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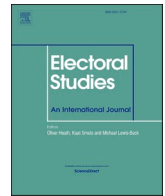
When are parties punished for serving in a coalition government?

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ABSTRACT

Many empirical studies find that parties in government on average lose votes. However, few studies take into account that this cost of ruling may not be uniform across parties. Those that do present dissimilar results. We investigate whether characteristics of parties and coalitions mediate the effect of party incumbency on local election results. Using a large panel data set on municipal elections in the Netherlands enables us to control carefully for omitted variables. We find that the cost of ruling decreases with the number of coalition parties, and after four or more consecutive terms in office. These results are consistent with the grievance asymmetry theory. However, other results remain unexplained by existing theories. One example is the finding that some (niche) parties actually gain seats after incumbency. Thus, there seems to be a need for more refined theorizing.

1. Introduction

Democracy can only thrive if there is healthy competition between political parties. This keeps parties on their toes and forces them to stay connected to their voters (Wittman, 1995). An important factor that may influence party competitiveness is being in power. If some parties enjoy unfair advantages because they are part of the government, competition is weakened. Competition might also suffer if parties are punished solely for taking responsibility by joining a governing coalition.

The literature on the effects of incumbency is extensive and "incumbency" can have different meanings. In some studies, incumbency means holding seats in a legislative body (parliament, council). In this paper, however, incumbency refers to participating in government: we investigate the effect of governing on electoral success. This can be analyzed at the level of individual politicians, parties or entire coalitions. We study party incumbency.

The empirical evidence shows that parties on average lose votes after joining a coalition (see, e.g., Van Spanje, 2011 and Hjermitslev, 2020, and the literature therein). However, the reasons for this cost of governing are unclear. For a long time, the literature implicitly assumed that the cost of ruling affects all parties and coalitions within the same institutional framework equally. Recently, studies have emerged on the heterogeneity of the cost of governing, i.e., the variation in this cost among governing parties. One might expect, e.g., that the cost of ruling is higher for anti-establishment parties (Van Spanje, 2011). This kind of research is important because the mechanisms behind the cost of governing may be uncovered by studying how it differs among parties.

Only seven papers study the heterogeneity of party incumbency for legislative bodies. Five of these papers study national elections and two local elections. Their results are often not replicated, as the literature review below shows. Therefore, we can draw few conclusions yet, except that we do not really understand the causes of the cost of governing.

Inconsistent results may occur because the cost of governing is strongly dependent on the institutional context. A study in a different institutional context would then yield different outcomes. To investigate whether this is true, an empirical study should encompass different institutional contexts, which in practice would mean different countries, and analyze how results differ. However, inconsistent results may also occur because of omitted variable bias, even if the cost of governing is not strongly dependent on the institutional context. Historical or cultural factors may help shape the impact of incumbency, while the importance of these factors may not always be known and sufficient data to control for them is often unavailable. A multi-country empirical setup exacerbates this risk, because it not only provides different institutional contexts, but also different cultural and historical contexts. This makes it hard to tell whether the inconsistent results in the literature are due to omitted variable bias, or proper reflections of different effects of incumbency in different institutional settings.

Thus, we face a trade-off. Studying the cost of ruling at the local level in one country, as we do, reduces the risk of omitted variable bias. Historical, cultural or institutional factors differ much less between local governments in a unitary state than between countries. Studying local elections has the additional benefit that more jurisdictions can be included than in a multi-country study; this allows including more

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variables without overfitting regression models. However, this approach comes at a cost: our empirical setup does not allow us to study how institutions shape the cost of governing. Rather, our goal is to estimate the heterogeneity of the cost of governing among parties and coalitions as accurately as possible. We realize that our results cannot easily be generalized to other institutional settings. Therefore, we would like to see similar studies on local elections in other countries.

We use data on municipal elections in the Netherlands in the 1990–2018 period. The cost of governing has not been previously studied for local elections in the Netherlands. This is a well-functioning representative democracy (Coppedge et al., 2019) based on proportional representation, i.e. the most commonly used electoral system worldwide (Bormann and Golder, 2013). Because of these institutional characteristics, it is an interesting case to test hypotheses derived from the *grievance asymmetry theory* and the *coalition of minorities theory*, which both may explain negative incumbency effects that differ between parties.

To further reduce omitted variable bias, we use party-year fixed effects (unlike previous studies at the local government level (Martinussen, 2004; Karlsson and Gilljam, 2014)). These control for factors that affect all local chapters of a party in a certain year in the same way, e.g., scandals affecting the party at the national level or factors such as the national economy. Another source of potential omitted variable bias is that previous studies (whether at the local or the national level) have only included interactions of up to three terms, whereas our models include interactions of four terms (main model) or more. Unnecessarily including a term in an interaction does not create bias and has little effect on predictive power (Mikucka et al., 2015). However, wrongly omitting an interaction term creates bias and reduces predictive power.

This paper adds to the literature in four ways. Firstly, we add a country to the small universe of cases studied in depth at the local level. Secondly, we control more rigorously for omitted variables than previous studies. Thirdly, we test two hypotheses that have not been tested before, namely that the local cost of ruling is higher for parties participating in the national cabinet, and also for niche parties. Finally, we identify grievance asymmetry as the most likely explanation for the negative incumbency effect in Dutch local government.

2. Literature review

2.1. Theories of incumbency effects

Some theories predict that incumbency should have no effect on electoral success. According to the *accountability theory*, parties that govern well are rewarded at the polls while underachieving parties are punished (Karlsson and Gilljam, 2014). Assuming that voters are rational and base their vote on how well a party performed relative to other parties, incumbency is not a factor. Similarly, if parties behave as expected by voters, incumbents are not systematically rewarded or punished since voters have no reason to change their vote (Nannestad and Paldam, 1999). And if parties behave differently, voters only defect if parties disappoint.

The *more resources theory* predicts a positive incumbency effect, because government parties enjoy more media coverage, become household names, accumulate experience and can use government means to gain votes (Trounstine, 2011; Liang, 2013). The *positive selection theory* maintains that parties that succeeded in joining a governing coalition have exceptional qualities. Unless they lose these qualities, these will help them secure votes again in the next election (Trounstine, 2011).

These theories mainly originate from US scholarship in the context of two party elections and single party governments (Liang, 2013). They may not be very helpful in multiparty systems, where previous studies found negative incumbency effects (Van Spanje, 2011). Theories predicting negative incumbency effects are mostly found in the vote-function literature. This literature mainly deals with national

elections, with empirical studies often having a cross-country setup, but has also been applied to local elections (Liang, 2013; Karlsson and Gilljam, 2014).

One theory that may explain such a cost of ruling is the *back-swinging theory*, which argues that it is simply a statistical artefact. Parties that win votes may be more likely to secure a place in the ruling coalition. If parties' electoral successes fluctuate around some 'natural' level, vote share may be lower in an election following a successful one (Paldam, 1986). An incumbency effect would then be an artefact of a selection effect, where only parties that did well are analyzed. To prevent this, one may control for parties' vote share in the previous election (Brender, 2003).

Four other theories predict a negative incumbency effect. The *median gap theory* asserts that two parties competing for votes in a one-dimensional issue space will aim at voters in the center of the ideological distribution, while taking care to keep enough distance from their competitor in order not to become indistinguishable (Downs, 1957; Nannestad and Paldam, 1999). Voters in the gap between both parties will vote for the party in opposition, because the average policy outcome is closer to their ideal if power changes in every election. Despite its theoretical elegance, this theory is difficult to apply to Dutch local elections, which are multidimensional and have many parties.

Three theories remain, and these are easy to apply to multiparty systems. The *preference for political change theory* just assumes voters prefer political change, as a result of which a party in government will lose votes (Paldam, 1986). Why voters like political change is not explained. Perhaps, from time to time, voters want to see new faces. Because of its vagueness, this theory is hard to prove or disprove (Paldam and Skott, 1995). Moreover, its use for explaining why the size of the cost of governing may differ among coalition parties seems limited.

