When politics meets professionalism:
The characteristics and performance predictors of municipally owned corporations

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Waar politiek en professioneel management samenkomen:
De eigenschappen en gevolgen van lokale verbonden partijen

*(met een samenvatting in het Nederlands)*

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Chapter 1: Introduction

1.1 Introduction

On September 12, 2019, the municipality of Amsterdam announced that it would start taking steps to reorganize its refuse collection company Afdale Energie Bedrijf (AEB) (NOS 2019). AEB had long been responsible for refuse collection in and around Amsterdam, but after years of insufficient spending on maintenance of its equipment, the company had to shut down four of its six incinerators in July 2019 to ensure the safety of its personnel. This spelled an acute financial disaster for the municipality. Millions of euros were at once required from the municipality on a monthly basis merely to keep the company afloat, and an injection of another 100 million euros was necessary just to restart the incinerators – a figure unseen before in the Dutch refuse collection sector. The responsible alderman resigned after his proposal to privatize the company to clean up the financial state of the company was rejected by the municipal council, not seeing alternatives to restore the refuse collection services for the municipality in a manageable state. With privatization off the table, the likely outcome of this mismanagement in and of AEB is that the municipality of Amsterdam will have to cut services or raise taxes at the cost of around €120 per inhabitant, a steep price to pay for mismanagement.¹

Less than a week later, the province of North Holland, of which the municipality of Amsterdam is part, published the outcomes of an extensive inquiry into the performance and governance of many of the municipally owned corporations in the province, not including the AEB (Noord-Holland 2019). The report contrasted with the narrative surrounding the AEB. Although it did not provide any direct evidence of these companies’ effectiveness, it lauded the progress that municipally owned corporations are making in increasing the efficiency of service delivery at the sub-national level, and provided an overall picture of their instrumentality for good governance at the local level.

The report of the province of North Holland illustrates the popularity of municipally owned corporations (MOCs) in current Dutch local public service delivery; the situation surrounding the AEB demonstrates that this service delivery mode is not necessarily without problems. These two news stories present different narratives about the role that MOCs play in current local government. On the one hand, MOCs may provide a much-needed introduction of a business-like work environment in public service delivery that is often too bureaucratic, an injection of outside capital and expertise, and, in some context, circumvention of budget rules and economically inefficient labor protections granted to the civil service. On the other hand, MOCs present a serious governance challenge for local governments, increase local governments’ risk exposure, and have limited accountability.

Why do municipalities turn to MOCs to provide local public services? What are the consequences of moving public service delivery to MOCs? And what are the governance implications? These are the questions tackled in this dissertation.

¹ Amsterdam has around 863,000 inhabitants, who would together share the burden of a 100 million euro investment in the refuse incinerators.
1.2 MOCs as mode of local public service delivery

The decision how to deliver local public services is a key topic of local government studies (Bel and Gradus 2018; Bel, Hebdon, and Warner 2007; Brown and Potoski 2006; Brown, Potoski, and Van Slyke 2008; Hefetz and Warner 2007, 2011; Hefetz, Warner, and Vigoda-Gadot 2012; Rodrigues, Tavares, and Araújo 2012; Schoute, Budding, and Gradus 2017; Warner 2011; Warner and Hebdon 2001; Zafra-Gómez et al. 2013). Municipalities have many options for delivering local public services: beyond using MOCs, municipalities can privatize or contract-out service delivery, deliver services in-house through the civil service, or deliver services together with other parties informally in the form of intermunicipal cooperation or public-private partnerships. All of these service arrangements are highly contested, and choices about what happens to, say, a local swimming pool, cut to the heart of local politics, as the chosen delivery mode can strongly affect what services citizens receive.

This contestation of service delivery choices that we can observe in local politics is also present among academics. Local privatization and contracting-out, intermunicipal cooperation, and private-public partnerships have been studied frequently and have inspired debates among researchers studying local government: see the literature reviews by Bel and Warner (2008), Bel and Warner (2016), and Hodge and Greve (2007) respectively. These debates have been productive, and if a policymaker today wants advice on the outcomes of privatization, contracting-out, intermunicipal cooperation or public-private partnerships, they can turn to the academic literature to provide at least some broad-stroke answers to questions about what consequences could be expected. For all these service delivery channels, academic knowledge and practitioners’ need for information are reasonably aligned.

Our knowledge of MOCs, however, starkly contrasts with our knowledge of the other service delivery options. Local corporatization – as the shifting of service delivery from the in-house bureaucracy to ‘at arm’s length’ MOCs is often called – is in many ways still terra incognita for policymakers and academics: academics have uncovered little, and practitioners still require much information. As researchers Pérez-López, Prior, and Zafra-Gómez (2015) write: “to date, studies of [service delivery] have considered only a single delivery form and/or they have been more oriented towards analyzing the opposition between public and private provision” (p. 1159). Multiple other researchers have also called for more research on this topic (Bergh et al. 2018; Cambini et al. 2011; Ferry et al. 2018; Lidström 2017; Torsteinsen 2019). And when we conducted our surveys and held our interviews with practitioners in the Netherlands (more on this later), various respondents complained about how little is known about the governance of at-arms length organizations, and how they were forced to ‘muddle through’ their policy options without much information at their disposal.

1.3 Knowledge deficit

The lack of knowledge on MOCs is confirmed through systematic literature reviews. When we conducted such a study in 2017, our finding was that very little could be found on the topic through a keyword search. Our solution was to go through the ten major public administration journals and examine all articles published in the last fifteen years by hand, with the hope that we had just missed some keywords – but as it turns out, the academic literature was just limited. We uncovered a mere 21 articles on MOCs, primarily based in case studies, which meant that we had no way to prove through meta-regression research
(a statistical method to aggregate findings of multiple studies) what causes and effects MOCs have. In contrast, the service delivery options of privatization, contracting-out, and intermunicipal cooperation have all been exposed in the literature to such meta-regression analysis (Bel and Fageda 2009; Bel, Fageda, and Warner 2010; Bel and Warner 2016; Silvestre, Marques, and Gomes 2018).

In a keynote speech delivered at a workshop specifically on MOCs in Tromsø, Norway, in 2019, Rhys Andrews presented additional evidence to back up this finding of very limited academic knowledge (Andrews 2019). Using a comparative quantitative keyword search in the Web of Science database for use of the terms ‘corporatisation’, ‘municipal companies’, or ‘municipal corporations’ – whether as topic or mere mention – Andrews found only 20–40 mentions of all these terms together per year, up until around 2015 and afterwards, when there was a visible jump in attention to this phenomenon (to around 200 mentions per year). In contrast, a similar search for the keywords ‘privatization’ and ‘contracting out’ showed a steady 600 to 800 annual mentions in the scientific literature – with a similar noticeable jump in 2015. In other words, the knowledge that exists on local corporatization lags strongly behind the knowledge we have on other service arrangements, demonstrating a large academic need for more knowledge.

This need for academic knowledge is also felt among practitioners. At least in the Netherlands, where this dissertation is written from, many government reports have been published on strategies for municipalities to retain control over MOCs. However, this topic has still received substantially less attention than agencies and state-owned enterprises at the national level, where a consistent corporate governance code is now largely adopted by the ministries (Van Thiel, Van Genugten, and Voom 2019). Such a governance code has not quite been developed for local governments, and local governments are often still individually figuring out how to govern their MOCs.

There is thus limited information about MOCs. One reason for this relatively modest attention given to MOCs is that for a long time, public service delivery through MOCs was not considered to be different from service delivery through the local civil service. A general tendency in the literature is to focus on ownership. Since incentives in ‘public’ and ‘private’ channels of service delivery differ substantially, ownership was often seen as the critical determinant of the performance of service delivery, at least in the early stages of research into (local) public service delivery. Later research showed that often the public-private dichotomy might be less relevant if environmental circumstances were accounted for, such as competition (Vining and Boardman 1992; Warner and Bel 2008); even so, for a long time, and today still, many researchers do not distinguish between MOCs and service delivery through the local civil service, as they are seen as two manifestations of the same ‘public’ service delivery, where interests of the municipality are key in determining outcomes.

1.4 MOCs: what makes them different?

This failure to distinguish between public service delivery ‘inside’ and ‘outside’ the local civil service, however, may be erroneous, and is challenged by an idea in the corporate governance literature, where academics starting with Fama and Jensen (1983) have argued that it is important to distinguish ownership from control. Take the example of a firm: ownership of the majority or even all of the shares in a firm does not provide full control over the firm’s behavior, because part of control over the firm must be delegated to management, which may have its own, misaligned, incentives (Laffont and Tirole 1991).
This idea became epitomized in the broader theory of principal-agent dynamics, which states that the greater distance exists between the owner (principal) and manager (agent) of a service, the greater asymmetric information exists, and the more problematic it will be to get the interests of the owner aligned with those of the manager. When applied to service delivery through MOCs, principal-agent theorists would argue quite firmly that at least some inefficiencies, loss of control, and loss of accountability are to be expected in such an arrangement. The benefits of having an expert manager may outweigh this disadvantage – or it may not.

However, while this agency problem is strictly detrimental in the private sector, where it deters investment in capital markets and diverts resources to non-productive purposes (Shleifer and Vishny 1994, 1997), it could be argued that this agency problem is not uncontroversially so in the public sector. This is because the owners of public service delivery – politicians, bureaucrats, civil servants – are at the same time agents to the electorate at large, and as such, may not have welfare-maximizing interests in the first place. This is the suggestion of public choice theory – a theory that suggests that there is no one aggregate interest of the public sector – the public sector is a collection of individuals, each with individual interests that may run counter to those of the electorate (cf. Arrow 1951). Moving service delivery out of the reach of these political interests may be beneficial for welfare; on the other hand, it may shift service delivery even further away from voters’ control.

Beyond these differences in control, there are also a large number of environmental differences between public service delivery through the civil service and through MOCs that could produce differences in outcomes, although these depend heavily on country, policy sector, time, and corporate status of the MOCs. MOCs may be less bound by salary constraints or labor protections than the civil service, or they may not: for instance, in the Netherlands, MOCs are allowed to deviate from municipal labor agreements and the public sector salary caps – but only if they are based in private law. Then still during the corporatization of the service the original civil servants retain their current benefit packages. MOCs also ‘earmark’ resources for certain services, making it more difficult to shift funds between services and between years. MOCs may also have greater access to capital markets, may be used to avoid strict public sector budget rules, may charge user fees that are less politically contested than taxation for the same purpose, or may allow operating at a loss or at a profit where that is otherwise impossible – although all these factors are contingent on legislation and are not inherent to MOCs.

Each of these environmental differences can make MOCs either more or less effective than civil service delivery. For instance, the non-application of salary caps may allow MOCs to attract the most expert managers, increasing the effectiveness of public service delivery, or it may allow nepotism, allowing politicians to elect their friends to now more interesting positions, and causing service delivery to be less effective. Earmarking resources for specific services may allow greater policy continuity, which may produce greater effectiveness by removing horizon effects and policy insecurity, but may reduce flexibility, democratic accountability, and the ability to shift funds to where they are most needed or most productive. And greater access to capital markets increases the ability of municipalities, especially those with tight budgets, to undergo larger projects, but also severely increases risk for the municipalities if the profitability of investments is wrongly assessed.

In other words, the literature has often seen MOCs as effectively an extension of the usual ‘public’ service delivery in practice, and this may well explain why they have
not been studied extensively. Yet, there are substantive reasons to believe that they could produce very different outcomes, although it is entirely unclear whether these outcomes are net positive or net negative. Thus, studying them is highly relevant.

1.5 Defining MOCs
We define MOCs as organizations that:
- have independent corporate status;
- are owned at least for the majority by municipalities or comparable local governments; and
- (typically) have legal and managerial autonomy (Voorn, Van Genugten, and Van Thiel 2017)

Many terms have been used in the literature to describe MOCs, and all describe essentially organizations that have the above characteristics. When we talk about MOCs, we are referring to the same types of organizations that other researchers call:
- ‘municipal companies’ (Olsen, Solstad, and Torsteinsen 2017; Torsteinsen 2019);
- ‘municipally owned companies’ (Alexandersson, Hulten, and Fölster 1998; Corvellec, Bramryd, and Hultman 2012; Corvellec, Campos, and Zapata 2013; Davis and Muehlegger 2010; Hall 1998; Söder and Ackermann 2005);
- ‘municipally owned firms’ (Carreras, Tafunell, and Torres 2000; Liljeblom and Vaihekoski 2009; Primeaux Jr and Bomball 1974; Primeaux 1977; Ramaswamy and Renforth 1996);
- ‘municipal corporations’ (Collin et al. 2009; Coombs and Edwards 1993; Coombs and Richard Edwards 1994; Fischel 2001; Grossi and Reichard 2008; Tavares and Camões 2010; Wagner 2011);
- ‘municipally owned enterprises’ (Bergh et al. 2018; Papenfuß et al. 2018);
- ‘local government companies’ (Andrews 2019; Ferry et al. 2018);
- local enterprise funds (Bunch 2000; Molinari and Tyer 2003)

In the United States, the most comparable organizational form to a MOC seems to be a type of special district called a ‘public authority’ (Bourdeaux 2004, 2007, 2008; Koppell 2010; Landow and Ebdon 2012; Leavitt and Morris 2004; Lidström 2017; Savitch and Adhikari 2017; Voorn, Tavares, and LeRoux 2019), which is a more limited form of special district that does not have taxation power (Adams 2007; Doig 1983; Eger III 2005; Mitchell 1991, 1992). However, since the organizational form and autonomy of these public authorities varies strongly between states, it is difficult to generalize (Leigland 1994). For instance, public authorities in California may have taxation powers (Mullin 2009). Still, public authorities will typically fit our definition of MOCs.

The term we use, originally used by Tavares and Camões (2007), continues to be a widely-adopted term (Argento, Grossi, and Thomasson 2011; Berg and Phillips 2017; Citroni, Lippi, and Profeti 2015; Erlingsson, Thomasson, and Öhrvall 2018; Furlong 2015; Grossi and Reichard 2016; Grossi and Thomasson 2011; Krause and Van Thiel 2019; Tavares 2017; Tavares and Camões 2010; Thomasson 2019; Thomasson and Grossi 2013; Wagner 2011). We think it is the most appropriate term, since it emphasizes both municipal ownership and the organization’s independent corporate status, while not necessarily implying the existence of a market, like the terms ‘enterprise’, ‘companies’,
and ‘firms’ do.

It must be emphasized that organizations under our definition can still vary widely in organizational form. MOCs can allow shared ownership, facilitating extensive cooperation between localities and between public and private sector, allowing for cooperation as diverse as inter-municipal enterprises or public-private partnerships. Moreover, MOCs differ from local bureaucracies in funding, transaction costs, financial scrutiny, labour rights, permission to operate outside their jurisdiction, and, under some circumstances, in the right to make profits and risk of bankruptcy (Bel and Fageda 2010). MOCs can also be founded in either public or private law. Sometimes, MOCs are politicized; at other times, they are strictly independent. The heterogeneity of organization types among MOCs is likely one reason for the fragmented literature; we purposely opt for the most inclusive definition.

1.6 MOCs as a trend

In countries like the Netherlands, MOCs are ubiquitous (see Chapter 5). Most refuse collection organizations are corporations owned by municipalities, and the same is true for most water companies, city development organizations, and business park developers. Many theaters and concert halls, museums and archives, stadiums and sport accommodations, nature parks and leisure parks, swimming pools and libraries, and parking garages take the shape of MOCs. If we extend the term to include also the autonomous at arm’s length intermunicipal organizations based in public law, then even more fundamental government services such as firefighting services and paramedics, first-response and youth care services, and employment services fall among them. Municipal organizations ‘at arm’s length’ from the actual legislators are very common, take up large parts of municipal budgets, and affect large numbers of people.

This is not exclusively true for the Netherlands. Before this dissertation was written, researchers had already written about the increasing preponderance of MOCs in Italy and Germany (Argento et al. 2009; Grossi and Reichard 2008), Portugal (Da Cruz and Marques 2011; Rodrigues, Tavares, and Araújo 2012; Saz-Carranza and Longo 2012; Tavares and Camões 2007, 2010), and the United States (Bourdeaux 2004; Bunch 2000; Leavitt and Morris 2004). Since the start of this project, more was written about MOCs in Norway (Andersen and Torsteinsen 2017; Olsen, Solstad, and Torsteinsen 2017; Torsteinsen et al. 2018), Sweden (Bergh et al. 2018; Elfgren and Persson 2019), the United Kingdom (Andrews et al. 2019; Ferry et al. 2018), Japan (Nagasawa 2018), Canada (Buttazzoni, Arku, and Cleave 2019), New Zealand (Sam and Scherer 2019), Slovakia (Valach and Ágh 2019), and Georgia (Narmania 2018), demonstrating their global impact.

MOCs have not always been so influential. For a long time, public services were administered directly by the government bureaucracy, or in some cases by the private sector. In that regard, MOCs are a modern phenomenon. While we do not have time-series data for many countries, some researchers and national institutes have tracked local corporatization to allow us insight into how the usage of MOCs has changed throughout the years in Europe. Aars and Ringkjøb (2011) note that the number of MOCs in Norway increased from 850 in 1997 to more than 2,500 in 2008. Bergh et al. (2018), using longer time series data, find an increase of the number of MOCs in Sweden from 250 in 1965 to 1,750 in 2015. Ferry et al. (2018) look specifically at the period from 2010 to 2016 to find a 50 per cent increase in corporatization in the United Kingdom. Gradus and Budding (2018), using time series data for every year from 1999 to 2014, find that the frequency of
the use of MOCs for service delivery increased from use for about 6% of services in 1999 to use for just over 30% in 2010, after which it remained somewhat steady. Thus, numbers show that corporatization rates have been on the rise since the 1960s in all European countries where it is tracked, and that these numbers seem to have been on the rise especially in this century, although there are stark differences between countries in the exact time frame in which corporatization took place.

1.7 Causes for the trend towards MOCs

We do not yet know why corporatization has emerged as such a trend, or why country-level differences are so stark, and motives are still contested in the literature. Often, the decision to corporatize seems very pragmatic, based in an overall environment where skepticism of the efficiency of both bureaucratic service delivery and privatized service delivery is high. MOCs are seen as a ‘middle ground’, or perhaps as a form of equilibrium, where a balance can be struck between both public interests and private efficiency. This is the argument of Leavitt and Morris (2004), who suggested that public authorities – the US version of MOCs (Voorn, Tavares, and LeRoux 2019) – are increasingly popular in the United States precisely because they present this middle ground in the ‘pendulum shift’ (cf. Warner and Aldag 2019; Wollmann and Marcou 2010) between public and private service provision. Likewise, Marra (2007) suggests that the key benefit of MOCs is the ease at which they can be privatized or reincorporated into the civil service, although this may be specific to some countries, as in the Netherlands MOCs seem to rarely be dismantled. And in Europe, many privatization reversals, in which many private forms of service delivery and contracting-out arrangements were replaced by MOCs, seem to occur for pragmatic reasons (Voorn, Van Genugten, and Van Thiel forthcoming). Various of these pragmatic reasons have been posited in the literature for the increasing use of MOCs, although most seem partial explanations at best.

First, and perhaps the most current idea about what causes local corporatization, is that it can be linked to austerity and governance in the wake of the financial crisis. This idea was defended by Ferry, Andrews, Skelcher and Wegorowski (2018), who conducted a review of English local councils’ annual accounts between 2010 and 2017, demonstrating an increase from 400 to 600 MOCs directly in the wake of the Great Recession. Ferry et al. (2018) are not the only researchers to argue this case: the idea that corporatization is a result of fiscal stress in municipalities is suggested also by other academics, for instance by Grossi and Reichard (2008) and Citroni, Lippi, and Profeti (2013). The evidence, however, remains unclear. As we have pointed out in Voorn, Van Thiel, and Van Genugten (2018), not included in this dissertation, while the increase of 400 to 600 MOCs in England between 2010 and 2017 seems significant, there were only 185 MOCs in the entirety of the United Kingdom in 2004 (Dexia Crediop, 2004). Thus, the majority of local corporatization actually took place in the years before the financial crisis, and the uptick in the number of MOCs in England in the past decade may simply be in line with that longer trend, or may perhaps even be a de-acceleration of it. Moreover, while Andrews, Ferry, Skelcher, and Wegorowski (2019) found in a recent study that municipalities that were more dependent on national government grants and debt financing were more likely to have MOCs in England, Tavares and Camões (2007) found no effect in Portugal. It is unclear whether these differences are caused by differences between countries, time, sector, or circumstance, but it seems right to consider fiscal stress...
as only a partial explanation of the increased use of MOCs over the last decade, if one at all.

Second, as proposed by Tavares and Camões (2007), MOCs may be used because of their ability to charge user fees, which are more politically salient than taxation. Not every service that is offered by local governments targets all citizens, and sometimes local governments want to ensure that the costs off a service are covered by its users, rather than from overall budgets. MOCs can offer municipalities this option by charging user fees. Tavares and Camões (2007) demonstrate that MOCs are especially used for policy sectors that charge these user fees, and help to explain why particularly services such as refuse collection services, water provision services, bus services, theaters, and museums are often provided through such companies. However, also user fees are only a partial explanation of municipal corporatization, as many MOCs do not charge fees (such as over half of Dutch MOCs: see Chapter 4).

Third, another explanation of the use of MOCs is offered by Bourdeaux (2004), again investigating US public authorities. She argues that when politicians and bureaucrats shift policy delivery to at arm’s length organizations, they give themselves political cover, and allow themselves the ability to spin every outcome to their benefit. If the public authority performs well, bureaucrats can claim credit for good governance; if it performs poorly, they can shift the blame squarely to the manager. Evidence for this theory comes from policy documents of 44 New York solid waste management agencies, where local corporatization took place more in more contentious political environments. However, this finding, although intuitive, is somewhat indirect, based in a small sample, and has not yet been tested or replicated elsewhere.

Most explanations about local corporatization are thus partial and contestable, leaving again much unknown about MOCs. However, what these explanations all have in common is that they are all highly pragmatic and not ideological; in other words, MOCs are expected to fulfill some useful purpose, even if that purpose may differ across times, countries, and policy sectors.

### 1.8 Research question and objectives

While the literature about causes of municipal corporatization is thus at least somewhat developed, the governance and consequences of MOCs are still a ‘black box’ for researchers and practitioners. While various studies have been conducted about individual MOCs, it is hard to aggregate findings to draw overall conclusions about their governance and performance in general due to small sample sizes. Moreover, it is difficult to establish exactly what ‘good governance’ and ‘good performance’ mean in a context of local public service delivery: profitability and efficiency are important, but so are democratic accountability, service quality, equity, stability, flexibility, responsiveness to citizens, and various other service outcomes. From studies conducted prior to this dissertation, we are unable to judge what those outcomes are.

Summarizing, little is known about MOCs, particularly about their consequences and their governance, and there exists both an academic and practical knowledge deficit in this regard. MOCs have often been treated as just another form of ‘public’ service delivery, and yet we have various reasons to expect that they are different. Nonetheless, while we have theories, we have no empirical evidence.

Our objective is to fill the gap in understanding about governance and consequences of MOCs. The main research question of this dissertation is:
Do the characteristics and governance of municipally owned corporations explain their outcomes, and if so, how?

In particular, we have five research objectives:

1. To describe the characteristics of MOCs, with a particular focus on the settings in which they are used, in terms of ownership, service sectors, municipal contracting capacity, market environment, business techniques, and the autonomy they receive;
2. To describe the external governance mechanisms that are used for MOCs that govern the relationship between local governments and MOCs, with a particular focus on ‘hard’ performance management and ‘soft’ relational management, and on the multiple principal problem that can occur in MOCs;
3. To describe the internal governance mechanisms that are used for MOCs – the corporate governance – with a particular focus on their legal form, their ownership structure, distribution of power and competencies, board structure, and board proceedings;
4. To describe the outcomes of MOCs, focusing particularly on measures of output – efficiency, effectiveness, and quality – and measures of stewardship to society – democratic nature, responsiveness, and accountability;
5. To link (1) environmental characteristics of MOCs, (2) the external governance mechanisms that are used for MOCs, and (3) the internal governance mechanisms that are used for MOCs with (4) the outcomes of MOCs, in order to explain these outcomes for MOCs.

1.9 Approach and outline

Our approach to answering this research question is both theoretical and empirical. The theoretical part provides a conceptual framework for the empirical steps that form the core of the project.

The theoretical part of our approach was mostly aimed at integrating knowledge from related fields to build hypotheses that we would then be able to test in our empirical work. Thus, our theoretical work is mostly comprised of reviews of the literature. Two of these literature reviews are included in this dissertation. Our aim was not to build theory from scratch; rather, the aim was to systematically find theory in related fields that we could then systematically apply to MOCs.

We distinguish three theoretical steps: (1) mapping what is already known about our research question; (2) building theory on the basis of the literature on state-owned enterprises and national agencies; (3) building theory on the basis of the literature on service delivery by multiple principals.

Step 1 and 2 were performed with a hybrid form of systematic literature review, in which we used theory to build hypotheses2 about the efficiency and effectiveness of MOCs as compared to that of the local civil service. This systematic review is presented

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2 In hindsight, we should have used the term ‘propositions’ or ‘expectations’ instead, which would have been more appropriate for what we did in this review.
in Chapter 2. In particular, we derived two theories from the literature on state-owned enterprises and agencies that are often used to argue about their output and stewardship to society: principal-agent theory and public choice theory. Both provide rather mixed perspectives about MOCs. Principal-agent theory suggests that MOCs bring high agency costs, as their distance from the political owner makes it less likely that its objectives are met. However, it also suggests that these costs may be offset by the additional expertise that could be gained from corporatization. Next, public choice theory suggests that removing service delivery from the hands of politicians may be beneficial for welfare, as they may have private incentives that make service delivery through the local civil service inefficient. However, at the same time, public choice theory cautions us about shifting service delivery to professional managers, who may also have perverse incentives. Principal-agent theory and public choice theory both provide various insights and instruments that we can use to understand MOCs, and thus we largely use these theories to build our theory about MOCs.

For step 3, we conducted a systematic literature review of the literature on service delivery by multiple principals, which we present in Chapter 3. In particular, we find that various problems are created when multiple principals jointly own service organizations, which we coin the multiple principal problem. We build a model based in principal-agent theory to predict problems that can occur and build hypotheses to test these in the literature. We find that joint service organizations often suffer from collective action problems among its principals, that lead to insufficient or duplicate monitoring and steering, lobbying of the service organizations, ambiguity of directives, and large autonomy for the organizations and inefficiency as a result. We use the insights found from this literature in constructing our conceptual framework, as many MOCs have multiple stakeholders and shareholders.

Following theory-building, a mixed method empirical research design was used to fulfill our research objectives. We can distinguish broadly six empirical steps: (1) desk research, (2) building a conceptual framework, (3) survey design, (4) survey analysis, (5) interview design, and (6) interview coding and analysis.

In step 1, I constructed a database of all MOCs in the Netherlands. I systematically went through the annual reports of all 380 municipalities, who by law are required to name their MOCs in a section of this report, to build an exhaustive list of 799 Dutch MOCs that existed in 2018. Some difficulties occurred here – not all of these MOCs were by majority owned by municipalities, not all of them were findable through websites, and lists were not always complete – but in the end 799 MOCs were identified.

In step 2, we built a conceptual framework, using the theory derived from our two systematic literature reviews. In particular, we identified the key background variables (objective 1), external governance mechanisms (objective 2), and internal mechanisms (objective 3), that could have an effect on the outcomes of MOCs. We also considered the possible outcomes that could occur according to these theories (objective 4) and made sure to include those in our conceptual framework. In the end, that created a conceptual framework that linked background variables and internal and external governance mechanisms to outcomes (objective 5), giving us the tools to answer the main research question. This conceptual framework is presented in the Appendix.

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See footnote 2.

Note that this occurred in 2018. As of 2019, the number of Dutch municipalities has dropped to 355.
In step 3, a survey was constructed based on the conceptual framework, which was submitted to the directors (professional managers\(^5\)) of all 799 Dutch MOCs, providing us the data to answer our main research question. Our survey was largely based on a survey conducted by researchers involved with the Comparative public Organization data Base for Research and Analysis (COBRA), that investigated national-level agencies (COBRA 2010; Verhoest, Van Thiel, et al. 2004) and considered many questions similar to ours. The advantage of this was that we could avoid various problems that inevitably occur in building new surveys, and factor loadings were validated in various studies (see Christensen and Lægreid 2006; MacCarthaigh 2007; Van Thiel, Steijn, and Allix 2007; Van Thiel and Yesilkagit 2011; Verhoest, Bouckaert, and Peters 2007; Verhoest, Peters, et al. 2004; Verhoest et al. 2012; Verhoest, Van Thiel, et al. 2004; Verhoest, Verschuere, and Bouckaert 2007; Verhoest, Verschuere, et al. 2004; Wettenhall 2005; Yesilkagit and Van Thiel 2008, 2011). Moreover, the COBRA survey had already been conducted among Dutch agencies as well in studies that had used pilots to test the applicability of translations (Van Thiel and Yesilkagit 2011; Yesilkagit and Van Thiel 2008, 2011) and that had found acceptable factor loadings (Van Thiel and Yesilkagit 2006), and we could draw on this Dutch translation for our research. We adjusted this survey to fit our conceptual model and made sure our survey was appropriate for municipal-level studies by conducting a pilot study ourselves with practitioners in the field and local government experts in our faculty. The survey contained 50 questions and was sent out between February and April of 2018 to all MOCs, and we received 177 responses – on the low end for statistical research, but covering a large percentage of the total population and thus avoiding many generalization problems. The survey is explained in the Appendix.

In step 4, we analyzed the data retrieved through our survey. We began by publishing a descriptive study outlining the characteristics of MOCs, and which internal and external mechanisms were used to govern them (Objectives 1-3). We also mapped how directors perceived their performance on 12 separate performance metrics, thus giving us a provisional idea of outcomes (Objective 4). This study was first published in Dutch and was distributed to the respondents of the survey as a check on our findings; it was also distributed to relevant actors in the Dutch government for valorization. This descriptive study is included as Chapter 4 in this dissertation. Next, we statistically analyzed our survey in order to find out how characteristics and governance of MOCs explain their outcomes (Objective 5 and our research question). We employed stepwise regression techniques to find which factors were most related to outcomes in MOCs. Given this extensive data set, we split this in two separate studies: in Chapter 5, we consider which factors are most related to the output of MOCs, and in Chapter 6, we consider which factors are most related to the stewardship to society of MOCs.

While we conducted our research, an increasing number of studies came out that considered that outcomes of corporatization largely related to culture shifts (e.g. Andersen and Torsteinsen 2017; Argento, Culasso, and Truant 2016; Olsen, Solstad, and Torsteinsen 2017; largely based on Skelcher and Smith 2015) using the so-called institutional logics

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\(^5\) In the articles in this dissertation, we use the terms ‘director’ and ‘professional manager’ interchangeably, but to us they mean the same thing. The term ‘director’ is slightly more precise, but the term ‘professional manager’ is more in line with the international literature. Regardless, we are referring to the president of the executive boards of MOCs.
perspective. Inspired by this, we added a study in Chapter 7 that looked into the role of cultural change in MOCs, considering in particular whether the autonomy-performance link in municipally owned corporations is mediated by their more business-like culture.

In step 5, we designed an interview guide to help explain some findings from the survey. In particular, we found through the survey that performance management was very uncommon in MOCs in the Netherlands – for instance, less than 10% of our survey respondents expected consequences in case they performed poorly. This ran counter our expectations – the original COBRA survey found substantially more use of performance management among national-level agencies. Therefore, to understand what causes this very limited use of performance management in MOCs, we set up interviews with municipal executives, policy advisors, and directors of nine MOCs. We again used our conceptual model to build this interview guide, complemented with concepts derived from the institutional logics perspectives.

In step 6, after conducting 27 interviews, we made full transcripts in order to understand reasons behind use or non-use of performance management in MOCs. We found a platitude of reasons behind non-use of performance management, including low municipal capacity, political risk aversion by executives, lack of a culture change after corporatization, the absence of salient performance measures, lack of interest among the municipalities, and strong information asymmetries. We sent our research for a member check to our interviewees, and then distributed them to relevant government actors for valorization. These findings are presented in Chapter 8.

As part of the discussion and conclusion we present a research agenda about arm’s length bodies more generally in Chapter 9. Finally, in Chapter 10, we conclude. Here, we discuss the theoretical and practical contributions of the studies contained within this dissertation and reflect on the limitations of the studies and provide suggestions for future research. Table 1 provides an outline of all chapters in this dissertation, and includes publication statuses.

Table 1: Overview and research questions in this dissertation

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Status</th>
<th>Journal</th>
<th>Reference</th>
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<tr>
<td>1</td>
<td>Introduction</td>
<td>Chapter</td>
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<td>2</td>
<td>The Efficiency and Effectiveness of MOCs</td>
<td>Published</td>
<td>Local Government Studies</td>
<td>Voorn, Van Genugten, and Van Thiel (2017)</td>
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<td>3</td>
<td>Multiple Principals, Multiple Problems: A Framework for Effective Governance and Research Agenda for Joint Service Delivery</td>
<td>Published</td>
<td>Public Administration</td>
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<td>Results 1</td>
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<td></td>
<td>The Characteristics of Dutch MOCs</td>
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<td>IMR Report</td>
<td>Voorn, Van Genugten, and Van Thiel (2018)</td>
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<td>Results 3</td>
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<td>Professional Managers, Public Values? Predictors of the Stewardship of MOCs</td>
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<td></td>
<td>Business Techniques as an Explanation of the Autonomy-Performance link in Corporatized Entities: Evidence from Dutch MOCs</td>
<td>In press</td>
<td>International Public Management Journal</td>
<td>Voorn, Borst, and Blom (in press)</td>
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<td>8</td>
<td>Results 5</td>
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<td></td>
<td>Performance Management in MOCs: Explanations for Use and Non-Use</td>
<td>Revise &amp; Resubmit</td>
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<td>Voorn et al. (2019)</td>
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<td>9</td>
<td>Research agenda</td>
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<td>Local Governments and Their Arm’s Length Bodies</td>
<td>Published</td>
<td>Local Government Studies</td>
<td>Van Genugten, Van Thiel, and Voorn (2019)</td>
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<td>10</td>
<td>Conclusion</td>
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<td>A1</td>
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<td>Appendix: Survey</td>
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References


Van Genugten, Marieke, Sandra Van Thiel, and Bart Voorn. 2019. "Local governments and their relationship with arm’s length bodies." Local Government Studies online first.


Chapter 2
Chapter 2: The Efficiency and Effectiveness of MOCs

2.1 Introduction

*Municipally owned corporations* (MOCs) are autonomous organizations owned by municipalities, used to produce or deliver local public services outside the local bureaucracy. A steadily increasing number of localities utilise them for public service provision (Florio and Fecher 2011; Grossi and Reichard 2008; Whincop 2005). Municipalities in Germany, Italy, and The Netherlands utilise on average between 10 and 20 local corporations for providing public services (Boogers et al. 2016; Grossi and Reichard 2008); a large majority of municipalities in Portugal own at least one MOC (Tavares and Camões 2007). Local corporations are also increasingly used for service provision in the United States (Bunch 2000; Molinari and Tyer 2003) and throughout Europe more broadly (Dexia Crediop 2004).

Despite the growing importance of MOCs, the literature on them remains scarce. While much of local governance literature has been devoted to investigating the comparative efficiency of different local service delivery modes (Bel, Hebdon, and Warner 2007; Hefetz and Warner 2007, 2012; Jossart-Mirelli and Musso 2005; Warner and Hebdon 2001), researchers have focused primarily on comparing private and public production for various services, and less on the efficiency of different types of service organization within the public sector (Sørensen 2007; Pérez-López, Prior, and Zafra-Gómez 2015). Those studies that do recognize that public sector provision can occur in ways other than in-house provision usually consider only a single delivery form, or consider it solely in the light of the trade-off between public and private provision (Bel, Fageda, and Mur 2014; Benito, Bastida, and García 2010; Dijkgraaf, Gradus, and Melenberg 2003; Simões, Cavalho, and Marques 2013). Consequently, our empirical understanding of the efficiency and effectiveness of municipally owned corporations remains limited.

Yet there are reasons to suspect that institutional differences between MOCs and local bureaucracies may yield differences in effectiveness and efficiency (Bognetti and Robotti 2007; Da Cruz and Marques 2011, 2012; Dijkgraaf and Gradus 2013; Marra 2007; Zafra-Gómez et al. 2013). Key to understanding MOCs is their vast legal and managerial autonomy. While local bureaucracies are constrained by municipal law safeguarding public money, MOCs are often regulated by public or private commercial law instead (Bel, Dijkgraaf et al. 2010; Bognetti and Robotti 2007; Da Cruz and Marques 2011; Tavares and Camões 2007). Next, MOCs are often granted extensive managerial autonomy and flexibility in delivery (Bel and Fageda 2006; Garrone, Grilli, and Rousseau 2013) by municipal owners seeking to remove politics from service provision (Bourdeaux 2013). MOCs allow shared ownership, facilitating extensive cooperation between localities and between public and private sector, allowing for cooperation as diverse as inter-municipal enterprises or public-private partnerships. Moreover, MOCs differ from local bureaucracies in funding, transaction costs, financial scrutiny, labour rights, permission to operate outside their jurisdiction, and, under some circumstances, in the right to make

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6 This chapter has been published as Voorn, Van Genugten, and Van Thiel (2017). We have permission from the publisher to present this chapter here.
profits and risk of bankruptcy (Bel and Fageda 2010). Each of these factors may potentially cause MOCs' greater or lesser effectiveness and efficiency.

Do MOCs differ in efficiency and effectiveness from local bureaucracies, and if so, what factors bring this difference about? In this paper, we offer a typology of MOCs, explore the variables that affect their behaviour, and perform a systematic literature review of public administration studies between 2001 and 2015 on their efficiency and effectiveness. We find that while MOCs often have high initial failure rate, they are also often more efficient than bureaucracies in the provision of services such as refuse collection, water distribution, and transit services, although our conclusions remain tentative in light of the scarcity of the literature.

The remainder is organized as follows. The next section offers a definition of MOCs. In section 3, we explore the differences between MOCs and local bureaucracies and formulate hypotheses about efficiency and effectiveness based on the literature. Next, in section 4, we discuss our methods for finding articles, and offer descriptive statistics about the state of the literature. In section 5, we systematically review the literature on MOCs, testing our hypotheses using the empirical findings. In section 6, we summarize the state of the literature, discuss implications of our findings, and explicate this study's limitations. In section 7, we conclude.

2.2 Municipally owned corporations

The advent of New Public Management in the 1980s brought a shift towards involving markets in producing public services (Van Genugten 2008). By the 1990s, contracting out local services was a growing trend in the United States (Hefetz and Warner 2007) and Europe (Pérez-López et al. 2015). Initial studies showed large cost savings (Domberger and Jensen 1997; Domberger and Rimmer 1994; Hodge 2000). However, these cost savings were later found to diminish over time (Bel and Costas 2006; Dijkgraaf and Gradus 2011). By the early 2000s, local governments were bringing more contracted services back into public provision than they were contracting out (Hefetz and Warner 2007; Wollmann et al. 2010).

Some municipalities began experimenting with municipally owned corporations (MOCs). MOCs are corporations constituted by municipalities to provide typically a single service, most often bus services, water and sewerage services, and refuse collection. They differ from bureaucracy in that they are governed by appointed executive boards and have independent corporate status (Bel and Fageda 2006). Some MOCs rely on revenue from user fees, distinguishing them from agencies and special districts funded through taxation (Tavares and Camões 2007). MOCs are typically identified as single-purpose organizations operating under private law (Bel, Dijkgraaf, et al. 2010; Bel and Fageda 2010; Warner and Bel 2008), although MOCs can be multi-purpose (Bognetti and Robotti 2007) and operate under public law in various countries, including The Netherlands and Norway (Torsteinsen and Van Genugten 2016). Finally, municipalities retain ultimate control through ownership (Bel and Fageda 2006). Since ownership can be transferred, MOCs can facilitate cooperation between localities and between municipalities and the private sector. Table 1 illustrates typical differences between MOCs and bureaucracy. Factors in *italics* describe typical cases and factors in normal font describe identifying features.
Table 1: Production by enterprise and bureaucracy compared

<table>
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<tr>
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<th>Provision by</th>
<th>Bureaucracy</th>
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<tbody>
<tr>
<td><strong>Legal status</strong></td>
<td>Corporation</td>
<td>Government</td>
</tr>
<tr>
<td><strong>Governed under</strong></td>
<td><em>Multiple options</em></td>
<td>Public municipal law</td>
</tr>
<tr>
<td><strong>Organization form</strong></td>
<td>Single-purpose</td>
<td>Multi-purpose</td>
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<tr>
<td><strong>Governed by</strong></td>
<td>Appointed executive board</td>
<td>Local bureaucracy</td>
</tr>
<tr>
<td><strong>Funded through</strong></td>
<td>User fees</td>
<td>Taxes</td>
</tr>
<tr>
<td><strong>Cooperative flexibility</strong></td>
<td>High</td>
<td>Medium</td>
</tr>
</tbody>
</table>

It can quickly be perceived that MOCs are not easily defined, which can explain why, to our knowledge, only Tavares and Camões (2007) established a definition. They describe (Portuguese) MOCs as single-purpose public organizations, dependent on user fees, with independent corporate status and governed by an executive board appointed by local government officials, although as mentioned we also discovered MOCs that rely on tax revenues (also in Portugal) and are multi-purpose organizations.

For this paper, we define MOCs as organizations:

1. with independent corporate status (i.e. with *legal autonomy*);
2. managed by an executive board appointed primarily by local government officials (with *managerial autonomy*);
3. with *majority public ownership*.

### 2.3 Theory and hypotheses

In this section we theorize about the efficiency and effectiveness of MOCs. We focus on the effects of the factors that distinguish MOCs from bureaucracy: (i) legal autonomy; (ii) managerial autonomy; and (iii) majority public ownership.

#### 2.3.1 Legal autonomy

Much has been written about the economic effects of the *legal autonomy* that is granted to keep operators at arm's length of public officials. In the literature on authority-operator dynamics, transaction cost economics (Williamson 1981) has been applied to study various political institutions and modes of public service delivery. The consensus in this literature is that as distance between the regulator and the service operator grows, monitoring mechanisms become more important, the authority's objectives are less often satisfied, and contracts more likely fail. This effect is typically strongest in smaller jurisdictions and with services that are more technical and have less overt public objectives (Brown and Potoski 2003a, 2003b).

Transaction costs matter because distance between authority and operator may create goal divergence, information asymmetries, and principal-agent problems such as operators hiding information or shirking public orders. A wide array of capacities is necessary to mitigate such costs (Brown and Potoski 2003a), including research capacity, technical knowledge, economic knowledge, legal expertise, negotiation skills, and network access. Particularly for smaller municipalities managing more complex services,
such capacities are not self-evident. Fortunately, transaction costs can shrink when the regulator and operator have a good working relationship (Agranoff and McGuire 2003; Jeffries and Reed 2010; Williamson 1985), but distance typically brings such costs nonetheless.

Separating politics from service provision also has upsides. Efficiency may be impaired when politicians are involved in the provision of services, who may face incentives to sacrifice efficiency for increasing re-election chances (Shleifer and Vishny 1997). There is, for instance, evidence that employees receive more protection and are hired in greater numbers at higher wages in public firms than in private firms (Boycko, Shleifer, and Vishny 1996; Savage 1993; White 1997). The further politics is removed from service provision, the less rent-seeking can transpire (Shleifer and Vishny 1994).

How does this relate to MOCs? Municipally owned corporations may be kept at distance from the bureaucracy, but are not uniformly so. Relational ties between the MOC’s executive board and the public actor are not always properly defined. While typically public actors appoint executive boards that share their plans and objectives, the executive board is often given leeway in their management precisely to introduce distance between the operator and the bureaucracy. In other scenarios, the public actor may meticulously dictate policy.

Hence, MOCs vary in transaction costs, which increase as MOCs gain distance from the authority. Because of information asymmetries and transaction costs, MOCs may have a higher initial failure rate than bureaucracy does, particularly for technical services, services with less overt public objectives, and in smaller municipalities which may have less contract-management capacity. Beyond this phase, as contracts become more specific, responsibilities become clear and mutual understanding grows, downsides may diminish, making MOCs more effective and efficient than bureaucracy.

**H1a:** MOCs have a substantial initial failure rate, but if this can be overcome MOCs are more efficient than bureaucracy.

**H1b:** MOCs’ initial failure rate is lower for services that are less technical and for which there are overt public objectives.

**H1c:** MOCs fail less initially in larger municipalities.

### 2.3.2 Managerial autonomy

While it is difficult to pinpoint exact differences, since MOCs are subject to different sets of laws across countries (Dexia Crediop 2004), not falling under municipal law means that MOCs are typically subject to less financial scrutiny and have more discretion in personnel management (Tavares and Camões 2007; Da Cruz and Marques 2011). Consequently, MOCs may have a cost advantage in overhead and labour costs, although the extent to which this advantage exists depends on government employee protection and strictness of financial regulation of the public sector compared to the private sector. However, this may not happen everywhere: in countries where labour unions are relatively powerful, such as in Spain and Portugal, unions have been known to demand higher salaries for the same jobs to accept the creation of MOCs, to compensate for workers’ reduced job security.

**H2:** MOCs have lower labour costs than local bureaucracies.
2.3.3 Flexible majority public ownership

The final characteristic of MOCs is flexible majority public ownership. Unlike local bureaucracies, MOCs can be owned by multiple localities, or shared by the public and private sector (Da Cruz and Marques 2013). Such shared ownership brings the potential for both welfare-detrimental conflict and welfare-beneficial cooperation. Cooperation between localities can exploit economies of scale (Bel et al. 2014; Bel and Warner 2015), thwart rent seeking by politicians by making steering more difficult (Shleifer and Vishny 1994), and allow risk sharing between municipalities, reducing intertemporal budget volatility. The drawback is that shared ownership may intensify principal-agent problems, as the operator must serve multiple masters (Van Thiel 2016; Waterman and Meier 1998). Conflict may break out between localities over objectives, incentives to monitor the service are diluted, and localities lose some control over their service provision. It is from theory unclear whether efficiency gains from cooperation may offset efficiency losses from reduced ownership and control.

Similarly, cooperation between the public and private sector (which can occur when the locality sells some of the MOC’s shares to a private entity) can bring both efficiency gains and losses. Efficiency is increased by the introduction of private expertise, the stimulation of good management through profit incentives, risk sharing with the private sector, and limiting of opportunistic behaviour by the political body (Bognetti and Robotti 2007; Marra 2007). In the best scenario, such cooperation brings an optimal combination of incentives for reducing costs and improving quality in comparison with pure production forms (Schmitz 2000), because private firms providing public services may care little about quality erosion (Hart, Shleifer, and Vishny 1996).

However, the risk of conflict is greater, as private and public objectives can conflict. Since the locality usually keeps most of the MOC’s shares, private partners are unlikely to buy shares without first obtaining important contractual rights, and thus public objectives do not always trump private objectives. Moreover, when contracts require renegotiation, the private partner has a powerful bargaining position as the incumbent (Cruz and Marques 2013).

When MOCs have multiple principals, potential for efficiency gains exists. This potential increases when the private sector gets involved. However, a potential for conflict also exists, which likewise increases when the private sector gets involved. Long-operating MOCs are more likely to have solved their conflicts.

\[ H3a: \text{MOCs with multiple owners have a higher initial failure rate, but bring large efficiency gains if this can be overcome.} \]
\[ H3b: \text{Mixed (public-private) MOCs have the highest initial failure rate and the highest efficiency potential.} \]

2.4 Data and methods

The articles incorporated in this study were selected in three stages. First, we specified a definition that articles had to meet for inclusion, and systematically examined eighteen public administration (PA) journals for 2001-2015 to collect relevant articles. Second, we reviewed all references within these articles to include papers outside these eighteen PA journals we missed before. Third, we identified the journals outside the eighteen PA journals where most research originated, and examined all articles published between 2001 and 2015 in those journals as well.
For inclusion in this study, an article was required to:

- exceed a length of four pages;
- concern itself primarily with the production or provision of a local service;
- discuss production or provision through a municipally owned corporation in the abstract or introduction; and
- discuss effects thereof.

In stage 1, only PA journals were selected with a 2015 SJR ranking exceeding 1.0 (SCImago Research Group 2016) (see Table 2). The first author systematically examined the abstracts and introductions of all articles in these journals for 2001-2015, including articles meeting our definition in a database. In total, we retrieved 8 articles in this stage, 4 of which were published in *Public Administration*. These papers varied in data origin, methods, and the sector and structure studied. For internal validity, the co-authors replicated this review for six journal volumes. After extensive discussion and deliberation, this led to the inclusion of one extra article to the database.

**Table 2:** The eighteen PA journals by SJR ranking

<table>
<thead>
<tr>
<th>Journal</th>
<th>SJR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative Science Quarterly</td>
<td>10.565</td>
</tr>
<tr>
<td>Journal of Public Administration Research and Theory</td>
<td>5.400</td>
</tr>
<tr>
<td>Educational Administration Quarterly</td>
<td>2.945</td>
</tr>
<tr>
<td>Public Administration Review</td>
<td>2.530</td>
</tr>
<tr>
<td>Governance</td>
<td>2.126</td>
</tr>
<tr>
<td>Journal of European Public Policy</td>
<td>1.975</td>
</tr>
<tr>
<td>Journal of Policy Analysis and Management</td>
<td>1.843</td>
</tr>
<tr>
<td>American Review of Public Administration</td>
<td>1.699</td>
</tr>
<tr>
<td>International Public Management Journal</td>
<td>1.696</td>
</tr>
<tr>
<td>Environment and Planning C: Government and Policy</td>
<td>1.568</td>
</tr>
<tr>
<td>Journal of Public Relations Research</td>
<td>1.544</td>
</tr>
<tr>
<td>Public Administration</td>
<td>1.460</td>
</tr>
<tr>
<td>Regulation and Governance</td>
<td>1.437</td>
</tr>
<tr>
<td>Review of Public Personnel Administration</td>
<td>1.376</td>
</tr>
<tr>
<td>Policy Studies Journal</td>
<td>1.299</td>
</tr>
<tr>
<td>Human Resources for Health</td>
<td>1.193</td>
</tr>
<tr>
<td>Journal of Information Technology and Politics</td>
<td>1.092</td>
</tr>
<tr>
<td>Review of Policy Research</td>
<td>1.058</td>
</tr>
</tbody>
</table>

In the second stage, we examined all reference lists in the previously retrieved articles, and added studies for 2001-2015 that fit our definition. Through this process, we added 12 new articles from 8 journals to the database. Two journals, *Local Government Studies* and *Annals of Public and Cooperative Economics*, had produced more than one article relevant for our definition, both adding 3 articles to our database. Therefore, in stage 3,
we examined all articles for 2001-2015 published in these journals, finding no new papers meeting our definition.

Altogether, our search rendered 21 articles from 13 journals. Table 3 offers descriptive statistics.

### Table 3: Descriptive statistics of included studies

<table>
<thead>
<tr>
<th>Period</th>
<th>Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001-2005</td>
<td>3</td>
</tr>
<tr>
<td>2006-2010</td>
<td>8</td>
</tr>
<tr>
<td>2011-2015</td>
<td>10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Country</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Spain</td>
<td>5</td>
</tr>
<tr>
<td>Italy / The Netherlands / Portugal</td>
<td>3</td>
</tr>
<tr>
<td>USA</td>
<td>2</td>
</tr>
<tr>
<td>Others</td>
<td>1 each</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Industry</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Refuse collection</td>
<td>14</td>
</tr>
<tr>
<td>Transit</td>
<td>9</td>
</tr>
<tr>
<td>Water management</td>
<td>8</td>
</tr>
<tr>
<td>Urban services / health services</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type studied</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-owned MOC</td>
<td>15</td>
</tr>
<tr>
<td>Shared public-private MOC</td>
<td>11</td>
</tr>
<tr>
<td>Joint public-public MOC</td>
<td>8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Methodology</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>14</td>
</tr>
<tr>
<td>Case study</td>
<td>6</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Journal</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Administration</td>
<td>4</td>
</tr>
<tr>
<td>Annals of Public and Cooperative Economics</td>
<td>3</td>
</tr>
<tr>
<td>Local Government Studies</td>
<td>3</td>
</tr>
<tr>
<td>Journal of Public Administration Research and Theory</td>
<td>3</td>
</tr>
<tr>
<td>Others</td>
<td>1 each (8 total)</td>
</tr>
</tbody>
</table>

### 2.5 Results

Table 4 summarizes the articles incorporated in this study. There is much variation in the constructs investigated, the countries and industries studied, and the methodology of the articles. As a result, we cannot conduct a quantitative meta-analysis of the research, and instead make inferences based on the similarities and differences between the articles.
## Table 4: Efficiency of MOCs

<table>
<thead>
<tr>
<th>Citation</th>
<th>Country / Form / Sector</th>
<th>Method (sample)</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albalate et al. (2012)</td>
<td>Spain / Singular / Bus services</td>
<td>Case study (1 metropole)</td>
<td>Singular MOCs are inefficient when not exposed to competitive pressures.</td>
</tr>
<tr>
<td>Bognetti and Robotti (2007)</td>
<td>Italy / Singular, Mixed / Various</td>
<td>Regression (2003 MOCs)</td>
<td>Mixed MOCs are more efficient than singular MOCs.</td>
</tr>
<tr>
<td>Bourdeaux (2013)</td>
<td>USA / Singular / Landfill, incinerator siting, development</td>
<td>Case study (8 cases)</td>
<td>MOCs have a more professional focus but are more prone to conflict.</td>
</tr>
<tr>
<td>Cuadrado-Ballesteros et al. (2012)</td>
<td>Spain / Singular, Mixed / Various</td>
<td>Regression (9,000-9,100 people)</td>
<td>Singular MOCs are judged more positively than bureaucracy in health, transit, trade services. Mixed MOCs do well for water services.</td>
</tr>
<tr>
<td>Da Cruz and Marques (2011)</td>
<td>Portugal / Singular, Joint / Water</td>
<td>Mixed methods (20 firms)</td>
<td>Singular MOCs performed badly in Portugal, particularly because they lacked real autonomy.</td>
</tr>
<tr>
<td>Da Cruz and Marques (2012)</td>
<td>Portugal / Mixed / Various</td>
<td>Case study (4 firms)</td>
<td>Mixed MOCs often fail because of goal conflict and the incumbent partner’s bargaining power.</td>
</tr>
<tr>
<td>Dijkgraaf and Gradus (2003)</td>
<td>The Netherlands / Joint / Refuse collection</td>
<td>Regression (85 municipalities)</td>
<td>Joint MOCs outperform bureaucracy as well as private firms when exposed to competition.</td>
</tr>
<tr>
<td>Dijkgraaf and Gradus (2007)</td>
<td>The Netherlands / Joint / Refuse collection</td>
<td>Regression (453 municipalities)</td>
<td>Joint MOCs do as well as private firms. Costs go down when they are exposed to competition.</td>
</tr>
<tr>
<td>Citation</td>
<td>Country / Form / Sector</td>
<td>Method (sample)</td>
<td>Findings</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-------------------------------</td>
<td>---------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Fillipini and Prioni (2003)</td>
<td>Switzerland / Singular, Mixed / Bus services</td>
<td>Regression (34 firms)</td>
<td>Mixed MOCs are more cost efficient than regular MOCs are.</td>
</tr>
<tr>
<td>Garrone et al. (2013)</td>
<td>Italy / Single, Joint, Mixed / Various</td>
<td>Regression (27 multi-utilities)</td>
<td>Mixed MOCs are efficient. Joint MOCs are not. Autonomy creates problems.</td>
</tr>
<tr>
<td>Marques and Berg (2011)</td>
<td>Portugal / Mixed / Water distribution</td>
<td>Case study (2 municipalities)</td>
<td>Mixed MOCs show potential for efficiency gains, but also often bring contract failure.</td>
</tr>
<tr>
<td>Marra (2007)</td>
<td>Italy / Mixed / Water distribution</td>
<td>Regression (40 basin plants)</td>
<td>Preliminary evidence that mixed MOCs have lower operating costs, attract more private capital.</td>
</tr>
<tr>
<td>Ohlsson (2003)</td>
<td>Sweden / Singular / Refuse collection</td>
<td>Regression (150 firms)</td>
<td>Singular MOCs were slightly more cost-efficient than private firms in Swedish refuse collection.</td>
</tr>
<tr>
<td>Pérez-López et al. (2015)</td>
<td>Spain / Singular, Mixed / Various</td>
<td>Regression (1,058 municipalities)</td>
<td>Mixed MOCs were they only delivery mode to contribute to efficiency both before and during the financial crisis.</td>
</tr>
<tr>
<td>Sørensen (2007)</td>
<td>Norway / Singular, Joint / Refuse collection</td>
<td>Regression (269-412 MOCs)</td>
<td>Joint MOCs have problems with goal conflict, monitoring. These drawbacks outweigh scale benefits.</td>
</tr>
<tr>
<td>Swarts and Warner (2014)</td>
<td>Germany / Singular, Mixed / Bus services</td>
<td>Case study (1 metropole)</td>
<td>Singular and mixed MOCs both reduce labor costs and make monitoring easier, but singular MOCs are less likely to fail.</td>
</tr>
<tr>
<td>Zafra-Gómez et al. (2013)</td>
<td>Spain / Mixed, Joint / Refuse collection</td>
<td>Regression (923 municipalities)</td>
<td>Joint MOCs increase efficiency among small localities.</td>
</tr>
</tbody>
</table>
Throughout the analysis, we will discuss MOCs’ efficiency and effectiveness. Like Vining, Boardman, and Moore (2014), we must ask: efficiency and effectiveness compared to what? As a baseline, we will assess MOCs’ effectiveness and efficiency compared to that of bureaucracy, although not every study included makes this comparison. We again attempt to enable such comparisons by synthesizing the different papers treating the topic.

