IS THE QUALITY OF THE OUT-SOURCED PUBLIC SERVICES CONTINGENT ON THE QUALITY OF BUREAUCRACY?

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ABSTRACT

Outsourced public services make up about half of the total public service delivery in OECD countries today and have increased dramatically over time. Reformers expected that outsourcing would both cut costs and increase quality through rather basic market logic. This paper investigates the impact of outsourcing on one of the fundamental goals of outsourcing – the quality of services. It draws on literature that suggests that markets for public services might often be dysfunctional, especially for complex goods, where highly incomplete contracts are rule, and that we should in fact expect a negative effect of outsourcing on service quality. However, we argue that potential negative consequences can be counter-acted, at least to some extent, with more competent and motivated personnel on the buyer’s side, as contracts will probably be better and monitoring more efficient, which will lessen the room for the vendor’s opportunistic behavior. We test our theoretical predictions empirically using data on the extent of outsourcing, satisfaction with the quality of service and education and pay of the municipal employees in Swedish municipalities. Our analyses show that outsourcing and citizen’s satisfaction with service are indeed negatively correlated, but that the magnitude of this association is lower in municipalities with better educated and better paid staff. We interpret this as supporting the idea that outsourcing is contingent on bureaucratic quality.

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Introduction

During the past four decades, public administration in most OECD countries has been re-shaped by reforms, often labeled New Public Management (NPM) (Hood 1991; Pollitt and Bouckaert 2011). Through these reforms, management ideas from the private sector that emphasize disaggregation, competition and incentivization have been introduced in ways previously unknown in the public sphere (Dunlevey et al. 2006). This development is well known and has attracted an impressive amount of scholarly attention. Although there is a whole academic industry producing comments and critiques of NPM reforms, there are relatively few studies of the actual outcomes of these reforms, attributed to the lack of data and the “surprisingly ideological” trend in the debate about public management and government (Hood and Dixon 2015, 5). The goal of this paper is to provide one such evaluation.¹

Holding that the NPM concept is so ambiguous that it makes it impossible to assess the reforms in their entirety (Dunlevey et al. 2006), the paper focuses on the outsourcing of public services, which is indeed at the heart of NPM (Hood 1991; Pallesen 2011). Although outsourcing has attracted considerable scholarly attention, most studies in this sub-field have focused on antecedents of outsourcing rather than its outcomes, highlighting such factors as, for instance, fiscal stress, political ideology, government size and electoral gains as important for explaining different levels of outsourcing across units (often municipalities). Those who have studied the effects of outsourcing have primarily been interested in cost reductions and the size of government (Alonso et al. 2015; Boyne 2003; O’Toole and Meier 2004; Pallesen 2004; Sundell and Lapuente 2012), while empirical studies that examine quality issues are few, rather dated, and provide mixed evidence (for an overview see Beuve and Chever 2014, 5, and see Hood and Dixon 2015 for a recent study of the effects of NPM in the UK). By focusing on the impact of outsourcing on service quality, the paper aims to address a gap in the literature on the outcomes of outsourcing.

While the benefits of outsourcing are normally associated with competition, economy of scale and the entrepreneurialism of the private, emerging from the qualities of private ownership (Christoffersen, Paldam and Wurtz 2007; Donahue and Zeckhauser 2011; Osborne and Gaebler 1992), there

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is also a considerable theoretical and empirical literature holding that markets may not be the most adequate system to ensure the delivery of high quality public service (Andrews 2010; Brown, Potoski and Van Slyke 2010; Carlson, Cowen and Fleming 2013; Girth et al 2012; Kettle 1993; Sclar 2000). However, a subset of literature on both sides of the debate acknowledges that the outcomes of outsourcing are contingent upon the capacity of the public agency to design, implement and manage contracts with third-party providers: be it the realization of efficiency gains (Andrews and Entwistle 2015) or minimization of negative externalities associated with outsourcing (Brown and Potoski 2003; Kettle 1993; Lamothe and Lamothe 2010; Romzek and Johnston 2002; Van Slyke 2003). As Van Slyke put it, “To reap the benefits of competition, government must be a smart buyer, a skillful purchasing agent, and a sophisticated inspector of the goods and services it purchases from the private sector” (2003, 296).

We contribute to the literature on the contingent nature of the outcomes of outsourcing by conceptualizing public management capacity in terms of bureaucratic quality, understood in terms of competence and motivation of the personnel of the public agency contracting out a service. Building on the “managing the market” (Brown and Potoski 2004; Girth et al. 2012; Graddy and Chen 2006; Johnston and Girth 2012; Warner and Hefetz 2008) and managing complex contracts (Brown, Potoski and Van Slyke 2010, 2015) literatures, we argue that there are at least three specific reasons underpinning the statement that better qualified and motivated government personnel are likely to have an important mediating effect on the quality of services provided because such personnel: i) are more likely to engage in the pre-contractual “market management” effort to allow for the emergence of mutual understanding of the quality issues; ii) are more likely to design contracts with a better specification of the quality of the outsourced services (weighing the implications of each privately procured product/service for the welfare of a polity as a whole) and observable parameters of consummate and perfunctory behavior of the vendor, and to design a suitable system of rewards and sanctions; and iii) are more likely to perform public value enhancing contract management by recognizing and concentrating their monitoring effort on the most problematic areas of exchange, executing rewards/sanction programs and developing contract relationships and better mutual understanding with the contract partners.

