

Ambidextrous sustainability, organisational structure and performance in hybrid organisations

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Abstract

Purpose – Drawing on paradox theory, this study explores how ambidextrous sustainability relates to organisational performance in hybrid organisations represented by Swedish municipal housing corporations, and how this relationship is contingent on the organisational structure of these organisations.

Design/methodology/approach – The study relies on the data collected from Swedish municipal housing corporations. These data sources consist of a survey sent to the management team members in Swedish municipal housing corporations, financial and non-financial archival data on these corporations, interviews with the management team and board members, and observations of meetings involving the management team and board of directors at a Swedish municipal housing corporation. Quantitative data of the study were analysed using descriptive statistics, correlation analysis and linear multiple regression analysis. Qualitative data were analysed employing deductive thematic analysis and were used to illustrate and discuss the results of the quantitative analysis.

Findings – The quantitative findings show that ambidextrous sustainability, i.e. the alignment between an explorative orientation and an exploitative orientation towards sustainability, has a weakly positive relationship with financial performance and a positive relationship with social performance in hybrid organisations represented by Swedish municipal housing corporations. The study further shows that a high level of the structural element “connectedness” weakened the relationship between the ambidextrous sustainability and financial performance of the organisation in the study. In contrast, a lower level of connectedness reinforced and strengthened this relationship. Our qualitative material illustrates how the quantitative findings could be explained by the interaction between the board of directors and the management team of these hybrid organisations.

Originality/value – The study shows how ambidextrous sustainability, employed for conceptualisation of the sustainability strategy in hybrid organisations, represented by Swedish municipal housing corporations, can impact on facets of performance (i.e. financial, social and environmental) differently. The study further highlights the importance of organisational structures in these relationships in a hybrid context.

Keywords Ambidextrous sustainability, Centralisation, Connectedness, Hybrid organisation, Municipal corporation, Performance

Paper type Research paper

Introduction

Since the 1980s, there has been increasing popularity in the for-profit sector and the public sector osmosing; giving rise to the conceptualisation of hybrid organisations. In the classical

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The authors would like to thank the SI editorial team and anonymous reviewers for their helpful comments on the paper. The authors would like to acknowledge and thank Oskar Svensson for his part in the survey data collection and to extend a special thank you to Xhousing for participating in this study and Sveriges Allmännytan for providing cooperation on the archival data collection. Timur Uman would like to acknowledge financial support by the Jan Wallander and Tom Hedelius foundation P20-0091.



understanding of osmosis, molecules' movement through a permeable membrane driven by a difference in osmotic pressure leads to a new concentration of a given solution(s) (Cath *et al.*, 2006). Similarly, hybrid organisations can be understood as a sum of the merger between the for-profit and the not-for-profit sector; these pressures can lead to various dilutions of the organisational form (Karré, 2020; Billis, 2010; Thomasson, 2020; Bozeman, 1987). Therefore, there is no natural or equitable balance, as such hybrid organisations might be thought of as all types of organisations between public and private domains (Kickert, 2001). However, according to Billis (2010) and Karré (2020), hybrid organisations should not be considered a distinct dichotomy, but rather as separate organisational logics. As a result, hybrid organisations describe the phenomenon rather than the type of organisation (Thomasson, 2009). The differences that distinguish one hybrid from another can vary and have been conceptualised by many scholars (see Bozeman, 1987; Billis, 2010; Dahl and Lindblom, 1953; Denis *et al.*, 2015; Karré, 2020). As such, there is a combination of characteristics (Rajala *et al.*, 2020) which provokes complexity, ambiguity (Thomasson, 2009) and tension (Skelcher and Smith, 2015) in hybrid organisations. Consequently, hybrid organisations epitomise the tensions between divergent logics manifested in different domains, as well as ways of managing these logics (Skelcher and Smith, 2015).

The performance domain in hybrid organisations involves creating value by simultaneously pursuing financial, environmental and social outcomes (Székely and Knirsch, 2005; Ponte *et al.*, 2017). The tension between these three outcomes gives rise to “paradoxes of performing” (Smith and Lewis, 2011), which occur in organisations with a multiplicity of stakeholders and goals. In a second domain, strategies of hybrid organisations involve “paradoxes of strategising” (Florin and Schmidt, 2011), which are similar to “paradoxes of performing” in that these organisations have to manoeuvre between market and mission-driven strategies (Ponte *et al.*, 2017). Finally, in a third domain, the structures of these organisations involve yet another issue known as a “paradox of strategic control” (Goold and Quinn, 1990), meaning that there is a more significant trade-off between structural efficiency and structural flexibility in hybrid organisations than in other organisations (Lentz, 1996). These paradoxes suggest that organisations of this type contend with competing logics and seek alignment between the domains (Voss and Voss, 2013). For example, according to Ozzane *et al.* (2016), ensuring simultaneous success in financial, social and environmental areas requires an approach which can facilitate both market and mission-driven strategies. Similarly, pursuing these strategies may require the organisation to adjust its structures to achieve divergent organisational goals.

Given these different paradoxes, scholars studying hybrids have adopted paradox theory to explore the various tensions within these organisations (e.g. Jay, 2013; Greco *et al.*, 2019). At the core of the paradox lies an acknowledgement that dualities exist in different categories within organisations (Smith and Lewis, 2011), and that these cannot be compromised or reconciled by a single decision involving them all (Eisenhardt, 2000). While the paradoxes in the hybrid organisation cause ambiguity and unease (cf. Lewis, 2000), creative responses (e.g. the simultaneous pursuit of seemingly divergent strategies) can help overcome these challenges if they are acknowledged and approached appropriately, and if an alignment is found across and within the paradoxical domains (cf. Papachroni *et al.*, 2015). These creative responses can encourage sustainable, long-term performance outcomes (cf. Lewis, 2000).

Drawing on Dahl and Lindblom (1953) and Bozeman (1987), Alter (2004) posits that hybrid organisations can be seen on a spectrum from “non-profit” at one extreme to “for-profit” at the other. The organisations closest to the non-profit are “non-profit organisations with income-generating activities”. At the other extreme of the spectrum, closest to the purely for-profit, organisations are “corporations practising social responsibility”. Finally, “socially responsible business” and “social enterprises” are in the middle of the spectrum; within the category of social enterprises, between the two extremes, are Swedish municipal corporations [1] which “are located in a twilight zone, being both private in one sense, acting according to the Swedish Companies Act, and public in another sense, oriented towards fulfilling the needs of the

municipal citizenry” (Collin *et al.*, 2009, p. 141). Therefore, while these corporations might not be considered hybrid in terms of ownership, they are an example of hybrid organisations that combine public non-profit and private for-profit characteristics [2] (Billis, 2010; Grossi and Thomasson, 2015; Karré, 2020; Thomasson, 2020), which according to Johanson and Vakkuri (2017), can be subject to public and private forms of social and financial control and may be characterised by goal incongruence and competing institutional logics.

Swedish municipal housing corporations (SMHCs) are increasingly faced with demands to become more sustainable (cf. Argento *et al.*, 2019; Wällstedt *et al.*, 2014; Brorström *et al.*, 2018). For some organisations, this represents a challenge, given the potential incompatibility of sustainable practices with existing business models. However, in the case of SMHC, sustainability is incorporated into their design (Sveriges Allmännyttan, 2021a), as their performance is evaluated in terms of financial, social and environmental aspects (cf. Collin *et al.*, 2009). According to Sveriges Allmännyttan [3], the organisations they represent are to simultaneously strive after long-term and efficiency-oriented financial goals, socially just and individual needs-oriented social goals and ecologically mindful environmental goals (Sveriges Allmännyttan, 2021b). Which therefore resembles the triple-bottom-line concept of performance in terms of sustainability (Hussain *et al.*, 2018). According to Jay (2013), successfully attending to these aspects simultaneously represents a “paradox of performing” and requires carefully crafted strategies which can address both short-term efficiencies and long-term discovery (Benner and Tushman, 2003). Ambidextrous sustainability could be seen as one such strategy, as it encapsulates an approach that simultaneously pursues sustainability exploitation and sustainability exploration (Susanto *et al.*, 2017), in essence, representing the simultaneous pursuit of divergent strategic orientations (Maletič *et al.*, 2014), incorporating the “paradox of strategising” which Swedish municipal corporations rely on to address the “paradox of performing”. According to Sveriges Allmännyttan (2021a), SMHCs strategy should be crafted by combining social and environmental responsibility with sustainable business aims and by keeping present and future needs of the society in mind, i.e. attaining both explorative and explorative sustainability orientations. However, in pursuing different organisational outcomes and crafting their strategy, SMHCs also need to attend to the “paradox of strategic controls” (Goold and Quinn, 1990) by relying on different structural elements (He and Wong, 2004). While the literature on management accounting and control contains a multitude of different structural elements (e.g. Otley, 2016), formal and informal structures can represent two “paradoxes of strategic control” (Goold and Quinn, 1990). According to Sveriges Allmännyttan (2020), Swedish municipal corporations have to adhere to formal rules and regulations that ought to be reflected in their organisational structure, yet these organisations also need to allow for sufficient flexibility in their operations and structural arrangements to be able to attend to the various needs of its stakeholders. Therefore, to explore the role of organisational structure in the relationship between ambidextrous sustainability and financial, social and environmental performance in Swedish municipal corporations, this study adopts the concepts of centralisation and connectedness, representing formal hierarchies and informal structures respectively (Mihalache *et al.*, 2014).

Thus, relying on qualitative and quantitative data on hybrid organisations, represented SMHC, the aim of this paper is to explore how ambidextrous sustainability relates to organisational performance and how this relationship is contingent on the organisational structure of these organisations.

Theory and hypotheses

Ambidextrous sustainability in Swedish municipal corporations

According to Billis (2010), there are distinct elements of private and public sector logics within hybrid organisations. Karré (2020, p. 37) argues that public organisations behave differently

from private organisations who behave differently from hybrid organisations, furthermore, “. . .one hybrid organisation will behave very differently from another”. In this regard, the term hybrid can reveal little about the organisation. On this basis we draw on [Thomasson \(2020\)](#) who argues that Swedish municipal corporations are hybrid organisations that enact built-in elements of each logic (i.e. public or private). Drawing on [Billis \(2010\)](#); [Thomasson \(2020\)](#) outlines a mix of five core principles that frame the Swedish corporate model (see below) and illuminate the competing logics connoting hybridity of these organisations. The principles include ownership, governance, operational priorities, distinctive human resources and distinctive other resources ([Thomasson, 2020](#)). These principles denote the complexities and challenges faced by Swedish municipal corporations and signify ambiguity ([Thomasson, 2020](#)) and tensions that arise in the face of managing the “intrinsic web of contrasting logics” ([Thomasson, 2020](#), p. 147) within each of these principles, and ultimately inform pursuit of divergent strategies and performance goals that result from this organisational form ([Székely and Knirsch, 2005](#); [Ponte et al., 2017](#)).

Hybridity in the Swedish corporate model ([Thomasson, 2020](#), p. 138)

Core elements	Swedish corporate model
Ownership	Shareholders are municipalities, indirectly citizens
Operational priorities	Market forces and competition combined with public monopoly
Governance	Municipality responsible for governance through municipal assembly
Distinct human resources	Paid employees but sometimes overlap with
Distinct other resources	Mainly Fees

Hybrid organisations are faced with the paradoxical challenges of exploiting existing competencies and simultaneously exploring new ones ([Vera and Crossan, 2004](#)). Consequently, they are confronted with the pressure to improve current competencies and capabilities and exploit existing products and services, while generating new knowledge and solutions which are both explorative and innovative ([Smith and Umans, 2015](#)). The tension between an explorative and exploitative orientation in the hybrid organisational domain is emergent compared to private firms, given the tensions between the market-oriented and mission-driven logics underpinning their respective organisational forms ([Umans et al., 2020](#)). Empirical evidence suggests that hybrid organisations manage these tensions by manoeuvring the market-oriented and mission-driven logics (cf. [Palm and Lilja, 2017](#)) and as a consequence pursue seemingly divergent strategic orientations, i.e. exploration and exploitation ([Besharov and Smith, 2014](#)).

According to [March \(1991\)](#), finding the alignment between divergent strategic orientations is fundamental to organisational success and survival. Engaging in one strategy over the other produces a substandard counterbalance ([Leventhal and March, 1993](#)) and will result in decreased organisational performance ([March, 1991](#)). The mounting empirical evidence, both within private and public sectors, suggests that simultaneous pursuit of both strategic orientations, conceptualised in terms of ambidextrous orientation [4], has a positive effect on organisational performance ([Duncan, 1979](#); [Tushman and O'Reilly, 1996](#); [Gibson and Birkinshaw, 2004](#); [He and Wong, 2004](#); [Lubatkin et al., 2006](#)). For example, in the private domain ambidextrous orientation was shown to have a positive effect on the performance of small- to medium-sized firms ([Tushman and O'Reilly, 1996](#); [Bedford et al., 2019](#)), multinational companies ([Gibson and Birkinshaw, 2004](#)) and technologically driven manufacturing firms ([He and Wong, 2004](#)). In the public domain ambidextrous orientation was shown to have a positive effect on the performance of public sector organisations ([Palm and Lilja, 2017](#); [Cannaerts et al., 2020](#)) and governmental

agencies (Tuan, 2017). While the ambidextrous orientation in both public and private sectors has been primarily explored in the realm of organisational strategy, it has recently been applied in the different domains of strategy, i.e. human resources management strategies (Plimmer *et al.*, 2017), manufacturing strategies (Tamayo-Torres *et al.*, 2017); branding strategies (Nguyen *et al.*, 2016), sustainability strategies (Maletić *et al.*, 2014; van den Buuse *et al.*, 2021) and in relationship to different organisational outcomes.

It is the application of ambidexterity in the sustainability domains of strategy that might be of particular importance for Swedish municipal corporations that are positioned in the public domain (e.g. Furlong and Bakker, 2010), where they are facing increasing regulatory and social pressure to incorporate sustainability into their strategy (cf. Argento *et al.*, 2019; Wällstedt *et al.*, 2014; Brorström *et al.*, 2018; Sánchez Gassen *et al.*, 2018). The concept of ambidextrous sustainability, introduced by Maletić *et al.* (2014), may capture municipal corporations' strategic orientation towards sustainability (cf. Parikh and Bhatnagar, 2018), as well as the "paradox of strategising" represented by the alignment between explorative and exploitative orientations. According to Maletić *et al.* (2014), sustainability exploitation and sustainability exploration, representing essential orientation elements of the sustainability strategy, create paradoxical challenges which can be resolved by aligning these two orientations with each other – i.e. ambidextrous sustainability (cf. Susanto *et al.*, 2017). Sustainability exploitation involves the efficient use of resources such as materials, water and energy, responding to the demands of different shareholders and stakeholders, measuring progress towards the organisation's specific goals, and exploiting competencies and resources for sustainability. On the other hand, sustainability exploration is characterised by incremental changes and improvements reflected in forward-looking questioning and adjustment of existing sustainable solutions. It results from developing innovative concepts, capabilities and competencies for sustainability-related innovation (Maletić *et al.*, 2014).

