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What happens when municipalities run corporations? Empirical evidence from 290 Swedish municipalities

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ABSTRACT

Local governments are increasingly relying on municipally owned corporations (MOCs) to provide public services. Some describe this development as a rational response to austerity challenges and emphasise the cost-efficiency of MOCs (*the optimistic view*). Others identify complications and associate MOCs with weak supervision, lack of accountability, and corruption risks (*the sceptical view*). Hitherto, no studies have analysed these opposing claims on MOCs in the one and same inquiry. We address this gap by focusing on Sweden, which has experienced a dramatic growth in the number of MOCs. We examine the association between the number of MOCs, the business climate, satisfaction with local government, local tax rates, and a corruption index for all 290 Swedish municipalities. Putting the 'optimistic view' into doubt, results indicate that municipalities relying heavily on MOCs are associated with more perceived corruption and higher taxes but do not have more satisfied citizens nor a better business climate.

KEYWORDS Municipally owned corporations; corruption; arms-length principle; hybrid-organisations; quasi-privatisation; new public management

Introduction

Municipally owned corporations (MOCs) are increasingly being used by local governments to provide services. This development has come to be described as a burgeoning 'corporatisation' of local government services (e.g., Andrews et al., 2019; Torsteinsen 2019; Ferry et al. 2018; Tavares 2017; Citroni, Lippi, and Profeti 2013; Tavares and Camões 2010; Grossi and Reichard 2008) or even as an 'enterprise fever' (Aars and Ringkjøb 2011). However, as lamented in several literature reviews that have surveyed the research on corporatisation, this development of local government's internal organisation has largely been ignored in the literature (e.g., Krause and Van Thiel 2019; Torsteinsen 2019; Voorn, Van Genugten, and Van Thiel 2017).

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Curiously, however, the handful studies that do exist are ambiguous regarding how the corporatisation should be interpreted and evaluated. From a New Public Management (NPM) perspective, semi-autonomous hybrid organisations, such as MOCs, are a rational response to contemporary fiscal stress in the public sector – particularly at the local level (Andrews et al. 2020; Ferry et al. 2018; Kruijff and van Thiel 2017; cf. Pollitt et al. 2004). Compared to the traditional bureaucratic model, MOCs have more legal and managerial autonomy, are generally less constrained by laws that regulate use of public resources and are typically able to implement much more flexible personnel management practices (Bel et al. 2020; Voorn, Van Genugten, and Van Thiel 2020). Such organisational peculiarities have the potential to enable MOCs to operate more efficiently than traditional bureaucracies. Confirming this optimistic view, Voorn, Van Genugten, and Van Thiel (2017) survey of empirical studies found that, on average, MOCs are somewhat more efficient than bureaucracies in the provision of services that operate within refuse collection, water distribution, and transit services.¹

On the other hand, when MOCs are analysed with theoretical perspectives that account for rent seeking and principal-agent relations or highlight public sector ethics, adverse aspects of MOCs are emphasised. For instance, Bergh et al. (2019) found that the use of MOCs tends to lower transparency by creating nested principal–agent problems that, in turn, undermine conditions for accountability. Similarly, Torsteinsen and Bjørnå (2012) identified problems related to e.g., complex ownership structures, lack of interest among local politicians and side-lined municipal bureaucracies. In addition, it has been argued that the sheer presence of publicly owned corporations, such as MOCs, discourages private entrepreneurs from entering markets or distort free and fair competition in other ways (e.g., Sappington 2003). Furthermore, the wider literature on the adverse side-effects of NPM argues that blurring boundaries between the private and public sector affects public ethics negatively, which might deteriorate public sector accountability (Aars and Fimreite 2005; Kersbergen and Waarden 2004; Von Maravic and Reichard 2003; Box et al. 2001; Hondgehem 1998).

The presented strands of literature give rise to diametrically opposing expectations as to how local governments that rely heavily on MOCs should differ from those that have few or no MOCs. According to the optimistic view, MOCs are associated with increased efficiency in service delivery, and we should therefore expect local governments with relatively more MOCs to have more satisfied citizens, and/or lower local taxes. While the tax-level obviously also can reflect political considerations, a pattern where municipalities with more MOCs systematically have neither lower taxes nor more satisfied citizens would clearly speak against the view that MOCs are associated with efficiency gains in service delivery.

If, on the other hand, the literature traditions which emphasise how MOCs create principal–agent problems, danger zones for corruption and market distortions are more correct, MOCs will be correlated with lower citizen satisfaction, worse business climate and possibly also with higher taxes. Most importantly, if the sceptical view is correct, one would expect local governments with many MOCs to be associated with more irregularities related to corruption.

The paper contributes in an original way to the debate on the pros and cons of the ‘corporatisation’ in local government by empirically examining the 290 Swedish municipalities when it comes to how ownership of MOCs is associated with 1) citizen satisfaction with local government, 2) the local tax rates and 3) a corruption index – developed for each municipality – based on a survey submitted to over 13,000 local councilors. Putting the ‘optimistic view’ into serious doubt, our results indicate that municipalities who rely heavily on MOCs are associated with significantly more perceived corruption as well as higher taxes, but not with higher citizen satisfaction with local services in general. And while it not statistically significant at traditional levels, the correlation between MOCs and local business climate is negative in all specifications. These correlations all support the ‘sceptical view’, confirming a public choice perspective on MOCs as well as the literature which has highlighted the adverse effects of NPM. More precisely, in Sweden – which has experienced a massive introduction of MOCs the past two decades – the findings do firmly reject the notion that MOCs help local governments provide good value for money to taxpayers.

