



Market failure in a universal welfare state? Ownership, quality, and regulation in Danish social services

Anders Bach-Mortensen ^{a,b,*} , Benjamin Goodair ^{b,c}, Ole Helby Petersen ^a, Jon Kvist ^a

^a Department of Social Sciences and Business, Roskilde University, Roskilde, Denmark

^b Blavatnik School of Government, University of Oxford, Oxford, UK

^c Centre for Analysis of Social Exclusion, London School of Economics, London, UK

ARTICLE INFO

Keywords:

Outsourcing
Social services
Welfare marketisation
Nordic welfare state
Privatisation
Ownership

ABSTRACT

Like many other countries, Denmark has recently seen a sharp increase in outsourced social service provision for children and adults. While quasi-market theory suggests that complex social services could be ill-suited to market provision, there has been little assessment of how ownership relates to service quality for welfare services due to fragmented data. This paper presents findings from a population-wide analysis of quality and inspection outcomes across public, non-profit, and for-profit providers in Denmark's social services for children and working-age adults with support needs, including children's homes and adult residential facilities (N = 2375, 2020–2024). First, we document a 44.1 % increase in for-profit providers over five years (2020–2024), while public and non-profit provision remained stable or declined. Second, for-profit providers were significantly more likely to receive regulatory sanctions, including intensified monitoring and forced closure compared to other ownership types. Third, non-profit providers received higher quality ratings, while newer for-profit entrants underperformed relative to both public and older for-profit providers. Fourth, quality and regulatory differences were most pronounced between for-profit and not-for-profit providers rather than between public and private providers, indicating that ownership form and the profit-motive within the private sector matters more than the public-private distinction. These findings support theoretical claims that welfare markets for complex social services are prone to market failure due to information asymmetries, user complexity, and incomplete contracts. Finally, the findings have policy implications for market regulation, procurement and pricing strategies in terms of how to sustain high-performing providers in an increasingly marketised social service landscape.

1. Introduction

Outsourcing complex social services to private actors has become a defining experiment in contemporary welfare governance, but its consequences remain contested and context dependent (Andrews et al., 2019). Denmark, as an exemplar of the Nordic welfare model, offers a revealing example. Starting with a Social Reform in 1933, free and equal access to social services has long been a cornerstone of the Danish welfare state (Kvist, 2012; Falster and Ringø, 2025). This includes state-guaranteed residential and social care for citizens with disabilities and complex social and mental health needs. Such services follow a universalistic model with needs-based access to services irrespective of personal means. However, in recent years, both this model and the governance of service delivery have come under strain. Evidence shows that rising costs have not directly translated into improved care (Social Services Expert Committee, 2024; Patient Safety Authority, 2023).

Simultaneously, the sector has seen significant growth in private for-profit provision, albeit still at comparatively low levels (Hjelmar et al., 2018; Winblad et al., 2017), and rising expenditure has corresponded with growth in for-profit provision (Social Services Expert Committee, 2024). This raises fundamental questions about the role of ownership in shaping costs, service quality, and regulatory compliance.

These challenges are not unique to Denmark. Across the OECD countries, governments have sought to manage rising care demands and fiscal pressures by restructuring the governance of welfare services and increasingly outsourcing provision to private actors (OECD, 2024). This shift towards private delivery of welfare services rests on assumptions embedded in quasi-market theory: that competition among diverse providers can increase efficiency, drive up quality, and facilitate improved user choice (Blomqvist, 2004; Le Grand, 1991). However, a growing international literature questions whether these assumptions hold in practice, particularly in services marked by complexity,

* Corresponding author. Department of Social Sciences and Business, Roskilde University, Roskilde, Denmark.

E-mail address: ambm@ruc.dk (A. Bach-Mortensen).

restricted user mobility, and limited user voice and agency (Dickinson et al., 2022; Stolt et al., 2011). For-profit providers, in particular, have been associated with lower quality and more incidents of malpractice in both adult and children's social care (Bach-Mortensen et al., 2024a; Bach-Mortensen et al., 2022; Barron and West, 2017).

What makes the Danish case analytically informative is not just the policy shift it represents, but the institutional context in which it unfolds. Denmark is often regarded as an exemplar of the universalistic welfare state, characterised by extensive public provision, high levels of trust, and substantial regulatory capacity (Esping-Andersen, 1990). The expansion of private provision arguably reflects broader welfare state transformations. Although there is little research on the marketisation of services for institutionalised children or residential care for working-age adults with disabilities or mental health needs, scholars have documented the increasing role of private sector actors in eldercare, highlighting changes in the structure and ownership of service provision (Anntonen and Karsio, 2017; Meagher and Szebehely, 2013).

This literature points to the importance of not only how much is spent, but how welfare services are delivered (Stolt and Winblad 2009; Hjelmar et al., 2018). Ownership can affect service outcomes and commodify the conceptualisation of care. The Nordic model has traditionally relied primarily on public or non-profit providers, which are assumed to operate under logics of care and solidarity (Henriksen et al., 2012). The entry of for-profit actors introduces logics of profit-maximisation, which may conflict with care values, especially under conditions of asymmetric information and weak monitoring (Fischer and Kvist, 2023; Walker et al., 2022). In this light, this paper examines social services for children and working age adults in Denmark, such as institutionalised and residential care for children and adults with mental health needs or disabilities. We address three objectives:

1. To map changes in outsourced social service provision in Denmark from 2020 to 2024.
2. To analyse the relationship between provider ownership (for-profit, public, and non-profit) and quality outcomes measured through regulatory sanctions and quality ratings collected by the industry regulator, controlling for provider characteristics, service types, and geographical variation.
3. To analyse if these differences vary depending on different ownership classifications by comparing public to all private provision, and for-profit to all non-profit provision.

This paper proceeds as follows. The next section presents the theoretical background and situates the Danish setting within the literature on public service outsourcing. We then outline the institutional and regulatory context of social services in Denmark and describe the data and methodology, including the construction of a unique longitudinal dataset on provider ownership, quality ratings, and regulatory sanctions. The results section presents descriptive statistics and multivariate analyses, showing how ownership is associated with quality scores and sanction risk, and how these relationships vary across provider age and service types. The discussion interprets these findings in light of welfare governance and quasi-market theory, with attention to policy implications of public and private ownership in complex care systems. The final sections reflect on study limitations and outlines directions for more ownership-sensitive welfare governance.

2. Background: outsourcing of social services and the impact of ownership on quality

Traditionally, outsourcing of public services has been predicated on the notion that market responsiveness, competition, and user choice increases cost efficiency and service quality (Grand and Bartlett, 1993). Achieving desirable market mechanisms through outsourcing requires close attention to market oversight, contracts, and provider ownership

(Brown and Potoski, 2003; Hansmann, 1980). While contracts define relationships between private and public sectors, they are inherently incomplete (Hart and Moore, 2007), which makes contract management and market oversight paramount for ensuring good outcomes. For social services, where key outcomes are complex and difficult to monitor, "complete" contracts are virtually impossible to define. This is why ownership matters. Non-profit and public sector providers, assumed to be pro-socially motivated, are expected to prioritise quality over costs even under incomplete contracts (Francois, 2000; Besley and Ghatak, 2005; Glazer, 2004; Glaeser, 2002). Conversely, for-profit providers may be more efficient under certain contract incentives, but they also face stronger incentives to shade on quality when important aspects of behaviour are unobservable by the public authority (Billis and Glennerster, 1998; Hart et al., 1997; Esteve et al., 2024; Weisbrod, 1989).

The empirical literature on ownership and service quality has shown varying results across different contexts and service types (Petersen et al., 2018). Complex social services, including disability services, care for older people, and children's homes, have become increasingly outsourced to the private and predominantly for-profit sector in many countries (Dickinson et al., 2022; Harrington et al., 2017). In England, residential care for older people and children's homes have become almost entirely outsourced to private for-profit providers; yet the research on this development finds that for-profit provision performs worse than the non-profit alternative (Bach-Mortensen et al., 2022; Barron and West, 2017). While the international literature on OECD countries generally finds that for-profit providers perform worse than non-profit and public providers, research on residential care for older people in Denmark and Sweden presents mixed results. In Denmark, Hjelmar et al. (2018) found generally no significant differences across most quality indicators between public, non-profit, and for-profit residential care providers for older people (Hjelmar et al., 2018). Similarly, Stolt and colleagues (2011) found that privatisation in Sweden was linked to approximately 9 % lower staffing levels per resident, but that private facilities performed better on several other quality indicators, including food choice options and resident involvement in care planning at nursing homes (Stolt et al., 2011). Winblad and colleagues (2017) confirmed this mixed result with more recent data, finding that Swedish public nursing homes outperform privately operated facilities on structural quality measures, such as staffing levels and individual accommodation, while privately operated homes typically achieve higher scores on process-based quality indicators.

