Long Live Marketization for Local Public Spaces

A Study of Scandinavian Managers' Satisfaction with Private Provider Performance

Lindholst, Andrej Christian

Published in:
Urban Affairs Review

DOI (link to publication from Publisher):
10.1177/10780874211042544

Publication date:
2023

Document Version
Accepted author manuscript, peer reviewed version

Long Live Marketization for Local Public Spaces: A Study of Scandinavian Managers' Satisfaction with Private Provider Performance

LINDHOLST, Andrej Christian (Associate Professor) *

* Department of Politics and Society, Center for Organization, Management, and Administration. Aalborg University, Fibigerstræde 3, 9220 Aalborg East, Denmark. Phone: + 45 2872 8520. E-mail: acl@dps.aau.dk

ACCEPTED PRE-PRINT VERSION
IN
URBAN AFFAIRS REVIEW

Abstract

Continued critiques, evidence and newer reform trends have increasingly contested the use of market-centered models–the competition prescription–for urban public space maintenance as well as other local services. This article adopts a contextualized contingency perspective on the competition prescription and questions the contested status of market-centered models in a survey-based study of the current use of and satisfaction with private providers for maintenance of parks/greenspaces and road/streets in Scandinavian local governments. The study finds widespread use of and satisfaction with private providers. However, satisfaction depends on national context and multiple contingencies. The study challenges the contested status of market-centered models, highlights that different models serve different strategic objectives, and directs attention to discussions of context and key contingencies that define how well market-centered models perform.

Introduction

Most local governments hold responsibilities for the provision of urban public space such as parks, greenspaces, squares and roads/streets to serve a diverse range of local needs and uses distributed across a number of stakeholders and interests (Carmona 2010). Undertaking of maintenance operations is critical for upholding attractive and functional public spaces within the urban fabric–or at least for upholding standards and meeting expectations outlined or agreed upon by the involved stakeholders (Dempsey and Burton 2012; Lindholst et al. 2015). Under the influx of wider reform pushes, neoliberal politics and national policies many local governments have since the 1980s challenged and increasingly shifted away from traditional state-centered models for organizing maintenance responsibilities through the introduction of market-centered management models (Carmona, De Magalhães, and Hammond, 2008; De Magalhães and Carmona, 2006; Lindholst 2020; Randrup, Lindholst, and Dempsey, 2020). A key assumption for the shift has been the general idea inherent in the new public management (NPM) reform agenda that governments can improve performance of service delivery by capitalizing on competitive markets (e.g., Dehoog 1990; Hood 1991; Walsh 1995)–an idea that Kettl (1993) labelled the "competition prescription."

However, discussions in the literature and evidence have increasingly contested the use of traditional market-centered models and the underlying rationale of the competition prescription. On the one hand, multiple studies find that the introduction of market-centered models for organizing maintenance of public space in several national contexts has resulted in substantial cost savings (Lindholst 2017). On the other hand, the literature delivers a substantial critique by highlighting that market-centered models have led to substantial losses of social and recreational qualities (e.g., Dempsey and Burton 2012; Jones 2000) and are likely to produce 'vicious cycles' with multiple negative outcomes (Randrup et al. 2020). Furthermore, some research indicates that salient outcomes across local governments present a diverse and multi-dimensional mix of negative and

positive outcomes, the balance of which is only poorly understood (Lindholst et al. 2017). Critiques of traditional market-centered models have also called attention to and raised hopes for newer ideas of partnerships and collaboration as alternative approaches for organizing market-centered models within public space management (e.g., Lindholst 2009; Randrup et al. 2020) and beyond (e.g., Donahue and Zeckhauser 2012; Vincent-Jones 2007). More broadly, critiques of market-centered models and developments within some local services have raised discussions about whether a new shift toward re-municipalization is emerging and replacing the movement toward market-centered models seen in the 1980s and 1990s (Clifton et al. 2019; Wollmann and Marcou 2010; Wollmann, Koprić, and Marcou, 2016). Finally, these discussions are connected to critiques and dismissal of the NPM and a shift in reform orientation toward other and newer models (e.g., Christensen and Lægreid 2017; Dunleavy et al. 2006). Some research, however, finds that local governments' choice of service provider are balanced over time and based on a pragmatism mainly driven by (dis)satisfaction with cost and quality levels of incumbent service providers (Kim and Warner 2016; Warner and Aldag 2019). In light of such discussions and developments, research has been called for that tries to understand better the contexts and contingencies under which different market-centered models lead to more favorable outcomes (Lindholst 2017). Such calls bring attention to a multitude of arguments beyond economic reasoning that contribute to our understanding of variations in outcomes. Notably, the literature has harnessed multiple arguments rooted in a mix of economic, contractual, sociological and administrative-organizational reasoning to highlight contingencies with a likely bearing on variations in the performance of market-centered models (Brown, Potoski, and Van Slyke 2006; Donahue 1989; Fernandez 2009; Kettl 1993; Kuhlmann and Wollmann 2019; Lamothe and Lamothe 2010; Lamothe, Lamothe, and Feiock 2008; Lindholst, Petersen, and Houlberg 2020; Warner 2006).

This article contributes to discussions in the literature on the contested status of market-centered models for public space management by developing a contextualized contingency perspective and providing an empirical test of implications in a study of Scandinavian local managers' satisfaction with the performance of private providers engaged for maintaining local parks/green spaces and streets/roads. The study relies upon comparable survey-data collected in 2014–16 from managers with responsibilities for local parks/green spaces and streets/roads in Scandinavian local governments. The design enables a study that across three country contexts tests 1) whether local managers are more satisfied than dissatisfied with private provider performance, and 2) the national, managerial and urban contingencies upon which local managers' satisfaction are likely to depend. Altogether eight hypotheses guide the study.

The first part of the article outlines the background and theoretical arguments on the performance of market-centered models for organizing maintenance services, and provides a set of arguments on why local managers' satisfaction with private provider performance varies. The second part describes the study's methods and data. The third part presents results, discusses implications and draws up conclusions.

Background: A contested status of market-centered models?

The study's service context–public space–has, from an urban planning perspective, long been viewed as vital for the attractiveness of cities and the quality of human life in self-reinforcing urban environments where "liveliness and variety attract more liveliness; deadness and monotony repel life" (Jacobs 1961, p. 129). In the classical terminology for different types of goods based on the two dimensions of rivalry in consumption and exclusiveness of use (Samuelson 1954), public spaces can be argued to resemble a "public" or "collective" good. For example, in practice it would be difficult (or very radical) to exclude local residents or visitors from using or benefiting from

these services, and the use by one user is to a certain extent non-rival for the use by other users. Given the (need for) non-exclusiveness, economic reasoning suggests that the use of market-centered models for delivering public space should ideally take place on the supply (production) side rather than the demand (consumer) side. From a welfare perspective, the risk for under-supply of public goods under a complete market-model also suggests that responsibilities for finance and availability should be in the hands of local government. In theory, decentralization of responsibilities to local governments should warrant a better match between local preferences, allocation of financing and availability of services (Warner 2006).

Research finds that services associated with maintenance of the physical infrastructures that constitute urban public spaces, such as parks and streets, represent a set of comparatively well-suited characteristics for implementation of market-centered models. Survey-based research from the US, for example, indicates that local managers find that the provision of services related to maintenance of public spaces, on average, is characterized by a relative ease of specifying and monitoring services, and represents a context where competition is relatively high (Hefetz and Warner 2012). The literature often contrasts these characteristics with social services, where competition is scarcer and services are argued to be harder to specify and monitor (Hansen 2010; Lamothe and Lamothe, 2010; Van Slyke 2003). However, such assessments are qualified by the fact that the requirements of commonly used market-centered models for maintenance services often rely on technical 'conformance-to-specification' definitions of quality that are not necessarily linked to the requirements for aligning public space qualities with expectations of excellence, shifting circumstances, or the needs and demands of multiple stakeholders (Lindholst et al. 2015). A review of studies addressing the outcomes from the use of market-centered models for park and green space maintenance finds that most studies report various positive economic outcomes such as cost savings and improved cost-effectiveness, while other reported outcomes related to services, the organization or staff tend to be negative (Lindholst 2017). The range of negative outcomes is in

123 particular voiced in critiques of the use of market-centered models in the context of UK experiences
124 in the 1980s and 1990s (Dempsey, Burton, and Selin 2016; Hebbert 2008; Jones 2000). Hebbert
125 (2008), for example, notes that the very radical UK policy regimen of compulsory competitive
126 tendering (CCT) enacted in the 1980s and 1990s reduced "the ancient art of urban horticulture" to
127 "mechanical crudity" and let genuine urban green spaces deteriorate into "ghost zones" and "green
128 deserts" empty of social and recreational functions. Thus, these critiques suggest that public spaces
129 to some degree stop being fit for purpose when (too) radical market-centered models are applied.
130 Others associate such critiques more broadly with the combination of market-centered models with
131 overly competitive and cost-focused approaches. The combination is argued to lead to 'vicious
132 circles' where self-reinforcing dynamics return a pool of diminished organizational resources, poor
133 working conditions, faulty performance of maintenance operations, loss of quality, increased
134 monitoring activities, and a lack of development and innovation (Randrup et al. 2020). Similar
135 dynamics and negative outcomes are observed in other service contexts where, for example, the use
136 of private providers–while superficially technically efficient–is less apt to promote outcomes related
137 to local equity and democracy than the alternatives (Hebdon 1995; Warner and Hefetz 2002). Such
138 dynamics can be interpreted as broad manifestations of the "quality shading" hypothesis (Hart,
139 Shleifer, and Vishny 1997) and/or as different kinds of "negative externalities" (Boyne 1998). Some
140 research simply suggests that private provision is "cheap and dirty" (Elkomy, Cookson, and Jones
141 2019). Congruently, research in the context of local public spaces finds that the overall balance of
142 managers' views on the outcomes from the use of market-centered models corresponds to a diverse
143 and multi-dimensional mix of positive and negative outcomes (Lindholst et al. 2017). Thus, the
144 comparatively well-suited characteristics of maintenance services do not appear to be sufficient
145 conditions for an uncontested use of market-centered models in the context of public space
146 management.