From here on, we refer to MOCs owned by a single locality as a ‘singular MOC’. MOCs owned by several localities are ‘joint MOCs’ and MOCs owned by the locality and a private actor are ‘mixed MOCs’.

### Table 4: Efficiency of MOCs (cont.)

<table>
<thead>
<tr>
<th>Citation</th>
<th>Country / Form / Sector</th>
<th>Method (sample)</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zullo (2008)</td>
<td>USA / Singular / Bus services</td>
<td>Regression (508 agencies)</td>
<td>Industries where singular MOCs are used for all elements of service provision are more efficient than where only used for parts.</td>
</tr>
</tbody>
</table>

2.5.1 Legal autonomy effects

2.5.1.1 Failure rates and efficiency

Our database incorporates 21 studies of MOCs, but we limit ourselves in this subsection to the discussion of singular MOCs, to separate the effects of legal autonomy from those of dispersed ownership.

Nine articles in our database compare singular MOCs to non-MOC delivery modes. These studies are not uniformly positive about MOCs’ efficiency: like state enterprises, singular MOCs are found to be inefficient when not exposed to competitive pressures (Albalate et al. 2012; Bognetti and Robotti 2007). Indeed, when governments put up barriers to entry, they insulate MOCs from competition, and remove market pressure to maximize their efficiency.

However, the large-N studies all show that singular MOCs are quite efficient when exposed to market pressures. Singular MOCs were slightly more efficient than private firms for refuse collection in Sweden (Ohlsson 2003), and comparable in efficiency to private firms in the US bus industry (Zullo 2008). Bourdeaux (2013) finds that MOCs have a more professional focus than bureaucracies; and in the quality of life study of Cuadrado-Ballesteros, García-Sánchez, and Prada-Lorenzo (2012), singular MOCs were preferred over bureaucracy in all industries. In Pérez-López et al. (2015), singular MOCs (defined as ‘agencies’) had higher efficiency in some industries but worse in others. Berlin transit operator BVG gained efficiency in transitioning from a municipal unit to public law corporation, which allowed labour restructuring (Swarts and Warner 2014).

Of the studies included, only one suggests that singular MOCs may do worse than bureaucracy (Da Cruz and Marques 2011). The authors point out that in Portugal, MOCs are rarely subject to competition, have little autonomy, and are difficult to regulate since the (centralized) regulator is hesitant to infringe upon local delivery choices. Moreover, they have in several instances led to overlapping functions between MOCs and municipalities, demonstrating that coordinating responsibilities is not always an easy task.
However, they too point out that, if these problems are solved, MOCs may well do better than bureaucracy. Overall, there is tentative evidence that singular MOCs have efficiency advantages over the bureaucracy in at least some industries, mostly because they substitute politics for professionalism (Bourdeaux 2013). Here, however, the general point that MOCs have high initial failure rates stands too. This is the most important finding in Bourdeaux (2013): while MOCs are more likely to deliver services professionally, they are vulnerable to political conflicts (over goals), which are arbitraged away in bureaucracy delivery. Similarly, Da Cruz and Marques (2011) caution that lacking well-defined responsibilities for the MOC, bureaucracy may be the better policy channel. Large-N studies into the efficiency and effectiveness of single-owned MOCs inform us that singular MOCs are a viable policy instrument when compared to private firms or local bureaucracy delivery, but case studies demonstrate that in individual cases failure is a real possibility. The empirical literature thus corroborates hypothesis 1a. Singular MOCs may yield efficiency gains compared to bureaucracy, but it is imperative to exhaustively negotiate goals, expectations, incentives and responsibilities to assure MOCs can meet these expectations.

2.5.1.2 MOCs across sectors
Only two studies (Cuadrado-Ballesteros et al. 2012; Pérez-López et al. 2015) actively distinguished across and between service sectors in analysing how MOCs compare to bureaucracy. In Cuadrado-Ballesteros et al. (2012), MOCs were found to provide more quality of life than local bureaucracy in all sectors. Meanwhile, Pérez-López et al. (2015) find different efficiency performances across sectors. Particularly, MOCs demonstrate higher efficiency in the waste, water, and development. In contrast, MOCs are found to be significantly less efficient in culture and in urban services, and less efficient in social and transit services. The results of these studies are not necessarily contradictory as the studies measure different things: while Cuadrado-Ballesteros et al. (2012) measure service satisfaction (in essence, quality perception), Pérez-López et al. (2015) measure cost efficiency. It is plausible that MOCs, in the Spanish context of local government austerity, can better safeguard quality than local bureaucracies.

Nevertheless, the findings of Pérez-López et al. (2015) provide tentative albeit limited evidence that MOCs do better in services that are less technical and which have overt public objectives. The empirical finding that MOCs do comparatively better in refuse collection, water management, and development than in providing culture and social services is in line with our notion that MOCs face lesser coordination issues when objectives are clear-cut and non-politicized. Altogether, however, evidence is too scarce to accept hypothesis 1b, although the data lend tentative support for it.

2.5.1.3 MOCs across municipalities
We also aimed to investigate if MOCs fail less often in populous urban municipalities than in smaller rural ones. Unfortunately, only one study of joint MOCs makes this distinction, finding that smaller municipalities gain from cooperation through scale economies (Bel and Warner 2015), but beyond that, data is absent. Consequently, we cannot corroborate or falsify hypothesis 1c.
2.5.2 Managerial autonomy effects

We were unable to falsify or contradict hypothesis 2, that MOCs have lower labour costs. None of the incorporated studies discuss how labour costs in MOCs compare to those in bureaucracy. Some studies report that labour costs are higher in singular MOCs than in mixed MOCs (Swarts and Warner 2014) or private firms (Albalate et al. 2012), but empirical evidence compared to bureaucracy lacks.

2.5.3 Ownership effects

2.5.3.1 Joint MOCs

In our database, seven studies discuss joint MOCs. Garrone et al. (2013) and Sørensen (2007) emphasize that the managerial autonomy of joint MOCs creates monitoring problems in Norway (Sørensen 2007) and goal conflict in Italy (Garrone et al. 2013), which outweigh gains from the exploitation of economies of scale. Bel and Fageda (2006) and Zafra-Gómez et al. (2013) observe the opposite effect in Spain, finding that small localities gain efficiency from cooperation with other localities through public firms. In the Dutch waste industry, MOCs do better than bureaucracy (Dijkgraaf and Gradus 2003) and as well as private firms (Dijkgraaf and Gradus 2003, 2007). They also lower the costs of service provision in localities where they compete in auctions, even when the bid is eventually won by another party (Dijkgraaf and Gradus 2008).

What explains these contradictory findings? Bel and Warner (2015) answer this in their review of studies on inter-municipal cooperation. First, Norwegian municipalities tend to be larger than those in Spain, leaving more economies of scale to be captured in Spain (while small localities were underrepresented in the study of Garrone et al. [2013]). Second, joint MOCs in Spain are managed by a single authority to which municipalities delegate, while in Italy and Norway multiple municipalities are directly on the board of MOCs. Bel and Warner (2015) suggest that political transaction costs are higher with multi-government ownership, which is consistent with our hypothesis 3a that failure rates of MOCs increase under dispersed ownership. The Dutch counterexample is explained away by the (then) prevalence of unit-based pricing, which is associated with lower costs.

Our hypothesis further suggests that we should observe variation in joint MOCs between MOCs that struggle under joint ownership and fail and MOCs that manage to overcome problems and reap the rewards of cooperation. Unfortunately, we lack empirical data to falsify these claims. The scarcity of literature on joint MOCs, in conjunction with the preponderance of large-N studies in this literature, leaves such micro-level analysis impossible.

2.5.3.2 Mixed MOCs

Eight articles discuss mixed MOCs. Five studies, all large-N studies, find that mixed MOCs realize real efficiency gains (Bognetti and Robotti 2007; Filippini and Prioni 2003; Garrone et al. 2013; Marra 2007; Pérez-López et al. 2015). Furthermore, three other studies, all small-N case studies, emphasize potential efficiency gains from mixed MOCs, but show that these could not come to long-term fruition due to goal conflict and negotiation problems (Da Cruz and Marques 2012; Marques and Berg 2011) or labour conflict (Swarts and Warner 2014). Only Roy and Yvrande-Billon (2007) (a large N-study) finds a negative effect of mixed MOCs in technical efficiency.
The five large-N studies that positively evaluate the efficiency effects of mixed MOCs study their economic efficiency (i.e. profits or total costs), while the one that finds negative effects studies more narrowly technical efficiency (i.e. what outputs they can produce with the resources available). Roy and Yvrande-Billon (2007) suggest that mixed MOCs may do worse due to opportunism by both the public and private partner (i.e. goal conflict) or difficulty in attributing responsibilities (i.e. incomplete contracts). However, performance differentials were only small, and mixed MOCs have more than double the variation in performance scores than singular MOCs. This may be congruent with an environment in which some mixed MOCs fail while others are successful.

The case studies of mixed MOCs corroborate hypothesis 3b that mixed MOCs have the highest initial failure rates but the highest efficiency potential. Da Cruz and Marques (2012) narrate particular cases where mixed MOCs faced goal conflicts and where contracts required costly renegotiation shortly after their founding, and Marques and Berg (2011) discuss in-depth the difficulty in saliently writing up contracts for mixed MOCs, giving recommendations on how to prevent contract failure. Swarts and Warner (2014) highlight a case where a mixed MOC provided immediate gains in efficiency, mostly through labour restructuring, which were eroded by subsequent unionization.

In sum, the empirical evidence supports hypothesis 3a and 3b: MOCs with dispersed ownership bring large efficiency gains but come with a large chance of failure. Public-private mixed MOCs have a larger failure potential but a higher efficiency potential than public-public joint MOCs.

2.6 Discussion

Our prediction about the effects of legal autonomy on the efficiency of MOCs was supported by the data. MOCs, on aggregate, are more efficient than local bureaucracies (hypothesis 1a), at least in refuse collection, waste management, and transit services. Simultaneously, the data corroborates the hypothesis that transaction costs and principal-agent problems induce a higher chance of failure (hypothesis 1a). This chance of failure increases under joint or mixed ownership (hypotheses 3a and 3b), which exacerbate transaction costs and principal-agent problems, and particularly the problem of serving multiple masters (Da Cruz and Marques 2012; Van Thiel 2016; Waterman and Meier 1998) is pressing and should be studied further. However, if these problems are overcome, cooperation with the private sector or between localities through a MOC can be very beneficial, as the data demonstrate (hypotheses 3a and 3b).

Our data was insufficient to corroborate or contradict our hypotheses about efficiency differences across municipality and service types (hypotheses 1b and 1c). Since the three most discussed sectors in the literature (water management, refuse collection, and transit services) are all often grouped as 'utilities' and are relatively homogeneous (they all involve infrastructure, have relatively overt public objectives, and are relatively capital-intensive), we cannot infer direct effects of service technicality (hypothesis 1b) or of labour intensity (hypothesis 2), although there is tentative evidence that overt and non-politicized public objectives make MOCs more likely to succeed (hypothesis 1b).

There remains much scope for research into MOCs. While studies have been done into MOCs operating in utilities, there have been few studies into MOCs in other sectors, such as in health care, culture, or welfare services. MOCs have been studied more in some countries (in particular in Italy, The Netherlands, Portugal, and Spain) than in others, and in Europe particularly the mixed (public-private) form of MOC seems more prevalent in
the Mediterranean countries than in the rest of Europe. Beyond being specific, data are also scarce. Our research spanned 20 journals for 15 years, plus the references in relevant articles, for an estimated 12,000 articles, of which only 21 (<0.2%) discussed effects of MOCs. Since many questions remain unanswered, we invite researchers to fill in the research gaps.

We should note that literature on MOCs exists beyond what we have examined. While we have limited this study to discussion of effects of MOCs, there exists a body of literature (Bel and Fageda 2010; Gradus, Dijkgraaf, and Wassenaar 2014; Rodrigues, Tavares, and Araújo 2012; Røiseland 2011, Tavares and Camões, 2007) examining the causes of MOCs. Moreover, we did not discuss (chapters in) books and publications in other sources than peer-reviewed academic journals, which increased our study’s reliability at the expense of its sample size. This is a limitation of this study, as good studies have been conducted outside of peer-reviewed journals (see: Dijkgraaf and Gradus [2014], Hulst and Van Montfort [2007], Wollmann and Marcou [2010]), although we are aware of none that challenge our findings. Similarly, we may have missed studies published in other languages than English, or that used vocabulary or abstracts and introductions that obscured the fact that they discussed MOCs.

On that note, we encourage researchers to be specific about the type of public organization they are investigating. We found that researchers often group together and juxtapose ‘public’ and ‘private’ firms without accurately specifying what form of public organizations they investigate, leaving the reader unable to infer (multiplicity of) ownership, applicable laws, and whether the author discussed public firms, in-house production, or a combination of both.

2.7 Conclusion
We make five main observations about MOCs. First, large efficiency gains can be and are realized through MOCs. Second, MOCs used for cooperation with the private sector can potentially yield even larger efficiency gains. Third, there is tentative evidence that MOCs used for inter-municipal cooperation can gain efficiency when scale economies are present only if problems of dispersed ownership can be overcome; the Spanish approach of delegating joint MOCs to one authority is one potential solution to this. Fourth, MOCs have a high initial failure risk resulting from goal conflict and principal-agent problems; localities need contracting capacity to mitigate this risk. Fifth, more ownership dispersion implies a higher risk of failure, and the problem of serving multiple masters, what we call the multiple principal problem, is a pressing one for (public) organizations.

It is important to emphasize that we deal with scarce and heterogeneous data: we have reviewed a limited number of cases, differing in service sector, country, and organization type. In view of this limitation and in view of the fact that multiple things about MOCs remain unknown, we encourage additional research about how MOCs fare in different institutional environments and across service sectors, and about the specific processes in which the problems MOCs face initially can be and are overcome.
References


Chapter 3
3.1 Introduction

Is joint service delivery beneficial for public sector organizations? We know from the literature on inter-municipal cooperation that knowledge sharing and scale economies frequently make joint service delivery efficient (Bel, Fageda, and Mur 2012; Bel and Warner 2015; Hulst et al. 2009; Silvestre, Marques, and Gomes 2018; Voorn, Van Genugten, and Van Thiel 2017). However, joint service delivery is also prone to failure, due to multiple possible collective action problems (Feiock 2009, 2013). For inter-municipal service delivery, Garrone, Grilli, and Rousseau (2013) find that conflict over objectives can trickle down to insufficient or incoherent directives to boards; Sørensen (2007) finds insufficient monitoring due to free-riding. We observe similar inefficiencies for parliaments and agencies (Dehousse 2008; Hammond and Knott 1996; Koppell 2005; McCubbins, Noll, and Weingast 1987; Moe 1987; Schillemans and Bovens 2014; Wood and Waterman 1991), public-private partnerships (Bognetti and Robotti 2007; Da Cruz and Marques 2012), and private firms with dispersed ownership (Lin and Chuang 2011; Su, Xu, and Phan 2008; Ward and Filatotchev 2010; Young et al. 2002).

Theory has focused on understanding these collective action problems in joint service delivery separately. Models of Gailmard (2009), Khalil, Martimort, and Parigi (2007), and Varian (1990) establish monitoring complexities; Dixit (2002); Martimort (1992), and Stole (1991) demonstrate an incentive-setting problem; and Hammond and Knott (1996), McCubbins, Noll, and Weingast (1987), and Schillemans and Bovens (2014) show difficulties of steering and accountability. Yet, the literature remains dispersed, policy recommendations for joint service delivery remain complex and incoherent, and predictive powers of models of joint service delivery remain weak. Some authors have begun collocating the collective action problems inherent to joint service delivery under a single term, hoping to find coherence to this multiple principal problem (e.g. Dehousse 2008; Miller 2005; Waterman and Meier 1998).

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7 This chapter has been published as Voorn, Van Genugten, and Van Thiel (2019). We have permission from the publisher to present this chapter here.

8 Researchers utilize many terms to describe the problem. We use the term multiple principal problem, as we find principal-agent theory explains collective action problems well overall; our terminology follows the works of Dixit (2002), Estache and Martimort (1999), Miller (2005), Van Thiel (2016), and Waterman and Meier (1998). Other terms used to describe the same problem include (the problem of) “multiple accountabilities” (Koppell 2005; Schillemans and Bovens 2015), “common agency” (Dixit et al., 1997), “principal-principal conflict” (Lin and Chuang 2011; Su et al. 2007; Ward and Filatotchev 2009; Young et al. 2002), and “serving two masters” (Da Cruz and Marques 2012).
In this article, we expand a framework grounded in principal-agent theory to understand the multiple principal problem and build a research agenda for governance. In section 2, we describe our study’s background and explicate our approach. In section 3, we derive the framework and form hypotheses. In section 4, we review and synthesize the extant literature on the multiple principal problem, test the framework, and highlight implications for joint service delivery. In section 5, we consider typical organizational responses to the multiple principal problem, and highlight problems these responses face. In section 6, we suggest a solution to the multiple principal problem, based on an interface approach and grounded in median voter theorem. In section 7, we summarize, emphasize limitations, offer potential avenues for research, and conclude.

### 3.2 Background and approach

Joint service delivery is widespread, for good reasons. When organizations cooperate, they can engage in risk sharing, specialize, and capture scale economies (Bel and Warner 2015; Silvestre, Marques, and Gomes 2018). Accordingly, we observe that many firms and foundations have multiple shareholders (Maury and Pajuste 2005), that governments and agencies, local councils, and political parties frequently cooperate (Bouckaert, Peters, and Verhoest 2010), that public-private partnerships are used more frequently (Hodge and Greve 2007), and that cooperation between the public sector and non-profit sector is rising (Warner and Hebdon 2001). Such cooperation is called collaborative or joint service delivery when it exists for the delivery of (public) services (Hilvert and Swindell 2013; Hulst et al. 2009); alternative terms, such as “joined-up government” (Hood 2005; Silvestre, Marques, and Gomes 2018) and “collaborative governance” (Ansell and Gash 2008), are also used.

Empirical research demonstrates that joint service delivery is often beneficial, albeit not problem-free (Bel and Warner 2015). Problems occur because cooperation requires (partial) externalization of decision-making (Argento et al. 2009), which brings complexities. Collective action problems occur when the interests of individual stakeholders conflict with the collective interest of all stakeholders in the collaboration, leading to sub-optimal outcomes. Stakeholders face transaction costs to mitigate those problems, including regulation and monitoring costs. Collective action problems and transaction costs together affect joint service delivery through ex post inefficiency, where collaboration is less efficient than it could have been, or ex ante inefficiency, when otherwise profitable cooperation does not occur. We know less about equity effects: how inefficiencies affect some stakeholders more than others (recent work by Cäker and Nyland (2017) and Spicer (2017) are welcome exceptions).

Many academics have focused on individual collective action problems and solutions to them (Dixit 2002; Gailmard 2009; Hammond and Knott 1996; Khalil, Martimort, and Parigi 2007; Martimort 1992; McCubbins, Noll, and Weingast 1987; Schillemans and Bovens 2014; Stole 1991; Varian 1990). While this endeavor has been fruitful, individual treatment of these collective action problems has brought weak predictive powers for models of joint service delivery. Building a framework to predict outcomes under multiple principals is crucial for understanding joint service delivery (Dehousse 2008) and is this article’s ultimate aim.

We illustrate our theoretical case with the practical example of inter-municipal service delivery to demonstrate how our framework emulates actual practice. Inter-municipal service delivery reflects benefits and problems of joint service delivery, as current research
shows that it is frequently quite successful (Bel and Warner 2015; Dijkgraaf and Gradus 2007; Teles and Swianiewicz 2018), while many problems can be linked to collective action problems (Bel and Warner 2015; Bognetti and Robotti 2007; Garrone, Grilli, and Rousseau 2013; Sørensen 2007). We will refer to this practical example throughout the text. We emphasize that the framework applies to joint service delivery overall, and not just in the context of our illustration; to show that our framework is applicable in a variety of settings, we incorporate a literature review that explores multiple types of service organizations.

3.3 Framework and hypotheses

3.3.1 Framework
Consider a municipality that operates a municipally owned corporation and hires an expert director to manage it, as frequently happens in Europe (Voorn, Van Thiel, and Van Genugten 2018). The resulting relationship between the municipality and director is a relationship between principal and agent, where the agent acts on behalf of the principal. Principal-agent theory emphasizes benefits of such relationships, which allow more expert service delivery. However, it also emphasizes problems of asymmetric information and moral hazard (Fama and Jensen 1983): the director may have objectives different from the municipality, and the municipality cannot take the director's commitment for granted. Therefore, the municipality needs to introduce governance to align the director's interest with its own.

Under principal-agent theory, steering and monitoring are key governance mechanisms that can entice agents to act in principals’ interest (Fama and Jensen 1983). For our hypothetical director-agent, steering protocols help: clear municipal directives build awareness of expectations, and give the municipality criteria to audit. Similarly, incentives such as variable pay can align the director's interest with that of the municipality. Monitoring the director is also practical, presuming it is not too costly. These steering and monitoring mechanisms increase the agent's accountability.

Typically, principal-agent theorists consider the dyadic case of one principal, one agent, and one task. This is a simplification of reality. In organizations, relationships typically involve multiple actors. Consider local refuse collection: while some large cities singly own refuse collection firms, many refuse collection organizations in Europe are owned inter-municipally, i.e. by multiple municipalities, or by public-private partnerships (Bel, Fageda, and Mur 2012; Blåka 2017; Da Cruz and Marques 2012; Dijkgraaf and Gradus 2007; Garrone, Grilli, and Rousseau 2013; Giacomini, Sancino, and Simonetto 2018; Gradus and Budding 2018; Sørensen 2007; Soukopová and Vaceková 2018; Voorn, Van Genugten, and Van Thiel 2018). In the United States, inter-municipal contracting is more frequent (Bel and Warner 2015; Hefetz, Warner, and Vigoda-Gadot 2012; Marvel and Marvel 2007; Warner and Hebdon 2001). For other types of joint service delivery, such as firms with dispersed ownership, parliaments and agencies, the dyadic model is similarly inaccurate.

Making the dyadic model more inaccurate is the observation that principals’ interests frequently diverge. In refuse collection organizations owned by multiple municipalities, interests between municipalities diverge in pickup frequency, pickup times, attitude towards recycling, pricing strategies, and others (Van Genugten 2008). In
intermunicipal theaters, interests between municipalities diverge in the prime targeted demographic, focus on local or national culture, types of cultural programs offered, or focus on tourism. Parliaments, agencies, public-private partnerships, and private firms with dispersed ownership face similar diverging interests among stakeholders. Crucially, since there is asymmetric information between the principals, where principals are not necessarily aware of each other's behavior, this creates a collective action problem for governance.

Once multiple principals are introduced, we can no longer presume that it is in individual principals' best interest to steer or monitor the agent. Worse yet, individual principals can lobby the agent to pursue their interests in lieu of those of other principals.

3.3.2 Formalization

Consider $\alpha$ is the extent to which the agent acts in the principals’ interest in a dyadic principal-agent model, and $c(\alpha)$ represents the costs of getting the agent to act that way. Suppose moreover that in a non-dyadic model, $\beta_i - \beta_j$ is the extent to which an agent sides with principal $i$ over principal $j$, where $c(\beta_i)$ represents the costs of getting the agent to side with principal $i$ over principal $j$. This is illustrated in Figure 1.

**Figure 1:** The model visualized.

In the dyadic model, policy to maximize the principal’s interest is straightforward to calculate. There are no lobbying costs $c(\beta_i)$, so monitoring should take place to the extent that $\alpha' < c(\alpha')$, i.e. to the point that the marginal costs of increasing $\alpha$ exceed the marginal increase of $\alpha$. In a non-dyadic model, however, outcomes are less positive. Depending on the extent to which principals can observe $\alpha$ and other’s $c(\alpha)$, the possibility of duplication and free-riding exists, which increases $c(\alpha')$ and thus decreases $\alpha$. (See also Varian (1990).)

An additional problem for overall welfare are lobbying costs $\beta$. In a two-principal model, principal $i$ maximizes expected utility $U_i$:

$$U_i(\beta_i) = \alpha_i + \alpha_j + \beta_i - \beta_j - c(\alpha) - c(\beta_i)$$
\[ U_i(\beta_i) = \beta_i^* - c'(\beta_i) = 0 \]

\[ \beta_i^* = c'(\beta_i) \]

Lobbying should occur to the extent that \( \beta_i^* < c'(\beta_i) \). Since this has the outcome that total lobbying is likely non-zero and lobbying provides no benefit for total welfare \( W = U_i + U_j \), the model suggests that there will be lobbying costs and that these will constitute inefficiencies. Since these inefficiencies exist in the non-dyadic principal-agent relationship, but do not exist in the dyadic relationship, the implication is that from an agency cost perspective, principal-agent relationships should be kept as dyadic as possible.

### 3.3.3 A collective action explanation and hypotheses

To simplify the model in collective action terms, consider Table 1. It is unclear whether individual principals benefit from steering when another principal may also steer, and likewise for monitoring. Still, we can make two observations. First, symmetric outcomes are inefficient: when all principals steer, they incur the costs of duplicate steering; when none steer, the agent is autonomous. Second, the asymmetric outcome (one of the principals steers) leaves the controlling principal better off than the non-controlling principal, introducing inequity. This is the multiple principal problem in the absence of organization, and demonstrates the drawbacks of joint service delivery.

<table>
<thead>
<tr>
<th>Principal A</th>
<th>Principal B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steer / monitor the agent</td>
<td>Steer / monitor the agent</td>
</tr>
<tr>
<td></td>
<td>Costly for A, Costly for B Agent follows A and B, or own course when A &amp; B disagree</td>
</tr>
<tr>
<td>Do not steer / monitor the agent</td>
<td>Not costly for A, Costly for B Agent follows B</td>
</tr>
</tbody>
</table>

Table 1: Pay-off schemes for steering or monitoring under multiple principals

We can infer four hypotheses from this framework. First, the framework suggests that multiplicity in the responsibility to steer and monitor reduces steering and monitoring overall (H1). This follows the fact that municipalities have incentives to individually free-ride in steering and monitoring. Second, multiplicity in the responsibility to steer and monitor leads to inequity between principals and may induce lobbying of the agent (H2). Principals with greater bargaining power may find their interests satisfied more than principals with lesser bargaining power. Third, conflict between principals and weaker steering and monitoring increase the agent’s autonomy (H3). In the absence of clear directives, the agent has more freedom to choose its paths. Finally, this all increases inefficiencies under joint service delivery (H4).
3.4 Evidence from the literature

To test this framework and explore these hypotheses in a wide variety of settings, we conduct an exploratory review of the literature on joint service delivery. However, as most organizations have multiple owners, the majority of research into any type of organization describes outcomes of multiplicity of principals. This makes the literature extensive, and a systematic review unfeasible. We opt instead to explore the literature (and indirectly the framework) through a scoping study. Scoping studies are often used as alternative to systematic literature reviews when the latter are not feasible (Arksey and O'Malley 2005), because fields are broad in scope or terminologies are not yet settled (Levac, Colquhoun, and O'Brien 2010), as is the case here. Our explorative study is necessarily limited; it serves not as hard proof of our hypotheses but as exploratory evidence for our framework.

We start from the literature on the multiple principal problem we are aware of (Garrone, Grilli, and Rousseau 2013; Miller 2005; Van Thiel 2016). We scanned all the relevant references from these studies for mentioning of multiplicity of principals, including them in a database when mentions were found. We repeated this step until we found no further articles. While this approach is not all encompassing, a more systematic approach might yield fewer important studies, being more contingent on terminology. Our approach yields 26 empirical and theoretical articles across business and management, economics, political science, and public administration, using six different terms to describe the phenomenon (see Table 2).

Table 2: Literature on the multiple principal problem

<table>
<thead>
<tr>
<th>Reference</th>
<th>Term</th>
<th>Application</th>
<th>Key theories</th>
<th>Hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bernheim and Whinston (1986)</td>
<td>Common agency</td>
<td>N/A (Model)</td>
<td>If cooperation is not achieved, common agency is likely inefficient.</td>
<td>1-4</td>
</tr>
<tr>
<td>Da Cruz and Marques (2012)</td>
<td>Serving two masters</td>
<td>Public-private partnerships</td>
<td>When principals diverge in interests, formal contracts often cause problems.</td>
<td>4</td>
</tr>
<tr>
<td>Dixit (2002)</td>
<td>Multiple principals</td>
<td>Tax agencies</td>
<td>Accountability is easily violated under multiple principals.</td>
<td>1</td>
</tr>
<tr>
<td>Dixit, Grossman, and Helpman (1997)</td>
<td>Common agency</td>
<td>N/A (Model)</td>
<td>Common agency induces lobbying efforts by the individual principals that reduce the overall size of the economic pie.</td>
<td>2,3,4</td>
</tr>
<tr>
<td>Estache and Martimort (1999)</td>
<td>Multi-principal</td>
<td>Public Sector</td>
<td>Coordination problems between multiple principals lead to inefficiency.</td>
<td>1,4</td>
</tr>
<tr>
<td>Gailmard (2009)</td>
<td>Multiple principals</td>
<td>N/A (Model)</td>
<td>There is a collective action problem in monitoring among multiple principals.</td>
<td>1,4</td>
</tr>
<tr>
<td>Reference</td>
<td>Term</td>
<td>Application</td>
<td>Key theories</td>
<td>Hypothesis</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-----------------------</td>
<td>-------------</td>
<td>------------------------------------------------------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>Garrone, Grilli, and Rousseau</td>
<td>Multiple principals</td>
<td>Utilities</td>
<td>Managers gain a lot of discretion from the multi-principal nature of multi-</td>
<td>3,4</td>
</tr>
<tr>
<td>(2013)</td>
<td></td>
<td></td>
<td>utilities.</td>
<td></td>
</tr>
<tr>
<td>Hammond and Knott (1996)</td>
<td>Multiple principals</td>
<td>Agencies</td>
<td>Organizations gain autonomy from multiple principals if their interests</td>
<td>2,3</td>
</tr>
<tr>
<td>Khalil, Martimort, and Parigi</td>
<td>Common agency</td>
<td>N/A (Model)</td>
<td>There is a collective action problem in monitoring among multiple principals.</td>
<td>1,4</td>
</tr>
<tr>
<td>(2007)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Koppell (2005)</td>
<td>Multiple accountabilities</td>
<td>Agency</td>
<td>Having to balance the interests of multiple principals can lead to</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>organizational failure.</td>
<td></td>
</tr>
<tr>
<td>Lin and Chuang (2011)</td>
<td>Principal-principal</td>
<td>Firms</td>
<td>Conflicts between multiple principals have empirically verifiable costs.</td>
<td>4</td>
</tr>
<tr>
<td>Martimort (1992)</td>
<td>Multi-principals</td>
<td>N/A (Model)</td>
<td>The more the interests of multiple principals diverge, the more welfare is</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>lost.</td>
<td></td>
</tr>
<tr>
<td>Miller (2005)</td>
<td>Multiple principals</td>
<td>N/A (Theory)</td>
<td>Summary of the political research into multiple principals: organizations</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>gain autonomy from multiple principals if their interests conflict.</td>
<td></td>
</tr>
<tr>
<td>Moe (1984)</td>
<td>Multiple principals</td>
<td>Agencies</td>
<td>Organizations gain autonomy from multiple principals if their interests</td>
<td>2,3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>conflict.</td>
<td></td>
</tr>
<tr>
<td>Moe (1987)</td>
<td>Multiple principals</td>
<td>Agencies</td>
<td>Organizations gain autonomy from multiple principals if their interests</td>
<td>2,3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>conflict.</td>
<td></td>
</tr>
<tr>
<td>Moe (2005)</td>
<td>Multiple principals</td>
<td>N/A (Theory)</td>
<td>Power between principals affect the allegiance of agents.</td>
<td>2</td>
</tr>
<tr>
<td>Reference</td>
<td>Term</td>
<td>Application</td>
<td>Key theories</td>
<td>Hypothesis</td>
</tr>
<tr>
<td>------------------------------</td>
<td>---------------------------</td>
<td>-------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>Schillemans and Bovens (2015)</td>
<td>Multiple accountabilities</td>
<td>N/A (Theory)</td>
<td>There are seven concerns for accountability under multiple principals: higher transaction costs, conflicting expectations, accountability confusion, negativism, control loss, blame games, symbolic accountability.</td>
<td>1,4</td>
</tr>
<tr>
<td>Sørensen (2007)</td>
<td>Multiple principals</td>
<td>Inter-municipal cooperates</td>
<td>There is a costly collective action problem in monitoring under multiple principals.</td>
<td>1,4</td>
</tr>
<tr>
<td>Su, Xu, and Phan (2007)</td>
<td>Principal-principal</td>
<td>Firms</td>
<td>Goal incongruence causes problems under multiple principals.</td>
<td>4</td>
</tr>
<tr>
<td>Van Thiel (2016)</td>
<td>Multiple principals</td>
<td>Quangos</td>
<td>Multiplicity of principals can create conflicts.</td>
<td>1,4</td>
</tr>
<tr>
<td>Van Thiel and Verhof (2012)</td>
<td>Plural principals</td>
<td>Agencies</td>
<td>Multiplicity of principals allows opportunistic behavior for both principals and agent, and increases transaction costs.</td>
<td>1,4</td>
</tr>
<tr>
<td>Ward and Filatotchev (2010)</td>
<td>Principal-principal</td>
<td>Mutual funds and stocks</td>
<td>There is evidence of the existence of greater multiple principal problems in mutual funds than stocks due to the lesser multiplicity in shareholders it creates.</td>
<td>4</td>
</tr>
<tr>
<td>Whitford (2005)</td>
<td>Multiple principals</td>
<td>Agencies</td>
<td>Organizations gain autonomy from multiple principals if their interests conflict.</td>
<td>2,3</td>
</tr>
<tr>
<td>Wood and Waterman (1991)</td>
<td>Multiple principals</td>
<td>Agencies</td>
<td>Organizations gain autonomy from multiple principals if their interests conflict.</td>
<td>2,3</td>
</tr>
</tbody>
</table>
### Table 2: Literature on the multiple principal problem (cont.)

<table>
<thead>
<tr>
<th>Reference</th>
<th>Term</th>
<th>Application</th>
<th>Key theories</th>
<th>Hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worsham and Gatrell (2005)</td>
<td>Multiple principals</td>
<td>Agencies</td>
<td>Organizations gain autonomy from multiple principals if their interests conflict.</td>
<td>2,3</td>
</tr>
<tr>
<td>Young, Peng, Ahlstrom, and Bruton (2002)</td>
<td>Principal-principal</td>
<td>Firms (Theory)</td>
<td>Goal incongruence leads to principal-principal conflicts and increased monitoring costs, which reduce efficiency.</td>
<td>1,4</td>
</tr>
</tbody>
</table>

#### 3.4.1 Summary of study backgrounds

Academics have conducted research into the multiple principal problem in broadly five clusters. In political science, study of the multiple principal problem is most prevalent in research on the politics-bureaucracy divide. Academics here utilize the idea of multiple principals to understand power balances between the executive and legislative branches of government and to reflect on the autonomy of agencies vis-à-vis the government (Miller 2005). Second, in business, researchers use the idea of multiple principals to understand the performance of firms where shareholders disagree on objectives (Lin and Chuang 2011; Su, Xu, and Phan 2008; Ward and Filatotchev 2010; Young et al. 2002), utilizing the term principal-principal conflict. Third, theoretical economists focus on individual collective action problems that multiple principals bring, naming it common agency (Bernheim and Whinston 1986; Dixit, Grossman, and Helpman 1997; Gailmard 2009; Khalil, Martimort, and Parigi 2007; Martimort 1992). Fourth, the accountability literature considers accountability problems that multiplicity of stakeholders can bring (Koppell 2005; Schillemans and Bovens 2014), coining it the multiple accountability problem. Finally, a body of public administration research uses the idea of multiple principals for theorizing about inter-municipal cooperation, shared services, public-private partnerships, and agencies (Da Cruz and Marques 2012; Garrone, Grilli, and Rousseau 2013; Sørensen 2007; Van Thiel and Verhof 2012). Some of these research clusters inter-cite in some studies, and particularly the theoretical economics stream seems well cited by the other streams, but primarily the different domains of research bring their own theory, leaving the literature somewhat unintegrated.

#### 3.4.2 Friction between principals, free riding and duplication in steering and monitoring

Our first hypothesis predicts that we should observe free riding and duplication in governance. The steering problem has received the most attention. Theoretical models by Bernheim and Whinston (1986), Dixit (2002), Martimort (1992), and Stole (1997) emphasize problems in building incentive schemes for agents when principals' objectives diverge and when coordination lacks. Literatures outside economics discuss the steering problem less in terms of incentives, but more in terms of directive ambiguity. The accountability literature emphasizes how multiplicity of principals can lead to confusion among management and employees, blame shifting and lack of real accountability (Schillemans & Bovens, 2015). Next, in the business and finance literature, Young et al.
(2002) emphasize the problem that goal incongruence can lead to conflict among multiple principals. This problem is also highlighted in the public administration literature by Estache and Martimort (1999) and Van Thiel (2016), who observe this as a problem for public sector management generally.

The literature also discusses the monitoring problem. In the economic literature, theoretical models emphasize the possibility of monitoring duplicity when principals do not coordinate (Khalil et al., 2007). Conversely, Gailmard (2009) emphasizes the possibility of free-riding in monitoring, leaving agents insufficiently checked by the principals. Empirical literature also discusses the possibility of duplicity or free-riding in monitoring procedures to explain their empirical findings, such as Young et al. (2002) in business and Sorensen (2007) in public administration. Some articles discuss problems in steering and monitoring together as ‘transaction costs’ (Estache & Martimort, 1999; Schillemans & Bovens, 2015; Van Thiel & Verhof, 2012).

3.4.3 Lobbying of the agent by principals

Our second hypothesis is that we should observe lobbying of the agent by principals. We find evidence for this primarily in economic modeling and in empirical work on the politics-bureaucracy interplay. First, economic models of Bernheim and Whinston (1986) and Dixit et al. (1997) show that principals face a collective action problem in how they get agents to pursue their ends: when there are multiple principals, individual principals have incentives to lobby agents to pursue their individual objectives. Since all principals face such incentives, lobbying begets a prisoners’ dilemma. The empirical existence of the lobbying of agents is found in the extensive literature on agencies (Hammond & Knott, 1996; Moe, 1984, 1987; Whitford, 2005; Wood & Waterman, 1991; Worsham & Gatrell, 2005), but is not addressed much elsewhere. Moe (2005) summarizes the political science literature on public service delivery under multiple principals in stating that when principals have heterogeneous preferences, information asymmetries between principals are created, and the multiprincipal nature of government can start to revolve more around individual principals’ power and less around cooperation.

3.4.4 Increased autonomy for agents

Our third hypothesis is that we should observe increased autonomy for agents. We find evidence for this again from economic modeling, the literature on the politics-bureaucracy division and to a lesser extent from public administration research. Models of Bernheim and Whinston (1986) and Dixit et al. (1998) emphasize that lobbying efforts by principals create autonomy for agents. Miller (2005) provides an overview of articles that focus on the politics-bureaucracy interplay and summarizes that the common finding in these articles is that inter-principal conflict can extend the freedom for agents to pursue autonomous goals. For instance, when Congress and the White House pressure agencies to pursue conflicting objectives, the agencies gain a lot of room to maneuver, benevolently or opportunistically, capable of cooperating with either principal on a case-by-case basis, able to play out both branches of government against each other. This autonomy of agencies is emphasized in the extensive literature on agencies with multiple principals (Hammond & Knott, 1996; Moe, 1984, 1987; Whitford, 2005; Wood & Waterman, 1991; Worsham & Gatrell, 2005). Garrone et al. (2013) find such autonomy also in their study of Italian multi-utilities, finding that multiplicity of owners often leads to substantial
managerial autonomy. We find no literature in business and finance comparing the autonomy of boards of directors under one principal with autonomy under multiple principals.

3.4.5 Inefficiencies under multiple principals
Given that we observe free riding and duplication in monitoring, lobbying by principals, and increased autonomy for agents, the framework predicts that we should observe inefficiencies under multiple principals (H4). We find evidence for this in both theoretical models and empirical studies. First, models of Bernheim and Whinston (1986) and Dixit et al. (1997) point out that lobbying increases agency costs and brings a larger wealth transfer from principals to agent than would occur under one principal. Models focusing on monitoring emphasize the welfare loss that comes from monitoring duplicity when multiple principals do not coordinate (Khalil et al., 2007), and increased agency costs that follow insufficient monitoring (Gailmard, 2009). Empirical studies also find inefficiencies. Garrone et al. (2013) emphasize the coordination costs of increased managerial autonomy. Sørensen (2007) confirms costs of collective action problems in monitoring in inter-municipal cooperation. Other empirical tests find inefficiency related to multiple principals, attributing them to governance problems (Da Cruz & Marques, 2012; Koppell, 2005; Lin & Chuang, 2011; Su, Xu, & Phan, 2007; Ward & Filatotchev, 2010). Multiple studies emphasize that transaction costs are higher under joint service delivery (Estache & Martimort, 1999; Schillemans & Bovens, 2015; Van Thiel & Verhof, 2012; Van Thiel, 2016; Young et al., 2002). While the literature on political transaction costs does not specify problems under multiple principals, it has emphasized accountability problems associated with autonomy (cf. Carr, LeRoux, & Shrestha, 2009; Overman, Van Genugten, & Van Thiel, 2015; Rodrigues, Tavares, & Araújo, 2012; Tavares & Camões, 2007; Warner & Hefetz, 2002).

3.4.6 Summary of findings
Notwithstanding the multiplicity of terms and limited synthesis of the different fields, findings in the literature fit the framework presented in section 3. Complexities in steering and monitoring are key drawbacks under multiple principals; without coordination between principals, we observe friction between principals and free riding and duplication in monitoring (H1), lobbying of agents by principals (H2), and increased autonomy for agents (H3), leading to inefficiencies (H4). However, coordination is not easy to achieve. Diverging objectives can bring a prisoner's dilemma, as principals have individual incentives to advance their own objectives in lieu of the joint objective. Inefficiency and a power transfer to the agent results, and accountability is diminished, particularly in public sector organizations built around cooperation of principals. We predict this problem exists in all types of joint service delivery organizations, including inter-municipal service organizations, parliaments and agencies, public-private partnerships, and private firms with dispersed ownership.

3.5 Institutional responses
The typical response to the multiple principal problem – if any – is to counter it with institutions (see e.g. Tavares and Feiock (2017) for a review of regional governance
options). Yet direct institutional solutions are rarely considered in the articles found in section 4 (Dixit (2002) and Waterman and Meier (1998) are welcome exceptions). In this section, we consider findings in the field of inter-municipal service delivery, link them to the principal-agent framework, and use the combination of literature and theory to propose a research agenda into institutional solutions to the multiple principal problem. We consider four typical institutions used for inter-municipal service delivery in practice (informal coordination, formalized coordination through contracts, delegation, and centralization) and their drawbacks from a perspective of solving the multiple principal problem.9

3.5.1 Informal coordination

One response to the multiple principal problem in joint service delivery is informal coordination, common at the local level in the United States (Feiock 2009). If governance tasks can be shared or divided among municipalities, the multiple principal problem may disappear. However, informal coordination does not prevent the prisoner's dilemma the economic literature forewarns. Individual principals continue to have incentives to defect from common agreements (Dixit, Grossman, and Helpman 1997). Consider our refuse collection example. Individual municipalities may lobby the director to pursue their objectives regardless of informal agreements. Next, individual municipalities may focus on auditing only objectives important to them; when they uncover problems, they have incentives not to share these with their partners. For instance, a recycling-concerned municipality is less likely to report higher costs of recycling policies, while municipal principals opposed to recycling are less likely to report positive outcomes. Similarly, for intermunicipal theaters, tourism-concerned municipalities are less likely to report high costs of international advertising, while municipalities concerned with cultural education are less likely to report high costs of that program. Table 3 illustrates the prisoner's dilemma that exists here.

---

9 Competition can also be an indirect solution to the problem of inefficiency under multiple principals (Dixit 2002). Over time, the presence of competition forces principals to maximize the efficiency of their management set-up, or else lose ground to more efficient competitors. Indeed, there are known cases where private sector organizations are introduced to compete with public sector organizations to allow such innovation to occur (Albalate, Bel, and Calzada 2012; Bognetti and Robotti 2007). However, most of the time, competition is notably absent in the public sector. In cases where there is \textit{ex-ante} competition (for instance through competitive tendering) there is evidence of \textit{ex-post} haggling and \textit{entrenchment} of such organizations once they have won the first bid (Dyer and Chu 2003; Marques and Berg 2011; Williamson 1985). Thus problematically for the public sector, outside competitive pressure is usually low.
Table 3: The prisoner's dilemma in informal coordination

<table>
<thead>
<tr>
<th>Principal A</th>
<th>Principal B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cooperates</td>
</tr>
<tr>
<td>Cooperates</td>
<td>Mutually beneficial outcome.</td>
</tr>
<tr>
<td>Defects</td>
<td>Costly for B. A gains over mutually beneficial outcome.</td>
</tr>
</tbody>
</table>

Thus, for short-run cooperation, principals have incentives to renege on informal agreements. When cooperation becomes lengthier, there are increasing incentives to cooperate and build trust between the parties. In the public sector, electoral cycles may stand in the way of such trust-building, and voluntary agreements become more difficult to safeguard when the number of parties involved gets larger. However, if those problems can be avoided, informal coordination may work.

3.5.2 Formal coordination

Formalizing coordination through contracts is a means to solve the prisoner's dilemma inherent to informal coordination, as contracts disincentivize defecting from joint agreements. For inter-municipal service organizations, if the municipalities jointly draft a contract for the director containing directives and incentives, it may inhibit all to lobby the director, safeguarding joint agreements. However, this solution has limitations too. When principals embed objectives in extensive contracts, this may inspire managerial performance only to the letter of the contract (Weber and Mayer 2011). Second, while lobbying may be limited to provisions in the contract, it continues to exist and may intensify for topics outside of the contract. Third, there are costs associated with drafting contracts and verifying adherence to them, which reduce efficiency; to account for changing circumstances, contracts might need to be perennially redrawn, and such continued investment leads to ex-post haggling (Dyer and Chu 2003; Williamson 1985)(Dyer & Chu, 2003; Whinston, 2003; Williamson, 1985), placing the agent in a continually stronger bargaining position (Marques and Berg 2011). Finally, individual principals, especially in the public sector, may fear that joint contracts undermine their autonomy, reducing their short-term control over the service. Formal coordination can help mitigate the multiple principal problem, but is no panacea.

3.5.3 Delegation to one principal

The third potential solution, delegation to one principal, is also limited. In this scenario, multiple principals essentially contract out the governance to one among them. An example of this is inter-municipal contracting, where one municipality (typically the largest) assumes responsibility for the service delivery (Bel & Warner, 2015). Both this scenario and the formal coordination scenario involve negotiations between principals about contract terms, but compared to formal coordination, power is transferred between principals, as the controlling party can now dictate terms not included in the contract. Moreover, the controlling party will have individual interests to monitor primarily the objectives it privately considers important. Even if contracts are salient, we know that in
such a scenario, the agent is likely to focus his attention on the monitored, rather than the directed task (Bevan & Hood, 2006), allowing the monitoring party to essentially steer the agent's objectives.

This so-called ‘benefit from control’ is well understood in the finance literature. Corporate governance scholars have found that for monitoring in private firms, the straightforward solution of appointing one of the shareholders is ill advised from a performance perspective (La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 2000; Kim, Kitsabunnarat-Chatjuthamard, & Nofsinger, 2007; Yeh & Woidtke, 2005). Monitoring by individual shareholders gives them greater access to information, encouraging them not to share important details about the firm with their colleague shareholders to gain an advantage in capital markets. Especially when a larger shareholder is appointed for monitoring, this can lead to entrenchment of their position on boards and exclude minority shareholders from effective corporate control, to the detriment of performance (Yeh & Woidtke, 2005).

3.5.4 Centralization

The last alternative to inter-municipal cooperation, one also frequently employed, is centralization. For our inter-municipal service organization, centralization would mean taking service delivery out of the hands of local authorities and making it a regional or national task. Centralization can be a solution for the multiple principal problem, reducing the service delivery to a single principal, but it is a limited solution. First, a problem of centralization is its involuntary nature (removing municipalities' ability to opt out). Second, there is no guarantee that the centralized service would be tailored to local preferences. Third, centralized organizations are easier to lobby, and losses can arise from acts seeking to influence the organization and its subsequent need to respond (Milgrom & Roberts, 1992, p. 58). For local service delivery, the literature has argued that for these reasons centralization may not be a desirable alternative (cf. Tavares & Feiock, 2017). Recent reviews of amalgamation outcomes by Tavares (2018) and Swianiewicz (2018) show that scale economies are only captured for a small subset of amalgamations. Thus, while centralization is a potential solution to the multiple principal problem, it is often an inefficient solution.

3.6 Research agenda: An electoral solution?

Previously we turned to evidence from finance to argue against delegation to a single principal. Indeed, it has become best practice in private firms to select outside directors or a variety of stakeholders (Hill & Jones, 1992), and not an individual shareholder with strong private incentives, for monitoring. We find, moreover, that shareholders’ meetings typically elect these outside directors or stakeholders.

Such elections to determine control over service delivery can be a solution to the multiple principal problem. If governance can be delegated to one party whose interest approximately represents the joint interest of the principals, the multiple principal problem is reduced. Since median voter theorem tells us that the outcomes of elections typically represent the interest of the median voter (cf. Downs, 1957), using such a procedure to select the governing party for joint service delivery is ceteris paribus most likely to represent the 'median' joint objective of the principals, while avoiding problems related to principal multiplicity. There are caveats: this does not work for dual principals, principals
may not always vote according to their interests, and Arrow’s Impossibility Theorem implies that it is difficult to devise electoral systems that perfectly aggregate social preferences under specific sets of preferences (Arrow, 1963). Moreover, minority principals need to be involved and protected in this process.

There is preliminary evidence also from the literature on inter-municipal cooperation that delegation of this kind works in practice. For inter-municipal joint service delivery, we find that there is a difference between countries in the success in dealing with the multiple principal problem. As Bel and Warner (2015) argue in their review of inter-municipal cooperation, inter-municipal cooperation seems to show better performance when its management is delegated to a single authority, as can happen in Spain, than when municipalities are directly on the board, as occurs in Italy (Garrone et al., 2013), the Netherlands (Voorn et al., 2018), and Norway (Sørensen, 2007; Torsteinsen & Van Genugten, 2016). While both models create an interface (middle tier) between principals (municipalities) and agent (service organization), the middle tier in the case of Italy, the Netherlands, and Norway still has multiple principals, while in the Spanish case the middle tier can be a single separate government (Bel, Fageda, & Mur, 2014; Bel & Warner, 2015), where elections may mitigate the possibility of lobbying. Consequently, the Spanish model solves collective action problems, whereas the Dutch, Italian, and Norwegian models do not (interestingly, in Italy, municipal unions have been developed that share characteristics of such separate governments [Ferraresi, Migali & Rizzo, forthcoming]). Figure 2 shows the difference between the two models.

**Figure 2: Research agenda**

Intermunicipal cooperation in Spain works through *comarcas* (counties) and *mancomunidades* (associations of municipalities). Within those institutions, elections take place to delegate the daily governance of service delivery to a single actor. In comarcas, members of the comarca elect a *consejo comarcal* (the comarca government) to be directly in charge of daily governance, and in mancomunidades, members elect not a government but a president. This kind of delegation to a single actor through a democratic process does
not occur in countries like the Netherlands and Norway, where such elections either do not occur or are not formalized (Torsteinsen & Van Genugten, 2016; Voorn et al., 2018). The unitary governance in the Spanish model solves collective action problems in steering and monitoring, and the good outcomes of the Spanish approach described by Bel and Warner (2015) lend provisional corroboration to the idea that the Spanish model mitigates the multiple principal problem intrinsic to inter-municipal cooperation better than other countries' models do. However, more research is necessary.

3.7 Discussion, conclusion, and recommendations

The multiple principal problem that organizations face when they must balance the (competing) interests of multiple stakeholders is severe and constitutes one of the primary obstacles to organizational effectiveness in joint service delivery. We continue to know little about how organizations approach the multiple principal problem in practice, or how they should in theory.

In this paper, we have extended a framework based on principal-agent theory to multiple principals to understand the issues that multiple principals can bring for joint service delivery in the public sector. Next, we found that a broad literature corroborated the principal-agent framework. We found support for four key hypotheses drawn from this framework: in joint service delivery, we often observe (i) free riding and duplication in monitoring, (ii) lobbying by principals, and (iii) increased autonomy for agents, (iv) leading to inefficiencies. We further found that coordination is difficult to achieve, as diverging objectives between principals bring a prisoner's dilemma, where principals have individual incentives to advance their own objectives instead of the common good. Altogether, the multiple principal problem can lead to large inefficiencies and powerful agents if not properly dealt with.

We also find that there has been little research describing and testing institutional solutions to the multiple principal problem. We combined our framework with literature on inter-municipal cooperation to tentatively suggest that an interface approach, in which principals delegate governance to an elected party whose objectives align most with the common good, could be a solution to the multiple principal problem under joint service delivery. Alternative coordination mechanisms, such as informal networks, formal contracts, centralization, and delegation to principals with individual interests might be less effective. We encourage further research to test different organizational models in practice, as we continue to lack empirical data describing and comparing different types of organization to deal with multiple principals.