However, this research has limited applicability to the social services sector, which has received much less academic attention. Social services, defined as help and support provided under the Service Act for adults and the Child's Act for children and young people, encompass a much wider range of interventions for individuals with physical or psychological disabilities or those in socially vulnerable positions (Social Service Expert Committee, 2024). These services differ substantially from residential care for older people by often involving greater complexity in care pathways, longer-term interventions, more diverse target populations, and different regulatory frameworks. More importantly, outsourcing levels remain low in residential care for older people, with for-profit providers representing less than 6 % of the sample in the Danish 2018 study (Hjelmar et al., 2018), while there has been a surge in for-profit provision in adult and children's social services. The number of for-profit social service providers overseen by the Social Service Authority ("Socialtilsynet") has increased by more than 56 % from 2015 to 2024 (Ministry for Social Affairs and Housing, 2024). This creates a problematic knowledge gap: we know very little about the role of ownership in a sector where outsourcing is rapidly increasing, and where service users are most at risk.

3. Denmark as a test case for welfare marketisation

Denmark represents an empirically and theoretically valuable setting for examining the role of ownership and outsourcing in welfare services,

because it embodies many of the institutional conditions that should theoretically enable successful welfare marketisation. Denmark has historically maintained strong public social service provision, with non-profit and for-profit providers playing a supplementary role (Henriksen et al., 2012). The country provides strong regulatory oversight through independent monitoring agencies, imposes relatively high corporate taxes, sets standardised prices, and has highly unionised staff who receive equivalent pay across sectors. These structural features are complemented by generous wrap-around services including universal healthcare and social security payments that reduce the complexity of service delivery. This institutional framework theoretically leaves little room for profiteering and should create favourable conditions for care delivery that ensure high accountability and promote competition on quality rather than cost-cutting.

Despite these favourable conditions, recent developments suggest that Denmark faces several challenges in its social service provision. While the degree of outsourcing remains moderate by international standards, the share of for-profit providers in residential social services has grown significantly over the past decade, particularly in services targeting children in care and residential care for adults with nursing or mental health needs (Ministry for Social Affairs and Housing, 2024). This development has been accompanied by accelerated spending: annual expenditures in the sector now exceed 60 billion DKK. At the same time, there are increasing reports of concerns about quality, equity, and rising costs, particularly in relation to private providers (Social Service Expert Committee, 2024). Regulatory authorities have also highlighted fragmented data, weak transparency, and increasing incidences of service failure (ibid).

4. Institutional context

The social services analysed in this study are governed by two core legislative frameworks: the *Social Services Act* (*Serviceloven*) for adults and the *Child and Youth Act* (*Barnets Lov*) for children and young people. In line with Denmark's decentralised welfare model, the country's 98 municipalities are responsible for financing, commissioning, and delivering these services, either through in-house provision or by using non-profit and for-profit providers. Services are fully tax-financed and free of charge for users. While pricing has traditionally been negotiated locally, national reference rates were recently adopted in September 2025 and thus do not apply to the study period.

The industry regulator, the Social Service Authority ("Socialtilsynet"), consists of five regional bodies (Copenhagen area, Mid, North, East, and South), which are responsible for approving, regulating, and monitoring social services. The mandate of the regulator is to ensure that citizens receive social services in accordance with social service laws through systematic, impartial, and professional oversight. The legal foundation for Social Service Authority is the 2014 Social Supervision Act, which includes a centrally defined quality model for evaluating services (Ministry for Social Affairs and Housing, 2013). Data collection and inspection procedures from the 5 regional bodies were streamlined in 2020, which produced complete, comparable, and nationwide data based on a unified quality model available from that year. Providers are inspected via announced and unannounced visits, at least once yearly, although the frequency of inspection varies depending on the provider status - for example, providers with an active sanction will be inspected more frequently.

5. Data and methods

5.1. Data

In Denmark, social service data has historically been fragmented, and the quality rating outcomes of social service inspections are not

publicly released. To enable nationwide analysis over time, we therefore created a harmonised dataset from a range of sources. First, we harmonised publicly available data from the Danish Ministry of Housing and Social Affairs on all active social services providers (15 datasets, covering registered providers from December 2019 to December 2024, updated every three months) (Ministry for Social Affairs and Housing, 2024). This is a mandated dataset managed by the regulator, and providers that are not in this dataset cannot, in principle, be used by the municipalities. We therefore used this data to deduce the activity status of providers during this period. We identified inactive or closed providers by assuming that if an active provider in one dataset was not in the subsequent one, it was inactive or had ceased operations. Similarly, we identified provider openings by assuming that unique providers that did not appear in the previous dataset represent a newly active or opened facility.

Second, we received data via two freedom of information (FOI) requests for national data on inspection and quality outcomes. The first FOI included all sanctions issued to providers, 2020–2024. Data was provided individually by each of the 5 regional bodies of the regulator. The second FOI request concerned all quality scores of active providers, as of January 2023 and January 2024. This data was provided by the Ministry of Housing and Social Affairs. The quality and sanction outcomes are both collected by the regional Social Service Authorities during annual inspections. Below, we provide more information about the specific sanction types and the quality rating framework.

Throughout the analysis, we focus on providers regulated by the Social Service Authority, which includes all services for children in care and working age adults with disabilities or mental health needs. Our final dataset comprises 2,375 unique providers representing 5,629 facility sites that operated between December 2019 and December 2024, of which 2,016 providers were active (as of December 2024) and 359 have closed, whereas 413 providers opened during the study period. We have quality score data from 2023 to 2024 for 1,977 providers and sanctions data across the whole period for all included (n = 2,375) providers. Each social service provider may operate several facility sites that serve different client groups and offer distinct services. While our analysis is conducted at the provider level, several control variables are aggregated from the provider facility sites (e.g., service type and target groups). Most control variables are collected at baseline (from the first registration year), while some control variables represent provider activity over the full period (for example, the full range of service types and client specialisations across the study period). Regulatory outcomes represent provider level assessments, which reflect an overall evaluation of all units under each provider.

5.2. Outcomes

5.2.1. Sanctions

In Denmark, there are three main types of sanctions representing differing levels of severity. *Compliance orders* ("påbud") are a corrective measure where the regulator specifies what a facility must address to maintain its registration approval. A compliance order is issued when the Social Service Authority expresses concerns that the facility can remedy through specific actions. For example, if significant staff turnover leaves insufficient qualified personnel to serve the approved target group, a compliance order might require hiring additional staff. *Intensified monitoring* ("skærpet tilsyn") is implemented alongside compliance orders when the Social Service Authority has serious concerns about the facility's operations, resident safety, or health, but still considers improvement possible. This results in more frequent inspection visits and additional information gathering. *Withdrawn registration* ("tilbagekaldt godkendelse") is the most severe sanction, which is only issued when the Social Service Authority determines a provider no longer meets approval standards and concludes that improvement is

impossible. This forces the provider to close, as it cannot legally operate without approval.

5.2.2. The social service quality framework

The 'quality model' is a framework used by the industry regulator to assess and ensure quality in social service facilities. The model consists of seven key themes: (1) education and employment, (2) independence and relations, (3) target groups, methods, and results, (4) health and well-being, (5) organisation and leadership, (6) competencies, and (7) physical environment (Danish Authority of Social Service and Housing, 2025). Each theme is broken down into specific criteria that represent concrete goals for the facilities, and each criterion is operationalised by multiple indicators meant to serve as evidence of it being implemented in practice. The quality model employs a five-point rating scale from "fulfilled to a very high degree" (5) to "fulfilled to a very low degree" (1) for each indicator.

5.2.3. Independent variables

Our main predictor variable is provider ownership, which we operationalise as for-profit, public, and non-profit providers. We also evaluate differences between all private providers (for-profit and non-profit) versus public provision, and all not-for-profit providers (non-profit and public) versus for-profit provision. Ownership was coded based on the organisational registration status of each provider.

5.2.4. Control variables

Throughout the analysis, we include variables that could influence the relationship between ownership and quality. These include geographic region, facility size (number of places and units), service type (e.g., youth services, housing services, treatment services), target groups served (e.g., physical disabilities, cognitive conditions, development disorders, mental health, social issues), and number of services offered by the provider and target groups served. We also control for whether the provider opened during the study period (after 2020) or if providers were active before 2020.

A full library of data and code is available on the Open Science Framework at <https://osf.io/abxuk/> overview.

5.3. Ethics approval

No human subjects were involved in this study, and we only analysed regulator-collected provider data. Ethics approval was thus not applicable to our study.

6. Analysis

We conduct multivariate logistic and linear OLS regressions to examine the relationship between provider ownership and quality and regulatory sanctions.