147 The findings echo insights from reviews of the general research on the outcomes from the use of
148 market-centered models and involvement of private providers in the public sector–in particular by
149 contracting out (Boyne 1998; Bel, Fagada, and Warner 2010; Hodge 2000; Petersen, Hjelmar, and
150 Vrangbæk, 2018; Vrangbæk, Petersen, and Hjelmar 2015). The reviews highlight that evidence is
151 far more abundant for financial and partly service performance criteria than for other criteria, and
152 that performance appears to depend on various contingencies such as reform history, and service
153 and country context. One key finding is that the reported returns, i.e., cost savings, from recurrent
154 competition are diminishing over time (e.g., Hodge 2000) or even that private production is not
155 cheaper than public production (Bel, Fagada, and Warner 2010). On the one hand, this is apparently
156 challenging key reform objectives for using market-centered models. On the other hand, this finding
157 is congruent with theoretical reasoning that suggests that differences in cost levels are likely to
158 diminish over time as competitive contexts spur both learning and searches for innovation equally
159 within the private and public sectors (Vining and Boardman 1992). Consequently–and after several
160 decades with market-inspired public sector reforms–it makes sense to apply multiple and more
161 context-sensitive performance criteria rather than impose a global evaluation criteria for cost levels
162 alone (e.g., Amirkhanyan, Kim, and Lambright 2007; 2014; Brown, Potoski, and Van Slyke 2006;
163 Lindholst et al. 2017). Empirical findings also warrant such complementary shifts in criteria. A
164 study from the 2010s (Lindholst et al. 2017) suggests that economic accountability–such as the
165 ability to deliver services at the 'market price' or demonstrate transparency for cost levels and unit
166 prices–rather than costs reduction is the most salient economic outcome from contracting out
167 maintenance of local public spaces for managers in a Scandinavian context. Similarly, Warner and
168 Aldag (2019) highlights the importance of focusing on local performance criteria by concluding that
169 managerial satisfaction with price and quality is driving shifts between in-house and private
170 provisions.

171 This study addresses these concurrent discussions in the literature by shifting attention to local
172 managers' satisfaction with private providers against multiple performance criteria and highlighting
173 key conditions and contexts, i.e., contingencies, under which market-centered models are likely to
174 become more or less contested.
175

176 ## Theory: A contingency approach

177 The following section develops a contingency approach to account for variations in the satisfaction
178 with private provider performance–the performance of the competition prescription–with attention
179 to the characteristics of the national and service context(s) of the study. The account expands and
180 combines earlier literature (e.g., Donahue 1989; Brown, Potoski, and Van Slyke 2006; Kettl 1993;
181 Kuhlmann and Wollmann 2019; Lamothe and Lamothe 2008; Walsh 1995; Warner 2006) and links
182 variations to differences in country characteristics, competitive environments, characteristics of
183 contract-based exchange relations, organizational capacities and the urban context. The account
184 offers eight testable hypotheses.
185

186 ### *Country context*

187 Comparative research points out that the implementation and outcomes from various reforms and
188 management models depend on a variety of contextual characteristics at the country level
189 (Christensen and Lægreid 2011; Kuhlmann and Wollmann 2019). Christensen and Lægreid (2011),
190 for example, highlight that contextual differences across groups of countries (and services) in
191 structures (e.g., legal constitutions and politico-administrative systems), cultures (e.g., history and
192 traditions), and environments (e.g., institutional and technical) are likely to produce divergence. The
193 study integrates a comparative perspective in the context of the three Scandinavian countries of

Denmark, Norway and Sweden–three OECD countries renowned for their highly developed economies, well-functioning politico-administrative structures and large tax-financed public sectors (Greve, Lægreid, and Rykkja 2016). With a point of departure in a Scandinavian context, the study is able to examine the importance of contextual differences at the country level given that the three countries represent a mix of similarities and differences with a bearing on the performance of market-centered models. Table 1 summarizes key similarities and differences.

*** Table 1 ****

In a comparative perspective, Kuhlmann and Wollmann (2019) highlight that the Scandinavian countries belong to the same administrative tradition. In the consensus and decentralized democracies of Scandinavia, most national governments have been coalitions or minority-based and highly dependent on securing a wider parliamentary consensus across several, and sometimes opposing, political parties and interests for producing new legislation, policies, and reforms (Lijphart 2012). Local governments in Scandinavia also have a comparatively high degree of autonomy and competencies vis-à-vis the central government in terms of, for example, the level and organization of services (Ladner et al. 2016). Thus, in comparison with majoritarian democracies, central governments in Scandinavia are limited in their powers to implement (if desired) radical and comprehensive reforms. More generally, public sector reforms in Scandinavia since the 1980s have emphasized modernization more than marketization, and retained a dominant role of the state by integration of newer reform features into the classical Weberian bureaucracy–an integration often viewed as an expression of a "neo-Weberian state" (NWS) model (Greve et al. 2016). Thus, markets and private providers are delegated a more limited role in reforms than in the more wholesale neoliberal state models and radical NPM reforms tried out in Anglo-Saxon countries

(Christensen and Lægreid 2017). In addition, the legal-regulatory frameworks for the use of market-centered models are relatively similar and well-established in the three countries due to requirements for compliance with EU-law. However, EU-law only regulates procedures for involving private providers, i.e., how to use the market, and does not regulate whether local governments should use the market or not. Overall, these features imply that Scandinavian local governments are delegated substantial degrees of freedom for a pragmatic adaptation of market-centered models to local circumstances and for combining the use with (modernized forms for) state-centered models or other alternatives. Thus, time and space have allowed for decentralized sectorial dynamics to take hold within and across local governments and private providers where gradual and mutual learning and development of required capacities can occur. Congruent with these characteristics, research finds that reform trajectories within local park and road services since the 1980s and onward have been of an incremental and pragmatic character (Lindholst, 2020). Combining the arguments on the relatively well-suited service characteristics and the decade-long pragmatic reform approach in Scandinavia suggests that local managers primarily use market-centered models where the overall balance between pros and cons are favorable. The following hypothesis tests the argument:

H_1 – Local managers in Scandinavia are–on average–more satisfied than dissatisfied with private provider performance.

However, the territorial and administrative preconditions for the use of market-centered models differ remarkably across Scandinavia (Table 1). Denmark is a relatively small and densely populated country with a politico-administrative structure based on relatively few and large lower-tier local governments. In contrast, Norway is a sparsely populated country with many small local

governments scattered across a vast geography and with a greater role for higher-level government bodies. In correspondence with earlier research (Bel and Fageda 2011; Foged 2016; Lamothe, Lamothe, and Feiock 2008; Warner 2006), these characteristics suggest that Denmark represents comparatively better preconditions in which stronger, more attractive and competitive markets can evolve alongside with the development of internal capacities for the use of market-centered models. Likewise, a comparison of the general characteristics suggests that Norway represents preconditions that are the most challenging, characterized by a highly fragmented and geographically scattered market structure with relatively unattractive small contracts, while Sweden takes up a middle position in Scandinavia. In sum, the arguments suggest that the differences in country context are likely to have an impact on how well market-centered models perform. A key difference in Scandinavia is the degree to which territorial and administrative structures support market-centered models. Thus, the use of market-centered models are expected to be more contested in Norway (in particular) and Sweden than in Denmark. The following hypothesis tests the arguments in the context of Scandinavia:

H_2 – In comparison to Norway and Sweden, the country context of Denmark is associated with higher satisfaction with private provider performance.

Competitive environments

Market theory and economic reasoning routinely highlight a combination of price-based competition, user choice (consumer sovereignty), profit-based incentive structures, and gains from economies of scale as key mechanisms for explanation of why market-based models and involvement of private providers should (in theory) result in superior performance in terms of technical and allocative efficiencies (Boyne 1998; Vining and Weimer 2007). A core proposition in

266 the traditional argument is the idea that establishment of competitive markets for contracts, where
267 governments can freely choose between alternative providers based on evaluation of price and/or
268 quality, gives providers a strong incentive to ensure cost-efficient service provision, and public
269 authorities an option to replace incompetent or failing providers (Dehoog 1990; Donahue 1989;
270 Walsh 1995). Similarly, common performance expectations of market-centered models in public
271 policies include a mix of key criteria related to service quality, costs levels and responsiveness
272 (Boyne 2002; Le Grand 2007; Warner and Aldag 2019).

273 Some arguments also suggest that competition can be detrimental to performance and its benefits
274 can be outweighed if a change of provider(s) disrupts stability of relations, damages coordination,
275 implies loss of knowledge and requires new learning (Alford and O'Flynn 2009; Lamothe and
276 Lamothe 2010). Managing processes of competitive tendering may also incur increased transaction
277 cost for local governments (Kettl 1993). Economic reasoning also points out that the presence of
278 increasingly higher switching costs, i.e., the costs of replacing an incumbent provider, limits
279 competition and transforms exchange relations (contracts) into bilateral monopolies with adverse
280 consequences for performance (Williamson 1979). Thus, the positive association between
281 competition and performance is likely to be rooted in the realistic possibility for replacement–as
282 reflected in Baumol's argument on contestability (1982), and classical economic reasoning on
283 competition (Abbott 1955)–rather than recurrent disruptions of service delivery through use of
284 competitive tendering and change of service providers. The arguments suggest that the contested
285 status of market-oriented models is partly explained by the strength of the competitive environment.
286 The following hypothesis tests the arguments.

287

288 H_3 – A stronger (weaker) competitive environment is associated with greater (lesser)
289 satisfaction with private provider performance.

290

291 *Contract-based exchange relations*

292 Market-centered management models rely heavily on formal contract-based exchange relations
293 (Donahue 1989; Vincent-Jones 2007; Walsh 1995). According to traditional contract theory, the
294 logic in the standard approach to contracting out–also designated the 'competition model'–seeks to
295 align formal contract features with the purpose of driving costs down by maximizing price
296 competition, i.e., ensuring technical efficiency, as well as ensuring accountability by specifying and
297 safeguarding the exchange (Dehoog 1990; Macneil 1980; Schepker et al. 2014). In a risk
298 perspective (Marques and Berg 2011), the standard contract should ideally be able to minimize
299 production costs by providing planning foresight and allocating a minimum of risk to the private
300 provider. However, the overall welfare benefit and outcomes from this approach hinge on whether
301 maintenance operations contribute to keeping public spaces fit for purpose within the urban fabric
302 (e.g., Dempsey and Burton 2012; Lindholst et al. 2015). Key contract features in the standard model
303 for maintenance services related to green spaces/parks and roads/streets usually include juridical
304 parts, formal specification of services with reference to a set of performance- and instruction-based
305 measures, a work schedule, a payment scheme, and provision for subsequent monitoring and
306 sanctions (Lindholst 2009). The standard contract also commonly links ex post payments calculated
307 on a regular (e.g., monthly) basis for work carried out in fixed work schedules and ad hoc work.
308 The standard model presumes that public authorities can, to a large extent, determine the "what,"
309 "where" and "when," and can foresee the key requirements and conditions of an exchange (i.e.,
310 maintenance operations) in advance (by ex ante planning) and specify them in a formal contract for
311 a given duration of time. Subsequently, the contract forms the basis for holding providers
312 accountable for provision of maintenance operations as agreed upon through the specification and
313 monitoring of services and provisions for penalties and sanctions. Thus the reliance on standard

contract features within an exchange relation reflects typical recommendations in economic reasoning and should in principle minimize the quality-shading problem (Hart, Shleifer, and Vishny 1997). Overall, the level of contract completeness, i.e., the level of formal specification in the contract and the inclusion of relevant information for addressing contingencies and allocating risks between the contract parties, becomes important for accurate contract pricing and effective use of competition, reduction of uncertainties and minimizing the risks for later conflicts between the contracting parties (Walker and Davis 1999). These arguments suggest that the contested status of market-centered models partly depends on the degree to which local governments rely on standard contract features in their exchange relations with private providers. The following hypothesis tests the arguments:

H_4 – Stronger (weaker) reliance on standard contract features is associated with higher (lower) satisfaction with private provider performance.