The *grievance asymmetry theory* (also referred to as negativity bias, Narud and Valen, 2008) originates in the economic-voting literature and can be seen as an extension of the accountability theory. According to this theory, voters judge a party in government by its performance, but attach more weight to failures than to successes. This would lead incumbents to lose votes on average. A theoretical foundation for such an asymmetry is found in loss aversion, which is part of the prospect theory developed by Kahneman and Tversky (1979). The grievance asymmetry theory has mainly been used to explain why voters punish incumbent governments more strongly for economic failure than that they reward them for economic success (Nannestad and Paldam, 1999; Narud and Valen, 2008; Van Spanje, 2011). However, similar asymmetries have been found in other policy fields (Boyne et al., 2009).

Another explanation why voters might punish specific parties for governing is given by the *coalition of minorities theory*. This theory originated with Downs (1957) but we focus on the adaptation of Nannestad and Paldam (1999). It argues that a party can win votes by promising more than it can deliver. Once in government, some promises cannot be kept and the party's true preferences are gradually revealed. More and more voters will become disenchanted, and be courted by opposition parties that follow the same strategy of overpromising. This theory assumes some degree of amnesia about the behavior of opposition parties when they were in office earlier, or, alternatively, that a fraction of the electorate can be fooled at every election (Nannestad and Paldam, 1999).

Van Spanje (2011) shows that the coalition of minorities theory may be used to explain why electoral costs of incumbency differ among coalition parties: some parties are more likely to promise more than they can deliver than others. The resulting disenchantment may concern policy, but also other considerations on which voters may base their choice. E.g., an anti-establishment party that has become an established member of a governing coalition can no longer credibly claim to 'clear the swamp' and, as a result, loses votes. However, the grievance asymmetry theory may also be used to explain why electoral costs of incumbency differ among coalition parties: e.g., if a coalition consists of many parties, it may be harder to put the blame on individual parties

and punish them at the polls.

Of the theories discussed in this section, the last two are most relevant for our study: they apply to multi-party elections which are multidimensional and they may help explaining heterogeneity in the cost of governing. Therefore, it is worth elaborating how they differ. According to the coalition of minorities theory, ruling exposes inconsistent promises. The compromises that must then be made reveal a party's true preferences. This will disenchant a part of its voters. According to the grievance asymmetry theory, voters judge a ruling party by its performance, attaching disproportionally heavy weights to failures. Electoral promises will partly shape the way voters judge the in-office performance of parties, but these promises are less important and do not have to be inconsistent as with the coalition of minorities theory. The latter, on the other hand, does not assume asymmetric reactions to successes and failures.

2.2. Empirical studies of heterogeneous cost of governing

The theories discussed above focus on explaining the cost of governing in general, not on why it would differ between parties. Nevertheless, some empirical studies have investigated the heterogeneity of the cost of governing. As most of them lack specific theories that deal with heterogeneity, there seems to be a disconnect between theory and empirical studies. This disconnect might be somewhat stronger on the local level because these theories were mainly inspired by studying national elections. However, the theoretical arguments they make are not specifically targeted at national elections. The reasoning behind the coalition of minorities theory or the grievance asymmetry theory, which are most relevant here, may be applied to local elections as well as to national elections. The extent to which these theories can actually explain effects of incumbency in local elections is an empirical question we aim to answer.

Table 1 summarizes the results of previous empirical studies on party-political factors, i.e. characteristics of parties and coalitions, which explain differences in the effect of party incumbency on election results for legislative bodies.

We found five studies on national elections (Narud and Valen, 2008; Van Spanje, 2011; Klüver and Spoon, 2020; Greene et al., 2020; Hjermitslev, 2020) and two studies on local elections (Martinussen, 2004; Karlsson and Gilljam, 2014). The studies on national elections use data from 7 to 28 countries, which differ in their electoral institutions and traditions. The studies of local elections use data from a single country (Norway and Sweden, respectively), which reduces the omitted variables problem.

Table 1 shows that there is no consensus about what mediates the cost of governing. Although some results have been replicated, many have not. Null-effects are common. Many studies find several factors to have no moderating effect on the cost of ruling.

3. Hypotheses

Previous empirical research on the effect of incumbency on election outcomes in multiparty systems finds electoral losses in the range of 1–3 percentage points (Van Spanje, 2011). In line with these results, we expect a similar effect in Dutch local elections. However, we expect the strength of this effect to depend on party characteristics, coalition characteristics and temporal characteristics.

The theories discussed above are not mutually exclusive and it is not always clear how they relate to one another. For instance, is grievance asymmetry a modification of the accountability theory in which the failures of a government are given more weight than its successes? Or is it a consequence of overpromising, and thus an implication of the coalition of minorities theory? Linking hypotheses to theories is bound to create ambiguities. Testing a specific theory directly is, therefore, not

Table 1
Summary of findings of previous studies[a].

Characteristic/hypothesis	Effect on cost of ruling		
	Higher	No effect	Lower
Party level			
Anti-establishment parties	Van Spanje (2011), Karlsson and Gilljam (2014)	–	–
Number of consecutive terms in office	–	Martinussen (2004)	–
Larger parties	Karlsson and Gilljam (2014), Hjermitslev (2020)	–	–
Prime minister's/mayor's party	–	–	Karlsson and Gilljam (2014), Klüver and Spoon (2020), Narud and Valen (2008), Hjermitslev (2020)[b]
Junior parties (coalition party that is not PM/mayor's party)	Hjermitslev (2020)	–	–
Junior parties that hold either their most salient portfolio, or many non-salient portfolios	–	–	Greene et al. (2020)
Increasing ideological distance of party from coalition partners	Martinussen (2004), Karlsson and Gilljam (2014)[d]	Van Spanje (2011), Karlsson and Gilljam (2014)[d]	Karlsson and Gilljam (2014)[c]
Government level			
Fragmented opposition/parliament	–	Martinussen (2004), Narud and Valen (2008)[d]	Narud and Valen (2008)[d]
More coalition partners (decreased clarity of responsibility)	–	Martinussen (2004), Narud and Valen (2008), Karlsson and Gilljam (2014)[d]	Van Spanje (2011), Karlsson and Gilljam (2014)[d], Hjermitslev (2020)
Higher number of seats in legislature	Hjermitslev (2020), Narud and Valen (2008)[d]	Narud and Valen (2008)[c], Karlsson and Gilljam (2014)[c]	Martinussen (2004)
Ideological breadth of coalition	Martinussen (2004), Karlsson and Gilljam (2014)[d]	Karlsson and Gilljam (2014)[c]	Karlsson and Gilljam (2014)[c]
Degree of consensual decision making	–	Martinussen (2004)	–
Opposition control index	–	Hjermitslev (2020)	–
Centrist vs ideologically extreme cabinet	–	Narud and Valen (2008)	–

[a] Underscored characteristics are studied in this paper too.
[b] Under most circumstances.
[c] Operationalized as 'oversized coalition'.
[d] Depending on the model or sample.

possible. Instead, we test a number of hypotheses that can be linked to existing theories. From the results, we derive to what extent we find empirical support for them.

3.1. Party characteristics

Hypothesis 1. Cabinet parties, i.e., local chapters of parties participating in the national government, suffer higher electoral costs of local incumbency

According to the grievance asymmetry theory, incumbents are more strongly punished for failures than they are rewarded for successes. Voters may use local elections to punish parties in the national government, making these local elections second-order elections. Parties participating in local government could suffer more from this second-order effect. Local governments depend on the central government for a large share of their revenues, and national regulation impacts local governments' ability to deal with local problems. As a result, disappointing performance of local administrators may be punished harder if the same party is also in power nationally, because that party is attributed a larger part of the blame. To the best of our knowledge, this hypothesis has not been tested before.