The paper proceeds as follows. The next section provides a background through a brief review of the relevant literature and the relevant context of Swedish local government. Section 3 presents the data employed, and in section 4, our results are presented. The paper concludes with a summary of our findings and a discussion about policy implications.

Context

The increasing use of MOCs has been described as an integral part of the public management trend often referred to as New Public Management (NPM). MOCs are said to be manifestations of the trend towards a ‘quasi-privatisation’, ‘middle ground’ or ‘hybridisation’ in the public sector (Denis, Ferlie, and van Gestel 2015; Christensen and Læg Reid 2003; Wettenhall 2001). One strand in this literature argues that the use of MOCs may have had unintended and undesirable side-effects, for instance, increasing corruption risks (e.g., Andersson and Erlingsson 2012; André 2010; see also OECD 2018; World Bank 2014; Luke 2010). Curiously, the United Nations Development Programme (UNDP) has gone so far as to highlight MOCs as particularly susceptible to corruption. And intimately related to corruption risks, several

scholars maintain that NPM may have negatively affected conditions for political accountability (Bergh et al. 2019; Papadopoulos 2007; Kersbergen and Waarden 2004), and that the philosophy to operate the public sector like a private enterprise threatens core public-sector values of the bureaucracy as servants of the public interest (Box 1999).

However, when it comes to efficiency, a case has been made for MOCs. MOCs typically operate under commercial law, thereby avoiding public laws surrounding local governments intended to safeguard public money (Voorn, Van Genugten, and Van Thiel 2017). The financial autonomy from the municipal budget as a whole is considered an upshot, since the operations of MOCs are not necessarily affected by demands on downsizing in times of financial stress. Moreover, at least in theory, the introduction of MOCs has aimed at giving extensive managerial autonomy and flexibility in delivery of services (Garrone et al. 2013; Bel and Fageda 2010) since it has been seen as a way for municipalities to separate politics from the practical implementation of service provision (Bourdeaux 2008). A separation of 'ownership' and 'control' takes place. The owner (the municipality, i.e., the local councilors) hands over the control of the operation to the management of the corporation, the board and the CEO (e.g., Wettenhall 2001). The operation in question is separated from the local bureaucracy, and becomes an independent and legal person in its own right – and importantly, in the Swedish context, subject to both public and private law (i.e., The Swedish Companies Act, Aktiebolagslagen). Here, MOCs are precisely in line with the overarching NPM philosophy, that operations will be more efficient when politicians rule at 'arm's length' (Majone 1997; Hood 1991). As noted above, supporting the optimistic view, efficiency gains have been observed in several studies (Voorn, Van Genugten, and Van Thiel 2017).

These two diametrically opposing lines of arguments regarding MOCs – the 'sceptical' and the 'optimistic' view – have lived in separate worlds. To our knowledge, they have never been jointly examined in the one and same study, at least not in the manner we go about in this study.

Before describing the Swedish setting, it is important to note that MOCs are in not a peripheral phenomenon. When Dexia Crediop (2004) gathered information about MOCs in Europa, they showed that they exist in all EU countries (except Luxembourg), with more recent comparisons and surveys of the rest of the world unfortunately lacking. For reasons that will become apparent, we believe that Sweden is a particularly well-suited case for quantitative studies on MOCs.

Sweden is organised into 21 regions and 290 municipalities. Accounting for roughly 60% of all public employment, Swedish municipalities are financed mainly by a proportional income tax of approximately 20%. Municipalities are responsible for the provision of schooling, childcare, and elderly care, leaving mainly the provision of health care and public transport

to regions and social insurance, higher education, and defence to the central government. Municipalities also handle welfare provision, zoning issues (including e.g., building permits), various inspections and permits, as well as issues relating to culture and recreation. Total public municipality consumption accounts for roughly 20% of national GDP, compared to 7% of GDP for the central government. Unsurprisingly, when indices have been constructed gauging decentralisation, local government capacity and autonomy across the globe, Sweden regularly ranks among the top nations (e.g., Ladner, Keuffer, and Baldersheim 2016; Sellers and Lidström 2007).

In Dexia Crediop's study, Sweden was the country with the second most MOCs per capita in the EU. Since that study was conducted, the number of Swedish MOCs has continued to grow consistently, from 1,256 in 2003 to 1,686 in 2018.² As shown in Figure 1, there has been a steady growth in MOCs since the early 1970s. While the number of municipalities have increased – through municipal splits – from its lowest value (277) in 1977 to today's 290, the number of MOCs per municipality has still increased from 2,2 to 5,8. The rapid development since the early 2000s means that MOCs now constitute a significant share of the Swedish local government sector. In 2018, 55,000 individuals were employed by MOCs (more than 6% of all local government employees), and their total turnover amounts to approximately 4,3% of GDP.

In general, Swedish MOCs operate in sectors that produce more traditional public goods and services. More than half of them deal with either 1) management of social housing, 2) electricity and heating, or 3) water and sewerage. However, it should be noted that almost 40% of them are active within such miscellaneous areas as culture, recreation, tourism, and vehicle repairs.

