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The welfare coalition in Denmark with pressure on the municipal budgets

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The welfare coalition in Denmark with pressure on the municipal budgets

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Abstract

Following median voter theory, a democratic system with full equality in the distribution of political power and with non-altruistic voters will lead to full redistribution, if median voter income is less than average income. In a welfare state like Denmark the winners of the redistribution game are the receivers of public welfare and public employees. Our assumption is that these groups of voters will form a welfare coalition voting for the largest possible redistribution. The optimal size of the welfare coalition is marginally more than 50 percent of all voters. The Danish welfare coalition has grown to become larger than optimal, and the increased pressure on the municipal budgets after 2010 has made a reduction in the redistribution system necessary. However, due to the majority held by the welfare coalition, this is a democratic impossibility... This demonstrates, that the hypothesis of the welfare coalition as a determinant of the total size of the welfare system can be confirmed in the Danish municipalities. Furthermore, it shows that the composition of the welfare coalition determines how the burden of reductions is shared between the public employees and the receivers of public welfare.

BA in economics Thomas Gress has been research assistant on the project.

THE WELFARE COALITION HOW IT WORKS

According to an old Danish saying, the horses will bite each other when the manger is empty. This paper examines how different groups of Danish voters relying on income from public tax financed sources start “biting each other” when the pressure on the municipal budgets increases. The concept of a welfare coalition constituted by receivers of income from tax financed sources having the majority vote in welfare politics forms the starting point of the paper. This concept was first developed in Christoffersen and Paldam (2003). The argumentation here states:

“The concept of the welfare stakeholder is that those deriving their income from the public will be against reducing the public sphere. They constitute the potential stakeholder coalition. Even though they do not vote for the same political party they have a joint interest, making them a potential pressure group.¹ We use the term “welfare coalition” for this group. This assumption is based upon the simple fact that municipal politicians know their voters. If the welfare coalition is large in a municipality the politicians will know and act accordingly.”

¹Variables related to our welfare coalition have appeared in other studies. Many studies - starting with Courant, Gramlich and Rubinfeld (1979) - deal with “the market power of public employees”. The closest to our term is probably the concept of “persons in non-market activities” used by Assar Lindbeck in his studies of the welfare state since 1990.

The concept of the welfare coalition is related to the theory of status quo bias (Fernandez and Rodrik, 1991) and the idea of delayed adjustments (Alesina and Drazen, 1991).

After 2000 the welfare coalition constituted by public employees and receivers of full public support represented about 60 percent of all voters in Denmark. Taken as a coalition these voters formed a solid majority. However, the size of the welfare coalition differed significantly between the 98 Danish municipalities.

Christoffersen and Paldam (2003) and later works have found evidence of the existence of a welfare coalition influencing the design and results of welfare politics. Yet in 2013 Rattsø and Sørensen (2003), Christoffersen et al. (2004) Birkvad (2013) found that the welfare coalition as a whole has failed to contribute to the solution of the core problem with lack of performance in the Danish municipalities.

Christoffersen and Paldam (2003) showed that the welfare coalition consists of several inhomogeneous groups of voters. Nevertheless, they found, that an informal coalition seemed to exist so that the coalition as an entity could explain the orientation in Danish municipalities towards a high level of public welfare services.

All studies so far have regarded the welfare coalition as a structural property characterizing the stock of voters in present time. In this study we have subdivided the welfare coalition into its components. The Danish welfare system contains different types of public support and furthermore there can be defined several types of capital income besides wage income. For all these income components we have established time series. Christoffersen, Gress and Larsen

(2015) offer documentation of these data, which enables us to examine the effects and influence of the welfare coalition during a period of change in preconditions. Income earners receive different types of income – wage income, capital income and possibly different types of public support – throughout a single year. Adherence to the welfare coalition requires receiving at least 50 percent of the total income in a year as public support or as wage income as a public employee.

In this paper we focus on the years 2010 to 2013 characterized by reduction in real municipal activities but following years of expansion.