Given that sustainability has become an essential strategy for Swedish municipal corporations' (Sánchez Gassen *et al.*, 2018; Sveriges Allmännyttan, 2021a), we pose that by adopting the concept of ambidextrous sustainability, to capture Swedish municipal corporations' strategic orientation, we may gain a better understanding of how pursuit of this orientation will be reflected in multifaceted performance of these organisations. Application of this concept might be of particular relevance for these hybrid organisations sustainability strategy given that the multiple stakeholders of these corporations expect them to pursue different goals (Ponte *et al.*, 2017). To attain those goals, on the one hand these organisations might pursue market-driven strategies informed by private logics as well as mission-driven strategies informed by public logics (Ebrahim *et al.*, 2014). Simultaneous pursuit of explorative and exploitative orientations in the sustainability domain, represented by ambidextrous sustainability, may represent the Swedish municipal corporations' duality of strategic responses to goal expectations and legitimise their existence as hybrid organisations.

Ambidextrous sustainability and performance in a Swedish municipal corporation

Performance guidelines for Swedish municipal corporations are set by Swedish law [5] and have been updated in 2010–2011 to emphasise "the business-like" principle of operations (Westerdahl, *in press*) and include financial, social and environmental dimensions, closely resembling the triple-bottom-line. According to Carmeli and Halevi (2009), organisations finding themselves in situations where multiple and often conflicting goals need to be fulfilled, tend to mitigate the various risks and pursue complex strategies. Thus, adopting ambidextrous sustainability Swedish municipal corporations make sense of the complexities and are able to pursue paradoxical performance targets. Inherent differences in ambidextrous orientation, including ambidextrous sustainability, are

represented by pursuing exploration of new possibilities or exploitation of old certainties, highlight paradoxical tensions that have significant consequences for organisational performance (March 1991; He and Wong, 2004). At one extreme – where organisations pursue a purely exploitative orientation – adjusting to current contextual demands can lead to stagnation and an inability to react to future contextual demands (Hannan and Freeman, 1984). At the other extreme – where organisations pursue a purely explorative orientation – experimenting with new alternatives reduces the speed at which existing competencies are built (March, 1991). Indeed, failure to engage in exploratory activities can disrupt success in existing domains without bringing success to other domains (e.g. Mitchell and Singh, 1993), while excessive exploration skews the balance and becomes equally destructive (Levinthal and March, 1993).

A similar logic can be applied to ambidextrous sustainability and its components of sustainability exploration and exploitation in the context of Swedish municipal corporations, except that purely for-profit corporations have a choice about whether to adopt a sustainability strategy (Maletić *et al.*, 2014) and are therefore not constrained in the same way as municipal corporations in Sweden. The Swedish municipal corporation's sustainability exploitation involves adjusting to the various stakeholders' immediate contextual sustainability-related demands. This is particularly the case with the owner and, by extension, the residents whose interests the owner represents. Simultaneously, the sustainability exploration in this context involves experimenting with new, alternative sustainability solutions that may not be of immediate interest to the owner and residents. Pursuing sustainability exploitation at the expense of sustainability exploration will address immediate gains at the expense of future needs. Levinthal and March (1993) refer to this as the “success trap”, where immediate gains appear to be signs of success. On the other hand, pursuing sustainability exploration at the expense of sustainability exploitation will address future needs at the expense of immediate needs. Levinthal and March (1993) refer to this as the “failure trap”, where the current needs of the owner and, by extension, the residents will not be satisfied.

Therefore, an organisation's orientation towards either sustainability exploration or sustainability exploitation involves a fundamentally different logic, which creates tensions. These tensions require organisations to make trade-offs, generated by a need to manage the alignment between the two (He and Wong, 2004) to avoid the failures inherent in each trap (March, 1991). By pursuing both an explorative and exploitative approach to sustainability, Swedish municipal corporations mitigate the risk of this failure (Levinthal and March, 1993), and therefore improve their chances of reaching triple-bottom-line performance targets. Consequently, we argue that, in addressing the paradox of strategising, i.e. by pursuing ambidextrous sustainability, Swedish municipal corporations will be able to reach triple-bottom-line goals and perform well in a financial, social and environmental capacity.

In light of the above arguments, the following hypothesis is proposed:

- H1a.* Ambidextrous sustainability will have a positive relationship with financial performance in Swedish municipal corporations.
- H1b.* Ambidextrous sustainability will have a positive relationship with social performance in Swedish municipal corporations.
- H1c.* Ambidextrous sustainability will have a positive relationship with environmental performance in Swedish municipal corporations.

Organisational structure – the role of connectedness and centralisation in Swedish municipal corporations

Current research indicates that organisational structure plays an essential contextual contingency role in the relationship between ambidexterity and performance (Mihalache

et al., 2014; Choi and Chandler, 2015; Úbeda-García *et al.*, 2020). Contingency theory suggests that the match between formal and informal structures on the one hand, and organisational strategy on the other is essential in improving organisational performance (Donaldson, 1987; Pertusa-Ortega *et al.*, 2010; Chenhall, 2003). Similarly, the mismatch between strategy and these structures is likely to hinder organisational development and attaining goals (cf. Thompson, 1991; Gerdin and Greve, 2004; Fullerton *et al.*, 2013). Goold and Quinn (1990) suggest that, while organisations simultaneously have both formal and informal structures, choosing between them means the organisation is faced with a “paradox of strategic control”. Drawing on this paradox, and on a contingency perspective, the present study, therefore, adopts the concepts of centralisation and connectedness (Mihalache *et al.*, 2014), which represent formal hierarchies and informal social structures respectively (Johanson, 2000), to explore the role of organisational structure in the relationship between ambidextrous sustainability and financial, social and environmental performance in Swedish municipal corporations.

Centralisation

Centralisation occurs when decision-making power is concentrated in a few actors residing in the organisation’s upper echelons (Mihalache *et al.*, 2014), and when only a few actors are responsible for problem-solving (Chang *et al.*, 2011). As such, centralisation represents the extent to which power is distributed between social actors in the organisation (Chang *et al.*, 2011) and the formal hierarchy this entails (Guggenberger and Rohlfing-Bastian, 2016). Given that information travels through a longer filtering process before it reaches final decision-makers, the context of a centralised organisation reduces the extent to which the management team consider substantial information from within the organisation (Atuahene-Gima, 2005; Jansen *et al.*, 2012). Given the paradoxical and complex nature of the decisions related to ambidextrous sustainability, the reduction in quality of information available to decision-makers will lead to an incomplete and inaccurate assessment of the feasibility and risks involved in matching the simultaneous pursuit of sustainability exploitation and sustainability exploration to the valuable opportunities of attaining various aspects of performance (e.g. Govindarajan, 1988). Moreover, to tune sustainability exploration and exploitation to the valuable opportunities requires timely responses from within the organisations. A centralised organisation usually provides less discretion to the middle managers and employees to quickly respond to unique opportunities or threats in the local environment (Birkinshaw and Lingblad, 2005). This would restrict organisational adaptivity to the distinct opportunities and limit the extent an organisation can benefit from ambidextrous behaviour (Jansen *et al.*, 2012) in the sustainability domain.

Thus, in the context of Swedish municipal corporations who seek alignment between sustainability exploration and sustainability exploitation, we pose that centralisation could be expected to tame such alignment which will be reflected in decreased financial, social and environmental performances.

In light of the above arguments, the following hypothesis is proposed:

- H2a.* Centralisation will have a negative moderating effect on the relationship between ambidextrous sustainability and financial performance in Swedish municipal corporations.
- H2b.* Centralisation will have a negative moderating effect on the relationship between ambidextrous sustainability and social performance in Swedish municipal corporations.

H2c. Centralisation will have a negative moderating effect on the relationship between ambidextrous sustainability and environmental performance in Swedish municipal corporations.

Connectedness

Connectedness refers to the relational density of organisational social networks (Mihalache *et al.*, 2014) and represents an organisations' informal social structure (Johanson, 2000). It consists of direct contact between members of an organisation, irrespective of hierarchy or functional position, facilitating explorative innovation through increased personal knowledge and the ideas that encourage innovation (Mihalache *et al.*, 2014). Connectedness reaches beyond hierarchical and functional positions and promotes meaningful interaction between an organisations' members (Atuahene-Gima, 2003). Moreover, connectedness strengthens organisational links between employees and across different projects and units (Clark and Fujimoto, 1991). Yet, connectedness and the informal communication it connotes might not always be the most efficient way of transmitting information (cf. Green *et al.*, 2005). Should organisations rely only on the informal communication channels at the expense of the formal ones, information might become available to and serve only certain groups and impede the achievement of common organisational goals (Iosim *et al.*, 2010). Nevertheless, literature suggests that informal communication is often not the only source of information exchange in organisations (cf. Mihalache *et al.*, 2014) especially since most organisations, hybrids included, are subject to formal requirements imposed on them by the institutional environment (cf. Convery and Kaufman, *in press*; Ferry and Slack, *in press*).

In addition to strengthening the links between people in organisations (cf. Clark and Fujimoto, 1991) connectedness fosters an awareness of different skills and competencies from all parts of the organisation, offering the organisation the chance to recombine existing knowledge and resources (Mihalache *et al.*, 2014). In turn, this can be valuable for both exploration and exploitation (Mihalache *et al.*, 2014), and subsequently stands to enhance access to strategic options and a cross-organisational network of information (Burgelman, 1991). According to Chang *et al.* (2011), the resulting collaboration between different functions and organisational units can improve or refine existing products and services. In the context of Swedish municipal corporations who seek alignment between sustainability exploration and sustainability exploitation, connectedness could be expected to facilitate such alignment, which will be reflected in improved financial, social and environmental performance.

In light of the above arguments, the following hypothesis is proposed:

- H3a.* Connectedness will have a positive moderating effect on the relationship between ambidextrous sustainability and financial performance in Swedish municipal corporations.
- H3b.* Connectedness will have a positive moderating effect on the relationship between ambidextrous sustainability and social performance in Swedish municipal corporations.
- H3c.* Connectedness will have a positive moderating effect on the relationship between ambidextrous sustainability and environmental performance in Swedish municipal corporations.

Method

Swedish municipal housing organisations

The empirical study object is SMHCs. These organisations are “traditionally . . . portrayed with traditional “state”, “market” and “civil society” labels” (Czischke *et al.*, 2012, p. 418) and display the characteristics of all three in different ways (Evers, 2005). In Sweden, 269 out of 290 municipalities operate at least one housing organisation (National Board of Housing, Building and Planning, 2019). These public housing corporations hold 28% of the available units in apartment buildings and play an important role in the Swedish housing market. Although Swedish public housing corporations operate under the same national laws, legislation that came into effect in 2011 (Swedish Law on Public Housing Corporations) means that there can be local differences in the priorities in relation to competing objectives (Grander, 2018), i.e. market and mission-driven logic.

Apart from the legislation, Swedish municipal corporations are characterised by distinctive features of hybridity (Billis, 2010; Karré 2020) (see below). They are defined further by five core elements on the hybridity spectrum (Billis, 2010; Thomasson, 2020). Ownership: shareholders/owners are municipalities and citizens are indirectly another group of owners [6]. Governance: municipalities govern the corporation through a municipal assembly, electing a politically assigned board of directors. Operational priorities: they are subject to market forces and competition and public monopoly, maintaining a stable financial position but simultaneously keeping the needs of the public in focus [7]. Human resources: they employ paid staff whose role overlaps with that of public servants. Other resources: they rely on fees rather than sales and taxes (Billis, 2010; Thomasson, 2020). These interlocking non-profit and private for-profit characteristics of municipal housing corporations (Grossi and Thomasson, 2015) epitomise their hybrid nature.

Dimensions of hybridity (Karré, 2020, pp. 36-37)

Hybrid organisations	
Dimensions of hybridity	Explanation
Legal form	Does an organisation fall under commercial law or is it an entity under public law?
Ownership	The continuum between public ownership (by the government) and the private ownership (either single business owner or a group of shareholders)
Activities	The continuum between statutory activities (at the behest of government) and purely commercial activities
Funding	The continuum between government appropriation and private funding
Market environment	The continuum between monopoly and full competition
Value orientation	The continuum between public and private sector value orientation. The first is defined here by the guiding principles of lanes public administration approach and Jacobs guardian moral syndrome. The second here is defined by lanes public management approach and Jacobs commercial syndrome
Strategic orientation	The continuum between strategy mainly aimed at government and public sector goals, and one aimed more at the market and its own commercial interests
Relationship with public principal	This is the continuum between a hierarchical relationship between the organisation and government in dealings between the two, and a vertical relationship of equals based on contract under private law
Levels of autonomy	Managerial autonomy is the continuum between no and full autonomy for the organisations senior executives to engage in strategic management, which means to specify the organisations objectives, translate them into policies and plans and to allocate resources to implement them; executive autonomy is the continuum between no and full autonomy for senior executives on how to design and organise the organisations operational process, that is, to execute the production of public goods and services

The empirical material

The study involved five types of data: (1) survey data based on a questionnaire sent to the top management teams of all ($n = 313$) SMHCs, (2) archival accounting data for all of these corporations, (3) non-participant observations at the praesidium, top management team meetings and board meetings of a mid-size SMHCs (referred to as XHousing corporation), (4) interviews with the chair of the board, vice-chair of the board, three additional board members, CEO and CFO and (5) official documents containing the owner directive and the yearly financial report of XHousing corporation.

Thus, the study employs both quantitative and qualitative data. The quantitative data were collected and analysed first followed by collection and analysis of the qualitative data. The latter has been employed for illustration of the quantitative findings. [Greene et al. \(1989\)](#) refer to it as *complementarity* approach to mixed data that “seeks elaboration, enhancement, illustration, clarification of the results from one method with the results from another” (p. 259).