Hypothesis 2. Electoral costs of incumbency decrease with party size

The more seats a coalition party obtains in the local council, the bigger its political clout and the more it will be able to keep its promises. Small coalition parties will more often have to bend to bigger parties' wishes. In the process, they must reveal what they hold most dear and alienate part of their electorate. Therefore, in line with the coalition of minorities theory, we expect the electoral costs of incumbency to be lower for large coalition parties. Table 1 shows that previous research provides some evidence for this hypothesis.

Hypothesis 3. Electoral costs of incumbency decrease after the first term in office

The grievance asymmetry theory assumes that voters (asymmetrically) judge the performance of a party. We expect that parties disappoint more voters after their first term in office than after two or more consecutive terms in office. This is because parties in office have revealed how they govern, and voters who were not satisfied with their performance in their first term will probably already have deserted them in the previous elections. Unless a party changes its policies or its style of governing, fewer of its voters will be disappointed after every consecutive term. Martinussen (2004) found no evidence for this hypothesis.

Hypothesis 4. Electoral costs of incumbency are higher for niche parties than for mainstream parties that run on a broad platform

In line with the coalition of minorities theory, we expect niche parties to have a higher cost of ruling than mainstream parties. There are many definitions of what a niche party is. Many of these are developed for national elections because they link niche-party status to not discussing the economic cleavage in society (Wagner, 2011). However, labor rights and income redistribution do not fall under municipal purview in the Netherlands. Consequently, we define niche parties as parties that mobilize voters on a single or few issues (e.g., greens, animal rights supporters, orthodox Protestants), which is equal to Wagner's (2011) definition minus their criterion that niche-parties prioritize non-economic topics. Niche-party voters value ideological purity, and will be quickly disenchanted when parties compromise upon entering a coalition. There is some empirical evidence suggesting that

anti-establishment parties have a higher cost of ruling (Table 1). We are not aware of a previous study that tested whether niche parties are punished more heavily for entering a coalition.[1]

Hypothesis 5. Electoral costs of incumbency increase with the ideological distance from other coalition parties

When a party forms a government with one or more parties that are ideologically distant, it will need to make bigger compromises. According to the coalition of minorities theory, this will alienate a larger share of their voters. Support for this hypothesis in previous research is mixed (Table 1).

3.2. Coalition characteristics

Hypothesis 6. Electoral costs of incumbency increase with the ideological breadth of coalition

This hypothesis is related to the previous one, but it applies at the coalition level instead of the party level. According to the policy-seeking model of coalition theory, a successful coalition should consist of parties that are connected along an ideological continuum (Martinussen, 2004). Such governments appear to be more consistent and reliable, and disappoint fewer voters, than governments with parties from different ends of the ideological continuum. Support for this hypothesis is mixed (see Table 1).

Hypothesis 7. Electoral costs of incumbency decrease with the number of coalition parties

The extent to which voters react to disappointing government performance may depend on the clarity of responsibility (Powell and Whitten, 1993; Narud and Valen, 2008). The more parties there are in the local government, the more difficult it is to pin the blame of disappointing performance on any one of them. In line with grievance asymmetry, we expect the electoral costs of incumbency to decrease with the number of coalition parties. Previous studies that tested this hypothesis come to different results (see Table 1).

3.3. Temporal characteristics

Hypothesis 8. The electoral costs of incumbency have increased over time

Whatever may drive the cost of governing, such an effect can only be expected if voters consider different parties to choose from. If, in each election, they routinely vote for the same party, incumbency will not matter. The Netherlands has long been characterized by a high degree of pillarization, where social democrats, Catholics, Protestants and liberal conservatives habitually voted for their own parties. In the last decades of the 20th century, depillarization, combined with secularization and individualization, gradually loosened the ties between voters and parties. Combined with the openness of the Dutch party landscape, where it is easy to form a new party and gain seats, we expect that incumbency is becoming increasingly important for voting decisions as time progresses. Thus, we hypothesize that the electoral costs of incumbency increase over time. Narud and Valen (2008) present some evidence for such an increase.

4. Institutional context

The Netherlands is a decentralized unitary state with three

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[1] Hjermitslev (2020) tests whether the electoral cost of ruling as a junior member depends on being a niche party, but the latter is operationalized as taking an extreme position on a left-right scale. Using a broader definition of niche party than we do, Adams et al. (2006) find evidence that niche parties that shift their policy program are penalized electorally while mainstream parties are not.

government tiers: the national government, 12 provinces and (in 2018) 380 municipalities. Municipalities are democratically governed jurisdictions with significant autonomy over spending decisions, carrying out a broad range of governmental tasks.

A municipality is governed by its municipal council and an executive board of mayor and aldermen. Aldermen are appointed by the municipal council. The mayor, who has a mostly non-executive function, is formally appointed by the crown. In practice, the crown appoints the candidate nominated by the municipal council.

In municipal elections, every permanent resident aged 18 or more is eligible to vote. Municipal elections are conducted every four years, simultaneously in all municipalities. When municipalities amalgamate, off-cycle elections are held (Allers et al., 2021). We exclude these from our analysis.

In both municipal and parliamentary elections, many parties participate. Party lists are semi-open; preferential votes may be cast. The allocation of seats among parties is based on proportional representation, with one municipality wide electoral district and no electoral threshold. This makes it easy to start a new party and gain seats. Pre-electoral coalitions are uncommon and post-electoral coalitions are hard to predict. Thus, the idea of 'close' elections is irrelevant in the Dutch context. Because of these institutional characteristics we think that the *grievance asymmetry theory* and the *coalition of minorities theory*, as discussed in paragraph 2.1, are most relevant for our case. Because of the proportional system there are often many smaller parties, niche parties and broad coalitions, which allows us to test hypotheses about these phenomena.

5. Regression models

In order to test our hypotheses, we use regression analysis with interaction terms. The main model is given as:

$$Y = \alpha + \beta(\text{Incumbency} \#\# \text{Seatshare} \#\# \text{Natcab} \#\# \text{Colpart})$$
$$+ \gamma(\text{Party} \# \text{Year}) + \delta\text{Munfe} + \varepsilon$$

The dependent variable, Y, is the relative change in the share in council seats of party x in municipality y between two subsequent local elections.[2] Thus, the units of observation are municipality-party combinations. α, β, γ, and δ are coefficients and ε is an error term. The symbol # refers to an interaction term, while ## refers to an interaction term which includes all constitutive terms. i.e., each of the elements that constitute the interaction term is included in the regression model.

The most important independent variable is a dummy that indicates incumbency. A party is incumbent if it participates in the ruling coalition before an election. To estimate how the cost of governing differs between parties or coalitions, we interact the Incumbency dummy with a number of variables. The first is the council seat share gained in the previous election (Seatshare). This variable also controls for possible back swinging or regression to the mean effects (Brender, 2003). Next, we include a dummy variable for participation in the (national) cabinet at the moment of the municipal elections (Natcab), and a variable reflecting the number of coalition parties in the local government before the election (Colpart).

All our models also include party-year dummies (Party # Year). These control for factors that affect all local chapters of a party in a certain year in the same way, e.g., scandals affecting the party at the national level. They also control for factors that have a similar impact on

all municipalities, e.g. the business cycle. All models also include municipal fixed effects (Munfe). These control for all time-invariant characteristics of the municipalities.

The model described so far is used to test hypotheses 1, 2 and 7. To test specific hypotheses we modify our interaction term. To test hypothesis 3, we combine the incumbency variable with dummy variables that measure the number of subsequent terms a party was in local government. This is only possible for elections in 2006 and later, because we need data from previous elections to calculate this variable, and our data start in 1990.

To test hypothesis 4, we combine the incumbency variable with dummy variables that indicate the different parties. To test hypothesis 5 we add a (continuous) variable to the interaction that measures the ideological distance between a party and the ruling coalition. We measure this as the difference between the ideology score of a party and the weighted average ideology score of all coalition parties. We do not use the distance to the median party, because coalition policies reflect coalition compromises, rather than the preferences of the median party (Martin and Vanberg, 2014).