More broadly, the ideologically-informed reform push toward market-centered models in the 1980s and 1990s appears increasingly contested and replaced in the 2000s and 2010s with pragmatism among local governments where dissatisfaction with private (or other) providers in terms of cost and quality brings attention to alternatives and drives shifts between these (Bel et al. 2018; Clifton et al. 2019). One alternative discussed in the literature is the shift back to state-centered models where responsibilities across multiple services are reorganized anew within local governments (Clifton et al. 2019; Wollmann et al. 2016). However, newer alternatives within public space management also include social enterprises (Muñoz 2010), community-centered models (Mathers, Dempsey, and Molin 2015), long-term public-private partnerships (Dempsey, Velarde, and Burton 2020), and cross-sectoral partnerships (Dempsey et al. 2016). Interestingly, critiques of

cost-focused and standard market-centered models also prompt hopes for partnership-based and collaborative contracting models as better alternatives for engaging private providers within public space management (Carmona et al. 2008; Dempsey and Burton 2012; Jones 2000), as well as more broadly in the public sector (Bovaird 2004; Donahue and Zeckhauser 2012; Entwistle and Martin 2005; Vincent-Jones 2007). This development corresponds with contemporary contract theory, which also emphasizes the formal contract as an important supportive mechanism for the adaptation and coordination of activities within an ongoing exchange relation (Schepker et al. 2014; Vincent-Jones 2007). Commonly, market-centered models for partnership and collaborative models within public space management include a strategic focus on service development, flexibility, and multiple objectives, and rely on additional contract features such as formalized structures for joint planning and collaboration combined with supportive economic incentives, inclusion of a broader range of stakeholders, and requirements for partners to bring in a broader knowledge-base and set of professional skills (Lindholst 2009). These models should therefore be better able to keep public spaces fit for purpose in the urban fabric, i.e., ensure allocative efficiency, when circumstances and requirements are more uncertain and demand ongoing adjustment and development of services (e.g., Dempsey and Burton 2012; Lindholst et al. 2015). Thus, from a risk perspective (Marques and Berg 2011), these models should reduce the risk for service provisions that are unaligned with the preferences on the demand side (i.e., users) and for the pursuit of short-term interests at the expense of long-term concerns. On the downside, partnership and collaborative models may allocate a greater amount of risk (e.g., by increasing future uncertainty of what, when and where for maintenance operations) to the private partner and thereby run the risk of incurring additional costs / increasing prices. However, pragmatic managers (Kim and Warner 2016) should be able to balance the overall pros and cons and design their maintenance contracts to fit their purpose.

Sociological reasoning on exchange relations highlights the limitations of formal contracts more generally and brings attention to the importance of supportive collaborative norms and behaviors for effective coordination within contract-based relationships (Amirkhanyan et al. 2010; Macneil 1980; Vincent-Jones 2000; 2007). A collaborative orientation in attitudes and behaviors within a relationship is argued to enhance key requirements for effective contracting such as communication and sharing of information, minimization of misunderstanding and provision of a helpful environment for fixing unforeseen problems 'ad hoc' as they arise. Thus, a collaborative quality in exchange relations assists in filling in the gaps in the formal contact setup and helps partners to achieve mutually satisfying outcomes. A collaborative relationship may also reduce transaction costs associated with monitoring, dispute settlements and sanctioning of the contract (Brown, Potoski, and Van Slyke 2006). The literature also argues that there is a 'darker side' of partnerships and collaborative relations. For example, long-standing exchange relations might succumb to inertia or 'corruption' and undermine sound competition and the consideration of alternative providers (Bovaird 2004; Walker and Davis 1999). However, these darker sides appear to be marginal or 'conditional limits' to a general positive link between partnerships and collaboration and performance (Poppo, Zheu, and Zenger 2008). In light of these arguments, parts of the contested status can be argued to depend on the degree to which local governments develop respectively formal partnership features and a collaborative quality within their exchange relations. The two following hypotheses test the arguments:

H_5 – Stronger (weaker) reliance on formal partnership contract features is associated with higher (lower) satisfaction with private provider performance.

H_6 – A stronger (weaker) collaborative quality of exchange relationships is associated with higher (lower) satisfaction with private provider performance.

Administrative-organizational capacity

Discussions in the literature suggest that use of market-centered models tends to fragment local governance structures and reduces the administrative-organizational capacity to govern public space in accordance with long-term interests and community needs (De Magalhães and Carmona 2006; Dempsey and Burton 2012). More broadly, the use of market-centered models is argued to 'hollow out' the capacity to govern due to internal loss of knowledge and resources and the transfer of these to the private sector (Milward and Provan 2000)–a loss that risks undermining the organizational requirements of market-centered models themselves (O'Flynn and Alford 2008). Also, politicians and high-level managers eager to reduce overall expenditures may overlook the importance of internal capacity and thus allocate insufficient resources for internal management (Van Slyke 2003). However, the implementation and use of market-centered models involves learning and development of internal contract management capacity, including the ability to address questions of "what to buy," "whom to buy from" and "what is bought" (Kettl 1993; 2010). The general levers for these abilities relate to multiple administrative-organizational characteristics of public bureaucracies, including the administrative infrastructure and technology, leadership and the elaboration of priorities, the coordination and alignment of activities into coherent wholes, and supportive management systems (Andrews and Entwistle 2015; Ingraham, Joyce, and Donahue 2003). Combined, these arguments suggest that the contested status depends on the degree to which local governments' develop their internal capacity for managing services through market-centered models. The following hypothesis tests the arguments:

H_7 – Stronger (weaker) internal contract management capacity is associated with higher (lower) satisfaction with private provider performance.

Urban complexity

Parts of the privatization literature (e.g., Warner 2006) suggest that urbanized environments with larger and more diverse populations provide a more challenging environment for market-centered models. Similarly, the planning literature suggests that more populated and diverse urban settings represent more complicated, dynamic and unpredictable environments for maintenance operations in public spaces (e.g., De Magalhães and Carmona 2006). For example, a greater number of residents and visitors, and a more diverse and varied use of public space make it harder (and more expensive) to schedule and provide maintenance in accordance with performance- and instruction-based specifications. A provider must be capable of adapting or postponing operations on a day-to-day basis and rely less on standard routines with a fixed number of monthly and weekly maintenance operations. For example, it might be impossible to carry out planned routine maintenance operations if a public space is used for informal social events. Grass maintenance might also be impossible or require rescheduling due to a high number of visitors on sunnier days or if a park unexpectedly needs litter collection. Within a given economy, a provider's operational capacity is usually limited, and maintenance operations under more dynamic and complex circumstances are more likely to be delayed or temporarily insufficient. Consequently, satisfaction with quality and responsiveness suffers. The following hypothesis tests the argument:

H_8 – A more (less) complex urban environment is associated with lower (higher) satisfaction with private provider performance.

Methods and data

Survey

The study's empirical parts rely on items and quantitative data from a web-based survey administered to midlevel managers in all local governments in Scandinavia in 2014-2016. The survey took place as part of a comparative research project assessing experiences with local governments' use of private and public delivery of park and road services. In the study's context, the survey delivers unique comparable data for variables across three countries where no other comparable data sources exist. Given that the survey data are cross-sectional, the study cannot infer empirically whether any statistically significant associations or differences between variables also are causal. Thus, causal reasoning in the study relies on theory.

The development of the survey included pre-tests of a common template with pilot respondents and expert evaluations, with the overall aim of ensuring that items were clearly understandable by respondents (i.e., ensure face validity) and comparable in their meaning across translations. Targeted respondents were midlevel managers in local government organizations with responsibilities for roads and/or park services expected to have insights into operational as well as strategic dimensions of park and/or road services. By targeting responsible managers, the survey reflects a major stakeholder perspective in local government contracting and a group of professionals with key insights into how contracting processes are organized and managed. Local research partners compiled contact lists for respondents in each country through a combination of contacts with professional associations, use of phone books for professionals, inspection of websites and direct phone contacts. Due to variations in internal organization, it was in some cases necessary to identify more than one respondent or use a general contact point for a local government or a department. Initial invitations were followed up by multiple reminders for partly and non-responding local governments. In a few instances where multiple respondents replied for the same

local government, a primary respondent was selected ex post based on an assessment of years of employment, job title, responsibilities, and organizational position. Data on age and employment history indicate that respondents in the final dataset are on average relatively experienced. Respondents' average age ranged from 50 (Sweden) to 52 years (Denmark and Norway). The average employment history ranged from respectively 17 (Sweden) to 20 (Norway) years within the public sector and 10 (Sweden) to 13 (Norway) years for employment within the current local governments. Thus, due to the selection strategy and the respondents' characteristics it is reasonable to assume that the respondents were able to provide qualified responses to survey items.

The dataset includes data from 115 out of 290 local governments in Sweden (40%), 75 out of 98 in Denmark (77%), and 95 out of 490 in Norway (22%). T-tests (not shown) find that the data are representative according to local government size (population) and regional distribution for Denmark and Sweden, but tend to represent larger local governments located in more central and urbanized areas in Norway. Findings from other Scandinavian research (e.g., Fongar et al. 2019) suggest that non-response in Norway and Sweden are likely to be due to high numbers of small local governments (e.g., fewer than 5,000 inhabitants) with relatively few or no responsibilities for local parks and roads. The data reported in Table 2 furthermore show that private providers are more frequently used in Denmark compared to Norway and Sweden and less frequently used within local green space/park compared to street/road services.

*** Table 2 ***

Measurement model

The study's measurement model includes 21 survey items. The items are used to construct and measure the study's main dependent (performance) and independent variables. Values for five

480 variables based on multiple items are calculated with simple weighted averages to retain their
481 interpretability in terms of the original response scales. In addition to survey-based items, the
482 analysis includes three country dummy variables, a sector dummy, and a variable for local
483 government size.

484 The study's dependent variables draw on four survey items that measure the respondent's
485 satisfaction with private provider performance in terms of criteria for service quality, price/cost
486 levels, responsiveness toward addressing issues and deficiencies, and development and innovation
487 of services. The study uses the items separately and in combination as an index. Items measure a
488 respondent's level of satisfaction on an 11-point bipolar numeric scale with the end anchors 0 =
489 'very unsatisfied' and 10 = 'very satisfied.' Scores above (below) the scale mid-point (5) indicate
490 greater (dis-)satisfaction with private provider performance.