While we have found substantial evidence of the existence of the multiple principal problem, not all organizations will suffer from principal-agent problems. We do not preclude the existence of stewardship and trust both between principals and between principals and agents in organizations, which help protect against the multiple principal problem. If we presume stewardship among the principals and agents, the multiple principal problem disappears.

Still, we have found substantial evidence of the existence and severity of the multiple principal problem, and we encourage future research into possible solutions to contribute to more effective joint service delivery in the public sector.
References


4.1 Introduction

The number of municipally owned corporations (MOCs) in the Netherlands is growing at a steady pace. Municipalities increasingly seem to opt for corporatization of service delivery, perhaps hoping that MOCs’ autonomy will bring performance improvements, service flexibility gains, or scale economies. Conversely, municipalities, by using MOCs, lose some control over service delivery, which may have some adverse effects.

Neither in the Netherlands, nor elsewhere, large-N research has been conducted into MOCs. Consequently, little is known about how municipalities govern MOCs, how monitoring takes place, and how the interaction between municipalities and MOCs works. Likewise, little is known about what factors contribute to MOCs’ performance. Our questionnaire “Municipally owned corporations in the Netherlands, 2018” is one instrument we use to address the need for more information among policymakers and municipal executives, professional managers and boards of MOCs, and the academic community.

For our questionnaire, supported by the Vereniging van Nederlandse Gemeenten, we addressed all 799 Dutch MOCs, and 177 organizations filled out our questionnaire entirely. The respondents’ responses offer us substantial insight in the functioning of MOCs.

We will answer many questions based on this information. This report, meant for respondents of our questionnaire, describes only a first step in our analysis. This report contains descriptive data and not causal relationships. In a later stage, we present more causal mechanisms underlying the behavior and performance of MOCs.\(^\text{11}\)

4.2 Process

4.2.1 Procedure

In February 2018, we sent a questionnaire to 799 Dutch MOCs. We submitted letters through postal mail, addressed to the boards of directors, which contained links to an online questionnaire developed using the software Qualtrics. We included a two-week deadline (from the sending time) and also added a request by the Vereniging voor Nederlandse Gemeenten (VNG) to fill in the questionnaire. In March 2018, we sent out a second letter, again containing the request of the VNG and a two-week deadline. After this deadline passed, we closed the questionnaire.

We found the MOCs included in this research through the paragraph ‘Verbonden partijen’ in the most recent annual reports of all Dutch municipalities. From November 2017 to January 2018, we systematically went through the annual reports of all Dutch municipalities, making a database containing all MOCs.

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\(^{10}\) This chapter has been published in Dutch as Voorn, Van Genugten, and Van Thiel (2018). It was targeted at practitioners, and for that reason uses less referencing.

\(^{11}\) A selection of these causal mechanisms are included in Chapters 5 through 8 in this dissertation.
Of the 799 questionnaires that were delivered, 243 were started (30.4% of the questionnaires). Of the 243 delivered, 61 were incomplete, and 5 other respondents were upon further reflection excluded from our research. After this selection process, 177 fully completed questionnaires remained and were used for our research (73.7% of the completely filled out questionnaires).

4.2.2 Respondent characteristics
Beyond questions about the MOCs, we also asked some questions about the respondents. This gave us insight into the knowledge each respondent had about the organization.

We primarily requested surveys to be filled out by the director (professional manager) of MOCs. However, for sample size reasons, we addressed the letter linking to the questionnaires more broadly to the boards of directors. Table 1 shows who filled out our survey. In 65.5% of cases, the questionnaire was filled out by the director(-secretary). In 11.9% of the cases, the secretary of the board filled out the survey, and in 22.6% of cases, others did.

Table 1: Respondent job descriptions

<table>
<thead>
<tr>
<th>Respondent job</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director</td>
<td>107</td>
<td>60.5</td>
</tr>
<tr>
<td>Secretary of the board</td>
<td>21</td>
<td>11.9</td>
</tr>
<tr>
<td>Director-secretary</td>
<td>9</td>
<td>5.0</td>
</tr>
<tr>
<td>Other</td>
<td>40</td>
<td>22.6</td>
</tr>
<tr>
<td>Total</td>
<td>177</td>
<td>100</td>
</tr>
</tbody>
</table>

On average, respondents had worked for their organization for 8.4 years. This varied between 0 and 35 years.

4.3 Characteristics of the municipally owned corporations
We asked multiple questions about the characteristics of MOCs, including about corporate status, age, service sector, size in terms of budget and personnel, number of municipal shareholders, number and composition of other shareholders, and sources of income.

4.3.1 Corporate status
One of the primary characteristics we determined was corporate status. When designing the questionnaire, one of the difficulties we faced was that organizations differ quite strongly when it comes to their internal structures. For instance, the term ‘shareholder’ is appropriate when addressing private-law enterprises (in the Dutch system, B.V.s, N.V.s, and C.V.s), but other terms were more appropriate for foundations (stichtingen), associations (verenigingen), and public law organizations (Wgr-organisaties). To simplify filling out the questionnaire for the respondents, we made the questionnaire’s terminology conditional on the corporate status of the respondent. This approach was effective for

12 Other terms that changed to specific terminologies based on corporate status based on the respondents’ answer to this question were ‘board of directors’, ‘board members’, ‘director’, and ‘supervisory board’.
the majority of respondents, but in some cases, respondents answered the question wrongly, and later noted that they found the terminology not entirely appropriate.

We compared these descriptive statistics of corporate status of respondents with our own data on the entire population of MOCs (N = 799). Table 2 compares the distribution of MOCs in terms of corporate status among our respondents and in the entire population of Dutch MOCs. Our sample is relatively representative of our population, although public-law organizations participated at a higher rate to our survey than MOCs with other corporate statuses.

Table 2 also shows that most MOCs are based in public law, although enterprises and foundations are common alternatives. Associations are used substantially less.

<table>
<thead>
<tr>
<th>Corporate status</th>
<th>N (Population)</th>
<th>% (Population)</th>
<th>N (Respondents)</th>
<th>% (Respondents)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public-law organization</td>
<td>309</td>
<td>38.7</td>
<td>80</td>
<td>45.2</td>
</tr>
<tr>
<td>Enterprise</td>
<td>279</td>
<td>34.9</td>
<td>58</td>
<td>32.8</td>
</tr>
<tr>
<td>Foundation</td>
<td>189</td>
<td>23.7</td>
<td>38</td>
<td>21.5</td>
</tr>
<tr>
<td>Association</td>
<td>22</td>
<td>2.8</td>
<td>1</td>
<td>0.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>799</strong></td>
<td><strong>100</strong></td>
<td><strong>177</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

4.3.2 Service sector

Another relevant descriptive statistic is the service sector in which MOCs operate. We asked MOCs to describe their sector in a few words and then categorized these answers ourselves. Table 3 shows the service sector categorizations of MOCs.

We further specify the MOCs here to their corporate status and observe a relationship between service sector and corporate status. For MOCs operating in services such as general and financial services, environmental services, social affairs, and security and health, public-law organizations are the dominant organizational form. This shows that public-law organizations are most often used for tasks that are mandated by the national government. Enterprises are mostly used for MOCs with economic and development tasks, sports and well-being, and infrastructure and refuse collection tasks, most of which are services that require substantial investments. Foundations are used

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13 Recoding service sectors for local public service delivery can be done in multiple ways, but one way is to recode using categorizations of ministries at the national level. The reason is that municipalities differ too much among each other in how they categorize service delivery to depend on municipal categorizations. Most municipally owned corporations are easily categorized in one of the sectors, although there are some debatable cases, such as companies for outside recreation, that could count as environmental corporations or sports and well-being corporations (we count them as the latter). We used the descriptions we got from the respondents to determine sector categorization.
particularly in the education and culture services: 54.6% of the MOCs in this service sector are foundations. In other service sectors, foundations are used substantially less.

Table 3: Municipally owned corporations organized by corporate status and service sector

<table>
<thead>
<tr>
<th>Sector</th>
<th>Public-law organization</th>
<th>Enterprise</th>
<th>Foundation</th>
<th>Association</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>General &amp; Finance</td>
<td>7 (63.6%)</td>
<td>1 (9.1%)</td>
<td>2 (18.2%)</td>
<td>1 (9.1%)</td>
<td>11</td>
</tr>
<tr>
<td>Economy &amp; Development</td>
<td>2 (7.4%)</td>
<td>22 (77.8%)</td>
<td>3 (11.1%)</td>
<td>0 (0.0%)</td>
<td>27</td>
</tr>
<tr>
<td>Infrastructure &amp; Refuse Collection</td>
<td>7 (28.0%)</td>
<td>14 (56.0%)</td>
<td>4 (16.0%)</td>
<td>0 (0.0%)</td>
<td>25</td>
</tr>
<tr>
<td>Nature &amp; Agriculture</td>
<td>17 (70.8%)</td>
<td>2 (8.3%)</td>
<td>5 (20.8%)</td>
<td>0 (0.0%)</td>
<td>24</td>
</tr>
<tr>
<td>Education &amp; Culture</td>
<td>8 (40.0%)</td>
<td>0 (0.0%)</td>
<td>12 (60.0%)</td>
<td>0 (0.0%)</td>
<td>20</td>
</tr>
<tr>
<td>Social Affairs &amp; Employment</td>
<td>24 (68.6%)</td>
<td>5 (14.3%)</td>
<td>6 (17.1%)</td>
<td>0 (0.0%)</td>
<td>35</td>
</tr>
<tr>
<td>Sports &amp; Well-Being</td>
<td>2 (11.8%)</td>
<td>14 (82.4%)</td>
<td>1 (5.9%)</td>
<td>0 (0.0%)</td>
<td>17</td>
</tr>
<tr>
<td>Security &amp; Health</td>
<td>13 (72.2%)</td>
<td>0 (0.0%)</td>
<td>5 (27.8%)</td>
<td>0 (0.0%)</td>
<td>18</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>80</strong></td>
<td><strong>58</strong></td>
<td><strong>38</strong></td>
<td><strong>1</strong></td>
<td><strong>177</strong></td>
</tr>
</tbody>
</table>

4.3.3 Ownership

One of the most interesting descriptive statistics is how many MOCs are used to cooperate with other municipalities (see Table 4). In 72.1% of cases, MOCs are inter-municipally owned. Enterprises and foundations are used in equal proportions for inter-municipal cooperation, while public-sector organizations are used exclusively for inter-municipal cooperation, as Dutch legislation does not allow for single-owned public-law MOCs (see Table 5).

Table 4: Municipal ownership of municipally owned corporations

<table>
<thead>
<tr>
<th>Number of municipalities</th>
<th>N</th>
<th>%</th>
<th>% (Cumulative)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>51</td>
<td>28.8</td>
<td>28.8</td>
</tr>
<tr>
<td>2</td>
<td>11</td>
<td>6.2</td>
<td>35.0</td>
</tr>
<tr>
<td>3</td>
<td>19</td>
<td>10.7</td>
<td>45.8</td>
</tr>
<tr>
<td>4-5</td>
<td>22</td>
<td>12.4</td>
<td>58.2</td>
</tr>
<tr>
<td>6-10</td>
<td>26</td>
<td>14.7</td>
<td>72.9</td>
</tr>
<tr>
<td>11-20</td>
<td>35</td>
<td>19.8</td>
<td>92.7</td>
</tr>
<tr>
<td>21&gt;</td>
<td>13</td>
<td>7.3</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>177</strong></td>
<td><strong>100</strong></td>
<td></td>
</tr>
</tbody>
</table>
Table 5: Municipal shareholders, specified to corporate status

<table>
<thead>
<tr>
<th>Number of municipalities</th>
<th>Public-law organization (% cumulative)</th>
<th>Enterprise (% cumulative)</th>
<th>Foundation (% cumulative)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0 (0.0%)</td>
<td>34 (59.2%)</td>
<td>17 (44.7%)</td>
</tr>
<tr>
<td>2</td>
<td>2 (2.5%)</td>
<td>6 (69.0%)</td>
<td>3 (52.6%)</td>
</tr>
<tr>
<td>3</td>
<td>11 (16.3%)</td>
<td>5 (77.6%)</td>
<td>3 (60.5%)</td>
</tr>
<tr>
<td>4-5</td>
<td>13 (32.5%)</td>
<td>4 (84.5%)</td>
<td>5 (73.7%)</td>
</tr>
<tr>
<td>6-10</td>
<td>22 (60%)</td>
<td>2 (87.9%)</td>
<td>2 (78.9%)</td>
</tr>
<tr>
<td>11-20</td>
<td>24 (90%)</td>
<td>3 (93.1%)</td>
<td>7 (97.4%)</td>
</tr>
<tr>
<td>21&gt;</td>
<td>8 (100%)</td>
<td>4 (100%)</td>
<td>1 (100%)</td>
</tr>
<tr>
<td>Total</td>
<td>80</td>
<td>58</td>
<td>38</td>
</tr>
</tbody>
</table>

We also asked for the shareholder status of MOCs by other government organizations and by private parties. In 23% of cases, other government organizations are shareholders. Out of those, 57.1% of the time, it is provinces, and in 21.4%, it is water district boards. 13.1% of the respondents reported that a private party was involved as a shareholder in the organization. Internationally, this is infrequent, but the Netherlands is often sketched as a country where public-private partnerships are rare, and the findings of this questionnaire challenge this. Most public-private partnerships appeared in the sectors ‘Infrastructure & Refuse collection’ and ‘Economics & Development’, and in many cases, they involved development projects for housing or business parks.

4.3.4 Organization age and continuity

The average MOC is relatively recently founded, with an average founding year of 2001, although there is a large spread. The oldest MOC was founded in 1936 and the youngest in 2018. The relatively large number of recently founded MOCs could indicate two things. First, it could show the rise of the MOC as an organizational model. We know that this organization form has become more popular in recent years, not only in the Netherlands, but also worldwide. Second, it could illustrate that MOCs have relatively low continuity. Both possibilities fall within the pattern of expectations of earlier scientific findings, but require more research.

4.3.5 Organization size

Much can be said about the size of MOCs. Among MOCs, there are both those with budgets of under a million euros and less than ten employees, and those with thousands of employees and a nearly billion euros in budget. Table 6 divides MOCs into three similarly sized groups according to their budgets and personnel numbers.

Next, Table 7 and Table 8 split the organizations up by corporate status. What is noticeable is that public-law organizations are on average substantially larger than enterprises and foundations, both in terms of budget and number of employees. Furthermore, foundations and public-law organizations tend to have more employees in proportion to their budget compared to enterprises, which on average have a larger budget and fewer employees.
### Table 6: The size of municipally owned corporations

<table>
<thead>
<tr>
<th>Budget size</th>
<th>N (%)</th>
<th>Number of employees</th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small (&lt;4mln)</td>
<td>60 (33.9%)</td>
<td>Small (&lt;16)</td>
<td>59 (33.3%)</td>
</tr>
<tr>
<td>Medium (4mln-17mln)</td>
<td>58 (32.7%)</td>
<td>Medium (17-125)</td>
<td>59 (33.3%)</td>
</tr>
<tr>
<td>Large (17mln&gt;)</td>
<td>59 (33.3%)</td>
<td>Large (126&gt;)</td>
<td>59 (33.3%)</td>
</tr>
<tr>
<td>Total</td>
<td>177 (100%)</td>
<td>Total</td>
<td>177 (100%)</td>
</tr>
</tbody>
</table>

### Table 7: Budget size, split by corporate status

<table>
<thead>
<tr>
<th>Budget size</th>
<th>Public-law organization</th>
<th>Enterprise</th>
<th>Foundation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small (&lt;4mln)</td>
<td>17 (28.8%)</td>
<td>22 (37.9%)</td>
<td>20 (52.6%)</td>
</tr>
<tr>
<td>Medium (4mln-17mln)</td>
<td>25 (41.3%)</td>
<td>23 (39.7%)</td>
<td>11 (28.9%)</td>
</tr>
<tr>
<td>Large (17mln&gt;)</td>
<td>38 (47.5%)</td>
<td>13 (22.4%)</td>
<td>7 (18.4%)</td>
</tr>
<tr>
<td>Total</td>
<td>80 (100%)</td>
<td>58 (100%)</td>
<td>38 (100%)</td>
</tr>
</tbody>
</table>

### Table 8: Number of employees, split by corporate status

<table>
<thead>
<tr>
<th>Number of employees</th>
<th>Public-law organization</th>
<th>Enterprise</th>
<th>Foundation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small (&lt;16)</td>
<td>15 (18.8%)</td>
<td>26 (44.8%)</td>
<td>17 (44.7%)</td>
</tr>
<tr>
<td>Medium (17-125)</td>
<td>24 (30%)</td>
<td>23 (39.7%)</td>
<td>12 (31.6%)</td>
</tr>
<tr>
<td>Large (126&gt;)</td>
<td>41 (51.3%)</td>
<td>9 (16.6%)</td>
<td>9 (23.7%)</td>
</tr>
<tr>
<td>Total</td>
<td>80 (100%)</td>
<td>58 (100%)</td>
<td>38 (100%)</td>
</tr>
</tbody>
</table>

### 4.4 Autonomy

Autonomy is one of the central topics in the questionnaire. Autonomy is an important characteristic of MOCs, and is often a key reason why MOCs are founded. However, MOCs can differ greatly with respect to the autonomy they have in practice.

#### 4.4.1 Personnel autonomy

One potential advantage of MOCs is the larger autonomy they can have in HRM matters. Table 9 shows the autonomy that MOCs have in this regard. The table demonstrates that MOCs have a high degree of control over their HRM policies. In particular, MOCs have much control over temporary personnel policy (including ability to freely hire temporary and external personnel) and often have control over longer-term policy as well (involving decisions such as hiring new personnel, determining wages and deciding about lay-offs or promotions). Many organizations also have control over labor agreements and pension arrangements, although MOCs’ control over these is substantially less. Private-law organizations – both enterprises and foundations – have substantially more personnel autonomy than public-law organizations.
Table 9: The autonomy of municipally owned corporations in HRM matters

<table>
<thead>
<tr>
<th>Task</th>
<th>Yes</th>
<th>With consent</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hiring external personnel</td>
<td>171 (96.6%)</td>
<td>4 (2.3%)</td>
<td>2 (1.1%)</td>
</tr>
<tr>
<td>Hiring temporary personnel</td>
<td>167 (94.4%)</td>
<td>7 (4.0%)</td>
<td>3 (1.7%)</td>
</tr>
<tr>
<td>Hiring new personnel</td>
<td>155 (87.6%)</td>
<td>14 (7.9%)</td>
<td>8 (4.5%)</td>
</tr>
<tr>
<td>Conditions for promoting personnel</td>
<td>153 (86.4%)</td>
<td>11 (6.2%)</td>
<td>13 (7.3%)</td>
</tr>
<tr>
<td>Hiring procedures for personnel</td>
<td>148 (83.6%)</td>
<td>16 (9.0%)</td>
<td>13 (7.3%)</td>
</tr>
<tr>
<td>Firing employees</td>
<td>146 (82.5%)</td>
<td>17 (9.6%)</td>
<td>14 (7.9%)</td>
</tr>
<tr>
<td>Determining wages for employees</td>
<td>144 (81.4%)</td>
<td>19 (10.7%)</td>
<td>14 (7.9%)</td>
</tr>
<tr>
<td>Content / Execution shared labor agreements</td>
<td>106 (59.9%)</td>
<td>30 (16.9%)</td>
<td>41 (23.2%)</td>
</tr>
<tr>
<td>Pension arrangements</td>
<td>96 (54.2%)</td>
<td>32 (18.1%)</td>
<td>49 (27.7%)</td>
</tr>
</tbody>
</table>

4.4.2 Financial autonomy

Another often-named advantage that MOCs have is their autonomy in financial affairs. We tested the presence of this autonomy by asking exactly what MOCs are allowed to do. Our questionnaire’s findings are presented in Table 10.

MOCs often have much autonomy in decisions about purchasing material and ICT, as well as in setting tariffs and in shifting funds between budgets for personnel and material. Conversely, MOCs have substantially less freedom in taking loans and in shifting budgets between years, and the freedom to invest and to participate in other companies is only granted to a small group of municipally owned corporations. There appears to be no meaningful difference between corporate statuses in the financial autonomy of MOCs.

Table 10: The autonomy of municipally owned corporations in financial affairs

<table>
<thead>
<tr>
<th>Task</th>
<th>Yes</th>
<th>With consent</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchasing material</td>
<td>165 (93.2%)</td>
<td>8 (4.5%)</td>
<td>4 (2.3%)</td>
</tr>
<tr>
<td>Purchasing ICT</td>
<td>161 (91.0%)</td>
<td>10 (5.6%)</td>
<td>6 (3.4%)</td>
</tr>
<tr>
<td>Shifting funds between budgets</td>
<td>120 (67.8%)</td>
<td>40 (22.6%)</td>
<td>17 (9.6%)</td>
</tr>
<tr>
<td>Setting tariffs</td>
<td>116 (65.5%)</td>
<td>49 (27.7%)</td>
<td>12 (6.8%)</td>
</tr>
<tr>
<td>Shifting funds between years</td>
<td>76 (42.9%)</td>
<td>76 (42.9%)</td>
<td>25 (14.1%)</td>
</tr>
<tr>
<td>Taking loans</td>
<td>70 (39.5%)</td>
<td>90 (50.8%)</td>
<td>17 (9.6%)</td>
</tr>
<tr>
<td>Making investments</td>
<td>47 (26.6%)</td>
<td>103 (58.2%)</td>
<td>27 (15.3%)</td>
</tr>
<tr>
<td>Participating in other companies</td>
<td>38 (21.5%)</td>
<td>106 (59.9%)</td>
<td>33 (18.6%)</td>
</tr>
</tbody>
</table>

4.4.3 Autonomy in sources of income

A last form of autonomy we asked about was autonomy in sources of income. Not all MOCs are solely dependent on municipal budgets. When MOCs have multiple sources of income, this can lead to greater autonomy.
Table 11 shows the sources of income for MOCs. MOCs are frequently dependent on municipal funding (accounting for on average 47.9% of their budgets), but also receive funding through tariffs to users (15.9%) or municipalities (9.5%). Sometimes, MOCs receive funding from other actors (7.2%) or receive different income (including subsidies, 19.5%).

There are large differences between different types of MOCs in terms of corporate status regarding their sources of income. Public-law organizations are most dependent on municipal budgets, and foundations are similarly quite dependent on this source of income. Enterprises are clearly less dependent, and obtain more funding from tariffs and other sources.

### Table 11: Sources of income for municipally owned corporations

<table>
<thead>
<tr>
<th>Source of income</th>
<th>Unweighted average</th>
<th>Public-law organization</th>
<th>Enterprise</th>
<th>Foundation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget municipalities</td>
<td>47.9%</td>
<td>62.7%</td>
<td>27.1%</td>
<td>50.4%</td>
</tr>
<tr>
<td>Tariffs for users</td>
<td>15.9%</td>
<td>4.7%</td>
<td>30.2%</td>
<td>13.4%</td>
</tr>
<tr>
<td>Tariffs for municipalities</td>
<td>9.5%</td>
<td>12.5%</td>
<td>6.9%</td>
<td>8.6%</td>
</tr>
<tr>
<td>Budget (other public sector)</td>
<td>5.9%</td>
<td>8.9%</td>
<td>2.1%</td>
<td>5.6%</td>
</tr>
<tr>
<td>Budget (private parties)</td>
<td>1.3%</td>
<td>1.7%</td>
<td>1.5%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Other</td>
<td>19.5%</td>
<td>11.9%</td>
<td>32.2%</td>
<td>21.5%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

4.5 Trust and shareholder relations

4.5.1 Trust (general)

We asked multiple questions about trust between municipalities and MOCs. Trust in general is perceived as important in such relationships. Table 12 shows the findings from our questionnaire.

Overall, trust is high. Further research should be conducted into the cases where trust is low.

### Table 12: Trust between municipalities and MOC (1=completely disagree, 5=completely agree, in %)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our organization shares all information with municipalities</td>
<td>1.6</td>
<td>15.8</td>
<td>8.7</td>
<td>37.7</td>
<td>36.1</td>
</tr>
<tr>
<td>Our organization is prepared to be flexible to satisfy municipalities</td>
<td>0.0</td>
<td>1.6</td>
<td>10.9</td>
<td>47.5</td>
<td>39.9</td>
</tr>
<tr>
<td>The interaction between us and municipalities clearly shows trust</td>
<td>1.1</td>
<td>9.8</td>
<td>16.4</td>
<td>40.4</td>
<td>32.2</td>
</tr>
</tbody>
</table>
Table 12: Trust between municipalities and MOC (1=completely disagree, 5=completely agree, in %) (cont.)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust between our organization and the municipalities is high</td>
<td>1.6</td>
<td>12.0</td>
<td>16.9</td>
<td>39.9</td>
<td>29.5</td>
</tr>
<tr>
<td>Our organization identifies with the goals of municipalities</td>
<td>0.0</td>
<td>6.0</td>
<td>16.4</td>
<td>42.6</td>
<td>35.0</td>
</tr>
<tr>
<td>Our organization has sufficient resources to execute tasks</td>
<td>1.6</td>
<td>8.2</td>
<td>8.2</td>
<td>37.7</td>
<td>44.3</td>
</tr>
</tbody>
</table>

4.5.2 Consequences of multiple shareholders and stakeholders

The largest steering and trust problems appear to arise in organizations that are governed by multiple municipalities (see Table 13). This is not surprising and fits with the theory on this topic. On the one hand, such organizations must navigate between the sometimes-conflicting wishes of different shareholders and stakeholders. On the other hand, municipalities have to deal with having lesser control over such organizations. The findings of our questionnaire demonstrate that this is not always without problems.

Surprisingly, large municipalities are seen as less dominant for the common municipal strategy than predicted. It seems likely that larger municipalities could exercise greater control over MOCs than smaller municipalities, both because of greater governance capacity and because of the larger amount of citizens that MOCs are responsible for, but this appears not to be the case for most MOCs. However, a small group of MOCs (21.1%) still emphasize this as a problem.

Upon further reflection, it appears that the degree to which the largest municipality is responsible for the shared municipal governance strategy on MOCs correlates strongly with corporate status. In public-law organizations, the largest municipalities appear to have a less decisive role in governance than in private-law organizations such as enterprises and foundations. This likely is a consequence of the legislation enshrined in Dutch public law.

Table 13: The consequences of multiple ownership (1=completely disagree, 5=completely agree, in %)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is more important to be accountable to citizens than to municipalities</td>
<td>13.3</td>
<td>33.3</td>
<td>25.7</td>
<td>14.8</td>
<td>13.1</td>
</tr>
<tr>
<td>The different municipalities express a shared vision</td>
<td>0.0</td>
<td>29.0</td>
<td>23.4</td>
<td><strong>32.3</strong></td>
<td><strong>11.3</strong></td>
</tr>
<tr>
<td>The different municipalities differ starkly in how our organization is governed</td>
<td>12.8</td>
<td>29.6</td>
<td>24.8</td>
<td>25.6</td>
<td>7.2</td>
</tr>
<tr>
<td>The largest municipality determines the governance of our organization</td>
<td><strong>18.8</strong></td>
<td><strong>44.5</strong></td>
<td>15.6</td>
<td>21.1</td>
<td>0.0</td>
</tr>
</tbody>
</table>
4.6 Governance and performance management

4.6.1 Reporting
An important way for municipalities to gain insight into the performance of MOCs is through reporting. MOCs appear to report extensively to municipalities. Table 14 illustrates that the majority of municipally owned corporations report between 3 and 6 times per year to municipalities. Almost three-quarters of MOCs report more often than once a year to municipalities.

Table 14: Reporting frequencies of MOCs, split by corporate status

<table>
<thead>
<tr>
<th>Regularity</th>
<th>Total</th>
<th>Public-law organization</th>
<th>Enterprise</th>
<th>Foundation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual</td>
<td>47 (26.6%)</td>
<td>10 (12.5%)</td>
<td>23 (39.7%)</td>
<td>14 (36.8%)</td>
</tr>
<tr>
<td>Semi-annual</td>
<td>26 (14.7%)</td>
<td>8 (10.0%)</td>
<td>11 (19.0%)</td>
<td>7 (18.4%)</td>
</tr>
<tr>
<td>Every 2 to 4 months</td>
<td>92 (52.0%)</td>
<td>56 (70.0%)</td>
<td>20 (34.5%)</td>
<td>15 (39.4%)</td>
</tr>
<tr>
<td>At least monthly</td>
<td>12 (6.8%)</td>
<td>6 (7.5%)</td>
<td>4 (6.9%)</td>
<td>2 (5.3%)</td>
</tr>
<tr>
<td>N</td>
<td>177 (100%)</td>
<td>80 (100%)</td>
<td>58 (100%)</td>
<td>38 (100%)</td>
</tr>
</tbody>
</table>

There appear to be noticeable differences between MOCs of different corporate statuses with regards to their frequency of reporting. Public-law organizations report more to municipalities than private-law MOCs.

4.6.2 Performance indicators
Many variables can be reported by MOCs to their municipalities, but one of the most commonly reported items is to what extent they are meeting their performance targets. Table 15 shows that MOCs frequently utilize performance indicators. 71.8% of MOCs use performance indicators related to financial results, 61.6% use performance indicators tied to quality of service delivery, and 41.2% use indicators related to other societal effects. These societal effect indicators are often sector-dependent: for example, environmental organizations often use performance indicators about environmental quality and employment organizations often report labor participation rates. Only 9 percent of MOCs point out that they do not use performance indicators. There appear to be no clear differences between MOCs of different types of corporate status in the frequency and type of performance indicators used.

Table 15: Types of performance indicators

<table>
<thead>
<tr>
<th>Type indicators</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial results</td>
<td>127 (71.8%)</td>
</tr>
<tr>
<td>Service quality</td>
<td>109 (61.6%)</td>
</tr>
<tr>
<td>Other societal effects</td>
<td>73 (41.2%)</td>
</tr>
<tr>
<td>None</td>
<td>16 (9.0%)</td>
</tr>
</tbody>
</table>

In addition to reporting on their performance frequently, MOCs appear to have much say in how performance-indicators are set (see Table 16). MOCs are rarely not involved in this process. Often, performance indicators are formulated jointly; in the majority of cases, municipally owned corporations play a greater role than the shareholding municipalities.
Comparatively, enterprises and foundations (and primarily the latter) have more control over setting performance indicators than public-law organizations do.

**Table 16: Who formulates performance indicators?**

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Public-law organization</th>
<th>Enterprise</th>
<th>Foundation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Municipalities</td>
<td>1 (0.6%)</td>
<td>0 (0%)</td>
<td>1 (1.8%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Municipalities, after consulting us</td>
<td>8 (4.5%)</td>
<td>2 (2.5%)</td>
<td>4 (7.1%)</td>
<td>2 (5.6%)</td>
</tr>
<tr>
<td>We formulate them together</td>
<td>72 (40.7%)</td>
<td>46 (58.2%)</td>
<td>16 (28.6%)</td>
<td>10 (27.8%)</td>
</tr>
<tr>
<td>We do, after consulting municipalities</td>
<td>57 (33.1%)</td>
<td>24 (30.4%)</td>
<td>21 (37.5%)</td>
<td>11 (30.6%)</td>
</tr>
<tr>
<td>We do</td>
<td>34 (19.8%)</td>
<td>7 (8.9%)</td>
<td>14 (25.0%)</td>
<td>13 (36.1%)</td>
</tr>
<tr>
<td>Total</td>
<td>172 (100%)</td>
<td>79 (100%)</td>
<td>56 (100%)</td>
<td>36 (100%)</td>
</tr>
</tbody>
</table>

Performance indicators are retrievable in various documents (see Table 17). Often, performance indicators that are not measurable are included in founding documents or statutes (45.2% of the time), although occasionally it happens that no performance indicators are included there (28.2%). Sometimes, performance indicators are even made explicitly measurable in such documents. More measurable performance indicators are regularly included in policy documents, (quasi-) contractual agreements between municipalities and municipally owned corporations, or in subsidy documents.

**Table 17: Location performance indicators**

<table>
<thead>
<tr>
<th></th>
<th>Yes, measurable</th>
<th>Yes, hard to measure</th>
<th>Yes, not measurable</th>
<th>Not</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy documents / Long-term plans</td>
<td>89 (50.3%)</td>
<td>38 (21.5%)</td>
<td>0 (0%)</td>
<td>35 (19.8%)</td>
</tr>
<tr>
<td>Subsidy letters</td>
<td>83 (46.9%)</td>
<td>27 (15.3%)</td>
<td>24 (13.6%)</td>
<td>43 (24.3%)</td>
</tr>
<tr>
<td>Founding documents / Statutes</td>
<td>22 (12.4%)</td>
<td>25 (14.1%)</td>
<td>80 (45.2%)</td>
<td>50 (28.2%)</td>
</tr>
<tr>
<td>(Quasi-) contractual agreements</td>
<td>70 (39.5%)</td>
<td>29 (16.4%)</td>
<td>12 (6.8%)</td>
<td>66 (37.3%)</td>
</tr>
<tr>
<td>Internal documents</td>
<td>38 (21.5%)</td>
<td>10 (5.6%)</td>
<td>6 (3.4%)</td>
<td>123 (69.5%)</td>
</tr>
<tr>
<td>Other</td>
<td>16 (9.0%)</td>
<td>4 (2.3%)</td>
<td>0 (0%)</td>
<td>157 (88.7%)</td>
</tr>
</tbody>
</table>

Interestingly, many MOCs do not believe that how they perform regarding performance indicators actually has consequences (Table 18). A large majority of the MOCs (92.7%) expect no benefits if they perform well. A smaller majority, but still three-quarters of the municipally owned corporations, also do not expect sanctions if they perform poorly.
### Table 18: What are consequences on performance indicators?

<table>
<thead>
<tr>
<th></th>
<th>Nothing</th>
<th>Wages</th>
<th>Funds</th>
<th>Autonomy</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rewards</td>
<td>164 (92.7%)</td>
<td>9 (5.1%)</td>
<td>2 (1.1%)</td>
<td>0 (0%)</td>
<td>2 (1.1%)</td>
</tr>
<tr>
<td>Sanctions</td>
<td>136 (76.8%)</td>
<td>2 (1.1%)</td>
<td>13 (7.3%)</td>
<td>14 (7.9%)</td>
<td>16 (9%)</td>
</tr>
</tbody>
</table>

#### 4.6.3 Communication with the local civil service

We also asked about the frequency of communication between MOCs and the local civil service (*Table 19* on the next page). This communication appears to be frequent. Most MOCs (67.7%) communicate with municipal civil servants on a weekly basis; the large majority (89.2%) has contact at least on a monthly basis. Divided by corporate status, we found that public-law organizations have most communication with local civil servants, and half of these organizations have this kind of contact even on a daily basis.

### Table 19: Frequency communication with the local civil service, by corporate status

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Total</th>
<th>Public-law organization</th>
<th>Enterprise</th>
<th>Foundation</th>
</tr>
</thead>
<tbody>
<tr>
<td>At least daily</td>
<td>70 (39.5%)</td>
<td>40 (50.0%)</td>
<td>19 (32.8%)</td>
<td>10 (26.3%)</td>
</tr>
<tr>
<td>At least weekly</td>
<td>50 (28.2%)</td>
<td>19 (23.8%)</td>
<td>19 (32.8%)</td>
<td>12 (31.6%)</td>
</tr>
<tr>
<td>At least monthly</td>
<td>38 (21.5%)</td>
<td>16 (20.0%)</td>
<td>12 (20.7%)</td>
<td>10 (26.3%)</td>
</tr>
<tr>
<td>3 to 6 times per year</td>
<td>12 (6.8%)</td>
<td>3 (3.8%)</td>
<td>5 (8.6%)</td>
<td>4 (10.5%)</td>
</tr>
<tr>
<td>Semi-annually</td>
<td>6 (3.4%)</td>
<td>2 (2.5%)</td>
<td>2 (3.4%)</td>
<td>2 (5.3%)</td>
</tr>
<tr>
<td>Annually or less</td>
<td>1 (0.6%)</td>
<td>0 (0.0%)</td>
<td>1 (1.7%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>177 (100%)</td>
<td>80 (100%)</td>
<td>58 (100%)</td>
<td>38 (100%)</td>
</tr>
</tbody>
</table>

*Table 20* demonstrates the nature of this communication with the local civil service. This communication is often about operational affairs. Evaluative and strategic affairs are also discussed with some regularity.

### Table 20: What is discussed during communication with the local civil service?

<table>
<thead>
<tr>
<th>Level</th>
<th>Rarely or never</th>
<th>Sometimes</th>
<th>Often</th>
<th>(Nearly) Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic affairs</td>
<td>20 (11.3%)</td>
<td>86 (48.6%)</td>
<td>46 (26.0%)</td>
<td>25 (14.1%)</td>
</tr>
<tr>
<td>Operational affairs</td>
<td>23 (13.0%)</td>
<td>26 (14.6%)</td>
<td>73 (41.2%)</td>
<td>55 (31.1%)</td>
</tr>
<tr>
<td>Evaluative affairs</td>
<td>13 (7.3%)</td>
<td>68 (38.4%)</td>
<td>71 (40.1%)</td>
<td>25 (14.1%)</td>
</tr>
</tbody>
</table>

#### 4.7 Management

### 4.7.1 Members of the board

Besides external governance, internal management is a major factor in MOCs’ performance. We asked questions about the background of board members to gain information on this topic.
Table 21 shows the number of board members in MOCs. In this regard, foundations and associations operate differently than enterprises and public-law organizations. In both enterprises and public-law organizations boards tend to be very small, often limited to a single director in charge of day-to-day affairs (in 67.4% of cases). In foundations and associations, meanwhile, daily control is more divided (in 74.4% of cases involving a board of multiple people).

<table>
<thead>
<tr>
<th>Number of board members</th>
<th>Enterprises and public-law organizations</th>
<th>Foundations and associations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>93 (67.4%)</td>
<td>10 (25.6%)</td>
</tr>
<tr>
<td>&gt;1</td>
<td>45 (32.6%)</td>
<td>29 (74.4%)</td>
</tr>
<tr>
<td>Total</td>
<td>138 (100%)</td>
<td>39 (100%)</td>
</tr>
</tbody>
</table>

Municipally owned corporations are demographically not very diverse (Table 22). Relatively few boards feature women or people with a non-Dutch background.

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>%</th>
</tr>
</thead>
</table>
| Only men                  | 115| 65.0%
| Both men and women        | 41 | 24.1%
| Only women                | 21 | 10.9%
| Only Dutch                | 171| 96.6%
| Both Dutch and non-Dutch  | 3  | 1.7%
| Only non-Dutch            | 3  | 1.7%
| Total                     | 177| 100%

In background (Table 23) and expertise (Table 24), the management of MOCs is more diverse. Board members often have public sector backgrounds, but backgrounds in the private and non-profit sectors also often feature on boards.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Fully</th>
<th>Partially</th>
<th>Not</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private sector</td>
<td>41 (23.2%)</td>
<td>47 (26.5%)</td>
<td>89 (50.3%)</td>
</tr>
<tr>
<td>Public sector</td>
<td>71 (40.1%)</td>
<td>49 (27.7%)</td>
<td>57 (32.2%)</td>
</tr>
<tr>
<td>Non-profit sector</td>
<td>29 (16.4%)</td>
<td>18 (10.0%)</td>
<td>130 (73.4%)</td>
</tr>
</tbody>
</table>

Regarding expertise, many boards feature management backgrounds, service sector knowledge, and expertise in finance. We find differences here between MOCs of different corporate statuses. Public-law organizations often have much service sector knowledge, and enterprises less so. Foundations often feature financial experts in their boards, but they have access to less management expertise when compared to public-law organizations and enterprises (Table 24).
Table 24: Expertise of boards

<table>
<thead>
<tr>
<th>Expertise</th>
<th>Total (177)</th>
<th>Public-law organization</th>
<th>Enterprise</th>
<th>Foundation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management</td>
<td>150 (84.7%)</td>
<td>71 (88.8%)</td>
<td>49 (84.5%)</td>
<td>29 (76.3%)</td>
</tr>
<tr>
<td>Service sector</td>
<td>132 (74.6%)</td>
<td>66 (82.5%)</td>
<td>36 (62.1%)</td>
<td>29 (76.3%)</td>
</tr>
<tr>
<td>Finance</td>
<td>103 (58.2%)</td>
<td>44 (55.0%)</td>
<td>32 (55.1%)</td>
<td>26 (68.4%)</td>
</tr>
<tr>
<td>ICT</td>
<td>25 (14.1%)</td>
<td>12 (15.0%)</td>
<td>7 (12.1%)</td>
<td>6 (15.8%)</td>
</tr>
</tbody>
</table>

4.7.2 Director

The director (professional manager) works full-time for MOCs in 58.8% of cases (see Table 25). There is a large difference here between different corporate statuses. Directors in public-law MOCs work full-time the most, and directors of foundations the least. This may relate to the fact that directors of public-law organizations are most likely to be monetarily compensated for their work, while this is less likely to be the case for directors of foundations (Table 26).

Table 25: How often does the director work fulltime?

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public law organization</td>
<td>64</td>
<td>80</td>
</tr>
<tr>
<td>Enterprise (58)</td>
<td>30</td>
<td>51.7</td>
</tr>
<tr>
<td>Foundation (38)</td>
<td>10</td>
<td>26.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>104</td>
<td>58.8</td>
</tr>
</tbody>
</table>

Table 26: Does the director receive monetary compensation?

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public law organization</td>
<td>78</td>
<td>97.5</td>
</tr>
<tr>
<td>Enterprise (58)</td>
<td>49</td>
<td>84.5</td>
</tr>
<tr>
<td>Foundation (38)</td>
<td>14</td>
<td>36.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>141</td>
<td>79.7</td>
</tr>
</tbody>
</table>

4.7.3 Supervisory board

73.4% of MOCs have a supervisory board. The large majority of MOCs communicate with this supervisory board on at least a monthly basis (Table 27). Informal communication is relatively rare.

Table 27: Communication with supervisory board

<table>
<thead>
<tr>
<th>Frequency communication</th>
<th>Formally</th>
<th>%</th>
<th>Informally</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>4</td>
<td>3.1%</td>
<td>3</td>
<td>2.3%</td>
</tr>
<tr>
<td>Annually or less</td>
<td>1</td>
<td>0.8%</td>
<td>1</td>
<td>0.8%</td>
</tr>
<tr>
<td>Semi-annually</td>
<td>1</td>
<td>3.1%</td>
<td>8</td>
<td>6.2%</td>
</tr>
<tr>
<td>3 to 6 times per year</td>
<td>10</td>
<td>7.7%</td>
<td>9</td>
<td>6.9%</td>
</tr>
<tr>
<td>Monthly or more</td>
<td>82</td>
<td>63.1%</td>
<td>82</td>
<td>63.1%</td>
</tr>
<tr>
<td>Weekly or more</td>
<td>32</td>
<td>24.7%</td>
<td>27</td>
<td>20.8%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>130</strong></td>
<td><strong>100%</strong></td>
<td><strong>130</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>
The content of such communication depends on whether communication is formal or informal. At formal meetings, strategic affairs are primarily discussed, although this communication often also is of an evaluative nature. In informal communication, operational affairs are more often discussed, although evaluative and strategic communication also occurs frequently.

Table 28: What is formally discussed with the supervisory board?

<table>
<thead>
<tr>
<th></th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>(Nearly) Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluative affairs</td>
<td>5 (3.9%)</td>
<td>21 (16.4%)</td>
<td>61 (47.7%)</td>
<td>41 (32.0%)</td>
</tr>
<tr>
<td>Operational affairs</td>
<td>12 (9.4%)</td>
<td>54 (42.2%)</td>
<td>44 (34.4%)</td>
<td>18 (14.1%)</td>
</tr>
<tr>
<td>Strategic affairs</td>
<td>2 (1.6%)</td>
<td>18 (14.1%)</td>
<td>46 (35.9%)</td>
<td>62 (48.4%)</td>
</tr>
</tbody>
</table>

Table 29: What is informally discussed with the supervisory board?

<table>
<thead>
<tr>
<th></th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>(Nearly) Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluative affairs</td>
<td>32 (25.2%)</td>
<td>40 (31.5%)</td>
<td>39 (30.7%)</td>
<td>16 (12.6%)</td>
</tr>
<tr>
<td>Operational affairs</td>
<td>12 (9.4%)</td>
<td>38 (29.9%)</td>
<td>57 (44.9%)</td>
<td>20 (15.7%)</td>
</tr>
<tr>
<td>Strategic affairs</td>
<td>20 (15.7%)</td>
<td>40 (31.5%)</td>
<td>39 (30.7%)</td>
<td>28 (22.0%)</td>
</tr>
</tbody>
</table>

4.8 Performance

Respondents assessed their own organization using several indicators (see Table 30). Eventually, we will link these performance variables with autonomy, corporate status, and governance, but this chapter is mostly descriptive.

The average mark respondents gave their organization overall was a 7.7 out of 10. Few MOCs rated their performance poorly, but it did occur. It is noticeable that directors of public-law organizations rated their organization on average lower than the directors of foundations (7.8) and enterprises (7.9).

Enterprises tend to rate themselves highly on performance indicators that are directly related to output, e.g. stability, effectiveness, efficiency, staff satisfaction and management. Foundations scored well on indicators related to the public nature of municipally owned corporations, namely motivation, responsiveness, democratic nature of service delivery, and flexibility. Public-law organizations scored worse in all categories. Further research should demonstrate why this is the case.

In general, MOCs rate themselves by far the highest on motivation and the lowest on democratic service delivery and efficiency (see Table 31). It creates an image of municipally owned corporations as organizations with high input, but limited output.

Table 30: Performance by corporate status

<table>
<thead>
<tr>
<th>Performance</th>
<th>Public-law organizations</th>
<th>Enterprises</th>
<th>Foundations</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>7.5</td>
<td>7.9</td>
<td>7.8</td>
</tr>
<tr>
<td>Stability</td>
<td>7.4</td>
<td>8.1</td>
<td>7.5</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>7.3</td>
<td>7.8</td>
<td>7.3</td>
</tr>
<tr>
<td>Efficiency</td>
<td>7.1</td>
<td>7.6</td>
<td>7.1</td>
</tr>
<tr>
<td>Staff satisfaction</td>
<td>7.4</td>
<td>7.8</td>
<td>7.3</td>
</tr>
</tbody>
</table>
Table 30: Performance by corporate status (cont.)

<table>
<thead>
<tr>
<th>Performance</th>
<th>Public-law organizations</th>
<th>Enterprises</th>
<th>Foundations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management</td>
<td>7.4</td>
<td>7.7</td>
<td>7.4</td>
</tr>
<tr>
<td>Service quality</td>
<td>7.4</td>
<td>7.9</td>
<td>7.7</td>
</tr>
<tr>
<td>Internal cohesion</td>
<td>7.2</td>
<td>7.6</td>
<td>7.4</td>
</tr>
<tr>
<td>Accountability to society</td>
<td>7.3</td>
<td>7.6</td>
<td>7.6</td>
</tr>
<tr>
<td>Flexibility</td>
<td>7.3</td>
<td>7.9</td>
<td><strong>8.0</strong></td>
</tr>
<tr>
<td>Democratic service delivery</td>
<td>7.4</td>
<td>7.1</td>
<td>7.6</td>
</tr>
<tr>
<td>Responsiveness to society</td>
<td>7.2</td>
<td>7.7</td>
<td>7.9</td>
</tr>
<tr>
<td>Motivation</td>
<td>8.1</td>
<td>8.2</td>
<td><strong>8.6</strong></td>
</tr>
</tbody>
</table>

Table 31: Performance (overall)

<table>
<thead>
<tr>
<th>Performance</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>7.7</td>
</tr>
<tr>
<td>Motivation</td>
<td>8.3</td>
</tr>
<tr>
<td>Flexibility</td>
<td>7.7</td>
</tr>
<tr>
<td>Quality</td>
<td>7.7</td>
</tr>
<tr>
<td>Stability</td>
<td>7.7</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>7.5</td>
</tr>
<tr>
<td>Management</td>
<td>7.5</td>
</tr>
<tr>
<td>Responsiveness to society</td>
<td>7.5</td>
</tr>
<tr>
<td>Staff satisfaction</td>
<td>7.5</td>
</tr>
<tr>
<td>Accountability to society</td>
<td>7.5</td>
</tr>
<tr>
<td>Internal cohesion</td>
<td>7.4</td>
</tr>
<tr>
<td>Democratic service delivery</td>
<td>7.3</td>
</tr>
<tr>
<td>Efficiency</td>
<td>7.3</td>
</tr>
</tbody>
</table>

4.9 Business techniques

There are limited differences between MOCs of different corporate statuses in terms of the use of business techniques (see Table 32). Enterprises more often determine internal budget sizes based on performance, and are more likely to adjust business techniques to market, service, or target group developments. Public law organizations do this less and also use targets internally substantially less. Conversely, they are more likely to grant autonomy to lower management. Foundations only operate differently when it comes to long-term planning, doing this less than enterprises and public-law organizations.

Table 32: Business techniques of municipally owned corporations

<table>
<thead>
<tr>
<th>Business technique</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>(Nearly) Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual reporting</td>
<td>6</td>
<td>9</td>
<td>16</td>
<td>146 (82.5%)</td>
</tr>
<tr>
<td>(3.4%)</td>
<td>(5.1%)</td>
<td>(9.0%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Innovative service delivery</td>
<td>13</td>
<td>52</td>
<td>80</td>
<td>32 (18.1%)</td>
</tr>
<tr>
<td>(7.3%)</td>
<td>(29.4%)</td>
<td>(45.2%)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 32: Business techniques of municipally owned corporations (cont.)

<table>
<thead>
<tr>
<th>Business technique</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>(Nearly Always)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjusting business techniques to</td>
<td>14 (7.9%)</td>
<td>43 (24.3%)</td>
<td>76 (42.3%)</td>
<td>44 (24.9%)</td>
</tr>
<tr>
<td>changing environments</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multi-year planning</td>
<td>17 (9.6%)</td>
<td>30 (17%)</td>
<td>50 (28.3%)</td>
<td>80 (45.2%)</td>
</tr>
<tr>
<td>Setting internal targets</td>
<td>28 (15.8%)</td>
<td>56 (31.6%)</td>
<td>65 (36.7%)</td>
<td>28 (15.8%)</td>
</tr>
<tr>
<td>Setting quality standards</td>
<td>29 (16.4%)</td>
<td>45 (25.4%)</td>
<td>67 (37.9%)</td>
<td>36 (20.3%)</td>
</tr>
<tr>
<td>Evaluating worker performance</td>
<td>36 (20.3%)</td>
<td>28 (15.8%)</td>
<td>67 (37.9%)</td>
<td>46 (30.0%)</td>
</tr>
<tr>
<td>Conducting surveys among customers</td>
<td>39 (22.0%)</td>
<td>79 (44.6%)</td>
<td>34 (19.2%)</td>
<td>25 (14.1%)</td>
</tr>
<tr>
<td>Offering extra service for pay</td>
<td>43 (24.3%)</td>
<td>61 (34.5%)</td>
<td>47 (26.6%)</td>
<td>26 (14.7%)</td>
</tr>
<tr>
<td>Giving autonomy to lower management</td>
<td>48 (27.1%)</td>
<td>50 (28.3%)</td>
<td>59 (33.3%)</td>
<td>19 (10.7%)</td>
</tr>
<tr>
<td>Increasing internal budgets based on</td>
<td>66 (37.3%)</td>
<td>64 (36.1%)</td>
<td>35 (19.8%)</td>
<td>12 (6.8%)</td>
</tr>
<tr>
<td>performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance-based pay for employees</td>
<td>86 (48.6%)</td>
<td>46 (26.0%)</td>
<td>27 (15.3%)</td>
<td>18 (10.2%)</td>
</tr>
</tbody>
</table>

4.10 Further research

The findings in this descriptive report of MOCs raise multiple questions that will be subject of further research. Our research will primarily focus on what factors contribute to performance of MOCs. For instance, we investigate the apparent link between corporate status and performance. We are also interested in the effect of all other variables on performance. Finally, the absence of actual performance management (despite the pervasiveness of performance measurement) is surprising and we will conduct further research into this.
Chapter 5
Chapter 5: Performance of MOCs: Determinants and Mechanisms

5.1 Introduction

A substantial literature explores predictors of the performance of state-owned enterprises (SOEs) and government agencies (Boardman and Vining 1989; Nelson and Nikolakis 2012; Pestieau and Tulkens 1993; Verhoest et al. 2012; Verhoest and Wynen 2018). This literature has demonstrated the importance of factors such as autonomy, trust, steering, and business techniques for SOEs’ and agencies’ performance, and governance practices have increasingly been developed based on this research (Van Thiel, Van Genugten, and Voorn 2019). However, at the local level, research into corporatization has been largely absent (Cambini et al. 2011; Lidström 2017; Torsteinson 2019), and perhaps as a consequence, no clear governance practices have been developed for municipally owned corporations (MOCs), and current governance practices are often limited to minimum arrangements (Aars and Ringkjob 2011). Multiple problems have been pointed out in the literature that suggest that current governance practices for local at arms’ length organizations may be suboptimal, such as worrisome entanglements between government and management (Bergh et al. 2018), too few checks on management (Garrone, Grilli, and Rousseau 2013), and conflicts between multiple principals (Voorn, Van Genugten, and Van Thiel 2019).

The objective of this study is to analyze to what extent lessons about the governance of SOEs and agencies can be applied at the local level for municipally owned corporations (MOCs). In particular, we study whether the predictors of performance of SOEs and agencies are the same at the municipal level among MOCs. We address the entire population of 799 Dutch MOCs with a questionnaire exploring possible predictors of their performance, based on the literature on SOEs and government agencies and using measures validated in previous studies that explored predictors of performance among government agencies (Van Thiel and Yesilkagit 2011; Verhoest et al. 2012; Yesilkagit and Van Thiel 2011). Worryingly, we find no evidence that many expected predictors of the performance of SOEs and government agencies, including autonomy, trust, and several steering techniques, matter for the performance of MOCs. Instead, the key factor driving MOCs’ performance is the interaction between their frequent multiple principals, suggesting that to understand local corporatization, researchers should look less at traditional principal-agent conflict and more at the consequences of goal conflict among municipalities. Local corporatization is fundamentally different from corporatization or agencification at the national level. An important limitation of our study is that our performance measures are static and short-term oriented, based on perceptions, and absolute rather than relative, and so further research is still required into this pressing topic.

The remainder is organized as follows. Section 2 describes the background of this study. In section 3, we review the literature on predictors of the performance of SOEs and government agencies and discuss their relevance for MOCs. Section 4 explains our methodology. In section 5, we present the results of our analysis and test our data's

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14 A reviewed version of this chapter was published as Voorn, Van Genugten, and Van Thiel (2020).
robustness. Section 6 discusses our findings in light of the theory and limitations. In section 7, we conclude.

5.2 Municipally owned corporations

Municipally owned corporations (MOCs) are corporations owned by municipalities and founded to provide a local public service. They are different from local bureaucracies in that they are governed by appointed executive boards and have independent corporate status. MOCs’ autonomy is a driving force behind their increasing popularity (Ferry et al. 2018; Grossi and Reichard 2008; Tavares 2017; Voorn, Van Thiel, and Van Genugten 2018). Municipalities hope that MOCs, through their autonomy, can increase efficacy of local public service delivery (Argento et al. 2009; Krause and Van Thiel 2019; Voorn, Van Genugten, and Van Thiel 2017), although MOCs are also utilized as a step towards privatization (Cruz et al. 2014; Marra 2007), to alleviate fiscal stress (Citroni, Lippi, and Profeti 2013; Grossi and Reichard 2008), to build coalitions (Citroni, Lippi, and Profeti 2015), or to introduce some measure of competition in local public service delivery (Leavitt and Morris 2004; Voorn, Van Genugten, and Van Thiel forthcoming). More negatively, MOCs can be vehicles for politicians to avoid blame for problems in public service delivery (Bourdeaux 2004).