Historically and in general, the use of MOCs has not been all that controversial or politically contested in Sweden. That said, critical accounts have slowly begun to surface the past decade. First, The Swedish Competition Authority has repeatedly criticised MOCs for distorting the local business climate by competing with private firms in already established markets (Konkurrensverket 2020, 2014). Second, the Swedish National Council for Crime Prevention (BRÅ 2012) found that MOCs tend to be overrepresented in corruption cases brought to prosecution. Third, auditors have recurrently complained that it is harder to audit and review MOEs compared to public administration proper (SKL 2013), a view that is shared by investigative journalists (Hyltner and Velasco 2009). Relatedly, the independence – and the competence – of the politically appointed auditors has been questioned (Thomasson 2018). Fourth, the Swedish Tax Agency has claimed that local governments use webs of MOCs arrangements for tax evasion, estimating that by creating MOCs, municipalities have avoided paying circa 1bn SEK in tax each year (Skatteverket 2013). Fifth, criticism has been levied against the fact that an overwhelming majority of MOC board members are appointed on the basis of being councilors and/or party members (SOU 2015, 24, p 344),

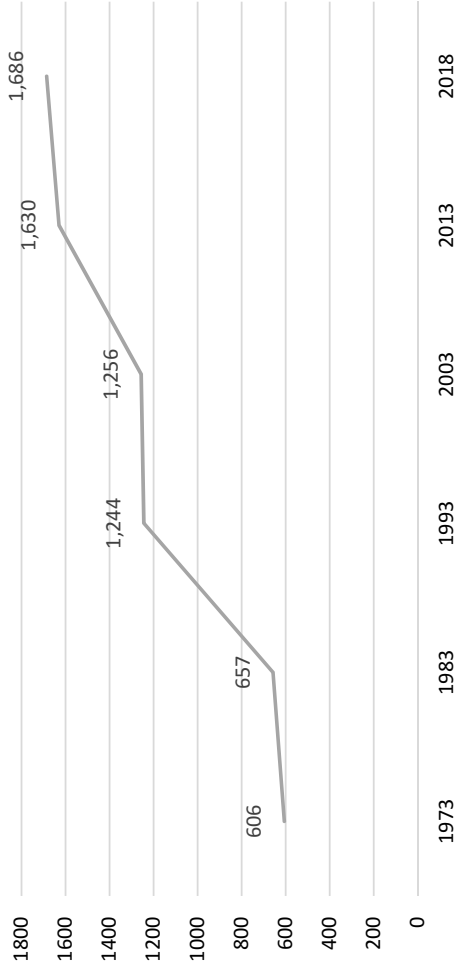


Figure 1. Number of MOCs in Sweden, 1973–2018.

and not on experience or competence. In addition, appointing boards on party political affiliation implies troublesome overlaps and entanglements between the politicians who are set to steer, govern, and oversee MOCs on the one hand, and the board members of MOCs on the other. Therefore, it has been suggested that MOCs may have had adverse effects on accountability in important (and growing) parts of local government operations (Bergh et al. 2019).

Data and methods

Against the described backdrop – i.e., that Sweden has experienced a dramatic increase in MOCs – Sweden constitutes an appropriate case to look closer at if we want to learn more about MOCs. Our main independent variable is the number of corporations for which the municipality owned at least 50% of the shares in 2013.³ The number of MOCs varies substantially across Swedish municipalities: The standard deviation is 7.1. seven municipalities own no MOCs whatsoever, whilst eight municipalities own more than 20. We examine how the number of MOCs correlates with four key characteristics: a measure of perceived local corruption, a measure of the local business climate, citizen satisfaction with local services and the municipal tax rate. All are described in more detail below.

For the measurement of corruption, we adhere to the standard definition of corruption as ‘abuse of public office for private gain’ (e.g., Rose-Ackerman 1978; cf. definitions used by Transparency International and The World Bank). We employ an original corruption index designed by Dahlström and Sundell (2013), which was based on a web survey sent to 13,361 local councilors in all of Sweden’s 290 municipalities during 2012–2013. It included two questions relating to bribes. Respondents’ were asked whether the following had taken place in their municipality of residence between 2010 and when they received the survey:

- A representative of a business has offered a gift or service to a civil servant in connection with a public procurement.
- A civil servant has demanded payment for performing a service that is part of his/her duties.

These questions were answered with alternatives on a scale from 1 to 7, with 7 corresponding the highest frequency of perceived corruption. Answers were combined additively to a corruption index that also ranges from 1 to 7. The overall response rate was 78%, and the response rate was at least 50% in 288 of 290 municipalities. This must be viewed as highly satisfactory considering that response rates have declined substantially in the developed world the past decades (Williams and Brick 2018). Reassuringly, validating the

quality of this index, Dahlström and Sundell (2013) found that answers to the questions used not only correlated significantly with answers to similar questions in a previous index (based on a total of less than 1,000 respondents) used by Bergh, Fink, and Öhrvall (2017), but also aligned with newspaper articles about bribery as well as legal bribery charges.

The local business climate variable is the Confederation Business Climate Index, compiled by the Confederation of Swedish Enterprise (Svenskt Näringsliv). Chiefly, it uses information from surveys answered by private employers in every Swedish municipality (in total 33,000 responses to questions concerning attitudes towards businesses and how municipalities handle zoning, issuing of permits and procurement processes, et cetera).⁴ The index has previously been used in, for instance, Lidström (2008) and Fölster (2016).

