Abstract
The Nordic welfare states are considered to be universalistic and to provide generous benefits and services. National equality presupposes centralised schemes implemented through national agencies. In the Nordic countries, the municipalities calibrate and provide care services. This article asks what are the reasons for municipal variation in elder care services provision in Norway? Building on theories of local autonomy, the explanatory variables are the state monetary transfer system, local government, municipal demography and structure, and path dependency. The data consists of municipal registry data from Statistics Norway. The main finding of a regression analysis of data from 2014, is that the state transfer system is the principal variable explaining the current municipal variation in elder care services in Norway. The conclusion is that policies at the national level matter more than local politics and needs when explaining the current differences in service provision between municipalities. The finding enlightens the blame-shifting between higher and lower tiers of government concerning the perceived shortcomings in elder care services provision, and suggests that a revision of the monetary transfer system might be more appropriate than increased legislation if the aim is decreased municipal differences in this area.

Introduction
The idea that modern welfare states can be grouped into distinct regimes types dominates comparative studies of welfare states (Klitgaard, 2007). This literature groups the Norwegian welfare state within the Nordic cluster of welfare regimes (Esping-Andersen, 1990: 350). The notion is that the Nordic welfare states share similar traits, the most distinctive being their universalistic approach based upon citizenship (Greve, 2004; Klitgaard, 2007). Universalism and national equality presuppose centralised schemes implemented through national agencies. In the Nordic countries, state agencies regulate and distribute cash benefits, but the municipalities calibrate and provide care services. It might be more useful to talk of ‘welfare municipalities’ (Gronlie, 1991; Kröger, 1997) rather than of a welfare state or a Nordic model when studying care regimes because of large municipal variations within each Nordic country’s care services provision (Daatland, 1997).

That one’s residential location decides the probability of receiving care and services in old age is not the established policy in social service states (Fimreite & Flo, 2002: 314; Trydegård & Thorslund, 2001: 175). Geographical inequality in welfare services, such as elder care, challenges the concept of a uniform and universal welfare state. Nevertheless, it is important to note that whether to allow municipal differences in service provision levels is a normative question. This article asks: what are the reasons for municipal variation in elder care services provision in Norway?

Keywords:
- National equality
- Local autonomy
- Welfare
- Elder care services
- Norway
Knowledge about the reasons for municipal differences in elder care services provision is important for at least three reasons. First, to challenge or confirm the notion that municipal differences are caused by different local needs or different priorities set by local governments, thus the result of local autonomy. Secondly, to calibrate national government steering tools to obtain the intended degree of universalism in services provision. And thirdly, to enlighten the blame-shifting and distribute accountability between higher and lower tiers of government concerning the perceived shortcomings in elder care services provision. The decentralised responsibility for elder care services provision in the Nordic countries leads to opportunities for blame-shifting because decentralisation makes the line of accountability unclear (Pollitt, 2005: 381). So far, there is little knowledge about the reasons for municipal variation in elder care services in the Nordic countries (Jensen & Lolle, 2013: 350; Savla, 2008: 48). We do not know because the existing literature is inconclusive (Davey et al., 2006; Jensen & Lolle, 2013; Savla, 2008; Trydegård & Thorslund, 2001, 2010).

This article contributes to the body of literature on care regimes and the Scandinavian model of public care services. It also contributes to the body of literature on local differences in services provision by differentiating between local factors and central financial constraints on local autonomy. It does so by investigating four possible reasons for municipal differences; the state monetary transfer system, local government, municipal demography and structure, and path dependency.

The state monetary transfer system provides the economic frames within which local government can provide services according to need among the population. If municipal differences are due to different municipal demography and structure or local government, differences are a result of local autonomy. If municipal differences are due to different sized municipal revenues, the differences are a result of national policies. This is because, in Norway, the municipal revenue is a virtually exogenous variable to the municipality (Aaberge & Langørgen, 2003; Borge & Rattsø, 1995; Monkerud & Sørensen, 2011). The calculation of the municipal revenue is based on structural features outside local government control, and central government decide local government tax rate and tax base. Because all municipalities levy the maximum local tax rate, and this revenue is included in the state monetary transfer system, Norwegian municipalities have limited opportunities to influence their revenue, in fact much fewer than both Swedish and Danish municipalities have (Lewin et al., 2008; Monkerud & Sørensen, 2011; Skjøveland & Serritzlew, 2010). It is therefore possible to consider the municipal revenue a result of national policies.

The subsequent section presents a theory of local autonomy. The succeeding section concerns municipal autonomy and national equality in Norway. The section explains how both national equality and municipal autonomy can exist side by side, and provides an insight into the Norwegian context of regulations concerning service provision and state transfers to the municipalities. The fourth section investigates the current dispersal of municipal elder care services before
section five describes the data and methods. Section six presents the findings and the last section contains a discussion and conclusion.

Local autonomy
The national government establishes a framework for the formal organisation of welfare. To ensure a certain level of standardisation and equal priorities throughout the country, the national government makes decisions regarding the direction of social services (Pollitt, 2005: 381; Spicker, 2008: 135). The national government has a set of tools with which to influence services provision by local governments in the desired direction. These consist of organisation, regulations, economic means, and information (Hood, 2008; Vedung, 2011). When the responsibility for services provision is divided between policy levels, the main principle is that the national level handles economic transfers and rights that are universalistic in character. Services provision and transfers that are prone to individual discretion and local conditions are handled at the local level (Powell & Boyne, 2001: 184). This structure normally means that national policies pose specific demands and performance criteria on local policies and services provision. To meet national performance criteria, the local level must develop strategies that correspond with local needs (van Gestel & Herbillon, 2010: 417).