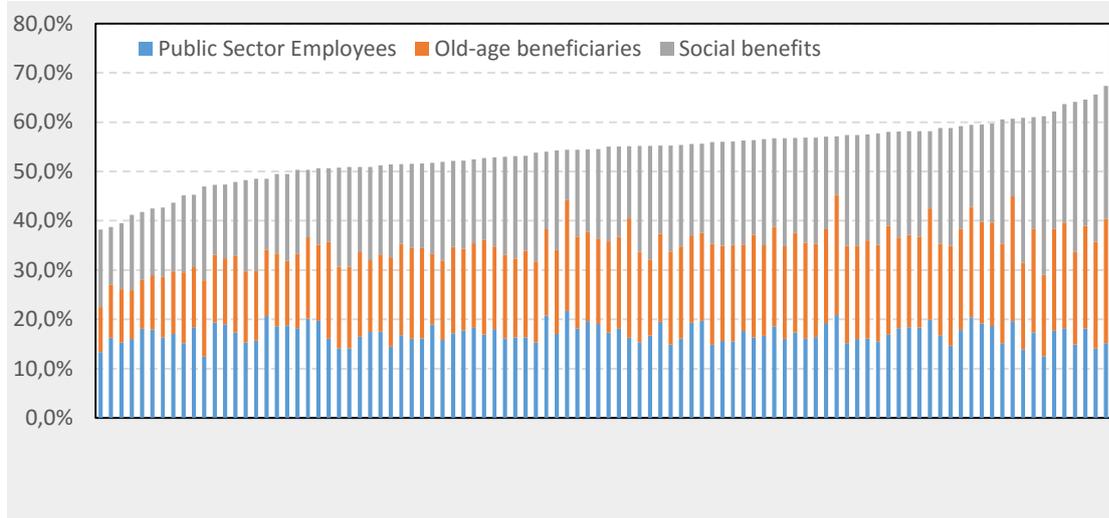
A median voter model concludes that equality in the distribution of political power in a democratic system and in a society with non-altruistic citizens will result in a political solution dictating full redistribution if the income of the median voter is less than the average income among voters (Alesina, Glaeser and Sacerdote, 2001). Following this result, we believe there is an incentive for citizens having a positive interest in redistribution to form a coalition pressuring for increased redistribution. Such coalition does not necessarily imply unification in terms of voting for the same political party, but all members share a common understanding and support each other in the political decision process.

Redistribution in a welfare state takes place through tax financed public support and provision of welfare services (Rattsø and Sørensen, 1998). As a consequence, the most privileged from the redistribution in a welfare state are public employees producing the welfare services. The receivers of welfare services will also profit from receiving this service, but the redistribution effects from this consumption are less clear since all citizens more or less are receivers of welfare services, which consist of both private goods included in the public support programs and local public goods. Our analysis therefore focuses on the question to what degree it is possible to understand political allocation decisions as a result of a coalition of the public employees and the receivers of public support working together in the interest of profiting from redistribution through the municipal economy. We concentrate on the budgets of the 98 Danish municipalities so that our analysis based on these 98 observations can employ standard econometric technique.