Survey data. For the survey, self-administered questionnaires were sent to the 731 top management team members of all ($n = 313$) SMHCs in April 2018 ([Maine and Svensson, 2018](#)). A response was received from representatives of 141 organisations. Out of 141 observations, 82 could be used in the analysis. The remainder involved either incomplete answers from respondents or missing accounting data from an archival source connected to the survey. Thus, the sample represents 26% of the population, similar to other studies on municipal corporations in the Swedish context (e.g. [Smith and Uman, 2015](#); [Umans et al., 2020](#)). Non-response analysis identified no significant differences among respondents and non-respondents concerning the corporations' size or profitability or the gender of respondents. The survey data were used to observe independent (Ambidextrous sustainability) and moderating (Connectedness and Centralisation) variables. They were also used for control variables related to survey respondents (respondents' position, gender, age and level of education).

Archival data. Archival data from the study were retrieved from a database available through the Swedish association of municipal housing corporations (Sveriges Allmännyttta [Public Housing Sweden]). The most recent available accounting data were retrieved in the autumn of 2019 for the year 2018, the same year, the survey data were collected. The archival data were used to observe the dependent variables and the control variables Organisational size and Residents' satisfaction.

Non-participant observations. Non-participant observations were made at the board of directors' and top management team meetings in XHousing corporation in the autumn of 2019 and the spring of 2020. The observations concentrated on resource allocation decisions by the board and during the praesidium (composed of the Chairperson, Vice-chairperson, CEO and CFO) meeting. A second focus involved discussing sustainability-related issues during the same fora to formulating and implementing a sustainability strategy. The data consisted of one top management team meeting, five praesidium meetings lasting between one and two hours, and five board meetings lasting between three and four hours. The material consisted of 28 h of observations and 220 pages of observation protocols recorded by one or two observing researchers. The data collected through non-participant observation were used to illustrate the findings of the quantitative analysis.

Interviews. Interviews were conducted with the Chairperson and vice-chair of the board of directors, three regular members of the board and the CEO and the CFO (seven interviews in total) of the XHousing corporation during the autumn of 2019 and the spring of 2020. Each interview lasted between one to two hours. The interviews with the Chairperson and CEO were recorded by two observers who took written notes. The interview with the CFO, vice-chair and three board members was recorded on tape/video and transcribed verbatim. The interviews focused on municipal housing corporations'

performance indicators and their sustainability strategy and management control systems. These discussions laid the groundwork for operationalising municipal housing corporations' organisational performance in the study; they have also helped illustrate the findings of the quantitative analysis.

Official documents. Owner directive and yearly financial report of the XHousing corporation. The ownership directive serves an important role in directing and communicating the purpose of SMHCs and states the purpose of ownership, the role of the organisation and required returns. More specifically it includes the owner's idea of organisational mission, governance and control development aims, social, financial and environmental goals and coordination and democracy goals (Lindbergh and Wilson, 2016).

Operationalisation

Dependent variables. Interviews were conducted with the management and board representatives, of a mid-sized municipal housing corporation in a mid-sized town in Sweden to determine appropriate accounting performance measures. The interviewees suggested several accounting indicators that they and the municipal owners of corporations use in assessing performance. These were the indicators used for this paper, according to the availability of data. Due to the nature of the performance measures described below, lower values of variables indicated higher organisational performance in the municipal corporation and higher values of variables indicated lower performance.

Financial Performance was measured by the natural logarithm of the value calculated by subtracting an interest rate of 1% on equity from 2017 profit in the balance sheet (before logarithmation negative values were multiplied by -1 [8]). This measure was derived from the Swedish Law on Public Housing Corporations owned by Municipalities (SFS, 2010:879), which stipulates permitted value transfers for municipal housing corporations. A low value of this variable, i.e. approaching zero, indicates higher financial performance and a high value indicates lower performance since The Swedish Local Government Act (SFS, 2017:725) prohibits corporations from "aiming for profit".

Social Performance was measured by dividing Gross rent for the apartments by Total area of the apartments. This indicated the rental price per square metre. In other words, decreasing apartment rental price per square metre indicated affordability of the apartments (cf. Pullen *et al.*, 2010; Wallbaum *et al.*, 2012) or the corporation's ability to offer affordable housing for present and potential tenants. Thus, this variable's lower value indicates higher social performance and the higher value of this variable indicates lower performance.

Environmental Performance was measured by dividing the corporation's total water usage, electricity and heating by the total area of all facilities belonging to the corporation. This provided an indicator of efficiency in using energy and natural resources per square metre (cf. Gill *et al.*, 2011). Decreasing costs per square metre were used as an indicator of environmentally conscious policy and performance. Thus, this variable's lower value indicates higher environmental performance and higher value indicates lower environmental performance.

Independent variable. Ambidextrous sustainability –six original statements for explorative orientation and six original statements for exploitative orientation were used from Lubatkin *et al.* (2006), rephrasing them to adjust them to the sustainability strategy orientation of the ambidexterity construct, and adapting them to the context of Swedish municipal corporations in line with Umans *et al.* (2020) (see Table 1). Given that this instrument had not been used previously, it was pre-screened by four scholars with substantial experience in the field of hybrid governance and adjusted in line with their suggestions. A 7-point Likert scale was used to assess sustainability exploration and sustainability exploitation. In line with the assumptions of paradox theory, which views explorative and exploitative

orientations as two separate paradoxical dimensions rather than positions on the continuum, He and Wong's (2004) and Mom's et al. (2015) calculation of ambidexterity was adopted. After checking for construct validity, this involved subtracting the mean of six statements measuring sustainability exploration ($\alpha = 0.909$, Mean = 4.63) from the mean of six statements measuring sustainability exploitation ($\alpha = 0.912$, Mean = 4.79). Negative results of the subtraction were multiplied by -1 , and the final score for ambidextrous sustainability was represented by the distance between explorative and exploitative sustainability orientations. Thus, scores approaching 0 indicated a greater degree of ambidextrous sustainability, while an increasing score indicated the opposite.

Moderating variable. *Connectedness* of decision-making was measured by adopting the instrument developed by Mihalache et al. (2014), consisting of four statements. A 7-point Likert scale was used to assess the statements. After checking for construct reliability, Connectedness ($\alpha = 0.868$) was first calculated as a mean of the four questions posed, after which the variable was dichotomised around the mean value of all observations. Thus, the measure for Connectedness was 0 = organisation with relatively low connectedness of decision-making and 1 = organisation with relatively high connectedness of decision-making (see Table 1).

Centralisation of decision-making was measured by adopting another instrument developed by Mihalache et al. (2014), consisting of six statements, all reverse coded, which were re-coded for the analysis. A 7-point Likert scale was used to assess the statements, after

Sustainability Exploration	<p>Please assess how the following statements reflect your organisation's orientation during the past 3 years, using a 7-point scale where 1 = not at all to 7 = very much</p> <ul style="list-style-type: none"> Looks for sustainability-inspired technological ideas by thinking "outside the box" Bases its success on its ability to explore new sustainability technologies Creates products or services that are sustainable for the organisation Looks for sustainable solutions to satisfy our customers' needs Actively invests in new sustainable market segments Actively markets sustainability for new customer groups
Sustainability Exploitation	<ul style="list-style-type: none"> Commits to improving quality and lower costs in sustainability Continuously improves the reliability of its sustainability-based products and services Increases the levels of automation in its sustainability operations Continuously surveys customers' satisfaction of sustainability-based products and services Fine-tunes existing sustainability-based offers to keep its current customers satisfied Penetrates more deeply into its existing customer base in terms of sustainability-related products and services
Centralisation	<p>Please assess how the following statements are reflective of your organisation, using a 7-point scale where 1 = Not at all reflective to 7 = Very reflective</p> <ul style="list-style-type: none"> Employees can develop their own work procedures ® Employees are free to choose their own methods in carrying out their work ® Within the organisation, employees can schedule major activities ® Employees can adjust their goals independently ® Within the organisation, employees can determine goals to be achieved ® Employees can influence how performance is evaluated ®
Connectedness	<ul style="list-style-type: none"> In our organisation, there is ample opportunity for informal 'hall talk' among employees Employees from different departments feel comfortable calling each other when the need arises People around here are accessible to each other In this organisation, it is easy to talk with virtually anyone you need to, regardless of rank or position

Table 1.
Survey items

checking for construct reliability, Centralisation ($\alpha = 0.858$) was first calculated as a mean of the four questions posed, after which the variable was dichotomised around the mean value of all observations. Thus, the measure for Centralisation was 0 = organisation with relatively little centralised decision-making and 1 = organisation with a considerable level of centralised decision-making (see Table 1).

Control variables. *Organisation size* – the number of employees was used, in line with previous research (e.g. Tagesson *et al.*, 2013).

Residents' satisfaction – in line with previous research (Lam, 2008), and due to a scarcity of data on residents' satisfaction, available data were used to construct a proxy by dividing the apartment maintenance expenses by the total area of the apartments.

CEO – given those top managers who responded were either CEOs or CFOs, a control was added for whether the data showed position-specific respondent bias. A number of independent sample *T*-tests were performed to assess whether CEOs and CFOs differed in their answers to the survey, or whether there were differences in the specific aspects of organisations used as control variables or performance measures (Umans *et al.*, 2020).

Respondents' characteristics – the regression models were not controlled for respondents' Age, Gender or Higher Education, given that the sample contained both CEOs and CFOs, which would have made it hard to interpret if the demography of any of the variables had specific performance effects, furthermore the degrees of freedom of our sample restrict the number of variables that could be included in the regression models. However, these data were used for descriptive purposes and to check whether there were any correlations with the respondents' survey answers (cf. Smith and Umans, 2015).

Data analyses

Quantitative analysis. IBM SPSS Statistics 24 software was used to explore the data. Descriptive statistics, Pearson correlation, independent sample *T*-tests, One-way ANOVA, multiple linear regression analysis and multiple linear moderating regression analyses were performed. To perform the latter, the independent variable (*Ambidextrous sustainability*) was standardised and multiplied by the dichotomous moderator variables (*Centralisation* and *Connectedness*). The plots were then used to visualise and interpret the results (cf. Dawson, 2014).

Qualitative analysis. NVivo was used to explore interviews, observations and official documents (such as the owner directive and yearly financial report) of the XHousing corporation, referred to from this point on as XHousing. The main concepts and findings from the quantitative analysis guided the coding of this material. We performed a deductive thematic analysis (cf. Fereday and Muir-Cochrane, 2006) and constructed an illustrative case study (cf. Scapens, 1990; Vaivio, 2008). The “theoretical focus” was prioritised before “empirical sensitivity” (Vaivio, 2008, p. 74). While the same data later during the project will be analysed more in-depth with the purpose of qualitative generalisation (Parker and Northcott, 2016), the primary purpose of the qualitative analysis in this paper is to illustrate, clarify and to exemplify the findings of the quantitative analysis (Greene *et al.*, 1989).

Looking for illustrations of the relationship between strategic orientation and performance, we used the codes: attention to financial performance, attention to environmental performance, attention to social performance and attention to triple-bottom-line. As codes for capturing organisational structure, we used centralisation/decentralisation and connectedness. We found the material from XHousing contained observations interesting for discussing centralisation and connectedness in relation to the group of municipal corporations and other organisational units within the municipality. Still, at this stage, we have less qualitative material useful for discussing the same phenomena on the organisational level studied in the survey and archival data.

One researcher was responsible for the coding in NVivo, while all three researchers contributed to the interpretation. All three researchers actively participated in the fieldwork and are well acquainted with the studied organisation. The presentation of the findings was guided by the NVivo code summaries in relation to the quantitative findings and previous literature. During the discussions, we found that our qualitative data helped illustrate how managers and board members approached paradoxes of strategising and performing by attending to both market and mission-driven goals.

Results and findings

Quantitative results and findings

Descriptive statistics. Descriptive statistics (Table 2) indicate that 31% of respondents were female, and 69% were male (this partly reflects the managerial gender structure in the industry, where 62% of executives are male and 38% are female judging by the email addresses collected). 57% of respondents were CEOs, while 40% were CFOs. The respondents' average age was 52 years, and 73% of them had a bachelor's degree or higher. Organisations in the sample employed between 7 and 313 individuals.

Pearson correlations. Table 3 shows a number of significant correlations between the characteristics of the respondents and between these characteristics and organisational performance. For example, being a female was negatively associated with being a CEO respondent (-0.285^{***}), while there was a positive relationship between age and being a CEO respondent (0.374^{***}). The matrix further showed a weakly significant negative correlation between Age and Gender (-0.216^*), suggesting that women executives in the sample were younger than male executives. The same applies to the significant negative relation between Age and Higher education (-0.285^{***}), suggesting that respondents with higher education were younger. The CEO variable showed a significant negative correlation (-0.330^{***}) with the Social performance variable, suggesting that CEOs responded from organisations which performed better on social indicators while it was the CFOs that responded from organisations which performed less well on these indicators. This might suggest some bias in the data, which will be discussed further in the next section.

Organisational size had a positively weak association with respondents' age (-0.172^*), suggesting that older executives responded to the survey in large corporations. There was also a significant negative correlation between Organisational size and Residents' satisfaction proxy (-0.243^{**}), suggesting that expenses per square metre for apartment maintenance were lower in smaller corporations. Organisational size had a significant negative correlation with Connectedness (-0.296^{***}) and Environmental performance

	Variables	N	Min	Max	Mean	Std.D
1	CEO	82	0	1	0.573	0.497
2	Gender	82	0	1	0.305	0.463
3	Age	82	27	66	52.132	9.037
4	Higher education	82	0	1	0.732	0.446
5	Organisation size	82	7	313	69.100	68.060
6	Residents' satisfaction	82	0.76	1.28	1.026	0.098
7	Ambidextrous sustainability	82	0	1.67	0.558	0.419
8	Centralisation	82	0	1	0.43	0.498
9	Connectedness	82	0	1	0.59	0.496
10	Financial performance	82	4.625	13.126	9.378	1.647
11	Social performance	82	0.759	1.283	1.026	0.098
12	Environmental performance	82	0.112	0.285	0.195	0.0353

Table 2.
Descriptive statistics

Table 3.
Correlations

Variables	1	2	3	4	5	6	7	8	9	10	11
1 CEO											
2 Gender	-0.285***										
3 Age	0.374***	-0.216*									
4 Higher education	-0.022	-0.017	-0.285***								
5 Organisation size	-0.146	0.147	0.172*	0.140							
6 Residents' satisfaction	0.017	0.019	-0.243**	0.110	-0.002						
7 Ambidextrous sustainability	0.136	-0.058	0.103	0.005	-0.122	0.095					
8 Centralisation	0.047	0.018	0.099	0.022	0.050	-0.115	0.099				
9 Connectedness	-0.026	-0.034	-0.027	-0.007	-0.296***	-0.047	0.045	-0.125			
10 Financial performance	0.005	0.118	0.165	0.155	0.448***	-0.166	0.093	0.257**	-0.269**		
11 Social performance	-0.330***	-0.029	-0.066	0.357***	0.337***	0.131	0.187*	0.092	0.005	0.422***	
12 Environmental performance	0.121	0.089	0.124	-0.146	-0.331***	-0.249**	0.049	-0.107	0.157	-0.252**	-0.272**

Note(s): *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

(−0.331***), and a significant positive correlation with Financial (0.448***) and Social (0.337***) performance. This suggests that smaller organisations had greater connectedness, but also that larger organisations performed better in environmental domains and worse in financial and social domains (given that low value of performance indicators, i.e. approaching zero, indicates higher performance and a high value indicates lower performance). Residents' satisfaction proxy had a significant negative correlation (−0.243**) with respondents' Age. The same proxy had a significant positive correlation with Social performance (0.357***), suggesting that organisations spending more resources on apartment maintenance had less affordable housing.