Local autonomy is a concept that has many meanings and interpretations, and it does not have a stable definition. It is a contextual concept that needs operationalisation as it is better defined in terms of more or less than either or. The type and degree of local autonomy are related to the national government’s steering tools. More specifically, according to Pratchett (2004), local autonomy has three key elements; freedom from central interference, freedom to effect particular outcomes, and the reflection of local identity.

Freedom from central interference is an approach to local autonomy based on constitutional and legal understandings of central–local relations (Pratchett, 2004: 363). The degree of freedom from central interference depends upon the degree of discretion that local authorities have from central government, and the extent to which national governments delegate power and authority to local governments. The freedom from central interference is related to what Clark (1984) calls power of immunity. The power of immunity is essentially the power of localities to act without fear of the oversight authority of higher tiers of the state. Freedom from central interference is largely constrained by a range of political and economic factors. When local autonomy depends on national legislation, legislation affects opportunities for, and may limit, local autonomy (Clark, 1984: 198). However, it is the financial independence of local government that is often deemed the most significant. Financial independence is the right to raise revenue and set spending priorities independently of central government. The argument of financial autonomy rests on the notion that legal, political, and organisational autonomy is meaningless without the resources to realise the benefits of such autonomy (Pratchett, 2004: 364).
The freedom to effect particular outcomes approach is related to constitutional and legal freedoms from central interference, but also the consequences of such freedoms. It deals with the rights and obligations of local authorities to undertake particular activities to influence the well-being of their citizens (Pratchett, 2004). The ‘freedom to’ approach is a designation of local governments’ leeway for discretion to pursue particular outcomes in their jurisdiction, and is the source of local variation under otherwise equal conditions.

The reflection of local identity is a bottom-up phenomenon where localities reflect and develop a sense of place through political and social interaction. It is a combination of the discretion to practice local politics in preferred ways and the freedom to express local identity through political activity and processes (Pratchett, 2004: 366-367). To be able to combine competing values and preferences to promote local identity, local governments must have authority to act. Local autonomy can only reflect local identity if local governments have both the power and ability to perform their duties and to be responsive to citizens’ needs and demands. This relates to what Dahl and Tufte (1973) calls cultural capacity, a conception of ‘how we do things around here’. Past service levels might foster expectations about future service levels and create a path dependency.

Autonomy and equality in Norway

In Norway, both national equality and local autonomy are highly valued, and would not necessarily be viewed as contradictory (Rose & Skare, 1996; Vabo & Burau, 2011). This is what Kröger (2011: 149) calls the paradox of the Nordic model of welfare governance. The model seeks to uphold the principle of local freedom, however, realising its ambitions for equality requires that local harmonisation and central regulation are perceived as indispensable. Norwegian municipalities’ tasks are negatively defined, which means that municipalities can take on all tasks not assigned by legislation to other administrative bodies. Norwegian municipalities are both the driving force in welfare services invention and a useful tool in promoting territorial equity and equality between population groups (Fimreite & Flo, 2002: 314). All municipalities must adhere to national legislation granting all citizens the same right to services. As a result, the municipalities are simultaneously organisational tools for achieving national policy goals and autonomous units responsible for providing services to their citizens (Grønlie, 2004). They are not direct arms of central government, but are subject to a variety of structural, political, and economic pressures (Fimreite, 2003).

Norway consists of 428 municipalities with an average of 12 000 inhabitants (median is 4 600), ranging between 200 inhabitants in the smallest municipality and 630 000 in the largest (ssb.no, table 01222, in 2014). The population is distributed unevenly, with both sparsely populated areas and urban areas. Five out of eight public employees work in the municipalities (ssb.no, table 09174). Local politicians govern the municipalities. Elections are held every four years and there is a proportional representation of parties. Parties that participate in local
elections are essentially the same parties that participate in national elections. In addition there are local parties. However, municipal politics do not adhere to the same cleavage lines as politics on the national level does; local coalitions can consist of highly unanticipated political partners (Saglie et al., 2016).

Local autonomy in Norway

The Nordic welfare states’ intention is to make uniform provision of welfare services the main duty of local authorities, although it is a challenge to their autonomy (Kröger, 1997: 95). Nordic countries have come to consider elder care a public responsibility rather than borne by the individual, the family, or the market (Ervik et al., 2013; Pavolini & Ranci, 2008; Smith, 2010: 234). Elder care is always an important topic in electoral campaigns, and there is little to indicate that public responsibility for elder care will diminish in the near future (Aardal, 2006; Bye, 2015; Lien & Pettersen, 2004).

