# The Gatekeeper's Dilemma: Controlling Political Selection or Incentivizing Team Effort

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July 2, 2022

#### Abstract

Political parties play an important gatekeeping role in elections. What goals do they pursue when exercising this role? Are they willing to sacrifice seats to control which candidates get elected? If so, under which conditions? Which candidates do they favor? We address these questions exploiting a unique feature of the Norwegian electoral system that allows parties to regulate the intensity of the internal contest for seats. With the help of a stylized model we show that, in this setting, all parties face a tradeoff (between maximizing seats and controlling political selection), but this tradeoff is weaker for popular ones. Indeed, we observe that stronger parties are more likely to use their gatekeeping power to protect their preferred candidates. We find that parties insulate candidates with political experience and women, which are beneficial in post-election bargaining for leadership positions.

*Keywords:* Campaigning, coalitional bargaining; intra-party politics; moral hazard; flexible party lists; personal votes; proportional representation; seniority norms *JEL Classification:* C21, D72

<sup>\*</sup>We thank Ali Cirone, Benoit Crutzen, Ben Geys, Nikitas Konstantinidis, Carlo Prato, Rune Sørensen, Stephane Wolton and audiences at EPSA-2020 and PERG-2021 for useful comments. Fiva gratefully acknowledges financial support from the Norwegian Research Council (grant no. 314079). Competing interests: The authors declare none.

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# 1. Introduction

Political parties are often considered as the cornerstone of democracy (Stokes, 1999). One of the most important roles that parties play is that of gatekeepers in the political selection process. Indeed, political parties control candidate recruitment, the composition of electoral lists and (albeit to varying degrees under different institutional structures) the intensity of internal competition for seats. Their strategic choices can therefore have a crucial impact on the process of translating voters' preferences for individual candidates into political outcomes. As such, it is of fundamental importance to understand what goals and objectives parties pursue in this process, and what strategies they adopt to achieve them. In this paper, we aim to address these questions.

We begin with the observation that, when exercising their gatekeeping power, parties must consider (at least) two elements. On the one hand, a party's strategic choices in this domain will impact its electoral performance, for example, by influencing individual candidates' incentives to contribute to the party's goals or exert costly campaign effort (Invernizzi and Prato, 2021). On the other hand, parties may want to use the their gatekeeper power to directly control the political selection process, by securing advantages or positions for their preferred candidates (Buisseret and Prato, 2021). Often, parties will not be able to achieve both goals at once. Here, we investigate this trade-off and ask: are parties willing to sacrifice votes (and seats) in order to exercise control? If so, under which conditions? What types of candidates are favored in this process, and why? What are the implications for voters' welfare? Do voters and parties have different preferences with respect to which candidates' characteristics are more desirable?

These questions are important from a both positive and normative standpoint, and the answers are far from obvious. Political scientists have been referring to parties' objectives and internal organization as the "black box" or "secret garden" of politics (Marsh et al., 1988; Hazan and Rahat, 2010). Parties typically approach these issues as purely internal matters, and are often reluctant to reveal their goals to the public. Thus, we still have a very limited understanding of how political parties make strategic use of their gatekeeping powers (see for example Dal Bó and Finan (2018) for a review and the gaps in knowledge).

In this paper, we exploit a unique feature of the Norwegian local electoral system. These elections are decided by a flexible list system, where voters can express their preference for individual politicians (as in open-list systems), but parties can choose to assign an advantaged position to some of their candidates (similarly to a closed-list system). The candidates that are placed in an advantaged spot receive a 'bonus' amount of personal preference votes. This boost is so large that it is extremely hard for a non-advantaged candidate to compete with the advantaged ones in the intra-party contest. By strategically allocating advantaged positions, local parties can therefore regulate the intensity of the internal contest for seats. As such, parties may fall victim of the trade-off that we discussed above, between choosing an allocation strategy that maximizes the party's electoral performance, and one that insulates their preferred candidates from competition. Thus, by observing the parties' choices in this setting we can gain a deeper understanding of what preferences, goals, and strategies they pursue when they exercise their gatekeeping power in the political selection process.

To this aim, we first introduce a stylized model to study parties' strategic problem in this setting. Party leaders care about maximizing the number of seats won, but they also value the possibility to control the political selection process by securing positions for specific candidates in the list. In the model, the allocation of seats to the party is a function of its ex-ante electoral strength, as well as individual candidates' effort. The assignment of seats within the party is a function of candidates effort and the allocation of advantaged positions. Here, party leaders face a moral hazard problem, since individual candidates care solely about their own chances of winning a seat, rather than the party's overall performance. Crucially, the intensity of this problem will be endogenous to the party's strategic choice. In fact, the number of advantaged positions allocated by the leadership fundamentally alters the candidates' incentives to exert costly campaign effort in this setting. Our analysis proceeds in two steps. First, our model illuminates the gatekeepers' dilemma: while the leadership may want to strategically allocate advantages in order to exercise control (i.e., insulate some candidates from competition and guarantee them a seat), the total amount of campaign effort is maximized when no advantaged positions are assigned. Thus, the party leader cannot achieve both goals at once. If the leader wants to exercise control, he needs to renounce some seats.

Second, our main novel result then highlights that the way the leader optimizes this trade-off depends crucially on the party's ex-ante electoral strength. Specifically, the likelihood that a party assigns advantages to protect some of its candidates and guarantee them a seat, rather than maximizing effort, increases in its electoral strength. The intuition is as follows. When some candidates are insulated from internal competition (i.e., receive an advantage that guarantees them a seat), only the disadvantaged ones will have incentives to exert effort. As the party gets stronger, there is a higher chance that it may be able to win enough seats to distribute to the candidates that received no advantage. Thus, these candidates' effort increases with party's electoral strength. A similar effect emerges under open-list, but there the marginal impact of increasing the party's strength is reduced by the fact that internal competition is more intense. In other words, stronger parties face a weaker trade-off: they can exercise control without it having a large (negative) impact on candidates' incentives to exert effort, and thus the party's overall electoral performance.

With these predictions at hand, we turn to the data. First, we verify that political candidates respond to the incentives arising under the different list structures as predicated in the model. We show that, as expected, candidates exert (proxied by their residualized personal vote-share) more effort when their advantaged status does not guarantee them a seat. This reassures us that the moral hazard problem we hypothesize is indeed empirically relevant. Next, we show that the data support our main prediction on the equilibrium allocation of advantaged positions. The likelihood of a party choosing an allocation that insulates some candidates from competition (at the expenses of effort and thus seats) is increasing in its ex-ante electoral strength.

Thus, our theoretical and empirical results suggest that parties do indeed experience a trade-off between control and seats, and that they are sometimes willing to sacrifice (some) seats as a result. However, stronger parties can (and will) get the best of both worlds: these parties can exercise their gatekeeping power to insulate some candidates from competition, without giving up too much in terms of electoral success.

Having established that parties value control above and beyond seats, our second contribution is to investigate which types of candidates parties favor in this process. Specifically, we study how candidate characteristics predict getting an advantaged position. In line with existing studies, we document that seniority within the party is important for receiving an advantaged position (Cirone, Cox and Fiva, 2021; Fiva and Røhr, 2018). Beyond this, skills and relevant experience seem to be especially valuable for political parties, and women tend to be more likely to obtain an advantaged position than men. We interpret these results as evidence that parties prefer specific types of candidates and may potentially sacrifice votes in order to get them elected. However, if the parties' preferences over the candidates' characteristics are perfectly aligned with the voters', such a trade-off may not materialize in practice (Casey, Kamara and Meriggi, 2021).

To investigate this possibility, we measure voter preferences by regressing candidates' personal vote-share on their characteristics, while controlling for advantaged status, rank and local party fixed effects. We see that, while parties' and voters' preferences generally overlap, there is some residual disagreement. While new candidates are, everything else being equal, less likely to receive an advantaged position by the party, they are *more* attractive to voters. The opposite is true for women. Furthermore, when analyzing each party separately, we also find some mismatch with voters' preferences over candidates' union membership, immigrant background, and altruism. This suggests that parties do not use their gatekeeping power solely to increase the list's appeal to the voters.

Our final contribution is to delve deeper into what may motivate parties to favor spe-

cific types of candidates. First, we focus on the strong seniority norm that our empirical results identify. We investigate the hypothesis that electing experienced candidates is valuable for political parties (and voters) because such candidates are better at governing or cooperating with other parties (Buisseret et al., 2021; Cox et al., 2021). One specific argument is that incumbents are better able to navigate the post-electoral coalition bargaining process (Meriläinen and Tukiainen, 2021). Indeed, we show that as the share of elected incumbents increases, parties tend to obtain better bargaining outcomes (i.e., more important nominations). Interestingly, we find similar results for women candidates. Electing more women (as a share of total members) to the municipal council increases parties' chances to obtain a disproportionally large share of seats in the municipal executive. Recall that, with respect to a candidate's gender, we identified a mismatch between parties' and voters' preferences. This result thus suggests that parties are potentially willing to sacrifice votes to improve their chances of occupying strategic positions in the local government.

Before concluding this section, we pause to briefly discuss how this paper relates to the broader political science literature. The main goal of this project is to exploit a unique feature of the Norwegian electoral system to understand the preferences of parties by studying how, and why, parties strategically choose their ballot structures. This connects our work to the broader literature on endogenous electoral institutions (Aghion, Alesina and Trebbi, 2004; Leemann and Mares, 2014; Achury, Ramírez and Cantú, 2017). Simultaneously, our results also contribute to the recent theoretical and empirical literature on how the ballot structures shape the incentives and behavior of candidates, political selection, and intra-party politics (Buisseret and Prato, 2021; Buisseret et al., 2021; Carroll and Nalepa, 2020; Cox et al., 2021; Crutzen, Flamand and Sahuguet, 2020; Hangartner, Ruiz and Tukiainen, 2019; Kselman, 2020). Moreover, we provide evidence supporting the party politics literature view that control over the type of candidates elected is valuable to the parties (Cohen et al., 2008; Eriksson and Vernby, 2021; McCarty and Schickler, 2018). Finally, our findings add new insights to the extensive literature on incumbency

effects, and they are also closely related to work on seniority-based nomination norms in politics (e.g., McKelvey and Riezman, 1992; Epstein et al., 1997; Cirone, Cox and Fiva, 2021).

### 2. Institutional Setting

The Norwegian population of about 5.4 million is divided into 356 municipalities (2020).<sup>1</sup> These municipalities (local governments) are important entities of the welfare state with responsibilities for many core public services, such as education and primary health care. In total, municipalities employ about 17% of the total labor force.

Each local government is run by a municipal council of 11 to 77 members. Local elections take place every fourth year. Norwegian politics is dominated by seven political parties, which can be classified as left-leaning (*Labor Party* (A); *Socialist Left Party* (SV)), center (*Center Party* (SP); *Christian Peoples' Party* (KRF); *Liberal Party* (V)) or right-leaning (*Conservative Party* (H); *Progress Party* (FRP)).<sup>2</sup> The Labor Party and the Center Party are the largest parties, and present lists in almost all the municipalities (341 and 346, respectively). On average, they win 28-29 percent of the seats in the municipalities where they run. With an average council size of about 26 members, this translates into about 7 seats.

The proportional representation electoral system works as follows. Voters cast a ballot for one of the parties and, if they want, express their preferences for individual candidates. Voters can give a personal vote to as many candidates as they like.<sup>3</sup> Seats are allocated *across* parties based on the modified Sainte-Laguë method. The allocation of seats *within* parties is instead decided based on an index which depends on both voter and party choices. The election system allows parties to give candidates a "head start"

<sup>&</sup>lt;sup>1</sup>A municipal amalgamation reform, passed by parliament in June 2015, lead to a reduction in the number of municipalities from 428 to 356 over the following four years. The local election in 2019 used the post-reform municipality structure in place from January 2020.

 $<sup>^{2}</sup>$ Appendix Table A.1 provides descriptive statistics at the municipality-level for these parties in the 2019 elections.

<sup>&</sup>lt;sup>3</sup>In the most recent election (2019), 46 percent of voters cast at least one personal vote.

(*advantage*) to some of their candidates, that increments their personal vote-share by adding 25% of the total number of votes received by the party.<sup>4</sup> More precisely, denote as  $Poll_{il}$  candidate *i*'s advantage-adjusted personal preference vote-share. We have that:

$$Poll_{il} = \begin{cases} PersonalVotes_i & \text{if } i \text{ has no advantage} \\ PersonalVotes_i + 0.25 \cdot PartyVotes_l & \text{if } i \text{ has a advantage for list } l. \end{cases}$$

 $Poll_{il}$  then determines the candidates' post-ballot ranking, and therefore, the order in which they are elected. Evidently, the head-start parties can assign is so large that it is extremely hard for non-advantaged candidates to compete with advantaged candidates.<sup>5</sup>

The maximum number of candidates that party can give an advantage to depends on the size of the local council.<sup>6</sup> Parties can choose any number between zero and the maximum.