THE MODELS

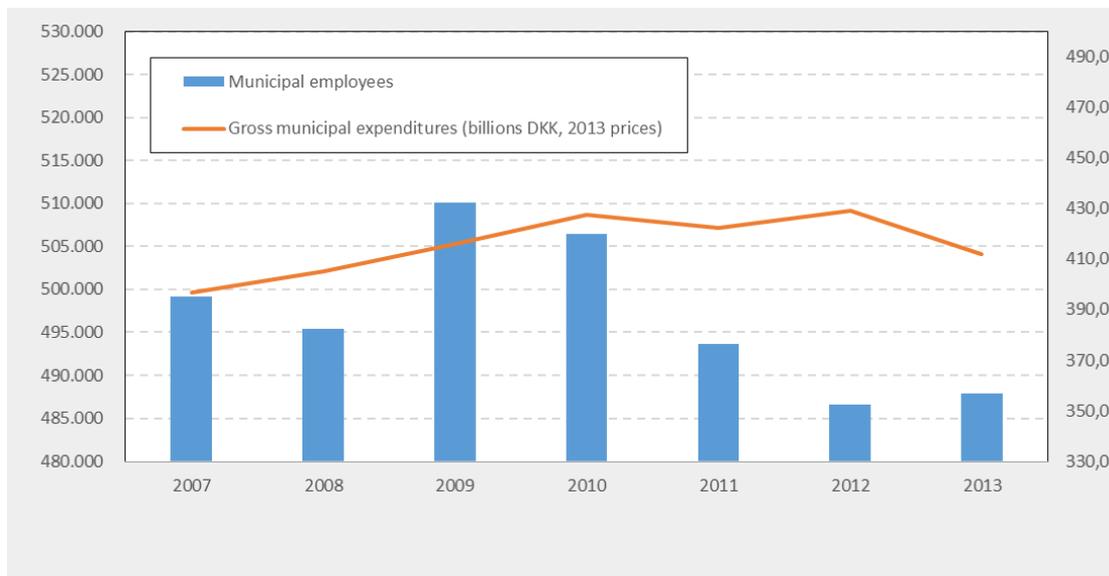
The size of the welfare coalition varies between the 98 Danish municipalities. Figure 1 shows the variations. The composition of this inhomogeneous coalition varies as well.

Figure 1. Size of welfare coalition in the 98 Danish municipalities, 2013



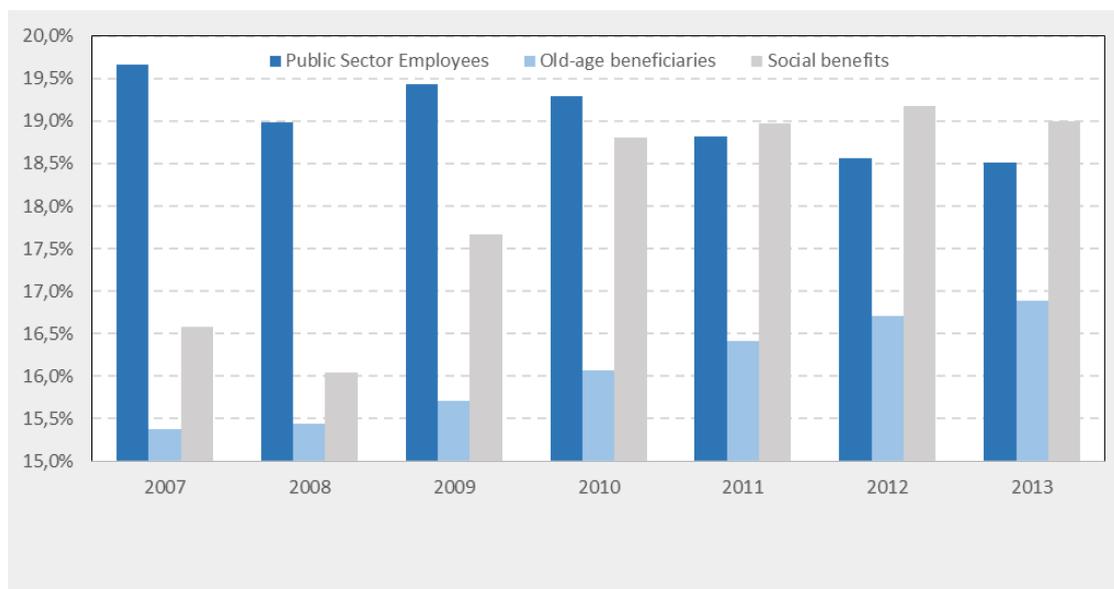
The total size of the Danish public and municipal sector has changed over time as well. The Danish municipal structure was formed during an amalgamation reform in 2007. From then and until 2009 the municipal budgets grew with strong growth rates. Since a turnaround in 2009-10 the municipal budgets almost stopped growing and the number of municipal employees was reduced with 5 percent from 2010 to 2013.