Municipal autonomy has a long tradition in Norway and is still highly regarded (Helgøy & Serigstad, 2004: 8; Vabo & Burau, 2011). The system is decentralised, with municipalities responsible for both policymaking and service provision at the local level because of their proximity to service recipients (Haug, 2008). The formal division of responsibility for elder care services provision implies a delegation of authority and financial means from national government to local governments. Simultaneously, municipalities are dependent on decisions made at the national level concerning their organisation, competency, and transfer of authority and money (Helgøy & Serigstad, 2004). By law, municipalities must offer necessary care services (Municipal Health- and Care Services Act, 2011). The term ‘necessary’ allows scope for local interpretation and implies that citizens may not demand specific services, only those that meet their needs. The leeway for interpretation also entails that Norwegian municipalities can decide which care services to provide and at which level because service provision is discretionary (Vabo, 2012: 117). As long as municipalities fulfil all necessary needs, they are in principle free from central interference.

Norwegian municipalities provide care in nursing homes, in assisted living facilities, and in the person’s own home. Irrespective of where the person lives, care is provided according to need (Municipal Health- and Care Services Act, 2011; Regulation on nursing homes and assisted living facilities, 1988). The home care service provides care in assisted living facilities and in the person’s own home according to individual decisions made by the municipality. Nursing homes are ‘all inclusive’ with dedicated staff. The nursing home is the elder care service with the most path dependency because it has durable physical structures and is resistant to rapid change. The home care service, on the other hand, is highly flexible, and allows local politicians to show their commitment by making rapid changes. This makes the characteristics of home care services and nursing homes different (Daatland & Veenstra, 2012; Trydegård & Thorslund, 2001). However, the home care service also serves the assisted living facilities that relieve and complement the nursing homes. More assisted living facilities now provide around the clock care, making them functional equivalents to nurs-
ing homes. The present mix of nursing homes and home care services in each municipality is the result of both long-term policies in relation to the building of institutions and assisted living facilities and short-term needs and priorities. The mix is also an expression of municipal autonomy in terms of municipal freedom to effect particular outcomes and a reflection of local identity.

The organisation of responsibilities implies that the state has limited authority over services provision, which implies local government autonomy (Spicker, 2008: 135). However, the same autonomy is limited by national legislation, but in Norway, even more so by national funding systems and policy goals (Hatland, 2007: 214).

**Norwegian state monetary transfer system**

The state has a crucial role in keeping territorial inequalities under control through a common regulatory framework and the stable funding of local authorities (Andreotti et al., 2012: 1936). The fairness of resource allocation is an important criterion of public sector performance (Boyne et al., 2001: 20). It is possible to achieve territorial equity by allocating equalising grants designed to level out the effects of differences in low resources and high need. It is, however, important to note that equity does not necessarily mean equality. Some municipalities need more resources to achieve the same service provision level as that of other municipalities. Without sufficient financial means to make local priorities, local autonomy provided by organisation and legislation is limited.

Norway has a centralised system of financing. Local government revenue consists of unrestricted and restricted funds. The unrestricted funds consist of local tax revenue and block grants from the state (75 per cent of total funds), where, very simplified, the size of block grants are calculated by subtracting local tax income from estimated unrestricted funds. The restricted funds consist of earmarked grants and user fees (18 per cent of total funds). The remaining seven per cent comes from other sources (KMD, 2015). Central government decides the cap on local taxes, user fees, and property tax. User fees are in theory earmarked, and within the care services they cover only seven per cent of municipal expenses (Hagen et al., 2011). Not all municipalities levy property tax. User fees and property tax offer the only, although limited opportunity to influence current revenues (Borge & Rattsø, 1999: 36; Borge & Haraldsvik, 2009: 472).

The state transfer system has two main aims (KMD, 2015). One is to level out local economic conditions to give the municipalities equal possibilities to provide equivalent services to their inhabitants. The second aim is to facilitate the political objective of maintaining settlement in rural and remote areas. To achieve this second goal, central government provides additional funding to enable a more generous service provision and by encouraging a large public sector in these areas. The two aims are not always compatible. The first aim promotes equality, the second may lead to inequality. It has been argued that the system has shortcomings and permits unintended local differences (Langørgen, 2001). The funding system is currently under revision.
To make sure municipalities have the possibility to provide equivalent services and to level out structural differences, the calculation of the municipal unrestricted funds contains both expense and income equalisation measures (Borge & Rattsø, 1999; KMD, 2015). The basic principle of the equalisation system is that the grants are independent of local spending decisions. The expense equalisation consists of a grant per capita calculated by a formula taking into account the local tax base and local characteristics such as the age composition and the density of the population (Borge & Rattsø, 1999: 36). Municipalities can do little to influence these structural differences. The income equalisation takes place because of unequal tax bases in the municipalities. The income equalisation is not exact, simply within certain boundaries (Langørgen, 2001). The reason for this is to not deprive the municipalities of all incentives to increase their tax bases. The calculation of the expense and income equalisation measures is documented in KMD (2015).

To achieve the second goal of maintaining settlement in rural and remote areas, certain groups of municipalities receive extra grants. Municipalities in the north and south of Norway and small municipalities receive extra grants. In addition, large cities and municipalities with large population growth receive extra funding to be able to provide the same kinds of services, and to handle challenges facing large cities. Lastly, there is a discretionary grant to municipalities with special needs not captured by the ordinary state transfer system (KMD, 2015).

The result of the current financing system is that central government determines the revenues of each local government. Local decision-makers have little influence on municipal revenue, the main decision is how to allocate the fixed total budget between different services (Borge & Rattsø, 1999: 39). As a result, municipalities have little financial independence of local government. The size of the state transfers thus determines the leeway for local autonomy.