While their autonomy sets them apart, MOCs are otherwise heterogeneous. MOCs can be owned by one municipality or by multiple municipalities, are typically single-purpose but can be multi-purpose (Bognetti and Robotti 2007), and usually operate under private law, but can operate under public law in various countries (Van Genugten, Van Thiel, and Voorn 2019). In some cases, MOCs rely on revenues derived from user fees (Tavares and Camões 2007); in other cases, they rely on subsidies from their municipal owners. Some MOCs are allowed to make profits, or are even relied upon to do so by their owner-municipalities; others are instructed or mandated by law to break-even (Bel and Fageda 2010). It is concerning that in the face of such heterogeneity, systematic large-N research into MOCs has lacked, and the literature remains largely dependent on single case studies, often focusing on specific countries, sectors, or types of MOC (Voorn, Van Genugten, and Van Thiel 2017).

While there is tentative evidence of how MOCs perform compared to local bureaucracies – they can be more efficient, but have high failure rates (Voorn, Van Genugten, and Van Thiel 2017) – there continues to be little knowledge on what contributes to MOCs’ performance, the types of governance used for MOCs in practice, and the types of governance that should be used. Since MOCs are forms of externalized public organizations, like SOEs and agencies, researchers often apply theory based on that literature to MOCs as well (e.g. Sørensen 2007). Practitioners may copy governance techniques based on experiences at the national level to MOCs, although they most often follow the minimum legal requirements (Aars and Ringkjøb 2011). Yet we do not know if this (limited) type of governance is fully appropriate, and whether MOCs behave similarly to other externalized public organizations. Several problems have been pointed out in the governance of MOCs that may demonstrate inefficiencies in current governance practices (Bergh et al. 2018; Garrone, Grilli, and Rousseau 2013).

There are various reasons why MOCs should potentially be governed differently than SOEs and agencies. First, MOCs face lower service expertise among their shareholders (Bel et al. 2010), as municipalities, due to their more limited resources, have less access to service experts than state or national governments do (Brown and Potoski
2003; Warner 2011). This deficiency in expertise frequently spills over to boards, as politicians take up board positions in MOCs more frequently than in SOEs, creating entanglements between politics and management (Bergh et al. 2018) and too few checks on management (Garrone, Grilli, and Rousseau 2013). Second, municipalities often have problems in establishing salient contracts (Brown and Potoski 2003), creating high transaction costs, and requiring (more) active and perhaps more relational governance (Van Genugten, Van Thiel, and Voorn 2019). Third, more than SOEs and agencies, MOCs have multiple owners (municipal shareholders), potentially inducing conflicts in governance (Blaeschke and Haug 2018; Cäker and Nyland 2017; Carini, Giacomini, and Teodori 2019; Giacomini, Sancino, and Simonetto 2018; Sørensen 2007; Soukopová and Vaceková 2018; Voorn, Van Genugten, and Van Thiel 2019). Consequently, the municipalities' ability to monitor management is often limited, encouraging the right governance practices for MOCs becomes more critical, and good governance of MOCs may differ substantially from good governance of SOEs and agencies. Thus, it is important to uncover exactly how predictors of the performance of MOCs differ from those of SOEs and national agencies.

5.3 Theory

5.3.1 Performance

Before we can theorize about predictors of performance in MOCs, we must first discuss what it means to perform well in the public sector. Performance in the public sector is often more difficult to measure than it is in the private sector (Kearney 2018; Van Dooren, Bouckaert, and Halligan 2015), since public goals are often harder to quantify and public sector organizations operate less in competitive environments, making benchmarking more difficult.

Typically, performance is measured in terms of output. Output measures of performance assess organizations' performance in the economic sense: are they effective, efficient, and productive in achieving their goals? Output measurement is frequently challenged in the public sector, largely because it is often used exclusively, crowding out elements of performance that are harder to measure (Bevan and Hood 2006). Nonetheless, output measurement is critical to assess how well public services are administered, and efficiency, effectiveness, and quality are therefore key measures of public sector performance (Andrews and Van de Walle 2013). Since MOCs are frequently founded in the belief that they should increase output, we will focus on this dimension of performance in this article, but we would encourage measurement of other important outcomes of MOCs, such as stability, responsiveness, or accountability.

5.3.2 Predictors of performance

Below, we address the key factors that are predicted to affect performance in the literature on SOEs and agencies, discuss how they relate to MOCs, theorize how they affect MOCs’ performance, and form hypotheses.

5.3.2.1 Autonomy

One key reason to engage in ‘governance at arm’s length’ is to allow autonomous (non-
political) delivery of public services (Bourdeaux 2008; Citroni, Lippi, and Profeti 2013). As such, autonomy is considered a key predictor of performance for SOEs and agencies (Lioukas, Bourantas, and Papadakis 1993; Verhoest, Peters, et al. 2004). Whether this effect is positive or negative is contested. On the one hand, autonomy creates transaction costs, which negatively affect performance: as the distance between an organization and its political principal increases, the principal's objectives are less likely to be satisfied (Brown and Potoski 2003; Egeberg and Trondal 2009) and accountability can be lost (Moynihan 2006), although trust is a mitigating factor (Agranoff and McGuire 2004). On the other hand, autonomy distances politicians from service delivery, and since politicians may have incentives to sacrifice efficiency for the sake of re-election, this may be beneficial (cf. Shleifer and Vishny 1994).

For MOCs specifically, the effects of autonomy on performance seem to be either insignificant or small but positive. Torsteinsen et al. (2018) find mixed effects of autonomy on performance of municipally owned corporations in five countries. Cambini et al. (2011) and Swarts and Warner (2014) find that autonomization brings cost savings; Pérez-López, Prior, and Zafría-Gómez (2015) find that whether autonomization successful depends on the sector where it takes place. Bourdeaux (2007) finds that many corporatization projects fail because the introduced autonomy leads to steering problems, and Da Cruz and Marques (2011) find that corporatization does not bring desired effects when autonomy is insufficiently granted. Voorn, Van Genugten, and Van Thiel (2017) conclude in a systematic literature review that autonomization in MOCs has the potential to increase efficiency compared to municipal bureaucracy, but can bring high failure rates.

H1. Autonomy positively affects MOCs’ performance.

5.3.2.2 Steering
Another factor with a predicted effect on performance of SOEs and agencies is steering. Ex-post steering can occur in multiple stages. First, objective-setting can help communicate the government’s objective to the organization, and benchmark what level of performance is expected. Its effects are contested (Bevan and Hood 2006; Pollitt 2005; Radnor and McGuire 2004; Yesilkagit and Van Thiel 2008), because too precise objective-setting can lead organizations to try to follow objectives to the letter, rather than in spirit (cf. Macaulay 2018). Next, evaluations and monitoring procedures help the government assess whether objectives are actually achieved, which can have positive effects as they can help the government ensure that its objectives are pursued, although they can also come at high costs (Wholey and Hatry 1992). Finally, sanctions and rewards can ensure that the incentives of the organization’s management are aligned with those of the government (Girth 2012; Melkers and Willoughby 2005), although the effectiveness of this is frequently challenged because it can again inspire following the government’s objectives too little in spirit or can ‘crowd out’ intrinsic motivation (e.g. Lægreid, Roness, and Rubecksen 2006; Lægreid, Roness, and Rubecksen 2008; Propper and Wilson 2003).

It does not only matter what procedures are followed, but also who is responsible for steering. In the absence of a clearly defined principal for steering, steering may not be effective. Next, it is important that the steering party has expertise and is objective (Brown, Potoski, and Van Slyke 2006; Hendry 2002; Marvel and Marvel 2007; Waterman and Meier 1998). What is monitored also matters, because what gets measured is typically what gets done (Bevan and Hood 2006). Finally, there may be strategic steering, where the steering party is only involved with objective-setting, but there may also be operational
steering, where the principal is actively involved in day-to-day management (Van Thiel, Van Genugten, and Voorn 2019); these strategies may have different outcomes.

**H2.** Ex-post steering (through performance management) positively affects MOCs’ performance.

A key challenge to ex-post steering comes from principal-steward theory (Schillemans 2013) and network theory (Klijn, Edelenbos, and Steijn 2010). A focus on extrinsic motivation through incentives can ‘crowd out’ intrinsic motivation (Benabou and Tirole 2003) and lead to distrust. In agencies and SOEs, it means that when objectives are embedded in extensive contracts that are precisely measured, this may inspire managerial performance only to the letter of the contract, which is problematic because contracts are unavoidably incomplete (Grossman and Hart 1986). Network theorists emphasize interdependence between principal and agent and often challenge the hierarchy assumptions made in principal-agent theory (Edelenbos and Klijn 2007). Principal-steward and network theorists therefore emphasize the importance of relational contracting, intrinsic motivation, and trust. A focus on steering through trust can motivate and lead to information sharing and is therefore an important predictor of SOE and agency performance (Van Thiel and Yesilkagit 2011).

**H3.** Trust between MOCs and their owner-municipalities positively correlates with MOCs’ performance.

5.3.2.3 Multiplicity of principals

One key area in which MOCs are different from agencies and SOEs is in the frequent multiplicity of principals. More than on the national level, MOCs have multiple owners (municipal shareholders), potentially inducing conflicts in steering and monitoring (Bel and Sebő 2018; Blaeschke and Haug 2018; Cäker and Nyland 2017; Sørensen 2007; Soukopová and Vaceková 2018; Voorn, Van Genugten, and Van Thiel 2019).

Multiplicity of principal-municipalities may be problematic for several reasons (Voorn, Van Genugten, and Van Thiel 2019). First, when municipalities are homogeneous in interests, a potential coordination problem exists. Municipalities are not necessarily aware of each other’s behavior, and may face a collective action problem in steering and monitoring that may lead to an absence of steering (free-riding) or to duplicate steering, both creating inefficiency. Second, when municipalities are heterogeneous in interests, they may have incentives to lobby MOCs to pursue their interests above those of other municipalities, and the result is that MOCs face a lot of different directives), which is detrimental for performance (Garrone, Grilli, and Rousseau 2013).

We thus expect that differences in steering between principal-municipalities negatively affect MOCs' performance.

**H4.** Differences between principal-municipalities in steering MOCs negatively affect MOCs’ performance.

5.3.2.4 Background factors

Beyond the aforementioned elements that affect performance, some background factors also matter. Organization size in terms of budget and number of employees may affect
performance (Gooding and Wagner III 1985). The sector in which organizations operate may matter, because some sectors can be more technical than others, and regulators have more difficulty regulating more technical services because of lack of expertise or capacity (Brown and Potoski 2003; Tavares and Camões 2010); on the other hand, MOCs may have access to more technical expertise (Correlje, Francois, and Verbeke 2007). Having access to enough resources matters, as organizations that are not endowed with enough resources may struggle to perform. Organization age may also affect performance, but we do not know how: settled organizations are more likely to have established salient governance practices, but may also be more entrenched (Ahuja and Majumdar 1998). Corporate status may have an effect, but we do not know how, and it largely affects performance through its effect on autonomy, although different legislation may apply.

H5a. MOCs’ size positively affect their performance.
H5b. The technicality of a service affects MOCs’ performance.
H5c. MOCs’ access to resources positively affects their performance.
H5d. Older MOCs have higher performance.
H5e. MOCs’ corporate status affects their performance.

5.4 Method

5.4.1 Case selection
To study the antecedents of MOCs’ performance, we focus our research specifically on the Netherlands. In the Netherlands, MOCs are heterogeneous, and vary immensely in number of municipal owners, sectors, corporate status, budgets, and revenue sources. Both private-law and public-law options exist for MOCs, and using MOCs to institutionalize public-private partnerships or cooperation between multiple levels of government is also possible. This heterogeneity allows us to collect a broad dataset and makes our findings more generalizable. Moreover, by law, Dutch municipalities are obligated to include a section 'Verbonden partijen' (translated: 'attached entities') in their annual budgets outlining (partial or complete) ownership of any organization, allowing straightforward and reliable data collection on our population.

The Netherlands differs from some other countries in a few aspects. First, the Netherlands has strict legislation for public-law MOCs, where the Wet gemeenschappelijke regelingen mandates the presence of politicians on supervisory boards, which may limit MOCs’ autonomy and may cause boards to become caught up in intermunicipal conflicts. This may cause the public-law MOCs in The Netherlands to perform worse than they would in other countries, although some other countries, such as Germany, have similar legislation (Papenfuß et al. 2018). Second, cooperation of many varieties is possible, but multi-purpose MOCs and public-private partnerships are less common in the Netherlands than in many other European countries (Bel et al. 2010). It is unclear how this may affect predictors of performance, but these factors may limit generalization of our findings, and we revisit these in the discussion.

5.4.2 Procedure
We sent a survey to directors of all Dutch municipally owned corporations in February 2018. Directors were sent a letter through postal mail that contained links (shortened and
complete) to an online survey administered through Qualtrics. The letter contained a
deadline of two weeks from the date of submission, as well as a request from the
Vereniging voor Nederlandse Gemeenten (the Association of Dutch Municipalities, an
umbrella organization for Dutch municipalities), both intended to bolster response. After
the deadline expired, we sent a second letter in March 2018, again with a two-week
deadline.

5.4.3 Population and sample
From November 2017 to January 2018, we systematically went through the most recent
budgets of all 390 Dutch municipalities and included all independent organizations they
owned in a database. We omitted 'empty' holding companies and organizations with no
listed address. In total, this yielded a database of 809 MOCs. We sent letters requesting
survey participation to this entire population. 10 letters were returned indicating inability
to deliver, and we removed these MOCs from our database, leaving a total population of
799 MOCs.

To allow us to compare our respondents with the population, we also tracked a
few general statistics for this population. We collected information on all organizations' corporate status, sector, and website presence. We also attempted to collect information about organization size (number of employees (in ftes) and budget size), but data were often inaccessible or outdated. This leaves us with no perfect measure to compare organization sizes in our sample with those in the population, although the presence of a website may be an imperfect indicator.

In total, 243 surveys were returned (response rate 30.4%). Of those 243 surveys, 61 were incomplete (all with under 30% completion); these were excluded for our research. Five more respondents suggested they had no budget or no employees, and upon further reflection were not independent organizations and were excluded. That left 177 complete surveys (completion rate 73.7%, net response rate 22.2%) for analysis. Table 1 shows descriptive statistics for the population (799) and for our sample (177). It shows that our sample is slightly skewed towards public-law organizations and larger organizations (judged by website presence), but is on the whole quite representative.

Table 2 shows more descriptive statistics for our sample. Of all MOCs, 71% were intermunicipal, 14% were public-private, and 23% had an additional higher-tier government as principal. The average age of the organization was 17.17 years; budgets ranged from 0 to 800 million euros with a mean of 33.19 million; the number of employees ranged from 0 to 3,800 with an average of 229 employees. Our organizations were thus highly heterogeneous. They rated themselves, on average, 7.28 out of 10 in efficiency, 7.45 in effectiveness, and 7.66 in product or quality.

Table 1: Some descriptive statistics for the population and our sample

<table>
<thead>
<tr>
<th>Corporate status</th>
<th>Population (799)</th>
<th>%</th>
<th>Sample (177)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporation</td>
<td>279</td>
<td>34.9</td>
<td>55</td>
<td>31.1</td>
</tr>
<tr>
<td>Foundation</td>
<td>189</td>
<td>23.7</td>
<td>38</td>
<td>21.5</td>
</tr>
<tr>
<td>Public-law organization</td>
<td>309</td>
<td>38.7</td>
<td>82</td>
<td>46.3</td>
</tr>
<tr>
<td>Other</td>
<td>22</td>
<td>2.8</td>
<td>2</td>
<td>1.1</td>
</tr>
</tbody>
</table>
Table 1: Some descriptive statistics for the population and our sample (cont.)

<table>
<thead>
<tr>
<th>Sector</th>
<th>Population (799)</th>
<th>%</th>
<th>Sample (177)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economy &amp; Housing</td>
<td>158</td>
<td>19.8</td>
<td>27</td>
<td>15.3</td>
</tr>
<tr>
<td>Education &amp; Culture</td>
<td>121</td>
<td>15.1</td>
<td>18</td>
<td>10.2</td>
</tr>
<tr>
<td>Finance &amp; General</td>
<td>67</td>
<td>8.4</td>
<td>11</td>
<td>6.2</td>
</tr>
<tr>
<td>Infrastructure &amp; Refuse collection</td>
<td>132</td>
<td>16.6</td>
<td>25</td>
<td>14.1</td>
</tr>
<tr>
<td>Nature &amp; Agriculture</td>
<td>64</td>
<td>8.0</td>
<td>24</td>
<td>13.6</td>
</tr>
<tr>
<td>Security &amp; Health</td>
<td>78</td>
<td>9.8</td>
<td>18</td>
<td>10.2</td>
</tr>
<tr>
<td>Social Affairs &amp; Employment</td>
<td>117</td>
<td>14.6</td>
<td>37</td>
<td>20.9</td>
</tr>
<tr>
<td>Sports &amp; Recreation</td>
<td>61</td>
<td>7.6</td>
<td>17</td>
<td>9.6</td>
</tr>
<tr>
<td>Website presence</td>
<td>688</td>
<td>86.1</td>
<td>164</td>
<td>92.6</td>
</tr>
</tbody>
</table>

Table 2: Descriptive statistics of our sample

<table>
<thead>
<tr>
<th>Ownership</th>
<th>Mean</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intermunicipal</td>
<td>0.71</td>
<td>0.45</td>
<td>-0.94</td>
<td>-1.12</td>
<td>0-1</td>
</tr>
<tr>
<td>Public-private</td>
<td>0.14</td>
<td>0.34</td>
<td>2.15</td>
<td>2.64</td>
<td>0-1</td>
</tr>
<tr>
<td>Public (multi-level)</td>
<td>0.23</td>
<td>0.42</td>
<td>1.32</td>
<td>-0.25</td>
<td>0-1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Background</th>
<th>Mean</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size (budget) (x1000)</td>
<td>33,192</td>
<td>88,574</td>
<td>6.13</td>
<td>43.45</td>
<td>0-800,000</td>
</tr>
<tr>
<td>Size (employees)</td>
<td>229.19</td>
<td>489.08</td>
<td>4.12</td>
<td>21.22</td>
<td>0-3,800</td>
</tr>
<tr>
<td>Age</td>
<td>17.17</td>
<td>17.31</td>
<td>1.79</td>
<td>2.82</td>
<td>0-82</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Performance</th>
<th>Mean</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiency</td>
<td>7.28</td>
<td>1.03</td>
<td>-0.78</td>
<td>2.62</td>
<td>2-10</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>7.45</td>
<td>1.13</td>
<td>-0.94</td>
<td>3.33</td>
<td>2-10</td>
</tr>
<tr>
<td>Quality</td>
<td>7.66</td>
<td>1.32</td>
<td>-0.92</td>
<td>1.73</td>
<td>3-10</td>
</tr>
<tr>
<td>Performance (factor)</td>
<td>0</td>
<td>1</td>
<td>-1.15</td>
<td>4.24</td>
<td>-4.74-2.52</td>
</tr>
</tbody>
</table>

5.4.4 Survey basis and measures

We based our survey partially on earlier surveys by the COBRA network sent to agencies and quasi-autonomous government organizations in a variety of countries (COBRA 2010; Verhoest, Van Thiel, et al. 2004). The COBRA network, or the Comparative Public Organization Data Base for Research and Analysis, is an academic research network in the field of public management which aimed to develop and replicate a common questionnaire in order to survey senior managers of public sector organizations, with a focus on, in particular, issues of autonomy and control in (semi-)autonomous national-level government agencies (COBRA 2011). Given that municipally owned corporations, like national-level government agencies, are semi-autonomous public sector organizations, we found many questions in the COBRA survey are also applicable to MOCs.

To ensure that our measures were indeed applicable also at the local level, we adjusted our survey to target specifically municipally owned corporations in terminology,
and conducted a pilot study of our survey among local government experts and former MOC directors. We also used this pilot study to test the terminology used in the survey. Our measures, with some terminological changes, were also deemed applicable at the local level by our pilot study respondents. We revisit the limitation of the COBRA survey in the conclusion.

In particular, we used items measuring autonomy and performance from the COBRA survey based on the fact that the factor loadings found in those earlier studies support their use (see Christensen and Lægreid 2006; MacCarthaigh 2007; Van Thiel, Steijn, and Allix 2007; Van Thiel and Yesilkagit 2011; Verhoest, Bouckaert, and Peters 2007; Verhoest, Peters, et al. 2004; Verhoest et al. 2012; Verhoest, Van Thiel, et al. 2004; Verhoest, Verschuere, and Bouckaert 2007; Verhoest, Verschuere, et al. 2004; Wettenhall 2005; Yesilkagit and Van Thiel 2008, 2011). Our Dutch translations were based partially on earlier COBRA-based surveys in the Netherlands (Van Thiel and Yesilkagit 2011; Yesilkagit and Van Thiel 2008, 2011); the factor loadings of those translations validate our factors as well. We discuss our key measures below. All specific survey items can be found in Appendix A.

The construct autonomy was divided in financial autonomy, personnel autonomy, and budget source autonomy, three concepts found as defining sources varying in intensity among municipally-owned corporations (Voorn, Van Genugten, and Van Thiel 2017) and all validated in the original COBRA-survey (COBRA 2010). For financial and personnel autonomy, respondents were given a list of types of autonomy they could have (10 items for financial autonomy, 9 items for personnel autonomy), which they could answer as “yes”, “only with prior consent of shareholders”, or “no”. For measuring budget source autonomy respondents were asked to estimate the percentage of their budgets derived from various sources (municipal budgets, other public budgets, other private budgets, municipality tariffs, general tariffs, private assignments, and other). Higher scores indicate a higher percentage of budgets derived from each source. We also measured the frequency of direct contact between daily board and the municipality and the content of the discussions.

The existence of multiple principals was measured by asking for the number of owner municipalities, as well as for the presence of private or other public shareholders, and for steering differences between principals. We also asked respondents if they perceived one of the municipalities to be the dominant steering actor on a five-point Likert scale.

We also measured background factors with single items. We measured (i) size of organizations, both in number of employees and in size of budget; (ii) age of organizations; (iii) corporate status of organizations; (iv) sector, which we asked as an open question and then recoded ourselves by sector based on the ministries they would fall under if they were national organizations (to allow national-local comparisons); and (v) self-assessed access to resources of the organization. We recoded a few of these variables. For the indicator organization size, we included both the log and the square root for our modeling to account for non-linear effects. We also created a measure 'labor intensity' by dividing the square root of the number of employees by the square root of budget size to serve as a measure of service technicality.

Lastly, performance was measured through self-assessment on a 10-point scale with 3 items, following our theoretical section, validated in the original COBRA-survey (COBRA 2010) and with acceptable factor loadings in our data (performance KMO = .725, sig .000). The items were efficiency, effectiveness, and quality.
A key limitation of our study is that our performance measures are limited in various ways. One, they are static and short-term oriented. They do not include long-run ‘dynamic’ indicators such as long-run sustainability, profit margins, indebtedness, or capacity to renew assets. Moreover, our measures are based on perceptions, and while several procedural remedies were used in the survey design to limit common source bias (see MacKenzie and Podsakoff (2012) and Saris et al. (2010)), including reducing the potential for social desirability bias in item wordings, reducing ambiguity in scale items by using pre-validated scale items, and eliminating common scale properties (by using different scales both among independent variables and between independent and dependent variables), we cannot rule out common source bias. Finally, our measures are absolute and not relative, and thus our findings are not comparative in any way.

The reason that we nonetheless use these measures is the fact that for municipally owned corporations, the usual ‘performance metrics’ are unreliable. Commonly, the performance of public sector organizations and private firms is measured through some combination of (i) profitability matrices and (ii) efficiency matrices, usually derived from financial reports. The use of these matrices for municipally owned corporations is problematic, because municipalities can shift relatively freely in their contributions to the municipal company or in the tariffs they allow the MOCs to charge. In response to a profitable year for the municipal company, local governments often respond by lowering tariffs in a way that makes the profitability or efficiency of the company invisible in its financial books; the opposite tends to occur in lesser-performing years. Using perceptions as a measure instead avoids this problem. Nonetheless, we welcome further research using alternative approaches to measure the performance of MOCs.

5.4.5 Strategy of analysis

Given the large amount of variables in our dataset, using a manual approach to decide which independent variables to include or exclude in our regressions would risk type II errors and researcher bias. To combat this, we opt for stepwise regression (Henderson and Denison 1989), a more automated and efficient approach for multi-hypothesis research that prevents type II errors and observer bias. Stepwise regression works by feeding all independent variables to the computer, which uses backwards elimination to discard the variable whose loss gives the most statistically insignificant deterioration of model fit, continuing to do so until the model reaches a specified criterion. We use the ‘standard’ criteria (probability of F for entry = .05, probability of F for removal = .10).

A downside of stepwise regression is that it can be prone to overfitting errors (type I errors) (Thompson 1995). However, this limitation is mitigated by the fact that our independent variables were collected in a hypothesis-driven way (we only collected data on factors of which we had reason to predict they affected performance, as opposed to the data-mining for which stepwise regression is more typically used). A second downside of stepwise regression is the assumption of linear relationships between dependent and independent variables (Henderson and Denison 1989). We take various steps to support our assumption of linearity, primarily by normalizing the dependent variables budget size, number of employees, and organization age, and by removing 2 strong outliers for the performance variable.
5.5 Results

5.5.1 OLS regressions on performance

Table 3 reports the results of stepwise ordinary least-squares (OLS) regressions on performance. Column (1) shows the key predictors of performance following our stepwise regression. Some key background variables are strongly related to performance at the p < 0.01 level. Access to resources is strongly positively related to performance, while the logarithm of the number of employees is negatively related to performance. Budget size is positively related to performance at the p < 0.05 level. The most critical non-background predictor seems to be differences in steering between MOCs with multiple owners, significant at the p < 0.01 level. One other factor is a less strong predictor of performance: the threat of autonomy loss following bad performance.

Column (2) and (3) show the same model with fewer predictors to test the model’s robustness. When we remove the two weakest predictors from the model, the $R^2$ of the model drops from 0.327 to 0.264, indicating these predictors’ relevance, but the other four predictors lose little predictive power and remain strongly significant.

Column (4) shows the key model when controlled for the number of municipal owners of the organizations. Given that our model indicates differences in steering to be a key predictor of performance, it is worth testing whether this effect increases as the number of municipal owners increase, but this only marginally the case.

Column (5), (6), and (7) show the model tested for the three key factors personnel autonomy, financial autonomy, and trust. None of these factors seems to have a significant effect on performance. In column (8), we include them all together, but they continue to have no significant effect on performance.

Overall, the results in Table 3 show a strong correlation between five key factors and performance. The factors are quite robust to the inclusion and elimination of other factors. Nevertheless, there is reason for not interpreting all relationships as causal. An endogeneity problem can arise from the fact that performance may be inversely correlated with budget size, as MOCs that perform well may see their budgets increase, although in the public sector that is not a given. However, personnel autonomy and financial autonomy can be instruments for budget size (although not significant at $p = 0.144$ and $p = 0.067$ respectively), and column (5) through (8) show that budget size continues to be a strong predictor of performance when they are included, lending evidence against the possible endogeneity problem. A further endogeneity problem arises from the fact that performance and sanctions can be inversely correlated. MOCs that perform badly are more likely to deal with sanctions and are thus more likely to report their existence. Unfortunately, we found no good instruments for sanctions that do not similarly face this endogeneity problem, and so we cannot establish a causal direction for the correlation between sanctions threatening autonomy loss and performance.
Table 3: The results of stepwise OLS regressions on performance of MOCs

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
<th>(7)</th>
<th>(8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log employees</td>
<td>-.155***</td>
<td>-.164***</td>
<td>-.133***</td>
<td>-.156***</td>
<td>-.149***</td>
<td>-.163***</td>
<td>-.154***</td>
<td>-.155***</td>
</tr>
<tr>
<td></td>
<td>(.038)</td>
<td>(.038)</td>
<td>(.036)</td>
<td>(.038)</td>
<td>(.040)</td>
<td>(.039)</td>
<td>(.038)</td>
<td>(.040)</td>
</tr>
<tr>
<td>Enough resources</td>
<td>.278***</td>
<td>.274***</td>
<td>.291***</td>
<td>.276***</td>
<td>.283***</td>
<td>.277***</td>
<td>.269***</td>
<td>.282***</td>
</tr>
<tr>
<td></td>
<td>(.073)</td>
<td>(.074)</td>
<td>(.075)</td>
<td>(.072)</td>
<td>(.074)</td>
<td>(.073)</td>
<td>(.074)</td>
<td>(.076)</td>
</tr>
<tr>
<td>Differences in steering</td>
<td>-.210***</td>
<td>-.205***</td>
<td>-.194***</td>
<td>-.216***</td>
<td>-.208***</td>
<td>-.204***</td>
<td>-.203***</td>
<td>-.198**</td>
</tr>
<tr>
<td></td>
<td>(.063)</td>
<td>(.064)</td>
<td>(.065)</td>
<td>(.062)</td>
<td>(.063)</td>
<td>(.063)</td>
<td>(.064)</td>
<td>(.064)</td>
</tr>
<tr>
<td>Square root budget size</td>
<td>.001**</td>
<td>.001**</td>
<td>.001**</td>
<td>.001**</td>
<td>.001**</td>
<td>.001**</td>
<td>.001**</td>
<td>.001**</td>
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<tr>
<td></td>
<td>(.001)</td>
<td>(.001)</td>
<td>(.001)</td>
<td>(.001)</td>
<td>(.001)</td>
<td>(.001)</td>
<td>(.001)</td>
<td>(.001)</td>
</tr>
<tr>
<td>Sanctions: autonomy</td>
<td>-.572**</td>
<td>-.559**</td>
<td>-.584**</td>
<td>-.535**</td>
<td>-.557**</td>
<td>-.542**</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.260)</td>
<td>(.259)</td>
<td>(.262)</td>
<td>(.262)</td>
<td>(.262)</td>
<td>(.265)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of municipalities</td>
<td>.073</td>
<td>.047</td>
<td>.078</td>
<td>.044</td>
<td>.021</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.48)</td>
<td>(.094)</td>
<td>(.071)</td>
<td>(.077)</td>
<td>(.080)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personnel Autonomy</td>
<td>.047</td>
<td>.047</td>
<td>.078</td>
<td>.044</td>
<td>.021</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.094)</td>
<td>(.094)</td>
<td>(.071)</td>
<td>(.077)</td>
<td>(.080)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial Autonomy</td>
<td>.078</td>
<td>.047</td>
<td>.078</td>
<td>.044</td>
<td>.021</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.047)</td>
<td>(.094)</td>
<td>(.071)</td>
<td>(.077)</td>
<td>(.080)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust</td>
<td>.341</td>
<td>.328</td>
<td>.335</td>
<td>.329</td>
<td>.339</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.048)</td>
<td>(.048)</td>
<td>(.048)</td>
<td>(.048)</td>
<td>(.048)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>.327</td>
<td>.296</td>
<td>.264</td>
<td>.341</td>
<td>.328</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.048)</td>
<td>(.048)</td>
<td>(.048)</td>
<td>(.048)</td>
<td>(.048)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>112</td>
<td>112</td>
<td>112</td>
<td>112</td>
<td>112</td>
<td>112</td>
<td>112</td>
<td></td>
</tr>
</tbody>
</table>

* p < 0.10, ** p < 0.05, *** p < 0.01. Reported are B-statistics (standard deviations).

We thus find strong evidence for two hypotheses: that differences between municipalities in steering MOCs negatively affect performance (H4) and that access to resources positively affects performance (H5c). We find mixed evidence for the hypothesis that MOCs’ size positively affects performance (H5a), specifically finding a positive effect for size in terms of budgets and a negative effect for size in terms of employee numbers. Next, while we find evidence for the correlation between performance and a particular type of steering (H2a) that involves taking away autonomy in the event of bad performance, we cannot disprove the existence of an endogeneity problem for that correlation, and thus do not consider this hypothesis supported. We further find no evidence for the relevance of autonomy (H1), trust (H3), and many background factors (H5) for performance.

5.5.2 Robustness: factor check

In the previous subsection we have offered robustness checks in the form of removal of or addition of key independent variables to our model. One valid concern might be the dependency of our model on the factor we choose for our dependent variable; moreover, factorizing performance may have limited the extent to which we can understand the mechanisms behind our correlations. We performed an additional robustness check by splitting up our factor into its three components: efficiency, effectiveness, and quality, and running OLS-regressions of our model (2) on the individual factor components (we drop the predictor of sanctions regarding autonomy, for which we could not disprove the endogeneity problem).

Table 4 reports the outcomes of the individual regressions. The outcomes show that our predictors affect performance in different ways that are obscured by using a factor.
as our dependent variable. Table 4 demonstrates that while having more employees negatively affects all types of performance, the other predictors show more specific effects. When MOCs lack resources, this affects their efficiency and effectiveness (p < 0.01), but we could not find that this was true at the same significance threshold for their quality (p < 0.1). Similarly, differences in steering disrupt efficiency and quality (p < 0.01), but we could not prove this same effect for effectiveness (p < 0.1). Budget size affects effectiveness and quality (p < 0.01) but not efficiency. While these differences could be due to sample size (the trend in all is not dissimilar), an alternative interpretation is that they challenge factorization of performance as we did here (despite the fact that our factor loadings for performance were acceptable). Thus we recommend caution in factorizing performance variables.

Table 4: The results of OLS regression model (2) on individual components of performance

<table>
<thead>
<tr>
<th></th>
<th>Efficiency</th>
<th>Effectiveness</th>
<th>Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log employees</td>
<td>-.158***</td>
<td>-.181***</td>
<td>-.154***</td>
</tr>
<tr>
<td></td>
<td>(.057)</td>
<td>(.046)</td>
<td>(.043)</td>
</tr>
<tr>
<td>Enough resources</td>
<td>.450***</td>
<td>.275***</td>
<td>.133*</td>
</tr>
<tr>
<td></td>
<td>(.109)</td>
<td>(.089)</td>
<td>(.082)</td>
</tr>
<tr>
<td>Differences in steering</td>
<td>-.283***</td>
<td>-.153*</td>
<td>-.194***</td>
</tr>
<tr>
<td></td>
<td>(.094)</td>
<td>(.077)</td>
<td>(.070)</td>
</tr>
<tr>
<td>Square root budget size</td>
<td>.001</td>
<td>.002**</td>
<td>.002***</td>
</tr>
<tr>
<td></td>
<td>(.001)</td>
<td>(.001)</td>
<td>(.001)</td>
</tr>
<tr>
<td>R^2</td>
<td>0.252</td>
<td>0.222</td>
<td>0.194</td>
</tr>
<tr>
<td>N</td>
<td>112</td>
<td>112</td>
<td>112</td>
</tr>
</tbody>
</table>

* p < 0.10, ** p < 0.05, *** p < 0.01. Reported are B-statistics (standard deviations).

5.5.3 Robustness: mediation check

Since stepwise regression removes variables with high collinearity scores, it is possible that the variables found here are mediators of the relationship between another variable and performance. We conduct univariate OLS regressions of our other variables on performance to understand the mechanisms better. Wherever univariate regressions find statistically significant predictors of performance that are removed during the stepwise regression, these predictors must be either highly collinear with, or be fully mediated by, our found predictors.

We find one additional predictor through this test: legal autonomy (see Table 5). In a univariate OLS regression, legal autonomy has a statistically significant positive relationship with performance, i.e., municipally owned corporations based in private law perform better. However, this relationship is fully mediated by personnel, suggesting that legal autonomy induces more personnel which in turn leads to lesser performance.
5.6 Discussion

5.6.1 Findings and implications

Table 5 lists our hypotheses again and indicates which hypotheses are supported. We uncover three key predictors for MOCs’ performance.

Table 5: Hypotheses and findings

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Evidence?</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: Autonomy positively affects MOCs’ performance.</td>
<td>No</td>
</tr>
<tr>
<td>H2. Ex-post steering (through performance management) positively affects MOCs’ performance.</td>
<td>No</td>
</tr>
<tr>
<td>H3. Trust between MOCs and their owner-municipalities positively correlates with MOCs’ performance.</td>
<td>No</td>
</tr>
<tr>
<td>H4. Differences between principal-municipalities in steering MOCs negatively affect MOCs’ performance.</td>
<td>Yes</td>
</tr>
<tr>
<td>H5a. MOCs’ size positively affect their performance.</td>
<td>5a and 5c: Yes.</td>
</tr>
<tr>
<td>H5b. For more technical services, MOCs’ performance will be lower.</td>
<td>The rest: No.</td>
</tr>
<tr>
<td>H5c. MOCs’ access to resources positively affects their performance.</td>
<td>Yes</td>
</tr>
<tr>
<td>H5d. Older MOCs have higher performance.</td>
<td></td>
</tr>
<tr>
<td>H5e. MOCs’ corporate status affects their performance.</td>
<td></td>
</tr>
</tbody>
</table>

First, access to resources matters. It appears one cause of worse performance among municipally owned corporations, at least in the view of the directors, is that municipally owned corporations are underfunded at a reasonable frequency. It is possible that an endogeneity problem exists here – that worse performance causes municipally owned corporations to be underfunded instead – but both directions of the relationship feasibly exist. Future research should look into whether (1) underfunding is a frequent problem in municipally owned corporations, whether (2) it objectively exists, or is only perceived to exist by directors, and whether (3) underfunding is a cause or a consequence of worse performance in municipally owned corporations. We recommend policymakers to critically examine the adequacy of funding for municipally owned corporations on a case-by-case basis.

Second, organization size matters, but not necessarily in the way that we would predict – budget size positively affects performance, primarily through effectiveness and quality, while the number of employees negatively affects performance across all dimensions. Further research needs to be conducted on why the latter is the case, but one mechanism could be that one cause of bad performance in MOCs could be in the hiring of too much personnel, just like there is evidence of excess employment in SOEs (Boycko, Shleifer, and Vishny 1996). One interesting finding here from earlier research is that this relatively high amount of personnel particularly exists in municipally owned corporations that fall under public-law, and exists less in municipally owned corporations operating under private law (Voorn, Van Genugten, and Van Thiel 2018b). We encourage policymakers to carefully examine whether excessive personnel can be a source of inefficacy in MOCs, and we encourage researchers to look into whether this is indeed the mechanism that underlies the negative correlation between personnel numbers and perceived performance.
Third, and perhaps the key finding that sets MOCs apart, relates to the effects of the multiplicity of owners that MOCs frequently have. Our stepwise regression confirmed that differences in steering between municipalities are a key cause of reduced performance for MOCs with multiple municipal owners, and in this, MOCs may operate substantially differently from SOEs and agencies. We provisionally find that their multiplicity of principals, more than steering or management types, trust, autonomy, and many background characteristics, is key to understanding their performance. Further research could demonstrate further whether our hypothesis that multiplicity of principals causes a collective action problem in steering and monitoring is indeed true in practice, and what potential solutions exist. For policymakers, we recommend particular attentiveness in coordinating the governance of municipally owned corporations when they have multiple shareholders.

5.6.2. Limitations

Our study was set in the Netherlands, and as such our findings may be limited by context. Two contextual factors that may particularly affect our findings are Dutch legislation and the Netherlands' relatively high population density. The Wet gemeenschappelijke regelingen mandates the presence of politicians on supervisory boards of public-law MOCs, which may prevent potential solutions to the multiple principal problem through delegation, as it mandates a multi-principal board. Moreover, the Netherlands' high population density may make inter-municipal cooperation (and thus jointly-owned MOCs) less effective than it is in other countries (Bel and Warner 2016). Further research should show whether our findings can be generalized to other countries, and perhaps which lessons The Netherlands can learn from other countries in governing intermunicipal cooperation through MOCs.

Moreover, our study, in addressing the entire population of MOCs, dealt with a large variety of respondents in organization types, sectors, sizes, and ages. In the context of such heterogeneous data and the relatively high number of variables, although they provide more information, Type I errors (errors related to overfitting the data) become more likely. We tried to mitigate these by building our theoretical model before collecting the data, so that no more data was collected than necessary, but Type I errors can never be fully avoided. However, the heterogeneity of our population is simultaneously a benefit, enabling us to generalize our findings further than previous (case study based or sector based) research of MOCs.

A last limitation of the study is that all findings are based on survey data and thus on self-assessment, which we opted for because other performance measures in MOCs are likely unreliable. This means that common-method bias cannot be ruled out. Several procedural remedies were used in the survey design to limit common source bias (see MacKenzie and Podsakoff (2012) and Saris et al. (2010)), including reducing the potential for social desirability bias in item wordings, reducing ambiguity in scale items by using pre-validated scale items, and eliminating common scale properties (by using different scales both among independent variables and between independent and dependent variables). However, we cannot fully rule out the possibility of common source bias. Moreover, our performance measures are limited in that they do not take into account long-run ‘dynamic’ performance indicators, such as sustainability and stability, profitability, indebtedness and capacity to renew assets, and are absolute rather than
relative, thus they should not be used in a comparative light. For this reason, we encourage further research into this pressing topic.

5.7 Conclusion
There has been much research into the predictors of performance of state-owned enterprises (SOEs) and government agencies, and many policies have been implemented to try to guarantee performance of national-level external public service organizations. However, much less research has been conducted at the local level among municipally owned corporations (MOCs), and governance of local at arms’ length organizations has often been limited to the minimum legal requirements (Aars and Ringkjøb 2011). We do not know whether this is appropriate, and multiple problems have been pointed out for the governance of MOCs, such as entanglements between government and management (Bergh et al. 2018), too few checks on management (Garrone, Grilli, and Rousseau 2013), and conflicts between multiple principals (Voorn, Van Genugten, and Van Thiel 2019).

Since MOCs are becoming increasingly numerous, it is vital to understand what makes them perform. We provisionally find that many of the predictors deemed important for the performance of SOEs and government agencies do not seem to be predictors for MOCs. We also find no evidence of the effectiveness of steering, management, trust, autonomy, and background variables other than organization size and access to resources, and we caution researchers and practitioners to use literature on externalization on the national level to draw conclusions about the local level, as theories on SOEs and agencification do not fully grasp the complexities MOCs face.

That said, our findings are still tentative, and our measure of performance is limited, based in perceptions, and does not take into account long-term effects; our model therefore has limited explanatory power. Future research should be done using other measures of performance; in particular more dynamic, long-term, and objective measures of performance would contribute to the current literature. Future research could also demonstrate how municipally owned corporations perform in a comparative light, i.e., vis-à-vis local bureaucracies. However, for reasons outlined in our methodology section, we caution researchers not to rely too much on traditional profitability and efficiency indices, as they are subject to municipal policy decisions that can strongly skew these numbers.

The tentative finding of our paper is that the best predictor of performance of MOCs, beyond characteristics related to their size and access to resources, relates to the multiplicity of their owners. Differences in steering between municipalities provisionally seem to be a cause of reduced performance for MOCs with multiple municipal owners. We encourage scholars on local corporatization and intermunicipal cooperation to focus among others on this problem of multiple principals, as it potentially is a key determinant of the success of local corporatization.
References


### Appendix A: Measurement scales (single item indicators excluded)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Measures</th>
<th>Items</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Autonomy</strong></td>
<td>Personnel autonomy</td>
<td>7 items (KMP .867, sig .000)</td>
<td>Yes (2), With consent shareholders (1), No (0)</td>
</tr>
</tbody>
</table>

**Can your organization make decisions regarding:**

i. Deciding on hiring policies regarding new personnel  
ii. Hiring temporary personnel  
iii. Hiring permanent personnel  
iv. Advancing personnel  
v. Firing personnel  
vi. Setting wages for personnel  
vii. Deciding on pension arrangements for personnel

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Measures</th>
<th>Items</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Autonomy</strong></td>
<td>Financial autonomy</td>
<td>6 items (KMO .776, sig .000)</td>
<td>Yes (2), With consent shareholders (1), No (0)</td>
</tr>
</tbody>
</table>

**Can your organization make decisions regarding:**

i. Setting tariffs or prices for products or services  
ii. Making investments  
iii. Taking loans  
iv. Shifting funds between years  
v. Shifting funds between material budgets and personnel budgets  
vi. Participating in private-law organizations

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Measures</th>
<th>Items</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Autonomy</strong></td>
<td>Budget source autonomy</td>
<td>7 items (KMP .867, sig .000)</td>
<td>Percentage of budget (0-100), items must add up to 100</td>
</tr>
</tbody>
</table>

**Please estimate the percentage of your organization’s budget derived from:**

i. Municipal budgets  
ii. Tariffs or prices charged to municipalities  
iii. Tariffs or prices charged to private parties  
v. Tariffs or prices charged to consumers  
vi. Other public funds  
vi. Other, namely…
Appendix A: Measurement scales (single item indicators excluded) (cont.)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Measures</th>
<th>Items</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust</td>
<td>N/A</td>
<td>5 items (KMO .617, sig .000)</td>
<td>Strongly agree (5) – Strongly disagree (1)</td>
</tr>
</tbody>
</table>

To what extent do you agree with the following statements?

i. The organization aligns itself with the goals of the municipal owner(s)
ii. The organization shares all information with the municipal owner(s)
iii. The organization is flexible towards the municipal owner(s)
iv. There is a high degree of trust between the organization and the municipal owner(s)
v. The way the organization interacts with the municipal owner(s) displays trust

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Measures</th>
<th>Items</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance</td>
<td>Output</td>
<td>3 items (KMO .725, sig .000)</td>
<td>Self-assessment (1-10)</td>
</tr>
</tbody>
</table>

What grade would you assign the organization regarding:

i. Effectiveness
ii. Efficiency
iii. Quality
Chapter 6
Chapter 6: Professional Managers, Public Values? Predictors of the Stewardship of MOCs

6.1 Introduction

Corporatization is an increasingly common trend in local public service delivery, at least in many European countries (Citroni, Lippi, and Profeti 2015; Ferry et al. 2018; Grossi and Reichard 2008; Schoute, Budding, and Gradus 2017). Corporatization can bring advantages, such as lesser politicization of service delivery (Bourdeaux 2008) and more efficient public service delivery (Voorn, Van Genugten, and Van Thiel 2017). However, it also makes governance more difficult, by distancing service delivery from public owners (Garrone, Grilli, and Rousseau 2013). As Bozeman (2002) writes: “Due to the rise of ‘government by proxy,’ […] in some cases there is insufficient government capacity to provide for public values” (p. 152). Indeed, some authors are concerned about the extent to which ‘at arm’s length’ municipally owned corporations (MOCs) make it less likely that ‘public values’ are retained (Bourdeaux 2008; Da Cruz and Marques 2011; Ferry et al. 2018; Lindholm 2019; Van Genugten, Van Thiel, and Voorn 2019).

The objective of this study is to analyze what factors underlie the presence of ‘public values’ in MOCs, considering in particular their stewardship to society: the “responsibility, accountability and authority for public action” of MOCs (following Skelcher 2000, 10). We address the entire population of 799 Dutch MOCs with a questionnaire exploring various possible predictors of their perceived stewardship to society. We find that the best predictor of perceived stewardship to society in MOCs is the extent to which they have strategic managerial autonomy in target-setting (contributing positively to stewardship to society). Our finding challenges the literature on public value failure, which argues that government by proxy is likely to lead to lesser public values. However, our model only explains a small part of the perceived stewardship to society of MOCs, and we tentatively suggest that public values in MOCs might depend less on their governance structures and background variables and more on the individuals that govern and manage them.

We organize the remainder as follows. In section 2, we describe the background of this study. In section 3, we discuss possible predictors of stewardship to society in MOCs. In section 4, we explain our methodology. In section 5, we present the results of our analysis and test the robustness of our data. In section 6, we discuss our findings in light of the theory and the limitations. In Section 7, we conclude.

6.2 Background and relevance

Municipally owned corporations (MOCs) are organizations that have independent corporate status, are solely or jointly owned by municipalities, and typically have large legal and managerial autonomy (Voorn, Van Genugten, and Van Thiel 2017). The autonomy granted to them is a driving force behind their increasing popularity (Grossi and Reichard 2008). Municipalities hope that MOCs, through their autonomy, can improve efficiency (Krause and Van Thiel 2019; Voorn, Van Genugten, and Van Thiel 2017).

15 While in this chapter we consider stewardship from a ‘public values’ angle, we consider stewardship an aspect of the performance of MOCs.
However, MOCs are also utilized as a step towards privatization (Cruz et al. 2014; Marra 2007), to alleviate fiscal stress (Citroni, Lippi, and Profeti 2013; Ferry et al. 2018; Grossi and Reichard 2008; Tavares 2017), or to charge user fees (Tavares and Camões 2007).

A substantial part of the literature on (local) corporatization is concerned about the presence (or absence) of public values in MOCs, and particularly about MOCs’ stewardship to society (Bourdeaux 2007; Da Cruz and Marques 2011; Ferry et al. 2018; Lindholst 2019; Van Genugten, Van Thiel, and Voorn 2019). In MOCs, decision-making power is shifted to appointed boards (Flinders and Matthews 2010), which shifts responsibility, accountability and democratic authority away from elected actors (Skelcher 2000). Municipalities cannot fully observe the interests and behavior of the professional managers on these appointed boards, and that causes some problems for MOCs’ societal accountability (Van Genugten, Van Thiel, and Voorn 2019). Due to the hybrid nature of MOCs as public organizations with often business-like logics (Andersen and Torsteinsen 2017), it is important for municipalities that MOCs retain stewardship to society after corporatization.

However, academics have conducted little large-scale research about what contributes to public values like stewardship to society in MOCs. While various researchers have argued that the extent to which MOCs fulfill public objectives should not be taken for granted (Bourdeaux 2008; Da Cruz and Marques 2011; Ferry et al. 2018; Van Genugten, Van Thiel, and Voorn 2019), actual academic knowledge on how to retain public values after corporatization is still missing. This is problematic particularly for practitioners, as it remains unclear what governance mechanisms can be implemented to safeguard public values in their arm’s length bodies.

Knowledge of this is particularly important, because while we know little about the predictors of stewardship to society in MOCs, we know that MOCs are taking up increasingly prominent roles in local public service delivery (Aars and Ringkjøb 2011; Citroni, Lippi, and Profeti 2013; Ferry et al. 2018; Voorn, Van Genugten, and Van Thiel 2017). Aars and Ringkjøb (2011) note that the number of MOCs in Norway increased from 850 in 1997 to more than 2,500 in 2008. Bergh et al. (2018), using longer time series data, find an increase of the number of municipal enterprises in Sweden from 250 in 1965 to 1,750 in 2015. Ferry et al. (2018) find a 50 per cent increase in corporatization in the United Kingdom between 2010 and 2016; Voorn, Van Thiel, and Van Genugten (2018) point out that going back further in time based on the data of Crediop (2004) shows that the bulk of corporatization in the UK already occurred before this period. Gradus and Budding (2018), using time series data for every year from 1999 to 2014, find that the frequency of the use of MOCs for service delivery in the Netherlands increased from use for about 6% of services in 1999 to use for just over 30% in 2010, after which it remained somewhat steady. Given this growth in the use of corporatization in all European countries where it has been tracked, it is important for local governance to understand how their public values can be safeguarded.

6.3 Theory

6.3.1 Public values and stewardship to society

There is a substantial body of research on the values of public sector organizations (cf. Bozeman 2002, 2007; De Bruijn and Dicke 2006; De Graaf and Van Der Wal 2010;
Jørgensen and Bozeman 2007; Lyons, Duxbury, and Higgins 2006; Van der Wal and Huberts 2008; Van Thiel and van der Wal 2010). Fueling the academic debate on public values in public sector organizations is the increasing use of business-like approaches to public service delivery following New Public Management in many countries (Hood 1995). In the face of this trend towards ‘government by proxy’ (Bozeman 2002), many researchers have voiced concerns about the government’s ability to safeguard classical public values in a modern administration (Bozeman 2002; De Bruijn and Dicke 2006).

It is especially surprising that given this background of the public value literature, there has been little research into the effects of corporatization on public values (Van Thiel and van der Wal 2010). Research has focused extensively on the distinction between public and private organizations, while differences within the public sector have received less attention (Van der Wal and Van Hout 2009). Despite the fact that much of the literature on public value failure has challenged ‘government by proxy’ (Bozeman 2002), arm’s length bodies remain understudied, and particularly little is known about public values at the local level in municipally owned corporations (Van Genugten, Van Thiel, and Voorn 2019).

In this article, we focus on procedural public values (Bozeman 2002, 64; De Bruijn and Dicke 2006, 719), i.e. the public values that focus around the “responsibility, accountability and authority for public action” of MOCs (following Skelcher 2000, 10), that we call ‘stewardship to society’. Similar public values have been measured in public sector organizations before (Andrews and Entwistle 2010; Andrews and Van de Walle 2013; Brinkerhoff and Brinkerhoff 2011; De Bruijn and Dicke 2006; Pandey 2010; Warner and Hefetz 2002). However, to the best of our knowledge, there has not been research into predictors of public values in arm’s length bodies, and certainly not in MOCs.

We consider various predictors of the presence of procedural public values in MOCs.

6.3.2 Predictors of public values

6.3.2.1 Managerial autonomy

One key reason to engage in ‘governance at arm’s length’ through MOCs is to allow autonomous (non-political) delivery of public services (Grossi and Reichard 2008). Following principal-steward theory, autonomy is expected to lead to increased feelings of responsibility and motivation in MOCs (cf. Schoorman, Mayer, and Davis 2007; Van Thiel and Yesilkagit 2011). However, following principal-agent theory, autonomy creates distance, which is expected to negatively affect MOCs: as the distance between public service organizations and their political principal increases, public objectives may be less likely to be satisfied (Brown and Potoski 2003a) and accountability can be lost (Moynihan 2006). This distance also creates more opportunistic behavior: politicians may use MOCs for blame-shifting, and may be less inclined to monitor (Shleifer and Vishny 1994, 1997).

Generally, the literature frames the negative effect as stronger than the positive effect, i.e., managerial autonomy is expected to have a negative effect on the stewardship of arm’s length organizations. This is argued in the literature on agencification (Overman 2017; Overman, Van Genugten, and Van Thiel 2015; Overman, Van Thiel, and Lafarge 2014; Schillemans 2008, 2011), and is also often argued for MOCs (Bergh et al. 2018; Bourdeaux 2004; Ferry et al. 2018; Garrone, Grilli, and Rousseau 2013). Thus, our first hypothesis is:
H1: Managerial autonomy negatively affects stewardship to society in MOCs.

6.3.2.2 Legal autonomy
MOCs can operate under public (government) law, but they can also operate under private (commercial) law. MOCs operating under public law tend to be more political and less autonomous than their counterparts operating under private law, because public-law provisions mandate forms of political control of these MOCs that do not exist under private law (usually, presence of political executives on the board of directors). This is true in MOCs in many countries (Van Genugten, Van Thiel, and Voorn 2019). To paraphrase Zijlstra (2008): in principle, private-law organizations are free to do anything that is not prohibited by the law, and public-law organizations are unfree except to execute what they are allowed by law. In other words, private-law organizations have more legal autonomy (Verhoest, Peters, et al. 2004).