Figure 2. Total gross municipal expenditure and no. of municipal employees, 2007-2013



The size of the welfare coalition has also changed since 2007 as shown in figure 3.

Figure 3. The size of the welfare coalition and its components, as share of voters, 2007-2013



It follows from the median voter theory than the optimal size of a coalition voting for redistribution is marginally more than 50 percent. As can be seen from figure 3 the Danish welfare coalition as defined here clearly exceeds 50 percent.

The total municipal expenditure is limited by annual agreements between the national union of local authorities and the minister of finance on behalf of the government and the majority in the parliament. In practice the limit is dictated by the government. The municipalities have strong incentives to maximize their expenditure. In the years before 2010 the municipal expenditure ended up exceeding the limit defined in the agreements. This resulted in legislation in 2010 implementing economic sanctions on municipalities not respecting the budget limit. As a consequence, it became less attractive for municipalities to run budget deficits, and a turnaround in the municipal economy began after 2010. The consequences of this increased pressure on the municipal economy are indicated in figure 2.

The welfare coalition had an inoptimal large size before 2010 and thus members of each group in the coalition profited from having members of other groups excluded, as long as it did not imply negative consequences on themselves. Such exclusions did not in fact occur. An explanation may be that none of the groups in the welfare coalition were able to exclude others without the risk of negative consequences.

The increased pressure on the municipal economy after 2010 reduced the available means to share in the redistribution game. The incentives for each group in the welfare coalition to exclude other groups from the redistribution and so avoiding own reduced profit from redistribution then became stronger.

The theory of the welfare coalition originally states that different group of receivers of money from public sources have initiatives to enter a common coalition in voting on decisions about redistribution. However, the theory also indicates that contradictory interests between the

groups forming a coalition may arise if the coalition becomes too large and if the pressure on the potential for redistribution increases.

The groups of voters profiting from redistribution do not necessarily have the same amount of resources, organizational structures and political power. In a situation characterized by increased pressure on the welfare coalition, we must assume there will be both winners and losers in the new redistribution game among the groups forming the welfare coalition.

In the following we define indicators for the redistribution relation between main groups forming the welfare coalition, and we seek to explain the changes in these relations as the economic pressure on the municipalities developed after 2010. We have defined three such indicators and we have developed five explaining hypotheses: Size and composition of the welfare coalition, party politics, economic situation of the municipality, allocation decisions made by the municipality and demography. Figure 4 lists the variables in our models.

Figure 4. The models explaining the (change in) relations between main groups of welfare coalition members from 2007 to 2013

Explained variable	
Model I	Service expenditure as proportion of total expenditure
Model II	Change in service expenditure from 2010 to 2013 as proportion of total expenditure
Model III	Change in number of employed by the municipality from 20010 to 2013
Hypotheses	Explaining variables
H.1: Welfare coalition	
H.1.1: Public employed as proportion of all voters	
H.1.2: Transfer receivers 66+ as proportion of all voters	
H.1.3: Transfer receivers < 67 as proportion of all voters	
H.2: Political parties	
H.2.1: The party of the mayor	
H.3: The economic situation of the municipality	
H.3.1: Change in expenditure	
H.3.2: Average income	
H.3.3: Change in average income	
H.3.4: Socioeconomic structure	Socioeconomic index as defined by the Ministry of the Interior
H.3.5: Change in socioeconomic structure	
H.4: Allocation decisions made by the municipality	
H.4.1: Wages as proportion of service expenditure	
H.4.2: Model II only: Service expenditure as proportion of total expenditure	
H.5: Demographics	
H.5.1: Change in number of inhabitants in percentage	

RESULTS

Before running the regressions based on the three models defined in figure 4 we test the basic hypothesis stating that there is a welfare coalition working in municipal politics influencing the decisions on the size of the budget.

The basic hypothesis stating that there exists a positive correlation between the size of the welfare coalition and the size of the welfare system measured as total gross expenditure as proportion tax base still holds in The Danish municipal sector. Figure 5 shows the relation. Municipal net expenditure depends significantly of the size of the welfare coalition, whereas party politics seems to be irrelevant. An alternative regression confirms that the same results will appear if explaining net expenditure in the same model.