**How large is the municipal variation in elder care services?**

Before analysing possible explanations for municipal variation in elder care services provision, it is expedient to look at the range of municipal differences, and whether these differences have been increasing or decreasing over time. Davey et al. (2006) point out that municipal equality in services provision might be a sign of inequitable services, because needs differ between municipalities. Some difference in services provision between municipalities might therefore be a sign of responsiveness to differences in need, which is positive.

The dependent variable of this study is coverage levels of care services for elderly aged 80 and above in 2014. The traditional separation of home care services and nursing homes is now less clear as assisted housing staffed by the home care services and nursing homes have become functional equivalents. The dependent variable therefore combines the two services and measures the percentage of the population aged 80 and above who live in institutions or receive home care services. The variable is constructed by adding the number of persons
aged 80 and above living in institutions and the number of persons aged 80 and above receiving home care services in each municipality. This number is divided by the total number of persons aged 80 and above living in the municipality and multiplied by 100 to get the percentage (ssb.no, tables 04686 and 07459 measured on Jan 1st each year). The chosen age group consists of people aged 80 and above. The pragmatic reason is that the age of 80 is a cut-off point used by Statistics Norway and in other studies (e.g. ssb.no; Trydegård & Thorslund, 2001). It is used because many people of that age receive some kind of public care services and because many of that age live alone. Tables 1 and 2 describe the variable.

A coverage level is a measure of the municipal service provision. The reason for using these levels as opposed to municipal spending on care services is that the services have different costs in different parts of the country because of travel time, economies of scale, etc. The same level of municipal spending would, as a result, not necessarily mean the same level of service provision. Spending cannot explain the actual service provision the same way coverage levels can. Whereas spending is a measure of how much money each sector spends, coverage levels measure the actual service provision provided by spending.

Table 1: Municipal coverage levels for nursing homes, home care services and elder care services for the population aged 80 and above in 2002 and 2014.1

<table>
<thead>
<tr>
<th>Year</th>
<th>N</th>
<th>Mean</th>
<th>Mdn</th>
<th>Percentiles</th>
<th>SD</th>
<th>CV</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10</td>
<td>90</td>
<td></td>
</tr>
<tr>
<td>Nursing homes</td>
<td>2002</td>
<td>425</td>
<td>17.7</td>
<td>17.2</td>
<td>11.1</td>
<td>24.8</td>
</tr>
<tr>
<td></td>
<td>2014</td>
<td>426</td>
<td>15.0</td>
<td>14.4</td>
<td>9.0</td>
<td>21.7</td>
</tr>
<tr>
<td>Home care services</td>
<td>2002</td>
<td>427</td>
<td>39.9</td>
<td>38.8</td>
<td>30.4</td>
<td>50.7</td>
</tr>
<tr>
<td></td>
<td>2014</td>
<td>421</td>
<td>35.9</td>
<td>35.1</td>
<td>28.2</td>
<td>44.0</td>
</tr>
<tr>
<td>Elder care services</td>
<td>2002</td>
<td>424</td>
<td>57.6</td>
<td>56.0</td>
<td>46.9</td>
<td>69.3</td>
</tr>
<tr>
<td>(dependent variable)</td>
<td>2014</td>
<td>420</td>
<td>50.7</td>
<td>49.7</td>
<td>42.5</td>
<td>61.1</td>
</tr>
</tbody>
</table>

Source: Statistics Norway, tables 04467, 04468, 04686 and 07459.

Table 1 shows the municipal coverage levels for nursing homes, home care services and elder care services for the population aged 80 and above in 2002 and 2014. 2002 is used because it is the earliest year some of the variables are comparable. Table 1 demonstrates three things: firstly, that there are large differences between the municipalities with the highest and lowest coverage levels. In 2014 the difference between the tenth and ninetieth percentiles is 12.7 per cent for nursing home coverage and 15.8 per cent for home care coverage and 18.6 per cent for the dependent variable. Secondly, the numbers reveal a less generous dispersal of elder care services in 2014 than in 2002, as the tenth and the nineti-
What explains municipal variation in care service provision?

To explain the differences in elder care services coverage, the selection of independent variables builds on the three key elements of local autonomy; freedom from central interference, freedom to effect particular outcomes, and the reflection of local identity. National legislation and delegation of authority apply equally to all municipalities. Freedom from central interference is therefore operationalised as municipal revenue. Freedom to effect particular outcomes is operationalised as a political variable, and the reflection of local identity is operationalised as both need among the population and as path dependency.

Independent variables

Several studies of variation in elder care services in Norwegian municipalities indicate that structural variables such as the share of the elderly population living alone, age composition, and degree of urbanisation influence the need for care services in the municipality (Borge & Haraldsvik, 2005; Brevik & Nygård, 2013; Daatland, 2014; Hagen et al., 2011; Hjelmbrekke et al., 2011). The same explanatory variables have uncovered municipal variation in Denmark and Sweden (Jensen & Lolle, 2013; Trydegård & Thorshlund, 2001).

The proportion of elderly living alone is an indication of the general need within the elderly population (Hagen et al., 2011; Jensen & Lolle, 2011; 2013: 367; Trydegård & Thorshlund, 2001). Elderly couples who live together can take care of one another, whereas elderly people who live alone become more reliant upon family and public services. It is likely that the public services are responsive to citizens’ needs.