The municipal tax rate is a flat rate income tax paid by all inhabitants and caters for two-thirds of the revenue for all municipalities (with grants from central government and user fees accounting for most of the rest).

The satisfaction index measures local citizens' subjective satisfaction with their municipality based on a citizen survey conducted by Statistics Sweden. To these studies, municipalities voluntarily opt-in to participate, and hence, data exist only for 132 of the 290 municipalities. The number of respondents per municipality in these surveys vary between 233 and 855. The survey included a wide range of questions concerning how the citizen perceive their municipality of residence. The index we employ is based on the following survey questions:

- How satisfied are you with the way the municipality is running its operations?
- How well do your municipality's operations fulfil your expectations?
- Imagine a municipality that runs its operations perfectly – how close does your municipality come to such an ideal?

We view these questions as attempts to capture the latent variable 'general citizen satisfaction with municipality operations'. They were answered by citizens on a scale from 1 to 100, and we simply use the mean as an index of general satisfaction.

Finally, in addition to general satisfaction as measured using the questions above, we also examine answers to questions regarding municipal operations of water/drainage and waste disposal/refuse collection (also measured on a scale from 1 to 100 and is available for 131 municipalities). Using an indicator variable, these questions allow us to examine if satisfaction with these specific services is higher in municipalities where they are operated by MOCs.

Following a recent study on corruption in Swedish municipalities by Bergh, Fink, and Öhrvall (2017), we have included theoretically motivated controls

for municipality population and median income, the share of the municipal population with tertiary education, the presence of local newspapers and the share of women in the municipal council. Since the absence of political competition is traditionally thought to aggravate corruption, we have also included a dummy for municipalities where one party has been incumbents in power throughout the entire 1973–2013 period.

Table 1 contains descriptive statistics for all variables included in our analyses. It is worth noting that perceived corruption varies between 1.04 and 3.545, with the average value of 1.661 on a scale that ranges between 1 and 7. In addition, the table shows that the variation in MOC-ownership is significant: it ranges from 0 MOCs to 71. At the point when data were collected, a municipality owned and operated on average 5.73 MOCs. The distribution of population size is skewed due to many small- and medium-sized municipalities in the range of 10,000 to 50,000 inhabitants and a few very large cities with several hundred thousand inhabitants. In our preferred specification, we use log-transformed values of the corruption index, population and the number of MOCs plus one. As robustness tests, we use MOCs without the log-transformation, MOCs/capita and MOC's share of total municipal turnover as independent variables without changing the main results in any qualitative sense.

Results

We start out by visualising the correlations of interest ([figure 2a-f](#)). Most municipalities have fewer than 10 MOCs. In this range, we observe no correlation between the number of MOCs and perceived corruption. The correlation is weaker, but remains positive, when we exclude the two outliers with respect to number of MOCs – Sweden's two largest municipalities, Stockholm and Gothenburg. As shown, there are no strong correlations between MOCs and business climate, general citizen service satisfaction and tax rate. Satisfaction with water/drainage and waste disposal/refuse is very similar irrespective of whether these areas are handled by MOCs or bureaucracy.

Running standard OLS-regressions with perceived corruption, business climate, citizen satisfaction and tax rate as dependent variables gives the results presented in [Table 2](#), which is our preferred model specification. Conditional on other characteristics, municipalities with more MOCs are perceived to have significantly more corruption and have significantly higher taxes – but do not generally have more satisfied citizens nor a better business climate.

Model 5 and 6 in [Table 2](#) are motivated by the findings reported in Voorn, Van Genugten, and Van Thiel (2017), that MOCs who deal with refuse collection, water distribution, and transit services have an advantage in cost

Table 1. Descriptive statistics and variable definitions.

	N.	Mean	St. dev.	Min.	Max.	Comment (source: Statistics Sweden, unless otherwise stated)
Corruption index	290	1.66	0.38	1.05	3.55	Survey-measured corruption index created by Dahlström and Sundell (2013).
Business climate	290	3.34	0.40	2.38	4.52	Business Climate Index compiled by the Confederation of Swedish Enterprise.
Municipality tax rate	290	21.51	1.22	17.12	23.90	Flat-rate income tax set by municipalities
Satisfaction index	132	53.37	5.81	40	67	See explanation in text.
Satisfaction: water and drainage	131	65.24	4.11	55.00	75.00	See explanation in text.
Satisfaction: waste disposal and refuse collection	131	78.22	5.73	59.00	90.00	See explanation in text.
Number of MOCs	290	5.74	7.12	0	71	Number of enterprises for which the municipality owned at least 50% of the shares in 2013 (data collected by the authors).
MOCs per capita	290	2.65	2.02	0	11.84	Number of majority owned enterprises per 10,000 citizens
MOC's share of total municipal turnover	194	0.76	0.42	0.10	0.42	MOC's share of total municipal turnover
Corporation of water delivery or waste disposal	290	0.31	0.46	0.00	1.00	Dummy taking the value 1 for municipalities that have a MOC which either focus on water delivery, drainage or waste disposal
Population	290	32,700	66,016	2431	864,324	Number of inhabitants in 2013
Median income (KSEK)	290	241.48	24.17	196.30	336.70	Median labour income
Education.	290	0.14	0.06	0.06	0.44	Share of municipal population with at least three years tertiary education in 2013
Local news media	290	0.56		0	1	Dummy indicating presence of at least one local (newspaper) editorial (from Bergh, Fink, and Öhrvall 2017).
Share women in council	290	42.23	4.33	30	53	Share of women in the municipal council that were elected in 2010.
Stronghold over local power	290	0.24	0.43	0	1	Dummy for municipalities where one party have held power from 1973–2013.