Our third contribution to the literature is empirical: we test our argument in the context of municipal governance in Sweden by utilizing a newly assembled cross-sectional dataset with measures of the extent of outsourcing in four areas where the majority of municipal purchases are executed.
(care for the elderly/disabled, social care, pre-school/school age child care and education), citizens’ satisfaction with these services, the education and pay of municipal employees and a set of relevant control variables for most of Sweden’s 290 municipalities. The results of the analysis suggest that there is a statistically significant association between the greater extent of outsourcing and lower citizen satisfaction with the services. However, this negative association decreases when the education (proxying competence) and pay (proxying motivation) are higher among municipal employees. The paper is organized as follows. The next section discusses the NPM and outsourcing literatures and develops the paper’s theoretical argument. A section about research design, data and methods follows the theory. The results are then given and discussed, and the final section gives conclusions.

**Theoretical Argument: Outsourcing, Contracts and Quality of Services**

Since Christopher Hood (1991) coined the phrase in the beginning of the 1990s, *New Public Management* (NPM) has been much debated and considered by many to be too broad a concept. It is mainly used as an overall term for the reform wave that has swept over public administrations since the 1980s. NPM reforms have been inspired by private sector management theories and have had a huge impact on the organization of the public administration, as well as on the public administration scholarship and the study of public organizations in political science, sociology and economics (for reviews see Christensen and Laegreid 2011; Hood and Dixon 2015; Pollitt and Bouckaert 2011).

Dunleavy et al. (2006) suggest that NPM is best understood as a two level concept. At the first level it is a rather general management theory that underlines the importance of disaggregation, competition and incentives for increasing efficiency and effectiveness in the public sector. At the second level it is a set of specific management ideas, inspired by this management theory. These ideas have been implemented over the past decades to varying degrees in different countries. Three noteworthy illustrations of these ideas are: the establishment of semi-autonomous agencies, the so-called agencification, which, for example, were part of the Next Steps initiative in the UK (James 2003); the outsourcing of service delivery that has been implemented in many countries and has for instance been particularly notable in the Netherlands (Alonso et al. 2015; OECD 2011, 168; 2015, 81); and the introduction of performance related pay in the public sector, which was embraced in the Anglo-Saxon and Nordic countries to a rather large degree (Dahlström and Lapuente 2010).
We follow the scholars who have suggested that, while the NPM concept may be a suitable umbrella concept, it is less useful for those who are interested in the causes and consequences of specific reforms. This is because different reforms, all labeled NPM, vary a great deal not only in the specifics of the reform designs but even goals and outcomes achieved (Christensen and Laegreid 2011; Pollitt and Bouckaert 2011). Scaling down to Dunleavy et al.’s (2006) second level provides appropriate analytical lenses for the assessment of the major pillars of NPM individually, therefore laying the foundations for a further holistic evaluation.

The focus of this paper is outsourcing – arguably, a core component of NPM (Hood 1991; Pallesen 2011). Other labels such as “contracting out” and “privatization” are sometimes used to describe the same phenomenon (Pallesen 2011; Pollitt and Bouckaert 2011), but for convenience we use outsourcing throughout. Following the literature, outsourcing is understood as public service delivery provided by agents outside the public sector (Alonso et al. 2015; Minicucci and Donahue 2004). Outsourcing services has been an important part of the administrative reform agenda. In a review of the field, Boyne (2003, 370) goes so far as to suggest that it was “the dominant theme of public management during the 1980s and 1990s”. Today outsourcing is a widespread modus operandi of governments: in 2013 (the most recent available data) the OECD countries spent on average about 9 percent of their GDPs on outsourcing (OECD 2015, 81). This however ranges from 17 percent of the GDP in the Netherlands to only 3 percent in Mexico. Among the Scandinavian countries the expenditures on outsourcing in 2013 constituted about 11 percent of their GDPs, with Finland being the leading outsourcer in the region and second largest among the OECD countries (authors’ calculations based on OECD 2015, 81). Sweden, with almost 12 percent of GDP spending on outsourcing, stands slightly above the OECD average.

High hopes for improved public service delivery have been associated with outsourcing initiatives (Osborne and Gaebler 1992). The increased use of outsourcing was motivated by the need to both improve the quality of services and to save resources in the public sector (Osborne and Gaebler 1992; Pollitt and Bouckaert 2011). These seemingly contradictory goals were thought to be achieved through rather straightforward market mechanisms: competition in service provision will pressure the public service provider to be more efficient, as there is no longer room for the slack associated with a monopsonized market (Buchanan 1972; Niskanen 1971); as competition forces producers to control costs, public spending will decrease (Kodrzycki 1998); and, finally, competition forces producers to deliver quality services because the market enables citizens to choose the
best service available, which in turn will drive quality upwards (Kettl 2000; Lane 2000; Pallesen 2011).

However, there has also been considerable skepticism of the unconditionally positive effect of outsourcing on efficiency, effectiveness and service quality. There are at least three broad counterarguments. First, often anchored to transaction costs economics (Williamson 1985), it has been questioned whether the market is the most efficient organization for public service provision, considering the low number of available providers of services that government normally outsources and the considerable costs associated with “managing the markets” – interventions by the outsourcing authority aimed at creating, enhancing and sustaining provider markets for public goods and services to be delivered under contract (Brown and Potoski 2004; Girth et al. 2012; Graddy and Chen 2006; Johnston and Girth 2012; Warner and Hefetz 2008). Second, the incomplete contract literature, pioneered by Grossman and Hart (1986) and Hart and Moore (1988), suggests that there are inevitable inefficiencies associated with contracting because it is impossible for contracting parties to anticipate all the contingencies that may occur and to specify unambiguously how to deal with them in a contract. An extension of this literature into the realm of government outsourcing implies that complex products, such as public services, “lead to highly incomplete contracts” (Brown, Potoski and Van Slyke 2010, 44; 2015). Finally, even if contracts could have been complete, there are allocative distortions associated with information asymmetries in principal-agent relations, namely with adverse selection, moral hazard and the observability of the agent’s actions (Holmstrom 1979; Dixit 2002).