To test hypothesis 6 we add a (continuous) variable to the interaction that measures the ideological breath of the coalition. This is measured as the difference between the ideology scores of the two coalition parties that take up the extreme positions on a certain ideological dimension. To test hypothesis 8 we combine the incumbency variable with election year dummies.

6. Data

We built a dataset of the results of the eight regular municipal council elections held in the 1990–2018 period. Because our dependent variable is relative change in seat share, this allows us to estimate the cost of governing in elections from 1994 onward.

Data on coalition membership and number of aldermen per party are derived from the annual *Gids Gemeentebesturen* published by the Association of Dutch Municipalities (VNG). These directories list, for each municipality, names and party membership of aldermen and council members. However, parties that participated in local elections but did not win seats are not included. Therefore, we derive data on election participation from Ogink (2019), which lists every party that participated in an election, even if it won few votes.

All national political parties are included in our dataset. Due to data limitations, local parties, i.e., parties that run in a single municipality, are only included in elections where one local party participated.

We have 12,589 observations, i.e., party-municipality combinations for which we know the change in seat share, in 737 different municipalities. Municipalities that were amalgamated were coded as different from their constituent parts, so change in seat share can only be computed for the second regular election after amalgamation.

Of the 12,589 observations in our dataset, 11,570 involve a national party, 559 a local party, and 460 a party combination, where two or

Table 2
Number of observations per party or combined list.

CDA	Christian democrats	2.845
VVD	Conservative liberals	2.641
PVDA	Social democrats	2.340
D66	Social liberals	1.309
GL	Green left	997
CU	Socially conservative Christians	554
SGP	Orthodox Christian right	412
SP	Socialists	401
RPF	Socially conservative Christians	44
GPV	Socially conservative Christians	41
Local party		559
Combined list		460
Total		12.589

In 2000, GPV and RPF merged to form CU.

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[2] We do not use the first difference in vote share between two elections because, for the parties themselves, the degree in which they grow or shrink relative to the previous election is more relevant. For instance, a three percentage points increase in vote share may imply a doubling of the votes for a small party, but it signifies a much smaller victory for a large party (Karlsson and Gilljam, 2014).

more parties have formed a combined list (Table 2). Combined lists most often include either several conservative protestant parties (CU, SGP, RFP, GPV) or both social democrats and greens (PvdA/GL). Observations involving national parties that participated in less than twelve local elections have been left out of the dataset.

Breadth of a coalition and ideological distance of a party from the ruling coalition are calculated using ideology scales developed by Laméris et al. (2018). Laméris et al. (2018) use factor analysis to derive ideology scales from a Dutch voter survey. Respondents were asked for their preferences with respect to 40 political statements. The answers were then analyzed with respect to their national party preferences. These scales thus reflect the preferences of voters of particular parties, not party programs. In total, Laméris et al. developed five scales, including a left-right scale which is similar to scales used in other studies. The four new scales are based on different ideological dimensions: preferences for economic equality, for markets and efficiency, for personal and cultural freedom, and nationalist, protectionist and populist preferences.

Because Laméris et al. (2018) provide ideology scores for national but not local parties, the variables *breadth of coalition* and *ideological distance* cannot be calculated in cases where a local party participates in a ruling coalition. Ideological distance can also not be calculated for local parties. In order to calculate these variables where combined lists participate, we use the ideology of the first party listed. Descriptive statistics are presented in Table 3.

The number of parties represented in municipal councils ranges from 2 to 14, with a median value of 6 (Fig. 1). Most often, governing coalitions consist of 2, 3 or 4 parties (Fig. 2, left panel). The number of aldermen is often quite small (Fig. 2, right panel), however. This implies that, in many (mostly small) municipalities, even the largest party has only one or two aldermen.

Fig. 3 shows how often parties were incumbent in our research period. In more than half of all local elections, Christian democrats (CDA), social democrats (PvdA) and conservative liberals (VVD) were incumbent. In 45 percent of all elections, a local party was incumbent. Measured in council seats, incumbent parties are usually bigger than other parties are (Fig. 4, left panel). Still, Fig. 4 shows that even parties holding few council seats may participate in local government.

The right panel of Fig. 4 shows our dependent variable: relative change in council seat share. Incumbent parties often lose seat share. Parties doubling their seat share (+100) are overwhelmingly not incumbent.

7. Results

Table 4 presents regression results of models without interactions. In the first column, the incumbency dummy is the only independent
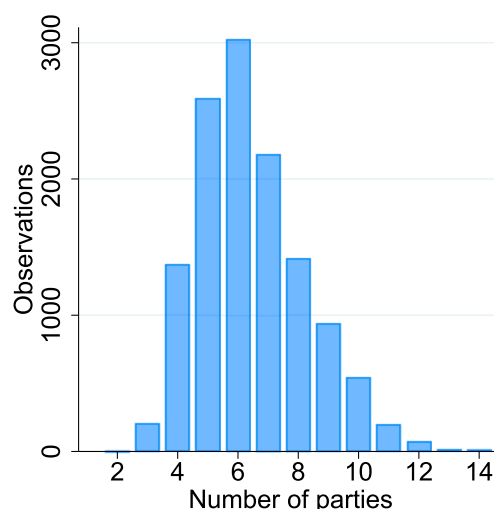

Fig. 1. Number of parties in municipal council before elections.

variable. In the second column, we add share in council seats, cabinet membership, and number of coalition parties. In column 3, party-year and municipality fixed effects are added. The incumbency effect decreases from −21.5 percentage points in column 1 to −7.4 in column 3.

The next step is adding interactions between the independent variables. These models are described in the method section. The regression coefficients for the main model are reported in the online Appendix 2. These are hard to interpret, since the many different interaction coefficients have to be considered jointly. Marginal effects provide a more intuitive way to assess the results of multiple joint coefficients, in which we are interested. Without information about co-variances, confidence intervals of marginal effects cannot be derived from coefficients or their variance (Brambor et al., 2006).

The marginal effect of incumbency is the predicted change in seat share that would result from changing the value of the incumbency variable from 0 (not incumbent) to 1 (incumbent). Put differently, the marginal effect is the predicted change in seat share if incumbent, minus the predicted change in seat share if not incumbent, while holding all other variables constant. In order to test our hypotheses, we plot conditional marginal effects, e.g., the effect of local incumbency given that the party concerned is also a member of the (national) cabinet (or not).

First, we calculate the unconditional marginal effect of incumbency on change in council seat share. Parties that join a local coalition can expect to lose on average 6 percent of their share in council seats in the next elections (with a 95% confidence interval that runs from −7.5 to −4.6) compared with parties that do not.

Table 3
Descriptive statistics.

	Observations	Mean	Standard-error	Minimum	Maximum
Change in council seat share (%)	12,589	2.65	0.41	−100	557
Incumbent (dummy)	12,589	0.52	0.004	0	1
Share of council seats (%)	12,589	17.3	0.09	2.2	73.7
Cabinet party (dummy)	12,589	0.50	0.004	0	1
Number of coalition parties	12,589	2.95	0.007	1	6
Consecutive terms in office	6517	1.20	0.02	0	4
Coalition's breadth (left-right)	7024	1.92	0.008	0.11	2.65
Coalition's breadth (equality)	7024	0.92	0.004	0.02	1.61
Coalition's breadth (markets)	7024	0.32	0.002	0.03	0.85
Coalition's breadth (freedom)	7024	1.01	0.006	0.06	2.88
Coalition's breadth (populism)	7024	0.84	0.004	0.16	1.43
Distance from coalition (left-right)	6469	−0.03	0.013	−2.57	2.50
Distance from coalition (equality)	6469	0.01	0.007	−1.40	1.38
Distance from coalition (markets)	6469	−0.04	0.003	−0.77	0.58
Distance from coalition (freedom)	6469	0.01	0.008	−2.69	1.86
Distance from coalition (populism)	6469	−0.03	0.006	−1.22	1.23