H1: The more elderly who live alone, the higher the coverage of public elder care services.

The operationalisation of the variable is the proportion of the municipal population aged 80 and above living alone in 2014 (ssb.no, table 04902).

Cox (1998: 10) states that municipal variation is a function of the relative importance of the rights of elderly people balanced against those of other claimants. Borge and Rattsø (1995) find that there is a clear negative effect of age group size on spending per client. Studies that are more recent also conclude that the larger the share of elderly in the population, the fewer elder care services in the municipality (Borge & Haraldsvik, 2005; Daatland, 2014). Hagen et al.
(2011) find the same effect for institutional coverage, but not for home care services. One possible reason for this effect is economies of scale. It is reasonable to assume that offering services to more of the elderly might reduce the cost per unit. For example, the cost of running an institution is lower per person the more beds it has in use. Jensen and Lolle (2013) explain that the greater the share of older people, the more pressure on the budget, which leads to lower spending per person. Lower spending can induce municipalities to offer a less expensive service, such as more home care services and less residential care, or, induce them to run the services more cost efficiently. If lower spending equals lower coverage levels, then a larger share of elderly in the municipality would mean a higher threshold for receiving services and more competition among the elderly for services. As the dependent variable is coverage levels and not municipal spending, this study can shed light on whether a larger share of elderly in the municipality actually leads to reduced service provision or simply cost efficiency. Because elder care is an important topic in Norwegian elections, the hypothesis is contrary to other studies’ findings.

H2: The larger the proportion of elderly in the municipality, the higher the elder care services’ coverage level.

The variable’s operationalisation is the percentage of the municipal population aged 80 years and above in 2014 (ssb.no, table 07459).

Norway is an elongated country with rural and sparsely populated areas. Low population density increases the cost of care services as travel distances for home care staff and service delivery require more person-hours for travel to help the same amount of people (Borge & Haraldsvik, 2005; Hagen et al., 2011; Trydegård & Thorslund, 2001: 178). It is probably cost efficient for municipalities with a sparse, spread out population to bring together in centrally located institutions or assisted living facilities those needing care services. This solution could influence spending on service provision, but not necessarily the coverage levels. Replacing one service (home care) with another service (nursing home) does not affect the coverage levels. However, previous studies have found a negative relationship between elder care services and the degree of urbanisation (Borge & Haraldsvik, 2005). One explanation offered is that the minimum capacity in small municipalities will be large relative to the number of inhabitants. Another possible explanation is that this variable measures underlying factors such as differences in population composition regarding age and education, employment patterns, social networks, and contact between the municipality and citizens (Lien & Pettersen, 2004; Monkerud & Sørensen, 2011). The literature on the dispersal of elder care services in Norway is the basis for the third hypothesis:

H3: The higher the population density, the lower the elder care services coverage.
The variable is measured as the percentage of the municipal population living in urban or densely populated areas (according to the Statistics Norway definition ssb.no, table 04902).

Local elections decide the composition of municipal government. There is reason to believe that municipalities differ in their provision of welfare services according to whether the political left or right governs. Traditionally, the political left and the labour movement were driving forces in developing the welfare state (Bolzendahl & Brooks, 2007; Trydegård & Thorslund, 2001: 178). The situation in Norway is such that the Progressive Party, Norway’s most right-wing party, strongly promotes more funding for elder care services (Bjørklund & Saglie, 2004). However, local party politics may not directly reflect national party politics (Hanssen & Vabo, 2012: 137). Overall considerations in the municipalities may overshadow party cleavages at the national level. Consensus orientation, and blurry party lines may restrain party differences locally (Bukve & Saxi, 2014; Saglie et al., 2016). Neither Jensen and Lolle (2011) nor Trydegård and Thorslund (2001) found any significant relationship between the percentage of leftist mandates and municipal spending and coverage levels in Denmark or Sweden.

H4: In municipalities where the largest party comes from the left wing, the elder care services’ coverage levels are higher.

The operationalisation of local government is a dummy variable: the largest political party in the local election, measured by the number of seats won, is assigned the value 1 (ssb.no, table 01182). All other parties in the municipality are assigned the value 0. It is reasonable to give the local government some time to make changes before measuring the elder care services’ coverage levels. The analysis uses the 2011 local election, while the remaining variables are measured in 2014, three years after the election. The parties included are the Labour Party (control variable), the Progress Party, the Conservative Party, the Centre Party, local parties and ‘others’.

Regulations, organisation, and supervision adhere equally to all municipalities, whereas their funding differs. It is reasonable to believe that richer municipalities have a higher service provision than do poorer municipalities simply because they can afford it. However, analysis have shown that high revenues contribute to lower efficiency in service provision (Borge & Haraldsvik, 2009). The fifth hypothesis concerns the relation between municipal economic capacity and service provision.

H5: The richer the municipality, the higher the elder care services’ coverage level.
The municipal economy is measured as the adjusted unrestricted funds at the municipality’s disposal per citizen, in thousands of NOK, in 2014 (KMD, 2014-2015; ssb.no, table 09397). Property tax is left out because to levy the tax is a municipal choice. Revenue related to hydropower is left out of the analysis because they increase the municipal differences. The starting point is the municipal unrestricted revenue. This revenue is deflated using the spending needs equalisation system as a deflator to capture the real differences across municipalities, eliminating compensation for unfavourable cost conditions (Borge & Haraldsvik, 2009: 478). Other studies have shown that a logarithmic transformation of this variable might be more appropriate because the utility value diminishes with higher revenues (Monkerud & Sørensen, 2011: 275). For simplicity however, the variable is kept in its original form.