For our analysis of sanctions, we pool all providers that operated at any point during from December 2019 to December 2024, including those that closed during this period. This allows us to capture the complete regulatory history of all providers during this five-year period. We used logistic regression models to estimate the association between ownership and the likelihood of receiving different sanctions during this time period.

For our analysis of quality scores, we conduct a pooled cross-sectional analysis of all quality ratings on all active providers as of January 2023 and 2024, representing 115,098 observations for around 2,000 providers. We aggregate the quality scores from all themes into one average score for each provider, averaged by the two years for which we have data. We conduct multivariate OLS regression to assess how ownership relates to the average quality scores, while accounting for other facility characteristics.

For all models, we transform the regression coefficients into predicted probabilities. Predicted probabilities offer significant advantages for cross-model comparisons in logistic regression, because they express coefficients in the natural metric of the dependent variable (probabilities rather than log-odds), which makes the coefficients easier to interpret and allows comparison across different model specifications. Most importantly, predicted probabilities can be compared across models with different covariate specifications, unlike logistic regression coefficients and odds ratios, which are rescaled by unobserved factors that change as model variance changes, which makes cross-model comparisons challenging (Norton et al., 2024; Howell-Moroney, 2024).

Throughout our analyses, we control for a number of factors that may also correlate with provider sanctions and quality. These include regulator region (to account for varying inspection practices), facility size (measured by number of places and units), service type, target groups served, and the total number of target groups served by each facility. In all models, we also cluster the standard errors using the CVR number (Danish business registration number, which reflects the underlying owner) and the geographic region (number of clusters = 1233).

7. Results

7.1. Descriptive results

Fig. 1 displays the development in social service providers and facilities. From December 2019 to December 2024, the number of for-profit social service providers increased 44.1 % (from 256 to 369 providers) and currently (December 2024) represent 18.3 % of all providers. This growth is even higher when counting the number of facility sites, where for-profit provision grew by 54.0 % (from 483 to 744 facility sites). Public and non-profit provision have slightly decreased or stagnated during this period.

Table 1 presents the descriptive statistics for the 2,375 social service providers regulated by Social Service Authority that were active from 2020 to 2024, broken down by ownership. For-profit providers comprised 19.1 % of all providers that were at some point active during this period, public providers 52.6 %, and non-profit providers 28.3 %.

The descriptive distribution of the average quality scores show that non-profit providers had the highest average quality score (4.49), followed by public providers (4.37), while for-profit providers had the lowest (4.24). A similar pattern is reflected in the distributions of sanctions, with 15.9 % of for-profit providers receiving at least one sanction compared to 5.6 % of public and 10.4 % of non-profit providers from 2020 to 2024. For-profit facilities also had the highest closure rate at 18.5 %, compared to 13.6 % for public and 15.6 % for non-profit facilities. At the same time, for-profit providers were more likely to have opened in the last 5 years, with 42.7 % having opened after 2020, compared to only 13.3 % of public providers and 7.7 % of non-profit providers.

In terms of provider characteristics, public facilities were considerably larger (43.9 places on average) compared to non-profit (25.3) and for-profit facilities (18.3). More than 51 % of for-profit providers that were active during the study period offered 10 places or less. The target populations served by providers varied by ownership, with for-profit and non-profit providers more likely to serve clients with mental health (59 % and 65 %, respectively, versus 40 % for public providers) and social issues (72 % and 73 %, respectively, versus 38 % for public provision), while public facilities more commonly served clients with cognitive disabilities (61 % versus 34 % and 39 % for for-profit and non-profit providers).

Service types also varied by ownership, with public facilities providing a significant proportion of disability housing services (53 %), while for-profit and non-profit facilities focused more on temporary housing (65 % and 64 %, respectively) and children's homes (38 % and

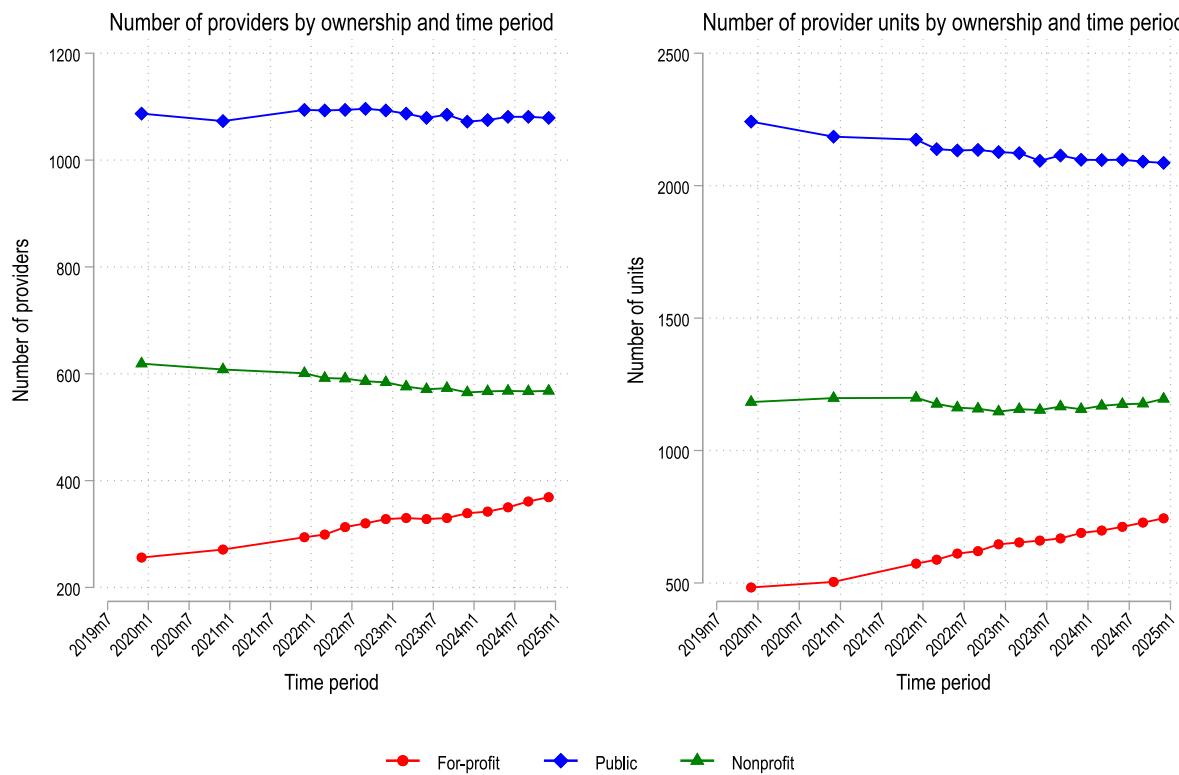


Fig. 1. Changes in number of providers and units over time.

Note: This includes all providers of formal social services under the Danish Social Services Act, which are regulated by the Social Service Authority (“Socialtilsynet”).

41 %, respectively). Overall, 48 % and 52 % of for-profit and non-profit providers, respectively, offered services for children and young people, compared to just 23 % for public provision. The average number of service types and target groups were more or less similar across ownership. This positioning of non-profits between for-profit and public providers (yet closer to for-profit in terms of service offerings and client populations) aligns with patterns observed in the hospital ownership literature (Horwitz, 2005; Horwitz and Nichols, 2009; Bayindir, 2012).

7.2. Sanctions and ownership

From 2020 to 2024, 468 sanctions were issued to 210 providers. Table 2 displays the association between ownership and sanctions, controlling for provider and facility unit characteristics. The table shows the fully adjusted results for all sanctions, and the stepwise regression results can be found in Appendix Table A2. Fig. 2 displays the predicted probabilities of receiving different sanction types.

Both Fig. 2 and Table 2 show that public and non-profit providers are generally less likely to be sanctioned compared to for-profit providers. Public providers had 80 % lower odds of receiving any sanction compared to for-profit providers ($OR = 0.20$, 95 % CI [0.10, 0.38]), $p < 0.01$). Similarly, non-profit providers had 49 % lower odds of receiving any sanction ($OR = 0.51$, 95 % CI [0.33, 0.81]), $p < 0.05$). This translates to for-profit providers having a predicted probability of 18.7 % of receiving at least one sanction during the study period. The predicted probabilities for public and non-profit providers were 5.1 % and 11.6 %, respectively.

Overall, this pattern was consistent in direction across all types of sanctions, although there was some variation in the magnitude of the associations. For example, for the least severe sanction type, compliance orders, the difference between for-profit and non-profit facilities was

smaller than for the other sanctions and only marginally statistically significant ($p < 0.10$). Both public and non-profit facilities were significantly less likely to be issued an intensified monitoring order: For for-profit providers, the predicted probability to be subject to intensified monitoring was 14.4 %, whereas for public and non-profit provision, the probability was 2.1 % and 7.5 %, respectively.