The decision over how many advantaged positions to allocate, and to whom, is taken by local parties' nomination committees. The candidates with an advantage are listed in boldface on the top of the ballot. The initial ranking of candidates is also chosen by the party, but it does not play any formal role, except if there is a tie. In practice, ranking correlates with personal votes. In our empirical analysis, we focus on the 2019 local elections, where the median number of advantaged candidates is two. However, there is considerable variation across municipalities, as well as over time for local party lists.<sup>7</sup> Thus, the number of advantaged positions that parties give appears to be a real choice. This choice, and its implications, is what we study in this paper.

 $<sup>^4{\</sup>rm Candidates}$  with a head start are listed at the top of the ballot paper in boldface. Appendix Figure A.1 provides an example.

<sup>&</sup>lt;sup>5</sup>In 2019, only 2% of non-advantaged candidates received personal votes amounting to 25% of the total number of votes received by the party, which is the *minimum* to overtake a candidate with a head start (see Appendix Figure A.2). Only 0.2% of non-advantaged candidate beats a candidates with a head start (excluding open lists).

<sup>&</sup>lt;sup>6</sup>In councils with fewer than 23 members, parties can give an advantage to a maximum of 4 candidates. For councils with 23 to 53 members, the maximum is 6, and for councils with more than 53 members, 10 is the limit (Fiva and Røhr, 2018). For the vast majority of party lists, the restriction is not binding. In our sample, 8 percent of party lists are at the maximum allowed.

<sup>&</sup>lt;sup>7</sup>For municipalities that were not involved in any mergers between 2015 and 2019, we find a correlation between the number of advantaged candidates at the list-level of 0.49.

### 3. What do parties want?

In what follows, we introduce a stylized model to analyze parties' optimal allocation of advantaged positions. For ease of presentation, we will first focus on the candidates' campaign effort choice, fixing an allocation of advantaged positions. We will then define the party's objective function and characterize the equilibrium allocation strategy.

### 3.1 The candidates' effort choice

Consider the game between n candidates belonging to the same party, that only care about their own individual success (i.e., their probability of winning a seat). Each candidate's strategic choice is the amount of costly campaign effort to exert  $e_i \in [0, 1]$ . Formally, each candidate *i*'s utility is  $U_i = \mathbb{I}_i R - \frac{e_i^2}{2}$ , where  $\mathbb{I}_i$  takes value 1 if candidate *i* obtains a seat and 0 otherwise.<sup>8</sup> The individual candidates' campaign effort influences the party's overall electoral performance. We model this electoral process in a reduced-form. The number of votes received by the party (S) is a function of the n candidates' effort choices  $(\sum_{i=1}^{n} e_i)$ , the party's ex-ante electoral strength (V),<sup>9</sup> and a random shock  $(\delta \sim U[-\frac{1}{2\phi}, \frac{1}{2\phi}])$ :

$$S = \sum_{i=1}^{n} e_i + V + \delta.$$

The allocation of seats to the party is proportional to its vote-share. Specifically, for each x, there is a threshold  $K(x) = x \cdot K$  that the votes obtained by the party must surpass to win x seats. Thus, the party obtains 1 seat if  $S \in [K, 2K)$ , 2 seats if  $S \in [2K, 3K)$ etc.

The allocation of the seats *within* the party is a function of two elements: each candidate's effort choice, and the allocation of advantaged positions by the party leadership. Each seat that the party wins is allocated to the set of advantaged candidates first. Only after all the advantaged candidates have obtained a seat, the residual ones are allocated

<sup>&</sup>lt;sup>8</sup>We impose R < 1 to ensure interior solutions.

<sup>&</sup>lt;sup>9</sup>As a function, for example, of the voters' ideological leaning or the value of the party brand.

to the non-advantaged candidates. Suppose, for example, that the party assigns an advantaged position to 3 candidates, and wins a total of  $\sigma > 3$  seats. Then, 3 seats are allocated to the advantaged candidates and  $\sigma - 3$  to the non-advantaged ones. Suppose instead that the party assigns an advantaged position to 3 candidates, and wins a total of  $\sigma \leq 3$  seats. Then, all the seats are allocated to the advantaged group.

Within each group (advantaged and non-advantaged), each candidate's probability of obtaining a seat is increasing in its effort choice, and decreasing in the effort choice of the other candidates in the same group. Formally, seats are allocated as a result of a (sequential) Tullock contest (as in Crutzen, Flamand and Sahuguet (2020)). For example, suppose that the party wins a single seat, and allocates an advantaged position to  $n_a > 1$ candidates.<sup>10</sup> Then, for each advantaged candidate  $i_a$ , the probability of obtaining a seat is:

$$Q_{i_a}(1) = \frac{e_{i_a}}{\sum_{i_a} e_{i_a}}.$$

Suppose instead that the party wins a total of two seats and allocates an advantaged position to  $n_a > 2$  candidates. Then each advantaged candidate's probability of obtaining the first seat is as above  $(Q_{i_a}(1))$ . The candidate that obtains this first seat is then excluded from the contest for the second. Each advantaged candidate  $i_a$ 's probability of obtaining a seat is therefore

$$Q_{i_a}(2) = \frac{e_{i_a}}{\sum_{i_a} e_{i_a}} + (1 - \frac{e_{i_a}}{\sum_{i_a} e_{i_a}}) \frac{e_{i_a}}{\sum_{i_a \neq w_1} e_{i_a}},$$

where  $w_1$  denotes the candidate that won the first seat. If the party wins more seats than the number of advantaged candidates, the allocation within the disadvantaged group follows an analogous process.<sup>11</sup>

 $<sup>^{10}\</sup>mathrm{Abusing}$  notation,  $n_a$  will denote both the set of advantaged candidates and the cardinality of this set.

<sup>&</sup>lt;sup>11</sup>Formally, denote as  $\chi$  the number of seats won by the party and allocated to the set of advantaged candidates (notice that  $\chi = min \in \{\sigma, n_a\}$ ). The probability that each of the advantaged candidates wins a seat is:

Our goal in this section is to analyze how the candidates respond to the incentives generated under different (exogenous) allocations of advantaged positions.

Analysis. It will be useful to introduce some notation. Denote  $\overline{N}$  the maximum number of seats the party can win. This is the number of seats the party would win if all the candidates exerted maximum effort, and the realization of the idiosyncratic shock  $\delta$  was the most favorable.<sup>12</sup> <u>N</u> is instead the minimum number of seats the party is guaranteed to obtain, i.e., the number of seats the party wins thanks to its ex-ante electoral strength (even if all candidates exert 0 effort, and even if the shock  $\delta$  takes its smallest value). Finally  $n_a \in [0, n)$  denotes the number of advantaged candidates in the list.<sup>13</sup>

It is easy to see that the candidates' incentives to exert campaign effort depend primarily on the relationship between  $\overline{N}$ ,  $\underline{N}$  and  $n_a$ . We can identify four cases. First, suppose  $n_a \in (0, \underline{N}]$ :

**Remark 1.** Suppose that  $n_a \in (0, \underline{N}]$ . Then, advantaged candidates exert no effort, while disadvantaged ones exert the same amount of strictly positive effort.

Here, the number of candidates receiving an advantaged position is (weakly) lower than the minimum number of seats the party is guaranteed to win. This implies that the advantaged candidates are completely insulated from internal competition, and are always guaranteed a seat. Therefore, these candidates have no incentives to exert costly effort. In contrast, within-party competition for seats is preserved amongst the non-

$$Q_{i_a}(\chi) = q_1 + \sum_{j=2}^{m_a} q_j (\prod_{s=1}^j (1-q_s)),$$

$$e_i$$

where

$$q_j = \frac{i_a}{e_{i_a} + \sum_{k \neq i_a} e_k},$$

for all  $i_a, k \in n_a \setminus \{w_{j-1}\}$ .  $w_{j-1}$  denotes the set of advantaged candidates that won the first j-1 seats. In an analogous way, we can define  $\xi = max \in \{0, \sigma - \chi\}$ , and the probability of winning a seat for a candidate that does not receive an advantage as  $Q_{i_{na}}(\xi)$ .

<sup>12</sup>In our empirical analysis, we will use past election results to construct a proxy for this upper bound. <sup>13</sup>Recall that, in the Norwegian case, there is an exogenous upper bound to the number of advantaged positions parties can allocate. We thus assume that the party leadership cannot assign an advantage to all the candidates on the list. This does not alter our results from Proposition 1. advantaged candidates. Further, all these candidates face an identical problem, and thus exert the same amount of effort in equilibrium.

Second, consider the case in which  $n_a \in (\underline{N}, N)$ :

**Remark 2.** Suppose that  $n_a \in (\underline{N}, \overline{N})$ . Then, both advantaged and non-advantaged candidates exert strictly positive effort in equilibrium. All candidates with the same advantage status exert the same amount of effort.

Here, the number of candidates that receive an advantage is strictly higher than the minimum number of seats guaranteed to the party, but strictly lower than the maximum. This implies that the advantaged candidates are not always guaranteed a seat and, at the same time, the non-advantaged candidates can hope to win one. While candidates in the two groups have different incentives to exert effort, all will choose a strictly positive amount in equilibrium: competition is preserved both at the top and the bottom of the list.

Third, if  $n_a \geq \overline{N}$ , we have:

**Remark 3.** Suppose that  $n_a \geq \overline{N}$ . Then, non-advantaged candidates exert no effort, while advantaged ones exert the same amount of strictly positive effort in equilibrium.

Now, the number of advantaged candidates is (weakly) higher than the maximum number of seats the party can hope to win. As a consequence, advantaged candidates are not guaranteed a seat, and have incentives to exert costly campaign effort. In contrast, disadvantaged candidates can never hope to win a position, and therefore always choose zero effort in equilibrium.

Finally, under  $n_a = 0$ , we have:

**Remark 4.** Suppose that  $n_a = 0$  (open list). Then, all candidates exert the same amount of strictly positive effort in equilibrium.

 $n_a = 0$  corresponds to an open list structure. All candidates face an identical problem, and all have a chance of winning a seat. Thus, all will exert the same strictly positive amount of effort.<sup>14</sup>

#### 3.1.1 Empirical evidence on candidates' effort choice

Before moving to analyze the party's optimal allocation, we turn to the data to verify that, in our setting, candidates respond to the incentives generated under the different allocation structures as predicted by our model. A striking implication of the model is that, even fixing their advantaged status, candidates should behave very differently under different allocation structures. In particular, advantaged candidates should exert more effort when their status does not guarantee them a seat, i.e., when the total number of advantaged candidates in the list is larger than the minimum number of seats the party expects to win  $(n_a > \underline{N})$ . In other words, when they remain subject to intraparty competition for seats, even candidates that received an advantaged position will want to exert effort to improve both the party's overall performance and their own standing in the internal contest. In contrast, a candidate that is guaranteed a seat has no electoral incentives to exert effort to improve the party's overall performance or his own standing in the internal contest.

To evaluate this prediction, and thus, reassure ourselves that the moral hazard problem we hypothesis is relevant in our setting, we compare the effort choices of *advantaged* candidates under different allocation structures.<sup>15</sup>

We consider the candidates running for office in the 2019 local election (54,244 candidates). We exclude the 1,551 candidates running in Oslo and Bergen, since these two municipalities have chosen a parliamentary system. We also exclude candidates running for non-standard lists (i.e. joint lists of the main parties, party-independent lists, and minor party lists) (10,584 candidates). We also exclude candidates running for office in municipalities involved in mergers (11,212 candidates), and candidates that have any missing data from the administrative registers (2,755 candidates). This leaves us with a

<sup>&</sup>lt;sup>14</sup>Notice that the candidates would face an identical strategic problem under  $n_a = n$ .

<sup>&</sup>lt;sup>15</sup>Figure A.4 displays the share of lists adopting the different allocation structures corresponding to Remarks 1-4.

sample of 28,142 candidates.

We do not have a direct measure of campaign effort. Instead, we rely on a proxy: the personal vote-shares, or their residuals while fixing the candidates' pre-ballot rank in the list, advantage status, personal characteristics, and local party fixed effects. Appendix Table A.2 provides descriptive statistics for the main variables in our empirical analysis.<sup>16</sup>

In order to classify the different allocation structures, we consider the maximum and minimum number of seats the list won in the last four elections. These correspond, respectively, to the parameters  $\overline{N}$  and  $\underline{N}$  in the model.<sup>17</sup>

The analysis central to our interests is the comparison between the candidates in an advantaged position who are insulated from intraparty competition vs. candidates with similar observed personal characteristics and pre-ballot rank<sup>18</sup> and advantaged status, but who are exposed to competition. Thus, we compare the personal vote-shares of a candidate that receives an advantage in a list where  $0 < n_a \leq \underline{N}$ , with the vote-share of a similar candidate who also receives an advantage (and has same pre-ballot rank), but is in a list where  $n_a > \underline{N}$ . The former candidate is in a safe spot, and should therefore have little incentive to campaign, while the latter has to win the intra-party contest in order to obtain a seat. Moreover, local party fixed effects address, for example, the concern that variation in  $\underline{N}$  could be correlated with district or local party characteristics.