Although the literature on expectations about legal autonomy is much scarcer, the same reasoning about expectations should apply as for managerial autonomy: legal autonomy reduces political control, which reduces the chance that the objectives of the public principals are met. Simultaneously, legal autonomy (potentially) makes political rent-seeking more difficult. We expect the former effect to be more dominant than the latter. Thus, our second hypothesis is:

H2: MOCs operating under public law demonstrate more stewardship to society than MOCs operating under private law.

6.3.2.3 External governance
Another factor with a predicted effect on stewardship to society in MOCs is external governance, and in particular performance management. This effect is more ambiguous.

On the one hand, according to principal-agent theory, performance management helps to enforce the wishes of political principals and thus acts as an accountability mechanism for MOCs that encourages stewardship to society. Clear objective-setting can make the behavior of MOCs more measurable, and evaluations and monitoring procedures help the government assess whether objectives are actually achieved, with positive effects for accountability (Mayne 2017; Pollitt 2005; Wholey and Hatry 1992). Next, performance measurement makes governance of MOCs easier, and makes it easier for political principals to encourage their democratic nature and responsiveness to society.

On the other hand, according to principal-steward theory, a focus on extrinsic motivation through performance management can ‘crowd out’ intrinsic motivation (Benabou and Tirole 2003; Frey 1994, 1997) and in that way lead to reduced motivation and negative effects on stewardship (Davis, Schoorman, and Donaldson 1997b; Schillemans 2013; Van Slyke 2006). Moreover, it is argued in the literature that when objectives are precisely measured, this may inspire managerial performance only to the letter of the contract (Bernheim and Whinston 1998; Macaulay 2018; Weber and Mayer 2011), which would reduce the responsiveness and democratic nature of MOCs. Thus, relational contracting is important, and a focus on governance through trust-building can motivate, reduce information asymmetries, and may make MOCs more ‘public’ in nature.

An increasing number of authors argue that principal-agent theory and principal-steward theory, and thus performance management and relational governance, are not necessarily mutually exclusive (Davis, Schoorman, and Donaldson 1997a). For instance,
Van Thiel (2011) argues that agency-based governance works when the professional manager is an agent, that relational governance works when the professional manager is a steward, and that stewardship is only discouraged when there is a mismatch. Thus, salient governance involves using governance strategies on a case-by-case basis, depending on individuals and circumstances. Therefore, our third hypothesis is:

H3a: Performance management positively affects the stewardship to society of MOCs.
H3b: Relational governance positively affects the stewardship to society of MOCs.
H3c: Trust positively affects the stewardship to society of MOCs.

6.3.2.4 Multiplicity of principals
One key aspect that sets MOCs apart is the frequent multiplicity of principals in MOCs (Voorn, Van Gennep, and Van Thiel 2018). More than on a national level, MOCs have multiple owners, potentially inducing conflicts in governance (Bel and Sebô 2018; Blaeschke and Haug 2018; Blāka 2017; Cäker and Nyland 2017; Sørensen 2007; Soukopová and Vaceková 2018), which may be problematic for public values for several reasons. In particular, when municipalities are heterogeneous in their interests, they may have incentives to lobby MOCs to pursue their interests above those of other municipalities. This creates cross-pressure for MOCs, which gives them more space to set their own targets and agendas (Garrone, Grilli, and Rousseau 2013) and makes them less accountable and makes behavior less measurable. We expect this intermunicipal ownership to negatively contribute to stewardship to society in MOCs.

One often pursued solution to this problem is to delegate responsibilities for governance to the largest municipality (Bel and Sebô 2018; Voorn, Van Gennep, and Van Thiel 2019). However, this can erode the democratic nature of such multi-owned MOCs, and may lead to inequitable situations, where the wishes of the largest municipality, rather than the public interest, become dominant (Cäker and Nyland 2017; Spicer 2017). We thus expect that a key role for the largest municipality in governance, while it is a potential solution to the multiple principal problem, also negatively affects MOCs’ stewardship to society.

H4a: Intermunicipal ownership negatively affects stewardship to society in MOCs.
H4b: A key role for the largest municipality in governance negatively affects stewardship to society in MOCs.

6.3.2.5 Internal governance: board structure
Board structure may also affect stewardship to society. First, board diversity is expected to contribute to MOCs’ stewardship to society, as diversity of backgrounds and perspectives adds to board discussion and mitigates groupthink (Forbes and Milliken 1999; t Hart 1990), and may help MOCs to better reflect on the interests of the public. Among commonly perceived types of diversity to contribute to public values in boards are professional diversity, international diversity, and gender diversity (Jehn, Northcraft, and Neale 1999; Miller and Del Carmen Triana 2009; Walt and Ingleby 2003; Williams and O'Reilly III 1998). Next, board size may affect stewardship: larger boards are likely to have more diverse thinking.

Thus, we can formulate the following hypotheses:
H5a: Board diversity positively affects stewardship to society in MOCs.
H5b: Board size positively affects stewardship to society in MOCs.

6.3.2.6 Background variables
Beyond these elements, we include some background variables that are potentially linked to stewardship to society. Organization size in terms of budget and number of employees may affect stewardship to society, increasing diversity in the organization, which may increase their responsiveness and accountability to society. The sector in which organizations operate may matter, because some sectors can be more technical than others, and regulators have more difficulty regulating more technical services because of lack of expertise or capacity, leading to more autonomy in those sectors (Brown and Potoski 2003b, 2005; Tavares and Camões 2010) and thus lesser accountability and responsiveness. Next, organization age may affect stewardship to society, but we do not know in which direction: more settled organizations are more likely to have established salient practices, and so may be more accountable and responsive; conversely, information asymmetries are likely to grow over time, and so older organizations may be less ‘public’.

6.4 Method

6.4.1 Procedure
In February 2018, we submitted a survey to directors of all Dutch MOCs. In particular, directors were sent a letter through postal mail that contained links (shortened and complete) to an online survey administered through Qualtrics. This initial letter contained a deadline of two weeks from the date of submission, as well as a request from the Vereniging voor Nederlandse Gemeenten (the Association of Dutch Municipalities, an umbrella organization for Dutch municipalities), both intended to bolster response. We sent a second letter in March 2018, again with a two-week deadline; following that deadline, we closed the survey.

6.4.2 Population and sample
By law, Dutch municipalities are obligated to include a section 'Verbonden partijen' (translated: 'attached entities') that outlines (partial or complete) municipal ownership of any organization. From November 2017 to January 2018, we systematically went through the most recent budgets of all 390 Dutch municipalities and included all organizations of which they had ownership in a database. We omitted 'empty' holding companies and organizations with no listed address. In total, this yielded a database of 809 MOCs. We sent out letters requesting survey participation to this entire population. 10 letters were returned indicating inability to deliver, and we removed these MOCs from our database, leaving a total population of 799 MOCs.

In total, 243 surveys were returned (response rate 30.4%). 61 of those 243 surveys were incomplete (all under 30% completion); these were excluded for our research. 5 more respondents suggested they had no budget or no employees, and upon further reflection were not independent organizations and were excluded. That left 177 complete surveys (completion rate 73.7%) for analysis.
6.4.3 Survey measures

We based our survey partially on earlier surveys by the COBRA network that were sent to agencies and quasi-autonomous government organizations across a variety of countries (COBRA 2010; Verhoest, Van Thiel, et al. 2004). In particular, we used items measuring autonomy and performance based on the fact that the factor loadings found in those earlier studies support the use of these items. Our Dutch translations were based partially on earlier COBRA-based surveys in the Netherlands (Van Thiel and Yesilkagit 2011; Yesilkagit and Van Thiel 2011); the factor loadings of those translations validate our factors as well. Our survey was furthermore tested in a pilot among former MOC directors and local government experts. We discuss our key measures below. All specific survey items can be found in the Appendix.

The construct managerial autonomy was divided in financial autonomy, personnel autonomy, budget source autonomy, and strategic autonomy, four concepts found as defining sources varying in intensity among municipally-owned corporations (Voorn et al., 2017) and all validated in the original COBRA-survey (COBRA 2010). For financial and personnel autonomy, respondents were given a list of types of autonomy they could have (10 items for financial autonomy, 9 items for personnel autonomy), which they could answer as “yes”, “only with prior consent of shareholders”, or “no”. For measuring budget source autonomy respondents were asked to estimate the percentage of their budgets derived from various sources (municipal budgets, other public budgets, other private budgets, municipality tariffs, general tariffs, private assignments, and other). Higher scores indicate a higher percentage of budgets derived from each source. Strategic autonomy was measured with a single item question: “who sets performance targets?”, with five response possibilities: “we set targets ourselves, without consulting the municipalities”, “we set targets, after consulting the municipalities”, “we set targets together with the municipalities”, “the municipalities sets targets, after consulting us”, and “the municipalities set targets, without consulting us”.

Legal autonomy was measured with a single direct question about the MOC’s corporate status. We asked respondents to select one of the four possible corporate statuses of Dutch MOCs (enterprise, public-law organization, foundation, or association), and retained both this four-category variable and a recoding of this variable to a binary variable (public law or private law).

External governance and performance management was measured using multiple single items. We measured (i) the presence, type, and formalization of target-setting; (ii) the presence of, focus of, and party responsible for evaluations and monitoring; and (iii) the presence and types of bonuses and sanctions.

The construct trust was primarily an own construct based on 5 items that measured the trust that respondents had in owner municipalities (the 5 items were stewardship, information-sharing, flexibility towards the municipality, trust visible in input, and trust visible in output). The factor loadings were just enough to accept this as a factor (KMO measure .617; sig .000); for future studies, alternative measures would be preferred.

The presence of multiple principals was measured by asking for the number of owner municipalities, as well as for the presence of private or other public shareholders. We also asked respondents if they perceived one of the municipalities to be the dominant steering actor on a five-point Likert scale.

Board structure was measured using multiple single items. For this study, we measured (i) the number of board members; (ii) the diversity of board members in
expertise, nationality, and gender; (iii) the existence of a supervisory board; and (iv) the role of the supervisory board. We recoded the diversity variable in three ways: (a) diversity in absolute numbers (e.g. the number of women on the board); (b) diversity in relative numbers (e.g. the percentage of women on the board); (c) a dummy the presence of diversity (e.g. the presence of women on the board).

We also measured background factors with single items. We measured (i) size of organizations, both in number of employees and in size of budget; (ii) age of organizations; and (iii) sector, which we asked as an open question and then recoded ourselves by sector based on the ministries they would fall under if they were national organizations (to allow national-local comparisons). For the indicators organization size, we included both the log and the square root for our modeling to account for non-linear effects. We also created a measure ‘labor intensity’ by dividing the square root of the number of employees by the square root of budget size, to serve as a measure of service technicality. Lastly, we added a measure ‘service measurability’, a binary variable labeled as ‘1’ when respondents described at least 1 performance indicator as measurable.

Lastly, the presence of stewardship to society was measured through self-assessment on a 10-point scale of 3 items, accountability to society, responsiveness to society, and democratic nature of service delivery, as validated in the original COBRA-survey (COBRA, 2010). This factor had acceptable loadings in our data (public values KMO = .662, sig .000).

6.4.4 Strategy of analysis

Given the large amount of variables in our dataset, we opt for stepwise regression, a more automated approach that prevents type II errors and researcher bias that works by feeding all independent variables to the computer, which uses backwards elimination to discard the variable whose loss gives the most statistically insignificant deterioration of model fit, continuing to do so until the model reaches a specified criterion (Thompson 1995). We use the ‘standard’ criteria (probability of F for entry = .05, probability of F for removal = .10).

Stepwise regression has two key limitations. First, it can be prone to overfitting errors (type I errors) (Thompson 1995). This limitation is mitigated by the fact that our independent variables were collected after construction of our conceptual model. Next, stepwise regression assumes linearity in the relationships between dependent and independent variables. We make our data linear using various strategies, by normalizing the dependent variables budget size, number of employees, and organization age, that are expected to have non-linear relationships with public values, and by removing 2 strong outliers for the public values factor.

We include three robustness checks. First, following our analysis, we shrink our ‘best-fit’ model, to observe if this has a substantial impact on model fit. Second, we re-run our regressions independently on the items in our stewardship measure, which will simultaneously help us uncover potential mechanisms. If results are inconsistent, we do not accept our hypothesis. Third, for the results that are robust to this, we perform mediation analysis in order to test whether our findings are (partially) mediated by four potential mediators: managerial autonomy, legal autonomy, corporate status, and trust, which will likewise help us uncover potential mechanisms behind our findings and test the robustness of our findings at once.
6.5 Results

6.5.1 Findings

*Table 1* reports ordinary least-squares (OLS) regressions of all our variables on stewardship to society. Column (1) shows the outcome of our stepwise regression on stewardship to society. The most critical factor predicting MOCs’ stewardship to society seems to be the strategic autonomy of MOCs (significant at the p < 0.01 level). It appears that autonomy in setting targets is related to a higher degree of self-reported stewardship to society. Another factor that significantly negatively affects stewardship to society is the extent to which the largest municipality is responsible for steering, calling attention to the problem of multiple principals. Lastly, trust seems to be positively correlated with stewardship to society.

Columns (2) and (3) reduce the number of predictors to test the model’s robustness. Reducing the number of predictors from (1) to (2) strongly reduces the model’s $R^2$, indicating the relevance of all predictors, but the variable ‘trust’ loses predictive power and becomes non-significant. No significant loss of power occurs between models (2) and (3).

Column (4) shows the key model when controlled for the number of municipal owners, testing whether the responsibility for the biggest municipality steering affects organizations more as the number of owners grow. We find no evidence for this.

Finally, columns (5) and (6) include personnel and financial autonomy in the model to test the model’s robustness. The model is relatively unaffected by their inclusion. Column (7) includes both forms of autonomy at the same time, again with no effect.

Overall, the results in *Table 1* refute particularly hypothesis 1 – in contrast to expectations, managerial autonomy seems beneficial for stewardship to society. The other findings are not robust.

Our model fit is low across all models ($R^2$ ranges from 0.077 to 0.193). This is unusual for stepwise regression and even more unusual for theory-informed stepwise regressions. Thus, either key factors have not been included in our model, or stewardship to society in MOCs depends more on the individuals responsible for governance and management than on organizational structure.

*Table 1: Predictors of stewardship to society*

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
<th>(7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic autonomy</td>
<td>.340*** (.091)</td>
<td>.288*** (.091)</td>
<td>.286*** (.076)</td>
<td>.350*** (.092)</td>
<td>.356*** (.091)</td>
<td>.347*** (.094)</td>
<td>.354*** (.094)</td>
</tr>
<tr>
<td>Trust</td>
<td>.159** (.075)</td>
<td>.056 (.067)</td>
<td>.162** (.075)</td>
<td>.155** (.075)</td>
<td>.155** (.075)</td>
<td>.157** (.076)</td>
<td></td>
</tr>
<tr>
<td>Largest municipality steers</td>
<td>-.138* (.073)</td>
<td>-.129* (.073)</td>
<td>-.141* (.072)</td>
<td>-.138* (.073)</td>
<td>-.141* (.073)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of municipalities</td>
<td></td>
<td>.045 (.050)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personnel Autonomy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.108 (.076)</td>
</tr>
<tr>
<td>Financial Autonomy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.022 (.076)</td>
</tr>
<tr>
<td>N</td>
<td>119</td>
<td>169</td>
<td>169</td>
<td>119</td>
<td>119</td>
<td>119</td>
<td>119</td>
</tr>
<tr>
<td>$R^2$</td>
<td>.150</td>
<td>.081</td>
<td>.077</td>
<td>.193</td>
<td>.165</td>
<td>.151</td>
<td>.165</td>
</tr>
</tbody>
</table>

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Reported for the first two columns are B-statistics (standard deviations).
6.5.2 Sensitivity analysis

In the previous subsection, we have offered one robustness check in the form of removal of or addition of key independent variables to our model. We also perform a robustness check on the dependent variable, by splitting up our stewardship factor into its three components: accountability, responsiveness, and democratic service delivery, and running OLS-regressions of our model (1) on the individual factor components.

Our check demonstrates that strategic managerial autonomy is a robust predictor of stewardship to society, and is a significant predictor of all components of the factor public values (see Table 2). However, our findings are substantially less robust for our other three predictors. Trust appears to correlate quite strongly with accountability to society and responsiveness to society, but not with the democratic level of service delivery. Interestingly, the governance role for the largest municipality is not a significant predictor for individual indicators, but is a significant indicator for them in conjunction, likely because of information gain after factorization.

Table 2: The results of OLS regression model (1) on individual components of stewardship to society

<table>
<thead>
<tr>
<th></th>
<th>Accountability to society</th>
<th>Responsiveness to society</th>
<th>Democratic level service delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic autonomy</td>
<td>.347** (.140)</td>
<td>.326** (.143)</td>
<td>.375** (.160)</td>
</tr>
<tr>
<td>Largest municipality steering</td>
<td>-.016 (.111)</td>
<td>-.122 (.113)</td>
<td>-.137 (.127)</td>
</tr>
<tr>
<td>Trust</td>
<td>.251** (.115)</td>
<td>.228* (.118)</td>
<td>.193 (.131)</td>
</tr>
<tr>
<td>R²</td>
<td>0.083</td>
<td>0.075</td>
<td>0.066</td>
</tr>
<tr>
<td>N</td>
<td>120</td>
<td>120</td>
<td>120</td>
</tr>
</tbody>
</table>

* p < 0.10, ** p < 0.05, *** p < 0.01. Reported are B-statistics (standard deviations).

We run an additional robustness check to consider whether some key factors mediate the relationship between strategic autonomy and stewardship to society: personnel autonomy, financial autonomy, legal autonomy, and trust. We find no evidence for the existence of a mediating effect, and thus autonomy in setting targets appears to be the only direct, significant, and robust predictor of stewardship out of the variables tested.

One possible reason for this could come from goal clarity. It could be that if MOCs have greater control over performance targets themselves, they create more measurable targets, which makes them perceive themselves as more accountable to the public. However, also goal measurability is no significant mediator of the strategic autonomy – stewardship to society relationship (see Table 3).
Table 3: Sobel’s t-test for mediating effects

<table>
<thead>
<tr>
<th></th>
<th>Regression coefficient on mediator</th>
<th>Regression coefficient on stewardship to society</th>
<th>Sobel’s t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel autonomy</td>
<td>.009 (.089)</td>
<td>-.118* (.067)</td>
<td>-0.101</td>
</tr>
<tr>
<td>Financial autonomy</td>
<td>.217** (.086)</td>
<td>-.028 (.068)</td>
<td>1.25</td>
</tr>
<tr>
<td>Legal autonomy</td>
<td>-.131 (.122)</td>
<td>-.122 (.135)</td>
<td>.866</td>
</tr>
<tr>
<td>Trust</td>
<td>-.055 (.086)</td>
<td>.056 (.067)</td>
<td>-0.51</td>
</tr>
<tr>
<td>Goal clarity</td>
<td>-.046 (.191)</td>
<td>-.007 (.192)</td>
<td>0.036</td>
</tr>
</tbody>
</table>

* p < 0.10, ** p < 0.05, *** p < 0.01. Reported for the first two columns are B-statistics (standard deviations).

6.6 Discussion

6.6.1 Findings

We found three significant predictors of stewardship to society in MOCs – strategic autonomy, a steering role for the largest municipality, and trust. However, only one was a robust finding: strategic autonomy was a significant and robust predictor of the perceived stewardship of MOCs. Other factors lacked either robustness or significance.

Our finding that strategic managerial autonomy is a positive predictor of stewardship to society runs counter our hypothesis and the literature on this topic. While a large literature predicts that more autonomous MOCs should feel less public because of their distance to their political principals (Bourdeau 2008; Da Cruz and Marques 2011; Ferry et al. 2018; Garrone, Grilli, and Rousseau 2013; Van Genugten, Van Thiel, and Voorn 2019), we find the opposite: professional managers of MOCs consider themselves to be greater stewards when they have more control over objectives. We have also shown that increased measurability of objectives is not the reason for this.

One explanation comes from public choice theory: by reducing the role of politicians in setting objectives for public service delivery, the goals of MOCs could be less ‘political’ and more ‘public’ – or at least directors of MOCs may perceive it as such. This is in line with findings from some countries of problems in MOCs that are not sufficiently autonomous from politicians (Bergh et al. 2018; Da Cruz and Marques 2011). An alternative explanation comes from stewardship theory: the strategic managerial autonomy granted to MOCs may make them feel more responsible and motivated, and is reciprocated through increased public values (cf. Schoorman, Mayer, and Davis 2007; Van Thiel and Yesilkagit 2011). Future research should help us understand this finding.

A secondary key finding of our study was the surprisingly low fit of our explanatory model, despite it being drawn from a rather extensive amount of predictors all based in the literature. Our most extensive model of the stewardship to society of MOCs explained under 20 per cent of the variation in the stewardship to society of MOCs, which is unusually low, particularly for a stepwise regression, which due to its data-fitting
approach tends to bring higher-fitting models. Our relatively high number of indicators and our relatively low sample size both would also predict higher model fits. Therefore, it is likely that we either missed a crucial predictor of performance in our study, or that the extent to which MOCs have public values is highly dependent on the characteristics of the individuals in the governance relationships (Van Thiel 2011). Both of these possibilities point to the necessity of further research into predictors of the stewardship to society of MOCs, as to the best of our knowledge this is the first study into the public values of such organizations.

6.6.2 Limitations

Our study has various limitations, relating to context, heterogeneity of our sample, and the subjectivity of particularly our stewardship measure. We will address these in turn.

First, our findings may be limited by context, as we addressed MOCs only in a single country: The Netherlands. One contextual factor that may particularly affect our findings is Dutch public law: the Wet gemeenschappelijke regelingen mandates the presence of politicians on supervisory boards of intermunicipally owned MOCs based in public law, which means that public law in the Netherlands inevitably politicizes MOCs. However, our finding that strategic autonomy is a predictor of public values without a mediating effect of legal autonomy implies that this may not be a serious limitation. Moreover, this type of public-law legislation exists in many other countries (Van Genugten, Van Thiel, and Voorn 2019). Nonetheless, further research should show whether our findings can be generalized to other countries.

Second, our findings may be limited by our sample’s heterogeneity. Since our study addressed the entire population of MOCs in the Netherlands, we dealt with a large variety of MOCs in organization types, sectors, sizes, and ages. In the context of such heterogeneous data and the relatively high number of variables, Type I errors (errors related to overfitting the data) become more likely. This appears not to be a problem in our data (judging from the low model fit and high significance of our finding), but we cannot verify this. We call for more data from other countries on the public values of arm’s length bodies.

A last limitation of the study is that all findings are based on survey data and thus on self-assessment. While we used several procedural remedies in our survey design to limit common source bias (MacKenzie and Podsakoff 2012), such as reducing the potential for social desirability bias in item wordings, reducing ambiguity in scale items by using pre-validated scale items, and eliminating common scale properties (by using different scales both among independent variables and between independent and dependent variables), we cannot fully rule out the possibility of common source bias. Moreover, our stewardship measure is subjective and thus deals with perceptions rather than fact. For this reason, we encourage further research using more objective measures of stewardship to society.

6.7 Conclusion

Since MOCs are becoming increasingly numerous, and since it is hard to retain control over them due to their autonomy, it is important to understand how to ensure their commitment to public values. However, until now, no research has been conducted among them to understand what factors underlie such corporations’ stewardship to society. We
use a survey among all 799 MOCs in The Netherlands to try to uncover an answer to this question, and provisionally find only one direct, robust and significant predictor of these corporations’ perceived stewardship to society: their strategic managerial autonomy. In particular, MOCs that have more control over their own performance targets perceive themselves to be greater stewards to the public. This finding contradicts expectations from the literature, as the prevailing view is that MOC’s will become less ‘public’ as they become more autonomous. However, we emphasize that more research is still necessary, particularly using more objective measures of stewardship to society, before governance implications can be drawn.
References


### Appendix A: Measurement scales (single item indicators excluded)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Measures</th>
<th>Items</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Autonomy</strong></td>
<td>Personnel autonomy</td>
<td>7 items (KMP .867, sig .000)</td>
<td>Yes (2), With consent shareholders (1), No (0)</td>
</tr>
</tbody>
</table>

**Can your organization make decisions regarding:**

1. Deciding on hiring policies regarding new personnel
2. Hiring temporary personnel
3. Hiring permanent personnel
4. Advancing personnel
5. Firing personnel
6. Setting wages for personnel
7. Deciding on pension arrangements for personnel

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Measures</th>
<th>Items</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Autonomy</strong></td>
<td>Financial autonomy</td>
<td>6 items (KMO .776, sig .000)</td>
<td>Yes (2), With consent shareholders (1), No (0)</td>
</tr>
</tbody>
</table>

**Can your organization make decisions regarding:**

1. Setting tariffs or prices for products or services
2. Making investments
3. Taking loans
4. Shifting funds between years
5. Shifting funds between material budgets and personnel budgets
6. Participating in private-law organizations

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Measures</th>
<th>Items</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Autonomy</strong></td>
<td>Budget source autonomy</td>
<td>7 items (KMP .867, sig .000)</td>
<td>Percentage of budget (0-100), items must add up to 100</td>
</tr>
</tbody>
</table>

**Please estimate the percentage of your organization’s budget derived from:**

1. Municipal budgets
2. Tariffs or prices charged to municipalities
3. Tariffs or prices charged to private parties
4. Tariffs or prices charged to consumers
5. Other public funds
6. Other, namely…
### Appendix A: Measurement scales (single item indicators excluded) (cont.)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Measures</th>
<th>Items</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust</td>
<td>N/A</td>
<td>5 items (KMO .617, sig .000)</td>
<td>Strongly agree (5) – Strongly disagree (1)</td>
</tr>
</tbody>
</table>

**To what extent do you agree with the following statements?**

i. The organization aligns itself with the goals of the municipal owner(s)
ii. The organization shares all information with the municipal owner(s)
iii. The organization is flexible towards the municipal owner(s)
iv. There is a high degree of trust between the organization and the municipal owner(s)
v. The way the organization interacts with the municipal owner(s) displays trust

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Measures</th>
<th>Items</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stewardship</td>
<td>N/A</td>
<td>3 items (KMO .662, sig .000)</td>
<td>Self-assessment (1-10)</td>
</tr>
</tbody>
</table>

**What grade would you assign the organization regarding:**

i. Accountability to society
ii. Responsiveness to society
iii. Democratic level of service delivery
Chapter 7
Chapter 7: Business Techniques as an Explanation of the Autonomy-Performance link in Corporatized Entities: Evidence from Dutch MOCs

7.1 Introduction

(Semi-)autonomous delivery of public services is a complex topic in the literature on public sector performance. While corporatization – the creation of companies for public service delivery – is a trend, especially in local government (Aars and Ringkjøb 2011; Bergh et al. 2018; Ferry et al. 2018; Grossi and Reichard 2008; Papenfüß et al. 2018; Sancino 2011; Voorn, Van Thiel, and Van Genugten 2018), we still have not fully assessed its effects (Cambini et al. 2011; Voorn, Van Genugten, and Van Thiel 2017). On the one hand, corporatization can solicit expert managers that can deliver services in a more efficacious manner than bureaucracies constrained by law and dominated by political interests (Bourdeaux 2008). On the other hand, political principals have difficulty monitoring and regulating corporatized services to ensure achievement of public objectives (Brown and Potoski 2003; Egeberg and Trondal 2009; Tavares and Camões 2007; Voorn, Van Genugten, and Van Thiel 2017). There remains no consensus if corporatization is in the end harmful or beneficial for public service delivery (cf. Boardman and Vining 1989; Overman and Van Thiel 2016; Verhoest 2005; Verhoest et al. 2010).

In the face of this uncertainty, reasons for corporatizing are often pragmatic, or based in expectation rather than knowledge (Citroni, Lippi, and Profeti 2013, 2015; Grossi and Reichard 2008; Tavares 2017; Tavares and Camões 2007, 2010; Voorn, Van Thiel, and Van Genugten 2018). One such expectation is that corporatization can bring more business-like public service delivery, which might make public service delivery more efficacious – a belief that is a core tenet of New Public Management (Hood 1995). Yet research into whether corporatization is beneficial has rarely studied the usage of business techniques as a mediator of the autonomy-performance link. Consequently, we still do not know how, when, and why corporatization might be desirable, and what role business techniques play in this process.

Our aim in this article is to shed more light on the role of business techniques in corporatization. Specifically, we study the mediating effect of business techniques on the autonomy-performance link among municipally owned corporations (MOCs) – public service organizations operating at arm’s length from the municipal bureaucracy. We address the Netherlands’ entire population of 799 MOCs with a questionnaire exploring their autonomy, self-perceived performance, and use of business techniques, along with background variables. We use measures previously validated in research among agencies by the Comparative Public Organization Data Base for Research and Analysis (COBRA) (see Christensen and Lægreid 2006; MacCarthaigh 2007; Van Thiel, Steijn, and Alix 2007; Van Thiel and Yesilkagit 2011; Verhoest, Bouckaert, and Peters 2007; Verhoest, Peters, et al. 2004; Verhoest et al. 2012; Verhoest, Van Thiel, et al. 2004; Verhoest, Verschuere, and Bouckaert 2007; Verhoest, Verschuere, et al. 2004; Wettenhall 2005; Yesilkagit and Van Thiel 2008, 2011).

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16 A reviewed and altered version of this chapter is (at the moment of publishing) in press as Voorn, Blom, and Borst (in press).
We find a partial mediation effect of the use of internal business techniques on the autonomy-performance link, indicating that (i) more frequent use of internal business techniques positively affects performance, while (ii) yet other facets of managerial autonomy affect performance beyond business techniques alone. We also find that not all managerial autonomy is created equal: autonomy in HRM helps bring about business-like service delivery, while financial autonomy prevents it. One explanation of this could be that corporations with extensive HRM autonomy are more likely to attract personnel from the private sector, creating a more business-like environment in the corporation that aids performance. In line with previous research (cf. Boardman and Vining 1989; Overman and Van Thiel 2016; Verhoest 2005; Verhoest et al. 2010; Voorn, Van Genugten, and Van Thiel 2018), we find no significant direct effect of managerial autonomy on performance in municipally owned corporations.

We organize the remainder as follows. Section 2 describes the background of this study. Section 3 describes the theory on managerial autonomy and business techniques, culminating in 5 hypotheses. Section 4 explains the methods utilized to test our hypotheses. Section 5 reports our results. Section 6 discusses implications and explores potential avenues for future research.

7.2 Background: municipally owned corporations

Municipally owned corporations (MOCs) are organizations “with independent corporate status, managed by an executive board appointed primarily by local government officials with majority public ownership” (Voorn, Van Genugten, and Van Thiel 2017), akin to public authorities in the United States (Bourdeaux 2004, 2007, 2008; Koppell 2010; Landow and Ebdon 2012; Savitch and Adhikari 2017). Since the start of the century, there has been an observable rise in the numbers and budgets of MOCs in many countries (Bergh et al. 2018; Ferry et al. 2018; Gradus and Budding 2018; Grossi and Reichard 2008; Papenfuß et al. 2018; Sancino 2011; Voorn, Van Thiel, and Van Genugten 2018). Understanding their performance is thus an increasing priority (Ferry et al. 2018; Voorn, Van Genugten, and Van Thiel 2017).

MOCs can be seen as a ‘middle road’ between privatization and bureaucratic service delivery. They allow public ownership, while introducing a measure of competition (Leavitt and Morris 2004; Voorn, Van Genugten, and Van Thiel 2019). Through corporatization, managers can be solicited from outside the public bureaucracy, and so, competition is introduced at executive board level, rather than at firm level (Bel et al. 2010; Bel and Fageda 2006, 2010; Van Genugten, Voorn, and Van Thiel 2018; Voorn, Van Genugten, and Van Thiel 2019). This competition may be absent within the public bureaucracy, and privatization and contracting-out may sometimes fail to bring the desired number of bidders; MOCs can be a pragmatic alternative balancing public ownership and competitive pressures for efficacy (Leavitt and Morris 2004; Voorn, Van Genugten, and Van Thiel 2019).

Whether MOCs constitute a more efficacious form of local public service delivery than delivery through the public bureaucracy is yet unclear (cf. Bourdeaux 2007; Cambini et al. 2011; Da Cruz and Marques 2011; Pérez-López, Prior, and Zafra-Gómez 2015; Swarts and Warner 2014; Voorn, Van Genugten, and Van Thiel 2017). In the absence of knowledge about effects, reasons for corporatizing have primarily been pragmatic or based in expectation (Bourdeaux 2004; Citroni, Lippi, and Profeti 2013, 2015; Grossi and Reichard 2008; Rodríguez, Tavares, and Araújo 2012; Tavares 2017;
Tavares and Camões 2007; Wassenaar, Groot, and Gradus 2013). One such expectation is that corporatization can bring more business-like public service delivery, which can make it more efficacious (Overman 2016) – one of the key tenets of New Public Management (Dunleavy and Hood 1994; Hood 1995). Corporatization can ‘replace politics by professionalism’ (Bourdeaux 2008): MOCs can be managerially involved in many business activities, including marketing, retail, research and development, production, purchasing, and diversification practices (Krause and Van Thiel 2019; Lioukas, Bourantas, and Papadakis 1993). Yet the usage of business techniques is rarely studied as a reason why corporatization is more or less efficacious. Our objective in this article is to investigate this link.

7.3 Theory

7.3.1 Managerial autonomy and performance

Much has been written on the relationship between managerial autonomy and performance. On the one hand, managerial autonomy for expert management can introduce a focus on efficacy, which may be absent in local bureaucracies due to the proliferation of political rather than economic incentives (Bourdeaux 2008). On the other hand, political principals have difficulty monitoring and regulating these autonomous managers to ensure that political objectives are achieved (Brown and Potoski 2003; Egeberg and Trondal 2009; Tavares and Camões 2007; Voorn, Van Genugten, and Van Thiel 2017). The question whether we should expect managerial autonomy to be performance-enhancing is in the end an empirical question, and not a theoretical one. Unfortunately, research into the effects of corporatization is limited (Cambini et al. 2011; Lidström 2017; Torsteinsen 2019) and ambiguous (Pollitt and Dan 2013).

For MOCs specifically, the effects of managerial autonomy on performance seem to be either insignificant or small but positive. Torsteinsen et al. (2018) find mixed effects of autonomy on performance of municipally owned corporations in five countries. Voorn, Van Genugten, and Van Thiel (2018) find that the relationship between autonomy and performance in Dutch municipally owned corporations is positive but statistically insignificant. Cambini et al. (2011) and Swarts and Warner (2014) find that corporatization leads to cost savings. Pérez-López, Prior, and Zafra-Gómez (2015) find that whether corporatization is successful depends on the sector where it takes place. Bourdeaux (2007) finds that many corporatization projects fail, and Da Cruz and Marques (2011) find that corporatization does not bring desired effects when autonomy is insufficiently granted. Summarizing, Voorn, Van Genugten, and Van Thiel (2017) conclude in a systematic literature review that MOCs have the potential to increase efficiency compared to municipal bureaucracy, but struggle with high failure rates.

Considering corporatization beyond the local level, evidence is almost exclusively limited to the literature on ‘agencification’ (Egeberg and Trondal 2009; Overman and Van Thiel 2016; Van Thiel et al. 2012; Vining, Laurin, and Weimer 2015). Verhoest (2005) finds that autonomy is performance-enhancing in Flemish public agencies in specific conditions. Overman and Van Thiel (2016) find output losses as a result of agencification in a systematic comparison of 20 countries, and Overman (2017) finds no evidence of satisfaction gains from agencification in a survey of 15 countries. Nelson and Nikolakis (2012) find a positive link between autonomy and performance in
state forest agencies in Australia. Vining, Laurin, and Weimer (2015) find initial gains from autonomy among agencies in Quebec, but suggest that these may plateau over time. Wynen et al. (2014), considering agencies in five countries, uncover a positive effect of autonomy on innovation, but argue that result control can stifle this innovation. Overall, the evidence of the effects of autonomy in public service delivery is mixed (Pollitt and Dan 2013), limited (Cambini et al. 2011; Lidström 2017), and insufficiently comparative (Torsteinsen 2019).

One of the reasons why it is difficult to link managerial autonomy to performance is that managerial autonomy is difficult to study. The construct ‘managerial autonomy’ encapsulates many different types of discretion that corporations may have. The literature identifies three types of managerial autonomy in the public sector and among MOCs specifically (COBRA 2010; Verhoest, Peters, et al. 2004; Verhoest, Van Thiel, et al. 2004; Voorn, Van Genugten, and Van Thiel 2017, 2018). First, strategic autonomy determines who is generally in control of outlining the longer-term strategy and yearly targets for the corporations. Second, financial autonomy determines to what extent the corporations have control over their budget and expenses in the short term, and over investments in the long term. Third, HRM autonomy determines the discretion that corporations have over HRM matters. This is often a defining feature of the autonomy of corporations, given the relative strictness of public sector contract rules in many countries. Yet while the literature distinguishes between these types of autonomy, it does not bring different expectations regarding how these factors affect performance. All types of managerial autonomy make it more difficult for the political principal to steer or monitor the corporation. Simultaneously, all three types of managerial autonomy allow greater freedom for MOCs to manage service delivery in a way that is potentially more efficacious than the public bureaucracy would manage it.

7.3.2 Business techniques

Although it is often argued that managerial autonomy allows MOCs to perform better because they are able to behave in a business-like manner, this mediating mechanism is rarely researched empirically. Moreover, it is often left implicit what behaving in a business-like manner means. This inhibits our understanding of how autonomy affects performance, as it is likely (i) that not all facets of managerial autonomy help bring about business-like behavior and (ii) that not all types of business-like behavior are effective in increasing performance.

One way to define business-like behavior of MOCs is to examine the mechanisms by which they manage the internal organization – hereafter referred to as internal business techniques – and their clients – hereafter referred to as external business techniques. In other words, while managerial autonomy measures what organizations can do, business techniques are about what they actually do in practice. While most research on national-level agencies examines the influence of managerial autonomy on the adoption of internal techniques such as performance management (e.g. Verhoest et al. 2010; Verhoest and Wynen 2018; Wynen, Verhoest, and Rübecksen 2014), some empirical research exists on external techniques, such as innovativeness, as well (Wynen et al. 2014). The expected positive effect of managerial autonomy is on the usage of these techniques is often based on the idea that managerial flexibility allows and motivates public managers to adopt techniques that are in line with the reasons for corporatization, i.e. to become more efficacious. However, according to Verhoest et al. (2010), the relation between autonomy
and internal business techniques in MOCs is not merely explained by economic rationality. Institutional mechanisms play a role as well, as these techniques provide a source of legitimacy towards the principal and the public. In this respect, Blom, Kruyen, Van Thiel, et al. (2018) found that the adoption of business-like personnel systems by national-level agencies was strongly influenced by both a need to achieve legitimacy with their parent ministry and a need to improve service delivery. Building on these findings, it could be expected that, regardless of the type, managerial autonomy in general will lead to an increased use of business techniques. Therefore, the following hypotheses are formulated:

**H1:** Autonomy in Human Resource Management has a significant positive effect on the use of both internal and external business techniques.

**H2:** Autonomy in financial affairs has a significant positive effect on the use of both internal and external business techniques.

**H3:** An organization’s own control over target setting has a significant positive effect on the use of both internal and external business techniques.

One main reason why internal and external business techniques have become popular in public organizations is their alleged effect on performance (Alford and Hughes 2008; Pollitt and Bouckaert 2011). Business administration scholars have consistently found that the adoption of these techniques leads to higher performance outcomes, such as productivity, quality, and efficiency (Combs et al. 2006; Jiang et al. 2012; Staw and Epstein 2000). Although scholars have questioned if the same effects are witnessed in public organizations (Brown 2004; Burke, Noblet, and Cooper 2013), a recent meta-analysis showed that business techniques can be equally effective in the public sector (Blom, Kruyen, Van der Heijden, et al. 2018). Thus, based on the idea that managerial autonomy leads to an increased use of business techniques and that these techniques are related to higher performance, the following hypotheses are formulated:

**H4:** The relationship between all forms of managerial autonomy and performance are partially mediated by the use of internal business techniques.

**H5:** The relationship between all forms of managerial autonomy and performance are partially mediated by the use of external business techniques.

These hypotheses lead to the conceptual model as presented in Figure 1.
7.4 Methods

7.4.1 Data collection

To test the hypotheses, we employed a survey carried out in February 2018 among the directors of all Dutch MOCs. From November 2017 to January 2018, the first author systematically went through the budgets of all 390 Dutch municipalities, which are obliged by law to list MOCs, and included all found MOCs in a database, omitting 'empty' holding companies and organizations with no listed address. This yielded a database of 809 MOCs. Letters were sent requesting survey participation to this entire population. 10 letters were returned indicating inability to deliver. These MOCs were removed from the database, leaving a population of 799 MOCs.

243 of the 799 delivered surveys were returned (response rate 30.4%). 61 surveys were returned incomplete (all under 30% completion); these were excluded. 5 more respondents suggested they had no budget or no employees, and upon further reflection were not independent organizations and were excluded. After listwise deletion of respondents with missing values on one or more of the studied variables, 169 MOCs remained for analysis. We attempted to collect some information about the whole population; unfortunately, many descriptive data were inaccessible or outdated. However, we could compare our population and sample in sector and corporate status, and on those counts we find that the sample is fairly representative of the population.
7.4.2 Survey method

We based the items for our measures (constructs) partially on earlier surveys by the EU network ‘Comparative Public Organization Data Base for Research and Analysis’ (COBRA), sent to agencies and quasi-autonomous government organizations in various countries (COBRA 2010; Verhoest et al. 2012; Verhoest, Van Thiel, et al. 2004). For the purpose of this study, the original questions from the COBRA-questionnaire were translated from English into Dutch. It was possible to use existing Dutch translations of the COBRA-questionnaire, validated by Van Thiel and Yesilkagit (2011), Yesilkagit and Van Thiel (2008), and Yesilkagit and Van Thiel (2011).

To ensure that our measures were applicable also at the local level, we adjusted our survey to target specifically municipally owned corporations in terminology, and conducted a pilot study of our survey among local government experts and former MOC directors. We also used this pilot study to test the terminology used in the survey. Multiple changes were made based on our findings in the pilot study, in particularly in the control variables (discussed in the next section); our measures for managerial autonomy, business techniques, and organizational performance were deemed also applicable at the local level by our pilot study respondents. We revisit the limitation of the COBRA survey in the conclusion.

7.4.3 Measures

The construct managerial autonomy included the measures financial autonomy, HRM autonomy, and strategic autonomy, all validated in the original COBRA-survey (COBRA 2010). For financial and HRM autonomy, respondents were given a list of types of autonomy they could have (8 items for financial autonomy, 8 items for HRM autonomy), which they could answer as “yes”, “with prior consent of shareholders”, or “no”. For measuring strategic autonomy respondents were asked to what extent they have a leading role in the creation of performance targets. Possible answers ranged from 1 (The shareholders set targets) to 5 (The MOC sets targets itself).

The construct business techniques included the measures internal business techniques and external business techniques following the original COBRA-survey (COBRA 2010). Respondents answered questions about the extent to which they applied several business techniques (5 internal business techniques and 3 external techniques) on a 4-point Likert scale ranging from 1 ((almost) never) to 4 ((almost) always).

The construct organizational performance was measured with 9 items from the validated performance scale of the COBRA-survey (COBRA 2010). The respondents answered questions about the extent to which they perceived that their organization performed well in several areas on a 10-point scale ranging from 1 to 10. These items cover various aspects of organizational performance: goal performance, process performance, personnel performance, and system performance to measure the latent construct ‘performance’. We emphasize that these items are self-evaluated and do not include accountability or governance measures, but focus on management.

Several control variables were included. The number of municipal owners was included as a continuous variable. Whether the MOC has public and/or private shareholders was measured using two dummy variables (‘yes’ or ‘no’ for public shareholders; ‘yes’ or ‘no’ for private shareholders). Furthermore, the number of employees, the size of the budget and the age of the organization were included as continuous variables.
All items of the used constructs can be found in Appendix A.

7.4.4 Strategy of analysis

Our five hypotheses were tested using structural equation modeling performed in Mplus version 7.4 (Muthén, Muthén, and Asparouhov 2016). A two-step approach was adopted where, first, we examined the measurement model, followed by the analysis of the structural model (cf. Anderson and Gerbing 1988). Since the measurement model included multiple categorical variables, some of which had skewed answer distributions (floor and ceiling effects), we applied the Weighted Least Squares Means and Variance adjusted (WLSMV) estimation method. The WLSMV estimation method does not assume normally distributed variables and provides the best option for modeling categorical data (Brown 2006). After developing the measurement model, all factors for the structural model were automatically corrected for skewedness and made continuous.

To test the measurement model, several fit measures were analyzed. In line with common practice, the comparative fit index (CFI), Tucker-Lewis index (TLI), and root mean square of approximation (RMSEA) were used to assess whether the model fits the data. The CFI and TLI measures indicate fit with a threshold above .90 and excellent fit above .95. The RMSEA value indicates good fit below .08 and excellent fit below .05 (Byrne 2012; Hu and Bentler 1999; Kline 2010). In addition, construct reliability (C.R.) and Average Variance Extracted (AVE) were calculated to test the reliability and validity of our variables respectively.

To test the relationships between the constructs, we developed a mediated SEM. To test mediating effects, we applied the “Delta method” included in Mplus. This method utilizes the Sobel method (Sobel 1982) which is a commonly applied conservative method to test latent models with two or more mediators (MacKinnon 2008; Taylor, MacKinnon, and Tein 2007). Since we incorporate two mediators, this method appears the most viable to test mediation.

7.5 Results

In this section, we present the results of the study. First, we construct a measurement model of the study’s central variables, in order to assess its measurement quality and convergent and discriminant validity. Next, we report correlations. Finally, we examine our hypotheses through the structural equation model.

7.5.1 Measurement model

The measurement model consisted of five latent variables – Financial autonomy, HRM autonomy, internal oriented business techniques, external oriented business techniques, performance – and one observed, single-item variable – strategic autonomy. As these measures from the COBRA-questionnaire are applied to MOCs for the first time, we assessed the data structure of the measurement through a series of model comparisons (e.g. Luu 2017). As shown in Table 1, we combined several antecedents of performance. The results showed a good fit between the hypothesized five-factor model and the data (CFI = 0.95, TFI = 0.95, RMSEA = 0.05).
Table 1: Comparison of measurement models

<table>
<thead>
<tr>
<th>Model</th>
<th>CFI</th>
<th>TLI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesized five-factor model</td>
<td>.950</td>
<td>.945</td>
<td>.054</td>
</tr>
<tr>
<td>Four-factor model 1: Autonomy combined</td>
<td>.929</td>
<td>.923</td>
<td>.064</td>
</tr>
<tr>
<td>Four-factor model 2: Business techniques combined</td>
<td>.948</td>
<td>.944</td>
<td>.054</td>
</tr>
<tr>
<td>Two-factor model 1: Autonomy and business techniques combined</td>
<td>.900</td>
<td>.893</td>
<td>.075</td>
</tr>
<tr>
<td>One-factor model (Harman’s single-factor test)</td>
<td>.671</td>
<td>.649</td>
<td>.136</td>
</tr>
</tbody>
</table>

A Harman’s single-factor test, in which all items are loaded onto one dimension, was performed to test for common method bias. This model had a significantly worse fit (CFI=0.67, TLI=0.65, RMSEA=0.14) compared to the measurement model, indicating that common method bias is unlikely to influence the results (Podsakoff and Organ 1986).

All items loaded significantly onto their appropriate factor. While one internal technique (steering of the organizational sub-units and lower management levels in financial and human resource management) had a loading of only 0.41, lowering the AVE to 0.3, C.R. was good and no double loadings were detected. To stay in line with the already validated scale, we opted to retain the item. For external techniques, too, there was one low loading of 0.47 (extension of service delivery for pay), lowering the AVE to 0.4, but C.R. was good. Due to the mixed reliability statistics, we chose to retain the low scoring techniques in the factors. For all other constructs, C.R.s exceeded 0.6 and AVEs exceeded 0.5, satisfying the rules of thumb (Fornell and Larcker 1981). Table 2 presents the means, standard deviations (S.D.), and correlations of the studied variables.

The AVE of 3 of the 5 constructs exceeds the squared correlations between the other constructs, so discriminant validity is sufficiently warranted. As mentioned, the AVE of internal and external techniques are low; lower than the squared correlation with each other. Although the correlation between the two techniques is 0.75, the Variance Inflation Factor between the constructs is within the acceptable range (VIF = 1.22), indicating the absence of multicollinearity (Bowerman and O’Connell 1990). Furthermore, Cronbach alphas of both constructs are acceptable (respectively internal $\alpha$=0.61, and external $\alpha$=0.61), and, as shown in Table 2, the fit of the five-factor model is better than the model in which the two techniques are combined. While this difference is marginal, it demonstrates discriminant validity. Interestingly, the techniques have higher reliabilities among semi-autonomous agencies (COBRA 2010). These findings will be discussed in the final section.
### Table 2: Descriptive statistics and correlations

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
<th>7.</th>
<th>8.</th>
<th>9.</th>
<th>10.</th>
<th>11.</th>
<th>12.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Number of municipalities</td>
<td>4.63</td>
<td>2.10</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Public shareholders</td>
<td>0.23</td>
<td>0.42</td>
<td>0.59</td>
<td>***</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Private shareholders</td>
<td>0.14</td>
<td>0.35</td>
<td>-0.14</td>
<td>***</td>
<td>-0.02</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Number of employees</td>
<td>238.44</td>
<td>499</td>
<td>-1.07</td>
<td>***</td>
<td>-0.10</td>
<td>-1.03</td>
<td>2.37</td>
<td>***</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Size of budget, log</td>
<td>9.20</td>
<td>1.82</td>
<td>-0.045</td>
<td>***</td>
<td>-0.037</td>
<td>-0.15</td>
<td>-0.23</td>
<td>***</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Age</td>
<td>17.00</td>
<td>17.3</td>
<td>-0.083</td>
<td>***</td>
<td>-0.009</td>
<td>-0.214</td>
<td>***</td>
<td>-0.004</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. HRM autonomy</td>
<td>1.55</td>
<td>0.52</td>
<td>-0.011</td>
<td>***</td>
<td>-0.266</td>
<td>1.07</td>
<td>1.03</td>
<td>1.03</td>
<td>0.013</td>
<td>α=</td>
<td>0.47</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Financial autonomy</td>
<td>1.47</td>
<td>0.57</td>
<td>-0.142</td>
<td>*</td>
<td>-0.141</td>
<td>0.16</td>
<td>0.12</td>
<td>0.059</td>
<td>0.14</td>
<td>0.191</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Strategic autonomy</td>
<td>5.67</td>
<td>0.86</td>
<td>-0.176</td>
<td>*</td>
<td>-0.108</td>
<td>0.024</td>
<td>0.10</td>
<td>0.014</td>
<td>0.162</td>
<td>0.59</td>
<td>***</td>
<td>α=</td>
<td>0.74</td>
<td></td>
</tr>
<tr>
<td>10. Int. business techniques</td>
<td>2.65</td>
<td>0.98</td>
<td>-0.039</td>
<td>0.037</td>
<td>-1.173</td>
<td>0.095</td>
<td>-0.069</td>
<td>0.092</td>
<td>0.024</td>
<td>0.016</td>
<td>0.561</td>
<td>***</td>
<td>α=</td>
<td>0.61</td>
</tr>
<tr>
<td>11. Ext. business techniques</td>
<td>2.64</td>
<td>0.91</td>
<td>-0.197</td>
<td>-0.022</td>
<td>-0.196</td>
<td>-0.12</td>
<td>-0.127</td>
<td>0.561</td>
<td>0.016</td>
<td>-0.018</td>
<td>-0.007</td>
<td>0.131</td>
<td>0.267</td>
<td>***</td>
</tr>
<tr>
<td>12. Performance</td>
<td>7.55</td>
<td>1.16</td>
<td>-0.067</td>
<td>0.016</td>
<td>0.112</td>
<td>-1.26</td>
<td>0.113</td>
<td>0.000</td>
<td>-0.098</td>
<td>-0.007</td>
<td>0.131</td>
<td>0.267</td>
<td>0.331</td>
<td>α=</td>
</tr>
</tbody>
</table>

α = Cronbach’s alpha  *p ≤ .05. **p ≤ .01. ***p ≤ .001
7.5.2 Structural equation model
We created a structural model to test our hypotheses. The direct effects (hypotheses 1-3) are shown in Table 3, and the indirect (mediating) effects (hypotheses 4 and 5) are shown in Table 4.

Table 3: Structural equation model

<table>
<thead>
<tr>
<th></th>
<th>Internal business techniques</th>
<th>External business techniques</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of municipalities</td>
<td>-.057 (.046)</td>
<td>.001 (.053)</td>
<td>-.003 (.046)</td>
</tr>
<tr>
<td>Public shareholders</td>
<td>.246 (.203)</td>
<td>.200 (.354)</td>
<td>.056 (.198)</td>
</tr>
<tr>
<td>Private shareholders</td>
<td>-.513* (.248)</td>
<td>-.394 (.288)</td>
<td>.503* (.253)</td>
</tr>
<tr>
<td>Number of employees</td>
<td>.000 (.000)</td>
<td>.000 (.000)</td>
<td>.000 (.000)</td>
</tr>
<tr>
<td>Size of budget(\text{log})</td>
<td>.072 (.053)</td>
<td>.030 (.053)</td>
<td>.017 (.050)</td>
</tr>
<tr>
<td>Age</td>
<td>-.007 (.003)</td>
<td>-.004 (.165)</td>
<td>.000 (.003)</td>
</tr>
<tr>
<td>HRM autonomy</td>
<td>.751*** (.126)</td>
<td>1.041*** (.142)</td>
<td>-1.672* (.725)</td>
</tr>
<tr>
<td>Financial autonomy</td>
<td>-.322*** (.123)</td>
<td>-.734*** (.144)</td>
<td>.974 (.521)</td>
</tr>
<tr>
<td>Strategic autonomy</td>
<td>.272*** (.096)</td>
<td>-.093 (.115)</td>
<td>.035 (.196)</td>
</tr>
<tr>
<td>Internal business techniques</td>
<td></td>
<td></td>
<td>.768*** (.230)</td>
</tr>
<tr>
<td>External business techniques</td>
<td></td>
<td></td>
<td>1.105*** (.503)</td>
</tr>
<tr>
<td>(R^2)</td>
<td>.625</td>
<td>.691</td>
<td>.688</td>
</tr>
</tbody>
</table>

Model fit: CFI=.947, TLI=.942, RMSEA=.043

*\(p \leq .05\). **\(p \leq .01\). ***\(p \leq .001\);

Table 4: Indirect effects of the three forms of autonomy through the two forms of business techniques on performance

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Dependent variable</th>
<th>Mediator business techniques</th>
<th>Indirect effect</th>
<th>Total effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRM autonomy</td>
<td>Performance</td>
<td>Internal business techniques</td>
<td>.577*** (.211)</td>
<td>.055</td>
</tr>
<tr>
<td>Financial autonomy</td>
<td>Performance</td>
<td>Internal business techniques</td>
<td>-.248* (.125)</td>
<td>-.085</td>
</tr>
<tr>
<td>Strategic autonomy</td>
<td>Performance</td>
<td>Internal business techniques</td>
<td>.209* (.098)</td>
<td>.141</td>
</tr>
<tr>
<td>HRM autonomy</td>
<td>Performance</td>
<td>External business techniques</td>
<td>1.151 (.622)</td>
<td>.055</td>
</tr>
<tr>
<td>Financial autonomy</td>
<td>Performance</td>
<td>External business techniques</td>
<td>-.812 (.461)</td>
<td>-.085</td>
</tr>
<tr>
<td>Strategic autonomy</td>
<td>Performance</td>
<td>External business techniques</td>
<td>-.103 (.141)</td>
<td>.141</td>
</tr>
</tbody>
</table>

*\(p \leq .05\). **\(p \leq .01\). ***\(p \leq .001\).
Fit measures of the model in Table 3 indicated good fit (CFI = .95, TLI = .94, RMSEA = 0.04). Based on the findings, we can accept hypothesis 1: HRM autonomy has a significant positive effect on the use of both internal business techniques ($\beta = 0.75$, $p < .001$) and external business techniques ($\beta = 1.04$, $p < .001$) in MOCs. In contrast, we reject hypothesis 2: financial autonomy has a significant negative effect on the use of both internal and external business techniques (respectively $\beta = -0.32$, $p < .001$, and $\beta = -0.73$, $p < .001$) by MOCs. We also (partially) reject hypothesis 3. While strategic autonomy has a positive significant effect on MOCs’ usage of internal business techniques ($\beta = 0.27$, $p < .001$), it has a (non-significant) negative effect on MOCs’ usage of external business techniques ($\beta = -0.09$, $p = ns$).