The Centralisation variable had a weakly significant positive correlation with Social performance (0.187*), where an increasing degree of centralisation was associated with lower social performance. Connectedness had a significant positive correlation with Financial performance (0.257), where an increasing degree of connectedness was associated with lower financial performance.

Regression analysis – direct effect. Hypothesis 1a, 1b and 1c was tested by performing linear multiple regression analysis, reported in Model 1, Model 3 and Model 5, respectively. Hypotheses 2a and 3a, 2 and 3b, and 2c and 3c were tested by performing linear multiple moderating regression analysis, reported in Model 7, Model 8 and Model 9 respectively (Table 4).

In Models 1, 2 and 3, the control variables (*CEO*, *Organisational size*, *Residents' satisfaction*) and independent variable (*Ambidextrous sustainability*) were tested first with *Financial*, *Social* and *Environmental performance* as dependent variables. In Models 4, 5 and 6, the same variables were used as in Models 1, 2 and 3, but with the added structural elements *Connectedness* and *Centralisation*, and the interaction variables *Ambidextrous sustainability* × *Connectedness* (dichotomous variable) and *Ambidextrous sustainability* × *Centralisation* (dichotomous variable). In both entries, and prior to multiplication, the *Ambidextrous sustainability* variable was standardised to alleviate multicollinearity concerns. All models had some multicollinearity indications, which was within an acceptable range, between VIF = 1.039 and VIF = 6.434 (cf. Pallant, 2004), where the recommended cut-off value ranges between 4 and 10. A slightly higher level of multicollinearity could be accepted in Models 4, 5 and 6, given the interaction term in the model (cf. Umans et al., 2020).

The results of linear multiple regression analysis in Model 1 indicate that the variable *Ambidextrous sustainability* has a weakly significant positive association with the variable

Variables	Model 1 Financial performance		Model 2 Social performance		Model 3 Environmental performance	
	Std.B	Std.E	Std.B	Std.E	Std.B	Std.E
CEO	0.056	0.331	−0.320***	0.020	0.075	0.007
Organisation size	0.475***	0.002	0.322***	0.000	−0.318***	0.000
Residents' satisfaction	−0.181*	2.971	0.113	0.175	−0.253**	0.067
Ambidextrous sustainability	0.161*	0.393	0.259***	0.023	0.024	0.009
Centralisation						
Connectedness						
Constant	8.638***	0.457	0.977***	0.027	0.218***	0.010
F-value	6.702***		7.373***		4.182***	
Adj. R ²	0.220		0.239		0.136	
VIF value, highest	1.039		1.039		1.039	
	n=82		n = 82		n=82	

Note(s): ***p < 0.01; **p < 0.05; *p < 0.1

Table 4. Multiple linear regression models

Financial performance (Std. $\beta = 0.161, p < 0.1$), suggesting that municipal corporations with a lower level of ambidexterity have lower financial performance and vice-versa. This suggests partial (given the weak significant association) support for [Hypothesis 1a](#). The variations in the independent variables in Model 1 explain 22% of the variation in the dependent variable ($R^2 = 0.220$). The regression analysis results in Model 3 indicate that the variable *Ambidextrous sustainability* has a significant positive association with the variable *Social performance* (Std. $\beta = 0.259, p < 0.05$), suggesting that municipal corporations with a lower level of ambidexterity have lower social performance and vice-versa. This suggests support for [Hypothesis 1b](#). The variations in the independent variables in Model 3 explain 26% of the variation in the dependent variable ($R^2 = 0.258$). The regression analysis results in Model 5 indicate no association between *Ambidextrous sustainability* and *Environmental performance*, which shows that [Hypothesis 1c](#) is not supported.

Regression analysis – moderating effect. To test [Hypotheses 2a–c](#) and [3a–c](#), linear multiple moderating regression analyses were performed (see [Table 5](#)). Model 3 tested [Hypotheses 2a](#) and [3a](#), Model 4 tested [Hypotheses 2](#) and [3b](#) and Model 5 tested [Hypotheses 2c](#) and [3c](#). Models 4 and 5 suggest no moderating effect of structural elements on the relation between *Ambidextrous sustainability* and *Social* or *Environmental performance*, which suggests that [Hypotheses 2b, 2c, 3b](#) and [3c](#) are not supported. Model 3 indicates that *Centralisation* does not have a moderating effect on the relationship between the independent and dependent variable. Instead, *Centralisation* appears to have a significant positive correlation with *Financial performance*, indicating that organisations with a higher level of *Centralisation* have a lower *Financial performance* level. These findings thus indicate that [H2a](#) is not supported. Nevertheless, there was some indication of a significant negative moderating effect of *Connectedness* on the relation between *Ambidextrous sustainability* and *Financial performance* (Std. $\beta = -0.476, p < 0.1$). The variations in the independent and control variables, along with interaction terms in Model 3, explain 29% of the variation in the dependent variable ($R^2 = 0.285$).

The plot in [Figure 1](#) reveals that *Ambidextrous sustainability* has a stronger positive relation with *Financial performance* where there are lower levels of connectedness and a weaker positive relationship with *Financial performance* where there are higher levels of connectedness.

Variables	Model 4 Financial performance		Model 5 Social performance		Model 6 Environmental performance	
	Std.B	Std.E	Std.B	Std.E	Std.B	Std.E
CEO	0.037	0.325	-0.298***	0.020	0.078	0.008
Organisation size	0.403***	0.002	0.346***	0.000	-0.298***	0.000
Residents' satisfaction	-0.137	2.901	0.126	0.181	-0.263**	0.069
Ambidextrous sustainability	0.562**	0.849	0.232	0.053	0.091	0.020
Centralisation	0.364**	0.561	0.004	0.035	-0.077	0.013
Connectedness	0.169	0.583	0.153	0.036	0.065	0.014
Amb.S. × Centralisation	-0.205	0.784	0.149	0.049	-0.068	0.019
Amb.S. × Connectedness	-0.476**	0.860	-0.103	0.054	-0.027	0.021
Constant	7.728***	0.714	0.954***	0.045	0.216***	0.017
F-value	5.044***		3.909***		2.224**	
Adj. R ²	0.285		0.223		0.109	
VIF value, highest	6.434		6.434		6.434	
	n = 82		n = 82		n = 82	

Table 5. Multiple linear moderating regression models

Note(s): *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

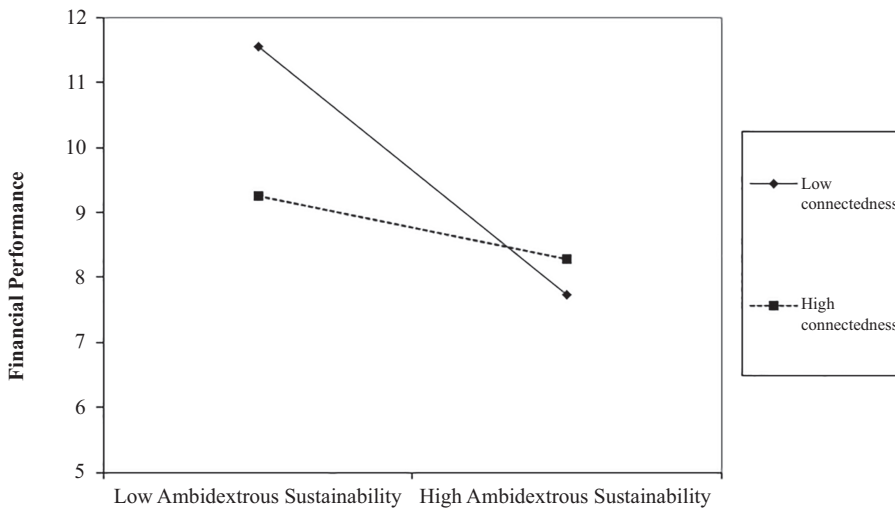


Figure 1.
Interaction effect

Thus, the result of the moderating regression analysis does not support [Hypothesis 2b](#). In fact, the moderating effect of *Connectedness* indicates the opposite to the hypothesised relationship.

Robustness tests. Independent sample *T*-tests. To check for respondent-specific bias due to the respondents' position, independent sample *T*-tests were performed to check for differences between CEOs and CFOs in relation to survey-based variables, i.e. Ambidextrous sustainability, Centralisation and Connectedness, and in relation to archival data-based variables, i.e. three types of performance. The *T*-test on the survey-based variables showed no significant differences between the CEO and CFO answers, suggesting limited position-specific bias. The *T*-test on the performance variables indicated that organisations, where CEOs responded, had significantly ($p < 0.01$) higher performance on social indicators ($M = 0.998$, $StD = 0.090$) compared to organisations where the CFO responded ($M = 1.06$, $StD = 0.100$). This suggests some degree of self-selection bias, which is discussed in the limitation section of the study.

One-way ANOVA. In the process of the analysis, it became apparent that by dichotomising centralisation and connectedness, 17 organisations had both a low level of connectedness and low-level centralisation, 18 organisation that had both a high level of connectedness and high level of centralisation and remaining 47 organisations having the mix of either high level of centralisation and low level of connectedness or vice-versa. To check whether the three types of organisational groupings could affect further analysis, we performed a one-way between-groups analysis of variance (One-way ANOVA). This was done to compare scores of the independent variable (Ambidextrous sustainability) as well as outcome variables (Financial, Social and Environmental performances) with situation 1 (Different scores for Connectedness and Centralisation), 2 (Similar low scores for Connectedness and Centralisation) and 3 (Similar high scores for Connectedness and Centralisation). No statistically significant differences were found. Post-hoc comparisons using the Tukey HSD tests further indicated that the different variables' mean scores did not differ significantly between the situations. Given these results, we continue with multivariate analysis, yet providing further discussion on the potential limitations of dichotomisation of the moderating variables in the study's limitations section.

Empirical illustrations

XHousing is one of two municipal housing corporations in a Swedish municipality with approximately 140,000 inhabitants. While the other and larger housing corporation owned by the municipality is operating estates in the city centre, XHousing is responsible for municipal housing outside the city centre. XHousing is younger than the average SMHC; it was founded in 2019 after a merger of five smaller corporations. Although the corporation is new, all managers, and some board members, have previous experiences from municipal housing organisations. The CEO and the CFO were recruited from two other municipal housing corporations while the additional four members of the management team previously worked for the merged corporations. The board comprised of representatives of the eight political parties of the municipality council. After the merger, the council's political majority decided not only political representation was important but also geographical representation. As a result, the board of XHousing has 14 members. The board members interviewed described the board as being too large and argued the number of members most likely will be reduced.

According to estimated market values, the profitability of XHousing (3.7% in yield calculated as operating net/assets) corresponds to the average among municipal housing corporations in Sweden (SABO, 2018). In terms of number of apartments, the Swedish public housing association would categorise XHousing as midsized (SABO, 2018) but the number of employees (35) is less than the average for the organisations responding to the survey used in this article (69). Our main argument for using XHousing as an illustrative case is that it is an organisation currently dealing with many of the challenges and opportunities discussed as crucial by actors within the industry, for example, housing shortage, segregation, the different needs in housing for different groups of people and the consequences of climate change (SABO, 2017; Sveriges Allmännytt, 2019).

Strategising and performance of XHousing from different perspectives. The municipality where XHousing is operating has a relatively high population growth. Both housing corporations are expected to produce new apartments. As described by the chairperson in a public statement when XHousing was founded and the CEO recruited: “We need to build new apartments in many parts of the municipality and at the same time develop and maintain the property portfolio we already have” [Chairperson]. Board members and managers pointed out during interviews and meetings that some of the properties were inadequately maintained before the merger.

As described above, the profitability of XHousing, 3.7% in 2019, corresponds to the average among municipal housing corporations in Sweden. This is close to the long-term target of 4% set in the ownership directive. The target was carefully monitored by managers as well as board members, in isolation and in relation to the other organisational objectives. Besides the profitability target, the owners' instructions include a target for equity/assets ratio (20%) and the total number of new constructions to be initiated before the end of year 2023 (175 apartments). During an interview, the chairperson described the approach of XHousing to financial targets in the following way:

We make sure to try to meet the financial targets. The solvency requirement is most difficult when expanding. We make sure to keep with it, but we do not make an effort to go above what is stated in the ownership directive, so to speak. We cannot do everything. We cannot both meet the requirements of housing construction and have high equity ratio requirements. That is not how it works. We have to deal with the equity ratio after constructions. [Chairperson]

The directive also states that XHousing should “promote integration and social cohesion”, “create safe and sustainable housing environments”, “consider requirements for climate change and adaptation” and “contribute to collaboration and expanded cooperation” within the municipal group and with other stakeholders. As part of the paragraph on “goals and guidelines” the directive lists some of the policies and programs that all the corporations

within the group are expected to align with, such as a program for environmental sustainability and a program for social sustainability.