In their analysis of Danish municipal service provision, Jensen and Lolle (2013) controlled for previous spending in the elder care sector. Their reason for doing so was to include the path-dependency argument, ‘according to which past political decisions take on a dynamic of their own’ (Jensen & Lolle, 2013: 359). This argument is in accordance with the theory of budgetary incrementalism. Budgets are normally not completely revised; new budgets are an adjusted version of previous budgets (Dempster & Wildavsky, 1979). There is reason to believe that previous coverage levels will have a highly positive correlation with present coverage levels for at least three reasons. The first reason is that infrastructure like nursing homes and assisted living facilities consists of durable structures that are highly popular in the municipalities (Daatland, 2014; Sørvoll et al., 2014). The second reason is political commitment to elder care (St.meld. nr 25, 2005-2006). Rather than drastic cuts, politicians would try to hide retrenchment in this sector by making gradual changes (Clasen, 2000; Lindbom, 2007). Thirdly, the state transfer system includes measures to keep the municipal economy stable, hence present revenue mirrors previous revenue and the related investments in services.

H6: There is a positive correlation between former and present elder care services coverage levels.

The variable is operationalised as the difference in coverage levels of elder care services between 2008 and 2014 (ssb.no, tables 04686 and 07459). By subtracting the coverage levels in 2008 from the coverage levels in 2014, municipalities who have increased their coverage levels will have a positive value, and municipalities with decreased coverage levels will have a negative value.
Table 2: Variables and ranges

<table>
<thead>
<tr>
<th>Variable</th>
<th>Min-max values</th>
</tr>
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<tbody>
<tr>
<td>Dependent variable</td>
<td>Coverage levels elder care services 2014</td>
</tr>
</tbody>
</table>

Independent variables

Block 1: Local conditions
- Per cent elderly living alone | 36.4%-86.4%
- Per cent elderly in municipality | 2.0%-9.6%
- Per cent population living in urban areas | 0%-98.4%

Block 2: Party politics
- Largest party in local election | Dummy

Block 3: Economy
- Municipal adjusted unrestricted funds per capita in 1000 NOK | 46.9-79.5 NOK

Block 4: Path dependency
- Difference in coverage levels elder care services 2008-2014 | -24.3%+-24.0%


Three separate regression analyses were done with home care services’ coverage, institutional coverage, and the combined elder care services as dependent variables, respectively. The analyses yielded very similar results, probably because nursing homes and assisted living facilities with around the clock care have become substitutes. Consequently, the study presents only the results of the analysis with the combined elder care services as dependent variable.

Data and methods

All data on municipal service provision are retrieved from the data bank of Statistics Norway (ssb.no). Every year, municipalities report on a large number of variables as part of an obligatory reporting system between the municipalities and the central government (KOSTRA). Statistics Norway have routines to ascertain the quality of data. Certain variables like the number of beds in nursing homes are reported at the municipal level, while variables like the number of home care service recipients are reported at the individual level and aggregated before publication by Statistics Norway. The advantage of using registry data are inclusion of all respondents and few missing values.

‘Coverage level’ as used in this paper is the percentage of the population within a certain age range that receives a certain service, see table 1. Coverage levels provide the possibility to compare development over time and between municipalities because the measure considers population changes. The coverage level of elder care services is the combined coverage levels of home care services.
vices and nursing homes. Other services such as food delivery services and safety alarms are not included because the aggregated data do not allow differentiating between individuals receiving one or more than one service. The omission of these services and the lack of subjective indicators measuring need or satisfaction in the registry data are shortcomings of the study.

The method used is ordinary linear regression. There are 15 municipalities with missing values on one or more variables, in most cases because of privacy considerations. In addition, one municipality is excluded from the analysis because of a reporting error. Values are missing listwise, meaning that the analysis excludes all municipalities with missing value(s). All variables have been controlled for collinearity and have been entered stepwise in four blocks.

**Findings**

Table 3 reveals that two out of three municipal structural variables are important when explaining elder care services’ coverage levels. Model 1 shows that the variable proportion of elderly living alone is positive and highly significant, confirming the first hypothesis. It is likely that the proportion of elderly living alone is an indication of perceived needs for elder care in the municipality. Hence, the finding suggests that the elder care services are responsive to needs in the population and that public care services in some cases are a substitute for spousal care. Contrary to other studies, this study does not find that the proportion of elderly in the municipality significantly affects care services provision. Hence, the second hypothesis is not confirmed. It is possible to argue that a larger share of elderly in the municipality may decrease spending on elder care services per capita, but it does not influence the coverage levels according to the findings in this study. Hence, decreased spending indicates cost efficiency, not necessarily a reduced service availability. As expected in the third hypothesis, the share of the population living in urban areas has a significant negative effect on coverage levels. This finding is in tune with findings in other studies, and suggests that urban areas have a different dynamic than do rural areas. This difference is sustained also when controlling for municipal economy.
Table 3: OLS regression. Dependent variable is coverage levels for municipal elder care services for the population aged 80 and above. All numbers from 2014, except local party variable from the 2011 local elections. N=412.