The starker association between ownership and inspections was for forced closures, where public facilities had 89.7 % lower odds ($OR = 0.10$, 95 % CI [0.03, 0.40], $p < 0.01$) and non-profit facilities had 67.7 % lower odds ($OR = 0.32$, 95 % CI [0.13, 0.80], $p < 0.05$) of being forcibly closed, compared to for-profit facilities. However, the absolute probability of forced closures is low across the board: the predicted probability of for-profit homes being forced closed was 4.8 %, whereas it was 1.6 % for non-profit providers and 0.5 % for public provision.

Several other factors were associated with increased likelihood of providers being sanctioned. Youth services and facilities serving a higher number of target groups also had increased odds of being sanctioned, as did larger providers, both in terms of providers running more units and those with more places. There was also some geographic variation with providers in the North region having 3.9 times the odds of receiving any sanction compared to those in Copenhagen (95 % CI [2.28, 6.60], $p < 0.01$).

7.3. Service quality and ownership

Table 3 presents our multivariate regression results examining the relationship between provider ownership and quality scores. In the unadjusted model (column 1), ownership is significantly associated with quality, with public providers scoring 0.13 points higher (95 % CI [0.04, 0.21], $p < 0.01$) and non-profit providers scoring 0.26 points higher (95 % CI [0.18, 0.34], $p < 0.01$) than for-profit providers. However, after

Table 1

All social service providers that operated in Denmark from January 2020 to December 2024.

	For-profit	Public	Non-profit	All
Provider size (%)				
Small (<10 places)	51.5	22.2	35.7	31.6
Medium (11–30 places)	37.2	44.4	43.0	42.6
Large (31–60 places)	8.2	18.8	14.7	15.6
Very large (>60 places)	3.1	14.7	6.6	10.2
Facility status^a (%)				
Fully active	65.9	65.5	60.9	64.3
Partially active	15.6	20.9	23.5	20.6
Closed	18.5	13.6	15.6	15.1
Sanctions and quality				
Mean provider rating 2023 (1–5)	4.3	4.37	4.51	4.4
Mean provider rating 2024 (1–5)	4.22	4.36	4.49	4.38
Mean provider rating (2023 & 2024)	4.24	4.37	4.49	4.38
Any sanction received (%)	16.0	6.0	10.0	9.0
Number of sanctions received (mean)	0.34	0.11	0.25	0.2
Provider status				
Active as of December 2024 (%)	81.0	86.0	84.0	85.0
Opened after 2020 (%)	43	13	8	17
Total places (mean)	18.3	43.9	25.3	33.8
Number of facility sites, 2020–2024 (mean)	2.26	2.37	2.44	2.37
Active facility sites (mean)	1.64	1.67	1.78	1.69
Closed facility sites (mean)	0.61	0.70	0.67	0.68
Service types (%)				
Children/youth services	48.0	23.0	52.0	36.0
Adult services	84.0	93.0	84.0	89.0
Children's home	38.0	15.0	41.0	27.0
Disability housing	0	53.0	5.0	29.0
Temporary housing	65.0	35.0	64.0	49.0
Long-term housing	31.00	20.0	26.00	24.00
Target Groups				
Cognitive disabilities (%)	34.0	61.0	39.0	49.0
Developmental disorders (%)	58.0	37.0	57.0	46.0
Mental health issues (%)	59.0	40.0	65.0	51.0
Physical disabilities (%)	7.0	17.0	10.0	13.0
Social problems (%)	72.0	38.0	73.0	54.0
Number of target groups (mean)	2.49	2.03	2.60	2.28
Number of offered service types (mean)	1.81	1.52	1.79	1.65
Regulator region (%)				
Copenhagen area	41.43	24.50	23.70	27.49
Mid	18.49	22.56	27.42	23.17
North	11.58	15.15	13.26	13.93
South	8.24	22.56	15.05	17.70
East	20.27	15.23	20.57	17.70
Sample Size				
N (all providers across full study period)	454 (19.1 %)	1,249 (52.6 %)	672 (28.3 %)	2,375
N (providers with quality ratings in 2023 and 2024 ^a)	323	1,077	577	1,977

^a Note: Data shows social service providers ("sociale tilbud") in Denmark, categorised by ownership. Percentages may not add to 100 % due to rounding or because categories are not mutually exclusive. "Fully active" providers have all units currently operating; "partially active" providers have some operating units and some closed units.

controlling for provider characteristics, regional variation, service types, target groups, and especially whether the provider opened in the last five years (column 5), the magnitude and significance of the ownership coefficient changes considerably. In the fully adjusted model, public providers scored only 0.06 points higher than for-profit providers (95 % CI [−0.03, 0.14]), a difference that is no longer statistically significant. Non-profit providers still scored 0.16 points higher (95 % CI [0.08, 0.23], $p < 0.01$) than for-profit providers, though the magnitude of this difference is reduced by almost half compared to the unadjusted model.

Geographical variation was also associated with quality outcomes, with facilities in the South inspection region scoring 0.40 points higher

than those in the Copenhagen area (95 % CI [0.34, 0.46], $p < 0.01$). Provider characteristics also influenced quality scores, with children/youth services being associated with better outcomes (0.09 points higher, 95 % CI [0.04, 0.14], $p < 0.01$). The number of providers owned by the same company was negatively associated with quality (−0.001 points per additional facility, 95 % CI [−0.002, −0.006], $p < 0.01$), though the magnitude of this association is small.

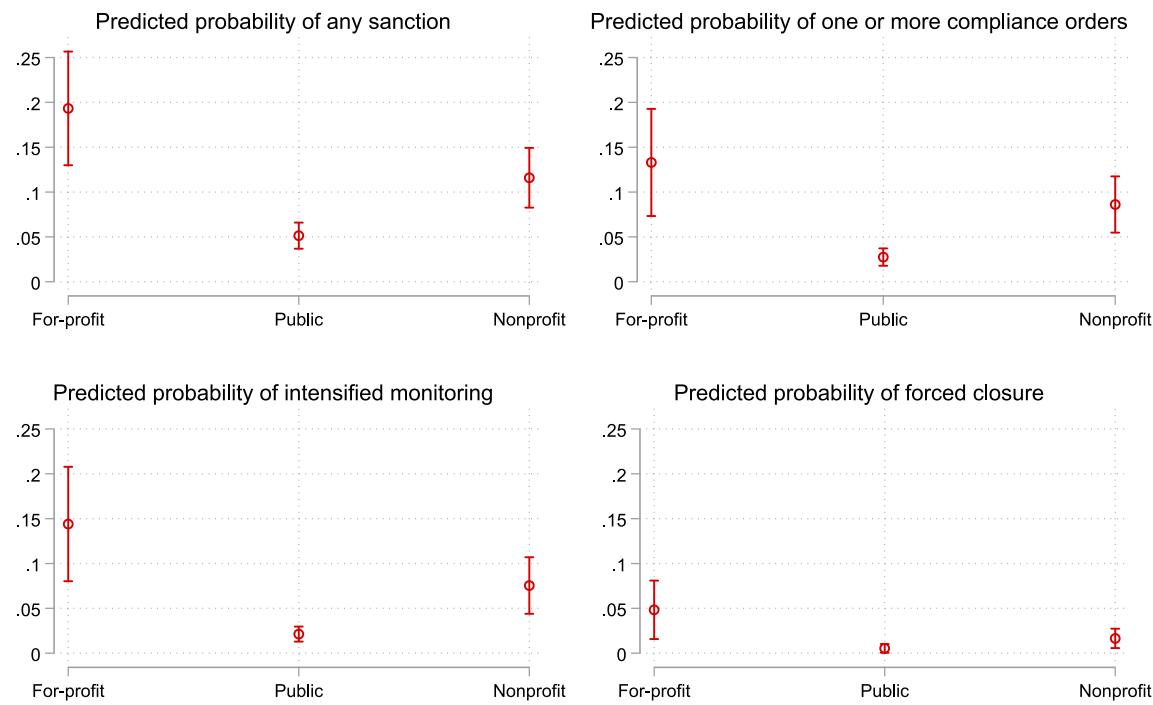
However, the most striking association is the quality difference between recently opened providers (those that opened after 2020) and facilities that were active before 2020. More recently established providers scored 0.21 points lower on the quality scale (95 % CI [−0.29, −0.12], $p < 0.01$) compared to those that were active before 2020. But more importantly, this variable appears to explain a significant portion of the quality gap between for-profit and other providers: after

Table 2

Logistic regression results: provider characteristics and sanctions.