During the interview, the CFO elaborated on ownership of the corporation relating it to performance of the corporation highlighting the hybridity of this type of organisation:

There is a larger constellation of owners. We try to live by our mission. Our purpose is to provide housing in this municipality, both manage the estates we have and construct new ones. To provide some form of relief during the housing crisis as it is. Our tenants are important and central to us. Of course, we want them all to thrive and do well. So, we try to be responsive to our tenants. They are partly our owners too. They live in this municipality so indirectly they are our owners. We have to find a sort of symbiosis. [. . .] Of course, there are sometimes conflicts of interest. [CFO]

The statement made by the CFO is echoed by the chairperson explaining that:

We have to consider different stakeholders when we think about how we form our strategy and what type of outcomes we would like to achieve. Financial outcomes are important since our organisational form is limited liability, but then we are also a municipal [public sector] organisation and have the municipality as an owner, so societal needs are of equal if not higher importance. [CFO]

At least one board member held this perspective as problematic. He argued that content tenants and consideration to municipal stakeholders are crucial for the business but called for a stronger focus on financial performance during the interview:

They [board of directors and management team] focus on the wrong stakeholder. Most often, they focus on the tenant. It is completely wrong because we should focus on the owner. What is right from the perspective of the owner. And that does not mean we should scour the tenant. Satisfied and good tenants are crucial for the business. And it is nice and good to do well in rankings. But you ignore the financial result this way. I am sometimes annoyed when it is suggested that we have to “experiment” [project]. We have some money left and it is argued we should see if we can do this or that “experiment” [project]. [For example] to try out environmental solutions which are not justifiable from a financial perspective. Or necessary. They shift the focus. [Board member 2]

As in the housing sector in general (SABO, 2017; Sveriges Allmännytt, 2019) the environmental impact from current operations and constructions were constantly on the agenda. On par with financial and social performance, environmental performance was sometimes discussed in isolation and sometimes in relation to performance from other perspectives. During the board meetings and the management meeting, we witnessed discussions of the municipality’s sustainability strategy. During these discussions, the board and management team members raised several issues related to long- and short-term sustainability objectives and the need for a justifiable allocation of resources. One example was the introduction of water gauges. Installing water gauges was considered vital since it would make it possible to charge tenants according to actual water consumption. This was considered important both to reduce the water use in line with the overall ambition of the municipality to reduce CO₂ emissions and to be fair to each tenant. However, to be cost-efficient, the installations of the water gauges ideally would be done in combination with other installations or repair work. The best time to start separating water use charges from rent invoicing was therefore repeatedly negotiated among the management team members.

In relation to the ambition to reduce CO₂ emissions, there were also recurring discussions in relation to the parallel objective stated by the municipality to increase the number of apartments for rent. Managers argued it would make sense to separate the ambitions for CO₂ emissions related to current apartments from the emissions related to the construction of new housing areas. However, the public officer at the municipality in charge of the project had argued the same ambition should apply irrespective of the number

of construction projects initiated. As stated by the CFO repeatedly during the interview, management “always need to be responsible in how we prioritise”.

Discussing social and financial goals both during the interviews and the board meetings, the board members primarily focused on the current social and financial targets, while the CEO and other management team members have primarily discussed more future oriented social and financial goals. Similarly, when the means of achieving these goals were discussed and different strategies related to sustainable solutions were elaborated on, the board was taking a more exploitative approach focusing on short-term strategies to achieve owners’ targets. However, the CEO was more explorative in his view on sustainability strategy discussing how innovative solution in this domain could be of future value for the firm. At first glance we observed that these discussions led to tensions between the board and management team. However, these tensions were momentarily eased through consensus-based decisions that contained both the explorative and exploitative elements. When discussing environmental goals, the board and the management team also experienced tensions, yet those were related to the interpretation of what environmental targets set by the government were relevant for XHousing.

Organisational structure and performance. Since we observed formal and scheduled meetings only, our qualitative material provides scattered illustrations in relation to the question of centralisation/decentralisation and connectedness. While it is difficult to conclude if XHousing is more or less centralised, managers as well as board members gave voice to an ambition to build a decentralised organisation characterised by high connectedness. During meetings and informal conversations, the CEO and chairperson demonstrated to the management team that they knew the area managers were competent and knew their respective area of responsibility well.

The vice-chair of the board elaborated on the centralisation of the decision making in the organisation by saying that:

We [the board of directors] get reports from the CEO and from the employee surveys how the personnel feel about XHousing. My impression is that it is a well-functioning organisation with little distance between individuals and while decisions are made by the CEO they are well anchored within the organisation. [Vice chair of the board]

One board member commenting on the goals of the corporation suggested that:

I get a sense that there is a good social climate in the organisation. The CEO make the decisions, but since they are well anchored with us and with the employees these decisions are easier to implement and to reach the goals set. [Board member 1]

Our findings in relation to structure suggest that decision-makers are aware of the importance of hierarchy and relations in their organisation. An example of this was XHousing board members repeatedly discussing the negative publicity of the other municipal housing corporation. They were concerned of how it could affect the relations between the board and the management team as well as relations between the management and employees in that organisation. Recognising that valuable time that was supposed to be dedicated to strategy making and implementation was instead spent on dealing with consequences of the exposure.

Discussion

This study explored whether ambidextrous sustainability of hybrid organisations, represented by SMHCs, is reflected in these organisations’ financial, social and environmental performance. It further explored whether the relationship between ambidextrous sustainability and different facets of performance is contingent on

structural elements represented by organisational centralisation and connectedness. This paper's empirical data involved a survey of top management and archival data analysis containing financial and non-financial performance indicators. Field material from interviews with managers and board members, as well as official documents are used to illustrate the quantitative findings, alongside observations of management and board meetings. The data analysis partly supports the theoretical assumptions, but some findings run counter to the theoretical arguments presented.

In line with expectations, the study showed that the strategising of SMHCs represented by ambidextrous sustainability has a positive relationship with specific aspects of performance. While research on an ambidextrous orientation usually focuses on financial performance (e.g. [Junni et al., 2013](#)), this study also investigated its relationship to social and environmental performance. The study shows that ambidextrous sustainability has a positive, albeit weak, relationship with financial performance, and a stronger positive relationship with social performance in SMHC. However, no such relationship was found between ambidextrous sustainability and the environmental performance of these organisations. These findings indicate that the outcome of ambidextrous sustainability might have a more immediate relationship with social performance in these organisations, given that current and potential tenants are the primary stakeholders. A similar but weaker relationship between ambidextrous sustainability and financial performance might indicate that SMHC strategising in a sustainability domain aims to satisfy the shareholders who expect financial stability. Yet, these shareholder interests appear to be secondary to the other stakeholder interests. The illustrative case suggest that financial and social performance are attained through the tensions between and within the board and the management team in the strategy-making process, where different actors push and pull for explorative and exploitative strategic decisions in the sustainability domain. Our case further suggests that in devising seemingly divergent strategies in the sustainability domain in the hybrid context, the two power groups direct their attention to different targets where, for example, some actors focused temporarily on financial targets. In contrast other actors kept the social and environmental targets in focus. It appears that the board and management in XHousing are able to focus on divergent targets by pursuing divergent strategic orientations in the sustainability domain by means of coordination of strategic activities between the two power groups and consensus-oriented decision-making concerning different targets.

Consequently, in aligning exploration and exploitation in the sustainability domain, SMHCs improve both financial and social performance, but give primacy to social objectives, which resonates with the illustrative case findings. Thus, organisations in our sample differ from purely for-profit organisations which aim to fulfil financial targets through ambidexterity or/and ambidextrous sustainability (e.g. [Junni et al., 2013](#); [Maletić et al., 2014](#)). Likewise, they differ from purely non-profit organisations where alignment between explorative and exploitative resources allocation in the strategic domain aims to fulfil non-financial (e.g. social) performance targets (e.g. [Parikh and Bhatnagar, 2018](#)). This suggests that, by addressing the “paradox of strategising” and pursuing divergent sustainability strategies, the hybrid organisations, represented by the SMHC in this study are managing the “paradox of performing” by attending to both market and mission-driven goals (cf. [Ponte et al., 2017](#)). These findings assert that SMHCs exert hybrid behaviour in aligning their pursuit of seemingly divergent strategies to achieve seemingly divergent organisational goals. Our illustrative case suggests that the board and management team share a common understanding of the hybrid nature of their organisation and are mindful of their organisation, on the one hand, being a corporation expected to pursue market goals and on the other hand being an entity within a public domain with an expectation to deliver social value to the citizens they serve. Acknowledging the paradoxical nature of these goals, decision-makers in our illustrative case appear not to see these goals to be mutually exclusive

or conflicting with each other. Instead of accepting these seemingly paradoxical goals as given, decision-makers in XHousing engage in extensive discussions on strategy making in different domains; sustainability included, the outcome of which appears to be manifested in consensus-oriented and coordinated but yet, seemingly divergent strategic orientations in these different domains.

The observation of no relationship between ambidextrous sustainability and environmental performance could suggest at least two things. First, it could suggest that environmental performance targets are relatively homogeneous within the industry since the Swedish government heavily regulates them (Government offices of Sweden, 2017, The Swedish climate policy framework; Government Offices of Sweden, 2017, UN High-Level Political Forum, 2017 on Sustainable Development). Unlike aspects of financial and social performance which vary according to decentralised targets decided at the municipal level. In line with previous research (Grander, 2018), data from the present study support this explanation, indicating a lower level of variance in environmental performance compared to much higher variability in the financial and social performance indicators across the sample. Secondly, if the Porter hypothesis [9] is valid, it is particularly so in the long term. Indeed, supporting this notion, Horváthová (2012) shows that lagged rather than current values of environmental performance are linked to financial performance. Our illustrative case suggests that an additional reason for sustainability strategising not reflecting in environmental performance lies in ambiguity in interpreting the relevant environmental objectives. The case further highlights the complex nature of multiple environmental objectives faced by SMHCs, that are partly informed by the government set “requirements” and partly by the owners’ interpretation of government “requirements” outlined in the owner’s directive, adding to ambiguity and uncertainty as to which strategies to pursue to attain these environmental objectives. Thus, further, and deeper inquiry into ambidextrous environmental sustainability alone may provide additional insights into how hybrid organisations attain and reason about environmental performance.

The aggregate findings from the direct effect of ambidextrous sustainability on different performances of hybrid organisational represented by SMHCs might suggest that the concepts of ambidextrous sustainability might be capturing more of the variance within financial and social domains and less so of the environmental domain. This may indicate that juxtaposing financial, social and environmental sustainability strategising into one concept, i.e. ambidextrous sustainability, may be a suitable way of quantitatively operationalising complex concepts, yet it might inhibit a more fine-grained understanding of the sustainability strategising in each domain.

The quantitative analysis findings show that centralisation does not moderate the relationship between ambidextrous sustainability and performance. Instead, centralisation has a direct negative relationship with financial performance but not with social or environmental performance in SMHCs. These findings are in line with previous research, which shows that centralisation could represent a strategic choice rather than a contextual control dimension and that it can have direct effects on outcomes in an organisation (Tai and Wong, 1998). Previous research in the context of municipal corporations suggests that centralising decision-making can either mean that these organisations do not meet their performance targets or that there are negative outcomes in terms of performance (e.g. Mwita, 2000). These suggestions are grounded in the idea that, in order to meet multiple and complex targets, organisations need to have autonomous and decentralised features that allow them to pursue different and, at times, divergent performance targets simultaneously (e.g. Bogt, 2001). Our empirical illustrations provide some indication that financial targets are understood as relatively straight forward compared to the more ambiguous social and environmental targets to be fulfilled by the SMHCs. This, in turn, may suggest that faced with the trade-off between straight forward and ambiguous targets, senior executives of our

hybrid organisation opt for a more centralised form of control to reach the more ambiguous targets, which might cannibalise the pursuit of the more straight forward, financial targets, thus providing some insights into the quantitative findings of the study.

Finally, the quantitative data analysis shows one instance when connectedness moderates the relationship between ambidextrous sustainability and performance, namely the financial performance of SMHCs. While connectedness in an organisation appears to strengthen the positive effect of ambidextrous sustainability on financial performance, it is the lower level of connectedness that has a more pronounced impact on this relationship. This highlights the importance of structural elements in conjunction with strategic choices in Swedish municipal corporations (Umans *et al.*, 2020) but is only reflected in these organisations' financial performance. One potential explanation of these findings might lie in the relatively inefficient nature of informal communication, connoted by high-level connectedness (cf. Kratzer *et al.*, 2008) that impedes ambidextrous sustainability to be reflected in the financial performance of SMHCs. Another potential explanation for these findings lies in the close match between connectedness and long-term strategic orientation (cf. Moldovanova and Goerdel, 2018), which is related to explorative rather than exploitative orientation in the sustainability domain. In other words, the high levels of connectedness are not commensurate with the simultaneous pursuit of explorative and exploitative orientations, which characterise ambidextrous sustainability, while the lower levels of connectedness are better aligned with the simultaneous pursuit of both orientations. Our observations in XHousing of the tensions between and within the board and the management team could be understood as an example of a lower level of connectedness, i.e. board members and managers are being accessible to each other, as our qualitative data suggests, yet are conscious of their rank, role and responsibilities. Potentially this structural dimension, resembling a low level of connectedness, could be facilitating the impact of ambidextrous sustainability on financial performance. In our illustrative case and during the interviews, decision-makers of XHousing asserted their organisation be built on informal interactions between different organisational actors. Yet, the observational data of the board and praesidium meetings suggests the importance of formal communication practices concerning strategy formulation and financial and other targets. During these meetings, we could observe that in order for the board and management to achieve coordination and consensus on the pursuit of seemingly divergent strategies in the sustainability domain and in the different performance targets, they rely on formal communication practices, i.e. agreeing on the structure of the board meetings during the praesidium meetings where the board and management representatives outline the meeting structure, relying on the agreed protocol in structuring their discussion during the board meetings, specifying who presents which information and at what point and how the feedback should be delivered. In other words, it appears that reliance on these formalised communication practices might be assisting decision-makers in SMHCs to attend to financial targets through the pursuit of ambidextrous sustainability.

Our quantitative findings should be further interpreted considering the skewness of organisational size in our sample. While we partly alleviate concerns related to skewness by controlling for the organisational size in our hypotheses testing analysis, we acknowledge that a significant negative relationship between organisational size and connectedness could suggest that the relationship between ambidextrous sustainability and financial performance could be more profound in larger organisations that are characterised by a lower level of connectedness. Thus, potentially highlighting the further need to explore how the interaction between organisations' resources, signified by size, and control structures are related to hybrid organisations' strategies.

In this study's sample, connectedness emerges as a contingency aspect in relation to financial performance only and adds no context to the relationship between ambidextrous sustainability and either social or environmental performance. In terms of the latter, the non-

findings can be explained by the specificity of the environmental performance noted earlier. By extension, this means that the contingent role of connectedness might not be emergent due to the low variation in environmental performance across the industry, with the limited time lag between ambidextrous sustainability and connectedness on the one hand and environmental performance on the other. Where social performance is concerned, the non-findings in terms of the contingent role of connectedness may suggest that irrespective of the controls, social targets in SMHCs are reached primarily by attending to the “paradox of strategising”, where divergent sustainability-related strategies are pursued independently of context.