All three arguments have a direct implication for the quality of contracted out services. Considering that one of the key assumptions underlying the concept of a functioning market is a requirement for “many” buyers and sellers that can easily enter and exit the market (Johnston and Girth 2012, 7), “thin” markets with few vendors are unlikely to produce a level of competition that fosters quality improvement and cost reduction. The advocates of market mechanisms in the public sector emphasized that the “most of the kick” in privatization and outsourcing comes from “the greater scope for rivalry” and not “from private provision per se” (Donahue 1989, 218). When the rivalry is undermined because of the low number of “rivals”, the “kick” may never happen at all. Considering the incomplete contracts and information asymmetries arguments, a frequently evoked “quality-shading hypothesis” suggests that, since many quality issues are not fully contractible ex ante, this gives vendors, especially in for-profit organizations, incentives and opportunities to engage in ex-
cessive cost cutting at the expense of quality (Hart, Shleifer and Vishny 1997; Jensen and Stonecash 2005). In other words, the \textit{ex ante} non-contractibility of quality exacerbates post-contractual (\textit{ex post}) opportunism by encouraging both the agent’s moral hazard and the principal’s difficulties in an observability of the agent’s actions. Since most of public services are “complex products” – which are difficult to describe and produce (Brown, Potoski and Van Slyke 2015, 1) – the combination of \textit{ex ante} non-contractibility of quality and \textit{ex post} opportunism poses a formidable threat to the quality of the service.

These considerations inform our baseline expectation about the impact of outsourcing on the quality of service provision:

H1: All things being equal, polities with higher levels of public service outsourcing will on average exhibit a lower quality of public service provision than polities with lower levels of outsourcing.

Even though this negative expectation is well grounded in the literature, there is also good reason to believe that there are ways to alleviate the threat to service quality borne by the inherent difficulties with the contractibility of quality and \textit{ex post} opportunism. In broader terms, we hold that, given that describability of the quality is at the center of the problem, any improvement in the description of the quality of the outsourced product will, through a series of interconnected steps, improve the quality of the delivered product. The ways through which the describability issues can be managed within the process of outsourcing point to the paramount role of the competence and motivation of the buyer’s staff play.

First, at the most general level, the buyer has to have more than a rough idea of what it wants the product to do – something that can be called buyer’s competence, and it stands to reason that better educated and more motivated human resources are more likely to have higher buyer’s competence. Moreover, in the public sector, buyer’s competence stands not only for the in-depth understanding of the features, qualities and functions of a product. Since the main objective of public sector organizations is the maximization of social welfare, the assessment of the quality of each product procured must also be made in the light of the ramifications that these qualities may have for the overall welfare of the community. In order for outsourcing to be more than an immediate reduction in costs, as it oftentimes was in the past (Grimshaw, Vincent and Willmont 2002), but beneficial for the community as a whole, government buyers must recognize the ramifications of each individual contract for the quality of services provision in its entirety. The fact that this is very
difficult to achieve is revealed in a recent review of the UK central government, one of the largest and oldest outsourcers of services in the industrialized world. The so-called Green review (2010) exposed the “shocking” inefficiency of IT buying, largely caused by the department’s fragmented vision of procurement. Public buyers are certainly aware of this fact, as evidenced by an ongoing effort by, for example, the Swedish Competition Authority (2014, 40) to procure products for preschools (furniture, toys, textiles, kitchen equipment and cleaning products) in such a way that both concerns for child safety and environmental sustainability are met. Although the need to address the wider implications of each privately procured service elevates the notion of buyer competence to a new level, it is reasonable to suggest that better educated and motivated government personnel may be better positioned to deal with this dimension of contracting than less educated and less well paid staff.

Second, given that complex products are difficult to describe in a formal contract, it would be reasonable for buyers to engage in activities that would help vendors to develop an in-depth understanding of the features, qualities and functions of the outsourcing product at the pre-contractual stage. After all, it is said that complex contract success is contingent on “mutual understanding between the two parties” (Brown, Potoski and Van Slyke 2015, 1). Pre-contractual engagement between the parties will, among other things, foster a mutual understanding with regard to the quality of the product in question, which in turn will help the vendors to prepare formal bidding documentation, better reflecting both the product’s requirements and their competitive advantages for the delivery of the required functionalities and features in comparison to other bidders. Although the “managing the market” literature is currently not concerned with the service quality issues, predominantly focusing instead on the buyers’ response to the non-competitive vendor market (Girth et al. 2012; Johnston and Girth 2012), it is reasonable to expect that pre-contractual quality management actions would be part of the “managing the market” repertoire. Two clear take home messages of this literature – that only some public buyers engage in the managing the market activities (Johnston and Girth 2012) and that those who do engage are engaged show a clear understanding of the limitations of the market forces and opportunities for vendor opportunism (Girth et al. 2012, 897) – point to the importance of the buyer’s motivation and competence for the pre-contractual management of quality issues.