491 The study's independent variables draw on survey items measuring competitive environment
492 (single item), formal contract features (eight items), the overall quality of relationships with private
493 providers (four items), and the internal contract management capacity (four items). The items are
494 measured with an 11-point unipolar numeric scale with the end anchors 0 = 'not at all' and 10 = 'in
495 a very high degree.'

496 The variable for competitive environment is based on a single item. The item reflects classical
497 economic reasoning on competition (Abbott 1955) and contestability (Baumol 1982), and measures
498 the strength of the competitive environment in which ongoing contract-based exchanges take place
499 in terms of the relative ease of switching to an alternative. Higher scores indicate the presence of a
500 more competitive environment. Four items for 'standard' and four items for 'partnership' features
501 measure two key dimensions of commonly used maintenance contracts within park and road
502 services (Lindholst 2009). Higher scores indicate a greater reliance on formal contract features for
503 organizing and coordinating behaviors within the relationship. The variable for the (collaborative)

quality of relationship is based on four items. Item formulations reflect core content of relational governance and are adapted from earlier research (Cannon, Achrol, and Gundlach 2000). Lower scores indicate more adversarial relationships while higher scores indicate the presence of more supportive collaborative relationships. The variable for contract management capacity is based on four survey items. The items reflect a generic understanding of management capacity (Ingraham et al. 2003) and refer to internal organizational features such as 'systems,' 'methods,' 'procedures,' 'expertise' and 'time' for managing contracts. Higher scores indicate the presence of greater internal contract management capacity.

The study uses a variable for local government size (number of inhabitants) as a proxy variable for urban complexity. The variable is based on register-based data (inhabitants) collected from national statistical bureaus.

Finally, the study includes a control variable for service context (park or road services). Two-hundred and twenty-five cases in the sample provide data for all items. Table 3 shows descriptive statistics for all included variables. Appendix A provides additional details on item formulations.

*** Table 3 ***

Validity checks

A number of statistical ex post analyses were conducted to certify that the study relies on sound survey data and a valid measurement model. First, the data were checked for potential non-response bias based on guidelines offered by Armstrong and Overton (1977). The check tested differences in data from the groups of the early third and the late third respondents for each country with independent samples t-tests. Across 63 comparisons, the tests found no statistical significant differences at the .05 p-level and less than a handful of significant but unsystematically distributed

528 (i.e., for different items) differences at the .10 p-level. Based on Armstrong and Overton's idea that
529 late respondents resemble non-respondents, the check suggests that any substantial and systematic
530 differences between respondents and non-respondents are unlikely to be present.
531 Second, construct validity of the survey-based part of the measurement model was assessed with
532 principal component analysis (PCA). PCA allows for ex post assessment of content validity, uni-
533 dimensionality, and convergent and discriminant validity of variables, i.e., the PCA checks whether
534 items are associated with the variables that they are intended to (Heir et al. 2018). The PCA was
535 carried out in a 'confirmatory' mode with the number of extracted components fixed to equal the
536 number of survey-based variables in the measurement model (i.e., six) and with direct oblimin
537 rotation to reflect the realistic assumption of substantial associations (i.e., correlations) between
538 variables. The PCA shows that the six extracted components account for a satisfactory amount–
539 72%–of the total variance among the 21 survey items with the first component (performance)
540 accounting for 32%. The PCA returns a rotated solution with high primary loadings (> .7) for all but
541 three items (still with acceptable loadings > .4) on their expected components and no troublesome
542 or relatively large secondary loadings (> .3) on other components. Overall, the results from the PCA
543 are indicative of good construct validity. Reliability scores (Cronbach's Alpha) for index-based
544 variables ranging from .74 to .87 are indicative of good internal consistency and support the results
545 from the PCA. Appendix A provides additional details for the PCA and reliabilities.
546 Third, social desirability bias is likely to influence the study if local managers provided answers
547 in accordance with personal and/or organizational interests and/or socially accepted norms. The
548 design and administration of the survey with full anonymity should ideally reduce the risk for social
549 desirability bias. The risk was checked ex ante in a test where a dummy variable for whether the
550 local manager relies on in-house provision (coded '1') or not (coded '0')–a variable indicative of
551 the presence of any organizational interests–is added to the study's regression model. The test found

552 the estimate to be statistically insignificant (-.27, p = .221) and the inclusion did not result in any
553 substantial change for other estimates. Thus, social desirability bias should be–if present–limited in
554 the study.
555 Finally, the risk for bias due to the presence of any common method variance (e.g., inflated or
556 deflated estimates) was assessed against simulation-based guidelines offered by Fuller et al. (2016).
557 Together, the size of reliabilities, the number of validated variables, the amount of variance
558 explained by the first component in the PCA, and the correlations among components (ranging from
559 .06 to .51 equal to shared variances ranging from .004 to .26) suggest that any substantial bias due
560 to common method variance is unlikely.
561

562 ## Results

563 The descriptive statistics reported in Table 3 indicate that local managers generally appear satisfied
564 with private provider performance in terms of quality, price/costs and responsiveness of
565 maintenance services related to local parks and roads. The average scores range from 5.8 to 7.1 on
566 the scale, where zero equals very high dissatisfaction and ten equals very high satisfaction, and they
567 are well above the scale midpoint of five, where scores above (below) are indicative of more (dis-
568)satisfactory performance evaluations. One-sample t-tests (details not shown) for Scandinavia (n =
569 225) and for each country find that all differences between the average performance scores and the
570 scale midpoint are statistically significant ($p < .01$). Thus, the study finds empirical support for the
571 hypothesis (H_1) that local managers in Scandinavia on the average are more satisfied than
572 dissatisfied with private provider performance. However, standard deviations for each performance
573 criteria, ranging from 1.6 to 2.1, are indicative of substantial variations.
574

575 *** Figure 1 ***

Boxplots in Figure 1 illustrate these variations for each country based on the index variable for private provider performance. The main variations are rather similar in the three countries, with the majority of scores in the upper range of the scale from around 6 to 8. In Sweden and Norway, however, there are also a few deviating cases with very low scores, indicative of a more extreme dissatisfaction. In addition, the boxplots illustrate (by the lower whiskers) that a notable minority of local managers are more dissatisfied than satisfied. Clearly, market-centered models for maintenance do not work equally well for all. An additional comparison of country differences between local managers' satisfaction with the individual performance criteria finds that differences between all scorings are insignificant except for price/costs (at p-level .01, ANOVA with post hoc test). Danish managers' score for price/cost levels are respectively 0.90 and 0.88 higher than their Norwegian and Swedish colleagues' scores. Overall, the substantial variations emphasize the importance of addressing the contingencies under which market-centered models work relatively well.

Next, country differences and possible explanations for variations in satisfaction with private provider performance are tested through a multiple regression analysis. Table 4 shows the results from five ordinary lest square (OLS) regression models (1–5) that evaluate the importance of key contingencies for local governments' satisfaction with private provider performance against criteria for quality, price/costs, responsiveness, innovation/development, and the aggregated performance index. All models are significant (F-tests, $p < .01$) and explain a substantial share of the variance in satisfaction with private provider performance with values for adjusted R^2 ranging from 30% to 48%. Values for variance inflation factors (VIF) are low (i.e., < 2) and indicate that multi-collinearity is not a concern. A check of the main results' robustness against a regression model

599 with stratified (by country) bootstrapping of standard errors, p-values, and 90% confidence intervals
600 finds similar results (see supplementary materials).
601
602 *** Table 4 ***
603
604 Overall, the main results from the regression analysis shown in Table 4 corroborate most of the
605 study's theoretical arguments and hypotheses (H_2–H_8) on the importance of country context,
606 competition, standard and partnership contract features, relationship quality, contract management
607 capacities and urban complexities for (explaining) variations in local managers' satisfaction with
608 private provider's performance of maintenance services against key criteria. Interestingly, the
609 results differ slightly across the models for individual performance criteria (Model 2–5) and for the
610 three countries, which provides for some nuances and unexpected results.
611 First, there are important differences related to country context. The differences in the
612 satisfaction with price due to the Norwegian and Swedish country context compared to the Danish
613 are respectively -1.03 and -.67 ($p < .01$). The difference between the Danish and Norwegian country
614 context is also statistically significant for quality (-.54, $p < .1$). In contrast to the main argument,
615 however, the country context of Sweden is found to be positively associated with higher satisfaction
616 with development and innovation in comparison with the Danish country context (.63, $p < .01$).
617 These findings point forward to a more complex association between country context and private
618 provider performance across different country contexts. Second, emphasis on partnership contract
619 features is not important ($p > .1$) for differences in satisfaction for three out of four specific
620 performance criteria. Still, partnership features are found to be positively associated (.20, $p < .01$)
621 with their most relevant performance criterion–innovation and development of services–a criterion
622 for which standard contract features is found to be unimportant ($p > .1$). Standard contract features

623 are positively associated with the three first performance criteria ($p < .01$). Third, larger local
624 governments, compared to smaller, is associated with lower overall satisfaction (-.17, $p < .05$) and
625 with regard to quality (-.29, $p < .01$) and responsiveness (-.18, $p < .10$). The logarithmic scale
626 indicates that the association is more pronounced for differences between relatively smaller local
627 governments.

628 Finally, the study checks for whether the main results for the importance of contingencies are
629 similar at the country level. For this purpose, the regression analysis in Model 1 was fitted with
630 interaction terms between country dummies and each of the variables that test the hypothesized
631 associations with performance (see supplemental materials). The test found that all interaction terms
632 were statistically insignificant at p-level .10 except for standard contract features ($p = .09$).
633 Subsequent analysis found that the difference between the coefficients for Sweden and Norway is
634 statistically significant at p-level .05 and the difference between the coefficients for Denmark and
635 Norway is close to significant at p-level .10 ($p = .107$) in the main analysis and statistically
636 significant ($p = .088$) in the robustness check. Figure 2 illustrates further the differences and reports
637 significance test for the country specific coefficients (simple slope tests).

638

639 *** Figure 2 ***

640

641 Overall, the results suggest that the hypothesized contingencies are not necessarily of equal
642 importance for different performance criteria, nor do they work in accordance with general theory
643 across different country contexts. Table 5 summarizes the empirical support for the hypothesized
644 contingencies (H_2–H_8).

645

646 *** Table 5 ***

Conclusions and Discussions

Market-centered management models represent one alternative for organizing responsibilities for the maintenance of public spaces in urban environments (Carmona et al. 2008; Randrup et al. 2020; Lindholst 2009). However, past evidence, discussions in the literature and wider developments in the public sector have increasingly contested the status of market-centered models within public space management and beyond. Overall, this study finds a widespread use of private providers across local governments in Scandinavia and a majority of local managers appears satisfied–rather than dissatisfied–with private provider performance of public space maintenance. Consequently, the study's results run counter to arguments and findings purporting a more contested status of market-centered models and return some leeway to earlier pro-market arguments and policies. However, the results come with some important amendments and reservations, and raise new discussions.