The study’s findings and non-findings provide several contributions to the field, exploring challenges faced by SMHCs, representing hybrid organisations, in terms of performance. The study’s theoretical contributions lie in highlighting the role of ambidextrous sustainability in improving financial and social performance in these organisations. This, therefore, contributes to the extant literature on the relationship between sustainability-related strategy and the performance of hybrid organisations (Ebrahim *et al.*, 2014; Grossi *et al.*, 2015; Haigh and Hoffman, 2014; Jansen *et al.*, 2012; Ponte *et al.*, 2017) found in the fields of both hybrid governance and performance-management systems (e.g. Vakkuri *et al.*, in press). The study further illuminates the role of structural elements in bringing about this improvement (cf. Bedford *et al.*, 2019; Gschwantner and Hiebl, 2016; Venugopal *et al.*, 2019) and shows the impact of some of these elements on hybrids’ organisational performance. This, therefore, contributes to literature inspired by contingency theory, which explores the relationship between strategy and structure in hybrid organisations, and the fit between the two in relation to organisational outcomes (Boland *et al.*, 2008; Umans *et al.*, 2020). Relying on paradox theory, the study theorises paradoxes in SMHCs and provides empirical illustrations of them. It shows how these paradoxes co-exist and are related to each other in the context of these hybrid organisations. Finally, our findings support the contention that public services’ delivery constitutes a fruitful setting for understanding hybrid organisations and hybrid practices. More specifically, we show how SMHCs manoeuvre between market and mission-driven logics and make sense of the tensions between the two and in doing so, reinforce the conceptualisation of SMHCs as hybrid organisations (e.g. Collin and Tagesson, 2010; Grossi and Thomasson, 2015; Thomasson, 2020). Our quantitative findings reveal that to attain financial and social goals, SMHCs align between explorative and exploitative orientations in the sustainability domain. This being in line with the contention that hybrid organisations are characterised by simultaneous attainment of divergent operational goals and priorities (see Billis, 2010; Thomasson, 2020). Our qualitative findings further illustrate how Swedish municipal corporations could be understood as hybrids by strategising in the sustainability domain where a politically appointed board and professional management manoeuvre between mission and market orientations. Manoeuvring between the two orientations, these corporations’ decision-makers find themselves in a state of tension. They navigate these tensions by aligning occasionally divergent views on sustainability exploration and sustainability exploitation, which further indicates the hybrid nature of these organisations, particularly in the governance domain (cf. Collin and Tagesson, 2010).

The paper’s methodological contribution lies in the exploration of a performance measure that considers the hybrid nature of the SMHCs in the study and includes the financial, social and environmental performance dimensions adjusted to the industry. This adds to literature addressing performance in hybrid organisations (e.g. Agostino and Arnaboldi, 2015), which has so far aimed primarily at conceptual development of these measures (e.g. Ebrahim *et al.*, 2014), qualitative assessment of performance in hybrid organisations (e.g. Thomasson, 2009) or explorations of isolated characteristics of their performance (e.g. Lall, 2017). This study’s practical contribution lies in the insight it brings to ways in which decision-makers can adjust and align sustainable practices and structures to improve multifaceted organisational performance in the hybrid organisations they manage.

The contributions of our study provide answers to some of the emergent questions regarding accounting and performance challenges in hybrid organisations (Grossi *et al.*, 2019).

First, our study provides some answer to the question of how and by what means hybrid organisations, embedded in the network of different actors with divergent values and interpretations of organisational goals (Hyndman and McConville, 2017), attain different facets of performance. On the example of SMHCs, we show that by making sense of manoeuvring between market- and mission-driven logics, decision-makers of these organisations are able to devise seemingly divergent strategies in the sustainability domain. In turn pursuing these strategies enables these hybrid organisations to respond to the expectations of different stakeholders within and outside of these organisations in attaining seemingly divergent facets of performance, i.e. social and financial performance. Answering this question our study thus responds to the calls of an emergent stream of research aiming to explore how hybrid organisations solve strategic (e.g. Joldersma and Winter, 2002; van der Lugt *et al.*, 2013) and performance challenges (e.g. Caperchione *et al.*, 2017; Skelcher and Smith, 2017; De Waele *et al.*, in press).

Second, our study shows how SMHCs employ formal and informal structures in their quest for improved financial performance. Our analysis shows that improvements of financial performance in our hybrids occur when they opt for lower level of centralisation, without considering this formal structure in relationship to their sustainability strategy. At the same time these hybrids employ a lower level of connectedness when trying to achieve financial targets through their sustainability strategy represented by ambidextrous sustainability. This might suggest that faced with complexity of manoeuvring between market and mission-logics these organisations devise seemingly paradoxical control structures that are characterised by both lower-level of formalisation as well as lower level of informalisation to achieve their financial performance targets. Thus, our study provides some answers to the question of what effects hybridity has on the forms of control in hybrid organisations (Grossi *et al.*, 2019; Vakkuri *et al.*, in press). In showing this, we respond to the calls for inquiry into different forms of control and their effects in the context of hybrid organisations (cf. Boland *et al.*, 2008).

Third, we revisit the central tenants of the paradox theory (e.g. Lewis, 2000; Smith and Lewis, 2011) bringing it into the domain of accounting and management control in hybrid organisations. Relying on this theoretical perspective we are able to theoretically argue and empirically show how attending to “paradox of strategising” and “paradox of strategic control” SMHCs attend to the “paradox of performing”. While paradox theory has been previously applied in studies of strategy making and management of hybrid organisations (e.g. Jay, 2013) and in studies of accounting and management control (e.g. Busco *et al.*, 2017) our study might be paving the way for further application of this theoretical perspective in the intersections between the aforementioned fields of research. Thus, answering the calls to explore application of new theoretical perspectives that could form important building blocks for theory development of accounting for hybrid organisations (Grossi *et al.*, 2019).

Limitations and future research

This study has several limitations. While 26% of the total population is comparable to other studies in the field, it represents a relatively limited sample, so one should take this study’s findings with some degree of caution. A further limitation involves the use of a single respondent for observing independent and moderating variables. There were attempts to alleviate this limitation by aiming to collect data from multiple respondents. Unfortunately, this had limited success. The authors further acknowledge the potential limitation of the performance measures used. The explorative nature of the measures, taken from a number of

different fields of research, could draw criticism for being excessively empirical in nature. Pertinent to this limitation, we further acknowledge the sensitive nature of the regression models that involve various proxies of the performance variables, suggesting that one should assess our study's results with caution. In particular, we acknowledge the limitation of the financial performance measure utilised in this study, which is based on the idea that organisations approaching zero in their financial performance are those performing best irrespective whether organisations are making profit or loss. Yet, and to some extent, concerns related to this limitation were alleviated by performing the robustness tests reported in the method section.

Similarly, the measure of ambidextrous sustainability could be criticised. Despite attempts to adjust the original ambidexterity scales employed by field experts in validating the measures, measurement errors cannot be discounted. The authors introduced qualitative data to alleviate these concerns, using it to illustrate sustainability exploration and sustainability exploitation. In this sense, the study used qualitative data for discussion and illustration purposes only, but an alternative research design, using data in line with the Delphi method, might have strengthened the use of the instruments employed in the study's quantitative part. In relation to this, one should also note that the survey sample included more answers from CEOs of organisations who scored higher on social performance compared to the total sample. While this represents a limitation, it provides a further argument for using the Delphi method to investigate what counts as relevant social performance measures in different types of hybrids, with particular involvement of various actors representing different managers, board members and other groups of stakeholders (cf. [Melnyk et al., 2014](#)). Moreover, the construct of ambidextrous sustainability might be representing the simplified measure of the sustainability strategy of organisations in our sample, without considering different facets of that strategy, i.e. financial, social and environmental sustainability strategies. This limitation could only be partly addressed by introducing the notion of these three dimensions into the adjusted survey measure of the construct. Finally, we acknowledge that by not defining what sustainability means prior to the respondents' taking the survey we might have inadvertently allowed the respondents too much freedom in interpretation. However, by imposing a specific definition of sustainability in advance we could have biased our respondents to think of the sustainability in a narrow and limiting way. Moreover, given that our respondents occupy senior positions in Swedish municipal corporations within the same industry, we may expect some institutionalised uniformity in understanding what sustainability is.

Additionally, we acknowledge that we were inclined to adopt dichotomous measures of centralisation and connectedness that might have suppressed complex constructs into a binary variable without representative variation given the limited number of observations. Finally, in employing the paradox theory perspective, the study limited itself to a specific view of SMHCs' strategy, structure and performance. Using alternative theoretical perspectives might have informed the study's empirical design in a way that would have produced different findings.

Despite its limitations, the study serves as a starting point for exploring the relation between sustainability-related strategies and performance in hybrid organisations and the role of structure-related contingencies in this relationship. Financial performance measurements are usually considered less open to debate than social or environmental performance measurements. However, future studies could expand and refine the organisational performance measures used in this paper by considering other stakeholders of municipal housing corporations, such as tenant associations, suppliers of services and labour unions. Additionally, future studies could explore the different facets of ambidextrous sustainability within financial, social and environmental domains to understand better how hybrid organisations form their sustainability strategy.

Moreover, while ambidextrous sustainability has been explored in terms of a hybrid organisation's ability to pursue both strategies simultaneously, future studies could explore this pursuit in conjunction with the levels of sustainability exploration and exploitation in these organisations. Future studies could also further examine how managers' different characteristics relate to the pursuit of ambidextrous sustainability, thereby adding decision-makers and decision-making processes to the model developed in the present study. Future research might further consider embarking on further refinement of the structural elements in hybrid organisations. For example, considering whether and how centralisation and connectedness could be present on simultaneously high or low levels and how the occurrence of one or the other scenarios interact with ambidextrous sustainability of hybrid organisations. In pursuing this line of inquiry, future studies are encouraged to explore the complexity of interaction between and within strategy and control elements of hybrid organisations and the impact of these interactions on these organisations' performance.

Finally, and in line with previous studies (Dobija *et al.*, 2019; Grossi *et al.*, in press), our analysis highlighted the need for further research on the role of performance target setting in organisations where actors are faced with complexity and competing logics in their everyday work. In line with Gebreiter and Hidayah (2019), we suggest that future studies explore individuals' informal and formal standing within and beyond the corporation in relation to individual responses to competing institutional logics and performance objectives.

Notes

1. A detailed explanation of the hybrid characteristics of Swedish municipal corporations is provided under the method section.
2. Like any other organisation owned by a Swedish municipality, public housing corporations are subject to the Swedish Local Government Act (SFS 2017:725), which prohibits them from charging beyond "the full cost principle" or aiming "for-profit" (chapter 2, paragraphs 6 and 7). According to Swedish Law on Public Housing Corporations owned by Municipalities [1] (SFS, 2010:879), however, operations must be governed by business principles "despite chapter 2, paragraph 6 and 7 of the Swedish Local Government Act" (paragraph 2).
3. Sveriges Allmännyttta (public housing Sweden) is the public housing interest organisation of the municipality owned public housing companies in Sweden.
4. Ambidextrous orientation refers to organisational ability to exploit existing competencies and to explore new opportunities with equal dexterity (Lubatkin *et al.*, 2006).
5. Swedish Law on Public Housing Corporations owned by Municipalities (SFS, 2010:879).
6. Swedish municipal corporations exhibit hybridity in the ownership domain given that they are owned by municipalities and indirectly by another owner group – the citizens. In contrast, private sector for-profit organisations have shareholders, while public sector non-profit organisations have citizens as shareholders (Thomasson, 2020).
7. Swedish Law on Public Housing Corporations owned by Municipalities (SFS, 2010:879).
8. Prior to performing multiplication of the negative performance indicators by -1 , we have performed an independent sample *t*-test to compare the mean values of the independent variable for negative (0) and positive (1) values of financial performance. This was done in order to determine whether manipulation of the variable through multiplication by -1 might have an effect for further analysis. No significant differences between the mean values of the independent variable and the negative ($M = 0.517$, $SD = 0.338$) and positive ($M = 0.563$, $SD = 0.431$) values of financial performance were found.
9. Michael Porter argues that environmental regulations can lead to performance gains for the organisation. "Strict environmental regulations do not inevitably hinder competitive advantage against rivals; indeed, they often enhance it" (Porter, 1991, p. 168).