The following regression model is estimated separately for lists that have two, three, four, or five to six advantaged candidates. We do not study cases with more than 6 advantaged as they are rare.

<sup>&</sup>lt;sup>16</sup>For the time-varying individual characteristics, we use data from 2018, the year before the election. <sup>17</sup>However, especially for parties that are in decline or on the rise, this measure may be inaccurate and actual realizations can be out of these bounds. Therefore, in Appendix Figure A.3, we replicate the analysis, but use the actual number of seats won in 2019 elections plus or minus one to construct the bounds. This measure may be more accurate, but possibly suffers from post-treatment bias. It is reassuring that the results are almost identical when using two different measurement strategies that have different strengths and weaknesses.

<sup>&</sup>lt;sup>18</sup>Here, because the pre-ballot rank is chosen by the party and is a strong predictor of vote shares, it also potentially captures relevant individual characteristics the party is aware of, but that we do not have in our dataset.

$$PersonalVoteShare_{ipm} = \sum_{r=1}^{10+} \delta_r Rank_{ipm} \times TopCompetition_p +$$

$$\sum_{r=1}^{10+} \beta_r Rank_{ipm} + \alpha_{pm} + \lambda' \mathbf{X_{ipm}} + u_{ipm}.$$
(1)

Here  $PersonalVoteShare_{ipm}$  denotes the share of personal votes that candidate *i* gets in candidate's own party list *p* (in municipality *m*).  $Rank_{ipm}$  is the candidates pre-election rank in the list and  $TopCompetition_p$  denotes list where  $n_a > \underline{N}$ .  $\alpha_{pm}$  denotes the local party fixed effects. We use outcome data only from the last election year in our data (2019), and thus, election year fixed effects are not relevant.  $X_{ipm}$  denotes the candidate level control variables (see Appendix Table A.2).

The parameters of interest in equation (1) are  $\delta_r$ . In Figure 1 we present both the raw data of personal votes and the estimated  $\delta_r$ .<sup>19</sup> For example, the top-left panel restricts the sample to lists where two candidates are being advantaged, and compares the individual vote-share of candidates in a list where  $n_a > \underline{N}$  with the vote-share of candidates of identical pre-ballot rank and advantaged status<sup>20</sup>, but running in a list where  $0 < n_a \leq \underline{N}$ . The next graphs restrict the sample to lists with three, four, or five to six advantaged candidates. The results are striking and systematic. When candidates are insulated from intra-party competition, they receive substantially fewer personal votes both in the raw data and even when controlling for local party fixed effects and a full battery of personal characteristics. For example, looking at lists with two advantaged candidates, a first-ranked candidate gets about nine percentage points fewer personal votes when his advantage insulates him or her from internal competition. We find a corresponding effect of about four percentage points for the second-ranked candidates.<sup>21</sup>

<sup>&</sup>lt;sup>19</sup>The full set of regression results is reported in Appendix Table A.3.

 $<sup>^{20}</sup>$ Recall that advantaged candidates appear at the top of the list.

<sup>&</sup>lt;sup>21</sup>With local party fixed effects, the increase in personal vote shares for top candidates must be accompanied by a reduction in personal vote shares for bottom candidates. The reason that the positive effects in each plot in Panel B do not exactly balance the negative effects, is because there are many candidates in the "10+" rank category.

We interpret these results as evidence that the candidates' campaigning effort responds to the incentives induced by the party leadership's advantage allocation strategy in the expected way. As the theory predicts, candidates exert less campaign effort when their own seat is secure, even if this damages their party's overall performance.<sup>22</sup>

The pattern of results is striking such that with two advantaged candidates, the two first-ranked candidates get more votes when in top competition, with three advantaged, three first, and with four advantaged four first. Moreover, this pattern in the raw data is very robust to our very rich set of controls and fixed effects. As it is practically impossible to think of confounders that would follow this exact same pattern, we trust that we have established a causal effect of having a safe seat (or not) on personal votes. A remaining caveat is that the personal votes are determined jointly by the actions of parties, candidates and voters. While our design controls for simple potential voter heuristics such as advantaged candidates getting more votes because they are presented in bold letters in the list, more sophisticated voters responses may be a potential concern for our proposed mechanism that votes effects result from campaigning effort. The (residualized) personal vote-share may not be a good proxy for campaign effort if voters are strategically targeting their votes where it matters the most in the intra-party race. However, this is less of a concern in our specific setting, since the electoral system allows voters to cast as many preference ballots as they wish. Furthermore, even if advantaged candidates receive fewer personal votes when they are insulated from competition, their vote-share remains substantial. For example, we can see from Panel A of Figure 1 that top-ranked candidates tend to get about 25% of the total personal votes cast even when they are ex-ante already guaranteed a seat.<sup>23</sup> This suggests that voters typically do not take into account these strategic pivotality considerations when casting their ballots.

<sup>&</sup>lt;sup>22</sup>The only exception to the result is candidates that are ranked first, for whom residualized personal vote shares are more similar under the two allocation structures for the cases when many advantaged positions are given (typically larger parties). Crucially, parties typically place the presumptive mayoral candidate in the top-ranked position. Thus, especially in the larger parties, top-ranked candidates have more incentives to campaign in order to increase their party's overall performance, and thus, the chances of winning the mayoral position, even if their own seat in the council is safe (Cox et al., 2021).

 $<sup>^{23}</sup>$  The average personal vote-share is 5% (Table A.2).





Note: Panel A display candidates' personal vote share (within party list) by pre-election ballot rank and nature of competition. The black circles indicate top competition. The hollow circles indicate bottom competition. We split the sample by the number of advantaged candidates (given in the title of each subpanel). We pool cases where the advantage is given to 5-6 candidates because of few observations. Panel B plots estimates of  $\delta_r$  from equation (1).  $\delta_r$  captures the difference between advantaged candidates insulated from intraparty competition and those exposed to it, when controlling for local party fixed effects, rank, advantage status and candidate characteristics. Appendix Table A.3 provide the full regression results. Standard errors are clustered at the municipal level and 95% confidence intervals reported. Sample is candidates running for one of the seven main parties in the 2019 local election (excluding merged municipalities).

### 3.2 The party's optimal choice

Under the reassurance that the moral hazard problem we hypothesize is empirically relevant in our setting, we now move to analyze which allocation structure the party leadership finds optimal to adopt. Hereafter, we will assume that n = 4, N = 1 and  $\overline{N} = 3$ , i.e., the party list includes 4 candidates, the party is always guaranteed at least 1 seat, and can never win more than 3.

Building on the literature emphasizing that parties place a premium on the ability to control political nomination processes (Cohen et al., 2008; McCarty and Schickler, 2018), we assume that the party leadership cares about seats (and, thus, inducing campaign effort), but also values the possibility to protect some of its candidates. Recall that  $n_a$ indicates the number of advantaged positions allocated by the party. Denote  $\sigma$  the total number of seats won by the party. Then, we have that the leadership's utility  $U_l$  is:

$$U_l = \begin{cases} W\sigma + B, & \text{if } 0 < n_a \leq \underline{N} \\ W\sigma, & \text{otherwise} \end{cases}$$

Thus, W is the value of each additional seat. Recall that when  $n_a \leq N$ , the advantaged candidates are always guaranteed a seat. As such, B captures in a reduced-form the payoff premium that the leadership obtains from exercising control.<sup>24</sup> Substantively, insulating some candidates from competition may be valuable for the party leadership in and of itself (because the leadership wants to ensure its preferred candidates get to office), or because this represents a prize or reward the leadership allocates within the context of a larger dynamic intra-party bargaining process. Adopting a reduced-form approach, we black-box the question of why parties value control, and simply focus on the potential trade-off between exercising control and incentivizing effort.

Before proceeding to the analysis, it is important to emphasize that we do not ex-

<sup>&</sup>lt;sup>24</sup>Our key results from Proposition 1 are unchanged if we allow the party to also obtain a premium from *excluding* some candidates from competition (i.e., from choosing  $n_a \geq \overline{N}$ ).

plicitly consider candidates with different characteristics in the model. This is not to say that we assume all candidates are the same: individual heterogeneity is precisely why the party leadership may value control. Instead, here we take a stylized approach, which allows us to abstract from the issue of which types parties prefer, and focus on the tradeoff between incentivizing effort and exercising control.<sup>25</sup>

**Analysis.** First, it is important to establish what is the allocation structure that maximizes campaign effort in our setting:

**Lemma 1.** Total campaign effort (and thus expected number of seats) is maximized when the party allocates zero advantaged positions  $(n_a = 0)$ .

This illuminates the gatekeeper's dilemma. If the party leadership was interested solely in maximizing the candidates' campaign effort (which then translates into seats), it should never allocate any advantaged position, so as to intensify internal competition. However, the party also values control, and obtains a benefit from using advantaged positions so as to protect its preferred candidate(s). The gatekeeper's dilemma is therefore that it can never achieve both goals at once.

Here, we are interested in understanding under which conditions the party leadership chooses to exercise control, at the expenses of effort (and thus seats). Given our setup, it is straightforward to see that we can always find a B large enough that the party finds it optimal to strategically allocate advantaged positions to protect some of its candidates, rather than maximizing incentives for effort. Less straightforwardly, our analysis shows that the value of B that induces a party to adopt this strategy is a function of its ex-ante electoral strength (V): the stronger the party, the lower this threshold. This yields the following result:

**Proposition 1.** The likelihood (in the sense of set inclusion) that the party leadership chooses to exercise control (i.e., allocates  $0 < n_a \leq \underline{N}$ ) is increasing in the party's ex-ante

 $<sup>^{25}</sup>$ An important caveat is that this approach relies on the assumption that the marginal cost of effort is not a function of candidates' characteristics.

#### electoral strength V.

Notice that the previous Lemma implies that, in equilibrium, the party will either assign no advantaged positions at all (in order to maximize effort), or choose  $0 < n_a \leq \underline{N}$ (in order to exercise control).<sup>26</sup> Under  $0 < n_a \leq \underline{N}$ , the advantaged candidates are always guaranteed a seat, therefore only the non-advantaged ones will ever have incentives to exert effort. Such candidates are competing for the few seats that the party may win, and that would remain open after all advantaged candidates have secured a position. As the party's ex-ante electoral strength increases (and the party's chances improve), winning the intra-party conflict therefore becomes more relevant for the candidates at the bottom. Thus, campaign effort increases. A similar effect emerges under open-list ( $n_a = 0$ ), but there the marginal impact of increasing party strength is reduced by the fact that internal competition is more intense. In other words, the difference in equilibrium effort under the two allocation structures is decreasing in V. Thus, if V is too low, exercising control comes at a high cost for the party. In contrast, when V is high, parties can exercise control without sacrificing too much in terms of electoral success. Therefore, stronger parties experience a weaker trade-off, and can get the best of both worlds.

This prediction finds validation in our data. In Figure 2, we use the average local party vote share in the four previous elections as a proxy for the party's ex-ante electoral strength (V). We show that, as predicted, the likelihood that a party chooses to exercise control at the expenses of seats (i.e., allocates  $0 < n_a \leq \underline{N}$ ) increases with the party's ex-ante electoral strength.

This result not only sheds light on parties' goals and objectives. It also has important implications for our understanding of political selection and competition, and opens potential avenues for future research. While analyzing endogenous candidate entry is outside the scope of our project, this result in fact suggests that parties that are already electorally popular may also find it easier to recruit desirable candidates, by making a

<sup>&</sup>lt;sup>26</sup>If we allow the party to also obtain a premium from choosing  $n_a \geq \overline{N}$  (as in Footnote 24), this list will sometimes be chosen in equilibrium, but our results below remain unchanged.

credible promise to use their gatekeeping powers to insulate them from internal competition. This might, in turn, provide further benefits to these already advantaged parties. This hypothesis offers a promising direction to develop the burgeoning literature on candidates' self-selection in political economy (see Dal Bó and Finan (2018) for a review).

Figure 2: The likelihood that a party allocates  $0 < n_a \leq \underline{N}$  increases with electoral strength



Note: The figure shows the fraction of local party lists choosing  $0 < n_a \leq \underline{N}$  (denoted on the y axis as the party choosing 'bottom competition') in the 2019 election as a function of the average local party vote share in year 2003 to 2015. Sample is candidates running for one of the seven main parties in the 2019 local election (excluding merged municipalities). Each of the ten binned scatterpoints in each panel contains about the same number of observations.