The study's main results suggest that the Scandinavian countries–on the balance–have adopted a relatively successful reform approach to the use of market-centered models for public space maintenance. The approach is characterized by incrementalism and pragmatism combined with a substantial delegation of autonomy to the local government level and retention of a strong, but reformed, government bureaucracy. This contrasts more radical approaches tried out earlier in Anglo-Saxon countries (e.g., Christensen and Lægreid 2011; Jones 2000) and also reflects the idea of a widespread pragmatism (rather than ideology) among local governments in their choice of service delivery arrangements (e.g., Clifton et al. 2019; Kim and Warner 2016). The results also contribute to discussions of whether local services are witnessing a historical movement toward state-centered models after years with reforms promoting market-centered models (e.g., Wollmann et al. 2016). Although the study does not rely on longitudinal data, the findings are indicative of a strong entrenchment of market-centered models within public space management rather than a

671 possible movement back to state-centered models. In perspective, these findings contribute to
672 discussions about the merits of different reform types (e.g., Christensen and Lægreid 2017) by
673 suggesting that some segments exist in the public sector where the core ideas from the NPM work
674 out well, and more wholesale dismissals of the NPM are thus unwarranted.
675 The study adopts a contextualized contingency approach to the contested status of market-
676 centered models and expands on the specific contingencies for the competition prescription in the
677 context of public space management in Scandinavia. Findings suggest that differences in
678 competition, different types of contract features, collaborative relations, internal capacities, and
679 urban and national contexts help explain the relative success of local governments' use of market-
680 centered models. Thus, the study integrates and corroborates various arguments and findings from
681 the existing literature. In particular, the study demonstrates the benefits of integrating several
682 arguments related to national, urban and managerial contingencies. These arguments include–
683 among other–economic reasoning (e.g., Baumol 1982; Vining and Weimer 2007), contract design
684 (e.g. Lindholst 2009; Schepker et al. 2014), sociological reasoning (e.g., Macneil 1980),
685 administrative-organizational reasoning (e.g., Kettl 1993; 2010), arguments on the role of urban
686 environments (De Magalhães and Carmona 2006; Warner 2006), and comparative perspectives
687 (e.g., Kuhlmann and Wollmann 2019). These arguments are furthermore expanding on the
688 contingencies defining the circumstances under which the competition prescription performs
689 relatively better (or worse).
690 In a comparative perspective (e.g., Kuhlmann and Wollmann 2019), the study corroborates the
691 idea that the territorial and administrative structure in a country is important for the performance of
692 market-centered models. The study also highlights that the importance of contingencies are likely to
693 differ to some degree across country contexts. First, the study provides substance to the proposition
694 that a more scattered, fragmented and unattractive market structure (represented by Norway)

moderates the effectiveness of standard contract features for managing exchange relations. This insight warrants new comparative research that evaluates whether the contingencies, such as the use of contracts, for effective use of the competition prescription work in similar or dissimilar ways across different country contexts. However, the partly unexpected and diverging results for the Swedish country context are surprising and bring attention to needs for developing contextual arguments further. One speculation is that the Swedish context is more similar to the Danish than initially argued. The findings also present a puzzle of why the Swedish context is associated with a comparatively higher satisfaction with private providers' development and innovation of public spaces. Second, the study questions the prospect of generalizing core propositions without careful consideration of contingencies and their possible interplay within different country contexts.

The study corroborates classical ideas of the importance of competition and contestability for performance of market-based exchange (e.g., Apple 1955; Baumol 1982). This result diverges in part from other studies that suggest a limited or even negative role of competition (e.g., Fernandez 2009; Lamothe and Lamothe 2010). The divergence brings attention to the different ways local governments can harness competition for improving performance. This study suggests that a competitive environment that allows for less burdensome provider shifts in case of failure–in contrast to a routine use of competitive tendering that may upset existing well-performing exchange relations–is important for better performance.

The literature highlights that formal contracts can be designed differently, allocate risks in different ways and serve multiple functions and purposes within an exchange-relation (e.g., Lindholst 2009; Marques and Berg 2011; Schepker et al. 2014; Vincent-Jones 2007). This study contributes with empirical insights on the importance of formal contracts for performance and how different contract dimensions work within exchange relations. One interpretation of the results for the relative importance of respectively standard and partnership features for different performance

719 criteria is that they are able to serve different purposes depending on local governments' wider
720 strategic objectives. Reliance on standard features appears to serve objectives related to technical
721 efficiency (quality and price/costs), while partnership features serve objectives related to allocative
722 efficiency (development and innovation). Thus the study provides some empirical support for hopes
723 raised for partnership-based approaches in the literature (e.g., Dempsey and Burton 2012; Jones
724 2000; Vincent-Jones 2007). However, one limitation of this study for the judgment of partnership-
725 based approaches is that these often encompass broader strategic and social objectives beyond the
726 four performance criteria adopted in this study (e.g., Dempsey et al. 2020). In addition, the support
727 for the importance of formal partnership features can be discussed in conjunction with the support
728 for the importance of the collaborative quality of relations, as partnership-based models are
729 commonly defined as a collaborative endeavor (e.g., Donahue and Zeckhauser 2012). In this
730 respect, the study shows that the informal side of partnerships–a working relationship based on a
731 collaborative spirit–is a key contingency. Relevant to this discussion, the descriptive statistics (see
732 Table 2) show that reliance on partnership contract features appears relatively low compared to the
733 level of collaborative quality of relations and the reliance on standard contract features. This is
734 indicative of an overall complementary approach in Scandinavia, where a strong reliance on
735 standard contract features is embedded within exchange relations characterized by a collaborative
736 spirit. Thus the reliance on standard contract features in Scandinavia appears to be embedded in
737 exchange relations where there is less need for the contract's function as a safeguard, and where the
738 contract's primary function can be expected to be related to planning and coordination of activities.
739 The study's findings for the importance of a collaborative quality of relationships for performance
740 are furthermore congruent with sociological theories of contracts (e.g., Macneil 1980; Vincent-
741 Jones 2000) and findings in earlier research (e.g., Amirkhanyan et al. 2010; Fernandez 2009). The
742 findings for Norway–where reliance on standard contract features appears unimportant for

743 satisfaction with private provider performance–is a more extreme illustration of the relevance of
744 sociological arguments.

745 The study corroborates arguments in the literature that emphasize the importance of contract
746 management capacity (e.g., Amirkhanyan et al. 2014; Kettl 1993; 2010; Van Slyke 2003). Thus the
747 study further validates the importance of administrative-organizational contingencies. The study,
748 however, draws on a generic concept of management competency and it would be of interest to
749 explore further which particular managerial instruments (i.e., contingencies) competent managers
750 rely upon for ensuring the performance of private providers.

751 Finally, the study finds empirical support for a negative association between local government
752 size–as a measure for urban complexity–and satisfaction with private providers' performance. Thus,
753 the study supports the literature (e.g., Warner 2006) suggesting that urban complexities are
754 detrimental to the performance of market-centered models. It would be of interest to explore further
755 whether some models, such as partnerships (e.g., Dempsey and Burton 2012; Donahue and
756 Zeckhauser 2012), are better suited to mitigating the challenges of more complex urban
757 environments.

758 The study's findings offer guidance on how local governments can improve their returns from
759 adopting market-centered models for organizing maintenance of public spaces. From a managerial
760 perspective, the empirical support for the focal contingencies indicates prospective areas for
761 development of managerial skills and the importance of investing in internal capacities. Rather than
762 shifting to other alternatives, local governments could assess local circumstances and address key
763 contingencies that determine the relative outcomes of using different types of market-centered
764 management models, and seek to develop their expertise accordingly.
765

Limitations and future research

The number of available cases for analysis limits the study's statistical power in some parts. In particular, the lower n for Norway (56 cases) increases the risk of missing smaller but still substantial effects (i.e., type II errors). Thus, studies with higher n for subgroups are required to detect whether smaller effects are present and provide more certainty for empirical support.

The study relies on perceptual data from a single stakeholder to measure otherwise hard to measure variables and enable country comparison. One critique is that perceptual data are likely to be prone to several biases, and their validity relies critically on sound application of methods in particular in a study's design phase and the alignment of a study's purpose with respondents' interest and competencies (Podsakoff, MacKenzie, and Podsakoff, 2012). However, it is important to note that perceptions–such as managers' satisfaction with price and quality–inform local government decisions about who provides local services (e.g., Warner and Aldag 2019). Thus, gauging the perceptions of local managers is key for understanding dynamics in how service provision is organized. The perceptions of other key stakeholders, e.g., citizens, politicians and experts, are equally relevant in complementary accounts. Similarly, other sources, e.g., register-based accounts, might return different or complementary results (e.g., Amirkhanyan, Hyun, and Lambright 2014), and these are likely to be more valid for some research (e.g., comparisons of in-house and private providers) where social desirability bias can be expected to be more influential or the respondents' yardstick for assessment differs (e.g., Andrews et al. 2010).

The study takes place in the specific context of public space maintenance and findings may–with some caution–be extended to other services with similar characteristics, e.g., relative ease of specification and monitoring. Whether the study's findings are generalizable to services with more dissimilar characteristics is speculative. However, the study relies and expands on theoretical arguments that are more parsimonious and finds empirical support for these within the context of

790 public space maintenance services in Scandinavia. Thus the study provides a contextualized
791 empirical validation of and extension to existing arguments on the contingencies for the competition
792 prescription (e.g., Amirkhanyan et al. 2007; Brown et al. 2006; Dehoog 1990).
793 In perspective, the study highlights several avenues for future research. Notably, the study
794 warrants a contingency perspective on the performance of market-centered models corresponding to
795 multiple national, managerial, and urban conditions and contextual characteristics. This also
796 supports general calls for understanding organizational choices in regional governance by directing
797 attention to context (Feiock 2007). The study highlights the prospects for advancing research by
798 exploring the importance of country context further. One option would be to undertake replications
799 to validate performance and contingencies within similar or dissimilar service and/or country
800 contexts. The choice of dissimilar legal-institutional contexts with similar territorial and
801 administrative structures could test the importance of neo-institutional arguments (e.g., Williamson
802 2000) on the importance of "higher-order" institutions (e.g., legal frameworks) or different
803 "administrative traditions" (e.g., Kuhlmann and Wollmann 2019) for the effectiveness of lower-
804 order institutions (e.g., contract-based exchange) and the performance of different market-centered
805 models. Overall, the study highlights the relevance of context-sensitive scrutiny of the performance
806 of different types of market-centered models and careful generalization and application of theory
807 and arguments across country contexts.
808

809 ## Acknowledgements

810 The author is thankful for comments and support from Thomas Barfoed Randrup, Ylva Noren
811 Bretzer, Merethe Dotterud Leiren, and Nicola Dempsey, and from colleagues at the Center for
812 Organization, Management and Administration, Aalborg University.
813

References

Amirkhanyan, Anna A., Hyon J. Kim, and Kristina T. Lambright. 2007. "Putting the Pieces Together: A Comprehensive Framework for Understanding the Decision to Contract Out and Contractor Performance." *International Journal of Public Administration,* 30(6), 699–725.