All variables except change in seat share reflect the situation before the relevant elections.
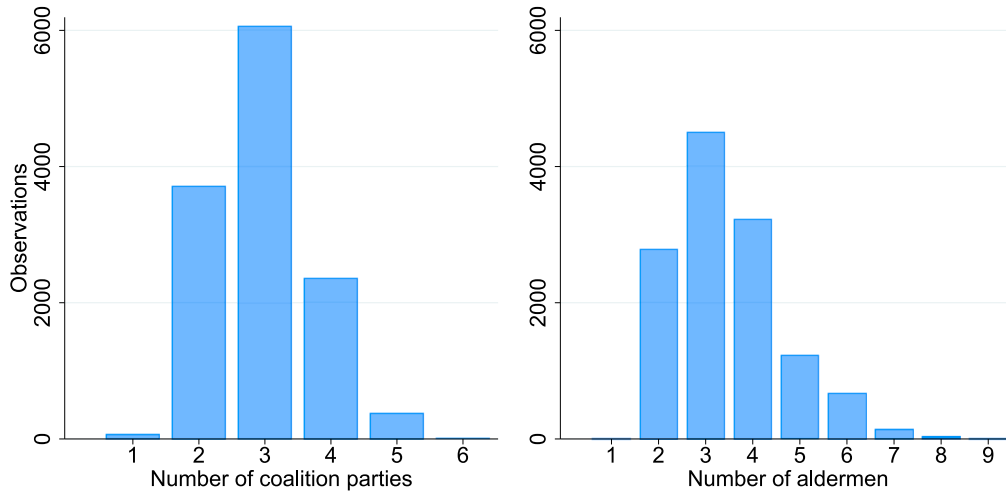
Fig. 2. Number of coalition parties and number of aldermen before elections.
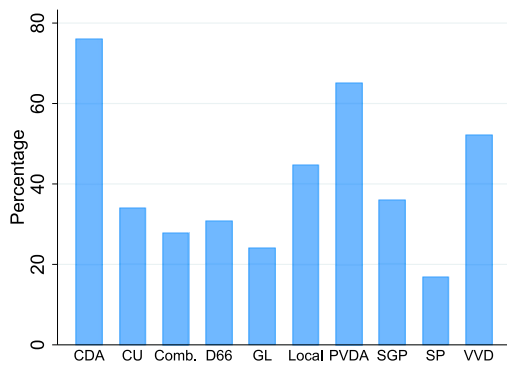

Fig. 3. Percentage of elections where party was incumbent.

In the remainder of this chapter, we analyze the effects of several moderator variables on the strength of this incumbency effect in order to test our hypotheses.

Hypothesis 1 states that the cost of ruling in local elections is higher for parties that participate in the (national) cabinet. Fig. 5 shows that

Table 4
Effect of incumbency on relative change in share of council seats; models without interactions.

	(1)	(2)	(3)
Incumbent	−21.53***	−6.03***	−7.37***
	(0.78)	(0.83)	(0.74)
Share in council seats		−0.96***	−1.13***
		(0.05)	(0.05)
Cabinet membership		−23.59***	32.78***
		(0.81)	(3.00)
Number of coalition parties		−3.35	0.31
		(0.55)	(0.78)
Observations	12,589	12,589	12,589
R^2	0.05	0.15	0.43
Constant	X	X	X
Party-year fixed effects	–	–	X
Municipality fixed effects	–	–	X

Cluster-robust standard errors between parentheses, clustered by municipality-party. ***$p < 0.01$, **$p < 0.05$, *$p < 0.1$.

this hypothesis must be rejected. The Figure shows the predicted vote share change, with 95% confidence intervals as tails. We see that, after controlling for the effects of other relevant variables and their interactions, cabinet membership does not significantly affect the cost of
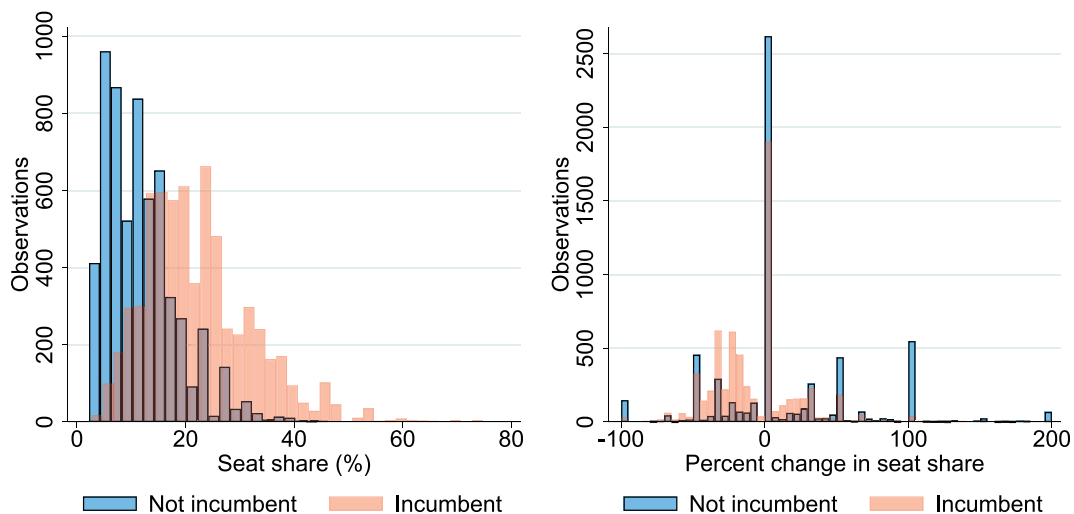

Fig. 4. Share of council seats before elections (left) and change therein (right; horizontal axis cut off at 200).
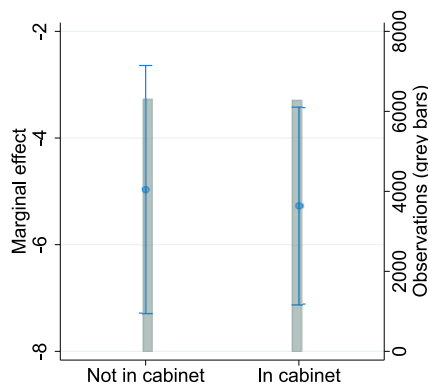
Fig. 5. Marginal effect of incumbency on change in seat share, conditional on cabinet membership, with 95% confidence intervals. Note: dots represent the conditional marginal effects; lines the 95% confidence intervals, and bars number of observations (right hand axis).

governing. This does not imply that cabinet membership does not influence local election outcomes. Local chapters of parties that participate in the national cabinet do lose votes (not shown), in line with the second order character of local elections, but they do not suffer a higher local cost of governing than non-cabinet incumbent parties.

Hypothesis 2 holds that the cost of ruling decreases with party size, measured as a party's share in council seats. Fig. 6 shows the predicted vote change with confidence intervals. The left panel suggests that the incumbency effect is negative for small parties holding up to about 20 percent of council seats, and positive for parties with more than 20 percent of council seats. However, share in council seats is treated here as a continuous variable. This implies that we assume a linear interaction effect, where the effect of incumbency on change in vote share can only linearly change with share in council seats.

To check whether this is appropriate, we follow Hainmueller et al. (2019) and replace the continuous moderator variable by several dummies. These dummies are defined by breaking the continuous moderator into several bins. Put differently, we treat share in council seats as a categorical variable after discretizing it. The middle panel of Fig. 6 reveals that the assumption of linearity does not hold. The incumbency effect is negative for all categories.

The conventional 95% confidence intervals show whether an effect differs significantly from zero, but not whether it is different for different values of the mediator variable (Goldstein and Healy 1995). To that end, we also present 83% confidence intervals (see, e.g., Austin and Hux 2002). The cost of ruling for parties with 0–10 percent of council seats is significantly higher than for bigger parties with the exception of parties with 18–24 percent of council seats (Fig. 6, right panel). Hypothesis 2, that the cost of ruling decreases with party size, must be rejected.