efficiency. In contrast to the negative coefficient for general satisfaction in Model 4, satisfaction with services related to water/drainage and waste disposal/refuse is marginally higher where these areas are handled by MOCs, but the effect is close to 0 and far from significant.⁵

For the control variables, several associations are as expected: rich municipalities and municipalities with a higher share of well-educated citizens have lower taxes. For perceived corruption, the control variables have signs similar to those reported in Bergh, Fink, and Öhrvall (2017). Some of these results are in line with theoretical expectations, such as perceived corruption being

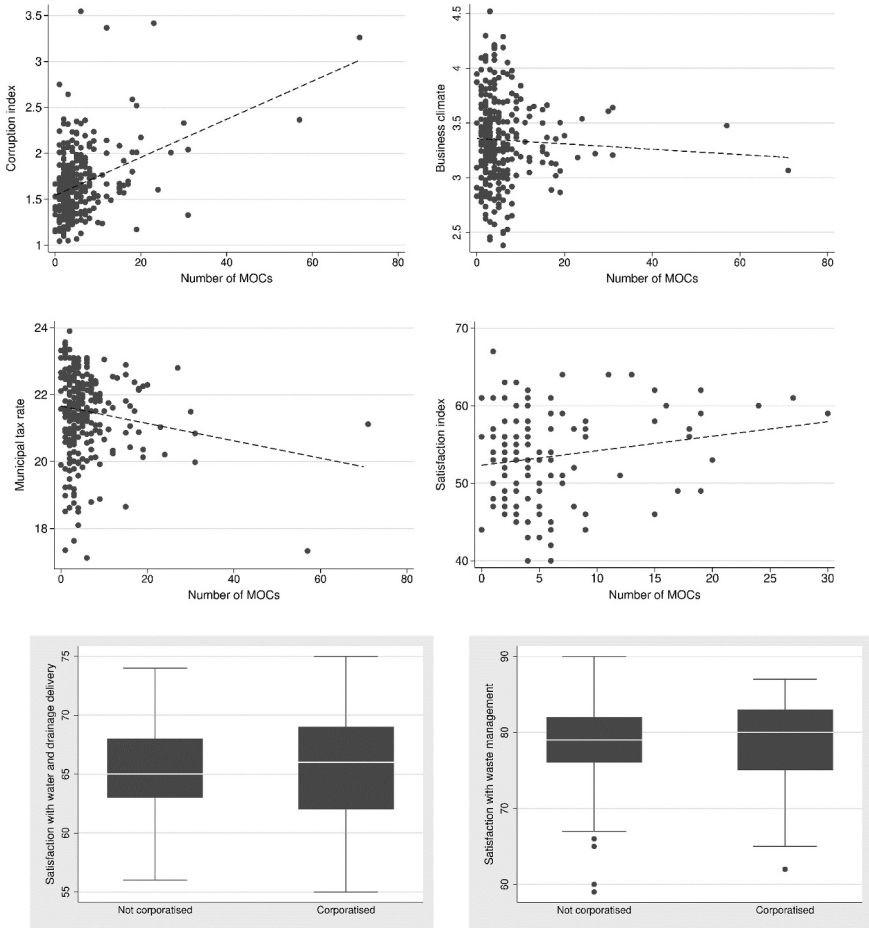


Figure 2. a. MOCs and perceived corruption. b. MOCs and business climate. c. MOCs and municipal tax rate. d. MOCs and general citizen satisfaction. e. Citizens satisfaction with delivery in water and drainage services depending on organisational form. f. Citizens satisfaction with waste disposal and refuse collection depending on organisational form.

slightly lower where local newspapers are present. Interestingly – and confirming results in in Bergh, Fink, and Öhrvall (2017) – perceived corruption is lower in politically less contested municipalities, and no support is found for the assertion that more women in politics implies less corruption.

In the appendix we report results from several robustness checks. First, we re-ran our main regression (Table 2) without the log-transformation (Table A1), using MOCs per capita (Table A2) and using MOC's share of total municipal turnover (Table A3). These alternative ways of measuring the importance of MOCs all generated the same pattern: Municipalities with

Table 2. The association between MOCs and various outcomes.