	(1)	(2)	(3)	(4)
	Any Sanction	Compliance Order	Intensified Monitoring	Forced Closure
Ownership (Reference: For-profit)				
Public	0.199*** [0.104,0.380]	0.161*** [0.069,0.376]	0.106*** [0.040,0.279]	0.104*** [0.027,0.404]
Non-profit	0.514*** [0.328,0.806]	0.582* [0.330,1.025]	0.438*** [0.248,0.774]	0.323** [0.131,0.795]
Regulator region (Reference: Copenhagen)				
Mid	0.907 [0.502,1.641]	0.732 [0.357,1.503]	0.783 [0.404,1.519]	1.906 [0.699,5.197]
North	3.881*** [2.283,6.597]	0.790 [0.361,1.727]	0.659 [0.272,1.595]	1.601 [0.450,5.687]
South	1.507 [0.886,2.562]	1.445 [0.732,2.851]	2.164** [1.156,4.050]	3.084* [0.946,10.056]
East	1.201 [0.721,1.998]	1.601 [0.906,2.829]	0.822 [0.411,1.645]	2.010 [0.744,5.433]
Provider size (Reference: small (≤ 10))				
Medium (11–30)	1.286 [0.853,1.938]	1.364 [0.817,2.277]	1.241 [0.697,2.211]	0.873 [0.371,2.052]
Large (31–60)	1.902** [1.100,3.287]	1.823* [0.913,3.642]	1.515 [0.753,3.049]	0.606 [0.105,3.512]
Very large (>60)	1.696 [0.896,3.210]	1.847 [0.853,3.998]	1.251 [0.554,2.823]	1.000 [1.000,1.000]
Total number of facility sites*	1.091*** [1.026,1.160]	1.093*** [1.026,1.164]	1.126*** [1.043,1.217]	0.767 [0.543,1.082]
No of providers with Same CVR number*	1.011** [1.001,1.021]	1.017*** [1.009,1.025]	1.020*** [1.011,1.029]	1.009 [0.986,1.033]
Framework agreement	1.305 [0.831,2.050]	1.210 [0.732,2.001]	1.058 [0.612,1.829]	0.682 [0.170,2.731]
Number of target groups	1.340*** [1.105,1.626]	1.660*** [1.303,2.114]	1.330** [1.023,1.730]	0.841 [0.495,1.429]
Number of service types	0.772** [0.616,0.967]	0.660*** [0.503,0.864]	0.611*** [0.442,0.846]	0.829 [0.423,1.625]
Children/youth services	1.991*** [1.312,3.022]	2.442*** [1.510,3.948]	3.291*** [2.040,5.308]	0.905 [0.442,1.852]
Long-term housing	1.821*** [1.174,2.823]	1.424 [0.813,2.495]	1.591 [0.887,2.853]	1.002 [0.358,2.805]
Housing for disabled residents	0.885 [0.502,1.559]	0.992 [0.505,1.948]	1.223 [0.614,2.437]	0.460 [0.087,2.441]
Developmental disorders	0.737 [0.453,1.199]	0.402*** [0.225,0.718]	0.520** [0.286,0.946]	2.614* [0.891,7.672]
Physical disorders	0.834 [0.476,1.462]	0.799 [0.401,1.593]	1.258 [0.629,2.513]	2.244 [0.510,9.878]
Social problems	0.895 [0.594,1.348]	0.629* [0.378,1.047]	0.908 [0.518,1.591]	1.383 [0.509,3.756]
New provider (Reference: active before 2020)	1.261 [0.815,1.949]	0.837 [0.462,1.517]	1.024 [0.595,1.765]	0.503 [0.198,1.283]
Observations	2171	2171	2171	1943
Pseudo R-squared	0.113	0.109	0.132	0.117

*Total number of facility sites associated with the provider for the full study period (2020–2024). Odds ratios reported. 95 % confidence intervals in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at CVR number and municipality.



Based on the fully adjusted regression models in Table 2

Fig. 2. Predicted probabilities to receive sanctions by ownership.

Table 3
Regression results for quality ratings.

	(1)	(2)	(3)	(4)	(5)
Ownership (Reference: For-profit)					
Public	0.125*** [0.037,0.212]	0.074* [-0.001,0.150]	0.111*** [0.030,0.192]	0.105** [0.024,0.186]	0.056 [-0.027,0.139]
Non-profit	0.260*** [0.184,0.336]	0.204*** [0.132,0.277]	0.208*** [0.136,0.279]	0.208*** [0.136,0.280]	0.155*** [0.081,0.228]
Regulator region (Reference: Copenhagen)					
Mid		0.136*** [0.075,0.197]	0.126*** [0.065,0.188]	0.129*** [0.067,0.190]	0.162*** [0.102,0.223]
North		0.205*** [0.142,0.267]	0.196*** [0.134,0.258]	0.195*** [0.135,0.256]	0.198*** [0.138,0.259]
South		0.401*** [0.344,0.458]	0.387*** [0.328,0.445]	0.391*** [0.331,0.450]	0.399*** [0.340,0.458]
East		0.025 [-0.040,0.089]	0.013 [-0.052,0.079]	0.016 [-0.049,0.081]	0.026 [-0.039,0.091]
Provider size (Reference: small (≤ 10))					
Medium (11–30)	0.026 [-0.024,0.076]	0.025 [-0.026,0.076]	0.025 [-0.026,0.075]	0.019 [-0.029,0.067]	
Large (31–60)	-0.030 [-0.091,0.030]	-0.032 [-0.096,0.033]	-0.034 [-0.099,0.031]	-0.042 [-0.105,0.020]	
Very large (>60)	0.012 [-0.070,0.094]	-0.000 [-0.087,0.086]	-0.023 [-0.111,0.065]	-0.035 [-0.120,0.050]	
Total number of facility sites*	-0.016*** [-0.025,-0.007]	-0.017*** [-0.026,-0.009]	-0.014*** [-0.022,-0.005]	-0.015*** [-0.024,-0.006]	
No of providers with Same CVR number*	-0.001*** [-0.002,-0.001]	-0.001*** [-0.002,-0.001]	-0.001*** [-0.002,-0.001]	-0.001** [-0.002,-0.000]	
Framework agreement					
Number of service types	0.012 [-0.013,0.036]	0.014 [-0.011,0.039]	0.013 [-0.012,0.038]		
Children/youth services	0.085*** [0.039,0.131]	0.095*** [0.046,0.143]	0.087*** [0.040,0.135]		
Housing for disabled residents	-0.002 [-0.053,0.049]	0.017 [-0.037,0.070]	0.013 [-0.040,0.065]		
Number of target groups					
Developmental disorders					
Physical disorders					

(continued on next page)

Table 3 (continued)

	(1)	(2)	(3)	(4)	(5)
Social problems				[-0.070,0.085] 0.040	[-0.065,0.087] 0.041
New provider (Reference: active before 2019)				[-0.015,0.094] -0.205*** [-0.287,-0.122]	[-0.014,0.096] -0.205*** [-0.287,-0.122]
Observations	1957	1954	1954	1954	1954
R-squared	0.038	0.153	0.163	0.169	0.188

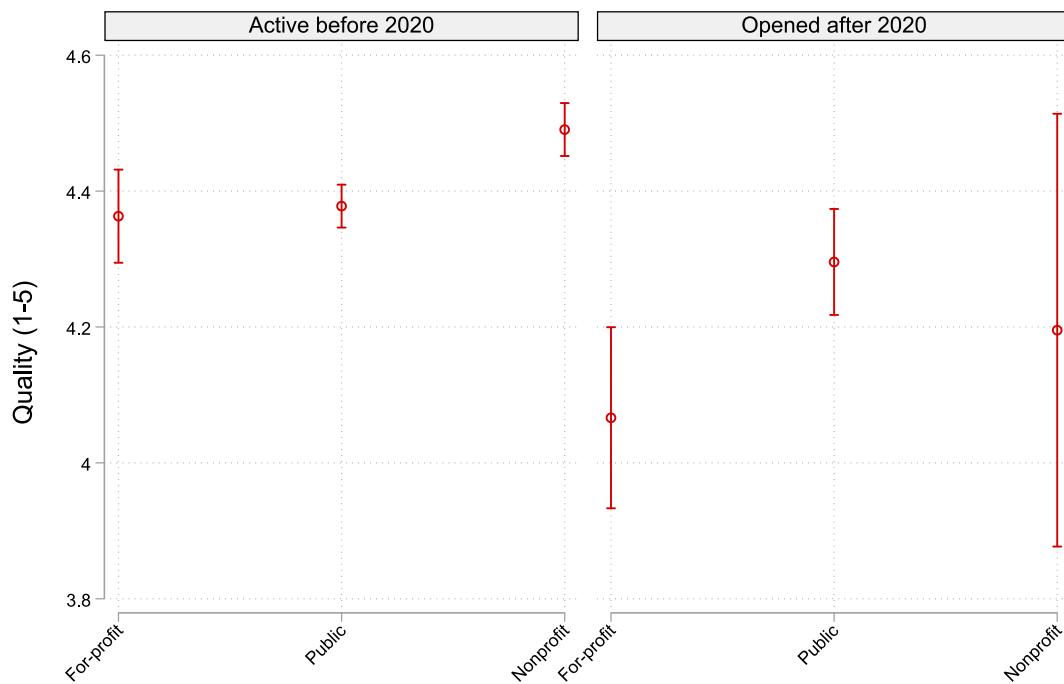


Fig. 3. Predicted quality scores by ownership status for recently opened providers.