### 4. Who gets the advantage?

The results so far suggest that parties use their gatekeeping power at least in part to control political selection by insulating some candidates from internal competition, and guarantee that they obtain a seat. But what types of candidates do parties tend to favor in this process? In order to answer this question, we analyze what characteristics increase the probability of a candidate obtaining an advantaged position. To achieve this, we estimate following linear probability model:

$$Advantage_{ipm} = \iota_{pm} + \boldsymbol{\zeta}' \mathbf{X}_{ipm} + \varepsilon_{ipm}.$$
(2)

Here,  $Advantage_{ipm}$  has value one if candidate *i* running in party list *p* in municipality *m* is assigned the advantaged position, and zero if not.  $\iota_{pm}$  denotes the local party fixed effects. These control perfectly for the different number of advantaged positions each local party assigns, because we use outcome data only from the last election year in the data (2019). We limit the sample in this way to be able to measure the effects of seniority over several elections.  $X_{ipm}$  denotes the candidate level variables of interest.

The results are reported in Table 1. The most striking result is a strong seniority norm (in line with results in Cirone, Cox and Fiva (2021) and Fiva and Røhr (2018), that also present evidence of seniority norms in Norwegian elections). Having been previously elected once increases the probability of receiving the advantage by about 20 percentage points. This is a large effect, given that the mean of the outcome variable is about 0.11. Furthermore, the extra boost from additional seniority is substantial, and the probability of receiving the advantage increases monotonically with each additional past electoral success.<sup>27</sup> Having been a mayor gives an extra boost of about 30 percentage points (on top of incumbency as all mayors are also elected). The results are robust to controlling for a rich set of candidate characteristics (on top of the local party fixed effects). We also find that high-quality candidates (where quality is measured using pre-election income and education) are generally more likely to receive an advantaged position.<sup>28</sup>

Next, we consider previous experience as municipal employees as a proxy for insider status, because such candidates tend to have an information advantage in the municipal council decision making (Niskanen, 1971; Hyytinen et al., 2018). We find that candidates working in the public sector are two percentage points more likely to receive the advan-

<sup>&</sup>lt;sup>27</sup>The analysis includes a separate dummy for how many times a candidate has been elected in the previous four elections: "Elected X times before". We also include a dummy for running for the first time: "New candidate". Therefore, the reference group is a re-running candidate who was not elected in any of the previous elections.

 $<sup>^{28}</sup>$ We find union membership status to be negatively associated with getting the advantage. Altruism, as measured by the amount of tax deductible donations to charities that the candidate has given, does not seem to matter.

tage. This is a similar magnitude to the estimate for higher education. An analogous picture emerges if we consider the impact of immigrant status, which serves as proxy for being an outsider. Immigrants are about two percentage points less likely to receive an advantaged position on the ballot. We note that this finding is in line with Dancygier et al. (2021), who document that immigrants' political careers are thwarted by party elites in Sweden.

Interestingly, female gender is associated with a lower likelihood of getting the advantage (column 3), but the sign flips ones we control for previous experience in office (column 4). Comparing candidates with equal experience, parties thus tend to favor women.

In the appendix, we investigate potential heterogeneity in these results. Interestingly, the patterns do not seem to vary much across political parties, or ideological blocs (Appendix Tables A.4 - A.5). Our data therefore do not support the conventional argument that party culture and norms concerning candidate and leadership selection differ across the political spectrum (Duverger, 1954; Lisi, Freire and Barberà, 2015; Meriläinen and Tukiainen, 2018). Similarly, parties make the same decisions over whom to give the advantage to regardless of the nature of the inter-party competition as measured by how intensely they are competing for the mayoral seat (Appendix Table A.6).

# 5. Who gets the votes?

The analysis so far shows that parties have preferences for specific types of candidates, and that they allocate advantaged positions in order to (at least partially) insulate these candidates from internal competition. We interpret these results as evidence that parties experience a tradeoff, and are potentially willing to sacrifice some electoral success in order to exercise control over the political selection process and get their preferred candidates to office. However, if the parties' preferences over the candidates' characteristics are perfectly aligned with the voters', such a trade-off may not actually materialize in practice.

Table	1:	Who	gets	the	advantage?
Table	т.	1110	8000	UIIC	auvanuage.

	(1)	(2)	(3)	(4)
New candidate	-0.001	-0.001		-0.019***
	(0.003)	(0.003)		(0.004)
Elected one time before	0.214***	0.212***		0.204***
	(0.009)	(0.009)		(0.009)
Elected two times before	0.306***	0.293***		0.292***
	(0.012)	(0.012)		(0.012)
Elected three times before	0.351***	0.311***		0.319***
	(0.018)	(0.018)		(0.018)
Elected four times before	0.501***	0.419***		0.429***
	(0.024)	(0.025)		(0.024)
Mayor (any previous election)		0.306***		0.292***
		(0.026)		(0.025)
Age (standardized)			0.004**	-0.029***
			(0.002)	(0.002)
Woman			-0.005	0.012***
			(0.003)	(0.003)
Log (Income)			0.027***	0.018***
			(0.001)	(0.001)
Union member			-0.018***	-0.001
			(0.005)	(0.004)
Donations (NOK 10000)			0.002	-0.000
			(0.004)	(0.004)
Municipal employee			0.049***	0.016***
			(0.006)	(0.005)
High education			0.045***	0.028***
			(0.005)	(0.004)
Immigrant			-0.037***	-0.022***
Maara of antone in 11	0.100	0 100	(0.007)	(0.006)
Mean of outcome variable Within R squared	0.122 0.14	0.122 0.15	0.122	0.122
Observations	28142	28142	28142	28142
Party FE	Yes	Yes	Yes	Yes

Notes: Sample is candidates running for one of the seven main parties in the 2019 local election (excluding merged municipalities). Standard errors are clustered at the municipal level and reported in parentheses. \* denotes 10% statistical significance, \*\* 5% and \*\*\* 1%.

Parties could, by insulating their preferred candidates, also make the whole list more attractive to voters. Therefore, even if exercising control reduces candidates' incentives to exert campaign effort, the party's vote-share may nonetheless be maximized.

In order to investigate this possibility, and assess the misalignment between voter and party preferences, we regress the candidates' personal votes on their characteristics, while controlling for the advantage status, pre-election rank fixed effects and local party fixed effects. This analysis is related to our campaigning analysis reported in Figure 1, but fundamentally distinct from it. There, candidate characteristics control for voters' preferences, and we study how being in a safe seat influences candidates' votes. Here, we are instead interested in studying voters' preferences directly, and thus investigate how different individual characteristics predict votes, while controlling for advantaged status.

These results are reported in Table 2 and should be compared to those in Table 1. Most of the covariates that are positively associated with probability of obtaining an advantage are also positive predictors of personal vote-shares, and vice-versa. However, there is some residual disagreement. In particular, while new candidates are (everything else being equal) less likely to receive the advantage, they are more attractive to voters. The opposite is true for women. Furthermore, when analyzing each party separately in Appendix Tables A.4 and A.7, we find some further mismatch also on union membership, immigrant background, and altruism. The same candidate traits seem to attract votes in similar ways in different parties, but there is between-party heterogeneity in how these features are associated with getting the advantage. In short, our data identify a partial mismatch between parties' and voters' preferences over candidates' characteristics. This is suggestive evidence that political parties do not use their gatekeeping power solely to increase the list's appeal to the voters. Instead, parties seem to value control above and beyond electoral success.

	(1)	(2)	(3)	(4)	(5)	(6)
New candidate	$0.005^{***}$	$0.005^{***}$		-0.001	$0.001^{*}$	$0.001^{**}$
	(0.001)	(0.001)		(0.001)	(0.001)	(0.001)
Elected one time before	$0.061^{***}$	0.060***		$0.057^{***}$	$0.017^{***}$	$0.017^{***}$
	(0.002)	(0.002)		(0.002)	(0.001)	(0.001)
Elected two times before	0.088***	0.083***		0.082***	0.024***	0.024***
	(0.003)	(0.003)		(0.003)	(0.002)	(0.002)
Elected three times hofens	0 100***	0 009***		0.005***	0.000***	0 000***
Elected three times before	(0.109)	(0.093)		(0.095)	(0.029)	$(0.029^{-1})$
	(0.000)	(0.000)		(0.000)	(0.000)	(0.000)
Elected four times before	0.146***	0.112***		0.114***	0.032***	0.032***
	(0.007)	(0.006)		(0.006)	(0.004)	(0.004)
Mayor (any previous election)		$0.125^{***}$		0.119***	0.018***	0.018***
		(0.008)		(0.007)	(0.006)	(0.006)
Age (standardized)			0 009***	0 011***	0.006***	0.006***
Age (standardized)			(0.002)	(0.000)	(0.000)	(0.000)
			(0.000)	(0.000)	(0.000)	(0.000)
Woman			-0.011***	-0.006***	-0.005***	-0.005***
			(0.001)	(0.001)	(0.001)	(0.001)
Log (Income)			0.008***	0.005***	0.002***	0.002***
			(0.000)	(0.000)	(0.000)	(0.000)
Union member			-0 008***	-0 003***	-0.001**	-0.001**
			(0.001)	(0.001)	(0.001)	(0.001)
Donations (NOK 10000)			$0.006^{***}$	$0.006^{***}$	$0.005^{***}$	$0.005^{***}$
			(0.001)	(0.001)	(0.001)	(0.001)
Municipal employee			$0.015^{***}$	0.006***	0.001	0.001
			(0.001)	(0.001)	(0.001)	(0.001)
High education			0.017***	0.012***	0.006***	0.006***
			(0.001)	(0.001)	(0.001)	(0.001)
<b>T</b> · ·			0.010***	0.000***	0.005***	0.005***
Immigrant			$-0.013^{***}$	$-0.009^{***}$	$-0.005^{***}$	$-0.005^{***}$
			(0.002)	(0.001)	(0.001)	(0.001)
Advantage (head start)						0.006**
	0.059	0.059	0.059	0.059	0.059	(0.002)
Wean of outcome variable Within R-squared	0.053 0.20	0.053 0.22	0.053	0.053 0.26	0.053 0.60	0.053 0.60
Observations	28142	28142	28142	28142	28142	28142
Rank FE	No	No	No	No	Yes	Yes
Party FE	Yes	Yes	Yes	Yes	Yes	Yes

### Table 2: Personal vote determinants

Notes: Sample is candidates running for one of the seven main parties in the 2019 local election (excluding merged municipalities). Standard errors are clustered at the municipal level and reported in parentheses. \* denotes 10% statistical significance, \*\* 5% and \*\*\* 1%.

## 6. Why control? Investigating post-election bargaining

In this section, we delve deeper into *why* parties prefer certain types of candidates. Here, we focus on the two most striking results emerging in the analysis so far. First, how can we explain the strong seniority norm emerging in the data? In other words, why are incumbent office holders substantially more likely to receive an advantaged position? Second, why do parties favor women even if this seems to come at the expenses of votes?

The hypothesis that we investigate is that incumbents and women are valuable for political parties because electing such candidates secures a premium in the post-election bargaining process. In our setting, such bargaining advantage could result in the party obtaining a disproportionate share of the seats in the municipal board. The board is elected by the council at the beginning of each electoral period. While its composition should in principle reflect the seat-shares in the council, parties retain some leeway. If no councilor demands that the board members are selected via list-based proportional elections,<sup>29</sup> its composition can be decided on via a negotiated agreement. Furthermore, even if no formal bargaining process takes place, there are fewer positions in the board than seats in the council, which creates a degree of disproportionality that the parties must resolve.

In this setting, electing experienced candidates may be valuable for political parties because such candidates are better at navigating the post-election bargaining process (as in Meriläinen and Tukiainen (2021)). For example, incumbent candidates can use their networks and acquired skills to secure their party a disproportionate share of the available seats. To analyze this possibility, we regress the share of board seats that a party p in a municipality m at time t gets (*Board share*<sub>pmt</sub>) on the respective seat share of incumbents

 $<sup>^{29}</sup>$ In this case, each party (or groups of parties) puts forward a list of candidates for the board, including up to twice the number of names relative to the number of positions to be filled. Each list can only include elected council members, and should cover at least 40 percent candidates of each gender "as far as possible" (Local Government Act §7-5)

### (Incumbent share<sub>pmt</sub>).

Board share<sub>pmt</sub> = 
$$\alpha + \beta Council share_{pmt} + \gamma Incumbent share_{pmt} + \mu_{pmt}$$
. (3)

 $\gamma$  quantifies the possible bargaining premium that a party obtains from having more incumbent politicians, while holding the relative strength of the party fixed.