	Model 1 (ln) Corruption	Model 2 Business climate	Model 3 Tax rate	Model 4 General satisfaction	Model 5 Satisfaction withwater & drainage	Model 6 Satisfaction with waste disposal
(ln) Num. of MOCs	0.062** (0.023)	-0.057 (0.045)	0.434*** (0.109)	-0.547 (0.870)		
Water/Waste handled by MOCs					0.165 (0.794)	0.213 (1.105)
(ln) Population size	0.032 (0.024)	0.003 (0.039)	-0.520*** (0.096)	1.753* (0.718)	-0.0813 (0.476)	1.203 (0.726)
Median income	-0.001 (0.001)	0.003 (0.002)	-0.010* (0.004)	0.018 (0.034)	-0.006 (0.026)	0.001 (0.028)
Share with university educ.	0.343 (0.367)	0.688 (0.576)	-5.536** (1.918)	31.590* (13.194)	9.536 (12.986)	3.055 (12.146)
Local newspaper	-0.047* (0.024)	0.039 (0.050)	0.158 (0.111)	1.104 (1.063)	0.816 (0.792)	-0.426 (1.257)
Female rep in council	0.004 (0.003)	-0.013* (0.005)	0.031* (0.013)	-0.182 (0.102)	-0.186* (0.086)	-0.172 (0.131)
Stronghold over power in council	-0.080** (0.048)	0.029 (0.055)	0.146 (0.109)	1.242 (1.174)	0.282 (0.918)	0.992 (1.214)
Intercept	0.159 (0.218)	3.040*** (0.479)	27.602*** (1.206)	34.723*** (8.147)	73.441*** (8.039)	72.705*** (10.129)
N	290	290	290	132	131	131
R ²	0.199	0.091	0.494	0.257	0.055	0.057

Unstandardised coefficients; robust standard errors within parentheses.

Significance: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

more MOCs have higher perceived corruption and higher taxes, but are not associated with better business climate nor more satisfied citizens.

We have also ensured that our results do not suffer from over-controlling by running the models with population as the only control variable (not shown). Doing so produces significant results in the same direction, however of somewhat larger magnitude.

It should also be noted that data on citizen satisfaction are available in only circa 130 municipalities since participation in these surveys is on a opt-in basis. A dropout analysis reveals that the municipalities that have chosen to participate in the satisfaction survey are more well off than those that have not participated – and the richer municipalities are also relatively less corrupt. Hence, the negative association between MOCs and perceived corruption in the full sample is driven by the municipalities that opted not to participate in the satisfaction survey.

Finally, in [Table A4](#), we swap dependent and independent variables, thus explaining the logged number of MOCs using other variables. We do so to emphasise that our main finding should *not* be interpreted as a causal effect of MOCs on e.g., perceived corruption. Theoretically, it is an equally plausible interpretation that municipalities who already at the outset are more prone to

a culture of corruption could be more inclined to create an excess number of MOCs because of the rent-seeking and opportunities for spoils that MOC offer (Zetterberg 2000).⁶ As shown in table A4, municipalities with more perceived corruption and higher taxes have more MOCs – also when controls for local business climate are included. In column 6 in Table A4, the number of observations are fewer since here, we have also included the satisfaction index along with the three other variables. The coefficient on corruption on MOCs is still positive, but insignificant, in this model while the tax rate coefficient is still positive and significant.

Conclusion

Using data from 290 Swedish municipalities, we have demonstrated that local governments that have more MOCs tend to be associated with more perceived corruption and have higher taxes. We also found a negative (but insignificant) association between MOCs and the local business climate. In addition, in a sub-sample of 132 municipalities, we found no association between MOCs and citizens being satisfied with the way their municipality runs its operations. The results are robust to several alternative specifications. Ultimately, our findings thus lend support to previous studies that highlight adverse aspects of, and have been sceptical to ‘quasi-privatisation’, ‘middle ground’ or ‘hybridisation’, i.e., organisational peculiarities often associated with NPM.

As already noted, it is important to point out that the results should not be interpreted as to say that MOCs *causally* increase corruption. It is just as theoretically plausible that municipalities that already at the outset are permeated by a culture of corruption would be more inclined to create MOCs because of the unique rent-seeking opportunities, and lower transparency, they offer. However, to us, the direction of causality is not the main point. Whether their existence is caused by pre-existing corrupt cultures or causes increased probability for corrupt activities – it is likely that these effects are mutually reinforcing – there are at least four reasons to be wary towards a massive introduction MOCs in a country’s municipal sector.

First, they have increasingly come to be used to provide services associated with ‘high-risk sectors’ (Andersson and Erlingsson 2012): they are involved in zoning and large-scale construction projects, operate power and water distribution, as well as transportation. In addition, they are frequently employed in high economic output areas and engaged in an abundance of public procurement. *Second*, although initially intended to be ‘arm’s length bodies’ (Genugten, Van Thiel, and Voorn 2020), in Sweden, the overwhelming majority of the appointed board members of MOCs are also local councillors (SOU 2015:24). As emphatically argued by the World Bank (2014)

and OECD (2018), in situations where representatives of the ‘owners’ and the boards of public enterprises (in our case, councillors) overlap, the risk of political meddling is omnipresent. Also, such overlaps constitute a short-circuit of the accountability chain. This, in turn, as demonstrated by Bergh et al. (2019), risk making MOCs particularly susceptible to corruption. *Third*, scholars have associated MOCs with lower transparency and, as ‘hybrid organisations’ in a grey zone between private and public law, they blur boundaries between the public and the private spheres. This tends to make rules and norms fuzzy, and ultimately deteriorate traditional accountability mechanisms and undermine local integrity systems (Grossi and Thomasson 2015). *Fourth*, and importantly, the boards of Swedish MOCs are notorious for not including women, only having approximately 20–25% female representatives present. This should be compared to most other boards and committees in Swedish politics where the share of women is regularly well above 40%. Since a consistent finding is an association between a high share of females in elected office and a low level of corruption, the low share of women present in MOC boards is an obvious warning signal (e.g., Bauhr, Charron, and Wängnerud 2019).