Note: The predicted probabilities are calculated based on the fully adjusted results in model 5 in Table 3.

controlling for provider age (column 6), the difference between public and for-profit provision loses statistical significance.

To further test this, we ran the fully adjusted model with an interaction term between ownership and provider age (Appendix Table A2). Fig. 3 displays the predicted quality scores based on this interaction, which shows that among established providers (active before 2020), for-profit providers (4.36) performed nearly identically to public providers (4.38). Established non-profit providers still had the highest average ratings (4.49), which was statistically significantly higher than for-profit providers (difference = 0.13, $p < 0.01$). However, recently established for-profit providers had significantly lower quality scores (4.07) compared to new public providers (4.30), a difference of 0.23 points ($p < 0.01$).

7.4. What type of ownership matters?

In Denmark and other countries, the debate on outsourcing welfare services is often characterised by inconsistent terminology regarding ownership. For instance, 'private provision' frequently comprises both for-profit and non-profit providers. Similarly, 'non-profit' can refer to both private non-profit and publicly owned providers. To test if this matters empirically, we tested differences between alternative ownership categorisations. Table 4 presents these comparisons, with columns 1–4 showing quality outcomes (OLS regressions) and columns 5–8 showing sanction outcomes (logistic regressions). Predicted

probabilities are presented in Fig. 4.

When comparing private (combined for-profit and non-profit) versus public provision (columns 1–2 and 5–6), we found that private providers scored 0.06 points higher on quality scores after adjusting for covariates (95 % CI [0.002, 0.12], $p < 0.05$). However, private providers had 3.10 times higher odds of being sanctioned (95 % CI [1.83, 5.10], $p < 0.01$). This reveals an important nuance: while average quality ratings across all private providers are slightly higher than among public providers, this masks substantial variation within the private sector. The high average quality ratings of non-profit providers appears to offset the lower ratings of for-profit providers. Yet, the risk of serious quality failures requiring regulatory intervention remains substantially higher in the private sector overall.

The difference between for-profit and non-profit providers (combining public and private non-profit providers, columns 3–4 and 7–8) are more consistent. For-profit providers score 0.12 points lower on the quality scale (95 % CI [-0.18, -0.05], $p < 0.01$) and had 2.41 times higher odds of being sanctioned (95 % CI [1.54, 3.78], $p < 0.01$) in fully adjusted models. These alternative comparisons demonstrate that the key distinction in quality outcomes may not be between public and private provision as such, but between for-profit and non-profit provision, regardless of whether the non-profit provider operates in the public or private sector. This suggests that the profit motive, rather than private versus public ownership, may be the more relevant factor in determining service quality.

Table 4

Ownership comparisons in quality and sanctions.

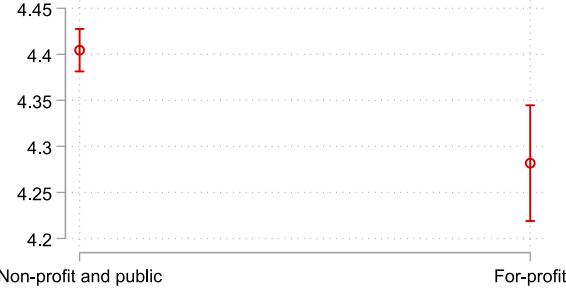
	Quality (OLS regression)				Sanctions (logistic regression)			
	(1) No controls	(2) Full model	(3) No controls	(4) Full model	(6) No controls	(7) Full model	(8) No controls	(9) Full model
Ownership Public (reference)								
Private (for-profit and non-profit)	0.042 [-0.026,0.111]	0.063** [0.002,0.123]			2.368*** [1.634,3.432]	3.057*** [1.830,5.107]		
Public and non-profit sector (reference)								
For-profit			-0.172*** [-0.250,-0.093]	-0.123*** [-0.193,-0.052]			2.396*** [1.713,3.350]	2.412*** [1.539,3.782]
Observations	1957	1954	1957	1954	2171	2171	2171	2171
R-squared & Pseudo R-squared	0.002	0.184	0.020	0.189	0.024	0.107	0.020	0.104

Multivariate and logistic regressions. Models 5-8 are in odds ratio. 95% confidence intervals in parentheses. See full models in Appendix Table A4. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

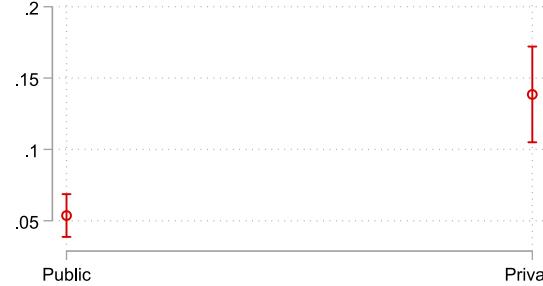
Quality: Private (non-profit and for-profit) versus public



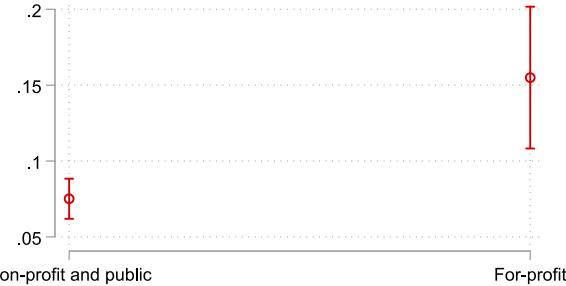
Quality: For-profit versus public and non-profit



Sanctions: Private (non-profit and for-profit) versus public



Sanctions: For-profit versus public and non-profit



Based on the fully adjusted OLS and logistic regression models in Table 4

Fig. 4. Alternative ownership comparisons.

7.5. Robustness checks

We conducted several robustness checks to test the validity of our findings. First, we ran negative binomial regression models to analyse sanction counts while accounting for overdispersion (Appendix Table A5). These models confirm our main findings, with public and non-profit providers having significantly fewer sanctions overall compared to for-profit providers. Second, we ran two specification curves (Simonsohn et al., 2020) on all possible variable compositions in our sanctions and quality models (Appendix Figures A16-A17). The specification curves confirm our main findings: variation in quality scores between for-profit and public provision is strongly correlated with provider age, whereas non-profit providers perform better than for-profit services regardless of how the model is specified. For sanctions, there is virtually no model composition where for-profit services are not more likely to be sanctioned than non-profit and public provision. Third, we analysed quality scores by theme to determine whether the role of ownership varied across different dimensions of quality (Appendix Table A6). Ownership was generally statistically significant in six of the seven quality themes, except for 'Education and employment' (Theme 1) (no statistically

significant ownership differences) and 'Physical environment' (no statistically significant difference between public and for-profit) (Theme 7). Fourth, we ran a number of interaction models across client and service types, which indicated that the association between ownership and sanctions did not differ significantly by clients (children, adults, mixed), or by being a long-term residential facility or children's home (Appendix Figures A7-A9). For quality ratings, we found modest variation by service context that were consistent across ownership types (Appendix Figures A10-A13). Fifth, we examined provider closure as an outcome rather than a control variable (Appendix Figures A3-A4). For-profit providers were more likely to close during the study period, but differences in closure probability across ownership were only marginally significant. We also found that closed for-profit providers had substantially worse quality ratings and higher sanction rates than active for-profit providers, while this gap was much smaller or absent for public and non-profit providers (Appendix Figures A14-A15). Last, we tested alternative geographic fixed effects specifications (Appendix Table A1). Using municipality fixed effects instead of regional fixed effects did not change the direction or significance of the role of ownership for sanctions. For quality scores, municipality fixed

effects led to a significant difference between public and for-profit providers, even when adjusting for provider age.

8. Discussion

This study provides the first nationwide examination of service quality and malpractice among all Danish public, non-profit, and for-profit social service facilities from 2020 to 2024. The analyses revealed four key findings.