The results are presented in the second column of Table 3 and Figure 3 (left panel). Despite close to one-to-one mapping between council seats share and board seat share (column 1), we see a statistically significant bargaining boost associated with electing more incumbents into the council. A 10%-points increase in incumbent share results in about 1.4%-points increase in the party's share of the executive.

Next, we consider the impact of electing more women to the council. When the board is selected via list-based proportional elections, each list has to include at least 40% of candidates of each gender (see Footnote 29). Even when the board is instead formed via a negotiated agreement, each councillor can anticipate that, if he or she demands that the board is selected via proportional elections, the gender quota will have to be respected. This credible threat inevitably constrains the bargaining process. As such, we can expect these gender quotas to make female candidates more valuable for parties in the post-election bargaining. To investigate this possibility, we run the following regression:

Board share<sub>pmt</sub> = 
$$\alpha + \beta Council share_{pmt} + \delta Women share_{pmt} + \mu_{pmt}$$
. (4)

As reported in Table 3, Column 3, we find that a 10%-points increase in the share of women results in a 0.8%-points increase in the parties share of the executive. This result is of particular interests for us, since the analysis of parties' and voters' preferences identified a mismatch for candidates' gender. This finding therefore suggests that parties are potentially willing to sacrifice votes in order to improve their chances of occupying strategic positions in the local government.

	(1)	(2)	(3)	(4)	(5)
Seat share (percent)	0.983***	0.983***	$0.981^{***}$	1.001***	1.000***
	(0.012)	(0.012)	(0.013)	(0.035)	(0.047)
Incumbents (percent)		0 014***		0 015***	0 019***
meambents (percent)		(0.014)		(0.010)	(0.019)
		(0.004)		(0.004)	(0.000)
Women (percent)			$0.008^{*}$	0.010**	$0.012^{*}$
<b>ν</b> - ,			(0.005)	(0.005)	(0.006)
				0.000	0.001
Seat share squared				-0.000	-0.001
				(0.001)	(0.001)
Mean of outcome variable	17.46	17.46	17.46	17.46	17.46
R-squared	0.839	0.840	0.840	0.841	0.847
Observations	1800	1800	1800	1800	1800
Municipality FE	No	No	No	No	Yes

### Table 3: Coalitional bargaining outcomes

Notes: The sample consist of main party lists winning a seat in a local council in the 2019 election (N=1,800). The dependent variable is the party's percent of seats in the executive board. "Seat share" measure the percent of seats the party holds in the council. "Incumbents" measure the percent of re-elected incumbents among the elected candidates from the party. "Women" measure the percent of women among the elected candidates from the party. Standard errors are clustered at the municipal level and reported in parentheses. \* denotes 10% statistical significance, \*\* 5% and \*\*\* 1%.

Figure 3: Coalitional bargaining outcomes



Notes: The sample consist of main party lists winning a seat in a local council in the 2019 election (N=1,800). The figure is a binned scatterplot residualized by parties' seat share, i.e. the fitted dashed line in corresponds to specification (2) and (3) from Figure 3, respectively. Each of the ten binned scatterpoints contains about the same number of observations.

# 7. Conclusions

What objectives do parties have when they take part in elections? Answering this question is of fundamental importance for scholars of politics, since parties play a key role in representative democracy. In particular, parties often act as gatekeepers in elections, controlling the set of candidates available to voters and the extent to which the electorate's preferences determine who gets elected to office. In this paper, we have analyzed parties' strategic choices in this domain. We used a unique feature of the Norwegian local election system, according to which each party can choose whether to give a 'head start' to some of its candidates, thus mechanically increasing the probability that they obtain a seat. This allows parties to control the nature of competition within lists.

We considered several dimensions of this choice: How many candidates do parties choose to give this advantage to? How does the party choice affect candidates campaigning effort? What characteristics do the preferred candidates have? Why are certain candidates preferred? Answering these questions both with a stylized model and empirical analysis allows us to shed light on the intuition that parties face a potential tradeoff between maximizing seats and controlling the political selection process, and to investigate how they operate when faced with this strategic choice.

We showed that there is substantial variation in the parties' choices of how many candidates to give an advantage to. We reject the hypothesis that parties strategically allocate advantaged positions solely (or primarily) in order to solve their moral hazard problem vis-à-vis the candidates. Instead, parties seem to value the opportunity to determine which of their candidates get into office, and use the allocation of advantaged positions to optimize their trade-off between seats and control. Stronger parties can get the best of both worlds, and are thus more likely to use their gatekeeping power to fully insulate their preferred candidates from competition.

All parties, consistently and regardless of the nature of inter-party competition, choose to give advantage to similar types of candidates: party insiders (e.g., previous incumbents and municipal employees), high quality politicians, and women. Especially the seniority norm is large and increasing in the length of tenure. We reported evidence that there is some misalignment between voters' preferences and candidates' features privileged by the parties in particular when it comes to gender and freshmen candidates. This is further indication that parties are potentially willing to sacrifice votes (and seats) in order to exercise control over the types of candidates elected to office. Finally, we documented that incumbent candidates and women are beneficial for parties in the post-election bargaining for important nominations to the municipal executive, and thus, the party choices are at least not solely driven by favoritism or elitism, but rather can benefit its voters.

While the specific election system the data come from is rare, it should not limit the generalizability of at least some of our results when it comes to the lessons about the parties' objective functions and candidates' responses to electoral incentives. Regardless of the specific institutional setting they operate in, parties can often face a tradeoff analogous to the one we investigate here, between maximizing expected electoral success and mitigating internal competition to favor their preferred candidate. For example, such a tradeoff may materialize when parties select which candidates to put on a ballot or how to allocate them across districts (Galasso and Nannicini, 2011, 2015), when they choose candidate ranking under closed-list systems (Buisseret and Prato, 2021), when they determine the structure of their primary elections (Serra, 2011), and when they decide how to distribute campaign funds (Snyder, 1989). Our contribution is to show that, when experiencing this dilemma, parties may be willing to sacrifice votes in order to exercise control, and to identify conditions under which this is more likely to occur.

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### **Online Appendix**

#### The Model: preliminaries

Denote p(x) the probability of the party winning exactly x seats. We have that  $p(x) = p\left(S \in [Kx, K(x+1))\right)$ , with  $S = V + \sum_{i=1}^{n} e_i + \delta$  and  $\delta \sim U \in [-\frac{1}{2\phi}, \frac{1}{2\phi}]$ . Plugging in this distributional assumption, we can easily compute these probabilities.

Recall that we assume that the party always wins at least <u>N</u> seats, and never more than  $\overline{N}$  (i.e.  $p(S < K\underline{N}) = 0$  and  $p(S \ge K\overline{N}) = 0$ ). These assumptions impose the following restrictions on the parameters:

- $V < min \in \{(\overline{N}+1)K n \frac{1}{2\phi}, \frac{1}{2\phi} + K(\underline{N}+1) n\},\$
- $V > max \in \{\underline{N}K + \frac{1}{2\phi}, \overline{N}K \frac{1}{2\phi}\}$
- $K < \min \in \left\{ \frac{1}{\phi(\overline{N} \underline{N} 1)} \frac{n}{\overline{N} \underline{N} 1}, \frac{1}{\phi} \right\}$
- $K > max \in \{n, \frac{n}{\overline{N}+1-\underline{N}} + \frac{1}{\phi(\overline{N}+1-\underline{N})}\}$
- $\phi < \frac{1}{n(\overline{N} \underline{N})}$

### The candidates' maximization problem.

Next, consider the maximization problem of a candidate in an advantaged position  $(i_a)$ . Denote  $p(\chi)$  the probability that exactly  $\chi$  seats are won by the party and allocated to the advantaged group (recall that this probability is a function of the candidates' effort choice). Further, denote  $Q_{i_a}(\chi)$  the probability of an advantaged candidate obtaining a seat. Then, each advantaged candidate maximizes the same objective function:

$$R\sum_{\chi=\underline{N}}^{n_a} p(\chi)Q_{i_a}(\chi) - \frac{e_{i_a}^2}{2}$$
(5)

The associated FOC is:

$$R(\sum_{\chi=\underline{N}}^{n_a} p(\chi) \frac{\partial Q_{i_a}(\chi)}{\partial e_{i_a}} + \sum_{\chi=\underline{N}}^{n_a} \frac{\partial p(\chi)}{\partial e_{i_a}} Q_{i_a}(\chi)) - e_{i_a} = 0$$
(6)

 $p(\cdot)$  and  $\frac{\partial p(\chi)}{\partial e_{i_a}}$  are computed in a straightforward way from the normal CDF. Further, notice that the maximization problem is identical for all candidates belonging to the same group (i.e., all advantaged candidates and all disadvantaged ones). This implies, straightforwardly, that all advantaged candidates exert the same effort in equilibrium. Plugging this into (6), we can verify that the following holds in equilibrium:

$$Q_{i_a}(\chi) = \frac{\chi}{n_a} \tag{7}$$

and

$$\frac{\partial Q_{i_a}(\chi)}{\partial e_{i_a}^*} = \frac{1}{e_{i_a}^*} (1 - \frac{\chi}{n_a}) \sum_{j=1}^{\chi} \frac{1}{n_a - j + 1}$$
(8)

Finally, consider the problem of a candidate in a disadvantaged position  $i_{na}$ . Denote  $p(\xi)$  the probability that exactly  $\xi$  seats are won by the party and allocated to the advantaged group (recall that this probability is a function of the candidates' effort choice).  $Q_{i_a}(\xi)$  denotes the probability of an advantaged candidate obtaining a seat. Then, each non-advantaged candidate maximizes the same objective function:

$$R\sum_{\xi=1}^{\overline{N}-n_a} p(\xi)Q_{i_{na}}(\xi) - \frac{e_{i_{na}}^2}{2}$$
(9)

The associated FOC is:

$$R(\sum_{\xi=1}^{\overline{N}-n_a} p(\xi) \frac{\partial Q_{i_{na}}(\xi)}{\partial e_{i_{na}}} + \sum_{\xi=1}^{\overline{N}-n_a} \frac{\partial p(\xi)}{\partial e_{i_{na}}} Q_{i_a}(\xi)) - e_{i_{na}} = 0$$
(10)

As above, we can verify that the following holds in equilibrium:

$$Q_{i_{na}}(\xi) = \frac{\xi}{n_{na}} \tag{11}$$

and

$$\frac{\partial Q_{i_{na}}(\xi)}{\partial e_{i_{na}}^*} = \frac{1}{e_{i_{na}}^*} (1 - \frac{\xi}{n_a}) \sum_{j=1}^{\xi} \frac{1}{n_{na} - j + 1}$$
(12)

Note on Remarks 1-4: we have shown that candidates with the same advantage status face an identical problem. This implies the symmetric results referenced in Remarks 1-4, i.e., that all candidates belonging to the same group (advantaged or disadvantaged) exert the same amount of effort in equilibrium.

#### **Proofs of Lemmas and Propositions**

Hereafter, we will assume that n = 4,  $\underline{N} = 1$  and  $\overline{N} = 3$ . Further, we assume that the party cannot assign an advantaged position to all candidates on the list.<sup>30</sup>

### Proof of Lemma 1

Using (5)-(12), we can easily compute candidates' equilibrium effort choice in each possible subgame.

Case 1: the party assigns one advantaged position. The advantaged candidate is guaranteed a seat. Therefore:

$$e_{i_a}^* = 0 \tag{13}$$

In contrast, each non-advantaged candidate exerts strictly positive effort:

$$e_{i_{na}}^{*} = \frac{1}{2} \left(\frac{3}{2}R\phi + \sqrt{\frac{9}{4}R^{2}\phi^{2} + 4R(\frac{5}{36} + \frac{5}{18}\phi V - \frac{11}{18}\phi K)}\right)$$
(14)

Case 2: the party assigns two advantaged positions. Here, both advantaged and

 $<sup>^{30}</sup>$ The party is always indifferent between assigning 0 advantaged position or assigning an advantage to all candidates, so this restriction amounts to an indifference breaking assumption.

non-advantaged candidates will exert strictly positive effort. Specifically:

$$e_{i_a}^* = \frac{\sqrt{R(\frac{1}{2} + \phi(2K - 2e_{na}^* - V))}}{2} \tag{15}$$

$$e_{ina}^* = \frac{R\phi + \sqrt{R^2\phi^2 + R(\frac{1}{2} - \phi(3K - 2e_{na}^* - V))}}{2}$$
(16)

Case 3: the party assigns three advantaged positions. The non-advantaged candidate has no hope of ever winning a seat, therefore:

$$e_{i_{na}}^* = 0 \tag{17}$$

Each advantaged candidate instead exerts effort:

$$e_{i_a}^* = \sqrt{R_9^2(\frac{1}{2} - \phi V) + \phi K R_{18}^{13}}$$
(18)

Case 4: the party assigns no advantaged position (i.e., open list). Each candidate in the list solves the same maximization problem, so each exerts the same amount of effort in equilibrium:

$$e_i^* = \frac{1}{12} (5R\phi + \sqrt{25R^2\phi^2 - 3R(7\phi K - 4\phi V - 11)})$$
(19)

Next, we compare the total equilibrium effort under the different allocation structures. We proceed in three steps.