As noted, our results do not necessarily put the results reported in Voorn, Van Genugten, and Van Thiel (2017) into question, i.e., that MOCs can have an advantage in cost efficiency. These authors focused on studies that had analysed MOCs operating within refuse collection, water distribution, and transit services. One possibility, which fits our observations, is that having a few MOCs that operate such core services, is less problematic from a corruption perspective and, in addition, also, seems beneficial from the efficiency as well as quality in services perspectives. However, when municipalities start to create, own and operate more than just a handful of MOCs, some of them will inevitably be active in markets that are furthered from the public sector’s core tasks. Consequently, such companies are more likely to distort free and fair competition, which might be problematic.

Another possibility is that the efficiency gains created can either be put to public use or diverted for personal gains – and the choice is affected by the institutional context. An aggravating circumstance, which could have tweaked several Swedish MOCs away from efficiency towards inefficiency (or even corruption), is that the growth in MOCs has not adequately been accompanied by high-quality oversight, auditing and supervision (Andersson 2002). We know that the lion’s share of Swedish corruption scandals has been exposed by private individuals and investigative journalists (BRÅ 2013). In that perspective, it is worrying that in Sweden – but not only there (e.g., Nygren, Leckner, and Tenor 2017) – almost a third of all local news outlets have been shut down over the past 15 years (Nygren and Althén 2014; Hanberger et al. 2005). Furthermore, not only is local journalism lacking in presence: when they do exist, the quality of their investigations has been put

into question by several scholars (Nord and Nygren 2007). It seems clear, then, that the massive introduction of MOCs in Swedish local government unfortunately has not been accompanied with sufficient instruments assuring checks and balances, hence, accountability.

If one adheres to the idea institutional design might influence the probability of individuals engaging in shady activities (e.g., Becker 1968), we should not be all that surprised when the institutional 'structure of temptation' is favourable, risks for corruption are heightened. We suggest that the movement towards increased corporatisation in Swedish local government simultaneously implied that 1) the opportunities to appropriate resources through corrupt behaviour has increased, that 2) the degree of auditing, oversight as well as media scrutiny has decreased, and that 3) the 'hybrid' character of MOCs has created an unfamiliar, blurry system of rules and regulations, so that individuals operating within these organisations are not always aware what the lawful or appropriate behaviour is. Taken together, the three factors contribute to make our findings more intelligible and should make local politicians wary to create, own and operate an increasing number of MOCs that are far removed from the core activities of the public sector.

Notes

1. Despite recurrent claims to the opposite, case-studies have demonstrated that this is true for state-owned corporations as well (e.g., Nelson and Nikolakis 2012; Bozec and Breton 2003).
2. Although our aim here is not to explain the growth of MOCs in Sweden, it can however be noted that two of the more notable surges in numbers coincide with the beginning of the 1990s, as well as between 2003 and 2013. Here, Sweden experienced a rough financial crisis 1990–1994 (related to a housing bubble that resulted in a credit crunch and widespread bank insolvency). Sweden experienced negative growth for a couple of years, and rampant unemployment followed suit. Sweden was also hit hard by the global financial crisis in 2008. Since Swedish municipalities are responsible for core responsibilities of the welfare state, large-scale economic crises inevitably hits the local government sector hard and puts them under financial stress. It has been argued in the literature on NPM that macroeconomic troubles in general (but perhaps in the 70's and early 90's in particular) are one of the more important reasons why NPM reforms climbed so high the political agenda in the OECD in general, and subsequently – as implicated in Green-Pedersen (2002), – this is clearly valid for Sweden too. The growth of MOCs – an organisational form typically associated with NPM – can obviously be analysed in this light.
3. According to Hansson (2006), MOCs that are not majority-owned by the municipality represented only 10%.
4. The index has previously been used by e.g., Fölster, Jansson, and Nyrenström Gidehag (2016) and Lidström (2008). It is available at <https://www.foretagsklimat.se/>

5. The regression models for satisfaction with water and drainage respectively waste disposal and refuse collection were estimated with a binary independent variable indicating whether a municipality are running these operations in corporate form. This dummy variable takes the value 1 for all municipalities which have at least one MOC related to water, drainage, waste disposal or refuse collection.
6. Anecdotal evidence of how MOCs have been used for rent-seeking and spoils are abundant. Examples include 1) appointing friends from one's own party to MOC boards, without them having formal competence or experience, but mainly for the sake of old good and hard work for the party, 2) using MOCs to circumvent rules for public spending, for instance buy oneself (and/or guests) food and alcohol, and 3) using MOCs to sponsor sports clubs and events, where the CEO and/or the boards receive kickbacks in the form of VIP-tickets to events.

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Appendix

Table A1. The association between MOCs and various municipal outcomes. Unlogged values.