First, we document a significant shift in Danish social service provision, with for-profit providers increasing by 44.1 % over just five years, while public and non-profit provision remained stagnant or slightly declined. The growth in for-profit provision outpaced all other ownership types, and private for-profit provision now represents 18.3 % of the market. Second, we found that for-profit ownership is associated with a higher sanction probability compared to public and non-profit facilities. This pattern was consistent across all sanction types, but the strongest ownership-specific associations were for the most serious sanctions (intensified monitoring and forced closures). Third, our analysis of quality scores showed that non-profit providers performed the best of all ownership types, while the quality of for-profit provision was variable. Older for-profit providers (established before 2020) performed comparably to public ones, while newer for-profit providers performed worse than newer public providers. However, the sanction likelihood for for-profit providers was consistently higher regardless of provider age. This suggests that there may be a 'learning effect' in terms of improving adherence to the quality framework as providers gain experience, but the risk of being sanctioned remains higher among for-profit provision irrespective of provider experience. Fourth, using alternative ownership classifications, we found that the key distinction in quality and sanction outcomes was not between public and private provision per se, but between for-profit and non-profit provision. Increased likelihood of sanctions and lower quality scores was specifically associated with for-profit status rather than private provision in general.

These findings have several implications for theoretical debates on social service marketisation. From a comparative welfare state perspective, the results suggest that even within a Nordic context characterised by strong regulatory institutions and a tradition of universalist service provision (Blomqvist, 2004; Esping-Andersen, 1990; Fischer and Kvist, 2023), marketisation can lead to stratification in service quality. That for-profit expansion appears associated with worse performance challenges the assumption that public accountability can reliably offset the risks introduced by private ownership. In this sense, the Danish case serves as a critical case: if outsourcing to for-profit actors is associated with adverse outcomes under strong regulatory conditions, such outcomes may be even more pronounced in systems with weaker institutional safeguards. We could therefore expect ownership differences in quality and inspection outcomes to be more pronounced in liberal market economies with less state oversight. Recent evidence from the UK appears to support this (Bach-Mortensen et al., 2024b).

From a market design perspective, the findings support the view that structural conditions in welfare markets, such as incomplete contracts, user complexity, and information asymmetries, undermine the ability to achieve effective competition and performance-based selection. The differential performance of for-profit and non-profit providers aligns with the theoretical expectation that non-profit actors may be more mission-driven and less susceptible to cost-cutting incentives when oversight is difficult or imperfect (Weisbrod, 1989; Billis and Glennerster, 1998). The poorer performance of recently established for-profit providers suggests a lack of institutional learning that has implications for how market entry is managed and regulated.

Empirically, our findings align with the international research on ownership differences in social care services (Barron and West, 2017; Winblad et al., 2017). However, these findings contrast with previous research on residential care for older people in Denmark (Hjelmar et al., 2018), which found minimal variation between ownership types. This

discrepancy is likely explained by two key factors. First, outsourcing is substantially more widespread in social services than for residential care for older people (Fischer and Kvist, 2023). Second, the current budget challenges facing social service provision coupled with fragmented data practices, asymmetric information between commissioner and providers, and limited user choice capabilities are likely to exacerbate ownership-related quality differences.

The findings in this study also reinforce the policy diagnosis of the recent Social Services Expert Committee report: residential care markets may be structurally ill-suited for price-based competition due to inelastic demand, limited provider substitutability, and high information asymmetry (Social Services Expert Committee, 2024). The findings in our study support that market-based incentives may be misaligned with public welfare objectives, which suggest that regulatory measures, such as reference pricing, strategic commissioning, and reinvestment of profit requirements, could potentially address inverse provider incentives.

Another policy implication of the results is that policy should avoid treating all private provision as equivalent. The observed differences between for-profit and non-profit provision suggest that blanket approaches to outsourcing may encourage expansion in lower-performing for-profit providers. An alternative approach is being piloted in Wales, which is banning for-profit children's social services and thereby restricting all outsourcing in this sector to non-profit providers (Welsh Government, 2024). Second, market dynamics appear poorly aligned with quality: for-profit growth has continued despite weaker performance, while high-performing non-profit providers rarely enter the market and are more likely to close, which echoes findings from England on the decline of public and non-profit providers (Bach-Mortensen et al., 2024b). This raises questions about the role of competition in ensuring quality provision. While theory suggests that competition should reduce quality gaps between ownership types (Sloan et al., 2001), recent evidence indicates that acquisition strategies employed by private equity-backed for-profit nursing and hospital providers may actually reduce effective competition due to local market dominance (Gandhi et al., 2023; Kunz et al., 2024). Future research should examine how the role of ownership varies by the level of local market competition and whether provider concentration influences quality outcomes in social service provision.

9. Limitations

Several limitations should be considered when interpreting our results. First, while our models adjust for provider characteristics and service types, we cannot establish causal effects of ownership. Second, our quality measures are based on regulatory assessments rather than direct user experiences or long-term outcomes. Without individual-level resident data, we cannot fully account for differences in case complexity across providers. Third, variation in inspection practices across the five regional regulatory bodies may introduce unobserved heterogeneity, though we adjust for regional and municipality (Appendix Table A1) fixed effects. Fourth, we cannot determine whether provider closures represent ownership transfers or genuine exits from the market, as the registration data does not allow us to track ownership changes. Fifth, there may be reporting bias if regulators apply a higher level of scrutiny to for-profit providers, though the standardised inspection framework should minimise this concern.

10. Conclusion

This study highlights the systemic tension between outsourcing and service quality in publicly funded social services. Despite Denmark's strong regulatory institutions and its Nordic welfare model, ownership remains a key determinant of service quality and regulatory compliance. For-profit provision, now the fastest-growing ownership form, was associated with poorer outcomes. Quality scores were comparatively lowest for newer for-profit entrants, while sanction risk was consistently high regardless of experience. This discrepancy between performance

and market growth raises serious concerns about the effectiveness of existing procurement strategies and current market governance in outsourced social care.

These results challenge the notion that outsourcing will facilitate improved quality in social service provision. Instead, our findings highlight the need for policy to explicitly consider ownership type. Addressing issues of information asymmetry, strategic commissioning, and the sustainability of high-quality provision is essential for the long-term effectiveness of the sector. This paper contributes to that agenda by offering empirical evidence and theoretical framing that clarify how marketisation can undermine care quality, even in a highly institutionalised welfare state setting.

If significant disparities in quality across ownership type can be documented in Denmark, they likely exist - and may be stronger - under weaker regulatory and welfare conditions. Future research should continue to explore policy pathways that combine provider innovation with accountability in the pursuit of sustainable, high-quality social services. This study compels us to confront the fundamental question at the heart of welfare governance: who truly cares best for those in need, a question that becomes all the more urgent when ownership, quality, and regulatory oversight intersect so visibly in the lives of those most dependent on care.

CRediT authorship contribution statement

Anders Bach-Mortensen: Writing – review & editing, Writing – original draft, Visualization, Validation, Supervision, Methodology, Funding acquisition, Formal analysis, Data curation, Conceptualization. **Benjamin Goodair:** Writing – review & editing, Visualization, Validation, Conceptualization. **Ole Helby Petersen:** Writing – review & editing, Validation. **Jon Kvist:** Writing – review & editing, Validation.

Statement EA

Ethics approval/statement EA.

Not applicable: The analyses is based on provider level registration data.

Funding

Funding is gratefully acknowledged from the Carlsberg Foundation and the Nuffield Foundation.

Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.socscimed.2025.118804>.

Data availability

The full dataset and analysis code can be found on the Open Science Framework <https://osf.io/abxuk/overview>.

References

Andrews, R., Beynon, M.J., McDermott, A., 2019. Configurations of new public management reforms and the efficiency, effectiveness and equity of public healthcare systems: a fuzzy-set qualitative comparative analysis. *Public Manag. Rev.* 21 (8), 1236–1260.

Anntonen, Anneli, Karsio, Olli, 2017. How marketization is changing the nordic model of care for older people. In: Martinelli, Flavia, Anntonen, Anneli, Mätzke, Margitta (Eds.), *Social Services Disrupted*. Edward Elgar, Cheltenham.

Bach-Mortensen, A., Goodair, Benjamin, Barlow, Jane, 2022. Outsourcing and children's social care: a longitudinal analysis of inspection outcomes among English children's homes and local authorities. *Soc. Sci. Med.* 313, 115323.

Bach-Mortensen, A., Goodair, B., Degli Esposti, M., 2024b. Involuntary closures of for-profit care homes in England by the Care Quality Commission. *Lancet Healthy Longev.* 5 (4), e297–e302.

Bach-Mortensen, A., Benjamin, Goodair, Esposti, Michelle Degli, 2024b. Does outsourcing enable the survival of good care homes? A longitudinal analysis of all care homes in England, 2011–2023. *BMJ Public Health* 2 (2).