Claim 1. Total effort under  $n_a = 0$  is always higher than total effort under  $n_a \ge \overline{N}$  (i.e., if the party assigns three advantaged positions).

*Proof.* Total effort under  $n_a = 0$  is

$$E_0^* = \frac{1}{3} (5R\phi + \sqrt{25R^2\phi^2 - 3R(7\phi K - 4\phi V - 11)}).$$
(20)

Total effort under  $n_a \geq \overline{N}$  (i.e., if the party assigns three advantaged positions) is

$$E_3^* = 3\sqrt{R_9^2(\frac{1}{2} - \phi V) + \phi K R_{\frac{13}{18}}^{\frac{13}{18}}}.$$
(21)

Straightforwardly, sufficient condition to guarantee that  $E_0^\ast > E_3^\ast$  is

$$\frac{1}{3}\sqrt{25R^2\phi^2 - 3R(7\phi K - 4\phi V - 11)} > 3\sqrt{R\frac{2}{9}(\frac{1}{2} - \phi V) + \phi KR\frac{13}{18}},$$
(22)

which reduces to

$$25R\phi^2 - 3(7\phi K - 4\phi V - 11) - 9(1 - 2\phi V + \phi K\frac{13}{2}) > 0.$$
 (23)

The LHS is increasing in V. Plugging in the lower bound  $V = 3K - \frac{1}{2\phi}$ , the above reduces to

$$25R\phi^2 + 9 + \frac{21}{2}\phi K > 0, (24)$$

which is always satisfied.

Claim 2. Total effort under  $n_a = 0$  is higher than total effort under  $n_a \in (\underline{N}, \overline{N})$  (i.e., if the party assigns two advantaged positions).

*Proof.* Total effort under  $n_a \in (\underline{N}, \overline{N})$  is always lower than

$$E_2^{max} = R\phi + \sqrt{R^2\phi^2 + R(\frac{1}{2} - \phi(3K - 2 - V))} + \sqrt{R(\frac{1}{2} + \phi(2K - V))}.$$
 (25)

Total effort under  $n_a = 0$  is

$$E_0^* = \frac{1}{3} (5R\phi + \sqrt{25R^2\phi^2 - 3R(7\phi K - 4\phi V - 11)}).$$
(26)

To prove the claim, we proceed in three steps. First, notice that

$$\frac{5}{3}R\phi > R\phi. \tag{27}$$

Next, we can show that

$$\frac{1}{6}\sqrt{25R^2\phi^2 - 3R(7\phi K - 4\phi V - 11)} > \sqrt{R^2\phi^2 + R(\frac{1}{2} - \phi(3K - 2 - V))}.$$
(28)

The above reduces to

$$15 - 24\phi V + 87\phi K - 72\phi > 11R\phi^2.$$
<sup>(29)</sup>

Plugging in the upper bound  $V = 4K - 4 - \frac{1}{2\phi}$ , we have

$$27 - 9\phi K + 24\phi > 11R\phi^2 \tag{30}$$

Since  $K < \frac{1}{\phi}$ ,  $\phi < \frac{1}{8}$  and R < 1, the above is always satisfied. Finally, we can show that

$$\frac{1}{6}\sqrt{25R^2\phi^2 - 3R(7\phi K - 4\phi V - 11)} > \sqrt{R(\frac{1}{2} + \phi(2K - V))}.$$
(31)

Sufficient condition for the above to hold is

$$-3(7\phi K - 4\phi V - 11) > 36[\frac{1}{2} + \phi(2K - V)],$$
(32)

which reduces to

$$15 + 48\phi V - 93\phi K > 0. \tag{33}$$

By assumption,  $V > max \in \{K + \frac{1}{2\phi}, 3K - \frac{1}{2\phi}\}$ . First, suppose that  $K > \frac{1}{2\phi}$ , and plug in binding upper bound  $V = 3K - \frac{1}{2\phi}$ . The above reduces to

$$51\phi K - 9 > 0,$$
 (34)

which is always satisfied at  $K > \frac{1}{2\phi}$ .

Finally, suppose that  $K < \frac{1}{2\phi}$ , and plug in binding upper bound  $V = K + \frac{1}{2\phi}$ . The above reduces to

$$39 - 45\phi K > 0,$$
 (35)

which is always satisfied at  $K < \frac{1}{2\phi}$ .

Claim 3. Total effort  $n_a = 0$  is always higher than total effort under  $0 < n_a \leq \underline{N}$  (i.e., if the party assigns one advantaged position).

*Proof.* Denote  $E_1$  the total effort under  $0 < n_a \leq \underline{N}$ . First, we can show that  $\Delta = E_0^* - E_1^*$  is decreasing in V:

$$\frac{\partial \Delta}{\partial V} = \frac{2}{\sqrt{25R^2\phi^2 - 3R(7\phi K - 4\phi V - 11)}} - \frac{5}{6\sqrt{\frac{9}{4}R^2\phi^2 + \frac{5}{9}R + \frac{10}{9}R\phi V - \frac{22}{9}\phi K}}.$$
 (36)

 $\frac{\partial \Delta}{\partial V} < 0$  if and only if

$$144\left[\frac{9}{4}R^{2}\phi^{2} + \frac{5}{9}R + \frac{10}{9}R\phi V - \frac{22}{9}R\phi K\right] < 25\left[25R^{2}\phi^{2} + 33R + 12R\phi V - 21R\phi K\right], (37)$$

which is always satisfied given  $K < \frac{1}{\phi}$  (by assumption).

Thus, it is sufficient to show that the claim holds at the upper bound  $V=2K-4+\frac{1}{2\phi},$  i.e.,:

$$\frac{1}{3} \left( 5R\phi + \sqrt{25R^2\phi^2 - 3R[7\phi K - 4\phi(2K - 4 + \frac{1}{2\phi}) - 11]} \right) >$$

$$\frac{3}{2} \left( \frac{3}{2}R\phi + \sqrt{\frac{9}{4}R^2\phi^2 + 4R[\frac{5}{36} + \frac{5}{18}\phi(2K - 4 + \frac{1}{2\phi}) - \frac{11}{18}\phi K]} \right),$$
(38)

which reduces to

$$4\sqrt{25R^2\phi^2 + 3R\phi K + 39R - 48R\phi} > 7R\phi + 18\sqrt{\frac{9}{4}R^2\phi^2 + \frac{10}{9}R - \frac{2}{9}R\phi K - \frac{40}{9}R\phi}.$$
 (39)

Plugging in the lower bound  $K = \frac{4\phi+1}{3\phi}$ , we have

$$4\sqrt{25R^2\phi^2 + 40R - 44R\phi} > 7R\phi + 18\sqrt{\frac{9}{4}R^2\phi^2 + \frac{27}{28}R - \frac{128}{27}R\phi}.$$
(40)

To show that the above condition is always satisfied, I proceed in two steps. First, since  $\phi < \frac{1}{8}$ , notice that

$$\sqrt{25R^2\phi^2 + 40R - 44R\phi} > \sqrt{R}\sqrt{40 - \frac{44}{8}},\tag{41}$$

and

$$7R\phi < \frac{7}{8}R.\tag{42}$$

Further, recall that R < 1, therefore  $R < \sqrt{R}$ . Thus, we have that

$$\frac{7}{8\sqrt{40 - \frac{44}{8}}}\sqrt{R}\sqrt{40 - \frac{44}{8}} \ge 7R\phi,\tag{43}$$

and

$$4\sqrt{25R^2\phi^2 + 40R - 44R\phi} > \frac{7}{8\sqrt{40 - \frac{44}{8}}}\sqrt{25R^2\phi^2 + 40R - 44R\phi} > 7R\phi.$$
(44)

Next, it is easy to see that

$$\left(4 - \frac{7}{8\sqrt{40 - \frac{44}{8}}}\right)\sqrt{25R^2\phi^2 + 40R - 44R\phi} > 18\sqrt{\frac{9}{4}R^2\phi^2 + \frac{27}{28}R - \frac{128}{27}R\phi}.$$
 (45)

Therefore

$$4\sqrt{25R^2\phi^2 + 40R - 44R\phi} > 7R\phi + 18\sqrt{\frac{9}{4}R^2\phi^2 + \frac{27}{28}R - \frac{128}{27}R\phi}.$$
 (46)

This concludes the proof of Lemma 1.

### **Proof of Proposition 1**

Claim 3 shows that  $\frac{\partial (E_0^* - E_1^*)}{\partial V} < 0$ . Thus, there exist a unique threshold  $\hat{B}$ , decreasing in V, s.t. the party finds it optimal to exercise control if and only if  $B > \hat{B}$ . Therefore, the probability (in the sense of set inclusion) that the party allocates  $0 < n_a \leq N$  is increasing in V.

# Additional figures and tables

Figure A.1: Example of ballot paper from the Labor Party in Oslo



Note: The figure shows the ballot paper from the Labor Party (Arbeiderpartiet) in Oslo for the 2019 election. The first ten candidates on the ballot have a head start and are listed in boldface.





Note: Panel A plots the density of observations as a function of personal votes as share of party votes for candidates without a head start. Similarly, Panel B plots the density of observations as a function of personal votes as share of party votes for candidates with a head start. Finally, Panel C, is identical to Panel B, but the 25 percentage point bonus is included. Because voters can cast personal votes from candidates from other party lists, it is possible for a candidate's personal votes to exceed party votes. In the figure, we censor observations above 1. The sample is all candidates running for one of the seven main parties in the 2019 local election.





Note: This figure reproduces the analysis in figure 1 using contemporaneous election outcomes to classify the nature of competition. We compare the personal vote-shares of a candidate that receives an advantage in a list where  $0 < n_a \leq N$  (bottom competition), with the vote-share of a similar candidate who also receives an advantage (and has same pre-ballot rank), but is in a list where  $n_a > N$  (top competition). Here in contrast to Figure 1, N is the actual seats gained in 2019 elections minus 1. Panel A display candidates' personal vote share (within party list) by pre-election ballot rank and nature of competition. The black circles indicate top competition. The hollow circles indicate bottom competition. We split the sample by the number of advantaged candidates (given in the title of each sub-panel). We pool cases where the advantage is given to 5-6 candidates because of few observations. Panel B plots estimates of  $\delta_r$  from equation (1).  $\delta_r$  captures the difference between advantaged candidates insulated from intraparty competition and those exposed to it, when controlling for local party fixed effects, rank, advantage status and candidate characteristics. Standard errors are clustered at the municipal level and 95% confidence intervals reported. The baseline sample is all candidates running for one of the seven main parties in the 2019 local election.