Amirkhanyan, Anna A., Hyon J. Kim, and Kristina T. Lambright. 2010. "Do relationships matter? Assessing the association between relationship design and contractor performance." *Public Performance and Management Review,* 34(2), 189–220.

Amirkhanyan, Anna A., Hyon J. Kim, and Kristina T. Lambright. 2014. "The Performance Puzzle: Understanding the Factors Influencing Alternative Dimensions and Views of Performance." *Journal of Public Administration Research and Theory,* 24(1): 1–34.

Andrews, Rhys, George A. Boyne, M. Jay Moon, and Richard M. Walker. 2010. "Assessing Organizational Performance: Exploring Differences between Internal and External Measures." *International Public Management Journal,* 13(2): 105–29.

Andrews, Rhys, and Tom Entwistle. 2015. "Public–private partnerships, management capacity and public service efficiency." *Policy & Politics*, 43(2): 273–90.

Armstrong, J. Scott, and Terry S. Overton. 1977. "Estimating nonresponse bias in main surveys." *Journal of Marketing Research*, 14(3): 396–402.

Baumol, William J. 1982. "Contestable Markets: An Uprising in the Theory of Industry Structure." *The American Economic Review,* 72(1): 1–15.

833 Bel, Germa, Robert Hebdon, and Mildred E. Warner. 2018. “Beyond privatisation and cost savings:
834 alternatives for local government reform.” *Local Government Studies,* 44(2): 173–82.

835 Bel, Germa, and Xavier Fageda. 2011. “Big Guys Eat Big Cakes: Firm Size and Contracting in
836 Urban and Rural Areas.” *International Public Management Journal,* 14(1): 4–26.

837 Bel, Germa, Xavier Fageda, and Mildred E. Warner. 2010. “Is Private Production of Public Services
838 Cheaper Than Public Production? A Meta-Regression Analysis of Solid Waste and Water
839 Services.” *Journal of Policy Analysis and Management,* 29(3): 553–77.

840 Bovaird, Tony. 2004. “Public-Private Partnerships: from Contested Concepts to Prevalent Practice.”
841 *International Review of Administrative Sciences,* 70(2): 199–215.

842 Boyne, George A. 2002. “Concepts and indicators of local authority performance: an evaluation of
843 the statutory frameworks in England and Wales.” *Public Money and Management,* 22(2): 17–
844 24.

845 Boyne, George A. 1998. *Public Choice and Local Government. A Comparative Analysis of the UK*
846 *and the USA*. Basingstoke: Macmillan Press LTD.

847 Brown, Trevor L., Matthew Potoski, and David M. Van Slyke. 2006. “Managing public service
848 contracts: Aligning values, institutions, and markets.” *Public Administration Review,* 66(3):
849 323–31.

850 Cannon, Joseph P., Ravi S. Achrol, and Gregory T. Gundlach. 2000. “Contracts, Norms, and Plural
851 Form Governance.” *Journal of the Academy of Marketing Science,* 28(2): 180–94.

852 Carmona, Matthew. 2010. “Contemporary Public Space, Part Two: Classification.” *Journal of*
853 *Urban Design,* 15(2): 157–73.

854 Carmona, Matthew, Claudio De Magalhães, and Leo Hammond. 2008. *Public Space: The*
855 *Management Dimension*. London: Routledge.

856 Christensen, Tom, and Per Lægreid (editors). 2011. *The Ashgate Research Companion to New*
857 *Public Management*. Farnham: Routledge.

858 Christensen, Tom, and Per Lægreid (editors). 2017. *Transcending New Public Management*.
859 London: Taylor & Francis.

860 Clifton, Judith, Mildred E. Warner, Raymond Gradus, and Germa Bel. 2019. “Re-municipalization
861 of public services: trend or hype?” *Journal of Economic Policy Reform,* Online first, 1–12.

862 De Magalhães, Claudio, and Matthew Carmona. 2006. “Innovations in the Management of Public
863 Space: Reshaping and Refocusing Governance.” *Planning Theory & Practice.* 7(3): 289–303.

864 Dehoog, Ruth. 1990. “Competition, Negotiation, or Cooperation: Three Models for Service
865 Contracting.” *Administration and Society,* 22(3): 317–40.

866 Dempsey, Nicola, and Mel Burton. 2012. “Defining place-keeping: The long-term management of
867 public spaces.” *Urban Forestry & Urban Greening,* 11(1): 11–20.

868 Dempsey, Nicola, Mel Burton, and Rosie Duncan. 2016. “Evaluating the effectiveness of a cross-
869 sector partnership for green space management: the case of Southey Owlerton, Sheffield, UK.”
870 *Urban Forestry & Urban Greening,* 15: 155–64.

871 Dempsey, Nicola, Mel Burton, and Johanna Selin. 2016. “Contracting out parks and roads
872 maintenance in England.” *International Journal of Public Sector Management,* 29(5): 441–56.

873 Dempsey, Nicola, C. L. Martínez Velarde, and Mel Burton. 2020. “Long-Term Partnership
874 Contracting in Practice: Queen Elizabeth Olympic Park, London.” In *Marketization in Local*
875 *Government: Diffusion and Evolution in Scandinavia and England,* edited by Andrej Christian
876 Lindholst, and Morten Balle Hansen, 225–40. Cham: Palgrave Macmillan.

877 Donahue, John D. (1989). *The privatization decision: Public ends, private means*. New York: Basic
878 Books.

879 Donahue, John D., and Richard J. Zeckhauser. 2012. *Collaborative Governance: Private Roles for*
880 *Public Goals in Turbulent Times.* Princeton: Princeton University Press.

881 Dunleavy, Patrick, Helen Margetts, Simon Bastow, and Jane Tinkler. 2006. “New Public
882 Management Is Dead—Long Live Digital-Era Governance.” *Journal of Public Administration*
883 *Research and Theory,* 16(3): 467–94.

884 Elkomy, Shimaa., Graham Cookson, and Simon Jones. 2019. “'Cheap and Dirty: The Effect of
885 Contracting Out Cleaning on Efficiency and Effectiveness'.” *Public Administration Review,*
886 79(2): 193–202.

887 Entwistle, Tom, and Steve Martin. 2005. “From competition to collaboration in public service
888 delivery: A new agenda for research.” *Public Administration,* 83(1): 233–42.

889 Feiock, Richard C. 2007. “Rational Choice and Regional Governance.” *Journal of Urban Affairs*,
890 29(1): 47–63.

Fernandez, Sergio. 2009. “Understanding Contracting Performance: An Empirical Analysis”. *Administration & Society,* 41(1): 67–100.

Foged, Søren K. 2016. “The Relationship Between Population Size and Contracting Out Public Services: Evidence from a Quasi-experiment in Danish Municipalities.” *Urban Affairs Review,* 52(3): 348–90.

Fongar, Claudia, Thomas B. Randrup, Björn Wiström, and Ingjerd Solfjeld. 2019. “Public Urban Green Space Management in Norwegian Municipalities: A Managers’ Perspective on Place Keeping.” *Urban Forestry & Urban Greening,* 44(2019): 1–10.

Fuller, Christine M., Marcia J. Simmering, Guclu Atinc, Yasmin Atinc, and Barry J. Babin. 2016. “Common methods variance detection in business research.” *Journal of Business Research,* 69: 3192–8.

Greve, Carsten, Per Lægreid, and Lise H. Rykkja (editors). 2016. *Nordic Administrative Reforms: Lessons for Public Management*. London: Palgrave Macmillian.

Hair, Joseph F., Barry J. Babin, Rolph E. Anderson, and William C. Black. 2018. *Multivariate data analysis: A global perspective (8th edition),* Hampshire: Cengage Learning.

Hart, Oliver, Andrei Shleifer, and Robert W. Vishny. 1997. The proper scope of government: Theory and an application to prisons. *Quarterly Journal of Economics,* 112(4): 1127–61.

Hebbert, Michael. 2008. “Re-enclosure of the urban picturesque: Green-space transformations in postmodern urbanism.” *Town Planning Review,* 79(1): 31–59.

910 Hebdon, Robert P. 1995. “Contracting Out in New York State: The Story the Lauder Report Chose
911 Not to Tell.” *Labor Studies Journal,* 20(1): 3–29.

912 Hefetz, Amir, and Mildred E. Warner, 2012. “Contracting or Public Delivery? The Importance of
913 Service, Market, and Management Characteristics.” *Journal of Public Administration Research*
914 *and Theory,* 22(2): 289–317.

915 Hansen, Morten B. 2010. Marketization and Economic Performance. *Public Management*
916 *Review,* 12(2): 255–74.

917 Hood, Christopher. 1991. “A Public Management for All Seasons?” *Public Administration,* 69(1):
918 3–19.

919 Ingraham, Patricia W., Philip G. Joyce, and Amy K. Donahue. 2003. *Government Performance:*
920 *Why Management Matters*. Baltimore: The John Hopkins University Press.

921 Jacobs, Jane. 1961. *The Death and Life of Great American Cities*. New York: Random House.

922 Jones, Robert. 2000. “Managing the green spaces: problems of maintaining quality in a local
923 government service department.” *Managing Service Quality,* 10(1): 19–31.

924 Kettl, Donald F. 1993. *Sharing power: public governance and private markets*. Washington: The
925 Brookings Institution.

926 Kettl, Donald F. 2010. “Governance, Contract Management and Public Management.” In *New*
927 *Public Governance?,* edited by Stephan P. Osborne, 239–54. Oxon: Routledge.

928 Kim, Yunji, and Mildred E. Warner. 2016. “Pragmatic Municipalism: Local Government Service
929 Delivery in the Great Recession.” *Public Administration,* 94(3): 789–805.

930 Kuhlmann, Sabine, and Helmut Wollmann. 2019. *Introduction to comparative public*
931 *administration: Administrative systems and reforms in Europe, second edition*. Cheltenham:
932 Edward Edgar.

933 Ladner, Andreas, Nicolas Keuffer, and Harald Baldersheim. 2016. "Measuring Local Autonomy in
934 39 Countries (1990–2014)." *Regional & Federal Studies,* 26(3): 321–57.

935 Lamothe, Scott, Meeyoung Lamothe, and Richard C. Feiock. 2008. "Examining Local Government
936 Service Delivery Arrangements over Time." *Urban Affairs Review*, 44(1): 27–56.