Barron, David N., West, Elizabeth, 2017. The quasi-market for adult residential care in the UK: do for-Profit, Not-for-Profit or public sector residential care and nursing homes provide better quality care? *Soc. Sci. Med.* 179, 137–146.

Bayindir, E.E., 2012. Hospital ownership type and treatment choices. *J. Health Econ.* 31 (2), 359–370.

Besley, T., Ghatak, M., 2005. Competition and incentives with motivated agents. *Am. Econ. Rev.* 95 (3), 616–636.

Billis, David, Glennerster, Howard, 1998. Human services and the voluntary sector: towards a theory of comparative advantage. *J. Soc. Pol.* 27 (1), 79–98.

Blomqvist, P., 2004. The choice revolution: privatization of Swedish welfare services in the 1990s. *Soc. Pol. Adm.* 38 (2), 139–155.

Brown, Trevor L., Matthew, Potoski, 2003. Managing contract performance: a transaction costs approach. *J. Pol. Anal. Manag.* 22 (2), 275–297.

Danish Authority of Social Services and Housing, 2025. *Kvalitetsmodellens opbygning*. <https://www.sbst.dk/tvaergaende-omrader/socialtilsyn/haandbog-for-socialtilsyn/kvalitetsmodel/kvalitetsmodellens-opbygning>. (Accessed 12 March 2025).

Dickinson, Helen, Carey, Gemma, Malbon, Eleanor, Gilchrist, David, Chand, Satish, Kavanagh, Anne, Alexander, Damon, 2022. Should we change the way we think about market performance when it comes to Quasi-Markets? A new framework for evaluating public service markets. *Public Adm. Rev.* 82 (5), 897–901.

Esping-Andersen, Gøsta, 1990. *Three Worlds of Welfare Capitalism*. Princeton University Press, Princeton, N.J.

Esteve, M., Garrido-Rodríguez, J.C., Moore, A., Schuster, C., Zafra Gómez, J.L., 2024. Assessing the effects of user accountability in contracting out. *J. Publ. Adm. Res. Theor.* 34 (2), 211–223.

Falster, E., Ringø, P., 2025. Is something rotten in the state of Denmark? Austerity measures from a child and youth perspective. *Disabil. Soc.* 40 (1), 90–107.

Fischer, Jesper Brask, Kvist, Jon, 2023. *Frihed, Lighed Og Privat Velfærd*. Gyldendal, Copenhagen.

Francois, P., 2000. Public service motivation as an argument for government provision. *J. Publ. Econ.* 78 (3), 275–299.

Gandhi, A., Song, Y., Upadrashta, P., 2023. Private equity, consumers, and competition. *Consumers, and Competition*. (Accessed 16 May 2023).

Glaeser, E.L., 2002. *The Governance of not-for-profit Firms*. National Bureau of Economic Research, Cambridge, MA. NBER working paper no. w8921.

Glazer, A., 2004. Motivating devoted workers. *Int. J. Ind. Organ.* 22 (3), 427–440.

Grand, Julian Le, Bartlett, Will, 1993. Quasi-markets and social policy: the way forward?. In: *Quasi-Markets and Social Policy*. Palgrave Macmillan UK, London, pp. 202–220.

Hansmann, Henry B., 1980. The role of nonprofit enterprise. *Yale Law J.* 89 (5).

Harrington, C., Jacobsen, F.F., Panos, J., Pollock, A., Sutaria, S., Szebehely, M., 2017. Marketization in long-term care: a cross-country comparison of large for-profit nursing home chains. *Health Serv. Insights* 10, 1178632917710533.

Hart, O., Moore, J., 2007. Incomplete contracts and ownership: some new thoughts. *Am. Econ. Rev.* 97 (2), 182–186.

Hart, O., Shleifer, A., Vishny, R.W., 1997. The proper scope of government: theory and an application to prisons. *Q. J. Econ.* 112 (4), 1127–1161.

Henriksen, L.S., Smith, S.R., Zimmer, A., 2012. At the eve of convergence? Transformations of social service provision in Denmark, Germany, and the United States. *Voluntas Int. J. Voluntary Nonprofit Organ.* 23, 458–501.

Hjelmar, Ulf, Yosef, Bhatti, Helby Petersen, Ole, Rostgaard, Tine, Vrangbæk, Karsten, 2018. Public/private ownership and quality of care: evidence from Danish nursing homes. *Soc. Sci. Med.* 216, 41–49.

Horwitz, J.R., 2005. Does Corporate Ownership Matter? Service Provision in the Hospital Industry. NBER Working Paper no. 11376. <http://www.nber.org/papers/w11376>.

Horwitz, J.R., Nichols, A., 2009. Hospital ownership and medical services: market mix, spillover effects, and nonprofit objectives. *J. Health Econ.* 28 (5), 924–937.

Howell-Moroney, M., 2024. Inconvenient truths about logistic regression and the remedy of marginal effects. *Public Adm. Rev.* 84 (6), 1218–1236.

Kunz, J.S., Propper, C., Staub, K.E., Winkelmann, R., 2024. Assessing the quality of public services: for-profits, chains, and concentration in the hospital market. *Health Econ.* 33 (9), 2162–2181.

Kvist, Jon, 2012. *Changing Social Equality: the Nordic Welfare Model in the 21st Century*. Policy Press.

Le Grand, Julian, 1991. Quasi-markets and social policy. *Econ. J.* 101, 1256–1267.

Meagher, Gabrielle, Szebehely, Marta (Eds.), 2013. *Marketisation in Nordic Eldercare: a Research Report on Legislation, Oversight, Extent and Consequences*. Stockholm Studies in Social Work, vol. 30. <http://www.diva-portal.org/smash/get/diva2:667185/FULLTEXT01.pdf>.

Ministry for Social Affairs and Housing (Denmark), 2013. Social supervision act. <https://www.english.sm.dk/media/14902/act-on-social-supervision.pdf>.

Ministry for Social Affairs and Housing (Denmark), 2024. <https://www.sm.dk/arbejd/somraader/viden-analyse-og-data/tilbudsportalen>.

Norton, E.C., Dowd, B.E., Garrido, M.M., Maciejewski, M.L., 2024. Requiem for odds ratios. *Health Serv. Res.* 59 (4), e14337.

OECD, 2024. Is care affordable for older people? https://www.oecd.org/en/publications/is-care-affordable-for-older-people_450ea778-en/full-report.html. (Accessed 15 February 2025).

Patient Safety Authority (Denmark), 2023. Erfaringsopsamling: fortsat problemer med patientsikkerheden på landets bosteder. <https://stps.dk/nyheder/2023/sep/erfaringsopsamling-fortsat-problemer-med-patientsikkerheden-paa-landets-bosteder>. (Accessed 3 September 2024).

Petersen, O.H., Hjelmar, U., Vrangbæk, K., 2018. Is contracting out of public services still the great panacea? A systematic review of studies on economic and quality effects from 2000 to 2014. *Soc. Pol. Adm.* 52 (1), 130–157.

Simonsohn, U., Simmons, J.P., Nelson, L.D., 2020. Specification curve analysis. *Nat. Hum. Behav.* 4 (11), 1208–1214.

Sloan, F.A., Picone, G.A., Taylor Jr, D.H., Chou, S.Y., 2001. Hospital ownership and cost and quality of care: is there a dime's worth of difference? *J. Health Econ.* 20 (1), 1–21.

Social Services Expert Committee (Denmark), 2024. *Ekspertudvalget på socialområdets endelige rapport*. <https://www.sm.dk/publikationer/2024/apr/ekspertudvalget-paa-socialomraadets-endelige-rapport>. (Accessed 1 August 2024).

Stolt, Ragnar, Blomqvist, Paula, Winblad, Ulrika, 2011. Privatization of social services: quality differences in Swedish elderly care. *Soc. Sci. Med.* 72 (4), 560–567.

Walker, C.C., Druckman, A., Jackson, T., 2022. A critique of the marketisation of long-term residential and nursing home care. *The Lancet Healthy Longevity* 3 (4), e298–e306.

Weisbrod, Burton A., 1989. Rewarding performance that is hard to measure: the private nonprofit sector. *Science* 244 (4904), 541–546.

Welsh Government, 2024. 'Eliminating profit from children's residential and foster care: evidence review | GOV. WALES. <https://www.gov.wales/eliminating-profit-childrens-residential-and-foster-care-evidence-review>. (Accessed 26 August 2024).

Winblad, Ulrika, Blomqvist, Paula, Karlsson, Andreas, 2017. 'Do Public Nursing Home Care Providers Deliver Higher Quality than Private Providers? Evidence from Sweden'. *BMC Health Serv. Res.* 17 (1).