	Mean	SD	Min	Max	Ν
Share of votes					
Socialist Left Party (SV)	0.07	0.05	0.02	0.37	239
Labor Party (A)	0.29	0.11	0.07	0.67	346
Center Party (SP)	0.28	0.14	0.03	0.69	341
Liberal Party (V)	0.04	0.04	0.01	0.36	220
Christian Democratic Party (KrF)	0.07	0.06	0.01	0.40	222
Conservative Party (H)	0.16	0.09	0.02	0.58	309
Progress Party (FrP)	0.09	0.06	0.02	0.32	247
Seats in the local council					
Socialist Left Party (SV)	1.86	1.25	0	8	239
Labor Party (A)	7.38	3.70	1	19	346
Center Party (SP)	6.63	3.25	1	22	341
Liberal Party (V)	1.17	1.21	0	11	220
Christian Democratic Party (KrF)	1.84	1.74	0	8	222
Conservative Party (H)	4.72	3.54	0	24	309
Progress Party (FrP)	2.81	2.14	0	13	247
Seats in the executive board					
Socialist Left Party (SV)	0.58	0.57	0	2	239
Labor Party (A)	2.24	1.03	0	6	346
Center Party (SP)	2.00	0.98	0	5	341
Liberal Party (V)	0.33	0.52	0	3	220
Christian Democratic Party (KrF)	0.64	0.66	0	3	222
Conservative Party (H)	1.45	0.97	0	7	309
Progress Party (FrP)	0.76	0.74	0	3	247
Candidates with a pre-advantage					
Socialist Left Party (SV)	2.49	1.27	0	7	239
Labor Party (A)	3.17	1.81	0	10	346
Center Party (SP)	2.09	1.28	0	6	341
Liberal Party (V)	2.01	1.38	0	8	220
Christian Democratic Party (KrF)	1.87	1.09	0	6	222
Conservative Party (H)	2.59	1.80	0	10	309
Progress Party (FrP)	2.66	1.85	0	10	247
~ · · · /					

Table A.1: Municipality-level summary statistics for the main parties running in the 2019 local election

Table A.2: Summary statistics

			(1)		
	Mean	SD	Min	Max	Ν
Pre-advantage	0.12	0.33	0.00	1.00	28142
Personal votes (share of party total)	0.05	0.08	0.00	0.78	28142
New candidate	0.38	0.49	0.00	1.00	28142
Previously elected 2003-2015 (count)	0.38	0.85	0.00	4.00	28142
Mayor (any previous election)	0.01	0.11	0.00	1.00	28142
Age	49.23	14.45	18.00	94.00	28142
Woman	0.43	0.49	0.00	1.00	28142
Log (Income)	12.78	1.20	3.71	15.66	28142
Union member	0.51	0.50	0.00	1.00	28142
Donations (NOK 10000)	0.17	0.50	0.00	4.00	28142
Municipal employee	0.30	0.46	0.00	1.00	28142
High education	0.46	0.50	0.00	1.00	28142
Immigrant	0.08	0.27	0.00	1.00	28142
N	28142				

Figure A.4: Allocation structures



Note: The figure shows the fraction of local party lists choosing the different allocation structures corresponding to Remarks 1-4 in the 2019 election as a function of the average local party vote share in year 2003 to 2015. In the graph, we use the following definitions:

- Bottom competition for  $0 < n_a \leq \underline{N}$
- Top competition for  $n_a \ge \overline{N}$
- Top+Bottom competition for  $n_a \in (\underline{N}, \overline{N})$
- Open list for  $n_a = 0$

The sample is restricted to the seven main parties. We drop municipalities involved in mergers. Each of the ten binned scatterpoints in each panel contains about the same number of observations.

Table .	A.3:	Full	regression	results	from	Figure	1
10010 1	1.0.	r un	regression	robuito	II OIII	I ISUIC	-

	(1) Adv 2	(2) Adv 3	(3) Adv 4	(4) Adv 5
Rank1 X Top Competition	0.095***	0.045***	0.046**	0.019
	(0.013)	(0.015)	(0.019)	(0.020)
Rank2 X Top Competition	0.041***	$0.033^{***}$	0.046***	0.044***
	(0.007)	(0.012)	(0.011)	(0.013)
Rank3 X Top Competition	0.006	$0.023^{**}$	$0.037^{***}$	$0.043^{***}$
	(0.000)	(0.010)	(0.010)	(0.010)
Rank4 X Top Competition	-0.004 (0.005)	0.007 (0.007)	0.029*** (0.007)	0.011 (0.007)
	0.010**	0.005	0.002	0.01.4**
Ranko X Top Competition	(0.004)	(0.005)	(0.003)	$(0.014^{-5})$
Bank6 X Top Competition	-0.010***	-0.003	-0.011**	-0.008
tanko X Top Competition	(0.004)	(0.005)	(0.005)	(0.007)
Rank7 X Top Competition	-0.011***	-0.002	-0.007	0.005
	(0.003)	(0.005)	(0.004)	(0.005)
Rank8 X Top Competition	-0.007*	-0.004	-0.005	-0.010**
	(0.004)	(0.005)	(0.005)	(0.004)
Rank9 X Top Competition	-0.007***	-0.002	-0.005	-0.004
	(0.003)	(0.004)	(0.004)	(0.004)
Rank10 X Top Competition	-0.004	-0.005*	-0.004	-0.002
	(0.003)	(0.003)	(0.003)	(0.004)
New candidate	0.000	0.001	0.001	0.000
	(0.001)	(0.001)	(0.001)	(0.001)
Elected one time before	$0.018^{***}$ (0.002)	$0.020^{***}$	$0.012^{***}$ (0.003)	$0.008^{***}$
	(0.002)	(0.000)	(0.000)	(0.002)
Elected two times before	$(0.021^{***})$	$(0.028^{***})$	$(0.017^{***})$	$(0.014^{***})$ (0.003)
Elastad three times hafere	0.039***	0.030***	0.033***	0.005
Elected three times before	(0.005)	(0.007)	(0.007)	(0.003)
Elected four times before	0.034***	0.048***	0.021**	0.016**
	(0.008)	(0.012)	(0.010)	(0.006)
Mayor (any previous election)	0.027***	0.049***	0.039**	0.034**
	(0.009)	(0.018)	(0.019)	(0.017)
Age (standardized)	-0.006***	-0.005***	-0.006***	-0.004***
	(0.001)	(0.001)	(0.001)	(0.001)
Woman	-0.004***	-0.004***	-0.003***	-0.004***
	(0.001)	(0.001)	(0.001)	(0.001)
Log (Income)	$0.002^{***}$	$0.003^{***}$	$0.001^{**}$	0.000
	(0.000)	(0.001)	(0.001)	(0.000)
Union member	-0.001	-0.003	$-0.003^{*}$	-0.002
	(0.001)	(0.002)	(0.001)	(0.002)
Donations (NOK 10000)	$(0.003^{***})$	$(0.008^{***})$	$(0.006^{***})$	$(0.006^{**})$
Municipal and land	0.000	0.009	0.001	0.001
municipai empioyee	(0.001)	(0.002)	(0.001)	(0.001)
High education	0.007***	0.007***	0.003**	0.001
on concernon	(0.001)	(0.001)	(0.001)	(0.001)
Immigrant	-0.006***	-0.003	-0.002	-0.003
	(0.001)	(0.002)	(0.002)	(0.002)
Within R-squared	0.055 0.71	0.053	0.047 0.74	0.034 0.79
Observations	10412	4218	3871	2700
Kank FE Party FE	Yes Yes	Yes Yes	Yes Yes	Yes Yes

Notes: The baseline sample is all the candidates running for one of the seven main parties in the 2019 local election. We drop all lists where we fail to match any candidates with administrative data from Statistics Norway. We split the sample by the number of advantaged candidates (given in the title of each column). We pool cases where the advantage is given to 5-6 candidates because of few observations. Standard errors are clustered at the municipal level and reported in parentheses. \* denotes 10% statistical significance, \*\* 5% and \*\*\* 1%.

(1) $(2)$ $(3)$ $(4)$	(5)	(6)	(7)
SV A SP V	$\mathbf{KRF}$	Н	$\operatorname{FRP}$
New candidate 0.001 -0.025*** -0.006 -0.022*	-0.031**	-0.023**	-0.057***
(0.015) $(0.008)$ $(0.007)$ $(0.013)$	(0.013)	(0.010)	(0.013)
	()	()	()
Elected one time before $0.200^{***}$ $0.194^{***}$ $0.190^{***}$ $0.233^{***}$	0.288***	$0.165^{***}$	0.230***
(0.027) $(0.014)$ $(0.017)$ $(0.036)$	(0.036)	(0.019)	(0.031)
	(0.000)	(0.010)	(0.001)
Elected two times before 0.260*** 0.255*** 0.314*** 0.339***	0.340***	0.286***	$0.273^{***}$
(0.046)  (0.020)  (0.026)  (0.044)	(0.046)	(0.027)	(0.034)
(0.010) $(0.020)$ $(0.020)$ $(0.011)$	(0.010)	(0.021)	(0.001)
Elected three times before $0.327^{***} = 0.268^{***} = 0.340^{***} = 0.359^{***}$	0 298***	0 285***	0 407***
$\begin{array}{c} 100000 \\ (0.070) \\ (0.020) \\ (0.020) \\ (0.041) \\ (0.072) \\ $	(0.060)	(0.041)	(0.043)
(0.070) $(0.029)$ $(0.041)$ $(0.012)$	(0.009)	(0.041)	(0.043)
Elected four times before 0.515*** 0.338*** 0.455*** 0.502***	0 /02***	0 3/0***	0 5/13***
$\begin{array}{c} \text{Elected four times before} & 0.515 & 0.556 & 0.455 & 0.502 \\ (0.000) & (0.020) & (0.057) & (0.117) \end{array}$	(0.432)	(0.049)	(0.043)
(0.090) $(0.038)$ $(0.057)$ $(0.117)$	(0.111)	(0.059)	(0.051)
Morron (any provide alasticn) 0.442*** 0.426*** 0.257*** 0.100	0 1 4 9	0.974***	0.008
(0.000)  (0.027)  (0.027)  (0.109)  (0.027)  (0.017)  (0.1	0.143	0.274	-0.008
(0.069) $(0.037)$ $(0.055)$ $(0.155)$	(0.150)	(0.067)	(0.127)
Are (standard:	0.011*	0.091***	0 020***
Age (standardized) $-0.052^{-0.051} -0.022^{-0.028}$	-0.011	-0.021	-0.039
(0.008) $(0.005)$ $(0.004)$ $(0.007)$	(0.007)	(0.005)	(0.008)
Wesser 0.000 0.001*** 0.005 0.000	0.017	0.095***	0.010
woman $-0.008 \ 0.021^{111} \ 0.005 \ -0.000$	-0.017	0.035	0.019
(0.010)  (0.005)  (0.006)  (0.010)	(0.012)	(0.007)	(0.013)
	0 010***	0 009***	0.000***
Log (Income) $0.009^{-1} \ 0.024^{-1} \ 0.012^{-1} \ 0.015^{-1}$	0.019	0.023	$0.020^{-1}$
(0.004)  (0.003)  (0.003)  (0.004)	(0.005)	(0.003)	(0.005)
	0.004	0.000	0.014
Union member $0.011 - 0.003 - 0.005 - 0.001$	-0.004	-0.009	-0.014
(0.014)  (0.009)  (0.008)  (0.013)	(0.016)	(0.010)	(0.016)
D (1 (NOV 10000) 0.000 0.010 0.000 0.000	0.000	0.000	0.000
Donations (NOK 10000) $0.020$ $0.018$ $0.006$ $0.006$	-0.008	-0.008	0.023
(0.017)  (0.021)  (0.017)  (0.015)	(0.006)	(0.012)	(0.024)
	0.000	0.010	0.00
Municipal employee $-0.009  0.015^*  0.016^*  0.003$	0.022	0.019	0.067***
(0.014)  (0.008)  (0.009)  (0.016)	(0.016)	(0.012)	(0.023)
	0.010+++	0.014	0.040**
High education $0.019$ $0.032^{***}$ $0.029^{***}$ $0.030^{**}$	0.046***	0.014	0.040**
(0.014)  (0.008)  (0.008)  (0.014)	(0.015)	(0.009)	(0.019)
•	0.007	0.015	
Immigrant $-0.013 - 0.050^{***} - 0.027^{*} - 0.005$	0.001	-0.017	-0.034
(0.019)  (0.011)  (0.014)  (0.018)	(0.021)	(0.015)	(0.024)
Mean of outcome variable $0.137$ $0.126$ $0.090$ $0.122$	0.126	0.119	0.163
Within R-squared         0.08         0.22         0.20         0.12	0.18	0.15	0.19
Observations 3129 6570 6058 2566	2266	4800	2753
Party FE Yes Yes Yes Yes	Yes	Yes	Yes

Table A.4: Who gets the advantage? Heterogenous effects by national party

Notes: The baseline sample is all the candidates running for one of the seven main parties in the 2019 local election. We drop all lists where we fail to match any candidates with administrative data from Statistics Norway. Standard errors are clustered at the municipal level and reported in parentheses. \* denotes 10% statistical significance, \*\* 5% and \*\*\* 1%.