References

- Agostino, D. and Arnaboldi, M. (2015), "The new public management in hybrid settings: new challenges for performance measures", *International Review of Public Administration*, Vol. 20 No. 4, pp. 353-369.
- Alter, K. (2004), *Social Enterprise Typology*, Virtue Ventures LLC, Seattle, WA.
- Argento, D., Grossi, G., Persson, K. and Vingren, T. (2019), "Sustainability disclosures of hybrid organizations: Swedish state-owned enterprises", *Meditari Accountancy Research*, Vol. 27 No. 4, pp. 505-533.
- Atuahene-Gima, K. (2003), "The effects of centrifugal and centripetal forces on product development speed and quality: how does problem solving matter?", *Academy of Management Journal*, Vol. 46 No. 3, pp. 359-373.
- Atuahene-Gima, K. (2005), "Resolving the capability-rigidity paradox in new product innovation", *Journal of Marketing*, Vol. 69 No. 4, pp. 61-83.
- Bedford, D.S., Bisbe, J. and Sweeney, B. (2019), "Performance measurement systems as generators of cognitive conflict in ambidextrous firms", *Accounting, Organizations and Society*, Vol. 72, pp. 21-37.
- Benner, M. and Tushman, M.L. (2003), "Exploitation, exploration, and process management: the productivity dilemma revisited", *Academy of Management Review*, Vol. 28 No 2, pp. 238-256.
- Besharov, M.L. and Smith, W.K. (2014), "Multiple institutional logics in organizations: explaining their varied nature and implications", *Academy of Management Review*, Vol. 39 No. 3, pp. 364-381.
- Billis, D. (2010), "Towards a theory of hybrid organizations", in Billis, D. (Ed.), *Hybrid Organizations and the Third Sector: Challenges for Practice, Theory and Policy*, Palgrave Macmillan, New York, NY, pp. 46-69.
- Birkinshaw, J. and Lingblad, M. (2005), "Intrafirm competition and charter evolution in the multibusiness firm", *Organization Science*, Vol. 16 No. 6, pp. 674-686.
- Bogt, H.T. (2001), "Politicians and output-oriented performance evaluation in municipalities", *European Accounting Review*, Vol. 10 No. 3, pp. 621-643.
- Boland, R.J. Jr, Sharma, A.K. and Afonso, P.S. (2008), "Designing management control in hybrid organizations: the role of path creation and morphogenesis", *Accounting, Organizations and Society*, Vol. 33 Nos 7-8, pp. 899-914.
- Bozeman, B. (1987), *All Organizations Are Public: Bridging Public and Private Organizational Theories*, Jossey-Bass, San Francisco.
- Brorström, S., Argento, D., Grossi, G., Thomasson, A. and Almqvist, R. (2018), "Translating sustainable and smart city strategies into performance measurement systems", *Public Money and Management*, Vol. 38 No. 3, pp. 193-202.
- Burgelman, R.A. (1991), "Intraorganizational ecology of strategy making and organizational adaptation: theory and field research", *Organization Science*, Vol. 2 No. 3, pp. 239-262.
- Busco, C., Giovannoni, E. and Riccaboni, A. (2017), "Sustaining multiple logics within hybrid organisations", *Accounting, Auditing and Accountability Journal*, Vol. 30 No. 1, pp. 191-216.
- Cannaerts, N., Segers, J. and Warsen, R. (2020), "Ambidexterity and public organizations: a configurational perspective", *Public Performance and Management Review*, Vol. 43 No. 3, pp. 688-712.
- Caperchione, E., Demirag, I. and Grossi, G. (2017), "Public sector reforms and public private partnerships: overview and research agenda", *Accounting Forum*, Vol. 41 No. 1, pp. 1-7.
- Carmeli, A. and Halevi, M.Y. (2009), "How top management team behavioral integration and behavioral complexity enable organizational ambidexterity: the moderating role of contextual ambidexterity", *The Leadership Quarterly*, Vol. 20 No. 2, pp. 207-218.
- Cath, T.Y., Childress, A.E. and Elimelech, M. (2006), "Forward osmosis: principles, applications, and recent developments", *Journal of Membrane Science*, Vol. 281 Nos 1-2, pp. 70-87.

- Chang, Y.-Y., Hughes, M. and Hotho, S. (2011), "Internal and external antecedents of SMEs' innovation ambidexterity outcomes", *Management Decision*, Vol. 49 No. 10, pp. 1658-1676.
- Chenhall, R.H. (2003), "Management control systems design within its organizational context: findings from contingency-based research and directions for the future", *Accounting, Organizations and Society*, Vol. 28 Nos 2-3, pp. 127-168.
- Choi, T. and Chandler, S.M. (2015), "Exploration, exploitation, and public sector innovation: an organizational learning perspective for the public sector", *Human Service Organizations Management, Leadership and Governance*, Vol. 39 No. 2, pp. 139-151.
- Clark, K. and Fujimoto, T. (1991), *Product Development Performance: Strategy, Organization, and Management in the World Auto Industry*, Harvard Business School Press, Boston.
- Collin, S.O.Y. and Tagesson, T. (2010), "Governance strategies in local government: a study of the governance of municipal corporations in a Swedish municipality", *International Journal of Public Policy*, Vol. 5 No. 4, pp. 373-389.
- Collin, S.O.Y., Tagesson, T., Andersson, A., Cato, J. and Hansson, K. (2009), "Explaining the choice of accounting standards in municipal corporations: positive accounting theory and institutional theory as competitive or concurrent theories", *Critical Perspectives on Accounting*, Vol. 20 No. 2, pp. 141-174.
- Convery, A.M. and Kaufman, M. (in press), "Regulation as a force for hybrid organization: evidence from the Bonneville Power Administration (1980-2012)", *Accounting, Auditing and Accountability Journal*.
- Czischke, D., Gruis, V. and Mullins, D. (2012), "Conceptualising social enterprise in housing organisations", *Housing Studies*, Vol. 27 No. 4, pp. 418-437.
- Dahl, R.A. and Lindblom, C.E. (1953), *Politics, Economics and Welfare: Planning and Politico-Economic Systems, Resolved into Basic Processes*, Harper & Brothers, New York, NY.
- Dawson, J.F. (2014), "Moderation in management research: what, why, when, and how", *Journal of Business and Psychology*, Vol. 27 No. 1, pp. 1-19.
- De Waele, L., Polzer, T., van Witteloostuijn, A. and Berghman, L. (in press), "A little bit of everything? Conceptualising performance measurement in hybrid public sector organisations through a literature review", *Journal of Public Budgeting, Accounting and Financial Management*.
- Denis, J.L., Ferlie, E. and Van Gestel, N. (2015), "Understanding hybridity in public organizations", *Public Administration*, Vol. 93 No. 2, pp. 273-289.
- Dobija, D., Górska, A.M., Grossi, G. and Strzelczyk, W. (2019), "Rational and symbolic uses of performance measurement: experiences from Polish universities", *Accounting, Auditing and Accountability Journal*, Vol. 32 No. 3, pp. 750-781.
- Donaldson, L. (1987), "Strategy and structural adjustment to regain fit and performance: in defence of contingency theory", *Journal of Management Studies*, Vol. 24 No. 1, pp. 1-24.
- Duncan, R. (1979), "Organizational learning: implications for organizational design", *Research in Organizational Behavior*, Vol. 1, pp. 75-123.
- Ebrahim, A., Battilana, J. and Mair, J. (2014), "The governance of social enterprises: mission drift and accountability challenges in hybrid organizations", *Research in Organizational Behavior*, Vol. 34, pp. 81-100.
- Eisenhardt, K.M. (2000), "Paradox, spirals, ambivalence: the new language of change and pluralism", *Academy of Management Review*, Vol. 25 No. 4, pp. 703-705.
- Evers, A. (2005), "Mixed welfare systems and hybrid organisations: changes in the governance and provision of social services", *International Journal of Public Administration*, Vol. 28 No. 9, pp. 737-748.
- Fereday, J. and Muir-Cochrane, E. (2006), "Demonstrating rigor using thematic analysis: a hybrid approach of inductive and deductive coding and theme development", *International Journal of Qualitative Methods*, Vol. 5 No. 1, pp. 80-92.

- Ferry, L. and Slack, R. (in press), (Counter) accounting for hybrid organising: a case of the Great Exhibition of the North, *Accounting, Auditing and Accountability Journal*.
- Florin, J. and Schmidt, E. (2011), "Creating shared value in the hybrid venture arena: a business model innovation perspective", *Journal of Social Entrepreneurship*, Vol. 2 No. 2.
- Fullerton, R.R., Kennedy, F.A. and Widener, S.K. (2013), "Management accounting and control practices in a lean manufacturing environment", *Accounting, Organizations and Society*, Vol. 38 No. 1, pp. 50-71.
- Furlong, K. and Bakker, K. (2010), "The contradictions in 'alternative' service delivery: governance, business models, and sustainability in municipal water supply", *Environment and Planning C: Government and Policy*, Vol. 28 No. 2, pp. 349-368.
- Gebreiter, F. and Hidayah, N.N. (2019), "Individual responses to competing accountability pressures in hybrid organisations: the case of an English business school", *Accounting, Auditing and Accountability Journal*, Vol. 32 No. 3, pp. 727-749.
- Gerdin, J. and Greve, J. (2004), "Forms of contingency fit in management accounting research—a critical review", *Accounting, Organizations and Society*, Vol. 29 Nos 3-4, pp. 303-326.
- Gibson, C.B. and Birkinshaw, J. (2004), "The antecedents, consequences, and mediating role of organizational ambidexterity", *Academy of Management Journal*, Vol. 47 No. 2, pp. 209-226.
- Gill, Z.M., Tierney, M.J., Pegg, I.M. and Allan, N. (2011), "Measured energy and water performance of an aspiring low energy/carbon affordable housing site in the UK", *Energy and Buildings*, Vol. 43 No. 1, pp. 117-125.
- Goold, M. and Quinn, J.J. (1990), "The paradox of strategic controls", *Strategic Management Journal*, Vol. 11 No. 1, pp. 43-57.
- Government offices of Sweden (2017), "Sweden and the 2030 agenda. UN high level political Forum 2017 on sustainable development", available at: <https://sustainabledevelopment.un.org/content/documents/16033Sweden.pdf>.
- Govindarajan, V. (1988), "A contingency approach to strategy implementation at the business-unit level: integrating administrative mechanisms with strategy", *Academy of Management Journal*, Vol. 31 No. 4, pp. 828-853.
- Grunder, M. (2018), *For the Benefit of Everyone? Explaining the Significance of Swedish Public Housing for Urban Housing Inequality*, Doctoral Thesis, Malmö University.
- Greco, A., Long, T. and De Jong, G. (2019), "The freezing effect of sustainability paradoxes and conflicting identities in hybrid organisations", *Academy of Management Proceedings*, Vol. 2019 No. 1, p. 14881, Academy of Management, Briarcliff Manor, NY.
- Green, K.W., Inman, R.A., Brown, G. and Willis, T.H. (2005), "Market orientation: relation to structure and performance", *The Journal of Business and Industrial Marketing*, Vol. 20 No. 6, pp. 276-284.
- Greene, J.C., Caracelli, V.J. and Graham, W.F. (1989), "Toward a conceptual framework for mixed-method evaluation designs", *Educational Evaluation and Policy Analysis*, Vol. 11 No. 3, pp. 255-274.
- Grossi, G. and Thomasson, A. (2015), "Bridging the accountability gap in hybrid organizations: the case of Copenhagen Malmö Port", *International Review of Administrative Sciences*, Vol. 81 No. 3, pp. 604-620.
- Grossi, G., Papenfuss, U. and Tremblay, M.S. (2015), "Corporate governance and accountability of state-owned enterprises: relevance for science and society and interdisciplinary research perspectives", *International Journal of Public Sector Management*, Vol. 28 Nos 4-5, pp. 274-285.
- Grossi, G., Piber, M., Sargiacomo, M., Tremblay, M.S. and Vakkuri, J. (2019), "Accounting and performance challenges in hybrid organisations special issue call for papers", *Accounting, Auditing, Accountability Journal*.
- Grossi, G., Kallio, K.M., Sargiacomo, M. and Skoog, M. (2019), "Accounting, performance management systems and accountability changes in knowledge-intensive public organizations: a literature review and research agenda", *Accounting, Auditing & Accountability Journal*, Vol. 33 No. 1, pp. 256-280.

- Gschwantner, S. and Hiebl, M.R. (2016), "Management control systems and organizational ambidexterity", *Journal of Management Control*, Vol. 27 No. 4, pp. 371-404.
- Guggenberger, M. and Rohlfing-Bastian, A. (2016), "Delegation of strategic decision-making authority to middle managers", *Journal of Management Control*, Vol. 27 Nos 2-3, pp. 155-179.
- Haigh, N. and Hoffman, A.J. (2014), "The new heretics: hybrid organizations and the challenges they present to corporate sustainability", *Organization and Environment*, Vol. 27 No. 3, pp. 223-241.
- Hannan, M.T. and Freeman, J. (1984), "Structural inertia and organizational change", *American Sociological Review*, Vol. 49 No. 2, pp. 149-164.
- He, Z.L. and Wong, P.K. (2004), "Exploration vs. exploitation: an empirical test of the ambidexterity hypothesis", *Organization Science*, Vol. 15 No. 4, pp. 481-494.
- Horváthová, E. (2012), "The impact of environmental performance on firm performance: short-term costs and long-term benefits?", *Ecological Economics*, Vol. 84, pp. 91-97.
- Hussain, N., Rigoni, U. and Oriji, R.P. (2018), "Corporate governance and sustainability performance: analysis of triple bottom line performance", *Journal of Business Ethics*, Vol. 149 No. 2, pp. 411-432.
- Hyndman, N. and McConville, D. (2018), "Trust and accountability in UK charities: exploring the virtuous circle", *The British Accounting Review*, Vol. 50, pp. 227-237.
- Iosim, I., Iancu, T., Popescu, G. and Orboi, M.D. (2010), "The impact of informal communications in organizations", *Bulletin UASVM Horticulture*, Vol. 67 No. 2, pp. 125-130.
- Jansen, J.J., Simsek, Z. and Cao, Q. (2012), "Ambidexterity and performance in multiunit contexts: cross-level moderating effects of structural and resource attributes", *Strategic Management Journal*, Vol. 33 No. 11, pp. 1286-1303.
- Jay, J. (2013), "Navigating paradox as a mechanism of change and innovation in hybrid organizations", *Academy of Management Journal*, Vol. 56 No. 1, pp. 137-159.
- Johanson, J.E. (2000), "Formal structure and intra-organisational networks. An analysis in a combined social and health organisation in Finland", *Scandinavian Journal of Management*, Vol. 16 No. 3, pp. 249-267.
- Johanson, J.E. and Vakkuri, J. (2017), *Governing Hybrid Organisations: Exploring Diversity of Institutional Life*, Routledge, London.
- Joldersma, C. and Winter, V. (2002), "Strategic management in hybrid organizations", *Public Management Review*, Vol. 4 No. 1, pp. 83-99.
- Junni, P., Sarala, R.M., Taras, V. and Tarba, S.Y. (2013), "Organizational ambidexterity and performance: a meta-analysis", *Academy of Management Perspectives*, Vol. 27 No. 4, pp. 299-312.
- Karré, P.M. (2020), "Hybrid organisations: between state and market", in Billis, D. and Rochester, C. (Eds), *Handbook on Hybrid Organisations*, Edward Elgar Publishing, Cheltenham, pp. 31-47.
- Kickert, W.J. (2001), "Public management of hybrid organizations: governance of quasi-autonomous executive agencies", *International Public Management Journal*, Vol. 4 No. 2, pp. 135-150.
- Kratzer, J., Gemünden, H.G. and Lettl, C. (2008), "Balancing creativity and time efficiency in multi-team R&D projects: the alignment of formal and informal networks", *R&D Management*, Vol. 38 No. 5, pp. 538-549.
- Lall, S. (2017), "Measuring to improve versus measuring to prove: understanding the adoption of social performance measurement practices in Nascent social enterprises", *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, Vol. 28 No. 6, pp. 2633-2657.
- Lam, T.Y. (2008), "The impact of management measures on performance of outsourced professional housing maintenance services", *Property Management*, Vol. 26 No. 2, pp. 112-124.
- Lentz, S.S. (1996), "Hybrid organization structures: a path to cost savings and customer responsiveness", *Human Resource Management*, Vol. 35 No. 4, pp. 453-469.
- Levinthal, D.A. and March, J.G. (1993), "The myopia of learning", *Strategic Management Journal*, Vol. 14 S2, pp. 95-112.