In many instances, however, outsourcing begins with the execution of a competitive bidding process and designing formal contracts. Although describing the quality of the complex product in
question is indeed difficult, there is variation in both the completeness of contracts and the quality of the procured services. This implies that the way in which contracts are written and managed may have an independent effect on the resulting quality, which indeed is given evidence in the literature (Andrews and Entwistle 2015; Brown and Potoski 2003; Kettle 1993; Lamothe and Lamothe 2010; Romzek and Johnston 2002; Van Slyke 2003). We posit that, with a more competent staff on the contracting side, requirements pertaining to the quality of the interim and final product to be delivered could be more explicit, observable parameters of “consummate” and “perfunctory” behavior of the vendor (Brown, Potoski and Van Slye 2015) could be more precise, and a workable system of rewards (for consummate behavior) and sanitations (for perfunctory) behavior could be devised.

It is important that not only individuals or teams that write contracts are competent. Better educated personnel on the contracting side generally brings a knowledge of what is essential and required to be prescribed in small detail and what can be written with lesser precision. Without that knowledge, which comes for example from social workers and teachers, the contractors have less to work with; this is therefore something that procurement officers may not be able to handle on their own (Bhatti, Olsen and Pedersen 2009).

The intricacy of the outsourcing of complex services is not limited to the ex ante part of the exchange but runs well into ex post contracts management, where contract administrators and managers oversee fundamentally interconnected, yet often disjointed processes of monitoring vendor performance, evaluating interim results and executing rewards/sanctions programs. Contract monitoring is a key activity here, as a correct classification of the agent’s actions as consummate or perfunctory and the agent’s output as of suitable quality or not will determine the effectiveness of the system of rewards and sanctions. Recent theoretical literature on the issue suggests that the correct evaluation (verifiability) of the agent’s actions is endogenously determined by the principal-buyer’s “investment in drafting an explicit contract pertaining to the quality of the agent’s output” (Kvaløy and Olsen 2009, 2193). In other words, a great deal of the success of the contract monitoring has already been determined at the contract drafting stage of outsourcing, which in turn is heavily dependent on the competence of the staff on the outsourcing side. In addition, the application of rewards and especially sanctions is also dependent on competence and motivation. In terms of competence, Steven Kelman observed as early as in 1990 that “to be tough with vendors requires considerable judgment and discretion on the part of government officials” (1990, 90). More recent literature on contract implementation showed that, although public managers have powerful sanction tools that are available to them through formal contracts, they do not always apply them,
pointing to the willingness to use discretion as one of the major factors that prohibit the execution of sanctions (Girth 2012). Similar to the idea that more complete contract drafting requires a competent staff across the board on the buyer’s side, the notions of the buyer’s competence in verification of the vendor’s behaviors and outputs (in, for example, such extensive and demanding public services as elderly or social care) depends on the buyer’s motivation to act on these observations, which is again equally important for contracting as for the staff on the ground who directly observe and report on the quality of the delivered services and vendor’s actions.

In summary, we argue that, although a high quality of market procured public services is not given, the resulting quality may be contingent upon the competence and motivation of the personnel on the buyer’s side, who, through a series of interconnected steps in the outsourcing process, may alleviate the threat to service quality emanating from the inherent difficulties with the *ex ante* contractibility of quality and *ex post* opportunism. On this basis this we formulate the following two hypotheses:

**H2**: All thing being equal, polities with more competent public administration personnel are on average more likely to diminish the negative impact of outsourcing on the quality of public service provision, compared with polities with less competent personnel.

**H3**: All things being equal, polities with more motivated public administration personnel are on average more likely to diminish the negative impact of outsourcing on the quality of public service provision, compared with polities with less motivated personnel.

**Research strategy, data and methods**

To test our hypotheses we employ data on the variation in the levels of outsourcing, citizens’ satisfaction with services, and administrative quality among Swedish municipalities. This research design was driven by a number of considerations. First, Swedish municipalities are a meaningful unit of analysis for outsourcing as the overwhelming share of public service provision, including social services, non-medical health care, child care and primary and secondary education lies within their authority. Second, as shown below, there is a considerable degree of variation in both the levels of outsourcing and citizens’ satisfaction with services, which together with a large number of local authorities (290) enables a statistical examination of the relationships between the two variables of interest. Third, a sub-national focus enables us to control for many factors by way of design, there-
by increasing the likelihood of drawing valid causal inferences and calculating accurate estimates (Konisky and Reenock 2012; Snyder 2001).

The first NPM reforms were implemented in Sweden at the end of the 1980s. They were primarily driven by the need to deal with the growing state budget deficit, but they were also meant to make use of the accumulated expertise and professionalism in the municipalities (Pierre 2006). Swedish municipalities already had far-reaching capabilities, defined in the Instrument of Government (the Swedish Constitution) of 1974, but many measures in the reform package of the 1990s were concerned with decentralization, which further reinforced the traditional policy and tax autonomy of the local governments.

Outsourcing has been on the ascent in Sweden since the 1990s (Montin 2007). In terms of the extent of outsourcing on the national level, measured as its share in GDP (see above) or in the government consumption – 54 per cent in the OECD, compared to 46 per cent in Sweden (authors’ calculations based on Alonso et al. 2015; OECD Statistics) – Sweden is a typical case in the OECD context. At the same time, considerable policy autonomy in the municipalities has led to a large variation among Swedish local governments in terms of both the extent of outsourcing and citizens’ satisfaction with services, as illustrated both by the official data (Figures 1 and 2) and secondary sources (Johansson 2008; Kommunforskning i Västsverige 2005; Montin 2007; SKL 2014). According to Swedish public procurement law, a municipality must procure a service via a competitive tendering process, if its value exceeds a certain threshold, ranging from about 1.7 to 43.2 million SEK depending on the area of purchase (Löfving and Setterlid 1998, 14).