Hypothesis 3 maintains that the cost of ruling decreases after the first term in office. Because of data limitations, we can only test this hypothesis for elections in the 2006–2018 period. The left panel of Fig. 7 shows a negative incumbency effect for up to three consecutive terms in office. The right panel shows no significant differences in the cost of governing after one, two or three terms in office. Only after four or more terms, the cost or ruling is significantly lower than after the first term. We thus find no conclusive support for the hypothesis that the cost of ruling decreases after the first term in office.

According to hypothesis 4, the cost of ruling is higher for niche parties than for mainstream parties. Fig. 8 presents the marginal effect of incumbency conditional on party.[3] Based on our definition of niche parties as parties that mobilize voters on a single or a few issues, CU, SGP, GL and SP are considered niche parties. The first two represent conservative Christians, whose main support comes from voters adhering to specific protestant churches, which makes them compete on specific dimensions (e.g., traditional family values). GL are leftish
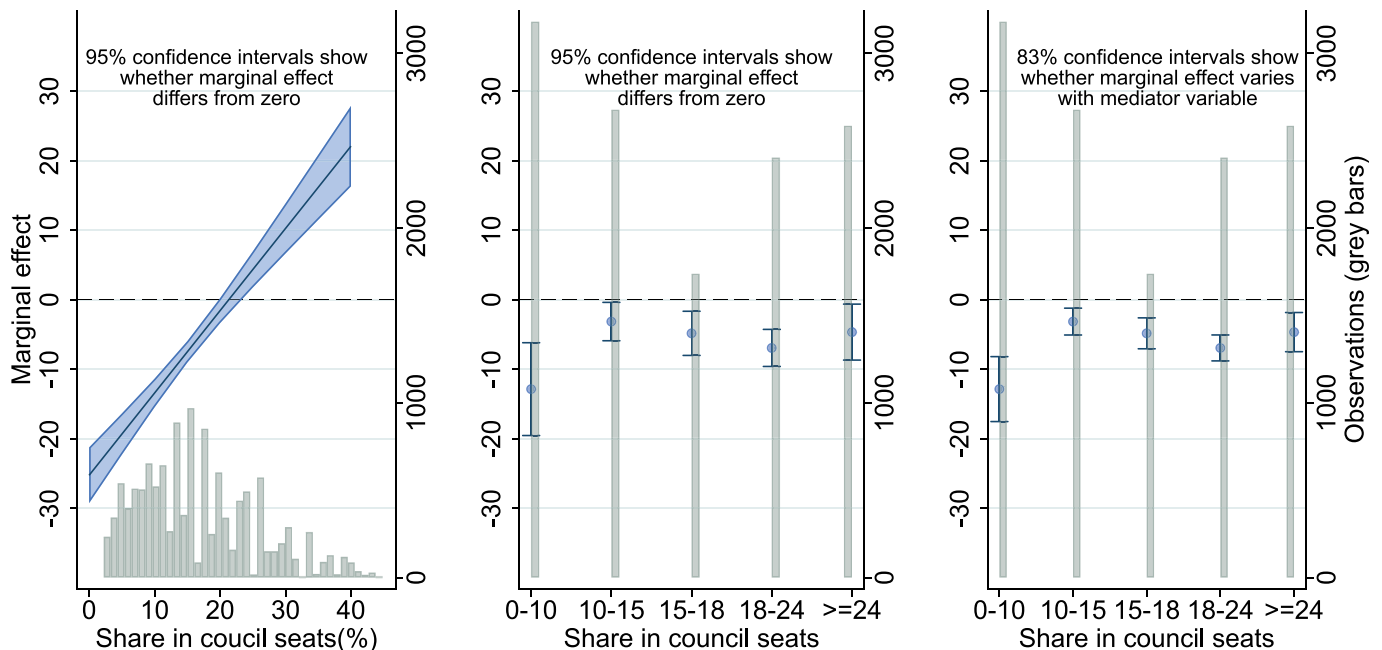

Fig. 6. Marginal effect of incumbency on change in seat share, conditional on share in council seats.

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[3] For the elections before the merger of GPV and RPF into CU in 2000, GPV and RPF were coded as CU in the regression underlying this figure. In other regressions, GPV and RPF are treated as separate parties before 2000.
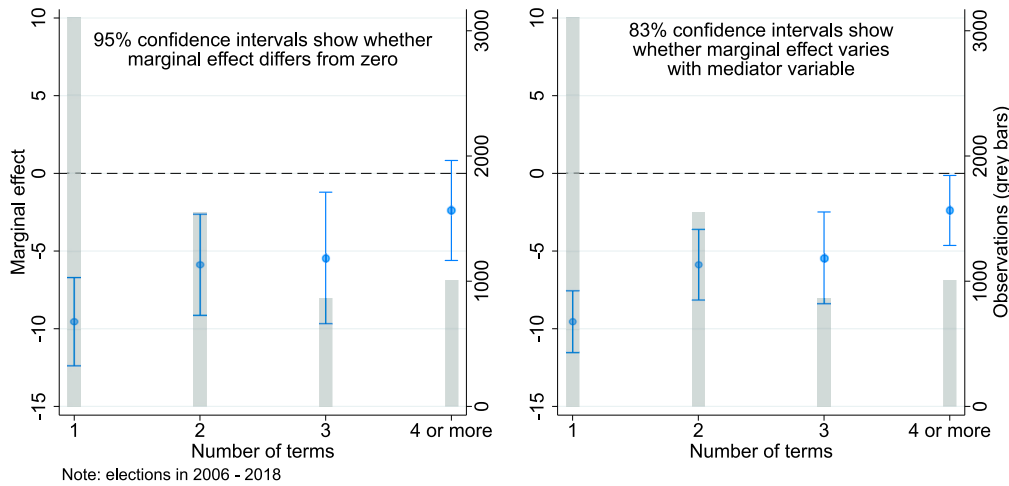
Fig. 7. Marginal effect of incumbency on change in seat share, conditional on number of consecutive terms in office.
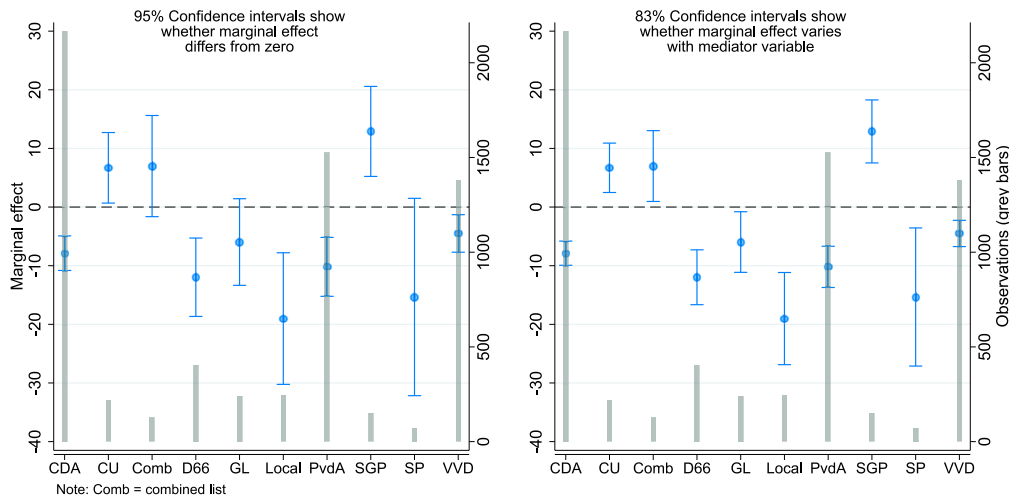

Fig. 8. Marginal effect of incumbency on change in seat share, conditional on party affiliation.

greens, who strongly emphasized sustainability long before other parties addressed this theme, and SP activist socialists who focus on the class-cleavage dimension, which at the local level sets them apart from other parties. Some local parties are also niche parties, but many are not.