	Corruption	Business climate	Tax rate	General satisfaction
Number of MOCs	0.012** (0.005)	-0.003 (0.003)	0.038* (0.015)	0.037 (0.106)
(ln) Population size	0.057 (0.039)	-0.018 (0.035)	-0.457*** (0.090)	1.253 (0.729)
Median income	-0.002 (0.001)	0.003* (0.002)	-0.010* (0.004)	0.028 (0.035)
Share with university educ.	0.542 (0.741)	0.773 (0.590)	-6.363** (1.998)	30.828** (13.413)
Local newspaper	-0.081 (0.041)	0.038 (0.050)	0.173 (0.115)	1.155 (1.060)
Female rep in council	0.007 (0.005)	-0.012* (0.005)	0.027** (0.012)	-0.177* (0.103)
Stronghold over power in council	-0.142** (0.045)	0.027 (0.055)	0.151 (0.125)	1.155 (1.168)
Intercept	1.148** (0.381)	3.092*** (0.498)	35.962*** (9.303)	35.962*** (8.112)
N	290	290	290	132
R ²	0.196	0.088	0.491	0.255

Unstandardised coefficients; robust standard errors within parentheses.

Significance: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Table A2. The association between MOCs per capita and various municipal outcomes.

	(ln) Corruption	Business climate	Tax rate	General satisfaction
MOCs per capita	0.030** (0.012)	-0.016 (0.012)	0.066* (0.025)	-0.159 (0.253)
(ln) Population size	0.148*** (0.030)	-0.046 (0.029)	-0.196* (0.078)	1.298* (0.622)
Median income	-0.002* (0.001)	0.003* (0.002)	-0.012** (0.003)	0.020 (0.032)
Share with university educ.	0.659 (0.576)	0.750 (0.582)	-5.989** (1.502)	31.855* (13.340)
Local newspaper	-0.078* (0.045)	0.035 (0.051)	0.173 (0.113)	1.084 (1.071)
Female rep in council	0.008 (0.005)	-0.012* (0.005)	0.029* (0.013)	-0.180 (0.102)
Stronghold over power in council	-0.145*** (0.049)	0.030 (0.055)	0.151 (0.112)	1.222 (1.174)
Intercept	0.308 (0.425)	3.438*** (0.559)	25.525*** (1.331)	38.280 (10.521)
N	290	290	290	132
R ²	0.188	0.091	0.475	0.257

Unstandardised coefficients; robust standard errors within parentheses.

Significance: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Table A3. The association between share of MOCs (of total municipal turnover) and various municipal outcomes.

	Corruption	Business climate	Tax rate	General satisfaction
Share MOCs	0.049** (0.018)	-0.045 (0.051)	0.228* (0.094)	-2.217 (3.876)
(ln) Population size	0.087** (0.026)	-0.049 (0.032)	-0.219 (0.120)	2.081** (0.723)
Median income	-0.001 (0.001)	0.004* (0.002)	-0.014** (0.005)	-0.001 (0.043)
Share with university educ.	-0.044 (0.483)	1.094 (0.747)	-4.391 (2.584)	37.130 (21.863)
Local newspaper	-0.066* (0.029)	0.039 (0.061)	0.264 (0.148)	2.302 (1.273)
Female rep in council	-0.000 (0.004)	-0.007 (0.007)	0.034 (0.019)	-0.056 (0.128)
Stronghold over power in council	-0.064 (0.034)	-0.066 (0.072)	0.338** (0.147)	0.360 (1.327)
Intercept	-0.205 (0.280)	2.928*** (0.611)	25.811*** (1.751)	30.037** (9.895)
N	194	194	194	91
R ²	0.227	0.112	0.406	0.231

Unstandardised coefficients; robust standard errors within parentheses.

Significance: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Table A4. MOCs as dependent variable.

	(ln) MOCs	(ln) MOCs	(ln) MOCs	(ln) MOCs	(ln) MOCs	(ln) MOCs
(ln) Corruption	0.377** (0.141)				0.351* (0.142)	0.186 (0.238)
Business climate		-0.089 (0.072)			0.006 (0.072)	0.087 (0.145)
Tax rate			0.122*** (0.029)		0.119*** (0.029)	0.208*** (0.047)
General satisfaction				-0.005 (0.008)		-0.007 (0.011)
(ln) Population size	0.598*** (0.042)	0.622*** (0.042)	0.655*** (0.041)	0.610*** (0.067)	0.630*** (0.041)	0.615*** (0.065)
Median income	-0.007** (0.002)	-0.007** (0.002)	-0.006** (0.002)	-0.012*** (0.003)	-0.005** (0.002)	-0.009** (0.003)
Share with university educ.	-1.098 (0.822)	-0.926 (0.820)	-0.264 (0.876)	0.826 (1.189)	-0.387 (0.876)	1.888 (1.115)
Local newspaper	0.010 (0.064)	-0.004 (0.063)	-0.027 (0.062)	-0.029 (0.097)	-0.010 (0.063)	-0.103 (0.100)
Female rep in council	-0.009 (0.006)	-0.009 (0.007)	-0.011 (0.006)	-0.007 (0.011)	-0.012 (0.006)	-0.011 (0.010)
Stronghold over power in council	0.077 (0.069)	0.050 (0.068)	0.028 (0.066)	0.103 (0.104)	0.055 (0.066)	0.093 (0.098)
Intercept	-2.295*** (0.564)	-2.007** (0.612)	-5.533*** (0.894)	-1.005 (0.951)	-5.470*** (0.901)	-6.500*** (1.474)
N	290	290	290	132	290	132
R ²	0.554	0.546	0.568	0.523	0.577	0.586

Unstandardised coefficients; robust standard errors within parentheses. Significance: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.