With regard to administrative quality, Sweden scores high in a comparative perspective (Dahlström, Lapuente and Teorell 2012). Thus, in terms of the extent of the contingent impact of the quality of the administrative personnel on citizens’ satisfaction with services, the Swedish municipalities test should be viewed as a conservative one.

**Data**

We use data from Statistics Sweden on the share of purchases from private and public providers out of the total municipal expenditures on the same services to measure the extent of outsourcing in service delivery. The data cover municipal services of care for the elderly and disabled, social services, childcare, and primary and secondary education, which constitute the bulk of the munici-
pal service expenditures (Sjöström et al. 2006, 19). It can be questioned whether education should be included. While it is true that primary and secondary education is delivered by private organizations, it is governed through a voucher system and therefore typically not contracted out. Monitoring is still important in this field, however, which motivates us to include it in the Outsourcing index, but we have re-run all analyses excluding education. The individual indicators are aggregated into an index (Cronbach’s alpha = 0.57) showing the share of these services provided via the market in the year 2010. In our sample, the variable of Outsourcing ranges from about 5 to 50 percent (see Table 1). Figure 1 visualizes the variance in the extent of outsourcing in Swedish municipalities.

We tap into the quality of service delivery by using a measure of citizens’ satisfaction with the range of services described above. Similar to Outsourcing, the subcomponents are aggregated into a composite indicator, Satisfaction (Cronbach’s alpha = 0.85), which theoretically ranges from 1 to 100, with higher values standing for higher satisfaction. The data come from high quality surveys of local residents conducted annually by Statistics Sweden. Municipalities are at liberty to decide whether to participate and, although almost all municipalities participate, they do not always participate every year. Therefore, in order to maximize the number of observations, we averaged the available data from 2010 to 2014 to arrive at a single indicator for each municipality. Although we lose some precision in the measure by pooling the data, the available number of observations (N=243) outweighs this concern. Figure 2 visualizes the municipal variance in citizens’ satisfaction.

As the main thrust of this paper is that the quality of outsourced services is contingent on the quality of the administrative staff, operationalized in terms of its competence and motivation, we capture it with two indicators: a share of municipal employees with post-secondary education and the average salary of the municipal employees. While the former taps into competence, the latter captures the level of motivation among public personnel. Both variables include all municipal employees, thus containing information for a range of bureaucratic posts within municipalities. One could object that information on the education and pay of the administrative staff directly involved in the outsourcing would have been more suitable for the purposes of our analysis. Although it is true that data limitations make this strategy unattainable, there are substantial arguments for why a broader measure is actually preferable. We try to explain in the theory section above why it is probably not sufficient for the contracting staff to be better educated and more motivated, as they depend on information from other professional personnel. Without competent and motivated staff on the ground, ex ante as well as ex post mechanisms will be hampered. As for Outsourcing, the data come from the year 2010.
FIGURE 1. MUNICIPAL VARIANCE, OUTSOURCING

FIGURE 2. MUNICIPAL VARIANCE, SATISFACTION

Note: The span of outsourcing is divided into 5 per cent, with the lowest value = <5 and the highest = 35<. Citizen satisfaction is divided into 5 points, with the lowest value = <50 and the highest = 60<. White areas in Figure 2 = missing values. Darker shades in both figures indicate a higher level of outsourced operations/citizen satisfaction with municipal operations. The regions surrounding Stockholm, Göteborg and Malmö are separated in order to simplify reading the figure.

To limit the omnipresent risk of omitted variable bias, we include a set of control variables, informed by the existing literature. First, we include the natural logarithm of population as a measure of the size of the local authority. Larger municipalities are likely to have a more competitive provider market, which is seen as an important prerequisite for contracting out (Johansson 2008, 252). By extension, this could also proxy prior experience with outsourcing, potentially affecting the quality of the procurement strategy. The state of municipal finance is another relevant factor, as previous research suggests there is a link between larger financial resources and higher performance (O'Toole et al. 2015). This is measured by the size of municipal taxation. The municipal tax ac-
counts for 60 to 70 per cent of the annual municipal income (Assmo and Wihlborg 2012; Johansson 2008); hence this captures a vital source of the municipal budgets. In addition, as a more generic control variable, we include population increase, which is commonly used as a measurement of municipal prosperity, showing the ability to attract new residents (Fjertorp 2013). We also include a dummy variable capturing whether the municipality is run by a center-right coalition, as it has often been suggested that NPM reforms are driven by a neo-liberal political agenda (Ansell and Gingrich 2003). Finally, in order to achieve two different goals, we include mean income and the share of population with higher education (ln-transformed). The first reason for including these controls is that rich municipalities with a highly educated population tend to exhibit both a greater extent of outsourcing and satisfaction with services. Second, we would like to ensure that our measures of education and salaries for public employees do not capture the general educational level and salaries in the municipalities. Statistics Sweden and Kolada (Kommun- och landstingsdatabasen) are the sources of data for all control variables. The data are from the year 2010. Table 1 reports summary statistics.