Fig. 8 does not support our hypothesis. On the contrary, the Christian niche parties CU and SGP actually gain vote share when incumbent and GL (green left) is not affected much by incumbency. The SP (Socialist Party) does seem to suffer but the confidence interval is rather wide.

According to hypothesis 5, the electoral costs of incumbency increase with the ideological distance between a party and the average ideological position of the coalition parties. We test this hypothesis using the five different ideological scales developed by Laméris et al. (2018), as described in the data section.

The left part of Fig. 9 plots the conditional marginal effects. For most scales, the confidence intervals include zero for all values of the mediator variables. For the market friendliness scale, we find that for some low values of the mediator variable incumbent parties do worse than opposition parties do. For the freedom scale, we find that this is the case for some intermediate values. Neither of these results are in line with hypothesis 5, according to which the cost of ruling increases with ideological distance.

Hypothesis 6 states that the cost of ruling increase with the ideological breadth of the coalition. The only evidence we find is on the ideological left-right scale. None of the four other ideological scales we use mediates the cost of governing. We find only weak support for Hypothesis 6.

Hypothesis 7 (the cost of ruling decreases with the number of coalition parties), is supported by the data (Fig. 10). The middle and the right panel of Fig. 10 confirm that the cost of governing varies linearly with the number of coalition parties. Possibly, it is more difficult to blame an individual party for disappointing performance when coalitions consist of more parties. We cannot rule out that the effect found here is driven by the number of council parties rather than number of coalition parties, as both are correlated. However, insofar this correlation is due to municipal size (larger jurisdictions have both more council seats and more aldermen), this is controlled for by our municipality fixed effects.

Hypothesis 8 states that the cost of ruling has increased over time. Fig. 11 shows that this hypothesis is not supported. There is no clear trend in the cost of governing, although this effect is no longer significantly different from zero in the last two elections.
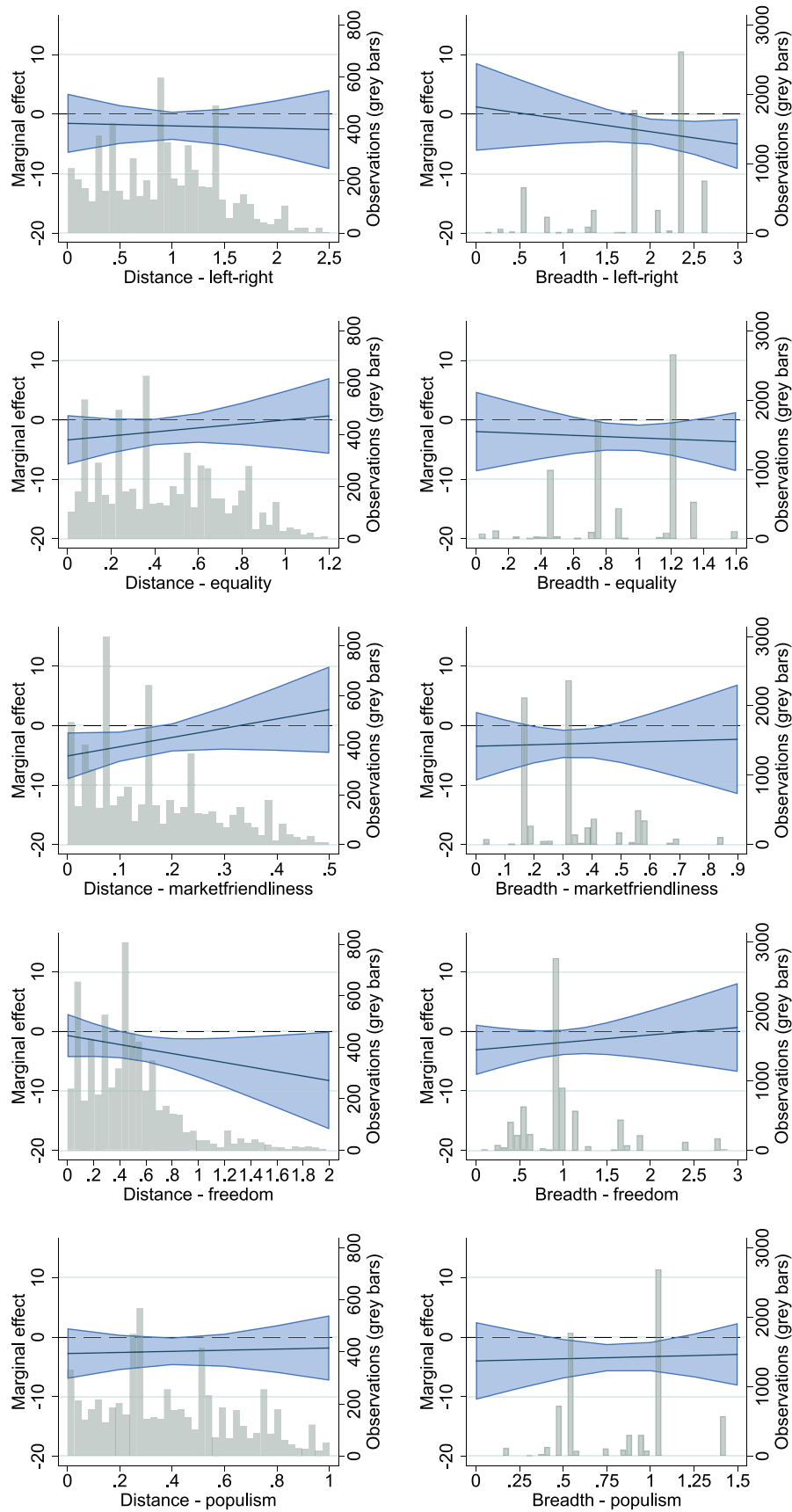
Fig. 9. Ideological distance from coalition (left) and ideological breadth of coalition (right) with 95% confidence intervals.
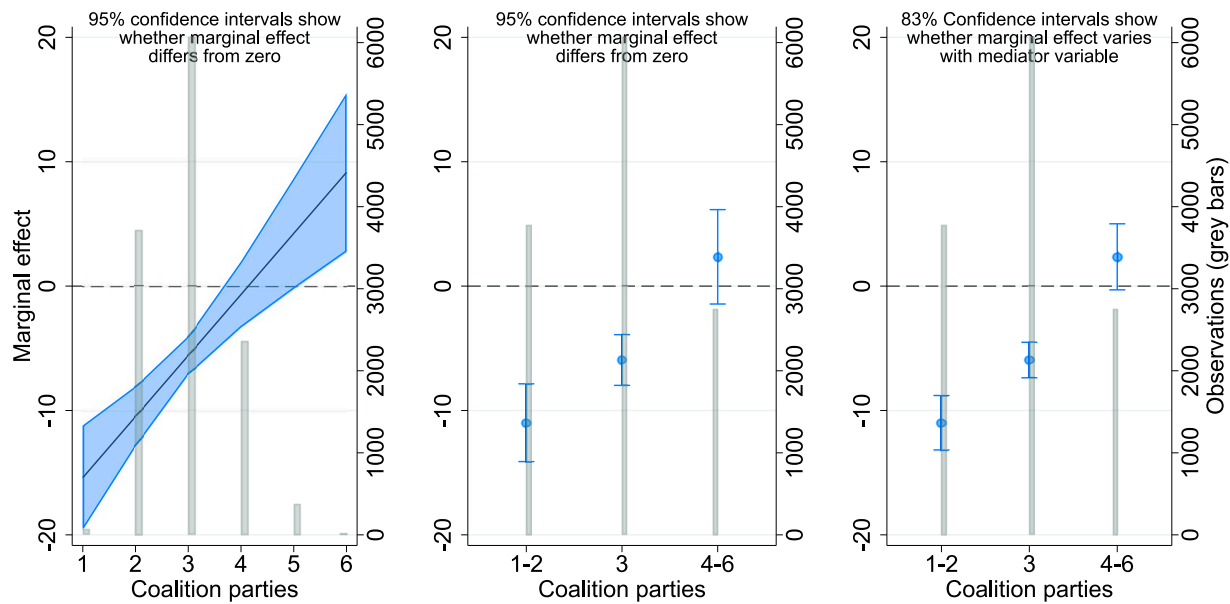
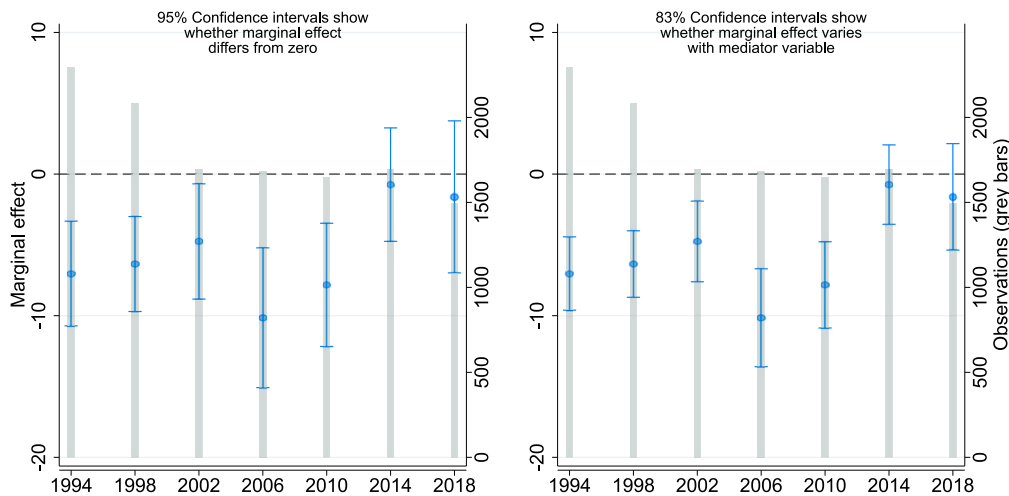**Fig. 10.** Marginal effect of incumbency on change in seat share, conditional on number of coalition parties.