937 Lamothe, Meeyoung, and Scott Lamothe. 2010. "Competing for what? Linking Competition to
938 Performance in Social Service Contracting." *The American Review of Public*
939 *Administration,* 40(3): 326–50.

940 Le Grand, Julian. 2007. *The Other Invisible Hand: delivering public services through choice and*
941 *competition*. Princeton: Princeton University Press.

942 Lijphart, Arend. 2012. *Patterns of Democracy: Government Forms and Performance in Thirty-Six*
943 *Countries. Second Edition*. New Haven: Yale University Press.

944 Lindholst, Andrej Christian. 2009. "Contracting-Out in Urban Green-Space Management:
945 Instruments, approaches and arrangements." *Urban Forestry & Urban Greening,* 8(4), 257–68.

946 Lindholst, Andrej Christian. 2017. "A review of the outcomes from contracting out urban green
947 space maintenance: What we know, don't know and should know." *Urban Forestry & Urban*
948 *Greening,* 27(October): 50–8.

949 Lindholst, Andrej Christian. 2020. “Denmark: The Incremental Way Towards a Deep-Seated
950 Marketization of Service Delivery.” In *Marketization in Local Government: Diffusion and*
951 *Evolution in Scandinavia and England*, edited by Andrej Christian Lindholst, and Morten Balle
952 Hansen, 141–60. Cham, Palgrave Macmillan.

953 Lindholst, Andrej Christian, Sid Sullivan, Cecil C. Konijnendijk van den Borsch, and Hanna Fors.
954 2015. “The Inherent Politics of Managing the Quality of Urban Green Spaces.” *Planning*
955 *Practice and Research,* 30(4): 376–92.

956 Lindholst, Andrej Christian, Morten Balle Hansen, Thomas Barfoed Randrup, Bengt Persson, and
957 Anders Kristoffersson. 2017. “The many outcomes from contracting out: The voice of public
958 managers.” *Environment and Planning C: Politics and Space,* 36(6): 1046–67.

959 Lindholst, Andrej Christian, Ole Helby Petersen, and Kurt Houlberg. 2020. “Economic Effects of
960 Contracting Out in Scandinavia, and the Importance of Country Context.” In *Marketization in*
961 *Local Government: Diffusion and Evolution in Scandinavia and England*, edited by Andrej
962 Christian Lindholst, and Morten Balle Hansen, 179–96. Cham: Palgrave Macmillan.

963 Macneil, Ian R. 1980. *The New Social Contract: An Inquiry into Modern Contractual Relations*.
964 New Haven: Yale University Press.

965 Marques, Rui C., and Sanford Berg. 2011. “Risks, Contracts, and Private-Sector Participation in
966 Infrastructure.” *Journal of Construction Engineering and Management,* 137(11): 925–32.

967 Mathers, Alice, Nicola Dempsey, and Julie F. Molin. 2015. “Place-keeping in action: Evaluating the
968 capacity of green space partnerships in England.” *Landscape and Urban Planning,* 139: 126–
969 36.

970 Milward, H. Brinton, and Keith G. Provan. 2000. “Governing the hollow state.” *Journal of Public*
971 *Administration Research and Theory*, 10(2): 359–79.

972 Muñoz, Sarah-Anne. 2010. “Towards a geographical research agenda for social enterprise.” *Area,*
973 42(3): 302–12.

974 O'Flynn, Janine, and John Alford. 2008. “The Separation/Specification Dilemma in Contracting:
975 The Local Government Experience in Victoria.” *Public Administration,* 86(1): 205–24.

976 OECD. 2018. *Subnational Governments in OECD Countries: Key data.* Paris: Organization for
977 Economic Co-operation and Development.

978 Petersen, Ole Helby, Ulf Hjelmar, and Karsten Vrangbæk. 2017. “Is Contracting out of Public
979 Services still the Great Panacea? A Systematic Review of Studies on Economic and Quality
980 Effects from 2000 to 2014.” *Social Policy & Administration,* 52(1): 130–57.

981 Poppo, Laura, Kevin Z. Zhou, and Todd R. Zenger. 2008. “Examining the conditional limits of
982 relational governance: Specialized assets, performance ambiguity, and long-standing
983 ties.” *Journal of Management Studies,* 45(7): 1195–216.

984 Podsakoff, Philip M., Scott B. MacKenzie, and Nathan P. Podsakoff. 2012. “Sources of Method
985 Bias in Social Science Research and Recommendations on How to Control It.” *Annual Review*
986 *of Psychology,* 63(1): 539–69.

987 Randrup, Thomas B., Andrej Christian Lindholst, and Nicola Dempsey. 2020. “Managing the
988 maintenance of urban open spaces.” In *Urban Open Space Governance and Management*
989 edited by Märit Jansson, and Thomas B. Randrup, 150–67. London: Routledge.

990 Samuelson, Paul A. 1954. “The Pure Theory of Public Expenditure.” *Review of Economics and*
991 *Statistics*, 36(4): 387–9.

992 Schepker, Donald J., Won-Yong Oh, Aleksey Martynov, and Laura Poppo. 2014. “The Many
993 Futures of Contracts: Moving beyond structure and safeguarding to coordination and
994 adaptation.” *Journal of Management,* 40(1): 193–225.

995 Van Slyke, David M. 2003. “The Mythology of Privatization in Contracting for Social Services.”
996 *Public Administration Review,* 63(3): 296–315.

997 Vincent-Jones, Peter. 2000. “Contractual Governance: Institutional and Organizational Analysis.”
998 *Oxford Journal of Legal Studies,* 20(3): 317–51.

999 Vincent-Jones, Peter. 2007. “The New Public Contracting: Public versus Private Ordering?”
1000 *Indiana Journal of Global Legal Studies,* 14(2): 259–78.

1001 Vining, Adrian R., and David L. Weimer 2007. “Economic Perspectives on Public Organizations.”
1002 In *The Oxford Handbook of Public Management* edited by Ewan Ferlie, Laurence E. Lynn Jr.,
1003 and Christopher Pollitt, 209–33. Oxford: Oxford University Press.

1004 Vining, Adrian R., and Anthony E. Boardman 1992. “Ownership versus Competition: Efficiency in
1005 Public Enterprise.” *Public Choice,* 73(2): 205–39.

1006 Vrangbæk, Karsten, Ole Helby Petersen, and Ulf Hjelmar. 2015. “Is contracting out good or bad for
1007 employees? A systematic review of international experience.” *Review of Public Personnel*
1008 *Administration,* 35(1): 3–23.

1009 Walker, Bruce, and Howard Davis. 1999. “Perspectives on Contractual Relationships and the Move
1010 to Best Value in Local Authorities.” *Local Government Studies*, 25(2): 16–37.

1011 Walsh, Kieron. 1995. *Public Services and Market Mechanisms, Competition, Contracting and the*
1012 *New Public Management*. Basingstoke: Macmillan Press Ltd.

1013 Warner, Mildred E. 2006. “Market-based Governance and the Challenge for Rural Governments:
1014 US Trends.” *Social Policy & Administration,* 40(6): 612–31.

1015 Warner, Mildred E., and Austin M. Aldag. 2019. “Re-municipalization in the US: a pragmatic
1016 response to contracting.” *Journal of Economic Policy Reform,* Online first, 1–14.

1017 Warner, Mildred E., and Amir Hefetz. 2002. “Applying Market Solutions to Public Services: An
1018 Assessment of Efficiency, Equity, and Voice.” *Urban Affairs Review,* 38(1): 70–89.

1019 Williamson, Oliver E. 1979. “Transaction-Cost Economics: The Governance of Contractual
1020 Relations.” *Journal of Law and Economics,* 22(2): 233–61.

1021 Williamson, Oliver E. 2000. “The New Institutional Economics: Taking Stock, Looking
1022 Ahead.” *Journal of Economic Literature,* 38(3): 595–613.

1023 Wollmann, Hellmut, Ivan Koprić, and Gérard Marcou (editors). 2016. *Public and Social Services in*
1024 *Europe. From Public and Municipal to Private Sector Provision*. Cham: Palgrave Macmillan.

1025 Wollmann, Hellmut, and Gérard Marcou (editors). 2010. *The Provision of Public Services in*
1026 *Europe Between State, Local Government and Market.* Cheltenham: Edward Elgar
1027 Publishing.

1028

Author Biography

Andrej Christian Lindholst is an associate professor of public management at the Center for Organization, Management, and Administration, Department of Politics and Society at Aalborg University, Denmark. His research addresses public sector issues related to corporatization and marketization, contract management, adoption of quality standards, managerial responses and learning under the Covid-19 pandemic, climate governance, and use of standardized tests in primary education.

Table 1. Country characteristics (mid 2010s)

	Denmark	**Norway**	**Sweden**
Government system	Consensual	Consensual	Consensual
Local autonomy	High	High	High
Basic reform approach	Modernization / incrementalism	Modernization / incrementalism	Modernization / incrementalism
Number of local governments (lower tier)	98	428	290
Country size (km^2)	43,000	407.000	304,000
Country size (inhabitants in thousands)	5,729	5,236	9,923
Average inhabitants in local governments	58,000	12,000	34,000
Inhabitants per km^2	134	14	23

Sources: OECD (2018), Greve, Lægreid, and Rykkja (2016), Ladner, Keuffer, and Baldersheim (2016), and Lijphart (2012).

1037

1038

Table 2. Country differences in local use of private providers

N (parks/roads)		Denmark (74/73)	Norway (80/85)	Sweden (115/114)
Proportions using private providers to some degree (> 0%)	Green space/parks	80% $^{N\,S}$	36% ^{DK}	45% ^{DK}
	Street/roads	93% ^{S}	85% $^{(S)}$	73% $^{DK\,(N)}$

Notes: Table based on survey data 2014-2016 (including cases that do not contract out). Remaining proportions are mainly provided by an in-house provider within the local government except for Sweden where about 10% of local governments use an inter-municipal company. Country comparisons based on pairwise χ^2-tests. Significant statistical results reported with country codes, e.g., ^{N}, for $p < .05$, and codes in parentheses, e.g., $^{(N)}$ $p < .1$.