TABLE 1, DESCRIPTIVE STATISTICS

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction</td>
<td>243</td>
<td>55.91</td>
<td>4.12</td>
<td>43.6</td>
<td>71.08</td>
</tr>
<tr>
<td>Outsourcing</td>
<td>289</td>
<td>18.55</td>
<td>7.27</td>
<td>5.25</td>
<td>52.5</td>
</tr>
<tr>
<td>Education, municipal staff (%)</td>
<td>290</td>
<td>44.04</td>
<td>6.92</td>
<td>30</td>
<td>77</td>
</tr>
<tr>
<td>Average salary, municipal staff</td>
<td>290</td>
<td>24.256</td>
<td>664</td>
<td>22300</td>
<td>27100</td>
</tr>
<tr>
<td>Population size</td>
<td>290</td>
<td>32.467</td>
<td>64.913</td>
<td>2460</td>
<td>847073</td>
</tr>
<tr>
<td>Population growth (%)</td>
<td>290</td>
<td>0.09</td>
<td>0.94</td>
<td>-3.09</td>
<td>2.50</td>
</tr>
<tr>
<td>Education, population (%)</td>
<td>290</td>
<td>9.71</td>
<td>4.21</td>
<td>4.67</td>
<td>30.67</td>
</tr>
<tr>
<td>Mean income, population</td>
<td>290</td>
<td>224000</td>
<td>29000</td>
<td>176000</td>
<td>433000</td>
</tr>
<tr>
<td>Tax revenues (1 000 000 SEK)</td>
<td>290</td>
<td>1178</td>
<td>2383</td>
<td>80</td>
<td>31000</td>
</tr>
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<td>Centre-right rule</td>
<td>290</td>
<td>0.49</td>
<td>0.50</td>
<td>0</td>
<td>1</td>
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<tr>
<td>Mean outsourcing, neighboring</td>
<td>289</td>
<td>18.42</td>
<td>5.71</td>
<td>9.1</td>
<td>41.71</td>
</tr>
<tr>
<td>Highest outsourcing, neighboring</td>
<td>289</td>
<td>24.46</td>
<td>7.91</td>
<td>11.5</td>
<td>52.5</td>
</tr>
</tbody>
</table>

Note: The data are from the year 2010 and sources are Statistics Sweden and Kolada (Kommun- och landstingsdatabasen).

In addition to these control variables, we run tests with the inclusion of level of trust, urbanization and several other measures, which did not change the estimates substantively. Considering that a relatively small N of our sample entails the risk of limiting degrees of freedom if too many variables are included, these controls were left out from the final analysis.
Method

We use a simple ordinary least square (OLS) estimator in the main analysis. An important objection to this analysis, as in all cross-sectional analyses, is the risks of omitted variable bias and reversed causality. In our case there is an argument to be made for endogeneity between the two main variables: outsourcing and citizens’ satisfaction with service quality. It is not unreasonable that local governments that face a dissatisfied citizenry may want to re-structure their service delivery and even increase the level of outsourcing. To deal with the issue of causality running from the levels of satisfaction to the extent of outsourcing, we employ a two-stage least squares (2SLS) instrumental analysis. We use two interrelated measures: the mean level of outsourcing in the neighboring municipalities, and the highest value of outsourcing in a neighboring municipality. The rationale is similar for both of these instruments. To start with, it is plausible that vendors that already provide services in municipality A would be interested in expanding their businesses in the neighboring municipalities B and C, thereby increasing the probability of outsourcing there. It is also necessary for the buying municipality A that there actually are providers in the field they would like to outsource and with companies already established in the neighboring municipalities B and C, this criterion is already met. In other words, with a well-functioning provider market nearby, outsourcing is a more viable option for the local authority in question. The extent of outsourcing in the neighboring municipality B is unrelated to the levels of citizens’ satisfaction with services in the municipality A, however, which fulfills the exclusion restriction. Moreover, we find it unlikely that outsourcing in neighboring municipalities is correlated with other unmeasured causes of satisfaction with services in the municipality under consideration, leading us to conclude that the instrument is independent (Sovey and Green 2010). As it is hard to predict whether one proximate well-functioning provider market would trigger outsourcing in a given municipality or whether it is a cluster of “think” markets, we use both the highest value and the mean value of outsourcing in the neighboring municipalities, and examine them separately.3

Results

Table 2 reports the results of the cross-section OLS analyses when the level of outsourcing is regressed on citizens’ satisfaction with public services under a set of the above specified controls.

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3 We would like to thank Anders Sundell for suggesting the extent of outsourcing in the neighboring municipalities as an instrument variable and for providing data on municipalities’ neighbours.
Model 1 shows that the outsourcing index and citizens’ satisfaction with services are significantly correlated at the 99 percent level and signed negatively, as hypothesized.

To model our prediction that the magnitude of this effect diminishes in municipalities with high quality personnel, we include the interaction term between the outsourcing index and the level of education of municipal employees (Model 2). The interaction term enters positively as hypothesized, but it is only statistically significant at the 90 percent level. The margins plot (Figure 3) visualizes the effect of the interaction term, and, as illustrated in the graph, the marginal effect is significant at the 95 percent level when about 30 to 60 per cent of the municipal employees have a post-secondary education. Considering that the average in Swedish municipalities is 45 per cent, the marginal effects are significant where empirically most relevant. The histogram included in Figure 3 depicts the distribution of higher education among municipal employees and demonstrates that it is indeed between 30 and 60 per cent in almost all cases in the sample. For each 10 per cent increase in education, the interaction term’s coefficient increases by 0.07 points. To illustrate, in Vallentuna municipality, 40.4 per cent of expenditures in the fields included in our outsourcing index are outsourced and 52 per cent of the municipal employees have post-secondary educations. If the share of education increased to 62 per cent, which is empirically valid according to the margins plot, the effect of outsourcing would decrease from -0.18 to -0.12 under a control for the remaining variables. Subsequently, the expected increase on the satisfaction scale would be 2.5 steps.