Relating these forms of managerial autonomy and business techniques to MOCs’ performance, we find that the usage of internal business techniques is a partial mediator between all three forms of managerial autonomy and MOCs’ performance (hypothesis 4), as demonstrated in Table 4. Noteworthy is that while internal business techniques mediate HRM autonomy ($\beta = 0.58$, $p < .001$) and strategic autonomy ($\beta = 0.21$, $p < .01$) on MOCs’ performance, the total effect on performance remains insignificant. Additionally, internal business techniques has a negative partial mediating effect ($\beta = -0.25$, $p < .01$) on the relationship between financial autonomy and performance. Here too, the total effect through internal business techniques is insignificant.

In contrast, hypothesis 5 should be rejected. Table 4 shows that the external business techniques are non-significant partial mediators between the three forms of managerial autonomy and performance. Thus, while internal and external business techniques have positive significant direct effects on performance (Table 4), their mediating effects between the HRM, financial, and strategic autonomy of MOCs on the one hand and the performance of MOCs on the other hand are not strong enough to positively link managerial autonomy to performance.

7.6 Discussion

Our finding that managerial autonomy has an ambiguous effect on performance in municipally owned corporations (MOCs) is in line with the conflicting evidence found in the literature on local corporatization (cf. Bourdeaux 2007; Cambini et al. 2011; Da Cruz and Marques 2011; Pérez-López, Prior, and Zafrá-Gómez 2015; Swarts and Warner 2014; Torsteinsen et al. 2018; Voorn, Van Genugten, and Van Thiel 2017, 2018) and on agencification (Egeberg and Trondal 2009; Nelson and Nikolakis 2012; Overman 2017; Overman and Van Thiel 2016; Van Thiel et al. 2012; Verhoest 2005; Vining, Laurin, and Weimer 2015; Wynen et al. 2014). Also in MOCs, there might be a trade-off between the potential efficacy gain provided by (the possibility of) more expert management and the difficulty in the steering relationship between the political principal and the corporation.

Our main contribution in this article is to show that, while the direct effect of all types of managerial autonomy on performance is non-significant or even negative, business techniques are both directly helpful for performance in MOCs and (partially) mediate the relationship between managerial autonomy and performance. To the best of our knowledge, this mediating relationship of business techniques on the autonomy-performance link in MOCs has not previously been demonstrated in the literature. Future studies investigating the effects of corporatization should take this mediating effect of business techniques into consideration to fully understand corporatization’s effects.
For practitioners, the main takeaway is that corporatizing public service delivery is no panacea to improve the efficacy of public service delivery, and might, when no business-like service delivery is implemented, even have a direct negative effect on the efficacy of public service delivery. We suggest that corporatization should not be a goal, but rather a means to introduce business techniques into public service delivery. HRM autonomy seems to bring these business techniques about. A reason for this could be that corporations with larger HRM autonomy are more likely to attract personnel from the private sector.

It is important here to emphasize that we have considered the effects of these business techniques on the autonomy-performance link, but introducing such business techniques may have other consequences for MOCs. For instance, business techniques may or may not negatively affect accountability, may or may not erode the ‘democratic nature’ of public service provision, and may or may not make political steering and governance more difficult. Further research should look into the effects of business techniques on the ‘stewardship’ and governance of MOCs.

A few additional limitations of this study should be addressed. First, many business techniques are possible, and our selection, following COBRA research, is plausibly incomplete. This is not a strong limitation, as it is plausible that the mediating effect of business techniques on the autonomy-performance link becomes stronger if more business techniques are added, but we had no strong methodological reason for doing so. The same is true for performance measures: adding other performance measures may affect outcomes, but we decided to retain the performance measures from the COBRA survey. Next, factor loadings of the measures of the COBRA-survey remained sufficient at the lower level among MOCs, but did lose some strength. The COBRA-survey thus seems applicable at the local level among MOCs, which we tried to ensure through our pilot study, but it does not transfer fully. Next, our sample size was moderately small, but we still found significance, and our sample size is similar to other research among MOCs (cf. Krause and Van Thiel 2019) and cannot be improved by virtue of the small populations of MOCs. Finally, this study used self-reported measures, which may be subject to desirability bias.

Overall, we found evidence that the introduction of business-like service delivery is critical for making corporatization work effectively, and that autonomy in human resources helps create an environment where such business-like service delivery flourishes. We encourage academics to take into account business techniques’ mediating effect on the autonomy-performance link for corporatization, and encourage practitioners to account for the fact that corporatization may not drive performance by itself, but requires active policy to induce business-like delivery of public services.
References


## Appendix A: Measurement scales

<table>
<thead>
<tr>
<th></th>
<th>HRM autonomy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Does your organization have control over:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Labor agreements</td>
</tr>
<tr>
<td></td>
<td>- Hiring external staff</td>
</tr>
<tr>
<td></td>
<td>- Way of appointing personnel for groups of staff</td>
</tr>
<tr>
<td></td>
<td>- Conditions for promotions for groups of staff</td>
</tr>
<tr>
<td></td>
<td>- Appointment of new employees</td>
</tr>
<tr>
<td></td>
<td>- Discharging/dismissing employees</td>
</tr>
<tr>
<td></td>
<td>- The level of salaries for groups of staff</td>
</tr>
<tr>
<td></td>
<td>- Hiring temporary staff</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Financial autonomy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Does your organization have control over:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Purchasing ICT services</td>
</tr>
<tr>
<td></td>
<td>- Purchasing material</td>
</tr>
<tr>
<td></td>
<td>- Setting tariffs for services or products</td>
</tr>
<tr>
<td></td>
<td>- Investments</td>
</tr>
<tr>
<td></td>
<td>- Shifting between the budgets of different years</td>
</tr>
<tr>
<td></td>
<td>- Taking out loans</td>
</tr>
<tr>
<td></td>
<td>- Shifting between the budgets for personnel or running costs and investments</td>
</tr>
<tr>
<td></td>
<td>- Participation in private law legal persons</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Internal business techniques</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Does your organization do any of the following:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Internal steering of lower management on objectives and results</td>
</tr>
<tr>
<td></td>
<td>- Extended internal management autonomy of lower management levels concerning financial and human resource management.</td>
</tr>
<tr>
<td></td>
<td>- Quality standards for production/service delivery</td>
</tr>
<tr>
<td></td>
<td>- Planning over the years in the form of a multi-year plan or business plan</td>
</tr>
<tr>
<td></td>
<td>- Internal reporting and evaluation system to enable the governing board and the management to assess with regard to set objectives</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>External business techniques</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Does your organization do any of the following:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Extension of service delivery for pay</td>
</tr>
<tr>
<td></td>
<td>- Development of innovative products and services</td>
</tr>
<tr>
<td></td>
<td>- Restructuring of internal processes to market, product, or target group</td>
</tr>
</tbody>
</table>
Appendix A: Measurement scales (cont.)

<table>
<thead>
<tr>
<th>5</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>How do you rate your organization on the following:</td>
<td></td>
</tr>
</tbody>
</table>
  - Effectiveness  
  - Efficiency  
  - Flexibility of the organization  
  - Internal cohesion  
  - Quality  
  - Motivation  
  - Stability of the organization  
  - Satisfaction of staff |
Chapter 8
Chapter 8: Performance Management in MOCs: Explanations for Use and Non-Use

8.1 Introduction

While performance measurement and management have long been common practice in the private sector, their introduction in the public sector had not immediately followed (Beyle and Parratt 1938). Perhaps as a result of increasing dissatisfaction with the inefficiency of the bureaucracy (Hood 2000), this began to change in the 1970s and 80s. The rise of New Public Management brought a renewed focus on private-sector and business approaches in the public sector (Denhardt and Denhardt 2000); performance measurement and management took on renewed importance in this time (Poister and Streib 1999). The objective was to move from rule-driven ‘input’ management to results-driven ‘output’ management in order to mitigate the inefficiencies of public bureaucracies (Behn 2002).

This trend was universal. New Public Management had already been a global phenomenon (Hood 1995, 2000), and likewise the trend towards performance measurement and management seemed omnipresent. Following the introduction of NPM, performance measurement and management was introduced in among others Germany (Greiling 2005), Australia (Dixon, Kouzmin, and Korac-Kakabads 1996), Great Britain (Hood 2007), the United States (Sanger 2008), Norway and the Netherlands (Van Helden and Johnsen 2002), Sweden (Lindgren 2001) and Finland (Rantanen et al. 2007).

Four decades have passed since the introduction of New Public Management, and much research has been conducted on performance management in the public sector. One of the interesting findings in this research has been that while many of the NPM reforms originated at the local level of the public sector – municipalities were for instance among the first levels of government to privatize and contract-out (Van Genugten 2008) – performance measurement and management did not follow this trend quite as strongly. Even today, when corporatization in local governments is increasingly common (Andrews et al. 2019; Bergh et al. 2018; Citroni, Lippi, and Profeti 2013, 2015; Grossi and Reichard 2008; Savitch and Adhikari 2017; Van Genugten, Van Thiel, and Voorn 2019; Voorn, Tavares, and LeRoux 2019; Voorn, Van Genugten, and Van Thiel 2017), we observe only a limited amount of performance management, despite increasing control loss and principal-agent problems (Aars and Ringkjøb 2011; Bergh et al. 2018; Garrone, Grilli, and Rousseau 2013; Olsen, Solstad, and Torsteinsen 2017). Why is performance measurement and management not more common at the local level, particularly among municipally owned corporations, especially observing its popularity at the national level? And what are antecedents for their use or non-use?

We explore these questions by conducting interviews among directors of municipally owned corporations, aldermen, and municipal advisors in the Netherlands. We use three perspectives (a (new) institutional economics perspective, public choice theory, and the institutional logics perspective) to construct sensitizing concepts for semi-structured interviews to try to establish emerging patterns in the reasons for use and non-use of performance measurement and management in municipally owned corporations. We utilize a 3x3x3 diverse systems design to have a relatively large N for our cases and

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17 An earlier version of this article was presented at a conference as Voorn et al. (2019)
to select our cases to be as generalizable as possible to municipally owned corporations in the Netherlands and beyond.

The remainder is organized as follows. Section 2 provides background on performance management in the public sector and on municipal corporations. Section 3 outlines the sensitizing concepts that underlie our semi-structured interviews about the causes of (non-) use of performance management in municipal corporations, and describes our methods and case selection. Section 4 describes the findings of our interviews. Finally, Section 5 discusses our findings, proposes implications, and provides recommendations for future research.

8.2 Background

8.2.1 Performance management
Starting in the 1970s, significant reforms took place in public sectors worldwide (Christensen and Yoshimi 2003) that would collectively become known as New Public Management (NPM). Facing serious revenue shortfalls and increasing public perception of government inefficiency, NPM had the broad goal of re-inventing government along private sector lines (Greiling 2005). The idea behind NPM was to make it possible to improve the quality of public services, to decrease costs in the public sector, to make government operations more efficient and to increase the effectiveness of the implemented policies (Pollitt and Bouckaert 2011). NPM was comprised of different trends in public service delivery, including an increased focus on output instead of input and an increased use of market-like mechanisms to deliver public services (Pollitt 2001). One of the key mechanisms thought to bring this about was performance measurement and management, which could overcome the ‘performance deficit’ in bureaucracies (Kamensky 1996).

Performance management is “the process of setting goals for an organization and managing effectively to achieve those goals and eventually bring about the desired outcomes” (Poister 2010). Performance management follows performance measurement, or the act of ‘quantifying the output of an activity or process’ (Radnor 2005). Performance management reacts to the outcome of the measurement and uses the outcome to manage the performance (Radnor and McGuire 2004). The underlying logic of performance management is to set objectives and measurable targets to encourage employees to hit or exceed the set targets (Pollitt 2013). Training, dialogue, incentives and rewards are elements of performance management (Lebas 1995).

One argument in favor of implementing business-like mechanisms such as performance management in the public sector is that it may improve the efficiency of public services (Greiling 2006; Van Dooren, Bouckaert, and Halligan 2010), and the same may be true at the local level among municipally owned corporations (Voorn, Borst, and Blom forthcoming).

8.2.2 Municipally owned corporations
Municipally owned corporations are organizations “with independent corporate status, managed by an executive board appointed primarily by local government officials with majority public ownership” (Voorn, Van Genugten, and Van Thiel 2017), comparable to public authorities in the United States (Bourdeaux 2004, 2007, 2008; Koppell 2010; Landow and Ebdon 2012; Savitch and Adhikari 2017). Since the onset of the twenty-first
In the twentieth century, there has been an observable rise in the numbers and budgets of municipally owned corporations worldwide (Andrews et al. 2019; Bergh et al. 2018; Ferry et al. 2018; Gradus and Budding 2018; Grossi and Reichard 2008; Papenfuß et al. 2018; Sancino 2011; Voorn, Tavares, and LeRoux 2019; Voorn, Van Thiel, and Van Genugten 2018). Understanding their performance and governance is therefore an increasing priority (Ferry et al. 2018; Voorn, Van Genugten, and Van Thiel 2017); performance management is one such mechanism that can affect the behaviour of municipally owned corporations.

8.3 Methodology

8.3.1 Research strategy
We conduct partially inductive research using sensitizing constructs (Bowen 2006; Van den Hoonard 1997). We approached 27 key stakeholders of Dutch municipal corporations in the period of December 2018 to September 2019 to uncover antecedents for the use or non-use of performance management in such entities. Our interviews were semi-structured and based partially on the theoretical insights of three theories: (new) institutional economics, public choice, and institutional logics. Our methods are explicitly explorative; our aim was to establish emerging patterns in the reasons for use or non-use of performance management in municipally owned corporations.

8.3.2 Sensitizing concepts
We utilize three perspectives to inspire our interview questions.

The first is the (new) institutional economics perspective, provided through the lens of transaction cost economics. The theory of transaction cost economics argues that institutional outcomes follow pragmatic efficiency considerations. Transaction cost economics has for instance been applied to point out the largely pragmatic reasons for decisions about local public service delivery modes (Bel, Hebdon, and Warner 2007; Brown and Potoski 2003b). Transaction costs economics has also previously been applied to municipally owned corporations by among others Tavares and Camões (2007), Bel and Fageda (2010), and Rodrigues, Tavares, and Araújo (2012) to explain their proliferation. The transaction cost economics perspective would suggest that performance management and measurement would be used primarily when those would be cost-effective for municipalities.

One particular consideration of transaction cost economics is local government capacity. Lower levels of government often have lower contract-management capacity as a result of lesser manpower and budget (Brown and Potoski 2003a), and this is particularly true in rural and smaller municipalities (Ernita Joaquin and Greitens 2012). It is plausible that this lower contract-management capacity also results in, or is correlated with, lower ability to measure and manage performance. Thus, one reason for lesser performance management at the local government level could be lower capacity for it. It has, for instance, been pointed out that city managers have little experience in how to use performance information effectively to improve policy programs (Hatry 1997).

*Sensitizing concept 1: Use or non-use of performance management may be affected by pragmatic considerations pertaining to local government capacity.*
The second perspective is public choice theory. Public choice theory takes a more methodologically individualist approach (cf. Arrow 1994) and considers incentives faced by individual decision-makers rather than those faced by the municipality as a whole. Public choice theory often contrasts with the (new) institutional economics perspective in suggesting that public service delivery decisions are often more political than practical, and there is some evidence for this too (Wassenaar, Groot, and Gradus 2013). Public choice theory also has been previously applied to municipally owned corporations by for example Bourdeaux (2004), Sørensen (2007), Wagner (2011), Garrone, Grilli, and Rousseau (2013), and Bergh et al. (2018), pointing out all sorts of problems related to political interference.

The public choice theory perspective suggests that political incentives could explain use or non-use of performance measurement and management in municipally owned corporations. The utilization of performance measurement may help government executives to justify their resource allocation, budget and other policy decisions. Alternatively, performance management may be problematic for decision-makers in municipalities because it allows more scrutiny in poorly performing municipally owned companies.

**Sensitizing concept 2: Use or non-use of performance management may be affected by political incentives for individual decision-makers.**

The third perspective we use is that of institutional logics, theorized by Skelcher and Smith (2015) and applied to municipally owned corporations by Argento, Culasso, and Truant (2016), Andersen and Torsteinsen (2017), and Olsen, Solstad, and Torsteinsen (2017). This theory suggests that organizational culture and identity can help shape policy decisions. Especially in municipally owned corporations, this perspective can help understand decision-making as a large reason for local corporatization to bring about a culture shift in local public service delivery, allowing a more business-like culture.

This perspective is relevant also for understanding performance management and measurement. Effective introduction of performance measurement and management in public organizations requires a culture change (Sanger 2008), as it takes substantial time to create a culture in which staff, managers, elected officials and stake-holders are supportive of implementing a system of performance measurement (Bernstein 2000). To understand whether local corporatization also involves increased performance measurement and management thus requires an understanding of the prevailing organizational culture. Especially in tight-knit communities and in smaller municipalities, this culture shock may be difficult to achieve, as lesser distance between actors may make them more likely to have a more relational approach towards governance (Bernstein 2000). That leads to:

**Sensitizing concept 3: Use and non-use of performance measurement and management in municipally owned corporations may be influenced by the existing organizational culture.**

Together, our three theories cover three levels in decision-making. On the macro (organizational) level, (new) institutional economics theory helps explain the incentives of the municipalities in the governance of municipally owned corporations. On the meso (intra-organizational) level, the institutional logics perspective helps to explain how the behavior of the organization is affected by its inner culture. And on the micro (individual)
level, public choice theory helps to explain the incentives faced by individual stakeholders surrounding the organization.

8.3.3 Interview questions

Interview questions were constructed based on our sensitizing concepts. We began and ended our interviews with open-ended questions that allowed us to infer the mechanisms that respondents themselves found most pressing. Next, we asked a few descriptive questions about performance management in the organization that allowed us to place the respondents’ answers in context. In particular, we asked here about:

- **Amount**: How many performance indicators are used for the corporation?
- **Content**: What are performance indicators about?
- **Actor**: Who constructs the performance indicators? Who measures?
- **Clarity**: Are performance indicators measurable and unambiguous?
- **Consequences**: Are consequences tied to performance indicators?
- **Desirability**: Does the corporation itself desire performance management?

We followed this up by asking questions about the antecedents for the (non-) use of performance management. Following our hypotheses, we asked about:

- **Capacity**: Does capacity play a role in the (non-) use of performance management?
- **Politics**: Does politics play a role in the (non-) use of performance management?
- **Culture**: Does culture play a role in the (non-) use of performance management?

Interviews were coded using the software *Atlas.ti* (Friese 2019). We coded every reference to antecedents in the earlier parts of the interview using the operationalization as presented above. When respondents discussed antecedents of performance management other than those included in our factors, we coded these as ‘other’.

For reference, the interview guide used during the interviews is attached as Appendix 1.

**Figure 1**: Key source of heterogeneity in municipally owned corporations


**Corporate status**: Three types of corporate status are common among municipally owned entities in the Netherlands: corporations and foundations, based in private law, and public-law organizations (Gemeenschappelijke Regelingen in Dutch). Some other forms, such as associations (*verenigingen*) or general partnerships (*vennootschappen*).
**Figure 1:** Key source of heterogeneity in municipally owned corporations (cont.)

*onder firma* are also possible, but are rare, making up at most 2% of the population (Voorn, Van Genugten, and Van Thiel 2018b).

**Actors and perspectives:** In the governance of municipally owned corporations, multiple actors are involved that can each bring different perspectives to the table. The three key actors we identify are the aldermen (*wethouders*), ultimately responsible for governance, the municipal controllers, who monitor the municipally owned corporations on behalf of the aldermen, and the directors of the municipally owned corporations, who have managerial control over service delivery often with great autonomy.

**Number and types of principals:** Voorn, Van Genugten, and Van Thiel (2018a) found that steering difficulties under multiple principals may be the largest determinant of performance in municipally owned corporations. It is hard to generalize findings of single-owned municipally corporations to sharedly-owned municipal corporations or vice versa. Preferably, our data set includes both types of ownership. Beyond this, there can be different types of principals on the boards of municipal corporations: beyond intermunicipal cooperations, there can be public-private partnerships, or another government layer can be present on the board of a municipal corporation (such as a province, an agency, or in the Netherlands a polder board (*waterschap*).

**Municipal size:** Different municipalities have different capacities in determining outcomes of governance, and one cannot expect a small rural municipality to have the same governance capabilities as a large urban municipality (Brown and Potoski 2003a; Ernita Joaquin and Greitens 2012).

**Organization size:** Smaller or larger organizations may respond differently to governance or may inspire different types of governance.

### 8.3.4 Case selection

We use 9 cases for our research. For our case selection, we use a *diverse systems design* (*DSD*). DSD is an approach for explorative qualitative research that differs from the more commonly used ‘most similar’ and ‘most different’ systems designs in that it does not use knowledge on either the dependent or independent variables of study, but tries to ensure broad representativeness in background factors in the absence of such data (Patton 2002; Seawright and Gerring 2008). Since our research is inductive in the sense that we do not know which factors contribute to the use of performance management, this fits with our research question. DSD is preferable over random case selection, as random selection, while a sensible approach in large-N research, is in small-N research more likely to lead to unbalanced unrepresentative samples (Seawright and Gerring 2008; Sekhon 2004). The upside of DSD is its relatively high generalizability and the potential to reject necessary background causes among multiple variables (Seawright and Gerring 2008).

Two important limitations of diverse systems design must be addressed. First, since representativeness is the key virtue of DSD, it requires a substantially more extensive sample than designs that take into account respondents’ characteristics in terms of independent and dependent variables. Therefore, for this research, we conducted a larger
than usual amount of interviews to compensate for our information disadvantage. Second, case selection for a DSD requires a good insight into what background characteristics may be important in determining the mechanisms underlying the causal relationship so that the sample can still be partially stratified. Fortunately, we know from earlier survey research in what domains municipally owned corporations are particularly heterogeneous (Voorn, Van Genugten, and Van Thiel 2018a), and so we can take these into account for our research. Figure 1 shows key sources of heterogeneity among municipal corporations.

We are capable of stratifying our sample among dimensions of sector, corporate status, actors and perspective, multiplicity and types of principals, and municipal and organization size (see Table 1). Most of these dimensions (sector, corporate status, actors and perspectives, multiplicity and types of principals) are categorical and thus relatively straightforward to include in a representative way. Other dimensions (municipal and organization size) are not categorical but can be assessed among categorical dimensions with comparative ease (see Voorn, Van Genugten, and Van Thiel 2018a, 2018b).

Table 1: Dimensions per background variable

<table>
<thead>
<tr>
<th>Variable</th>
<th>N Dimensions</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sector</td>
<td>8</td>
<td>See figure 1</td>
</tr>
<tr>
<td>Corporate status</td>
<td>3</td>
<td>Corporation, Foundation, Public-law organization</td>
</tr>
<tr>
<td>Actors &amp; perspectives</td>
<td>3</td>
<td>Alderman, municipal policy advisor, director MOC</td>
</tr>
<tr>
<td>Number of municipalities</td>
<td>4</td>
<td>One / Few / Medium / Many</td>
</tr>
<tr>
<td>Municipality size</td>
<td>3</td>
<td>Large / Medium / Small</td>
</tr>
<tr>
<td>Organization size</td>
<td>3</td>
<td>Large / Medium / Small</td>
</tr>
</tbody>
</table>

Engaging with every possible combination of dimensions is not feasible. We thus need to select which of these background factors are likely to be interdependent. We opt to stratify across actors and perspectives, multiplicity of principals, and municipality size, leading to 27 respondents. We randomize the other variables (corporate status, actors, and organization size) among them, with the provision that we opt to interview 3 respondents for the same organization (alderman, controller, and director) to help us additionally understand the interplay between actors within organizations. That leads to the case selection outlined in Table 2.

Procedurally, we randomly generated organizations from a database of all 799 Dutch municipal corporation, filling them in spots 1-9 (in Table 2) sequentially. We first approached the directors of municipal corporations. If we received no response, we approached them a second time; when we received a rejection, we replaced the organization with a new randomly selected organization; this occurred for 3 corporations. Once a director committed to an interview, we approached one of the aldermen and policy advisers on municipality side; the fact that we were already speaking with the corporations made them more likely to commit to give us a balanced perspective. Nonetheless, our request was rejected in two cases.
Table 2: Case selection

<table>
<thead>
<tr>
<th>Form</th>
<th>Municipalities</th>
<th>Actor</th>
<th>Size</th>
<th>Corporate status</th>
<th>Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporation (single owned)</td>
<td>One (large)</td>
<td>Alderman</td>
<td>MC</td>
<td>Corporation 1 (random)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Director</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>One (medium)</td>
<td>Alderman</td>
<td>MC</td>
<td>Corporation 2 (random)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Director</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>One (small)</td>
<td>Alderman</td>
<td>MC</td>
<td>Corporation 3 (random)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Director</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporation (intermunicipal)</td>
<td>Few (2-3)</td>
<td>Alderman</td>
<td>MC</td>
<td>Corporation 4 (random)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Director</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Medium (4-10)</td>
<td>Alderman</td>
<td>MC</td>
<td>Corporation 5 (random)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Director</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Many (11+)</td>
<td>Alderman</td>
<td>MC</td>
<td>Corporation 6 (random)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Director</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public-law organization (intermunicipal)</td>
<td>Few (2-3)</td>
<td>Alderman</td>
<td>MC</td>
<td>Corporation 7 (random)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Director</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Medium (4-10)</td>
<td>Alderman</td>
<td>MC</td>
<td>Corporation 8 (random)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Director</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Many (11+)</td>
<td>Alderman</td>
<td>MC</td>
<td>Corporation 9 (random)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Director</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8.4 Results

8.4.1 Sample of organizations

Table 3 presents the sample of organizations generated by our case selection procedure. Our sample appears diverse along the other variables organization size and sector (which were randomly generated), although infrastructure services are overrepresented.

Table 3: Sample of organizations

<table>
<thead>
<tr>
<th>Corp.</th>
<th>Corporate Status</th>
<th>Number of municipalities</th>
<th>Municipality Size*</th>
<th>MOC Size</th>
<th>Policy Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Private-law</td>
<td>Single (1)</td>
<td>Large</td>
<td>Small</td>
<td>Economy (Exploitation)</td>
</tr>
<tr>
<td>2</td>
<td>Private-law</td>
<td>Single (1)</td>
<td>Medium</td>
<td>Medium</td>
<td>Infrastructure (Parking)</td>
</tr>
</tbody>
</table>
Table 3: Sample of organizations (cont.)

<table>
<thead>
<tr>
<th></th>
<th>Private-law</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Single (1)</td>
<td>Small</td>
<td>Small</td>
<td>Nature (Nature center)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Small (2-3)</td>
<td>N/A</td>
<td>Small</td>
<td>Sports (Swimming pool)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Med (4-10)</td>
<td>N/A</td>
<td>Large</td>
<td>Infrastructure (Refuse collection)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Large (11+)</td>
<td>N/A</td>
<td>Medium</td>
<td>Economy (Innovation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Public law</td>
<td>Small (2-3)</td>
<td>N/A</td>
<td>Large</td>
<td>General (Services)</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Med (4-10)</td>
<td>N/A</td>
<td>Medium</td>
<td>Social services (Employment)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Public law</td>
<td>Large (11+)</td>
<td>N/A</td>
<td>Large</td>
<td>Security (First-response)</td>
<td></td>
</tr>
</tbody>
</table>

*For organizations with multiple municipal shareholders, we cannot report municipality sizes.*

In the remainder of this section, we frequently use quotations and references to the interviews. We refer between square brackets. [xA], [xD], and [xP] denote things said by the alderman, director, and municipal policy adviser of organization x respectively.

8.4.2 Descriptives of ex-ante performance management

8.4.2.1 Amount of indicators
The municipally owned corporations differed substantially in the amount of performance indicators they used. Some organizations did not use performance indicators at all [1, 3, 4, 7, 8]. Other organizations did use some. For instance, organization 2 (a parking management corporation) used 4 indicators. Organization 5, 6 and 9 (all large organizations with many shareholders) used so many that they could not tell us an exact amount.

8.4.2.2 Content of indicators
Organizations also differed in the content of indicators. Indicators were almost exclusively short-term, did not stretch more than one year in the future, and only involved operational management, and not strategic management. Some organizations found this useful: “ambitions are difficult to narrow down, because of the lack of clarity of the sector. They depend on everything” [6D]. Others found it bothersome. “If you corporatize, you should also be prepared to monitor differently […] to let things go a little […] This is not the bureaucratic culture” [2D]. One other respondent offered an explanation: “I see it as a phased process. The focus is first on operations and on what is important on a daily basis. When operations run smoothly, it becomes managerially less interesting where we are and more interesting where we should be in the future” [7D]. Others were more cynical. “It has not been decided well by the municipalities what they find important. There are no discussions” [8D].
Operational indicators depended heavily on sector and involved, for instance, parking occupancy percentages [2] or ambulance arrival times [9]. One key performance indicator was held to be universally important: budgets. Corporations that did not use explicit performance management all emphasized that in the absence of other indicators, they were well aware that they would be judged based on their financial results [1, 3, 4, 7, 8]. “Only if I am out of line with my budget, then I have something to explain” [4D]. “You get a budget, and you work with that.” [7D]. “[They find important that] financially, there are as few costs as possible” [8D]. Also in corporations that had many other performance indicators, it was clear to directors that “money is the bottom line” [9D], perhaps only on par with “[that] there is no commotion, no negative publicity” [8D].

While in actual content the corporations often differed in indicators based on sector, many struggled with the same problem that their multiple stakeholders wanted diverging forms of reporting. For instance, for intermunicipal corporations, executive boards often wanted organization-level reports of indicators, to see if the organization operates well. Yet municipal councils wanted these indicators split per municipality. This offered some problems for the corporations, either because they “do not have the indicators” [7D], or because in (small) municipalities it is difficult for indicators to be reliable and useful due to small sample sizes, and reporting could thus create unnecessary friction [9D]. In addition, different stakeholders often want the reporting in different styles:

“If I were in the municipality, I would […] like to know the numbers. If we sit with administrators, they let us know that they would rather have less information, and if we sit with auditors – they want to know more. […] Civil servants want it written down in a SMART way and shareholders want you to describe your objectives and get going.” [9D]

The respondents reported that having to take into account so many actors is a big source of confusion about strategy in municipal corporations [9D, 9P]. They also considered it a source of inefficiency. One organization reported that it had to devote a full month of all their employees’ time to reporting to keep all its stakeholders happy [2D]. Others reported spending substantial time writing an additional, simplified, report to municipal councils [1D, 6D].

8.4.2.3 Clarity of indicators
Another obstacle to long-term policy formation was the lack of measurability of indicators, which was reported to be a problem by nearly all respondents. A first-response security organization had particular difficulties with how performance indicators were measured. “We have a few operational [indicators], like the arrival time of the ambulance. […] It’s a bit like comparing apples to pears. We are a region where travel times are longer, because we are a rural area” [9D]. Moreover, a parking management corporation pointed out that performance indicators about cooperation [2D, 2P] were essentially not possible to clarify or quantify. Still, they attempted to resolve this. “We tried to shape this indicator [cooperation] anyway by naming a few criteria which one then had to score as ‘red’ or ‘green.’” [2D]. This ‘stoplight’ approach was used quite commonly in reporting to municipalities [2,5,6,9]. However, this simplicity was not without its downsides: “We asked them to indicate why [indicators scored as red] were red […] their answer was: […] for the sake of brevity we do not report on all activities individually. That’s the answer you get.” [9P].
8.4.2.4 Actors (constructing indicators)
Nearly all respondents pointed out a critical role for the municipally owned corporations themselves in determining the performance indicators. Sometimes, there are clear negotiation processes. One respondent explained how performance indicators were constructed at the founding of her corporation: “We made working groups and one group was responsible for drafting the outline of the service agreement [that contained performance indicators]” [2D]. But in general, the municipal corporation had a stronger initiating role, drafting the indicators, while the executive board that contained the municipalities only had a ratifying role [5,6,9], although occasionally also supervisory boards played a role [9]. Another respondent, in a corporation that had existed longer, reported to be developing new performance indicators, which was exclusively the task of the corporation [7D].

The respondents emphasized three factors in particular that contribute to the large role of municipal corporations in setting their own performance indicators. First, the longer an organization existed, the more it took over goal-setting from municipalities. As one director of a municipal corporation stated:

“Delegate the steering to me […] I know what goes on here, and not the municipalities; they can only determine their needs […] Policy advisors no longer know what is happening at the work floor and so cannot decide what direction they want to move in” [7D].

In other words, the increasing distance over time between municipality and corporation causes increasing information asymmetries and increasingly shifts the goal-setting role to the corporation.

A second factor that seemed to cause the frequent goal-setting role of the municipal corporations here seemed to be the frequent presence of aldermen rather than mayors on the executive board.18 In particular, corporations with aldermen on their executive board complained about transitions that hampered collaboration with the municipality. For instance, one respondent complained: “In the last municipal executive, the alderman was much more involved” [2D]. In contrast, an organization with a mayor on the executive board lauded the continuity and non-political nature of governance. “The aldermen come and go every four years and an alderman falls from grace faster than a mayor, of course. That makes a real difference.” [9D].

Lastly, corporations’ multiplicity of stakeholders seemed to increase corporations’ goal-setting role. For instance, one respondent dealt with multiple aldermen of different political bents in the executive board and noted that the corporation gained a lot of autonomy in the process: “there’s a general feeling of just letting it simmer and not making too much fuss.” (8D). Another respondent that acted as policy advisor for an organization with seventeen municipalities argued “the organization is so big, so it is very hard for seventeen municipalities to have control […] If [something] is really important,

18 For context: in the Netherlands, mayors are appointed for six-year terms on behalf of the Crown, which are regularly extended for another term; they are supposed to bring continuity to municipal policy; aldermen are appointed for four-year terms by elected municipal councils, whose makeup shifts every election.
you can act tough, involve your mayor […], but then you also have to lobby other municipalities to form a front against your own regional organization” [9P].

To summarize, municipal corporations play a large role in setting performance indicators, and this is largely due to information asymmetries accumulated as a result of time, discontinuity in municipalities, and multiplicity of stakeholders.

8.4.2.5 Actors (measuring indicators)
Measurement of the indicators was almost always the task of the municipal corporation itself. Only in two cases case, the municipality was responsible for measuring performance indicators [2, 7]. However, in those cases, one respondent pointed out that municipalities often did not follow through on this commitment, leaving performance indicators without measurement [2D], and another took the initiative to measure those indicators themselves, because it found it useful for its own operation to be able to measure continuously [7D].

Also in measurement, then, corporations played a leading role: “the organization […] measures [and reports], and the board ratifies” [9D]. Respondents complained about inequality in the relationship with municipalities multiple times. “The municipality often steers strictly on our [performance indicators] but less on those that are theirs”, complained one respondent [2D]. “They never inform us on time”, noted another [1D].

8.4.2.6 Consequences
When asked about consequences of (not) succeeding in reaching intended performance targets, municipally owned corporations universally pointed out that they did not expect any consequences. “It now has no consequences if we do not accomplish a performance target”, notes one director of a corporation [9D]. “There are no rewards or sanctions”, notes another [4D]. Some corporations pointed out that they had explicitly asked for consequences “just to feel like they are doing well”. For instance, the director of a parking management organization pointed out that they had originally wanted a bonus-malus arrangement, but the municipality did not want it, as it would be “[politically] sensitive” [2D].

Rather than face consequences, in all cases, municipal corporations expect to be talked to in case of problems, or perhaps to be sternly reprimanded. Not a single director noted concern for replacement, and the option was only mentioned twice on municipality side [1P, 2A]. But not all municipally owned corporations feel that the municipality engages in conversation with them on the basis of performance indicators, especially when that would be politically problematic for the alderman. “For a long time, cooperation [between the corporation and the aldermen] went poorly, so we scored it as ‘red’. And we then notified the board. They did not respond.” [2D]. In other cases, municipalities explicitly decided not to tie consequences to performance indicators. In the first-response security organization, the daily board decided not to report performance indicators to municipalities anymore. “It only produced confusion”, stated the mayor on the board [9A]. The service organization was happy about this. “We could not take it out ourselves, of course. Now we care a bit less about the performance indicators. We write in bullet points about their content and report on that” [9D].
8.4.3 Causes of performance management

The sensitizing concepts for (non-)use of performance indicators were all pointed out by the respondents. We focus on these first, before moving on to other factors described in the interviews.

First, municipal capacity contributed to the presence of performance management in some corporations. One respondent points out for an intermunicipal corporation: “the alderman in [the larger city] is strict [in governance] […] the smaller municipalities are not, they think more that [the fact that the largest municipality takes control] is nice, [it] makes their job easier” [8D]. The same respondent emphasizes why this is the case. The larger municipality has “civil servants that clear their schedules for [governance]. They are more dedicated and it is a more serious part of their portfolio. For smaller municipalities […] it is just too far removed” [8D]. The director of a municipal swimming pool sharedly owned by small municipalities agreed: “the municipalities just do not want to have anything to do with it [for reasons of expertise]” [4D]. Nearly all other respondents in intermunicipal corporations noted the same [5, 6, 9].

Political and media factors were addressed the most by respondents. They affected not only management, but also measurement. An organization facing temporary setbacks emphasized that “[opponents of corporatization are very interested in] current data, because they can score with it politically” [7D]. Similarly, aldermen can have political reasons not to have performance indicators measured. “[They find it important that] we do not cause commotion”, argued the director of an unemployment services corporation [8D]. Tracking performance indicator risks such commotion:

“It’s like a former colleague of mine said: they are the baby seals of our society. We should treat them well, we should be friendly with them, but as long as everything goes well there is no-one who is concerned about this.” [8D]

As one director of a corporation summarizes: “Business-like service delivery is not popular in politics. So […], they want to know performance indicators [only] when they are politically useful” [7D]. Some directors emphasize this political factor, but nuance it a bit more. “it is often said that the alderman does not want [reports that the organization needs to change tracks], but I notice this is not the case. The alderman will want it if he can put a positive spin on it” [2D]. Many respondents noted in particular risk aversion among political executives [1, 3, 5, 6, 9].

Bureaucratic culture also seems to be a reason for non-use of performance indicators. Respondents pointed out that for the most part, corporatization did not cause much of a culture change. As one director of a municipal corporation reported: “when [our organization] began, […] we just had to keep doing the same job […]. Performance indicators were therefore not developed. But that was also not the case before” [7D]. Another respondent explains the reason why this bureaucratic culture did not change after corporatization. “Civil servants also end up in the corporation, so the culture does not change, and then you will also keep steering in a bureaucratic way” [2D].

Beyond the factors in our hypotheses, four other factors were emphasized by respondents that played a role in determining whether performance indicators were used. First, the wishes of municipal corporations were an instrumental reason why performance indicators exist. “It should be measured. […] You can also do other things with [measurements]”, argued one director of a municipal corporation (9D). Some even saw it as a way to solve political friction, playing an informative role [1, 5, 6, 7]. “If we have
the indicators, we can steer more on output. Then politicians know what we are talking about, then there can be political consensus about the reality that exists, and then you can think about [...] where we want to go.” (7D). The fact that municipal corporations found measurement useful caused additional measurement in at least some corporations [2, 7]. Next, as already mentioned, the difficulties surrounding service measurability sometimes prevented the use of performance indicators. “[Performance] indicators could have perverse effects”, emphasized the director of a municipal swimming pool. “For instance, if I were judged on budget, I would spend less on maintenance – it would lead to high costs in the future […]. That is in no one’s interest” [4D]. Third, ideological support for performance management, or conviction that performance management works in municipal corporations, was sometimes absent. “At some point it started to bother us that [performance indicators] became a type of reality,” argued the mayor on the board of the first-response security organization [9A]. Lastly, current governance practices may not be developed enough to deal well with the challenges of municipal corporatization due to a lack of interest among municipalities [1, 3, 8]. As one director put it:

“[Municipal corporations] are on the bottom of the list in the agenda of administrators. [We] only matter when emergencies arise.” [8D]

8.5 Discussion
We have found that performance management occurs very little in municipal corporate entities. We find that all sensitizing concepts matter for determining the existence of performance management in corporatized municipal entities. Municipal capacity helped bring about performance management, as larger municipalities had civil servants that had more time and expertise to dedicate to the governance of municipal corporations. Political and media factors seemed most important, and many directors complained that politicians were only interested in performance indicators when they were politically useful. Lastly, respondents pointed out that for the most part, corporatization did not cause much of a culture change: the continued presence of a bureaucratic culture stood in the way of performance management.

We also found four other factors that played a role in determining whether performance indicators were used. First, many corporations wanted performance management. They found the existence of indicators useful for their own management and for giving clarity to their stakeholders. Second, difficulties surrounding service measurability sometimes prevented the implementation of performance management. Third, ideological support for performance management was sometimes absent, as corporations and municipalities questioned the usefulness of singular performance norms. Lastly, current governance practices may be suboptimal, as administrators seemed not to consider the governance of municipal corporations to be a priority.

We also want to address a few additional findings that were not specific to our research question, but are still worth addressing.

First, much has been written about the ‘crowding out effect’ of performance indicators: how the presence of measurable performance indicators crowds out those indicators that are less measurable (Bevan and Hood 2006; Van Thiel and Leeuw 2002). Indeed, we also find this in our study, for instance in the continued dominance of budgetary matters even in the face of many other performance indicators. But we do want to nuance this effect slightly. We have found that even if no performance indicators were
used, budgets became a *de facto* performance indicator, crowding out all other indicators other than political ones. Organizations that used no performance indicators seemed much more dominated by budgetary and political concerns; arguably, these two factors dictated their behavior to such an extreme extent that they acted as if part of the bureaucracy – begging the question if in the absence of performance management advantages of corporatization exist. After all, a key purpose of corporatization is to go beyond these bureaucracy-induced inefficiencies in corporatization (Bourdeaux 2008; Van Genugten, Van Thiel, and Voorn 2019; Voorn, Van Genugten, and Van Thiel forthcoming).

Next, and also not related to our main research question, we found that performance indicators in municipally owned corporations universally had no real consequences. Performance management in the explicit corporate governance sense does not exist for local corporatization in the Netherlands. This is consistent with earlier findings in the literature on municipal corporatization (Aars and Ringkjøb 2011; Voorn, Van Genugten, and Van Thiel 2018a). Sometimes performance indicators were explicitly ignored, and other times they were even removed from documents, but for the most part, performance indicators were dealt with through relational governance, or ‘stern talking-tos’, with unknown effects.

A related finding is that, to the extent that performance management does exist, it is not a reliable accountability mechanism, at least not currently. One critical finding is that in municipal corporations, large information asymmetries between the directors of the corporations and the aldermen tasked with monitoring them lead the corporations to play a leading role in determining performance indicators. This runs strongly counter to standard corporate governance recommendations (Van Thiel, Van Genugten, and Voorn 2019). If elected public actors no longer determine the scope of action for municipal corporations, then corporations, for all intents and purposes, cannot be said to be accountable to the public. This finding is again consistent with previous research on accountability following agencification (Overman, Van Genugten, and Van Thiel 2015; Overman, Van Thiel, and Lafarge 2014) and municipal corporatization (Bergh et al. 2018; Garrone, Grilli, and Rousseau 2013). This absence of a strong goal-setting municipality cannot solely be attributed to expertise differences between municipalities and their corporations, but also to a lax, risk averse attitude among those responsible for monitoring that leave municipalities giving very little strategic guidance to corporations unless there are politically pressing reasons to do so. This finding is consistent with similar findings of such *negativity bias* on the national level (Hood 2002, 2010; Van Thiel 2016). Information asymmetries are further exacerbated by problems of entrenchment over time (Savas 1987), non-continuity as a result of municipal elections, and the problem of multiple principals (Voorn, Van Genugten, and Van Thiel 2019).

Next, the content and form of performance reporting often created problems for municipal corporations. While strategic steering is often absent, operational steering is diverse and can be construed as problematic. Some organizations point out that a ‘too active’ role of municipalities in their day-to-day operation reduces efficiency. Moreover, the many stakeholders in municipal corporations cause problems for performance reporting, and in particular cause inefficiencies and problems in long-term objective-setting. In particular, different stakeholders want different types of performance indicators reported on or not reported on, and frequently request different types of reporting, leaving corporations often spending much time drafting reports. This is true even though the reports rarely play a meaningful monitoring role, as also pointed out in earlier research (Aars and Ringkjøb 2011).
While we have found major issues in the governance of municipally owned corporations, it is important to emphasize limitations of our research. In particular, our research is limited by sample size and methods: interview research is by nature exploratory and inductive, rather than confirmatory and deductive.

Nonetheless, our findings are consistent with earlier studies problematizing governance in municipally owned corporations, such as those of Aars and Ringkjøb (2011), Bergh et al. (2018), and Garrone, Grilli, and Rousseau (2013), and in local government in general, such as those of Askim (2007) and Ter Bogt (2004). These findings have real implications for practitioners and many improvements can still be made to governance practices in order to increase the efficiency and accountability of corporatized municipal service delivery, a topic that academically still has been little studied (Ferry et al. 2018; Lidström 2017; Torsteinsen 2019; Voorn, Van Thiel, and Van Genugten 2018).

While we express concerns about governance in municipal corporations, we want to emphasize that similar inefficiencies exist in bureaucratic public service delivery and contracting-out arrangements and that evidence about the efficiency of municipally owned corporations remains mixed (Torsteinsen et al. 2018; Voorn, Van Genugten, and Van Thiel 2017). Future research could look into whether the patterns that emerge in Dutch municipal corporations also emerge elsewhere, and into how these governance problems can potentially be resolved.
References


Van Genugten, Marieke, Sandra Van Thiel, and Bart Voorn. 2019. "Local governments and their relationship with arm’s length bodies." Local Government Studies online first.


2018a. "Background, autonomy, steering, and corporate governance: Determinants of the effectiveness of (governance of) municipal corporations." In EGPA Conference. Lausanne, Switzerland.


Appendix A: Interview guide

First question

How does steering take place by municipalities at [name organization]?

<table>
<thead>
<tr>
<th>Ex-ante use</th>
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</thead>
</table>
| - Are many performance indicators constructed for [name organization]?  
  o What demonstrates this?  
- What are these performance indicators about?  
  o Why about that?  
- Who constructs the performance indicators?  
  o Why he / she?  
- Are those performance indicators quantifiable and unambiguous?  
  o How so?  
- Do you consider performance indicators desirable? Why (not)?  
- Why are performance indicators (not) used?  
  o Do you think municipalities are trying to avoid bureaucracy?  
  o Why (not)?  
  o Do you think there are political reasons (not) to use them? Why (not)?  
  o Does that relate to the municipalities’ culture? Why (not)? |

<table>
<thead>
<tr>
<th>Ex-post use</th>
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</table>
| - Are performance indicators actually measured?  
- Who is responsible for auditing performance indicators?  
- Are there consequences for (not) reaching performance indicators?  
  o Which?  
  o Why these?  
- Do you consider consequences desirable? Why (not)?  
- Why are there (no) consequences?  
  o Do you think municipalities are trying to avoid bureaucracy?  
  o Why (not)?  
  o Do you think there are political reasons (not) to use them?  
  o Why (not)?  
  o Does that relate to the municipalities’ culture? Why (not)? |

<table>
<thead>
<tr>
<th>Last questions</th>
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<tbody>
<tr>
<td>- Is there anything that affects performance indicator use not mentioned in this interview?</td>
</tr>
<tr>
<td>- Is there anything you would like to add to your previous answers?</td>
</tr>
</tbody>
</table>
Chapter 9
Chapter 9: Local Governments and Their Arm’s Length Bodies

9.1 Introduction

Due to the combined effects of decreasing public budgets, New Public Management reforms and large-scale decentralisations by national governments, local governments worldwide have nowadays organised the delivery of public services more and more at arm’s length (John, 2001; Kuhlman and Bouckaert, 2016). Local governments can organise this in different ways: they can outsource tasks, collaborate with private or societal partners, or hive off parts of their own organisation thereby creating so-called arm’s length bodies (ALBs). This contribution will focus on the latter form.

There are different types of ALBs, ranging from semi-autonomous organisations to private law based corporations owned by local governments (Van Thiel, 2004). Countries differ in the types of ALBs that are established, depending on for example legal context or state traditions. In some countries, the creation of ALBs goes back decades (Van Genugten, 2008), while in other countries, the recent financial crisis has spurred local governments to externalize (Ferry, Andrews, Skelcher & Wegorowski, 2018; Kuhlman and Bouckaert, 2016). An overview of what arm’s length service delivery at the local level nowadays looks like across countries is however lacking (Torsteinsen, 2019).

Despite its wide spread, the creation of ALBs at the local level is – in contrast to a similar trend at the national level (see for example Verhoest et al., 2012) – largely understudied (Cambini, Filipinni, Piacenza & Vannoni, 2011; Kuhlman and Bouckaert, 2016; Lidström, 2017; Torsteinsen, 2019; Voorn, Van Genugten, and Van Thiel, 2017). The literature that reports on the local level focuses predominantly on contracting out and privatisation (e.g. Brown and Potoski, 2003; Dijkgraaf, Gradus, and Melenberg, 2003; Domberger and Jensen, 1997; Hefetz and Warner, 2004; Hirsch, 1995; Van Genugten, 2008), and to a lesser extent and more recently on corporatisation (Citroni, Lippi, and Profeti, 2013; Ferry et al., 2018; Florio and Fecher, 2011; Grossi and Reichard, 2008; Krause and Van Thiel, 2018; Tavares, 2017; Voorn et al., 2017). Consequently, the literature on local ALBs is not only limited, but also fragmented.

Furthermore, the literature mainly focuses on motives for and effects (mainly effectiveness and efficiency) of arm’s length service delivery, but does not touch upon the new governance and steering issues that have arisen as a result of the increased use of ALBs. Municipalities no longer have a solely hierarchical steering relationship with the organisations that are providing public services. Instead, they have an additional contracting relationship, in which they have to ensure the delivery of local public services. This poses several challenges for the governments involved (Krause and Van Thiel, 2018; Papenfuß, Van Genugten, De Kruijf & Van Thiel, 2018; Voorn, Van Genugten, and Van Thiel, 2017, 2019b).

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19 This chapter has been published as: Van Genugten, Van Thiel, and Voorn (2019). We have permission from the publisher to present this chapter here.

20 Public service delivery can encompass production, purchase and/or provision of public services.
In this overview article, we will first discuss the types of ALBs that exist in several countries, based on an expert survey. In the second part, we delve into the literature to list the most important research findings so far. We focus in particular on the new governance dilemmas that the use of ALBs has created for local governments. Using principal agent theory, we will describe these dilemmas and present some recent insights on the topic. Finally, we discuss which questions are or should be on the agenda for research into ALBs at the local level.

9.2 Arm’s length bodies at the local level

Arm’s length bodies at the local level can take many forms, depending on the local context and legal traditions. Unfortunately, researchers often group together and juxtapose ‘public’ and ‘private’ bodies without accurately specifying what type of bodies they investigate (Voorn et al., 2017). This lack of a clear and uniform terminology complicates research into ALBs, in particular comparative research. To solve this problem, we present a categorisation of ALBs at the local level, based on Van Thiel’s typology (2012) of agencies at the national level and Torsteinsen and Van Genugten’s application (2016) thereof to the local level. These typologies consist of five types of agencies ranging from type 0 agencies – traditional in-house delivery – that are actually not at arm’s length of (local) government, to three types of agencies (type 1, 2 and 3) that can be understood as ALBs, and type 4 agencies in which governments only have a contracting relationship with a public or private body but no ownership relationship as in the case of ALBs (see definitions below). Both type 0 and type 4 agencies are common at the local level in most European countries. Apart from England, where most areas of local public services have moved away from in-house delivery, type 0 can still be found in most countries at the local level. The same is true for type 4 agencies. In particular, in England and The Netherlands there has been a great amount of contracting out since the 1980s covering many services, while this process started a decade later in other countries, including Belgium, Norway and Spain, according to local experts whom we consulted (see below). The extent of contracting out varies from country to country and from one local government to another.

In the remainder of this paper, we focus on the three types of agencies that can be understood as ALBs (type 1, 2 and 3). ALBs can be defined as ‘organizations which spend public money and fulfil a public function but exist with some degree of independence from politicians’ (Greve, Flinders, and Van Thiel, 1999, 139). The degree of independence or autonomy varies per ALB and relates to conditions under which it operates, for example its source of finances and belonging to the public domain (Allix and Van Thiel, 2005; Greve, Flinders, and Van Thiel, 1999). These conditions vary per country and sometimes even per municipality within a country. Therefore, our categorization of ALBs is not exhaustive nor mutually exclusive and based on only two dimensions, namely structural and legal autonomy (Verhoest, Peters, Bouckaert & Verschuere, 2004). Structural autonomy refers to ‘the extent to which the agency is shielded from influence through lines of hierarchy and accountability’ (Verhoest et al., 2004, p. 105), while legal autonomy refers to ‘the extent to which the legal status of the agency prevents the government from altering the allocation of decision-making competencies or makes such changes more difficult’ (Verhoest et al., 2004, p. 106). Regarding the dimension of legal autonomy, type 1 ALBs do not have a separate legal status, while type 2 and 3 ALBs do. The degree of structural autonomy increases from type 1 ALBs to type 3 ALBs, meaning
that local authorities’ level of accountability to local councils and hierarchical control mechanisms available to local authorities decrease.

At the end of 2018, we sent out a survey to twenty-six (mainly European) academic experts in the field of public administration specialized in local government and asked them to categorise the local ALBs in their country according to our categorisation (see Appendix). We used an expert survey as this allowed us to collect information that cannot be gathered using a literature review because of a lack of uniform terminology or through document analysis due to language barriers. We received responses from eighteen experts, of which seven experts reported not to be able to give us the requested information, due to upcoming or recent reforms (Finland, Romania), lack of data (Estonia), lack of time, and lack of knowledge on this specific subject; two experts could only provide us reports that were difficult to translate to our typology. In total, we collected information from thirteen countries: Belgium (Flanders) (BE), Croatia (HR), Denmark (DK), England (EN), France (FR), Germany (DE), Hungary (HU), Italy (IT), Norway (NO), Portugal (PT), Spain (ES), Sweden (SE), and The Netherlands (NL). The data on Norway and Germany were collected in previous comparative projects on this subject (Papenfuß et al., 2018; Torsteinsen and Van Genugten, 2016). Table 1 presents the results.