1039

Table 3. Descriptive statistics

Variable	Mean [a]	SD	Min	Max	Skewness	Kurtosis
Performance						
Index	6.6	1.6	0.3	10.0	-0.70	1.05
Quality	7.1	1.7	0.0	10.0	-1.14	2.47
Price/costs	6.8	1.9	0.0	10.0	-0.65	0.78
Responsiveness	6.7	1.9	0.0	10.0	-0.73	0.64
Innovation / development	5.8	2.1	0.0	10.0	-0.24	-0.20
Country context (dummies)						
Denmark (yes = 1)	39%	N/A	0	1	N/A	N/A
Norway (yes = 1)	25%	N/A	0	1	N/A	N/A
Sweden (yes = 1)	36%	N/A	0	1	N/A	N/A
Competitive environment	6.1	2.6	0.0	10.0	-0.44	-0.73
Standard contract features	7.1	2.3	0.0	10.0	-0.83	0.10
Partnership contract features	4.6	2.1	0.0	10.0	0.09	-0.31
Collaborative relationship	7.5	1.6	2.3	10.0	-0.67	0.00
Contract mgmt. capacity	6.3	2.0	0.8	10.0	-0.64	-0.10
Local government size (LN) [b]	10.26	1.24	7.08	13.38	-0.26	0.27
Service context (parks = 0, roads = 1)	63%	N/A	0	1	N/A	N/A

Note: N=225.

[a] For dummy variables, the percentage for the value of 1 is presented.

[b] Data from national statistical bureaus (2016).

1042

Table 4. OLS regression analysis of private provider performance (unstandardized beta-coefficients, standard errors and p-levels)

	Model 1 Index	Model 2 Quality	Model 3 Price/costs	Model 4 Responsiveness	Model 5 Innovation/development
Country dummies (DK = ref.)					
Norway (yes = 1)	-.46(.25)*	-.54(.28)*	-1.02(.32)***	-.09(.32)	-.20(.37)
Sweden (yes = 1)	-.03(.19)	-.17(.21)	-.67(.24)***	.36(.25)	.63(.39)**
Competitive environment	.06(.03)*	.06(.04)*	.08(.04)**	.09(.04)**	.01(.07)
Standard contract features	.14(.04)***	.17(.05)***	.19(.06)***	.17(.06)***	.02(.06)
Partnership contract features	-.04(.05)	-.01(.05)	-.01(.06)	-.04(.06)	.20(.07)***
Collaborative relationship	.47(.05)***	.49(.06)***	.37(.07)***	.51(.07)***	.52(.08)***
Contract mgmt. capacity	.18(.04)***	.20(.05)***	.18(.06)***	.20(.06)***	.16(.07)**
Local government size (LN) [b]	-.17(.08)**	-.29(.09)***	- .06(.10)	-.18(.10)*	-.16(.12)
Service dummy (parks = 0, roads = 1)	.19(.16)	.14(.18)	.29(.21)	.19(.21)	.15(.25)
Model summary					
Model constant	2.16(.90)***	3.80(1.00)***	2.00(1.16)*	1.75(1.17)	1.08(1.36)
F-test	22.70***	19.67***	13.92***	15.30***	11.52***
R^2 / Adj. R^2	.49 / .47	.45 / .43	.36 / .34	.39 / .37	.33 / .30

Notes: N=225. P-levels * ≤ .1, ** ≤ .05, *** ≤ .01. Max value for variance inflation factors (VIF) is 1.88 in all models and relates to country dummies.

1043

1044

Table 5. Summary of empirical support from regression analysis (hypotheses H_2 – H_8)

Hypothesis / argument	Model 1 (performance index)	Model 2 (quality)	Model 3 (price/costs)	Model 4 (responsiveness)	Model 5 (innovation/ development)
H_2 (Danish context more supportive)	Partial	Partial	Yes	No	No (contrary findings)
H_3 (competitive environment)	Yes	Yes	Yes	Yes	No
H_4 (standard contract)	Partial	Yes	Yes	Yes	No
H_5 (partnership contract)	No	No	No	No	Yes
H_6 (collaborative relationship)	Yes	Yes	Yes	Yes	Yes
H_7 (contract mgmt. capacity)	Yes	Yes	Yes	Yes	Yes
H_8 (urban environment)	Yes	Yes	No	Yes	No

Note: Evidence evaluated at p-level .10.

1045

1046

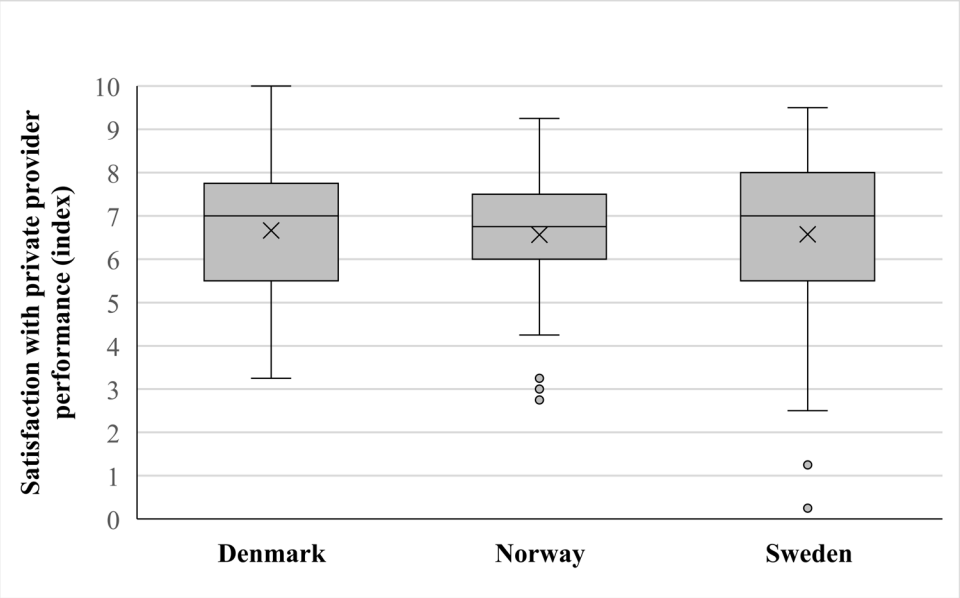

Figure 1. Boxplots of managers' satisfaction with private providers' performance of public space maintenance in three Scandinavian countries. *Notes*: N=225. Satisfaction with performance measured on an eleven-point numeric response scale where '0' = very dissatisfied and '10' = very satisfied. Average scores marked by a cross.

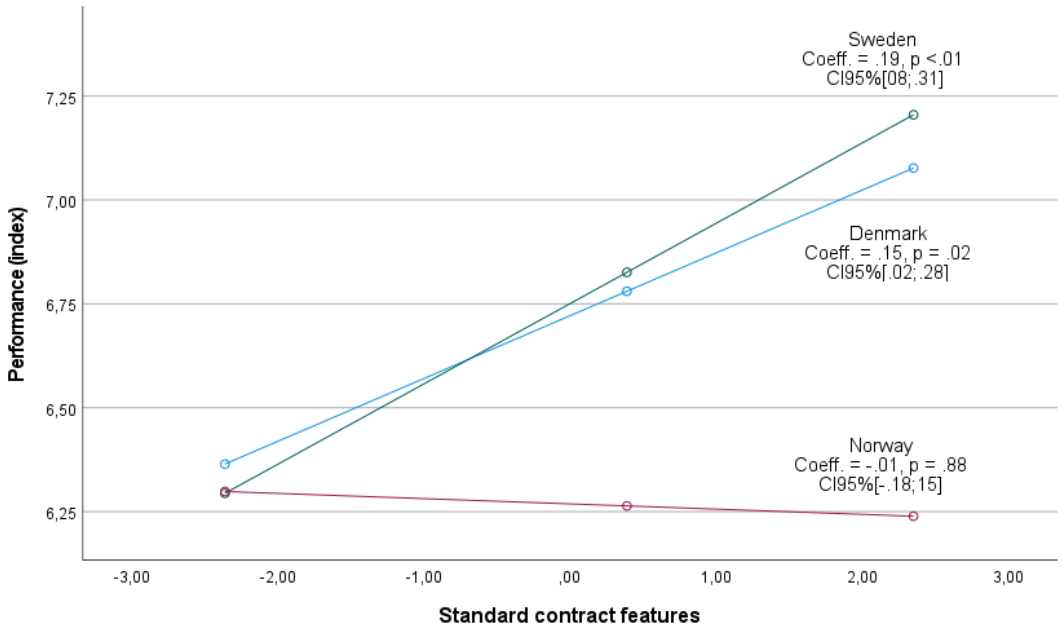

Figure 2. Estimated country moderation of the association between standard contract features and performance. *Notes*: N=225. P-levels * ≤ .1, ** ≤ .05, *** ≤ .01. Model summary R^2 = .50, F(11, 213)= 19.25***. Significance test of interaction term for country and standard contract features (mean centered): F(2, 213)= 2.39, p = .09. ΔR^2 = .011. Differences at increasing levels of standard contract features probed at the 16th (low), 50th (median) and 84th (high) percentile: Statistically significant differences found for DK-Norway at the median (-.51**) and high level (-.84**) and for Sweden-Norway at the median (-.56**) and high level (-.97***).

Appendix A

Appendix A: Principal component analysis (PCA): Survey items and loadings

	Loadings						
Component	**1**	**2**	**3**	**4**	**5**	**6**	**Com.**
Performance (Alpha = .862)							
Overall quality of maintenance operations	.760						.771
General pricing and cost of provided services	.717						.653
Follow-up and responsiveness toward service issues	.899						.835
Innovation and development of services	.827						.713
Competition							
Can change provider without significant costs / interruptions						.925	.879
Standard contract features (Alpha = .850)							
Formalized and written conditions and clauses (§§)		.846					.703
Performance specifications (goals, functionality and guidelines)		.657					.674
Prescriptive specifications (quantities, instructions and standards)		.813					.677
Formal and financial sanctions for noncompliance.		.731					.765
Partnership contract features (Alpha = .738)							
Formal model for collaboration and joint planning.				.727			.716
Engagement with users				.667			.548
Economic incentives for optimizing services				.801			.665
Skill requirements and professional qualifications				.463			.488
Relation quality (Alpha = .858)							
Mutual belief in collaboration as necessary for goal attainment					.902		.845
Mutual preparedness for change to make work easier					.874		.810
Mutual concerns for goal attainment					.786		767
Mutual belief in problem-solving as a joint responsibility					.700		.654
Contract mgmt. capacity (Alpha = .867)							
Organizational resources (e.g., time and staff)			.872				.711
Experience and expertise			.754				.689
Methods and systems			.853				.767
Management practices and procedures			.849				.839
Eigenvalue	6.7	2.8	2.4	1.3	1.1	.9	
Explained variance (%)	31.9	13.1	11.2	6.3	5.2	4.5	

Notes: N = 225. Abbreviated and translated item formulations. PCA carried out with direct oblimin rotation and forced extraction of six components (solution converged in 9 iterations). Kaiser-Meyer-Olkin measure of sampling adequacy = .845. Barlett's test of sphericity, $\chi^2(210) = 2575$, p <. 001. Total inter-item variance explained = 72.2%. Loadings shown for rotated solution, loadings < .3 not shown. Cronbach's Alpha (reliability) scores calculated with items for each index based variables. Extracted communalities (com.) reported in last column.