### Table 2, Outsourcing, Bureaucratic Quality and Citizens’ Satisfaction with Services: OLS Results

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outsourcing</td>
<td>-0.184*</td>
<td>-0.532**</td>
<td>-1.421***</td>
</tr>
<tr>
<td></td>
<td>(0.0426)</td>
<td>(0.193)</td>
<td>(0.863)</td>
</tr>
<tr>
<td>Population size (ln)</td>
<td>-2.827***</td>
<td>-3.077***</td>
<td>-2.991***</td>
</tr>
<tr>
<td></td>
<td>(0.711)</td>
<td>(0.713)</td>
<td>(0.726)</td>
</tr>
<tr>
<td>Population growth</td>
<td>-0.517</td>
<td>-0.497</td>
<td>-0.424</td>
</tr>
<tr>
<td></td>
<td>(0.395)</td>
<td>(0.405)</td>
<td>(0.401)</td>
</tr>
<tr>
<td>Education, population (ln)</td>
<td>4.736***</td>
<td>4.013***</td>
<td>4.911***</td>
</tr>
<tr>
<td></td>
<td>(1.398)</td>
<td>(1.449)</td>
<td>(1.404)</td>
</tr>
<tr>
<td>Mean income, population</td>
<td>0.0511***</td>
<td>0.0398***</td>
<td>0.0444***</td>
</tr>
<tr>
<td></td>
<td>(0.0142)</td>
<td>(0.0147)</td>
<td>(0.0150)</td>
</tr>
<tr>
<td>Tax revenues</td>
<td>0.00913</td>
<td>0.00915</td>
<td>0.00945</td>
</tr>
<tr>
<td></td>
<td>(0.000507)</td>
<td>(0.000501)</td>
<td>(0.000508)</td>
</tr>
<tr>
<td>Centre-right rule</td>
<td>0.975</td>
<td>0.835</td>
<td>0.936</td>
</tr>
<tr>
<td></td>
<td>(0.510)</td>
<td>(0.514)</td>
<td>(0.514)</td>
</tr>
<tr>
<td>Education, municipal staff</td>
<td>-0.0179</td>
<td>0.835</td>
<td>0.936</td>
</tr>
<tr>
<td></td>
<td>(0.115)</td>
<td>(0.514)</td>
<td>(0.514)</td>
</tr>
<tr>
<td>Outsourcing x education</td>
<td>0.00666*</td>
<td>0.00666</td>
<td>0.00666</td>
</tr>
<tr>
<td></td>
<td>(0.00384)</td>
<td>(0.00384)</td>
<td>(0.00384)</td>
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<td></td>
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<tr>
<td>---------------------------</td>
<td>---------------------</td>
<td>------------------</td>
<td>------------------</td>
</tr>
<tr>
<td><strong>Average salary, municipal staff</strong></td>
<td>-0.000829</td>
<td>(0.000864)</td>
<td></td>
</tr>
<tr>
<td><strong>Outsourcing x salary</strong></td>
<td>0.0000494</td>
<td>(0.0000346)</td>
<td></td>
</tr>
<tr>
<td><strong>Constant</strong></td>
<td>63.76***</td>
<td>72.02***</td>
<td>87.18***</td>
</tr>
<tr>
<td></td>
<td>(6.730)</td>
<td>(8.204)</td>
<td>(22.44)</td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>242</td>
<td>242</td>
<td>242</td>
</tr>
<tr>
<td><strong>R²</strong></td>
<td>0.230</td>
<td>0.256</td>
<td>0.237</td>
</tr>
<tr>
<td><strong>adj. R²</strong></td>
<td>0.207</td>
<td>0.227</td>
<td>0.208</td>
</tr>
</tbody>
</table>

Note: The dependent variable is citizens' satisfaction with services in the municipality (2010-2014 averaged). Standard errors are in parentheses. *p < 0.10, **p < 0.05, ***p < 0.01
FIGURE 3, AVERAGE MARGINAL EFFECTS OF OUTSOURCING (95% CONFIDENCE INTERVALS): EDUCATION

FIGURE 4, AVERAGE MARGINAL EFFECTS OF OUTSOURCING (95% CONFIDENCE INTERVALS): SALARY
Model 3, Table 2, reports the results of the interaction between Outsourcing and a proxy for better motivated municipal personnel. Similar to the estimates of the first interaction term, it enters with the positive sign but falls below the standard threshold for statistical significance. The corresponding margins plot (Figure 4) shows the outsourcing coefficient at different salary levels with a 95% conference interval. As displayed, it is statistically significant for a range of salaries between 22 000 and 26 500 SEK. The histogram along the X axis shows that this is where the large majority of all observations in the sample fall. The average salary for a municipal employee is 24 400 SEK, indicating that the coefficient is significant where most relevant in regard to the empirics. For each 200 SEK salary increase, the coefficient increases by 0.01 points. Another municipal example, Österåker, has an average salary of 25 100 SEK and 38.7 per cent outsourced operations. If salaries were raised to 26 000, which is empirically plausible, the negative coefficient would decrease from -0.18 to -0.14 under a control for the remaining variables. The expected increase on the scale of citizen satisfaction would then be 1.6 steps. Taking into account that the interaction term between Outsourcing and salaries is not statistically significant, we interpret these results with caution.