- Lewis, M.W. (2000), "Exploring paradox: toward a more comprehensive guide", *Academy of Management Review*, Vol. 25 No. 4, pp. 760-776.
- Lindbergh, L. and Wilson, T. (2016), "Strategic management in Swedish municipal housing: indications of change in owner directives", *Property Management*, Vol. 34 No. 2, pp. 136-157.
- Lubatkin, M.H., Simsek, Z., Ling, Y. and Veiga, J.F. (2006), "Ambidexterity and performance in small- to medium-sized firms: the pivotal role of top management team behavioral integration", *Journal of Management*, Vol. 32 No. 5, pp. 646-672.
- Maine, J. and Svensson, O. (2018), "Does an ambidextrous use of sustainability resources lead to sustainability performance?: a survey on Swedish Municipal Housing Organisations", Master thesis, Kristianstad University, Kristianstad, Sweden.
- Maletič, M., Maletič, D., Dahlggaard, J.J., Dahlggaard-Park, S.M. and Gomišček, B. (2014), "Sustainability exploration and sustainability exploitation: from a literature review towards a conceptual framework", *Journal of Cleaner Production*, Vol. 79, pp. 182-194.
- March, J.G. (1991), "Exploration and exploitation in organizational learning", *Organization Science*, Vol. 2 No. 1, pp. 71-87.
- Melnyk, S., Bititci, U., Platts, K., Tobias, J. and Andersen, B. (2014), "Is performance management fit for the future", *Management Accounting Research*, Vol. 25 No. 2, pp. 173-186.
- Mihalache, O.R., Jansen, J.J., Van den Bosch, F.A. and Volberda, H.W. (2014), "Top management team shared leadership and organizational ambidexterity: a moderated mediation framework", *Strategic Entrepreneurship Journal*, Vol. 8 No. 2, pp. 128-148.
- Mitchell, W. and Singh, K. (1993), "Death of the lethargic: effects of expansion into new technical subfields on performance in a firm's base business", *Organization Science*, Vol. 4 No. 2, pp. 152-180.
- Moldavanova, A. and Goerdel, H.T. (2018), "Understanding the puzzle of organizational sustainability: toward a conceptual framework of organizational social connectedness and sustainability", *Public Management Review*, Vol. 20 No. 1, pp. 55-81.
- Mom, T.J., Fourné, S.P. and Jansen, J.J. (2015), "Managers' work experience, ambidexterity, and performance: the contingency role of the work context", *Human Resource Management*, Vol. 54 S1, pp. 133-153.
- Mwita, J.I. (2000), "Performance management model", *International Journal of Public Sector Management*, Vol. 13 No. 1, pp. 19-37.
- National Board of Housing, Building and Planning (Boverket) (2019), "Most municipalities operate public housing companies (Allmännyttiga bostadsföretag finns i de flesta kommuner)", available at: <https://www.boverket.se/sv/samhallsplanering/bostadsmarknad/bostadsforsorjning/kommunernas-verktyg/allmannyttan/> (accessed 24 November 2019).
- Nguyen, B., Yu, X., Melewar, T.C. and Hemsley-Brown, J. (2016), "Brand ambidexterity and commitment in higher education: an exploratory study", *Journal of Business Research*, Vol. 69 No. 8, pp. 3105-3112.
- Otley, D. (2016), "The contingency theory of management accounting and control: 1980–2014", *Management Accounting Research*, Vol. 31, pp. 45-62.
- Ozanne, L.K., Phipps, M., Weaver, T., Carrington, M., Luchs, M., Catlin, J., Gupta, S., Santos, N., Scott, K. and Williams, J. (2016), "Managing the tensions at the intersection of the triple bottom line: a paradox theory approach to sustainability management", *Journal of Public Policy and Marketing*, Vol. 35 No. 2, pp. 249-261.
- Pallant, J. (2004), *SPSS Survival Manual: Version 12*, Open University Press, London.
- Palm, K. and Lilja, J. (2017), "Key enabling factors for organizational ambidexterity in the public sector", *International Journal of Quality and Service Sciences*, Vol. 9 No. 1, pp. 2-20.
- Papachroni, A., Heracleous, L. and Paroutis, S. (2015), "Organizational ambidexterity through the lens of paradox theory: building a novel research agenda", *The Journal of Applied Behavioral Science*, Vol. 51 No. 1, pp. 71-93.

- Parikh, M. and Bhatnagar, D. (2018), "A system of contradictory goals and realization of ambidexterity: a case study of a municipal corporation", *International Journal of Public Administration*, Vol. 41 No. 2, pp. 95-109.
- Parker, L.D. and Northcott, D. (2016), "Qualitative generalizing in accounting research: concepts and strategies", *Accounting, Auditing and Accountability Journal*, Vol. 29 No. 6, pp. 1100-1131.
- Pertusa-Ortega, E.M., Molina-Azorín, J.F. and Claver-Cortés, E. (2010), "Competitive strategy, structure and firm performance: a comparison of the resource-based view and the contingency approach", *Management Decision*, Vol. 48 No. 8, pp. 1282-1303.
- Plimmer, G., Bryson, J. and Teo, S.T. (2017), "Opening the black box: the mediating roles of organisational systems and ambidexterity in the HRM-performance link in public sector organisations", *Personnel Review*, Vol. 46 No. 7, pp. 1434-1451.
- Ponte, D., Pesci, C. and Camussone, P.F. (2017), "Between mission and revenue: measuring performance in a hybrid organization", *Managerial Auditing Journal*, Vol. 32 No. 2, pp. 196-214.
- Porter, M.E. (1991), "America's green strategy", *Reader in Business and the Environment*, p. 33.
- Pullen, S., Arman, M., Zillante, G., Zuo, J., Chileshe, N. and Wilson, L. (2010), "Developing an assessment framework for affordable and sustainable housing", *The Australasian Journal of Construction Economics and Building*, Vol. 10 Nos 1-2, pp. 48-64.
- Rajala, T., Laihonon, H. and Vakkuri, J. (2020), "Exploring challenges of boundary-crossing performance dialogues in hybrids", *Journal of Management and Governance*, Vol. 24 No. 3, pp. 799-820.
- Sánchez Gassen, N., Penje, O. and Slåtmo, E. (2018), *Global Goals for Local Priorities: The 2030 Agenda At Local Level, Agenda 2030 in the Nordic Region*, Nordregio, Stockholm.
- SABO (2017), *The Public Housing Sector Moving towards 2030 – A Concept Programme*, SABO, Stockholm.
- SABO (2018), *Ekonomisk Statistik 2017 [Financial Statistics 2017]*, SABO, Stockholm.
- Scapens, R.W. (1990), "Researching management accounting practice: the role of case study methods", *British Accounting Review*, Vol. 22 No. 3, pp. 259-281.
- SFS (2010:879), *Lag om Allmännyttiga Kommunala Bostadsaktiebolag [Law (2010:879) on the Public Utility Municipal Housing Corporations]*, Ministry of Finance, available at: https://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/lag-2010879-om-allmannyttiga-kommunala_sfs-2010-879.
- SFS (2017:725), *Kommunallag [Swedish Local Government Act]*, Ministry of Finance, available at: https://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/kommunallag-2017725_sfs-2017-725.
- Skelcher, C. and Smith, S.R. (2015), "Theorizing hybridity: institutional logics, complex organizations, and actor identities: the case of nonprofits", *Public Administration*, Vol. 93 No. 2, pp. 433-448.
- Skelcher, C. and Smith, S.R. (2017), "New development: performance promises and pitfalls in hybrid organizations—five challenges for managers and researchers", *Public Money and Management*, Vol. 37 No. 6, pp. 425-430.
- Smith, W.K. and Lewis, M.W. (2011), "Toward a theory of paradox: a dynamic equilibrium model of organizing", *Academy of Management Review*, Vol. 36 No. 2, pp. 381-403.
- Smith, E. and Umans, T. (2015), "Organizational ambidexterity at the local government level: the effects of managerial focus", *Public Management Review*, Vol. 17 No. 6, pp. 812-833.
- Susanto, F., Arafah, W. and Husin, Z. (2017), "Ambidextrous sustainability and manufacturing industry performance: the role of potential non-economic benefits as mediation pathways", *Polish Journal of Management Studies*, Vol. 16 No. 2, pp. 278-289.
- Sveriges Allmännyttiga [Public Housing Sweden] (2019), *Vi Är Sveriges Allmännyttiga: Strategisk Agenda 2019-2023 [We Are the Swedish Public Good: Strategic Agenda 2019-2023]*, Sveriges Allmännyttiga, Stockholm.

- Sveriges Allmännyttan [Public Housing Sweden] (2020), *Sabo Companies Moving towards 2020: – Creating Value for Municipalities, Housing Areas and Tenants. A Concept Program Report*, Stockholm.
- Sveriges Allmännyttan [Public Housing Sweden] (2021a), available at: <https://www.sverigesallmannytta.se/allmannyttan/> (accessed 1 January 2021).
- Sveriges Allmännyttan [Public Housing Sweden] (2021b), available at: <https://www.sverigesallmannytta.se/hallbarhet/> (accessed 1 January 2021).
- Székely, F. and Knirsch, M. (2005), “Responsible leadership and corporate social responsibility: metrics for sustainable performance”, *European Management Journal*, Vol. 23 No. 6, pp. 628-647.
- Tagesson, T., Klugman, M. and Ekström, M.L. (2013), “What explains the extent and content of social disclosures in Swedish municipalities’ annual reports”, *Journal of Management and Governance*, Vol. 17 No. 2, pp. 217-235.
- Tai, S.H. and Wong, Y.H. (1998), “Advertising decision making in Asia: ‘glocal’ versus ‘regcal’ approach”, *Journal of Managerial Issues*, Vol. 10 No. 3, pp. 318-339.
- Tamayo-Torres, J., Roehrichb, J.K. and Lewisb, M.A. (2017), “Organizational ambidexterity, manufacturing performance and environmental dynamism”, *International Journal of Operations and Production Management*, Vol. 37 No. 3, pp. 282-299.
- Thomasson, A. (2009), “Exploring the ambiguity of hybrid organisations: a stakeholder approach”, *Financial Accountability and Management*, Vol. 25 No. 3, pp. 353-366.
- Thomasson, A. (2020), “The Swedish corporate model”, in Billis, D. and Rochester, C. (Eds), *Handbook on Hybrid Organizations*, Edward Elgar Publishing, Cheltenham, pp. 135-150.
- Thompson, F. (1991), “Management control and the pentagon: the strategy-structure mismatch”, *Public Administration Review*, Vol. 51 No. 1, pp. 52-66.
- Tuan, T.L. (2017), “Reform in public organizations: the roles of ambidextrous leadership and moderating mechanisms”, *Public Management Review*, Vol. 19 No. 4, pp. 518-541.
- Tushman, M.L. and O’Reilly, C.A. III (1996), “Ambidextrous organizations: managing evolutionary and revolutionary change”, *California Management Review*, Vol. 38 No. 4, pp. 8-29.
- Úbeda-García, M., Claver-Cortés, E., Marco-Lajara, B. and Zaragoza-Sáez, P. (2020), “Toward a dynamic construction of organizational ambidexterity: exploring the synergies between structural differentiation, organizational context, and interorganizational relations”, *Journal of Business Research*, Vol. 112, pp. 363-372.
- Umans, T., Smith, E., Andersson, W. and Planken, W. (2020), “Top management teams’ shared leadership and ambidexterity: the role of management control systems”, *International Review of Administrative Sciences*, Vol. 86 No. 3, pp. 444-462.
- Vaivio, J. (2008), “Qualitative management accounting research: rationale, pitfalls and potential”, *Qualitative Research in Accounting and Management*, Vol. 5 No. 1, pp. 64-86.
- Vakkuri, J., Johanson, J.E., Feng, N.C. and Giordano, F. (in press), “Governance and accountability in hybrid organizations—past, present and future”, *Journal of Public Budgeting, Accounting and Financial Management*.
- van den Buuse, D., van Winden, W. and Schrama, W. (2021), “Balancing exploration and exploitation in sustainable urban innovation: an ambidexterity perspective toward smart cities”, *Journal of Urban Technology*, Vol. 28 Nos 1-2, pp. 175-197.
- van der Lugt, L., Dooms, M. and Parola, F. (2013), “Strategy making by hybrid organizations: the case of the port authority”, *Research in Transportation Business and Management*, Vol. 8, pp. 103-113.
- Venugopal, A., Krishnan, T., Kumar, M. and Upadhyayula, R.S. (2019), “Strengthening organizational ambidexterity with top management team mechanisms and processes”, *The International Journal of Human Resource Management*, Vol. 30 No. 4, pp. 586-617.
- Vera, D. and Crossan, M. (2004), “Strategic leadership and organizational learning”, *Academy of Management Review*, Vol. 29 No. 2, pp. 222-240.

-
- Voss, G.B. and Voss, Z.G. (2013), "Strategic ambidexterity in small and medium-sized enterprises: implementing exploration and exploitation in product and market domains", *Organization Science*, Vol. 24 No. 5, pp. 1459-1477.
- Wällstedt, N., Grossi, G. and Almqvist, R. (2014), "Organizational solutions for financial sustainability: a comparative case study from the Swedish municipalities", *Journal of Public Budgeting, Accounting and Financial Management*, Vol. 26 No. 1, pp. 181-218.
- Wallbaum, H., Ostermeyer, Y., Salzer, C. and Escamilla, E.Z. (2012), "Indicator based sustainability assessment tool for affordable housing construction technologies", *Ecological Indicators*, Vol. 18, pp. 353-364.
- Westerdahl, S. (in press), "Yield and the city: Swedish public housing and the political significance of changed accounting practices", *Critical Perspectives on Accounting*.

Further reading

- Government offices of Sweden, Ministry of the environment and Energy (2017), "The Swedish climate policy framework", available at: <https://www.government.se/495f60/contentassets/883ae8e123bc4e42aa8d59296ebe0478/the-swedish-climate-policy-framework.pdf>.
- Grossi, G., Reichard, C., Thomasson, A. and Vakkuri, J. (2017), "Theme: performance measurement of hybrid organizations: emerging issues and future research perspectives", *Public Money and Management*, Vol. 37 No. 6, pp. 379-386.

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