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th></th>
<th>Model 2</th>
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<th>Model 3</th>
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<th>Model 4</th>
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<tr>
<td></td>
<td>B</td>
<td>SE</td>
<td>Beta</td>
<td>B</td>
<td>SE</td>
<td>Beta</td>
<td>B</td>
<td>SE</td>
</tr>
<tr>
<td>Constant</td>
<td>34.952***</td>
<td>4.397</td>
<td></td>
<td>35.668***</td>
<td>4.475</td>
<td></td>
<td>7.447</td>
<td>4.884</td>
</tr>
<tr>
<td>Municipal structural variables</td>
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</tr>
<tr>
<td>H1 Prop. living alone</td>
<td>0.287***</td>
<td>0.059</td>
<td>0.216</td>
<td>0.276***</td>
<td>0.059</td>
<td>0.207</td>
<td>0.138**</td>
<td>0.055</td>
</tr>
<tr>
<td>H2 Prop. of pop. 80+</td>
<td>0.396</td>
<td>0.277</td>
<td>0.076</td>
<td>0.290</td>
<td>0.277</td>
<td>0.056</td>
<td>-0.000</td>
<td>0.250</td>
</tr>
<tr>
<td>H3 Prop. urban areas</td>
<td>-0.100***</td>
<td>0.015</td>
<td>-0.353</td>
<td>-0.088***</td>
<td>0.016</td>
<td>-0.309</td>
<td>-0.069***</td>
<td>0.014</td>
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<td>Local government dummies (Labour control)</td>
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<tr>
<td>H4 Progress Party</td>
<td>-1.388</td>
<td>1.954</td>
<td>-0.31</td>
<td>-1.523</td>
<td>1.748</td>
<td>-0.334</td>
<td>-0.136</td>
<td>1.580</td>
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<tr>
<td>H4 Conservative Party</td>
<td>-0.847*</td>
<td>0.859</td>
<td>-0.098</td>
<td>-2.013***</td>
<td>0.768</td>
<td>-0.107</td>
<td>-1.790***</td>
<td>0.692</td>
</tr>
<tr>
<td>H4 Centre Party</td>
<td>2.003</td>
<td>1.149</td>
<td>0.078</td>
<td>2.315***</td>
<td>1.028</td>
<td>0.090</td>
<td>1.599</td>
<td>0.928</td>
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<td>H4 Local parties</td>
<td>1.219</td>
<td>1.650</td>
<td>0.032</td>
<td>-0.274</td>
<td>1.484</td>
<td>-0.007</td>
<td>0.889</td>
<td>1.341</td>
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<td>H4 Other parties</td>
<td>2.040</td>
<td>1.489</td>
<td>0.060</td>
<td>0.495</td>
<td>1.341</td>
<td>0.014</td>
<td>-0.995</td>
<td>1.217</td>
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<td>National equalising policy</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>H5 Unrestr. funds</td>
<td></td>
<td></td>
<td></td>
<td>0.744***</td>
<td>0.074</td>
<td>0.423</td>
<td>0.712***</td>
<td>0.067</td>
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<tr>
<td>Path dependency</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>H6 Service diff 2008-2014</td>
<td></td>
<td></td>
<td></td>
<td>0.401***</td>
<td>0.041</td>
<td>0.343</td>
<td></td>
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<tr>
<td>Adjusted R2</td>
<td>0.244</td>
<td>0.256</td>
<td>0.404</td>
<td>0.517</td>
<td></td>
<td></td>
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</tbody>
</table>
Model 2 includes the local government variables. The addition modestly increases the explained variance (Adjusted R²) from 24 to 26 per cent, but does not alter the effects of the municipal structural variables. There is one significant effect: the coverage levels are 1.8 per cent lower in municipalities where the Conservative Party is the largest party than where Labour is the largest party. This finding does strengthen the argument that holds that leftist parties are more pro elder care services than right-wing parties are, and confirms the fourth hypothesis. The fact that the effect remains significant even when controlling for previous service levels in model 4 strengthens this assumption. The studies from Sweden and Denmark did not find a similar effect (Jensen & Lolle, 2013; Trydegård & Thorslund, 2001). It is possible to assume that the effect of local party politics on elder care coverage levels is easier to isolate in Norway than in Sweden and Denmark, as municipal revenue is virtually an exogenous factor. Whereas Swedish and Danish local politicians have to balance the tax level and service provision, Norwegian local politicians only have to consider provision. On the other hand, the effect of this variable is small compared to the effect from both the revenue and the path dependency variables. The importance of this finding is therefore limited.

Model 3 adds the adjusted municipal unrestricted funds. The addition of this variable augments the explained variance to 40 per cent. The coefficients show that when the municipal unrestricted funds augment by 10 000 NOK per capita (approx. €1 080), the coverage level augments by seven per cent. That means that there potentially is a 24 per cent difference in coverage levels between the richest and the poorest municipality (see Table 2). The finding confirms hypothesis five, that richer municipalities have more elder care services. The finding also supports the assumption that the state influences the level of municipal elder care services indirectly by the monetary transfer system. However, the relationship is not necessarily causal and it is not possible to say that giving the municipalities more money will guarantee that elder care services will expand.