Figure 5. Dependent variable is gross expenditures per capita, 2007-2013

	Coefficient	Std. error	P-values
Intercept	-9376,67	4069,896	0,022
Welfare coalition as share of voters	81749,02	6526,838	0
Socioeconomic index	20149,94	1387,098	0
Tax base	0,161	0,014	0
Capital Region Dummy	1477,883	711,283	0,038
Inhabitants	-0,017	0,004	0
Party of Mayor	263,301	487,244	0,589

Note: Membership of the welfare coalition is defined as having at least 50 pct. of total income from public sources.

However, this fact does not imply that the components of the welfare coalition possess identical strength. On the contrary, we expect the distribution of wealth from the public sources between the groups to change when the total amount of wealth to be shared by the members of the welfare coalition change. Such change in total resources will disturb the unity in the welfare coalition and cause contradictions of interests. The strength of the different groups will determine the distribution result. We express the result of the allocation controversy between the different groups of the welfare coalition by a measure of the expenditure of service activities as proportion of total expenditure in the municipality.

There is a strong correlation between the voter proportion of public employees and the proportions of middle aged as well as elderly receivers of public support as indicated in the correlation matrix in figure 7. Without any budget constraint this should imply that these groups in the welfare coalition should be reconciled in a common interest. Yet the strong budget constraint on each individual municipality defined by the central government seems to break down such a pattern.

Figure 6 shows the results from the regression in model 1 from figure 4. The key results that service expenditure as proportion of total expenditure is strongly negatively correlated with the size of the total welfare coalition. If size of the total welfare coalition is replaced by the size of only one of the groups, namely the number of public employees as proportion of all voters, the result is the opposite. Publicly employed voters support spending the budget on service provision whereas receivers of public support spending the budget on other purposes which is almost fully equivalent with spending the budget on public support.

Figure 6. Service expenditure's share of total expenditures, 2008-2013

		Coefficient	Std. error	P-values
	Intercept	0,975	0,030	0,000
Welfare coalition	Welfare coalition	-0,266	0,039	0,000
Politics	Party of mayor	-0,004	0,003	0,100
Economic factors	Expenditure trends	0,000	0,000	0,098
	Tax base per capita	0,000	0,000	0,175
	Change in tax base per capita	-0,002	0,000	0,000
	Socioeconomic Index	-0,029	0,006	0,000
	Change in socioeconomic index	0,000	0,000	0,516
Priorities	Wage as a share of service expenditures	-0,369	0,022	0,000
Demographics	Change in population in %	0,000	0,002	0,946

Figure 7. Service expenditure's share of total expenditures, 2008-2013

		Coefficient	Std. error	P-values
	Intercept	0,780	0,021	0,000
Welfare coalition	Public Employees as share of electorate	0,236	0,036	0,000
Politics	Party of mayor	0,002	0,003	0,466
Economic factors	Expenditure trends	0,000	0,000	0,113
	Tax base per capita	0,000	0,000	0,016
	Change in tax base per capita	-0,002	0,000	0,000
	Socioeconomic Index	-0,037	0,006	0,000
	Change in socioeconomic index	0,001	0,000	0,182
Priorities	Wage as a share of service expenditures	-0,413	0,022	0,000
Demographics	Change in population in %	-0,001	0,002	0,761

The regressions from models 2 and 3 are presented in the figures 8 and 9. We focus on the changes in the distribution of wealth between the voter groups in the welfare coalition following the increased pressure on the municipal economy from 2010 and onwards.

