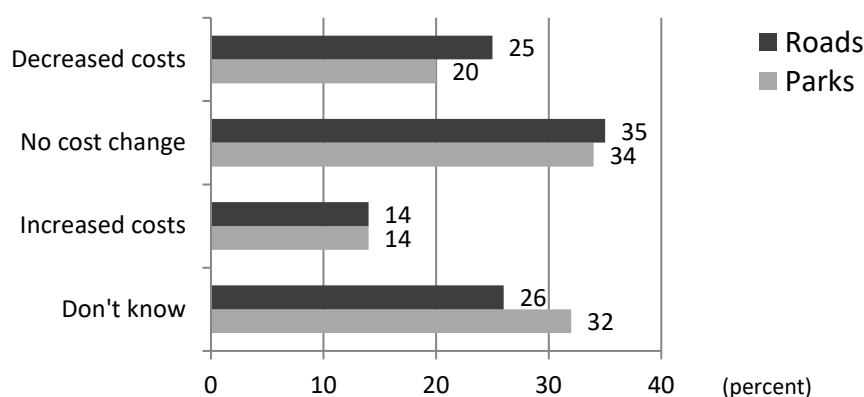
**Table 1.**

**Provision of park and road services by different types of provision (number)**

Type of provision	Park maintenance		Road maintenance	
	number	%	number	%
Question: 'Who solves maintenance tasks for your department?'				
Use of in-house provision (only)	42	42	19	17
Use of co-owned municipal company (only)	4	4	2	2
In-house provision AND private contracting	33	33	59	56
Mixed use of many provision models	9	9	6	6
Private contracting (only)	12	12	20	19
Total	100	100	106	100

*Comment: Number of internal response drop-outs to the questions were 15 for parks and 9 for road maintenance.*

**Figure 2. Cost effects of public procurement in park and road municipal sectors (percent of tendering municipalities)**



*Comments: Total number of tendering park departments are 115, total number of road departments are 115. Question: "How much cheaper or more expensive do you calculate that the procured maintenance services were in the latest procurement?" Complementary responses were given in "% cheaper", "% more expensive", "neither cheaper nor more expensive", or "don't know".*

**Table 2.****Number of procurements \* economic effect (number)**

Type of provision	Park maintenance			Road maintenance		
<i>Question: 'How many times have maintenance tasks in your areas of responsibility been contracted out in the past ten years?'</i>	<i>Decreased costs</i>	<i>No cost change</i>	<i>Increased costs</i>	<i>Decreased costs</i>	<i>No cost change</i>	<i>Increased costs</i>
Three or more procurements	4	10	2	12	17	3
<i>Odds</i>	4:12 (0.33)			12:20 (0.6)		
One or two procurements	5	4	3	3	5	3
<i>Odds</i>	5:7 (0.71)			3:8 (0.38)		
<b>Total number of municipalities</b>	<b>9</b>	<b>14</b>	<b>5</b>	<b>15</b>	<b>23</b>	<b>8</b>
<i>Odds total</i>	9:19 (0.47)			15:31 (0.48)		

**Table 3.****Contracting out in park and road sectors, per municipal type, budget, resource savings**

Municipal type	Park maintenance budget per capita (SEK)		Road maintenance budget per capita (SEK)		Provision by contracting out	Resource change* for those who contracted out	
	<i>Mean SEK per capita, per municipality (n)</i>	<i>Stdev</i>	<i>Mean SEK per capita, per municipality (n)</i>	<i>Stdev</i>		<i>Park Sector per cent, n</i>	<i>Road Sector per cent, n</i>
Metropolitan municipalities	540 (23) 506 (1)	883 -	1 147 (21) 546 (1)	1 064 -	Yes, one or several None*	-.01 (16)	-.06 (21)
Mid-sized	294 (8) -	235 -	306 (7) -	231 -	Yes, one or several None*	-.04 (6)	-.02 (13)
Rural municipalities	168 (9) 87 (2)	156 54	513 (8) 130 (1)	397 -	Yes, one or several None*	-.03 (8)	.00 (14)
All	407 (40) 228 (3)	694 244	842 (36) 338 (2)	908 294	Yes, one or several None*	-.02 (39)	-.03 (48)
<i>Eta<sup>2</sup></i>	.06 <sup>A</sup>		.17 <sup>A</sup>			.06 <sup>B</sup>	.10 <sup>B</sup>

*Comment:* \* = Resource change relates to latest procurement by percentage. <sup>A</sup> = eta is based on municipal type, budget per capita, and contracting out. <sup>B</sup> = eta is based on municipal type, contracting out, and resource change.