Finally, model 4 also contains the difference between current and previous coverage levels. By including this variable in the model, the explained variance further increases to 52 per cent. There is a positive significant relationship between the coverage levels in 2014 and the change in coverage between 2008 and 2014. This means that the higher the coverage level in 2014, the larger the increase in service provision between 2008 and 2014 and vice versa. The coefficient is 0.4, indicating that there is a connection between present and previous coverage levels. Municipalities with high coverage levels in 2014 had, on average, also high coverage levels in 2008. This positive relationship confirms hypothesis six and demonstrates path dependency in elder care service provision, as previously hypothesised.

Discussion and conclusion
This article asked what are the reasons for municipal variation in elder care services provision in Norway? The question has been investigated by including four
possible reasons for municipal differences in a regression analysis; municipal demography and structure, local government, the state monetary transfer system, and path dependency. The full model 4 in the regression analysis explains more than 50 per cent of the variation in the dependent variable, which is coverage levels for municipal elder care services for the population aged 80 and above. The model shows that the independent variables proportion of the population living alone and living in urban areas as well as the dummy variable Conservative Party are significantly associated with the dependent variable. However, the independent variables with the most explicative power are the municipal revenue and path dependency. The study adds to and confirms the body of literature on the large municipal variation within the Nordic welfare states.

The analysis first investigated municipal structural factors measuring need. It is a wish that municipal differences in services provision is a reflection of need only in the egalitarian Norwegian welfare state. To have a need for care services is highly subjective. Furthermore, only persons applying for care services have their needs measured. As a result, there is no objective measure of need available at the municipal level. It is possible to argue that this is a shortcoming of the analysis. Nevertheless, the included variables provide an indication of the degree to which municipal differences are a result of different needs in the population. The analysis suggests that the municipalities are responsive to needs in the municipality, but that different needs only to a limited extent explain municipal differences in elder care services provision.

Local autonomy operationalised as local party politics manifests itself as a small significant difference between municipalities where the Conservative Party and Labour Party have the most seats. However, the main difference between municipalities is not due to local political composition, it has more to do with the economic constraints within which local politicians make their choices.

There is a significant positive correlation between municipal elder care services provision and municipal revenue. This finding indicates that despite the income and expenditure adjustment system, high-revenue local governments provide a higher elder care services coverage level relative to less affluent local governments. The path dependency variable demonstrates that previous service levels are connected to present service levels. The finding indicates that the variable is linked to an expression of local identity and is resistant to rapid changes. The path dependency variable is also linked to economy by the mechanism of budgetary incrementalism and because state economic policies aim to keep the municipal economy stable. Thus, affluent municipalities with high service coverage rates have most likely been affluent for some time affording high service levels.

Because of Norwegian demography and topography and high number of small municipalities, it is evident that the differences in revenue between municipalities would be much larger without state equalising policies. In this sense, it is fair to say that the state achieves the aim of levelling out local economic conditions. The municipalities have a more similar possibility to provide equivalent services to their inhabitants because of the state funding system. This is one side
of the so-called paradox of the Nordic model: local harmonisation and central regulation are necessary to achieve the ambitions of equality.

The other element of the paradox is local freedom, an element that presumably would promote local differences. Within elder care services provision, the analysis suggests that the local freedom to affect particular outcomes and to reflect local identity is highly contingent upon state funding policies. The local political leeway is seemingly constrained by municipal finances as well as by former service levels and priorities. These in turn were also chosen because of previous economic boundaries.

The findings suggest that in Norwegian municipal elder care policies, votes count but resources decide (Rokkan, 1987), which is also to say that inhabitants have little ‘voice’ as suggested by Hirschman (1970). The findings challenge the notion that municipal differences are caused by local autonomy and local democracy. National policies concerning the municipal revenue are more important for explaining municipal differences in elder care services provision than local needs and politics. In fact, local autonomy granted through legislation, policies, and organisation is highly restricted by lacking financial autonomy. Municipal revenue limits the leeway for reflecting local identity. From a democratic point of view, it can be problematic that the state indirectly encourages local differences in service provision, because the state is supposedly the proponent of equity and harmonisation. A question is how and whether municipal differences would change if resources counted, but votes decided.

Based on the findings in this study, it is timely to examine the use of government steering tools limiting municipal differences in elder care services provision. The findings suggest that a revision of the monetary transfer system might be more appropriate than increased legislation, if the aim is decreased municipal differences in this area. On the other hand, municipal equality in coverage rates of elder care services is not a desirable result, because, as the analysis indicated, there are municipal differences in need and political priorities. To be responsive to these factors are important elements of local autonomy and local democracy.

Very different economic conditions in the municipalities lead to a system where service levels can be anticipated according to postcodes. On one hand, it is not fair to say that it is a postcode lottery, because the differences are not random. On the other hand, for the present generation of elderly persons, where you grow old and have your social network often depends on where you were born, and that is a lottery.

References


Vabo, Signy Irene (2012) "Tiltakende statlig styring av kommunesektoren – også på eldremrådet?" in Marit Reitan, Jo Saglie & Eivind Smith (eds), Det norske flernivådemokratiet, Abstrakt forlag, Oslo.

Notes

1 There was a change in the municipal reporting system on home care services in 2007. Between 2006 and 2007 the home care coverage was reduced 2.5%. The yearly change before and after the change in reporting system was 1%. The reporting of nursing home beds was unaltered.