Table 1: Typology of ALBs in thirteen countries

<table>
<thead>
<tr>
<th>Type</th>
<th>Definition</th>
<th>Types of bodies at the local level</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Semi-autonomous body, unit or body without legal independence but with considerable managerial autonomy</td>
<td>In-house delivery by ‘autonomised’ units</td>
<td>Intern verzelfstandigd agentschap (BE); Vlastiti pogon (HR); Kommunal entreprenør, Kommunal leverandør (DK); ‘business unit’ (EN); metropolitan agency (FR); Stadtbetriebe, Eigenbetriebe (DE); Istituzione (IT); Resultatenheter, Kommunalt foretak (NO); Serviços municipalizados (PT); Organismo autônomo (ES); Joint committees (Gemensam nämnd) (SE); gemeentebedrijf, tak van dienst (NL)</td>
</tr>
<tr>
<td></td>
<td><strong>Legally independent body with managerial autonomy (in principle public law based)</strong></td>
<td><strong>Inter-municipal companies, public bodies, statutory bodies</strong></td>
<td><strong>Autonoom gemeentebedrijf, opdrachtvullende en dienstverlenende vereniging (BE); Javna ustanova (HR); Kommunale fællesskaber I/S or §60 selskaber (DK); free-standing/single purpose local public bodies (trust) (EN); Anstalten des öffentlichen Rechts (DE); Communal public establishment, public interest group, cooperative public establishment (metropolis, urban community, community of communes) (FR); public budget organisation (önkormányzati költségvetési szerv), Local Governmental Association (önkormányzati társulás) (HU); Azienda Speciale, Consorzio (IT); Interkommunalt selskap (NO); Metropolitan areas, comunidades Intermunicipais, intermunicipal associations (PT); Consorcio, Mancomunidad, comunitades de municipios, asociaciones de municipios (ES); municipal federations (Kommunalförbundet) (SE); openbaar lichaam obv WGR (NL)</strong></td>
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<td>2</td>
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</tbody>
</table>
Table 1: Typology of ALBs in thirteen countries (cont.)

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Body established by or on behalf of the local government such as a foundation, corporation, company or enterprise (private law based)</td>
<td>Limited companies, foundations</td>
</tr>
</tbody>
</table>

Table 1 shows that the three types of ALBs exist in all these European countries. Moreover, ALBs are found in a broad range of sectors providing a broad range of services (from social welfare services to utility services). Since the 1990s/2000s, in particular type 3 ALBs are increasing. This is for example the case in Belgium, Croatia, Denmark, Italy, Norway, Portugal, and The Netherlands. In Sweden, type 3 ALBs are even the majority of ALBs (93%). An exception is Hungary, where the number of type 3 ALBs has not changed significantly since the 1990s. In Portugal, following the increase of type 3 ALBs since 1998, there was a significant reduction in numbers after the financial bailout in 2011, which intriguingly contradicts the rise in numbers after the crisis in England (Ferry et al., 2018).

Taking a closer look at the three types of ALB, all countries have type 1 ALBs at the local level. These ALBs are units within local government without a separate legal status, but with a degree of managerial autonomy concerning internal operational matters (personnel, organisation). For example in Portugal, these in-house delivery units have a separate fund in the municipal budget. In Norway and The Netherlands, contract-like agreements are set up to formulate performance obligations. The degree of managerial discretion varies considerably, within and between countries. In some countries, this type of ALB is used for municipal tasks in general, while in other countries they are mainly used for one type of service, for example for communal tasks in Croatia, social and cultural services in Italy, for utility services in Portugal, and for investments and urban planning in France. In most countries, type 1 ALBs are owned by a single municipality, but the joint committees in Sweden are created by two or more municipalities and the metropolitan
agencies in France can also be created by more than one municipality and/or different level government authorities.

Type 2 ALBs are public law based entities with a separate legal status, and can be found in all countries, but there is a great variety in forms within and between countries. One notable difference is the distinction in some countries between municipal and inter-municipal forms (for example in Belgium, France, Hungary, and Italy), while type 2 ALBs in other countries are solely inter-municipal (for example in Denmark, Norway, Portugal, and Sweden) and/or inter-governmental (for example in Spain and The Netherlands) in nature. In some countries, such as Belgium, France and Spain, non-profit and private bodies can also participate in these inter-municipal/inter-governmental forms. A second form of variation is that within the inter-municipal forms a distinction is made between compulsory and voluntary inter-municipal cooperation in some countries (for example Portugal and The Netherlands). A third form of type 2 ALBs that exist in some countries are non-profit, single purpose institutions established on the basis of a specific law (Croatia, France, and Germany) or by statute or ministerial decision (England). In the latter case, not all bodies are based in a law, but effectively they operate as though they were.

Type 3 ALBs are private law based organizations established by or on behalf of local government(s) and are found in all countries. Common forms of this type are the private law based limited liability company of which local governments have majority ownership (Croatia, Denmark, England, France, Germany, Hungary, Italy, Norway, Sweden, and The Netherlands) and the foundation (Croatia, Italy, Spain, Sweden, and The Netherlands). In Portugal, this type of ALB is based in a mix of public and private law. In all countries, type 3 ALBs can be single-owned or jointly-owned by municipalities. In some countries, other government levels can be co-establishe as well (for example in Croatia and The Netherlands). Mixed ownership of public and private owners also exists. For example, in Italy, mixed ownership is increasingly used, whereas in Sweden and The Netherlands this is quite modest. Besides the difference in legal form, the possibilities for accountability and control of ALBs are larger for type 2 ALBs than for type 3 ALBs, hence type 3 ALBs have more leeway to make their own decisions (cf. structural autonomy, Verhoest et al. 2004).

The expert survey confirms what we know from the literature so far: there is a large variety in forms of ALBs (Ferry et al., 2018; Torsteinsen, 2019; Voorn et al., 2017). And then one should be aware that the literature is not even covering all countries and policy sectors equally. There is a dominance of economists in research on ALBs, a dominance of some European countries (The Netherlands, Spain, Italy, Portugal) and a dominance of some sectors (e.g. utilities such as water, public transport, waste collection). This implies that there is still much research to do on this topic, a point to which we will return in the final section.

9.3 Prominent themes in research on ALBs

To gain an overview of the state of the art, we analysed review studies on arm’s length service delivery at the local level (among others: Bel and Fageda, 2007; Bel and Warner, 2008, 2015; Grossi, Papenfuss, and Tremblay, 2015; Tavares, 2017; Voorn et al., 2017). We will focus on three prominent themes: the motives of local governments to establish ALBs; findings on the performance of ALBs; and the new governance dilemmas for local governments (next section).
9.3.1 Factors explaining the choice for service delivery via ALBs

Two types of causes are mentioned for the creation of local ALBs (Bel and Fageda, 2007): economic and political causes.

Economic causes are fiscal stress and budget restrictions which induce governments to externalise (e.g. Andrews, Ferry, Skelcher & Wegorowski, 2019; Bel and Fageda, 2010; Citroni, Lippi, and Profeti, 2013; Gradus, Dijkgraaf, and Wassenaar, 2014; Grossi and Reichard, 2008). This is either instigated by the belief that market organisations and ALBs will perform more efficiently than government organisations, or by the belief that a particular task is not a core government responsibility anymore and therefore can be transferred to the market. Another economic motive is anticipated cost savings due to the introduction of competition or economies of scale (e.g. Bel and Fageda, 2010). The latter in particular is an important motive for smaller municipalities establishing jointly owned type 2 and 3 ALBs (Bel and Fageda, 2010; Citroni et al., 2013; Hulst and Van Montfort, 2012; LeRoux and Carr, 2007; Silvestre, Marques, and Gomes, 2018; Allers and De Greef, 2018) to cope with scarce local financial resources and cutbacks. Joint ALBs are expected to enhance the quality and range of service delivery. Another motive for joint ALBs are the scale and complexity of social processes and policy problems that require a capacity that goes beyond the scale and boundaries of a single municipality.

Political motives include the desire to win the support of interest groups (such as unions or industry) having a particular interest in a specific form of public service delivery (Bel and Fageda, 2010). For example, many type 2 and 3 ALBs have a board in which members of interest groups can be (and are) appointed (see also below). Another political motive is ideology. Rule of left-wing political parties is found to be related to public delivery, while right-wing political parties can be linked to contracting out and privatisation (Bel and Fageda, 2010; Gradus, Dijkgraaf and Wassenaar, 2014; Tavares and Camões, 2010). A third political motive for putting public service delivery at arms’ length, in particular type 2 and 3 ALBs, is political instability to avoid service disruptions or to shift blame to external providers (Bordeaux, 2004; Rodrigues, Tavares, and De Araújo, 2012; Tavares, 2017; Tavares and Camões, 2010). By putting public services at arm’s length, politicians may try to avoid blame when performance is poor – although in practice this is quite difficult as citizens often still anticipate the government to intervene (Van Slyke and Roch, 2004).

9.3.2 Performance of ALBs

Performance of public service delivery bodies is frequently studied, often to contrast public and private bodies. However, the focus of most of these studies is more on contracting-out and privatisation than on ALBs. Initial studies showed success (Domberger and Jensen, 1997; Hodge, 2000), but over time, research started showing that privatisation and contracting-out did not increase efficiency as much as originally presumed (Bel and Warner, 2008).

The limited success over time of contracting-out and privatisation, however, did not prevent municipalities from searching for new ways to incorporate market pressures in local public service delivery (Voorn, Van Genugten, and Van Thiel, 2018). The consensus among academics and practitioners seemed to be not that markets had failed to bring efficiency, but that markets had failed to develop. Therefore, from the early 2000s onwards, local public service delivery focused around introducing novel forms of service delivery, often relying on market- or business-like conditions in some way (Argento,
Grossi, Tagesson, and Collin, 2010; Voorn et al., 2018). Such forms included municipally owned corporations and mixed firms (type 2 and 3 ALBs). Particularly municipally owned corporations have become increasingly popular (Grossi and Reichard, 2008; Tavares, 2017; Tavares and Camoes, 2007, 2010; Voorn et al., 2018). Whether their creation has led to a more effective and efficient public service delivery is however not evident. Like other ALBs, it is difficult to steer and monitor these corporations (see also below). Moreover, corporatisation does not necessarily take place for public service reasons, and could be used as a way for political representatives to shift blame for poor management to the directors of the new municipally owned corporation (Bourdeaux, 2004; Tavares and Camoes, 2007). Next, autonomy could also be used to avoid budget rules, to make municipal budgets look healthier than they actually are, or to alleviate fiscal stress (Citroni et al., 2013; Grossi and Reichard, 2008; Tavares, 2017). Therefore, whether corporatisation is effective or not is one of the critical current questions in local public service delivery. A systematic review of the literature by Voorn et al. (2017) tentatively suggests a positive effect, although it is highly contingent on sector and municipal capacity (an issue we will return to in the next section).

9.4 Governance dilemmas for local governments

To model the governance relationship between local governments and ALBs, principal-agent theory is frequently used (Allers and Van Ommeren, 2016; Bel and Warner, 2008, 2015; Boyne, 1998; Feiock 2007; Garrone, Grilli, and Rousseau, 2013; Hefetz and Warner, 2004; Reeves, 2013; Sørensen, 2007; Van Slyke, 2006; Voorn et al., 2017, 2019b). In this economic model, the local government is the principal who hires an agent (ALB) to carry out a particular task. As the agent is more expert at the task, the principal faces uncertainty whether the agent will indeed perform as agreed, and not serve only its own interests. To compensate for his information disadvantage, the principal will have to invest in monitoring devices or offer incentives to the agent. Local governments that want to manage ALBs may run into a number of problems, that may be more severe when the structural autonomy is greater (i.e. when moving from type 1 to type 3 ALBs) We discuss the problems of (1) local government capacity, (2) goal divergence, accountability and control, (3) multiple principals, (4) corporate governance, and (5) hollowing out of local government.

9.4.1 Local government capacity

Compared to state or national governments, local governments have less capacity to manage at arm’s length. By virtue of their smaller size, they have less expertise in management (Brown and Potoski, 2006; Buenrostro and Bocco, 2003; Plummer, 2013), less access to technical knowledge or service expertise (Buenrostro and Bocco, 2003), and a lack of expertise in establishing salient contracts and in monitoring (Brown and Potoski, 2003, 2006; Ernita Joaquin and Greitens, 2012; Hefetz and Warner, 2004). Local governments may also face a more general lack of resources (Dolley et al., 2006; Voorn et al., 2019a), a problem that is nowadays more severe due to post-crisis austerity (Bolgherini, 2014; Lowndes and Gardner, 2016; Overmans and Noordegraaf, 2014; Peck, 2014).

Local government capacity can differ per municipality and service (Brown and Potoski, 2003, 2006; Hefetz and Warner, 2011; Martins, 1995). That is, capacity problems
seem greater in smaller, rural municipalities than in urban municipalities, and for services that are more technical or have less overt public objectives local governments require more capacity due to the difficulty of monitoring and evaluating service delivery. However, investing in capacity proves to be more difficult for smaller municipalities.

The problem may be smaller in type 1 ALBs, as this type of ALB is still part of the municipal hierarchical organisation. However, when creating a stand-alone organisation (i.e. type 2 and 3 ALBs), staff and expertise often moves to this new organisation. This leaves municipalities’ staff without the necessary expertise to manage these ALBs.

9.4.2 Goal divergence, accountability and control

Directors of ALBs may have objectives different from municipalities: they might want to divert funds for private gains or prestige (such as by asking for higher salaries or greater number of employees than necessary) or might disagree with municipalities about objectives (cf. Holmstrom and Tirole, 1989). This creates goal divergence that can cause problems for municipalities.

Goal divergence is a key reason why governance is required in the relationship between municipalities and ALBs. Such governance, however, is not without costs. Because of asymmetric information between municipalities and ALBs – ameliorated by lack of local government capacity – steering and monitoring protocols are required, especially in cases where multiple stakeholders are involved like in joint type 2 and 3 ALBs (Voorn et al., 2019b). Clear directives from the municipality build the ALB’s awareness of expectations, and gives the municipality a criterion to audit. Similarly, incentives such as variable pay can align the director's interest with that of the municipality. Monitoring the director is also practical, presuming it is not too costly. However, there are still findings that as the distance between ALBs and municipalities increases (i.e. moving from type 1 ALBs to type 3 ALBs), the municipalities’ objectives are less likely to be satisfied (Brown and Potoski, 2003) and accountability can be lost (Cäker and Nyland, 2017; Moynihan, 2006; Spicer, 2017).

9.4.3 Multiple principals

Principal-agent problems intensify when multiple stakeholders (in joint type 2 and 3 ALBs) are involved in service delivery. Such joint service delivery, that can take place through for example inter-municipal bodies or institutional public-private partnerships (Bel and Sebo, 2018; Blaeschke and Haug, 2018; Cäker and Nyland, 2017; Carini, Giacomini, and Teodori, 2019; Soukopová and Vaceková, 2018; Sørensen 2007; Voorn et al., 2017, 2019b) can potentially induce conflicts in governance and monitoring. For example, local governments can face free-riding problems or duplication in monitoring if there is no agreement on which principal will be in charge of monitoring, which can cause inefficiency. Moreover, individual municipalities may have incentives to pressure the ALB to put their own interests first, and such cross-pressure can potentially cause more inefficiency (Garrone, Grilli, and Rousseau, 2013; Voorn et al., 2019b). In institutional governance, a model that considers the relationship between governments and ALBs is needed (Van Thiel, 2016). One such model is stewardship theory (Davis, Schoorman & Donaldson, 1997).

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21 Goal divergence may not always be true for public sector organizations (Van Thiel, 2016). A more applicable model for the relationship between governments and ALBs in that case may be stewardship theory (Davis, Schoorman & Donaldson, 1997).
public-private partnerships (Argento et al., 2009; Da Cruz and Marques, 2012), for instance, both the public and private partner can try to pressure the ALB to reflect their interest first and foremost, and spend a lot of resources in the process of doing so. Much less emphasised, however, is that the same can occur for inter-municipal service delivery when municipalities are heterogeneous in interests. One proposed solution for this is to coordinate between local governments for example by delegating governance to a single party elected by the municipal principals, but further research as to whether or not this is effective is required (Voorn, Van Genugten, and Van Thiel, 2019).

9.4.4 Corporate governance
Type 2 and 3 ALBs often have a corporate structure with a one or two tier board. The one-tier model is the predominant model in Anglo-Saxon countries, while the two-tier board with an executive and non-executive board is a common model in continental European countries (Van Thiel, 2015). In the latter model, the executive board manages the ALB and the non-executive board officially is advisor and supervisor of the ALB. The corporate structure makes the corporate governance of these ALBs a relevant topic. Corporate governance is understood as the mechanisms for control, monitoring and management of legally and/or economically independent entities owned by local governments (Cadbury, 2008; Shleifer and Vishny, 1997). This is often associated with guidelines regarding the behaviour and structure of the executive and non-executive board and, in particular, the accountability of these boards (e.g., Aguilera and Cuervo-Cazurra, 2009; Zattoni and Cuomo, 2008).

Serious challenges and problems can be discerned in the corporate governance of ALBs (Bruton et al., 2015; Grossi, Papenfuss, and Tremblay, 2015). An important element of corporate governance is the composition and behaviour of the executive board (Hinna, De Nito, and Mangia, 2010; Meyer, Höllerer, and Leixnering, 2018; Van der Walt and Ingley, 2003). Besides in empirical studies, this is stressed in codes for good corporate governance (Papenfuss et al., 2018). Executive boards are expected to have a positive effect on ALBs’ performance (Cornforth, 2012; Hinna et al., 2010). In case of joint ALBs, the strategic decision making of the executive board can however be complicated by varying interests among the multiple stakeholders (Bruton et al., 2015). Furthermore, as municipal owners often have the power of appointing board members, they may appoint likeminded executive directors (with a previous career in the public sector or a political background) (Bruton et al., 2015; Flinders and Matthews, 2010). This type of government control, called politicisation (Flinders and Matthews, 2010; Peters and Pierre, 2004), might lead to a politically desired focus on maintenance of employment and other social concerns, but might negatively affect the economic performance of the ALB (Bruton et al., 2015). Moreover, municipal owners might use reward-based political patronage as a means of favouritism used to reward political minions (Meyer, Höllerer, and Leixnering, 2018).

9.4.5 Hollowing out of local government
Putting public service delivery at arms’ length from the local government might ‘hollow out’ local government. Hollowing out refers to (local) governments’ loss of functions and loss of autonomy due to reforms such as privatisation, putting services at arms’ length, and processes of centralisation and Europeanisation (Jacobsen, 2009). In the context of ALBs, the loss of power of political institutions, such as democratically responsible local
councils, to non-elected bodies can create a democratic deficit. For example, in type 2 and 3 ALBs, power is shifted to appointed boards (Flinders and Matthews, 2010) which limits the ‘responsibility, accountability and authority for public action’ of municipal councils (Skelcher, 2010, p. 8). In ALBs that are jointly owned by municipalities, the possibilities for steering and control of individual municipal councils is limited (Sørensen, 2017; Voorn et al., 2019b). Another cause for the democratic deficit is that ALBs are often single purpose bodies (Jacobsen, 2009), which limits the possibilities of integral decision making to deal with wicked issues. At the same time, layman councillors who often lack specialised knowledge struggle with controlling these specialised ALBs (Jacobsen, 2009). For example, they do not always have enough interest, time or capacity to interpret the information arising from performance monitoring (Askim, 2007; Ter Bogt, 2004; Voorn, Nolden, Van Genugten & Van Thiel, 2019a). As a result, control and monitoring of ALBs is often limited to the minimum legal requirements (Aars and Ringkjøb, 2011).

9.5 Research agenda

The foregoing discussion of the state of the art of research and research findings on the use of ALBs by local governments has shown that there are still many questions unanswered. In this final section, we will present three research priorities. There are many more topics that could be studied, but we believe that these are the most urgent questions, both for academics and practitioners.

First, the definition and types of ALBs need more clarification. Public service delivery encompasses both the production, provision and purchase of services. Further refinement is needed, but can only be done when we have a better overview of the different types and numbers of ALBs in various countries. Our expert survey confirmed that local governments in Europe are all making extensive use of all three types of ALBs. It has however proven difficult to obtain more exact numbers of such bodies and their size in terms of for example budget or sectors. More research is therefore first and foremost needed to make an inventory of types of ALBs, their size and the sectors in which they operate. The current literature is fragmented and limited, and biased towards certain sectors, in particular water and waste. The typology that was used for the survey can be instrumental for comparative research, even if it has its limitations. We do not expect that it is possible to get full clarity on all the different types, given all the differences in legal contexts and state traditions, but the three categories/types appear to be relatively easy to recognise for the experts.

A second priority for future research concerns the effects of the creation of ALBs, not only in terms of economic effects but also in terms of democratic effects. Little is known for example what citizens know and think of the fact that most of public service delivery nowadays is carried out by non-core government bodies (see for an exception James, Jilke, Petersen & Van de Walle 2016). Moreover, we have identified a number of ways in which a democratic deficit has arisen as a result of the creation of ALBs, particularly in case of type 2 and 3 ALBs. Most ALBs are non-elected and therefore not held accountable directly. Local governments can monitor the ALB and report this to local councils and citizens, but they are hindered by the limitations in their steering and information processing capacities. And in the case of jointly-owned ALBs the possibilities for individual local governments to intervene or monitor are even more limited. Research should delve more into these issues, also to develop useful solutions for local governments.
Third and final, the new governance issues need to be studied more. Governments are facing the dilemma on how to deal with bodies operating at arm’s length. We have identified a number of problems that all deserve attention. However, two issues stand out most: the multiple principal problem and the role of boards. Both occur most in type 2 and 3 ALBs. Small municipalities try to solve their lack of steering capacity by joining forces with neighbouring municipalities (also expecting economies of scale). However, a multiple principal situation creates new problems, both on the side of the principals (e.g. who is going to be in charge of monitoring) and of the agent (e.g. being subjected to cross pressure from different principals). Principal agent theory’s solution is to coordinate among the principals, but that is difficult to achieve among different governments. Researchers should not only study these problems, but also consider different solutions like alternative theories and models, such as stewardship theory (see note 2). Research into boards has so far focused mostly on the composition of the boards (e.g. diversity) or its remuneration (see e.g. Papenfuß et al. 2018). Knowledge of the internal workings and the effectiveness of boards is therefore one of the unchartered territories for researchers to go and explore.
References


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Local Government Studies 44 (1): 105-126.


Appendix A: Expert survey on ALBs

<table>
<thead>
<tr>
<th>Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dear country expert,</td>
</tr>
</tbody>
</table>

We are working on a paper about the steering relationship between local governments and arm’s length bodies. To set the scene we would like to write a section on arm’s length bodies at the local level in different countries. We have information on The Netherlands, Germany and Norway, but we don’t know much about these bodies in other countries. Therefore we are asking for your support by providing us information on arm’s length bodies at the local level in your country.

Attached you will find a document with a table. This table is based on Sandra van Thiel’s typology of arm’s length bodies at the national level (see attachment). We used this typology previously to compare arm’s length bodies (ALBs) in the Netherlands with ALBs in Germany and Norway. This worked quite well. The question to you is whether you would be so kind to fill out the table for ALBs at the local level in your country.
Appendix A: Expert survey on ALBs (cont.)

Survey

Please note when filling out the table, that we are interested in:

- Whether all forms of the typology do indeed exist in your country at the local level
- If so, what they are called
- If so, whether you could give an indication of how common the different forms are (and if available give some figures)
- If some forms do not exist – please leave the cell open
- If some forms do not fit this typology – please indicate this below the table and explain how you would classify these forms
- Major trends of development (e.g. increase in some forms)
- Particularities of ALOs at the local level in your country (e.g. with regard to legal form, legal provisions, (corporate) governance)
- Other thoughts on the typology or subject in general – please indicate this below the table

We look forward to a positive response from you. Thank you in advance for your support.

Name of expert: ......................................................
Country: .................................................................
## Appendix A: Expert survey on ALBs (cont.)

### Survey

<table>
<thead>
<tr>
<th>Type</th>
<th>Definition</th>
<th>Types of organizations at the local level</th>
<th>Country of expert</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Unit or directory of the local government</td>
<td>Traditional in-house delivery</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Semi-autonomous organization, unit or body without legal independence but with considerable managerial autonomy</td>
<td>In-house delivery by ‘autonomized’ units</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Legally independent organization with managerial autonomy (in principle public law based)</td>
<td>Inter-municipal companies, public bodies, statutory bodies</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Organization established by or on behalf of the local government such as a foundation, corporation, company or enterprise (private law based)</td>
<td>Limited companies, foundations</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Tendering and contracting out to public (for example other municipalities) or private organizations</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Major trends over time

### Particularities of ALBs

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**ALBs that do not fit the typology:**

**Other thoughts/comments:**
Chapter 10: Conclusion

The purpose of this dissertation is to understand if and how the characteristics and governance of municipally owned corporations (MOCs) explain their outcomes. Understanding what contributes to the outcomes of MOCs is theoretically and practically relevant, particularly because MOCs are increasingly used at the local government level to deliver public services, and are taking up increasing parts of municipal budgets (Citroni, Lippi, and Profeti 2013; Grossi and Reichard 2008). At the same time, we still know little about their performance, and the ways in which local governments can ensure that their objectives are reached. For this reason, multiple academics have called for more research on the topic (Bergh et al. 2018; Cambini et al. 2011; Ferry et al. 2018; Lidström 2017; Torsteinsen 2019; Voorn, Van Thiel, and Van Genugten 2018). Through various articles and using a mixed method strategy, this dissertation aims to fill that knowledge gap.

This conclusion serves as a summary of the contributions and limitations of this dissertation, and offers various avenues for future research. This chapter is organized as follows. In the next section, I briefly summarize the individual articles contained in this dissertation, before moving on to answering the main research question in section 2. Section 3 discusses the contributions made to the theoretical and empirical literatures, while section 4 outlines the practical contributions. I discuss the main limitations of this dissertation in section 5, and some avenues for future research in section 6. Section 7 wraps up the dissertation.

10.1 Summary of articles

This dissertation begins with a broad systematic literature review (published as Voorn, Van Genugten, and Van Thiel 2017) on the characteristics, efficiency, and effectiveness of MOCs in Chapter 2. Chapter 2 provides a definition of MOCs, explores what is known about the variables that affect their behavior, and offers a systematic review of the literature on the efficiency and effectiveness of MOCs (up until 2015). The key finding in this chapter is that the existing literature found MOCs to be often more efficient than local bureaucracies in the provision of services such as refuse collection, water services, and bus transportation, although they also have high initial failure rates. Based on this finding, we form a tentative hypothesis that MOCs are a viable means for delivering some local public services for municipalities capable of initiating and managing complex contracts. However, we also detect various problems in the literature. First, we detect a typological problem: definitions of MOCs vary widely. Second, we find that the literature has biases, with research into MOCs mainly focusing on specific policy sectors (refuse collection, water distribution, and transit services) and countries (Spain, Portugal, Italy, The Netherlands). Lastly, we find that empirical data is scarce: research of municipal corporatization relied much on case studies and rarely on quantitative research, leading to difficulties in aggregating findings across countries. In other words, we tentatively find based on the previous literature that municipal corporatization may increase the efficiency and effectiveness of local public service delivery, but more research is necessary to understand the mechanisms behind MOCs.

Chapter 3 (published as Voorn, Van Genugten, and Van Thiel 2019) follows up on one particular finding in the systematic literature review: the difficulty of governance
of inter-municipally owned corporations, a (large) subset of MOCs.\textsuperscript{22} This chapter theoretically discusses the multiple principal problem that refers to the collocation of the multiple collective action problems that MOCs face when they must balance (competing) interests of multiple stakeholders under joint service delivery. To investigate this theoretically, we expand a framework based on principal–agent theory, review the literature on joint service delivery, and consider implications of this framework and the literature for effective governance of joint service delivery in the public sector, in order to form hypotheses for what we can expect for MOCs. In particular, we posit that joint service delivery, as occurs in inter-municipally owned corporations, can lead to free-riding and duplication in governance, lobbying by principals, and increased autonomy for the professional managers of the corporations, leading to inefficiency. We build a research agenda and tentatively suggest, based on the literature, that an interface approach, where an elected unitary actor is placed in a middle tier between politics and service delivery, might best mitigate the multiple principal problem, which is currently not dealt with effectively in public management. These findings were used to supplement the survey, as demonstrated in the Appendix, and indeed the prevalence of the multiple principal problem is one of the more robust findings of this dissertation.

Chapter 4 (published in Dutch as Voorn, Van Genugten, and Van Thiel 2018b) describes MOCs in our country of study, the Netherlands, based on our survey, in terms of their characteristics, autonomy, external and internal governance, and performance. In general, we find that MOCs are very heterogeneous: they vary widely in terms of their corporate status, sector, size, amount of municipal owners, and in the involvement of other public and private shareholders. MOCs seem to be more autonomous in personnel matters than in financial matters and there is much diversity with regard to the sources of income that MOCs have. Regarding external governance and performance management, much is reported to municipalities regarding governance. However, this reporting seems to be of little consequence. MOCs generally have extensive control over their own targets. In internal governance or management, public-law organizations and enterprises seem to have clearer protocols than foundations, but there is little consistency in corporate governance, and certainly, no clear governance code is applied. Finally, in terms of outcomes, MOCs judge their performance the highest on motivation and the lowest on efficiency; public law organizations seem to rate themselves lower than foundations and enterprises. Overall, Chapter 4 demonstrates the large diversity of MOCs, which points out the danger in generalizing the previous largely case-based literature, but also complicates our large-N research.

Chapter 5 (conference version: Voorn, Van Genugten, and Van Thiel (2018a)) is the first chapter of this dissertation that considers causality in MOCs. It considers what factors influence professional managers’ perceptions of the output\textsuperscript{23} of MOCs. Using stepwise regression to determine which factors best predict perceptions of MOCs’ output, we find that key factors are their access to resources, their size, and the interaction between their multiple principals. First, at least in the view of the directors, one of the causes of reduced performance of MOCs in the Netherlands appears to be that they are often

\textsuperscript{22} In the Netherlands, these joint service organizations make up about 70\% of all municipal companies, see Chapter 4.

\textsuperscript{23} In Chapter 5, we use the term ‘performance’ at reviewers’ request, but we consider ‘output’ a more precise term for what we study.
underfunded. Second, budget size positively affects output, through increasing effectiveness and quality, but not efficiency, while organization size in terms of number of employees negatively affects output across all dimensions. We posit that one inhibiting factor for output in MOCs can be the hiring of excessive personnel, which was earlier found in state-owned enterprises (Boycko, Shleifer, and Vishny 1996). Finally, differences in steering between municipalities provisionally seem to reduce perceived output for inter-municipally owned corporations, which fits the theory based on the multiple principal problem, and offers a first indication that governance of Dutch MOCs is suboptimal.

Chapter 6 considers the stewardship of MOCs, i.e. their “responsibility, accountability and authority for public action” (following Skelcher 2000, 10). Again using stepwise regression, we consider which factors are the best predictors of MOCs’ stewardship to society. We find three significant predictors: trust, which positively affects perceived stewardship, dominance of individual municipalities in governance of inter-municipally owned corporations, which negatively affects perceived stewardship, and strategic managerial autonomy, which positively affects perceived stewardship. However, sensitivity analysis shows that only strategic managerial autonomy – the extent to which MOCs have control over their own targets – is a robust predictor – in contrast to what the literature on public value failure predicts. We suggest two possible explanations. First, this beneficial effect of strategic managerial autonomy on stewardship could be explained by the fact that reduced ‘ politicization’ of MOCs could make MOCs less ‘political’ and more ‘public’. Second, following stewardship theory, this increased stewardship following autonomy could be explained by increased legitimacy and motivation in MOCs. Both explanations suggest that stewardship of service delivery may not necessarily be served by an active strategic role for municipalities in governance, in contrast to typical government recommendations for active ownership (Van Thiel, Van Genugten, and Voorn 2019) – although further research using alternative measures of stewardship is recommended.

Chapter 7 considers the effects of one specific mechanism that is considered to play a key role in bringing about increased performance after local corporatization: the introduction of business techniques. In particular, this chapter studies whether business techniques play a mediating role for the link between managerial autonomy and performance in Dutch MOCs, using a latent measure of perceived performance as our dependent variable. We show that while the direct effect of all types of autonomy on performance is not significant or even negative, business techniques are both directly helpful for performance in MOCs and (partially) mediate the relationship between autonomy and performance. We also show that the mediating effects of business techniques between the HRM, financial, and strategic managerial autonomy of MOCs on the one hand and the performance of MOCs on the other hand are not strong enough to positively link autonomy to performance. The main takeaway of Chapter 7 is that corporatization is no panacea to improve the performance of public service delivery, and that autonomy might, when no business-like service delivery is implemented, have a direct negative effect on performance. One predictor of the usage of business techniques found in this chapter is the autonomy of MOCs in matters of personnel. We postulate that the influx of private sector personnel is one important mechanism through which ‘cultural change’ after corporatization can be achieved, with a net positive effect for performance.

Next, Chapter 8 (conference version: Voorn et al. (2019)) is based on qualitative research methods and considers one particular finding of the questionnaire: the relative (non-use) of performance management in MOCs. While performance management is
often used in the public sector at the national level to govern (semi-)autonomous public service organizations, knowledge of if and how this is implemented at the local level is limited, and in Chapter 4 we find that use of performance management was quite limited in MOCs. Therefore, we conducted a qualitative study into the causes of this lesser use of performance management in MOCs. 27 semi-structured interviews were held with stakeholders of 9 MOCs, interviewing for each organization the professional manager, a municipal alderman, and a municipal policy advisor, to assess the reasons for the (non-)use of performance management. Various patterns emerge that help to understand the (non-)use of performance management in MOCs. The most pressing reason we find to be inhibiting performance management is political: municipal executives have much to lose from the presence of performance indicators, so the introduction of salient governance techniques is not a priority. Limited municipal capacity and lack of culture change after local corporatization also are key drivers of lesser performance management. Other relevant factors include the preferences of the professional manager and service measurability. We also find that municipal control over MOCs diminishes over time due to increasing information asymmetries. Overall, introducing performance management for MOCs is difficult, and governance overall appears to be limited for many reasons, but particularly because of political risk aversion and growing expertise gaps over time.

Finally, Chapter 9 (published as Van Genugten, Van Thiel, and Voorn 2019) presents a summary of our findings in the form of a research agenda about arm’s length bodies more generally. In it, we make three contributions. First, based on an expert survey held among academics from 26 countries, we form a typology of these ‘at arm’s length bodies’ that helps future comparative research, showing that MOCs exist beyond just the countries studied in the literature. Second, we point out the challenges that local governments face after the creation of these arm’s length bodies, particularly emphasizing the difficulties that exist to ensure their performance, largely based on the research in this dissertation. Third, we demonstrate that research into these arm’s length bodies is still relatively undeveloped, and we present a research agenda to develop knowledge on the topic.

10.2 Answer to the research question

The main research question in this dissertation is:

**Do the characteristics and governance of municipally owned corporations explain their outcomes, and if so, how?**

In answering this research question, there are five main research objectives:

1. To describe the characteristics of MOCs, with a particular focus on the settings in which they are used, in terms of ownership, service sectors, municipal contracting capacity, market environment, business techniques, and the autonomy they receive;
2. To describe the external governance mechanisms that are used for MOCs that govern the relationship between local governments and MOCs, with a particular focus on ‘hard’ performance management and ‘soft’ relational management, and on the multiple principal problem that can occur in MOCs;
3. To describe the internal governance mechanisms that are used for MOCs – the corporate governance – with a particular focus on their legal form, their ownership structure, distribution of power and competencies, board structure, and board proceedings;

4. To describe the outcomes of MOCs, focusing particularly on measures of output – efficiency, effectiveness, and quality – and measures of stewardship to society – democratic nature, responsiveness, and accountability;

5. To link (1) environmental characteristics of MOCs, (2) the external governance mechanisms that are used for MOCs, and (3) the internal governance mechanisms that are used for MOCs with (4) the outcomes of MOCs, in order to explain these outcomes for MOCs.

Using the articles integrated in this dissertation, we can now answer this research question with a straightforward yes: the characteristics and governance of MOCs matter. We first describe the key features of MOCs (objectives 1-4), before answering our research question in more detail (objective 5).

10.2.1 Describing municipally owned corporations

We identified MOCs in the introduction as organizations that:

- have independent corporate status;
- are owned at least for the majority by municipalities or comparable local governments; and
- (typically) have legal and managerial autonomy (Voorn, Van Genugten, and Van Thiel 2017).

Our literature review in Chapter 2 pointed to a large heterogeneity of MOCs between countries: in some countries, MOCs can allow shared ownership, but not in others; countries can also differ in municipal corporatization in funding sources for MOCs, transaction costs, financial scrutiny, labour rights, and, under some circumstances, in the right to make profits and risk of bankruptcy (Bel and Fageda 2010). Next, MOCs can be founded in either public or private law, and can be very autonomous or less autonomous in various domains. This heterogeneity makes aggregating findings difficult. We have studied MOCs particularly in the Netherlands, and we have found MOCs to be not just heterogeneous between countries but also within a country.

First, in terms of characteristics, MOCs differ starkly from each other (objective 1). There is a wide variety of MOCs in terms of their corporate status, sector, size, amount of municipal owners, and in the involvement of other public and private shareholders. In corporate status, MOCs are often based in public law in the Netherlands on the basis of the Wet gemeenschappelijke regelingen, and this seems to be preferred by national legislators. However, enterprises and foundations based in private law have become common alternatives. Regarding ownership, MOCs often have multiple shareholders, most commonly other municipalities, but occasionally also private shareholders or other government layers are involved. Finally, regarding service sector, MOCs can be found delivering many types of services.
MOCs also vary widely in terms of their autonomy. Regarding personnel, they are generally very autonomous and can generally set their own personnel policies, although they have lesser control over labor agreements or pension arrangements, where they sometimes need to follow municipal and/or national policy. There is particularly much heterogeneity among MOCs regarding financial matters: some MOCs are allowed to invest on their own, can take out loans, and can freely change legal status or set up other corporations, but others are not, and particularly MOCs based in public law are restrained in this regard. Finally, unsurprisingly, there is much diversity with regards to the sources of income that MOCs have: some are largely dependent on municipal transfers, while others receive substantial revenue through other revenue streams, such as tariffs, subsidies, and private investment.

Next, in external governance, MOCs are also diverse (objective 2). Regarding external governance and performance management, much is reported to municipalities; however, this reporting seems to be of little consequence. Both bonuses and sanctions occur rarely among MOCs, and professional managers of MOCs suggest that failing to meet objectives is unlikely to lead to more than a firm talking-to, which may even not occur. However, there is much informal governance through individual relations between the MOCs and the municipal civil service, although this occurs substantially less in enterprises and foundations than in public-law corporations. MOCs generally have extensive control over their own targets, and over time municipalities seem to have less and less control, although in this too practices are heterogeneous.

In internal governance or management, MOCs are arguably even more diverse (objective 3). There is little consistency in corporate governance, and certainly no clear governance code is applied. Public-law organizations and enterprises seem to have clearer protocols than foundations. In the background of board members, there is little demographic diversity, with most boards dominated by white men; however, there is large diversity in career backgrounds and expertise, although public-sector backgrounds seem to be dominant on boards. Directors do not always work full-time, and particularly in foundations there is much part-time management without monetary compensation. Finally, communication between the executive board and supervisory board in MOCs is often formal and focused particularly on strategic, and not evaluative or operational matters, but also here, there is large heterogeneity among MOCs. There is little informal communication between executive boards and supervisory boards in MOCs with a two-tier board structure.

In terms of outcomes, there is diversity too. MOCs judge their performance the highest on motivation and the lowest on efficiency. Regarding business techniques, MOCs rate themselves high on transparency and planning. Less is done in terms of performance management. There are also large differences between MOCs in performance and business techniques depending on their legal status. Overall, municipally owned public law corporations seem to rate themselves lower than foundations and enterprises.

MOCs are thus a diverse group, and their behavior may have many different drivers.

10.2.2 Linking characteristics of MOCs to outcomes

Indeed, we can link various characteristics of MOCs to outcomes (objective 4).

First, when defining outcomes narrowly as output, it appears that one of the causes of reduced perceived performance of MOCs is that they are often underfunded.
Budget size positively affects performance, primarily through effectiveness and quality, while the number of employees negatively affects performance across all dimensions. Finally, steering differences between municipalities are a cause of reduced perceived performance for MOCs with multiple municipal owners, which fits the theory based on the multiple principal problem.

Second, when considering outcomes in terms of stewardship to society, three predictors seem significant: trust, governance under multiple principals, and strategic managerial autonomy. The extent to which municipalities express trust in MOCs correlates positively with stewardship to society, in line with our expectations; and the dominance of a single municipality for governance in inter-municipally owned corporations was linked to reduced perceptions of stewardship. However, neither of these findings was robust to sensitivity analysis. More robust to sensitivity analysis, and with high significance, was the finding that strategic managerial autonomy contributes positively to perceived stewardship of MOCs. This may be particularly linked to the politicization of MOCs that occurs when political executives play a more active role in target-setting.

Third, autonomy has a nuanced effect on performance. Managerial autonomy has an ambiguous effect on performance, and appears to be a helpful condition for bringing performance differentials in MOCs only if business techniques are introduced.

10.2.3 Answering the research question
Finally, we can answer our main research question (objective 5): characteristics and governance of MOCs indeed explain their outcomes. Three factors seem particularly important for understanding the outcomes of MOCs:

1. The presence of multiple principals negatively affects particularly the output of MOCs (through governance differences).
2. Autonomy has a mixed effect on performance. Managerial autonomy seems to have an ambiguous effect. Strategic managerial autonomy seems to improve the stewardship to society of MOCs. Other than that, managerial autonomy seems to be effective only if business techniques are introduced.
3. Various background variables affect output, in particular access to resources, which had a positive effect on performance, and organization size, where larger budgets were useful for economic performance and larger numbers of personnel were harmful for economic performance.

Figure 1 on the next page graphically illustrates our findings.
Figure 1: Findings of this dissertation illustrated

Note: the most relevant variables are shown in bold font.
10.3 Theoretical contributions

In answering our research questions, this dissertation has made several contributions to the theoretical literature, which we will address here.

10.3.1 Showing the limitations of dominant theory

First, this dissertation has contributed to the theoretical literature in showing the limitations of current theory. While principal-agent theory is nearly universally applied in the discussion of arm’s-length bodies (see e.g. Dixit 2002, for its use in government agencies; see Shleifer and Vishny 1994, for its use in state-owned enterprises; see Vining, Boardman, and Moore 2014, for its use in public-private partnership), the relatively low model fits of our research show that principal-agent theory offers no parsimonious explanation of the outcomes of MOCs. Indeed, MOCs are too heterogeneous to apply a single theory to. While we have found some support for the relevance of principal-agent theory in our research (for instance in the relevance of the multiple principal problem), we have also made some contradicting findings (for instance that MOCs show increased stewardship after being granted more strategic autonomy). We emphasize that increased ‘agency’ is not the only effect of municipal corporatization and that integration of more theories is necessary to understand MOCs.

In this dissertation we have used the insights of multiple other theories beyond principal-agent theory: public choice theory (primarily chapters 2, 3, 6, and 8), principal-steward theory and public value theory (primarily chapter 6, more limited in chapters 3, 5, and 8), and institutional logics theory (primarily chapters 6, 7, and 8). We have found some evidence for the relevance of all these theories, such as the higher perceived presence of stewardship in more strategically autonomous MOCs (chapter 6), which can be explained by principal-steward theory or public choice theory but not principal agent theory; the relevance of cultivating a business-like culture in MOCs (chapter 7), which supports the institutional logics perspective; and the problems of political rent-seeking in the governance of MOCs (chapter 8), which can be explained by public choice theory. For this reason, we encourage future research into MOCs to use a wide range of theories rather than to look for single parsimonious explanations of their behavior.

10.3.2 Demonstrating large heterogeneity and low predictability of outcomes of corporatization

A second and related contribution of this dissertation to the theoretical and empirical literature is to show that the heterogeneity of MOCs is high and the predictability of outcomes of municipal corporatization is low. First, Chapter 2 points out that MOCs have relatively high failure rates, and that discussing their aggregate effects may obscure their large heterogeneity. Second, Chapter 4 demonstrates heterogeneity for the Dutch case. Dutch MOCs vary strongly among all characteristics studied in this dissertation: in background, autonomy, internal and external governance, business techniques, and performance. Third, in the two stepwise regression articles, we demonstrate that even when we include all of the (large number of) variables studied in this dissertation in our research, it is hard to find a parsimonious explanation of the outcomes of MOCs, whether in terms of output or in terms of stewardship to society.

One explanation for this low predictability of the outcomes of municipal corporatization – although this explanation requires further research – is that no consistent
governance techniques have yet been developed, and so the mechanisms through which municipalities can ensure their objectives are met may not yet be optimized. The diversity in governance structures was demonstrated in Chapter 4, where we showed that none of the corporate governance techniques typically seen as useful were consistently applied, such as the use of supervisory boards, board diversity, remuneration, clear lines of communication, or performance management. Chapter 8 demonstrated that a lack of external governance is in part because of political disincentives for governance and expertise loss after local corporatization. Indeed, while for state-owned enterprises and government agencies guidelines exist, they do not exist (yet) for Dutch MOCs.

Another explanation that could be considered in further detail is the role of organizational culture, which likely affects outcomes strongly. Chapter 7 demonstrated that the mere presence of managerial autonomy, while helpful for introducing business-like public service delivery, is no guarantee of the adoption of these techniques and in turn for different service delivery. And one of the findings presented in Chapter 8 is that municipal corporatization does not necessarily come with a culture change, and that MOCs sometimes retain rather static features of the local civil service. Thus, organizational culture seems to be an important driver of the outcomes of municipal corporatization, and more research should be done to establish what performance-enhancing organizational culture looks like and how it can be brought about.

10.3.3 Challenging the efficacy – democracy trade-off

Third, this dissertation has contributed to the theoretical literature in showing that municipal corporatization may not simply be a trade-off between efficiency and democracy. The theoretical literature on state-owned enterprises and government agencies often sketches at arm's length governance as a trade-off between politics and professionalism, and between democracy and efficiency (Bourdeaux 2008; Christensen and Pallesen 2001; Leavitt and Morris 2004). We have empirically shown that it may not be so clear that this is in fact the trade-off that occurs after corporatization at the local level.

On the one hand, we have shown that it is not so clear that the autonomy of MOCs is linked to efficacy. First, while on the whole MOCs appear to be more efficacious than local bureaucracies, we do not yet have sufficient evidence for meta-regression analysis to verify this, and failure rates among MOCs remain high, so there might be a 'survival bias' in our data where only successful corporations remain standing. Second, it is not immediately clear if managerial autonomy contribute to output, as measured through perceptions of the corporations' directors, although legal autonomy seems beneficial. However, on the whole, whether MOCs are demonstrably more efficacious still remains an open question.

On the other hand, we have demonstrated that it is not obvious that municipal corporatization reduces stewardship to society of local public service delivery. The directors of MOCs with more strategic managerial autonomy scored their stewardship higher than the directors of MOCs that were strategically less autonomous. We suggest that while corporatization shifts public service delivery away from democratically elected politicians, this democratic accountability problem could also be (partially) offset by the

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24 That said, the frequency at which MOCs are reintegrated into the local civil service appears to be low.
lesser pervasiveness of political rent-seeking in MOCs. Thus whether MOCs are less public is not yet supported by the evidence. This dissertation thus makes an additional contribution to the literature by challenging the idea that municipal corporatization trades off democracy for efficacy.

10.3.4 Building a framework and finding evidence for the multiple principal problem

A fourth contribution of this dissertation was to build a framework and find evidence for the multiple principal problem. Since a large subset of MOCs are inter-municipally owned, they are subject to some additional governance problems. We have built a theoretical framework for the multiple principal problem that can occur in this situation. We have contributed to the theoretical literature by bringing multiple literatures together to build hypotheses for what can occur in case of joint public service delivery.

In particular, we posit that joint service delivery, as occurs in inter-municipally owned corporations, can lead to free-riding and duplication in governance, lobbying by principals, and increased autonomy for the directors of the corporations, leading to inefficiency and potentially inequity in service delivery. We find proof for this in our research: governance differences between municipalities were the cause of reduced output in MOCs. And when this was solved through a single principal taking on the role of governance, it caused reduced perceived stewardship of MOCs. Thus, the presence of governance problems related to the multiplicity of principals was one of the most significant predictors of outcomes in MOCs, and we suggest that these problems are likely to be observed in other cases of joint service delivery as well. We have also proposed a potential solution for the multiple principal problem based on the literature: an interface approach, where an elected unitary actor is placed in a middle tier between politics and service delivery. More research into this is necessary.

10.3.5 Illustrating that local corporatization is different

Finally, and most globally, this dissertation has (re)introduced the idea that the delivery of local public services through MOCs is fundamentally different from the delivery of local public service through the local civil service, despite the fact that in the literature these two types of service delivery tend to be collocated in favor of public-private comparisons. Most of our studies show that MOCs act fundamentally differently from municipal civil service. First, the systematic literature review demonstrates that MOCs are, on aggregate, more efficient than local bureaucracies, but have higher failure rates. Second, Chapter 6 showed that strategic managerial autonomy of MOCs has clear effects in terms of the output and stewardship to society of local public service delivery. Our structural equation model (Chapter 7) showed that autonomy in general contributes to the increased use of business techniques of MOCs, provisionally pointing out how they are different, although we could not tie this autonomy clearly to (improved or reduced) performance. And the interviews (Chapter 8) demonstrated that corporatization has clear governance implications, particularly related to the difficulties of increased information asymmetries. Thus, MOCs are different in terms of priorities, effects, and required governance for public service delivery – which researchers should take into account.
10.4 Practical recommendations

There are three practical recommendations that can be drawn from this dissertation.

10.4.1 Autonomy does not automatically bring better outcomes

Providing autonomy is not a panacea for service delivery. Autonomy provides the possibility for service delivery to change, but offers no guarantee for good performance. And whether or not autonomy for MOCs actually brings performance differentials depends on various circumstances which need to be actively brought about. Indeed, we found in our interviews that in some public services that were corporatized, culture change did not actually occur, and in the absence of changed behavior, MOCs function as not much more than parts of the municipal service where oversight has been lost (see Chapter 8).

How to bring about this culture change is still an open question. Chapter 7 demonstrates that particularly business techniques need to be introduced in order to change organizational culture, and one way to bring this about seems to be to encourage influx of private-sector personnel. However, a variety of other factors may also contribute to this culture change. Overall, thoughtful governance appears to be necessary on the side of municipalities to ensure that the right circumstances are in place for corporatization to lead to improved performance.

**Recommendation:** Municipalities should consider corporatization a means, rather than a goal, and put good (internal and external) governance practices in place to ensure, rather than enable, good performance outcomes.

10.4.2 Municipalities do not necessarily need ‘active’ political steering to protect the public interest

One of the key expectations about MOCs is that their autonomy leads them to be less democratic, but directors of MOCs do not seem to perceive lower stewardship in more autonomous MOCs. One suggestion of this dissertation is that active political ownership does not necessarily imply a better safeguarding of the public interest, as political executives are likewise subject to incentives that oppose the public interest, such as political risk aversion, short-term focus, and lack of incentives to introduce performance management.

**Recommendation:** Active political ownership comes at a cost. Municipalities should consider introducing governance mechanisms in MOCs that help to mitigate political lobbying, such as independent supervisory boards.

10.4.3 Joint service delivery brings governance problems

Nearly three-quarters of Dutch MOCs are owned by multiple municipalities (Chapter 4). Similar frequencies of inter-municipal ownership of MOCs are found in other countries (Chapter 9). Thus, it is important to be aware of the potential governance problems that can occur in such circumstances.

One of the most salient problems we have uncovered about the governance of MOCs is the multiple principal problem, which we have discussed in-depth in Chapter 3.
We have theorized that this multiple principal problem causes extensive autonomy for MOCs and disrupts efficiency in MOCs. Also in our empirical findings, the multiple principal problem is visible, in that the presence of multiple principals, reduces perceived output (Chapter 5), and that the presence of a single principal responsible for steering reduces perceptions of the stewardship to society of these MOCs, although this latter finding is not robust (Chapter 6). Practitioners should be aware that turning to intermunicipally owned corporations might provide expertise benefits, but also opens up service delivery to a multitude of governance problems. We have proposed that one solution to the multiple principal problem is to place governance duties in the hands of a single elected actor that can act as an interface between the municipalities and the intermunicipally owned corporation.

This multiple principal problem is evident in the MOCs with multiple shareholders, such as in intermunicipally owned corporations or in institutional public-private partnerships. However, practitioners should be (and usually are) aware that the existence of multiple principals occurs even in MOCs where one municipality is the exclusive shareholder, due to role dispersion in the municipality itself, and the professional managers of MOCs often point to the lack of continuity in municipal governance and the reporting difficulties this brings (see Chapter 8).

**Recommendation:** Municipalities should have a clear governance framework for MOCs, in which duties are exactly outlined. Make sure that governance is concentrated in the hands of an elected supervisory board that is independent from the shareholding municipalities. When possible, avoid cooperation under public law, where such governance is often made impossible by law.

**10.5 Limitations**

The research in this dissertation is not without its limitations. We discuss the main ones here.

**10.5.1 Applying national level theory to local level corporatization**

A first limitation of our research is in the theory we use: applying theory about national-level government agencies and state-owned enterprises to MOCs is helpful given the underdeveloped literature on MOCs, but also has its limitations. In particular, it is difficult to verify whether the same mechanisms we find to be essential for understanding national-level at arm’s length public service organizations are relevant at the local level among MOCs.

We mitigated this potential limitation in three ways. First, we started out by considering the literature on MOCs more generally (in our systematic literature review) to uncover whether some additional factors were important for understanding them. In doing so, we found the relevance of the multiple principal problem, which we then developed further theoretically for our research. Second, we included a large amount of variables in our research, reducing the chance that we missed a key variable. Finally, we asked open questions to respondents in both the survey and the interviews if we missed any important questions. While our qualitative research did provide us some new information, we believe for the large part our research covered the most important variables.
10.5.2 Dependency on perceptions

Next, one primary limitation of our methods is the dependency on perceptions, particularly in our performance measures in the questionnaire and in questions about antecedents of performance management in the interviews. When we ask directors about the performance of their organization, or when we ask municipal executives what caused their choice for certain governance mechanisms, it is likely that we incur some biases, and in particular answers may be subject to social desirability bias or overconfidence bias. Respondents may be tempted to choose answers that appear more desirable, and so directors of MOCs may overvalue their organization’s performance or municipal executives may be tempted to rationalize policy choices as more thought-out than they are in reality. This is exacerbated by the lack of attention for performance information. Altogether, it causes some bias in our research.

We try to mitigate these biases in the following way. First, several procedural remedies were used in the survey design (see MacKenzie and Podsakoff (2012) and Saris et al. (2010)), including reducing the potential for social desirability bias in item wordings, reducing ambiguity in scale items by using pre-validated scale items, and eliminating common scale properties (by using different scales both among independent variables and between independent and dependent variables). We emphasized to respondents that their answers would be treated anonymously at various stages during the survey, by including statements about this in the original request letter as well as in the online preamble to the survey. The same was done for our interview research: we emphasized anonymity in our original email and at the start of the interview and informed respondents that they could see transcripts and alter some of their statements if they wanted to (but no respondent did). Through these channels, we mitigated social desirability, although we cannot rule out its presence.