Turning to the control variables, the analysis shows a consistent negative correlation between population size and citizens’ service satisfaction, while educational level and mean income are positively correlated with citizens’ satisfaction. In other words, in line with existing research, municipalities with better educated and more affluent residents are those that on average exhibit higher levels of satisfaction with services, whereas the municipal population size is negatively associated with service satisfaction. Finally, both the size of tax revenues and the political color of the ruling coalition are positively correlated with satisfaction with services, although only statistically significant on the 90 percent level. It is probable that municipalities with a larger tax base can provide better services and, although this is pure speculation, one might suspect that more affluent people, generally more satisfied, are more common in municipalities ruled by center-right coalitions.
Finally, to address the potential issue of endogeneity, Table 3 reports two models using 2SLS specifications with robust standard errors. These specifications try to isolate the exogenous effects of outsourcing on citizens’ satisfaction with services. They include the control variables from Model 1 in Table 2. As mentioned in the Methods section, we use two different instrument variables. Model 1 reports the estimates when the instrumental variable is the mean of outsourcing in the neighboring municipalities, while the instrument in Model 2 is the highest value of outsourcing in a neighboring municipality. F-tests for both instruments (26.8 and 14.4 respectively) indicate that the instruments are not too weak. The coefficients for Outsourcing in both models enter statistically significantly and signed negatively, as hypothesized. Furthermore, compared to the OLS estimate, the substantive impact of Outsourcing has increased. The results of 2SLS analyses lessen the understandable concerns that outsourcing is endogenous to citizens’ satisfaction. It should be noted, however, that the interaction terms from Table 2 are not included in the 2SLS analyses reported in Table 3. There are two reasons for this. First, we do not consider concerns of the potential of endogeneity as pressing when it comes to these interaction terms. Second, we would ideally have to instrument
for the actual interaction terms and, while it is hard to find good instruments for the constituting terms, it proved to be too hard to find a viable instrument for the interaction terms.

Moreover, in order to test the robustness of the results, we have altered the main model in three different ways: i) including level of trust and urbanization among the controls; ii) excluding education from the outsourcing and satisfaction indices; iii) only studying elderly care, as this is probably the most salient policy area in outsourcing. The main results are robust to these alterations.

In sum, the results of the regression analyses provide considerable support to our hypothesis. As expected, outsourcing of public operations is negatively linked with the quality of service delivery, measured as citizens’ satisfaction with services. However, the magnitude of the negative impact is mitigated by the quality of the municipal staff, measured in two different ways. This finding signifies the need for competent administrative personnel to outsource public services efficiently. In the context of Swedish municipalities, these effects can be illustrated by Västerås, which made significant cost savings when exposing elderly care to competitive tendering, by preparing a well-designed procurement strategy, arguably owing to competent and motivated personnel (Konkurrensverket 2002, 169ff). Another example that highlights the importance of competence comes from the municipality of Boden, where a poorly designed procurement agreement for pre-schools left the municipality with no bidders. Instead of improving the contract and openly advertising for a new procurement, the local authority simply chose to change the terms and directly procure the operation from one specific company, without informing the other potential vendors about the new contract (Carlsson 2013). The competitive aspect of the process was thus disregarded, and the initial lack of administrative quality produced an unsuccessful procurement process.

Conclusions

In the OECD countries today outsourcing makes up on average about half of government consumption and about 9 percent of their GDP. The share of outsourcing has continuously increased over the past decades (Alonso et al. 2015; OECD 2015). It has been expected that outsourcing would both cut costs and increase quality through rather basic market logic. Most previous studies in this area have either explained why outsourcing is more common in some polities compared to others or examined whether it has contributed to cost containment (O’Toole and Meier 2015; Pallesen 2011). Unlike those studies, this paper investigated the impact of outsourcing on one of the fundamental goals of outsourcing – the quality of services.
The paper draws on the “managing the market” and managing complex contracts literatures that suggest that dysfunctional provider markets and highly incomplete contracts for complex goods are the scope conditions that lay a foundation for a theoretical expectation of a negative effect of outsourcing on the service quality. However, we argue that those potential negative consequences can, at least to some extent, be counteracted with more competent and motivated personnel on the buyer’s side, as contracts will probably be better and monitoring more efficient, which will diminish the room for the vendor’s opportunistic behavior. In sum, we expect that outsourcing has negative impacts on service quality, but that this association is contingent on the quality of the administrative staff.

We test our theoretical predictions empirically using data on the extent of outsourcing, satisfaction with the quality of service and education and pay of the municipal employees in Swedish municipalities. Empirical analyses such as the one presented in this paper are rare because of data availability. Our analyses show that there is indeed a negative correlation between outsourcing and citizens’ service satisfaction, and that the magnitude of this association is lower in municipalities with better educated and better paid staff. We interpret this as supporting the idea that outsourcing is contingent on administrative quality, but, although we have unique data, there are data limitations that make us refrain from making a far-reaching causal inference. The main objection to the analyses is a consequence of the cross-sectional nature of the data, which opens up for potential reversed causality. We try to lessen these understandable concerns, however, by using 2SLS regressions with two different instrumental variables. Results of these analyses and other robustness checks strengthen our confidence in the results presented.

These results are also in line with recent scholarly work on NPM reforms that has underlined the importance of contextual factors in general (Hood and Dixon 2015; O’Toole and Meier 2015) and the qualities of the public sector party in particular (Andrews and Entwistle 2015) for understanding the effects of NPM. Moreover, the study has potential interest for reformers. If outsourcing has negative consequences for service quality, but, for example, positive effects on cost reduction, reform minded practitioners might want to concern themselves with finding a way of balancing these two important goals. Cost reduction might sometimes be motivated even if this also means lower service quality and, to the extent we trust the results presented here, the negative consequences on service delivery can be reduced if public personnel are competent and highly motivated.
REFERENCES


Kommunforskning i Västsverige (2005), ekonomichefsenkät.