Fig. 11. Marginal effect of incumbency on change in seat share, conditional on election year.

8. Conclusions

On average, parties that join a local coalition government in the Netherlands can expect to lose about six percent of their vote share in the next election. This shows that Dutch local elections are not 'just' second-order elections. Local politics matters for the electoral choices voters make. As expected, the cost of ruling is not homogeneous. In some cases, being an incumbent party may not affect electoral performance, or it may even be rewarded by an increase in vote share. However, in many cases, this heterogeneity in the cost of incumbency does not conform to our hypotheses (Table 5).

We find that whether a party is a member of the national cabinet does not matter for the cost or ruling in local elections. In line with hypothesis 2, small parties (up to ten percent of council seats) are punished more harshly for joining a local coalition than larger parties. Small parties must compromise more, and are more liable to disappoint voters. However, the difference with parties occupying 18–24 percent of council seats is not significant.

The cost of ruling seems to decrease with the number of consecutive terms in office, but only after four terms or more is this cost significantly lower than after one term in office. We expected that parties disappoint more voters after their first term in office than after two or more consecutive terms, because parties in office have revealed how they govern, and unsatisfied voters would probably already have deserted them after their first term. That this effect only materializes after four or more consecutive terms suggests that grievance asymmetry is possibly not the best explanation. Possibly theories relating to the life cycle of political parties could offer some insights into this.

Two (Christian) niche parties actually gain seats when incumbent, while the two other (left wing) niche parties in our study suffer no significant electoral cost of incumbency. Perhaps these Christian niche parties are more reluctant to enter coalitions with parties that are ideologically different, because they do not want to compromise on what is important for them. Additional research could bear this out.

The electoral cost of incumbency does not increase with the ideological distance between a party and the average ideological position of

Table 5
Results per hypothesis.

	Hypotheses: electoral costs of incumbency:	Support?	Remarks
1	are higher for cabinet parties	No	Makes no difference
2	decrease with party size	Some	Cost is higher for very small parties but differences among medium-sized and big parties are not significant
3	decrease after the first term in office	Some	Only after four or more terms the cost or ruling is significantly lower than after the first term
4	are higher for niche parties than for mainstream parties	No	Some niche parties win vote share after incumbency
5	increase with the ideological distance from coalition	No	Only for one out of five ideological scales we find an effect, and this effect goes against the hypothesis
6	increase with ideological breadth of coalition	Little	Only on one out of five ideological scales
7	decrease with number of coalition parties	Yes	Linear effect of moderator variable
8	have increased over time	No	There is no clear trend

the coalition parties. The cost of ruling increases with the ideological breadth of the coalition, but only on the ideological left-right scale. Possibly hypotheses 5 and 6 are not supported because local politics is less ideological than national politics (Oliver et al., 2012). Municipal government is more about solving practical problems, making the ideological composition of the coalition less relevant for policies and voters.

One hypothesis is unambiguously supported: the cost of ruling decreases with the number of coalition parties, and thus with clarity of responsibility. This suggests that, when a proportional electoral system allows a large number of parties to emerge, necessitating coalitions of many parties, accountability could suffer. With regard to our final hypothesis, we find no clear trend in the cost of ruling over time.

An important limitation of this study is that local parties could only be included in regressions for elections where only one local party ran. As a robustness test, we investigated whether our conclusions would be different had all local parties been excluded. This is not the case; see the online Appendix 1.

We hope to see new studies on the local cost of governing using a similar methodology in countries with different institutions, in order to compare the results. Similar results would imply that the cost of governing is fairly independent of the institutional setting. However, different results would suggest that the cost of governing is context dependent, which may then explain the inconsistency in results of extant empirical studies.

We discuss different theories that may explain the mechanism behind the incumbency effect. These theories mainly originate from research on national elections and aim to explain the incumbency effect in general, not its heterogeneity. And, although they have been applied to local government before and go some way in explaining why the incumbency effect might differ between parties, they do not apply seamlessly. Two of these theories predict a negative incumbency effect, as we find here, and may also be applied to a multidimensional context, as in Dutch local elections: grievance asymmetry and coalition of minorities.

In line with the first of these theories, *grievance asymmetry*, we find that the electoral cost of incumbency decreases with the number of coalition parties and with the number of consecutive terms in office. However, only after four or more terms in office is this cost significantly lower than after the first term. Support for hypothesis 1 (parties that are simultaneously a national and local incumbent incur a disproportionally higher cost of ruling) would have been in line with grievance asymmetry as well, but was not found.

In line with the *coalition of minorities* theory, we would expect the electoral costs of incumbency to decrease with party size. However,

although this cost is indeed higher for very small parties, differences among medium-sized and big parties are small and not significant. We would also expect a higher cost for niche parties and when there is a greater ideological distance between a party and the coalition it joins, but neither of these hypotheses is supported. Finally, the coalition of minorities theory leads us to expect the cost of ruling to increase with the ideological breadth of the coalition, but this hypothesis is only weakly supported.

Our study points towards grievance asymmetry as a most likely explanation for the cost of governing in Dutch local government. This suggests that it is indeed fruitful to employ this theory beyond economic voting, which is also a logical implication of its close connection to prospect theory. Support for the grievance asymmetry theory implies that voters hold government accountable, although in an imperfect way.

However, many of our results remain unexplained by theory. This shows that there is a lot we do not know about the mechanisms that may affect the quality of our democracies. The most glaring anomaly is perhaps that we find that some (niche) parties actually benefit from incumbency. Future research could, e.g., look into the kind of ties parties have with the electorate (Martin, de Lange & van der Brug, 2022). Moreover, we hope that new theories will be developed that might better explain what we find. Since most of the theories on the incumbency originate from research relating to national governments, it could be worth exploring if novel theories are needed to explain the heterogeneity of the cost of governing at the local level. As Hjermitslev (2020) notes, there is clearly a need for more refined theorizing.

Data availability

Data will be made available on request.

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.electstud.2022.102516.

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