Figure 9. Change in service expenditure as share of total spending, 2008-2013

		Coefficient	Std. error	P-values
	Intercept	-10,815	5,784	0,062
Welfare coalition	Welfare coalition	-6,079	4,617	0,188
Politics	Party of mayor	31,572	4,757	0,000
Economic factors	Expenditure trends	-0,008	0,295	0,979
	Tax base per capita	-0,289	0,033	0,000
	Change in tax base per capita	0,000	0,000	0,000
	Socioeconomic Index	-0,598	0,057	0,000
Priorities	Change in socioeconomic index	2,961	0,742	0,000
	Wage as a share of service expenditures	0,119	0,045	0,009
Priorities	Service expenditures share of spending	2,739	3,025	0,366
	Change in population in %	-0,056	0,200	0,778

Figure 10. Change in service spending as expenditures

		Coefficient	Std. error	P-values
	Intercept	-15,037	4,380	0,001
Welfare coalition	Public Employees as share of voters	10,008	4,251	0,018
Politics	Party of mayor	30,349	4,725	0,000
Economic factors	Expenditure trends	0,182	0,291	0,533
	Tax base per capita	-0,297	0,032	0,000
	Change in tax base per capita	0,000	0,000	0,000
	Socioeconomic Index	-0,589	0,057	0,000
Priorities	Change in socioeconomic index	2,972	0,696	0,000
	Wage as a share of service expenditures	0,129	0,045	0,004
Priorities	Service expenditures share of spending	0,687	3,168	0,828
	Change in population in %	-0,183	0,206	0,375

We still find a negative sign to the coefficient of the full welfare coalition in figure 8, but this result is now insignificant. However, we now find that party politics has become a significant explaining factor indicating that municipalities with liberal or conservative mayors tend to give stronger priority to service activities than public support compared with municipalities headed by mayors from other political parties dominantly social-democratic mayors.

An alternative version of the regression in figure 8, where the full welfare coalition has been replaced by the proportion of voters employed in the public sector shows this sector in the

welfare coalition as a significant explaining variable. Party politics still works as another significant explaining variable.

To a large extent the regressions in model 3 follow the results from model 2. Party politics care about the number of public employees who vote.

Figure 11. Explaining the change in no. of municipal employees, 2008-2013

		Coefficient	Std. error	P-values
	Intercept	-4,091	2,687	0,128
Welfare coalition	Welfare coalition	-0,469	3,449	0,892
Politics	Party of mayor	0,458	0,229	0,046
Economic factors	Expenditure trends	0,095	0,025	0,000
	Tax base per capita	0,000	0,000	0,030
	Change in tax base per capita	0,035	0,044	0,420
	Socioeconomic Index	1,538	0,567	0,007
	Change in socioeconomic index	0,107	0,035	0,002
Priorities	Wage as a share of service expenditures	4,894	1,914	0,011
Demographics	Change in population in %	1,295	0,155	0,000

DISCUSSION

The existence of a welfare coalition implies that municipalities will react differently facing changing surroundings and economic conditions. These reactions will have a conservative character searching for protection of the strongest interests among the local voters. This result contradicts the legal status of municipalities as determined by national legislation. The Danish constitution ensures municipal independence in allocation decisions implying that the municipalities have degrees of freedom when determining municipal service expenditures on each. Opposite public support, both targeting and level of payment are defined by the national parliament through detailed legislation and supplementing national administrative regulation. Therefore, one would expect the municipalities to follow the same practice. Our results indicate that this is not the case.

The conservative municipal reaction pattern can be taken as an indication that municipal adjustments to national policies for strengthening productivity in the municipal sector does not necessarily result in efficient local allocation adjustments. Increased size of the local public production system results in stronger priority to service production expenditure, and increased size of the public support budget results in stronger priority to public support expenditure.

Such a municipal reaction pattern on national policies for raising the productivity in the municipal sector seems in the public political debate to strengthen arguments for more detailed national regulation of the local allocation decisions. Furthermore, we must expect Tiebout-reactions so

that household's dependent on the quality of the municipal service supply will flee municipalities populated by receivers of public support, whereas receivers of public support will flee municipalities with a strong priority to ensuring a high quality in the service supply. The superiority of the welfare coalition mechanism of self-interests over party politics in the Danish municipalities therefore strengthens the segregation between municipalities.

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