It is important also to consider these limitations in light of the limitations of alternatives. We could have measured performance instead through some combination of (i) profitability matrices and (ii) efficiency matrices, usually derived from financial reports, as is often done for measuring firm profitability. These matrices, however, are biased in at arm’s length organizations, and they have in our view been insufficiently challenged in the literature (see Chapter 5). Profitability measures and efficiency measures of performance in MOCs are subject to several problems. First, municipalities can and do shift relatively freely in their contributions to MOCs or in the tariffs they allow the MOCs to charge. In particular, in good years, local governments often lower tariffs at the expense of profits for immediate gain; in bad years, losses are often covered with additional subsidies. Second, profits can be diverted into quality improvements in ways that financial books do not show; losses can likewise be compensated through quality reductions. Third, the objectives of MOCs are subject to change on a yearly basis, and particularly change often in the wake of an election, and this often results in accounting changes. Thus, how profitable or efficient MOCs seem in financial data says little about their actual performance. Fourth, data on profitability is not always obtainable, and is not quite comparable across the heterogeneous set of MOCs. Fifth, financial information displays only a part of the information on MOCs’ performance, and provides little insight into performance indicators such as service quality, management proficiency, or responsiveness to society. By measuring perceptions, we avoid these biases in the financial data; while we acknowledge the limitations of our strategy, we have accounted for them as much as possible.
10.5.3 Non-response bias

Related to social desirability bias is non-response bias, i.e., the bias that is incurred when a part of the population does not want to participate in the research. Primarily in our interview research, we came across this problem, particularly in getting responses from the directors and municipal executives of more politically sensitive organizations, in getting responses from municipal executives that doubted their own expertise, and in getting responses from municipal policy advisors that did not want to potentially challenge their municipal executives. In this way, non-response bias has caused some problems for our research.

Also here, we have taken various steps to mitigate this bias. In our survey research, including a letter from the Vereniging voor Nederlandse Gemeenten (Association for Dutch Municipalities) helped to increase response particularly in the larger MOCs, and sending a reminder for our survey also helps to mitigate non-response bias (Barclay et al. 2002). In our interview research, we reduced non-response bias by being persistent with hesitant respondents, on two occasions accepting second-best interview methodologies (accepting a phone interview and accepting a 30-minute interview rather than one of one hour). However, we are unable to rule out non-response bias entirely.

10.5.4 Limitations of (our adaptation of) the COBRA survey

Using an adapted form of an already existing survey, the survey by the Comparative public Organization data Base for Research and Analysis (COBRA) (COBRA 2010; Verhoest et al. 2004), offered various advantages. It allows more comparative national-local research into at arm’s length organizations, allows using questions and measures already tested in similar populations, and increases the reliability of our work. Moreover, the COBRA survey had been conducted among Dutch agencies in studies that had used pilots to test the applicability of translations (Van Thiel and Yesilkagit 2006, 2011; Yesilkagit and Van Thiel 2008, 2011) and that had found acceptable factor loadings. We were able to draw on this Dutch translation for our research.

However, there are also limitations in adapting an already existing survey for use in a new population. First, the language used in the original survey aimed at senior civil servants in national-level agencies still had to make sense for directors in MOCs. We mitigated this limitation by conducting a pilot study ourselves with practitioners in the field and local government experts in our faculty. A second limitation is in factor loadings: measures that used various indicators that had been explored among national-level agencies need not necessarily have good factor loadings at the municipal level. Fortunately, most factors loaded reasonably well also at the local level. A third limitation was that the COBRA survey did not include questions on the interaction between multiple principals and included only limited questions on trust and relational governance, which are relevant for MOCs that are often multi-owned and in close proximity to local government. We compensated for this by including additional questions on trust and inter-principal relations in our survey.

10.6 Avenues for future research

We present four avenues for future research.
10.6.1 Internationalization of the literature

One key problem in the literature on municipal corporatization is that our knowledge remains very limited in terms of countries studied, and so far, no cross-country research exists, although the research agenda in Chapter 9 helped to map the international prevalence and typology of MOCs at least to some extent. Others before us have called for the need for more international comparative research (Torsteinsen 2019) and indeed internationalization of the research can help the literature in various ways: (1) expanding the typology of MOCs, (2) increasing the amount of data we have access to, in order to further large-N research, and (3) allowing cross-country exchange of knowledge on corporatization. Indeed, some international work is already in progress, including a CIRIEC working group, a large international NORFACE grant application, US-Europe work on comparing intercontinental typology of municipal corporatization (Voorn, Tavares, and LeRoux 2019), and various symposia taking place in 2019 and 2020 on municipal corporatization (in Tromsø, Norway, Cardiff, Wales, and Nijmegen, the Netherlands). Our survey contributes to this internationalization, allowing cross-country research into MOCs.

Still, some countries remain underrepresented in the research into MOCs, despite the recent uptick in international research on the topic. The Global South remains notably absent in municipal corporatization research (McDonald 2014; McDonald and Ruiters 2012). Research from China, India, and Japan also remains very limited, with only a few exceptions (see Dong, Cui, and Christensen (2015) for China and Nagasawa (2018) for Japan). This is particularly surprising because these countries account for much of the literature on state-owned enterprises. And while more research into municipal corporatization has been conducted in the United States (Bourdeaux 2004, 2007, 2008; Koppell 2010; Landow and Ebdon 2012; Leavitt and Morris 2004; Savitch and Adhikari 2017), integration between this literature and the rest of the literature on corporatization remains very limited.

10.6.2 Time-series research and ‘relative’ questions of corporatization

While the research in this dissertation has focused mostly on comparing different types of MOCs, important questions still remain about corporatization compared to non-corporatized service delivery. Questions such as ‘is corporatization effective, efficient, and desirable?’ still remain unanswered. One key reason why answering such questions is so difficult is because they require time-series research, or a ‘before’ and ‘after’ picture of municipal corporatization. Such data up until now has not been collected, perhaps in part because of the recency of research into the phenomenon and perhaps in part also because of poor book-keeping of municipalities, although the recent work of Andrews et al. (2019) is an exception. Future research could contribute by considering these ‘relative’ questions of corporatization by collecting the data necessary for time-series research.

10.6.3 Governance, culture, and consequences rather than causes

As already pointed out in the introduction and in Chapter 2, the literature on the causes of MOCs (Andrews 2019; Bourdeaux 2004; Citroni, Lippi, and Profeti 2013; Ferry et al. 2018; Gradus, Schoute, and Budding 2019; Grossi and Reichard 2016; Leavitt and Morris 2004; Rodrigues, Tavares, and Araújo 2012; Savitch and Adhikari 2017; Schoute, Budding, and Gradus 2017; Tavares and Camões 2007, 2010) remains substantially more
developed than the literature on governance and consequences (Bourdeaux 2007, 2008; Cambini et al. 2011; Da Cruz and Marques 2011). This is likely in part because of the complexity of measuring performance and in part because of the complexity of measuring governance, but it has resulted in an underdeveloped literature on what we can expect after corporatization takes place. Especially for practitioners, who currently have very little to go on in terms of research findings, further research on governance mechanisms and the consequences of corporatization would be very helpful.

In particular, future research could focus more on corporate governance mechanisms and board dynamics. The interviews demonstrated that governance issues are particularly important for MOCs. Further research could expand the literature on what corporate governance mechanisms in particular can contribute to MOCs’ success, and on related questions, such as what role the politicization of boards plays in determining the outcomes of MOCs.

Another factor that could be considered in more detail is the role of organizational culture, which likely affects outcomes of municipal corporatization strongly. Business-like service delivery and a general culture change in service delivery does not automatically follow corporatization, but we know very little about how to bring about this culture change in service delivery. While we have tentatively offered that an influx of private sector employees may be helpful for bringing about such culture change, multiple other factors may be important, and future research could help us to understand how to create an organizational culture in MOCs that is conducive to performance gains. Indeed, an increasing part of the literature on MOCs focuses on the role of institutional logics, which looks more at the role of culture in organizations (Andersen and Torsteinsen 2017; Argento, Culasso, and Truant 2016; Olsen, Solstad, and Torsteinsen 2017).

Lastly, future research could also consider performance from various angles. We encourage the use of many other performance metrics for MOCs, as well as more academic debate on the merits and drawbacks of performance measures for MOCs.

10.6.4 The multiple principal problem and potential solutions

Finally, one of the key findings of this dissertation, both theoretical and empirical, is the existence of the multiple principal problem in multi-owned MOCs. It is visible both in the frequent presence of single principals responsible for governance and in inter-principal conflicts in governance, and we have demonstrated negative effects for the stewardship to society and output of MOCs respectively (although the former is not robust to sensitivity analysis). That said, evidence of exact mechanisms is still limited, and so qualitative research into the effects of multiple ownership in MOCs (and beyond) would be very helpful for academic knowledge on the subject. Moreover, the ‘interface’ or ‘electoral’ solution we propose in Chapter 3 still requires rigorous empirical testing, and so we recommend future research into this pressing topic.

10.7 Wrapping it up

We began this dissertation with the example of the Amsterdam refuse collection company Afval Energie Bedrijf (AEB) that after years of insufficient spending on maintenance of its equipment, had to shut down four of its six incinerators in July 2019 to ensure the safety of its personnel, at large cost of the municipality and its inhabitants. We can now apply some of the lessons of this dissertation to this situation.
First, this type of failure in MOCs is not unusual. Corporatization is a risky option for the delivery of local public services, as failure rates of corporatization are relatively high (Chapter 2). While the case of Amsterdam’s refuse collection problem does not relate to governance problems under multiple principals (Chapter 3), it demonstrates clear governance issues in MOCs still persist (Chapter 8).

Second, governance in MOCs can be improved. We pointed out that a lack of access to resources is a key reason for reduced performance of MOCs (Chapter 5), and that is clearly visible in this case. Greater stewardship to society could also be encouraged by giving more strategic autonomy to the AEB (Chapter 6). Lastly, a focus on business techniques could help improve performance (Chapter 7).

Overall, the AEB case shows that there is still a lot that can be improved in (our knowledge) of MOCs. This dissertation has served as the first large-N study of municipal corporatization, and we encourage much further research in the future, to help academics and practitioners resolve the current gap in the knowledge of this topic.
References


Appendix: Survey

A.1. Introduction

In this document, we develop a survey to understand municipally owned corporations (MOCs) that can be used internationally for comparative research. This survey has been used to investigate MOCs in The Netherlands, and will be used in the future to study MOCs in other countries. Our aim is to develop a cross-national database on MOCs, in order to facilitate international scientific understanding of municipal corporatization.

By using this document, researchers should be able to construct their own national database on MOCs. We encourage researchers to use as many questions as possible from the survey below. However, we simultaneously encourage researchers to take into account the particularities of their own country.

This document is outlined as follows. We first show the conceptual model that underlies the survey. Next, we explain our coding scheme and the conditional terminology in the survey. Finally, we show the survey, where for each question we offer an explanation, tips for analysis, and recommendations for replication.

In designing this survey, we drew heavily on the methodological work of the COBRA network (COBRA, 2011) into national-level government agencies (COBRA, 2010; Verhoest et al., 2004). Much credit belongs to them. Any mistakes are ours.

For questions, please contact Bart Voorn (b.voorn@fm.ru.nl).

A.2. Conceptual model

The conceptual model for our survey is outlined below. Figure 1 shows the simplified version of our conceptual model along the ‘themes’ for our survey, and Figure 2 shows the expanded version, based on our factors. Both conceptual models are based broadly on the conceptual model of the COBRA survey (COBRA, 2010), but have been expanded with our findings from the literature in Chapters 2 and 3. The individual relationships are explained in the individual chapters in this dissertation.
Figure 1: Simplified conceptual model for the survey, with the circled numbers showing in which section in the survey the data were collected.
Figure 2: Expanded version of the conceptual model, with the circled numbers showing in which section in the survey the data were collected.
A.3. Coding and symbols

Different codes and symbols are used in this appendix to show how we formatted the survey. This section will explicate those.

A.3.1. Symbols

e Denotes that respondents were allowed to fill in only a single answer.
□ Denotes that respondents were allowed to fill in multiple answers.
[ ] Denotes text space for respondents.
[   ] Denotes a bar that respondents can drag-and-drop.
=== Denotes a ‘page break’ in the survey.
<…> Denotes the use of conditional terminology (see next subsection).

A.3.2. Conditional terminology

Given the heterogeneity of municipally owned corporations in the Netherlands, we sometimes had to use conditional terminology. It is important to use the appropriate terms that are associated with specific forms of organization in order to prevent confusion during the survey. For instance, in the Netherlands, enterprises have ‘shareholders’ as owners, while foundations have ‘founders’; we target our vocabulary to respondents accordingly based on the answers they provide to question 1 of the survey (about their corporate status). Thus, our survey uses a ‘branching’ approach where the terms in the survey are automatically adjusted to responses respondents give about their organizational form.

We present here the coding we used in the Dutch setting.

<table>
<thead>
<tr>
<th>Code</th>
<th>Organization form</th>
<th>Conditional term in survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;SHAREHOLDERS&gt;</td>
<td>Enterprises:</td>
<td>Aandeelhouders / Gemeenten</td>
</tr>
<tr>
<td></td>
<td>Foundations:</td>
<td>Oprichters / Gemeenten</td>
</tr>
<tr>
<td></td>
<td>Associations:</td>
<td>Oprichters / Gemeenten</td>
</tr>
<tr>
<td></td>
<td>Public-law organizations:</td>
<td>Oprichters / Gemeenten</td>
</tr>
<tr>
<td>&lt;BOARD MEMBERS&gt;</td>
<td>Enterprises:</td>
<td>Leden van de Raad van Bestuur</td>
</tr>
<tr>
<td></td>
<td>Foundations:</td>
<td>Bestuursleden</td>
</tr>
<tr>
<td></td>
<td>Associations:</td>
<td>Bestuursleden</td>
</tr>
<tr>
<td></td>
<td>Public-law organizations:</td>
<td>Directieleden</td>
</tr>
<tr>
<td>&lt;BOARD&gt;</td>
<td>Enterprises:</td>
<td>Raad van Bestuur</td>
</tr>
<tr>
<td></td>
<td>Foundations:</td>
<td>Bestuur</td>
</tr>
<tr>
<td></td>
<td>Associations:</td>
<td>Bestuur</td>
</tr>
<tr>
<td></td>
<td>Public-law organizations:</td>
<td>Directie</td>
</tr>
<tr>
<td>Type</td>
<td>Enterprises:</td>
<td>Foundations:</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>--------------</td>
<td>--------------</td>
</tr>
<tr>
<td><strong>&lt;DIRECTOR&gt;</strong></td>
<td>Directeur</td>
<td>Voorzitter</td>
</tr>
<tr>
<td><strong>&lt;SUPERVISORY BOARD&gt;</strong></td>
<td>Raad van Commissarissen</td>
<td>Raad van Toezicht / Advies</td>
</tr>
</tbody>
</table>
A.4. The survey

A.4.1 Preface

Explanation: This first page of the survey serves to welcome the respondents and provides an overview of the survey’s topic and structure.

Welcome to the survey "Municipally owned corporations in the Netherlands 2018". Thank you for participating!
In many municipalities public services are delivered through municipally owned corporations. This has led to new questions about for instance the way these corporations are organized, how municipalities can govern such corporations, and how oversight is guaranteed.
To find out more about this we ask you questions about seven topics: general information, the background characteristics of your organization, autonomy, relationships with municipalities, governance by municipalities, internal organization, and performance.
Filling out this survey should take approximately 15 minutes of your time. A colored bar on top of the survey will give you an indication of how far along you are in the survey.
In case you have any questions about the questionnaire, please email b.voorn@fm.ru.nl.
Thank you very much!

Please enter your access code:

[ _ ]
A.4.2 General information

**Q1**

**Explanation:** This question serves to identify the corporate status of the municipally owned corporations. It is important to start with this, as terminologies for e.g. board structure differ between different types of organization, and by starting with this question we can use conditional terminology in the survey to account for this.

**For replication:** In the Netherlands, MOCs can take four forms in terms of corporate status. For survey replication in other countries, we recommend adjusting the answer options for this question accordingly.

**For research:** We recommend turning the data into dummy variables for all corporate status forms and into dummy variables distinguishing MOCs based in public law from MOCs based in private law.

1. **Is your organization a(n):**
   - Enterprise
   - Foundation
   - Association
   - Public-law organization

---

**Q2**

**Explanation:** This question serves to identify the respondents. While we address the survey to the professional managers of MOCs, and encourage the same for future research, it occurs quite frequently that the professional manager delegates completion of the survey to other employees in the organization. This question serves as a way to test the validity and reliability of the responses.

2. **What is your position in the organization?**
   - Director
   - Secretary of <BOARD>
   - Other, namely: [ _ ]
3. **How many years have you been working for the organization?**
   [ _ ]
A.4.3 Background characteristics

**Q4**

**Explanation:** This question serves to identify the year of establishment of the MOC. Age is an important control variable and may itself be linked to autonomy (through increasing information asymmetries), governance (through more developed procedures), trust (through longer relations), and performance (through learning effects).

**For research:** We recommend recoding this variable later by subtracting the response from the year the survey was held. Be aware that the consequent variable ‘age’ will be non-normally distributed. We recommend using a log-transformation for statistical research.

4. In which year was your organization established in its current form? 
   [ _ ]

---

**Q5**

**Explanation:** This question serves to get an indication of organization size in terms of number of employees, which is of interest descriptively. The number of employees may also be linked to autonomy and performance.

**For research:** Also here, be aware that this variable will be non-normally distributed. We recommend using a log-transformation for statistical research here too, as we have used ourselves.

5. How many employees does your organization employ (approximately) in Full Time Equivalents? (per January 1, 2018) 
   [ _ ]
Q6

Explanation: This question serves to get an indication of organization size in terms of budget size, which is also of interest descriptively. Moreover, organization size in terms of budget may be linked to autonomy and performance.

For research: Also here, be aware that the this variable will be distinctly non-normally distributed. We recommend using a log-transformation for statistical research, as we have used ourselves. Next, we recommend creating an additional variable by dividing this variable by the log-transformation of the number of employees, which creates a measure of capital intensity. Do check how this measure is distributed.

For replication: For survey replication in other countries, we recommend not stating “in thousands of euros” in this question. It was misunderstood by a small minority of respondents, and we had to partially recode this ourselves by checking MOCs’ annual statements.

6. What is (approximately) the total size of the budget that your organization works with in thousands of euros? (per January 1, 2018).
   [ _ ]
Explanation: This question serves to identify the service sector in which the MOC operates. We ask respondents to self-code their sector, and reclassify this later, as to not limit respondents in their options, and to allow future recoding in different ways. In that, we deviate from the COBRA survey.

For research: There are various ways to recode this variable. We opted to recode this variable to approximately align with national-level government ministries. Alternatives are to classify service sector along the portfolios of municipal executives, or to recode using some measure of asset specificity and/or service technicality, depending on needs. Note that other questions can also be used to make ‘broad’ service sector classifications, such as the questions about corporate status (Q1), dependency on tariffs (Q13), measurability of performance targets (Q19), and content of performance targets (Q20).

For replication: For survey replication in other countries, we recommend a similar approach. Service sector is important to know both descriptively and because of its potential relationship with autonomy, governance, business techniques, and performance.

7. Could you in as few words as possible describe in what sector your organization operates? (e.g. refuse collection, primary education, employment services)
Explanation: This question serves to distinguish intermunicipally owned corporations from MOCs owned by single municipalities. This provides useful descriptive information. Moreover, the number of municipalities on the board may be positively linked to autonomy and negatively linked to performance (through the multiple principal problem).

For research: Also here, be aware that this variable will be non-normally distributed. We recommend using a log-transformation for statistical research.

8. How many municipalities are <SHAREHOLDERS> of your organization?
   [ _ ]

Explanation: This question serves to distinguish MOCs with partial ownership by other public sector organizations. This provides useful descriptive information. Moreover, multiple ownership may be positively linked to autonomy and negatively linked to performance (through the multiple principal problem).

9. Are other government organizations (for example, provinces, district water boards, regions) <SHAREHOLDERS> of your organization?
   o Yes, namely: [ _ ]
   o No.
10. Are private parties <SHAREHOLDERS> of your organization?

   o Yes, namely: [ ___ ]
   o No.
**Explanation:** This question serves to measure the autonomy of MOCs in personnel matters. It helps to understand how MOCs operate and in what personnel matters they are constrained. Moreover, personnel autonomy may be negatively correlated with trust, may be positively related to business techniques and performance, and may have an effect on governance. Our question is slightly more extensive than the question in the COBRA survey in asking about labor agreements and pension plans.

**For research:** We recommend recoding this into a binary variable, merging the ‘with permission’ response with either the ‘yes’ or ‘no’ response, depending on the data, before factorizing this variable. We emphasize that it is important not to treat these indicators as continuous variables.

### 11. Can the organization make independent decisions regarding:

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Only with permission of &lt;SHAREHOLDERS&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

- Appointment of new staff
- Hiring temporary staff
- Hiring external staff
- Levels of salaries of staff
- Conditions for promotions of staff
- Ways of appointing staff
- Firing staff
- Collective labor agreements
- Pension plans

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>o</td>
<td>o</td>
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<td>o</td>
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<td>o</td>
</tr>
</tbody>
</table>
A.4.4 Autonomy

Explanation: This question serves to measure MOCs’ autonomy in financial matters. It helps to understand how MOCs operate and in what financial matters they are constrained. Moreover, financial autonomy may be negatively associated with trust, positively associated with business techniques and performance, and may have an effect on governance.

For research: We recommend recoding this into a binary variable, merging the ‘with permission’ response with either the ‘yes’ or ‘no’ response, depending on the data, before factorizing this variable. We emphasize that it is important not to treat these indicators as continuous variables.

12. Can the organization make independent decisions regarding:

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Only with permission of &lt;SHAREHOLDERS&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Taking loans</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Setting tariffs for products or services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participating in private law legal entities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shifting between budgets for personnel and running costs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shifting between the budgets for personnel or running costs and investments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shifting between the budgets of different years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchasing equipment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchasing IT</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q12
**Q13**

**Explanation:** This question serves to measure the sources of income of municipally owned corporations, which may also be a form of autonomy. Measuring sources of income for MOCs helps us to understand how MOCs operate descriptively. Moreover, MOCs’ sources of income may affect trust between the MOCs and the municipality, business technique usage in the MOCs, governance of MOCs, and performance of MOCs.

**For replication:** For survey replication in other countries, we emphasize the importance of implementing a ‘counter’ in the software to show respondents how many per cent they have already distributed among the categories.

**For research:** We recommend creating two additional variables: merging the two responses about tariffs into one variable ‘Tariff Dependency’ and merging the two first response options into one variable ‘Municipal Dependency’.

13. **What sources of income does your organization have? Can you provide an estimate of the percentage of your total budget for each source?**

   Please let the percentages add up to 100%.

   [ _ ] % From the municipal budget
   [ _ ] % Tariffs charged to municipalities (e.g. on the basis of service agreements)
   [ _ ] % Budget other governments (e.g. provinces, water boards)
   [ _ ] % Investments of or tariffs charged to private parties
   [ _ ] % Own income such as tariffs
   [ _ ] % Other income, namely: [ _ ]
A.4.5 Relationship with municipalities

**Explanation:** This question serves to assess trust between municipalities and MOCs (and also includes a question about resources that would fit poorly elsewhere). Trust is important to measure, both because it is useful descriptive information and because it is likely to be associated with autonomy, governance, and performance. We deviate here from the COBRA survey. The COBRA survey had measured trust by asking about trust directly: “How would you describe the level of trust ...”. We purposely opt for a more latent measure of trust, in order to understand the precise mechanisms.

**For research:** We recommend factorizing this variable. Make sure to recode the last indicator to its inverse and to avoid factorizing the indicator about resources.

**For replication:** For survey replication in other countries, please be aware that our measure of trust did not have good factor loadings. For future research, one might want to consider alternative methods to measure trust.

14. **To what extent do you agree with the following statements?**

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our organization shares all information with municipalities</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Our organization is prepared to be flexible to satisfy municipalities</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>The interaction between the organization and municipalities clearly</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>demonstrates trust</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust between our organization and the municipalities is high</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Our organization identifies with the goals of the municipalities</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Our organization has sufficient resources to execute tasks</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>It is more important to be accountable to customers/citizens than</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>municipalities/shareholders</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Q15**

**Explanation:** This question serves to measure the presence of a multiple principal problem, looking at differences between municipalities in governance. The multiple principal problem is expected to be positively linked with autonomy, and to be negatively linked with trust, governance, and performance. **For replication:** For survey replication in other countries, we emphasize that it is important to only displaying this question if question 8 “How many municipalities are shareholders …” is answered with more than 1.

15. To what extent do you agree with the following statements?

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

- The different municipalities express a shared vision
- The different municipalities differ starkly in how our organization is governed
- The largest municipality determines the municipal governance of our organization

1 2 3 4 5
**Explanation:** This question serves to consider the frequency of contact between civil servants of municipalities and the municipally owned corporation. It is useful as descriptive information, providing insight in the relationships between MOCs and municipalities. Moreover, frequency of contact between municipalities and MOCs may be linked to trust, autonomy, governance, and performance. Technically, this question fits in better with part 5: external governance. However, for reasons of survey flow we recommend including it here.

16. **How often does your organization have contact with civil servants of the municipalities?**
   - Daily / More frequently
   - Once per week or more
   - Once per month or more
   - Once per 2-4 months
   - Twice per year
   - Once per year
   - Less than once per year
   - Never
**Q17**

**Explanation:** This question serves to identify what is discussed in communication between MOCs and municipal civil servants. This is interesting descriptive information, and may be associated with trust, autonomy, governance, and performance.

**For replication:** For survey replication in other countries, we emphasize that it is important not to display this question if the response to question 16 is ‘never’.

17. What is discussed in this contact with civil servants?

<table>
<thead>
<tr>
<th>(Almost) Always</th>
<th>Often</th>
<th>Sometimes</th>
<th>Rarely or never</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

- Strategic affairs (e.g. objectives)  
  - 1
  - 2
  - 3
  - 4
  - o
- Operational affairs (e.g. daily management)  
  - 1
  - 2
  - 3
  - 4
  - o
- Evaluative affairs (e.g. performance and results)  
  - 1
  - 2
  - 3
  - 4
  - o
A.4.6 External governance: Steering and control

**Q18**

**Explanation:** This question serves to measure strategic (policy) autonomy. Strategic autonomy is an important facet of autonomy and is interesting descriptive information, but may also affect trust, business technique usage, governance, and performance. We categorize this question here under ‘external governance’, rather than in the ‘autonomy’ section, because it logically leads into the next question.

**For research:** We recommend removing the last response option and treating the data as a continuous variable.

18. To what extent does your organization influence the formulation of performance agreements? Please provide one answer.
   - We formulate them ourselves
   - We formulate them ourselves, after consulting the <SHAREHOLDERS>
   - We formulate them together with the <SHAREHOLDERS> through a process of negotiation or consultation
   - The <SHAREHOLDERS> formulate them, after consultation with our organization
   - The <SHAREHOLDERS> formulate them, without consultation of our organization
   - Otherwise, namely… [ _ ]
Explanation: This question serves to measure the location of performance indicators and the measurability of performance indicators. Both constitute useful descriptive information and may have implications for governance and performance. For research: We recommend recoding the data into binary variables (‘yes’ or ‘no’ per document) to measure location. For measuring the presence of concretely defined goals overall, we recommend a single binary variable that takes the shape of ‘1’ if there are at least concretely defined goals in one of the documents. For measuring the measurability of these goals, we recommend creating a single binary variable that takes the shape of ‘1’ if there are measurable indicators in at least one of the documents.

19. In which documents are your organization’s goals concretely defined? (Multiple answers possible.)

<table>
<thead>
<tr>
<th>Yes, with measurable indicators</th>
<th>Yes, with difficult to measure indicators</th>
<th>Yes, without measurable indicators</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

- Founding articles or statutes of the organization
- Document in which the financial contribution of <SHAREHOLDERS> is determined
- (Quasi) contractual agreements with the <SHAREHOLDERS> (for example: service agreements)
- A by the <SHAREHOLDERS> approved policy plan / strategic plan / multi-year plan / action plan
- An internal document (that does not require the approval of <SHAREHOLDERS>)
- Other, namely: [ _ ]
Q20

Explanation: This question serves to measure the content of performance indicators used in practice. This may affect governance and performance, but can also act as a proxy for service sector, where focus on output may be indicative of a more industrial organization in a ‘harder’ service sector, and focus on societal effects may be indicative of a more social organization in a ‘softer’ service sector.

For research: We recommend transforming the data into dummy variables.

20. What do performance indicators relate to? (Multiple answers possible.)
   - □ Quantitative output
   - □ Quality of service delivery
   - □ Other societal effects, namely: [ _ ]
   - □ We do not use performance indicators

Q21

Explanation: This question assesses the frequency of reporting. This is useful descriptively. Reporting frequency may be linked to trust, autonomy or performance.

For research: We recommend treating this as a continuous variable.

21. How regularly does your organization report on results and performance to <SHAREHOLDERS>? Please provide one answer.
   - o In monthly or more frequent reports
   - o In 2 to 4 monthly reports
   - o In semi-annual reports
   - o In annual reports
   - o In reporting less than once per year
   - o We do not report
22. **Who assesses the results and performance of the organization?**
   
   (Multiple answers possible.)
   
   - The organization itself
   - All <SHAREHOLDERS>
   - One or a few of the <SHAREHOLDERS>
   - Third parties, commissioned by the organization (e.g. accountant)
   - Third parties, commissioned by <SHAREHOLDERS> (e.g. inspection)
   - City councils
   - Local audit offices
   - Otherwise, namely: [ _ ]
   - That does not happen

---

23. **Are rewards given to your organization for good performance and / or for achieving (other than purely financial) objectives of the organization?**

   o Yes, wage increases or bonuses for management or employees
   o Yes, granting more financial resources to the organization
   o Yes, more autonomy for the organization / management vis-à-vis the <SHAREHOLDERS>
   o Yes, other rewards, namely: [ _ ]
   o No
24. **Are sanctions imposed on your organization if performance is not as good or if (other than purely financial) objectives of the organization are not achieved?**
   - Yes, wage decreases or deduction of bonuses
   - Yes, reduction of financial resources to the organization
   - Yes, less autonomy for management versus the SHAREHOLDERS
   - Yes, other sanctions, namely: [ _ ]
   - No

25. **Is your organization regularly screened (e.g. audit, evaluation, inspection, visitation)?**
   - Yes
   - No
26. Who screens your organization? (Multiple answers possible)

- We screen our organization ourselves
- <SHAREHOLDERS>
- Local audit offices
- City councils
- Others, namely: [ ___ ]
**Explanation:** This question serves to assess what aspects of the organization are screened, which is useful descriptive knowledge and may be linked to background characteristics, trust, or performance.

**For research:** We recommend transforming the data into dummy variables for both content and actor.

**For replication:** For survey replication in other countries, we emphasize that this question should only be asked if the response to question 25 is ‘yes’.

### 27. What is the most attention during such investigations given to? (one answer possible per row)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Finance</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>General</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>Lawfulness</strong></td>
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<tr>
<td><strong>Efficiency</strong></td>
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<tr>
<td><strong>Internal management</strong></td>
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<tr>
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<tr>
<td><strong>Operational services</strong></td>
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<tr>
<td>o Own screening</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>o Screening by third parties</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>o Screening by / on behalf of all &lt;SHAREHOLDERS&gt;</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>o Screening by / on behalf of one or a few &lt;SHAREHOLDERS&gt;</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>o Screening by local audit office</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>o Screening by others</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
</tbody>
</table>
A.4.7 Internal governance: Management bodies

**Q28**

*Explanation:* This question serves to measure the number of board members, which is useful descriptive information and may be related to performance.

*For research:* We recommend transforming the data into an additional dummy variable of ‘1’ and ‘more than 1’, to have two different measures of this.

28. How many <BOARD MEMBERS> does the organization have?  
   [ _ ]

**Q29**

*Explanation:* This question serves to measure demographic diversity on boards of municipally owned corporations, which is interesting descriptive information and may be linked to performance.

*For research:* We recommend transforming the data into additional dummy variables, to have two different measures of this.

29. How many <BOARD MEMBERS> are:  
   [ _ ] Female  
   [ _ ] Non-Dutch
**Q30**

**Explanation:** This question serves to measure background diversity on boards of municipally owned corporations in terms of sector, which is interesting descriptive information and may be linked to performance.

**For research:** We recommend transforming the data into additional dummy variables, to have two different measures of this.

30. How many <BOARD MEMBERS> have a background in:
   - [ ] The private sector
   - [ ] The public sector
   - [ ] The non-profit sector

**Q31**

**Explanation:** This question serves to measure the expertise on boards of municipally owned corporations, which is interesting descriptive information and may be linked to performance.

**For research:** We recommend transforming the data into dummy variables.

31. What expertise does the <BOARD> have? Multiple answers possible.
   - [ ] Expertise in finance
   - [ ] Management expertise
   - [ ] Industry knowledge
   - [ ] ICT
Q32

Explanation: This question serves to measure the time commitment of the director of the MOC. Time commitment of the director is useful descriptive information and may be linked to performance.

For research: We recommend treating the data as continuous.

32. How many days per week does the <DIRECTOR> work for the organization?
   - 5 or more days per week
   - 4 days per week
   - 3 days per week
   - 2 days per week
   - 1 day per week or less

Q33

Explanation: This question serves to measure the remuneration of the directors of MOCs, which is useful descriptive information and may be linked to performance.

33. Does the <DIRECTOR> receive remuneration?
   - Yes
   - No
**Q34**

**Explanation:** This question serves to measure the transparency of the MOCs regarding remuneration of their director. This is useful descriptive information and may be linked to performance.

**For replication:** For survey replication in other countries, we emphasize that this question should only be asked if the response to question 33 is ‘yes’.

34. Is the amount of this remuneration documented publicly in your annual report?
   - Yes, and this is legally required
   - Yes, but this is not legally required
   - No

---

**Q35**

**Explanation:** This question serves to establish the presence of a supervisory board. Whether or not a supervisory board is present is interesting descriptive information and may be linked to performance.

35. Does your organization have a **SUPERVISORY BOARD**?
   - Yes
   - No
**Q36**

**Explanation:** This question serves to measure how ‘active’ the supervisory board is. The activity level of the supervisory board may be linked to performance.

**For replication:** For survey replication in other countries, we emphasize that this question should only be asked if the response to question 35 is ‘yes’.

**For research:** We recommend treating this data as continuous.

36. How often does the <SUPERVISORY BOARD> formally meet? Please provide one answer.
   - Once per month or more
   - Once every 2-4 months
   - Twice per year
   - Once per year
   - Less than once per year
   - Never

---

**Q37**

**Explanation:** This question considers the actual purpose of the supervisory board, which may be linked to performance.

**For replication:** For survey replication in other countries, we emphasize that this question should only be asked if the response to question 35 is ‘yes’.

**For research:** We recommend transforming the data into dummy variables.

37. Please name the most important task of the <SUPERVISORY BOARD>.
   - To control the management of the organization on behalf of the <SHAREHOLDERS>
   - Using organizational expertise to strengthen organizational performance
   - Representation of the social interest
   - Representation of stakeholders
   - Grant access to the network of members of the <SUPERVISORY BOARD>
   - Ratification of decisions of the board
**Q38**

**Explanation:** This question serves to measure the frequency of formal communication between the board and the supervisory board, which may be linked to performance.

**For replication:** For survey replication in other countries, we emphasize that this question should only be asked if the response to question 35 is ‘yes’.

**For research:** We recommend treating this data as continuous.

<table>
<thead>
<tr>
<th>38. How often does the &lt;BOARD&gt; have formal contact with the &lt;SUPERVISORY BOARD&gt;? (Meetings with minutes).</th>
</tr>
</thead>
<tbody>
<tr>
<td>o Once per week or more</td>
</tr>
<tr>
<td>o Once per month or more</td>
</tr>
<tr>
<td>o Once every 2-4 months</td>
</tr>
<tr>
<td>o Twice per year</td>
</tr>
<tr>
<td>o Once per year</td>
</tr>
<tr>
<td>o Less than once per year</td>
</tr>
<tr>
<td>o Never</td>
</tr>
</tbody>
</table>
**Q39**

**Explanation:** This question serves to measure the content of formal communication between the board and the supervisory board, which may be linked to performance. **For replication:** For survey replication in other countries, we emphasize that this question should only be asked if the response to question 35 is ‘yes’.

### 39. What is discussed during this formal contact? (Meetings with minutes)
Please provide one answer per row.

<table>
<thead>
<tr>
<th>(Almost) always</th>
<th>Usually</th>
<th>Sometimes</th>
<th>Rarely or never</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Strategic issues, such as the organization’s general goals</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Operational matters, such as specific daily management</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Evaluative matters, such as performance and results</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
</tbody>
</table>
**Explanation:** This question serves to measure the frequency of informal communication with the supervisory board, which may be linked to performance.

**For replication:** For survey replication in other countries, we emphasize that this question should only be asked if the response to question 35 is ‘yes’.

**For research:** We recommend treating this data as continuous.

40. How often does the <BOARD> have informal contact with the <SUPERVISORY BOARD>? (Meetings without minutes, telephone calls, e-mail). Please provide one answer.
   - Once per week or more
   - Once per month or more
   - Once every 2-4 months
   - Twice per year
   - Once per year
   - Less than once per year
   - Never
**Explanation:** This question serves to measure the content of informal communication with the supervisory board, which may be linked to performance.

**For replication:** For survey replication in other countries, we emphasize that this question should only be asked if the response to question 35 is ‘yes’.

41. What is discussed during this informal contact? (Meetings without minutes, telephone calls, e-mail). Please provide one answer per row.

<table>
<thead>
<tr>
<th>(Almost) always</th>
<th>Usually</th>
<th>Sometimes</th>
<th>Rarely or never</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Strategic issues, such as the organization’s general goals
Operational matters, such as specific daily management
Evaluative matters, such as performance and results

[Table with options: o for each response]
A.4.8 Performance

**Q42**

**Explanation:** This question asks the respondent to rate the performance of their organization, in a global, observed, measure of performance. It is important to measure performance both directly and indirectly, and this is the most direct approach.

42. What score do you give your organization based on the overall performance of the organization on a scale of 1 to 10?  
[ _ ]

**Q43**

**Explanation:** This question asks the respondent to rate the performance of their organization, on subdimensions, to create a latent or composite measure of performance. It is important to measure performance both directly and indirectly, and this is an indirect approach.

43. What score do you give your organization based on the overall performance of the organization on a scale of 1 to 10?  
   Efficiency [ ]  
   Effectiveness [ ]  
   Quality [ ]  
   Motivation [ ]  
   Staff satisfaction [ ]  
   Management quality [ ]  
   Internal cohesion [ ]  
   Stability of the organization [ ]  
   Flexibility of the organization [ ]  
   Responsiveness to society [ ]  
   Accountability to society [ ]  
   Democratic level of service [ ]
Q44

**Explanation:** This question serves to measure the presence of business techniques, which may be linked to autonomy and performance.

<table>
<thead>
<tr>
<th>44. To what extent do the following things happen in your organization:</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovation of products and services</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Extra service for a fee</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Adapting business to market, service, or target group</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Quality standards or measurements for production or services</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Surveys among target groups</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Formal multi-year planning</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Evaluation of employees / lower management based on performance</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Rewarding employees / lower management based on performance</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Self-evaluation and setting your own targets to be able to assess results</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Public reporting of company results (for example in annual reports)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Increasing project budgets based on performance</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Giving autonomy to lower management with regard to financial and personnel matters</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
</tbody>
</table>
A.4.9 Last questions

**Q45**

**Explanation:** This question serves to measure past performance more objectively. It is useful to understand this descriptively and helps to understand the continuity and performance of MOCs.

45. Has your organization come close to bankruptcy or been dependent on emergency subsidies in the past 10 years?
   - o Yes, several times
   - o Yes, once
   - o No, never

---

**Q46**

**Explanation:** This question serves to measure the causes of these emergency subsidies, which is useful descriptively and to understand antecedents of the performance of municipally owned corporations. **For replication:** For survey replication in other countries, we emphasize that this question should only be asked if the response to question 45 is ‘yes’.

46. What was the cause of this? [ _ ]

---

**Q47**

**Explanation:** Finally, this question gives respondents space to mention other mechanisms that we may have missed in the literature.

47. Are there any other issues that affect your organization that were not addressed in this survey?
   [ _ ]
A.4.10 Postscript

End of the survey.

Explanation: This final page of the survey can be used to set up potential follow-up interviews or to build a network of respondents to help as a member check and/or valorize the research. Naturally, respondents should be thanked, and respondents themselves may like to be able to print an overview of their answers.

This is the end of the survey. Thank you for your cooperation!
At the end of this survey, you will see an overview of your answers. You can save this overview on your computer by first clicking on the red pdf logo in the top right of the overview and then clicking on "export". If you would like to print the overview, open the saved PDF document and click on the print option.
If you would like to receive a report of the results of this survey among all MOCs, you can indicate this below.
Your data is processed separately from your answers. Your anonymity therefore remains guaranteed.

- Yes, I would like to receive a report by e-mail. My email address is [ _ ]
- No, I prefer not to receive a report.
References


Summary

Municipally owned corporations (MOCs) are increasingly used to deliver local public services. However, we continue to know little about their governance and their effects. The goal of this dissertation was, descriptively, to outline the effects and governance of MOCs, particularly in the Netherlands, and inferentially, to understand how the characteristics and governance of MOCs explain their outcomes.

We use multiple methods to study these questions. First, in the theoretical chapters (Chapters 2 and 3), we integrate various literatures to understand the international features of MOCs, what expectations there are regarding their effects, and what the influence of their frequent multiple principals is on their behavior. Second, in the ‘quantitative’ chapters (Chapters 4 through 7), we present the findings of a questionnaire sent out to all Dutch MOCs, to outline their features and to link these to their outcomes. In the qualitative chapter (Chapter 8), we utilize an interview design to understand the (lack of) governance and performance management, in Dutch MOCs. We end in Chapter 9 with a systematic review of the literature to provide a typology of arm’s length bodies in international context, largely based on the findings in this dissertation.

Describing MOCs

MOCs organizations (i) with independent corporate status, (ii) that are majority-owned by municipalities or comparable local governments, and (iii) that typically have large legal and managerial autonomy. We find that these features are consistent in MOCs across countries (see Chapter 2), but we also find that otherwise, MOCs are very heterogeneous. This is true when comparing MOCs across countries: shared ownership may be allowed in some countries but not in others, and differences are also apparent in funding sources for MOCs, transaction costs, financial scrutiny, labor rights, and, under some circumstances, in the right to make profits and risk of bankruptcy. But we also find that MOCs are heterogeneous within countries – and particularly our research within the Netherlands shows this (Chapter 4).

In their background characteristics, MOCs differ in corporate status, sector, size, number of municipal owners, and in the involvement of other public and private shareholders. MOCs in the Netherlands are often based in public law, following the Wet gemeenschappelijke regelingen, and this seems to be preferred by national legislation. However, MOCs based in private law have become common alternatives. MOCs often have multiple shareholders, most commonly other municipalities, but occasionally also private shareholders or other government layers are involved. Finally, MOCs can be found delivering many types of services.

Second, MOCs seem to vary widely in their autonomy. MOCs generally have much autonomy in personnel affairs, and less in financial affairs, although in financial affairs private-law based MOCs have substantially more autonomy than MOCs based in public law. MOCs also have varying sources of income: some are largely dependent on municipal transfers, and others receive substantial revenue through other revenue streams, such as tariffs, subsidies, and private investment.

While much is reported about the external governance and performance management of MOCs, ultimately, this reporting seems to be of little consequence. Both bonuses and sanctions occur rarely among MOCs, and professional managers of MOCs in general suggest that failing to meet objectives may lead to a mild reproof at most.
However, there is much informal governance through individual relations between the MOC and the municipal civil service, although informal communication occurs substantially less in private-law than in public-law MOCs. MOCs generally have control over their own targets, and over time municipalities seem to have less and less control, although in this too MOCs are heterogeneous.

In internal governance or management, MOCs are arguably most diverse. There is little consistency in corporate governance, and certainly no clear governance code is applied. There is little demographic diversity among board members, but there is much diversity in career backgrounds and expertise, although public-sector backgrounds seem to be dominant on boards. Internally, there is little informal communication with supervisory boards; this communication is often formalized and focused particularly on strategic, and not evaluative or operational matters, but also here, there is large heterogeneity among MOCs.

Outcomes are also very diverse. MOCs judge their performance the highest on motivation and the lowest on efficiency. There are also large differences between MOCs in performance depending on their corporate form. Overall, public-law MOCs seem to rate themselves lower than their private-law counterparts.

MOCs are thus a diverse group, and their behavior may have many different drivers.

**Linking characteristics of MOCs to outcomes**

Indeed, we could link various characteristics of MOCs to outcomes.

First, when defining outcomes narrowly as output, it appears that one of the causes of reduced perceived performance of MOCs is that they are often underfunded. Budget size positively affects performance (there are scale economies), while the number of employees negatively affects performance across all dimensions (there may be overemployment in MOCs). Finally, steering differences between municipalities reduce perceived performance for MOCs. All these findings are robust and statistically significant.

Second, when considering outcomes in terms of democratic performance, defined in this paper as ‘publicness’, three predictors seem significant. The extent to which municipalities express trust in MOCs correlates positively with publicness, in line with our expectations; and the dominance of a single municipality for governance in inter-MOCs was linked to reduced perceptions of publicness. However, neither finding was robust to sensitivity analysis. More robust to sensitivity analysis, and highly significant, was the finding that strategic managerial autonomy contributes positively to perceived publicness of MOCs. In other words, the smaller the role of municipalities in target-setting, the more MOCs feel like they act as ‘public’ organizations. This could point to politicization in the target-setting of MOCs, although it could also be that autonomy leads to a stronger feeling of (public) identity in MOCs.

Autonomy generally has a nuanced effect on performance. It does not seem to be the case that autonomy necessarily leads to less democracy and more performance in MOCs, as is often argued in the literature on corporatization. But autonomy does seem to play a role. Legal autonomy (through corporate status) seems to matter, with MOCs operating under private law perceiving higher performance in general. Strategic managerial autonomy seems to positively affect the publicness of MOCs, but not necessarily their output. Finally, operational managerial autonomy has a more ambiguous
effect on performance, and appears to be a helpful condition for bringing performance differentials in MOCs only if business techniques are introduced (see Chapter 7).

Limitations and future research
The findings in this dissertation naturally remain subject to limitations. We have applied national theory and a national survey to a local field, and that comes with some problems. Moreover, our reliance on the perceptions of respondents, particularly about performance, may have incurred social desirability bias and non-response bias, although we argue that other measures may have been similarly skewed. Finally, our data set was limited and heterogeneous, and while we have covered a substantial percentage of the entire Dutch population of MOCs, this is always problematic in large-N research. We have undertaken various procedures to mitigate these limitations, but we cannot remove them entirely.

For the future, we welcome particularly further international and time-series research focusing on questions of governance, culture, and performance in MOCs, which helps us to overcome some of the problems of the current limited and biased literature. Moreover, we emphasize that our proposed solution for the multiple principal problem in joint service delivery still requires empirical testing.
**Nederlandstalige samenvatting**

Verbonden partijen (op lokaal gebied) worden steeds meer gebruikt om lokale publieke diensten te leveren. We weten echter nog weinig over hun *governance* en hun effecten. Het doel van dit proefschrift was, beschrijvend, om de effecten en governance van verbonden partijen uiteen te zetten, en verklarend, om te onderzoeken hoe de eigenschappen en de governance van verbonden partijen hun effecten verklaren.

We gebruiken meerdere methoden om deze vragen te bestuderen. In de theoretische hoofdstukken (Hoofdstukken 2 en 3), integreren we verschillende literatuur om verbonden partijen in internationale context te begrijpen, om de verwachtingen rondom hun uitkomsten uiteen te zetten, en om de gevolgen van hun (regelmatisch) meerdere eigenaren te onderzoeken. In de kwantitatieve hoofdstukken (Hoofdstukken 4 tot en met 7), lichten we de uitkomsten toe van een survey uitgezet onder alle Nederlandse verbonden partijen, om hun eigenschappen te begrijpen en deze te verbinden aan hun uitkomsten. In het kwalitatieve hoofdstuk (Hoofdstuk 8) gaan we nader in op governance en prestatiemanagement in Nederlandse verbonden partijen. We eindigen in Hoofdstuk 9 met een typologie van verbonden partijen in internationale context, grotendeels gebaseerd op de bevindingen van dit proefschrift.

**Verbonden partijen beschreven**

Verbonden partijen zijn organisaties (i) met onafhankelijke rechtsvorm, (ii) in meerderheid in handen van gemeenten, (iii) gebruikelijk met grote autonomie. Deze eigenschappen zijn terug te vinden in verbonden partijen in internationale context (zie Hoofdstuk 2). Daarbij komen ook verbonden partijen in handen van particuliere partijen of andere overheidslagen. Binnen Nederland zijn verbonden partijen (Hoofdstuk 4) toont aan hoe groot de variatie onder verbonden partijen is.


In hun autonomie variëren verbonden partijen ook. Over het algemeen hebben verbonden partijen veel autonomie in personeelszaken, en minder autonomie in financiële zaken, al hebben in financieel opzicht privaatrechtelijke verbonden partijen beduidend meer autonomie dan publiekrechtelijke verbonden partijen. Verbonden partijen hebben ook heel diverse bronnen van inkomsten: sommige zijn veel afhankelijk van gemeentelijke bijdragen, terwijl andere verbonden partijen juist veel inkomsten elders halen, zoals direct bij inwoners.
Hoewel er veel wordt gerapporteerd over externe governance en prestatiemanager

dooy verbonden partijen, lijken beide uiteindelijk weinig gevolgen te hebben (zie ook
Hoofdstuk 8). Bonussen en sancties komen weinig voor onder verbonden partijen, en
directeuren stellen veelal dat het niet halen van doelstellingen weinig gevolgen heeft.
Informele governance komt veel voor, en ambtelijke ondersteuning spelt een grote rol in

deur verbonden partijen, al lijkt dit meer het geval te zijn in de
publiekrechtelijke verbonden partijen dan in de privaatrechtelijke verbonden partijen.
Verbonden partijen stellen veelal hun eigen doelen op, en hoe langer ze bestaan, hoe meer
dit het geval is, al verschillen verbonden partijen onderling veel.

De meeste diversiteit is terug te vinden in het management van verbonden

partijen. Er is weinig corporate governance in de publiekrechtelijke verbonden partijen en
er zijn, enkele uitzonderingen van proactieve gemeenten uitzonderd, ook geen algemene
governance codes voor verbonden partijen in gebruik. Er is verder weinig demografische
diversiteit in directies van verbonden partijen. Er is meer variëteit in hun achtergrond en
expertise, alhoewel publieksectorachtergronden de overhand voeren. Intern is er vaak
weinig contact tussen de directies en de raad van toezicht (of raad van advies / raad van
commissarissen), en de relatie tussen de directie en de toezichthoudende raad is vooral
formeel en strategisch van aard, en weinig evaluatorend. Ook hierin verschillen verbonden
partijen echter veel.

De uitkomsten van verbonden partijen zijn ook heel divers. Directeuren van
verbonden partijen beoordelen hun motivatie als hoog en hun efficiëntie als laag. Er zijn
echter grote verschillen waar te nemen tussen de prestaties van verbonden partijen
afhankelijk van hun rechtsvorm. Publiekrechtelijke verbonden partijen scoren hun
prestaties minder dan privaatrechtelijk verbonden partijen in vrijwel alle dimensies.

Samenvattend: verbonden partijen zijn een diverse groep.

**Het verklaren van de uitkomsten van verbonden partijen**

Voor zover het beschrijvende deel van het proefschrift. Wellicht interessanter is het
verklarende deel: welke eigenschappen van verbonden partijen verklaren hun prestaties?

Wanneer we prestaties in nauwe economische zin nemen, lijkt het dat een
oorzaak van verminderde prestaties in verbonden partijen is dat verbonden partijen vaak
onvoldoende fondsen worden toegewezen. Budgetgroottje heeft verder een positieve
invloed op prestaties (er bestaan schaalvoordelen), terwijl de hoeveelheid personeel een
negatieve invloed heeft op prestaties (er bestaat mogelijk ‘overemployment’ in verbonden
partijen). Als laatste hebben sturingsverschillen tussen gemeentelijke eigenaren een
negatieve invloed op prestaties. Al deze bevindingen zijn robuust en statistisch significant.

Wanneer we prestaties in democratische zin meten (wat wij ‘stewardship’
noemen, of de mate waarin organisaties voelen het publieke belang te dienen) lijken drie
zaken relevant. Het bestaan van een vertrouwensrelatie is positief geassocieerd met
stewardship, en de mate waarin een enkele gemeente de overhand heeft in governance is
negatief geassocieerd met stewardship. Deze bevindingen waren echter niet robuust. Wel
robuust en statistisch significant was de bevinding dat de mate waarin verbonden partijen
hun eigen doelen stelden een positief effect had op stewardship, tegen onze verwachtingen
in. In andere woorden, des te kleiner de strategische rol van gemeenten in het bepalen van
de doelen van verbonden partijen, des te meer het gevoel bestaat bij verbonden partijen
om aan publieke waarden bij te dragen. Dit zou erop kunnen wijzen dat de doelbepaling
voor verbonden partijen als te politiek wordt ervaren, maar het zou ook kunnen dat
autonomie voor verbonden partijen voor een sterker rolbese in verbonden partijen zorgt.
Autonomie, over het geheel genomen, heeft een heel genuanceerd effect op prestaties. Het lijkt niet zonder meer zo te zijn dat autonomie zorgt voor minder democratie en meer economie, zoals vaak betoogt wordt in de literatuur over verzelfstandiging. Autonomie lijkt echter wel een rol te spelen. De rechtsvorm van verbonden partijen lijkt relevant voor hun prestaties: privaatrechtelijke verbonden partijen beoordelen zichzelf beter dan publiekrechtelijke verbonden partijen. Strategische autonomie lijkt een positief effect te hebben op stewardship in verbonden partijen, maar niet op economische prestaties. Manageriële autonomie heeft een ambiguë effect op prestaties, en lijkt positieve gevolgen te hebben enkel wanneer bedrijfstechnieken worden geïntroduceerd (zie ook Hoofdstuk 7). Wellicht dient het geven van autonomie aan verbonden partijen gepaard te gaan met actieve governance gericht op het bevorderen van bedrijfstechnieken (Hoofdstuk 7) en prestaties in algemene zin (Hoofdstuk 8) voordat het daadwerkelijk tot positieve gevolgen zal leiden.

**Beperkingen en verder onderzoek**

De bevindingen van dit proefschrift zijn uiteraard gebonden door beperkingen. We hebben nationale literatuur en een nationale enquête gebruikt om een lokaal veld te bestuderen, en door percepties van prestaties te bestuderen zijn er mogelijk statistieke biases ontstaan in onze studie. Verder, ondanks dat we alle Nederlandse verbonden partijen hebben bestudeerd blijft het aantal verbonden partijen dat ondervraagd kon worden klein, wat niet bevorderend is voor kwantitatief onderzoek. We hebben in onze procedures deze beperkingen zoveel mogelijk ingeperkt, maar ze kunnen niet geheel worden weggenomen.

Voor de toekomst verwelkomen wij daarom verder internationaal en langdurig onderzoek over verbonden partijen. Wij zijn verheugd dat het onderwerp recent steeds meer op de academische en beleidsmatige agenda begint te staan.
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Curriculum Vitae

Bart Voorn was born on March 14, 1994 in Hoorn, the Netherlands. He received his Bachelor’s in social sciences at Amsterdam University College, en his Masters in political science and economics at the Vrije Universiteit Amsterdam and the University of Amsterdam respectively. Since 2016, Bart has been a PhD researcher at Radboud University, and since January 2020, he is an Assistant Professor there.