	(1)	(2)	(3)	(4)	(5)	(6)
	Left	Center	Right	(1) - (2)	(1) - (3)	(2) - (3)
New candidate	$-0.015^{**}$	-0.013**	-0.037***	-0.001	$0.023^{**}$	$0.024^{**}$
	(0.007)	(0.006)	(0.008)	(0.010)	(0.010)	(0.010)
				0.01.0	0.010	
Elected one time before	0.201***	$0.217^{***}$	0.185***	-0.016	0.016	0.032
	(0.013)	(0.015)	(0.016)	(0.020)	(0.021)	(0.021)
Floated two times before	0.964***	0 296***	0.28/***	0 069**	0 091	0.049
Elected two times before	(0.204)	(0.020)	(0.234)	(0.002)	(0.021)	(0.042)
	(0.019)	(0.021)	(0.022)	(0.021)	(0.028)	(0.050)
Elected three times before	0.281***	$0.337^{***}$	0.336***	-0.056	-0.055	0.000
	(0.027)	(0.030)	(0.031)	(0.040)	(0.039)	(0.043)
	(0.0_1)	(0.000)	(01002)	(0.0 - 0)	(0.000)	(0.010)
Elected four times before	$0.377^{***}$	$0.471^{***}$	$0.443^{***}$	$-0.094^{*}$	-0.066	0.028
	(0.035)	(0.045)	(0.039)	(0.054)	(0.053)	(0.055)
Mayor (any previous election)	$0.393^{***}$	$0.227^{***}$	$0.194^{***}$	$0.166^{***}$	$0.200^{***}$	0.034
	(0.037)	(0.049)	(0.057)	(0.063)	(0.070)	(0.076)
A ma (standardized)	0 020***	0.091***	0 000***	0 017***	0.000	0.000
Age (standardized)	-0.038	-0.021	-0.029	-0.017	-0.009	(0.006)
	(0.004)	(0.003)	(0.005)	(0.005)	(0.000)	(0.000)
Woman	0.012**	-0.001	0.030***	$0.013^{*}$	-0.018**	-0.031***
( ) official	(0.005)	(0.005)	(0.006)	(0.007)	(0.009)	(0.008)
	(0.000)	(0.000)	(0.000)	(0.001)	(0.000)	(0.000)
Log (Income)	$0.019^{***}$	$0.014^{***}$	$0.022^{***}$	0.005	-0.003	-0.008**
	(0.002)	(0.002)	(0.003)	(0.003)	(0.004)	(0.004)
Union member	0.002	0.002	-0.011	-0.001	0.012	0.013
	(0.007)	(0.006)	(0.008)	(0.010)	(0.012)	(0.011)
$\mathbf{D}_{\mathbf{n}}$	0.019	0.004	0.002	0.016	0.000	0.006
Donations (NOK 10000)	(0.012)	-0.004	(0.003)	(0.010)	(0.009)	-0.000
	(0.013)	(0.005)	(0.011)	(0.014)	(0.017)	(0.012)
Municipal employee	0.008	0.015**	0.035***	-0.008	-0.028**	-0.020
intallicipal elliptoyee	(0.007)	(0.007)	(0.011)	(0,010)	(0.013)	(0.013)
	(0.001)	(0.001)	(01011)	(01010)	(0.010)	(0.010)
High education	$0.027^{***}$	0.033***	0.020**	-0.006	0.007	0.013
-	(0.007)	(0.006)	(0.008)	(0.010)	(0.011)	(0.010)
Immigrant	-0.035***	-0.009	-0.021*	-0.026*	-0.014	0.012
	(0.010)	(0.010)	(0.012)	(0.014)	(0.016)	(0.016)
Mean of outcome variable	0.129	0.105	0.135	0.117	0.132	0.117
Within R-squared	0.16	0.17	0.16	0.17	0.16	0.17
Observations	9699	10890	7553	20589	17252	18443
Party FE	Yes	Yes	Yes	Yes	Yes	Yes

Table A.5: Who gets the advantage? Heterogenous effects by party bloc

Notes: The baseline sample is all the candidates running for one of the seven main parties in the 2019 local election. We drop all lists where we fail to match any candidates with administrative data from Statistics Norway. Standard errors are clustered at the municipal level and reported in parentheses. \* denotes 10% statistical significance, \*\* 5% and \*\*\* 1%.

	(1)	(2)	(3)	(4)	(5)	(6)
	Never	Sometimes	Always	(1) - (2)	(1) - (3)	(2) - (3)
New candidate	-0.021***	-0.020***	-0.029**	0.001	-0.008	0.008
	(0.005)	(0.006)	(0.014)	(0.008)	(0.014)	(0.015)
Elected one time before	$0.240^{***}$	$0.166^{***}$	$0.165^{***}$	$-0.074^{***}$	-0.075**	0.001
	(0.012)	(0.012)	(0.028)	(0.016)	(0.030)	(0.031)
Elected two times before	0.330***	0.272***	$0.284^{***}$	-0.058**	-0.046	-0.012
	(0.018)	(0.018)	(0.035)	(0.025)	(0.038)	(0.039)
	0.905***	0.900***	0.910***		0.000	0.010
Elected three times before	(0.385)	(0.025)	(0.010)	-0.02(	-0.009	(0.012)
	(0.027)	(0.025)	(0.043)	(0.030)	(0.050)	(0.050)
Flocted four times before	0 55/***	0.476***	0 /19***	0.077*	0 1/9**	0.065
Elected four times before	(0.034)	(0.025)	(0.412)	-0.011	-0.142	(0.003)
	(0.052)	(0.033)	(0.059)	(0.040)	(0.003)	(0.008)
Age (standardized)	-0 030***	-0.025***	-0 043***	0.005	-0.013	0.018**
inge (standardized)	(0.000)	(0.020)	(0.018)	(0.005)	(0.010)	(0.010)
	(0.000)	(0.004)	(0.000)	(0.000)	(0.000)	(0.005)
Woman	0.005	0.018***	0.021**	0.013**	0.015	-0.003
	(0,004)	(0,004)	(0, 010)	(0,006)	(0,011)	(0, 010)
	(0.001)	(0.001)	(0.010)	(0.000)	(0.011)	(0.010)
Log (Income)	$0.015^{***}$	$0.024^{***}$	0.025***	0.009***	$0.009^{*}$	-0.000
	(0.002)	(0.002)	(0.005)	(0.003)	(0.005)	(0.005)
	· /		( )		· /	( )
Union member	0.003	-0.016**	-0.017	-0.019**	-0.020	0.001
	(0.006)	(0.006)	(0.019)	(0.009)	(0.020)	(0.020)
Donations (NOK $10000$ )	0.002	-0.003	-0.008	-0.005	-0.010	0.004
	(0.005)	(0.009)	(0.019)	(0.010)	(0.019)	(0.020)
	0.0104				0.000.00	0.000
Municipal employee	$0.012^{*}$	0.027***	0.050***	0.015	0.038**	-0.023
	(0.007)	(0.008)	(0.017)	(0.009)	(0.018)	(0.018)
	0.005***	0.090***	0.000*	0.011	0.009	0.000
High education	0.025	0.030	$0.028^{\circ}$	0.011	0.003	0.008
	(0.006)	(0.006)	(0.010)	(0.008)	(0.018)	(0.017)
Immigrant	0 010**	0 022**	0 058***	0.003	0.030*	0.036*
mmgrant	(0,0019)	(0.022)	(0.000	-0.003 (0.012)	-0.039 (0.090)	(0.000)
Moon of outcome wowichle	0.120	0.100	0.110	0.100	0.120)	0.110
Within D agreed	0.130	0.108	0.119	0.122	0.128	0.110
oh	0.14	0.17	0.19	0.10	0.10	0.18
Observations	10077	9093	1872 V	20270	18449	11505
Party FE	Yes	Yes	Yes	Yes	Yes	Yes

Table A.6: Who gets the advantage? Heterogenous effects by list's previous success in winning mayoral office

Notes: The baseline sample is all the candidates running for one of the seven main parties in the 2019 local election. We drop all lists where we fail to match any candidates with administrative data from Statistics Norway. Standard errors are clustered at the municipal level and reported in parentheses. \* denotes 10% statistical significance, \*\* 5% and \*\*\* 1%. We drop municipalities involved in mergers during the 2003-2019 period.

	(1) SV	(2) A	(3) SP	(4) V	(5) KRF	(6) H	(7) FRP
New candidate	-0.004 (0.003)	$0.002^{**}$ (0.001)	$0.002 \\ (0.001)$	$-0.009^{**}$ (0.004)	-0.005 (0.004)	-0.001 (0.002)	$-0.010^{***}$ (0.003)
Elected one time before	$0.058^{***}$ (0.006)	$0.038^{***}$ (0.002)	$0.054^{***}$ (0.003)	$0.092^{***}$ (0.010)	$0.106^{***}$ (0.010)	$0.050^{***}$ (0.004)	$0.070^{***}$ (0.008)
Elected two times before	$\begin{array}{c} 0.087^{***} \\ (0.012) \end{array}$	$\begin{array}{c} 0.047^{***} \\ (0.003) \end{array}$	$0.080^{***}$ (0.005)	$\begin{array}{c} 0.140^{***} \\ (0.015) \end{array}$	$\begin{array}{c} 0.129^{***} \\ (0.014) \end{array}$	$\begin{array}{c} 0.074^{***} \\ (0.006) \end{array}$	$\begin{array}{c} 0.122^{***} \\ (0.012) \end{array}$
Elected three times before	$\begin{array}{c} 0.109^{***} \\ (0.020) \end{array}$	$0.050^{***}$ (0.005)	$0.083^{***}$ (0.008)	$\begin{array}{c} 0.152^{***} \\ (0.022) \end{array}$	$\begin{array}{c} 0.138^{***} \\ (0.021) \end{array}$	$0.081^{***}$ (0.009)	$0.156^{***}$ (0.017)
Elected four times before	$\begin{array}{c} 0.183^{***} \\ (0.023) \end{array}$	$\begin{array}{c} 0.037^{***} \\ (0.006) \end{array}$	$\begin{array}{c} 0.116^{***} \\ (0.013) \end{array}$	$\begin{array}{c} 0.217^{***} \\ (0.036) \end{array}$	$\begin{array}{c} 0.181^{***} \\ (0.031) \end{array}$	$0.078^{***}$ (0.012)	$\begin{array}{c} 0.186^{***} \\ (0.017) \end{array}$
Mayor (any previous election)	-0.021 (0.037)	$\begin{array}{c} 0.172^{***} \\ (0.011) \end{array}$	$0.097^{***}$ (0.013)	$\begin{array}{c} 0.103 \\ (0.069) \end{array}$	$0.109^{**}$ (0.045)	$\begin{array}{c} 0.142^{***} \\ (0.020) \end{array}$	$0.117^{**}$ (0.050)
Age (standardized)	-0.023*** (0.002)	-0.008*** (0.001)	$-0.007^{***}$ (0.001)	$-0.015^{***}$ (0.002)	$-0.010^{***}$ (0.002)	-0.008*** (0.001)	$-0.016^{***}$ (0.002)
Woman	$-0.005^{*}$ (0.003)	$-0.003^{**}$ (0.001)	$-0.004^{***}$ (0.001)	$-0.010^{***}$ (0.004)	$-0.010^{***}$ (0.003)	$-0.004^{**}$ (0.002)	$-0.013^{***}$ (0.003)
Log (Income)	$0.003^{**}$ (0.001)	$\begin{array}{c} 0.004^{***} \\ (0.001) \end{array}$	$0.005^{***}$ (0.001)	$\begin{array}{c} 0.005^{***} \\ (0.001) \end{array}$	$0.009^{***}$ (0.001)	$0.006^{***}$ (0.001)	$0.008^{***}$ (0.001)
Union member	-0.000 (0.003)	-0.002 (0.001)	-0.002 (0.002)	$0.000 \\ (0.004)$	-0.004 (0.004)	$-0.004^{**}$ (0.002)	$-0.007^{*}$ (0.004)
Donations (NOK 10000)	$\begin{array}{c} 0.016^{***} \\ (0.004) \end{array}$	$0.006^{**}$ (0.003)	$0.002 \\ (0.003)$	$0.010 \\ (0.006)$	$0.003^{**}$ (0.002)	$0.005 \\ (0.003)$	$0.005 \\ (0.006)$
Municipal employee	$\begin{array}{c} 0.004 \\ (0.003) \end{array}$	$0.003^{**}$ (0.001)	$0.005^{***}$ (0.002)	$\begin{array}{c} 0.006 \\ (0.004) \end{array}$	$\begin{array}{c} 0.005 \\ (0.005) \end{array}$	0.003 (0.002)	$0.013^{**}$ (0.005)
High education	$\begin{array}{c} 0.014^{***} \\ (0.003) \end{array}$	$\begin{array}{c} 0.010^{***} \\ (0.001) \end{array}$	$0.010^{***}$ (0.002)	$0.021^{***}$ (0.004)	$\begin{array}{c} 0.016^{***} \\ (0.004) \end{array}$	$0.010^{***}$ (0.002)	$0.015^{***}$ (0.005)
Immigrant	$-0.009^{**}$ (0.004)	$-0.009^{***}$ (0.002)	$-0.010^{***}$ (0.003)	-0.008 $(0.005)$	$-0.010^{*}$ (0.005)	$-0.008^{***}$ (0.003)	-0.000 $(0.007)$
Mean of outcome variable	0.058	0.043	0.046	0.064	0.072	0.052	0.067
Within B-squared	0.18	0.41	0.33	0.25	0.33	0.002	0.32
Observations	3120	6570	6058	2566	2266	4800	2753
Party FE	Yes						

Table A.7: Personal vote determinants: Heterogenous effects by national party

Notes: The baseline sample is all the candidates running for one of the seven main parties in the 2019 local election. We drop all lists where we fail to match any candidates with administrative data from Statistics Norway. Standard errors are clustered at the municipal level and reported in parentheses. \* denotes 10% statistical significance, \*\* 5% and \*\*\* 1%.