

## 6 The Influence of Strategies on the Vote Share of New Parties

### *Results*

In this project, I present the main hypothesis that the electoral success of new parties is influenced by the ideological positioning and issue emphasis of established competitors. In addition, I analyze the moderating influence of party characteristics on this relationship.

My empirical analysis is oriented toward the causal model presented in the theory chapter and its hypotheses. I want to answer whether the strategies of issue and position competition of established parties, moderated by the nicheness of new parties, the competitiveness of established parties, or the ideological proximity of both parties, influence the new parties' electoral success.

The chapter is structured as follows: First, I analyze based on a linear-additive multilevel model whether the position or issue strategies have the expected influence on new parties' electoral success. I then turn to the moderating variables and successively add interaction effects to the model. First, I look at how the nicheness of the new party influences the main relationship, then I look at ideological proximity, and finally at the competitiveness of the established party.

The dyadic time series data suggest the use of multilevel regression models. I test different nesting structures to fit the data generation process and verify the models' robustness. Multilevel models have the advantage that the particular dependence structure of the individual observations is explicitly modeled. This avoids type 1 error, i.e., the underestimation of standard errors. In addition, the model includes several control variables that take into account both the dynamics of party competition and the environment in which it takes place. In this way, I ensure that the coefficient estimates are as unbiased as possible.

The analysis shows that positional competition has no proven influence on the electoral success of new parties. This contradicts previous work on the electoral fortunes of niche parties. In contrast, the analysis shows that issue competition strategies influence the electoral success of new parties. I conclude that classical party competition centered on the left-right dimension is of little importance for new parties and that issue competition is more important. On the one hand, this finding can be linked back to the results of

Adams et al. (2011), who were able to show that policy moves are hardly noticed by voters. On the other hand, there is a link to Green-Pedersen and Mortensen's (2015) issue competition theory, which develops a framework to understand issue-oriented party competition.

Concerning the moderating factors, it first appears that nicheness does not have the expected amplifying influence on issue competition strategies. This emphasizes the contradiction with the results of earlier work on niche parties. With regard to ideological proximity, I work out that shared membership in a party family or ideological bloc makes a difference: Within the same ideological bloc, issue competition strategies have the opposite effect to that between the blocs. Last but not least, the analysis shows that the strategy of an established party is moderated by its previous vote gains and losses. Thus, I can corroborate the findings from the literature, which shows that voters take into account the likely impact of their choice and tend to vote for the representative of an issue who has the best chance of implementing the promised policies.

### 6.1 *The Impact of Strategic Choices*

I start my analysis with a base model that includes all independent variables and controls. Then I add interaction terms to the model to have a model for each theoretically derived interaction effect. Finally, I combine all these interaction terms into a chained interaction model (Kam and Franzese, 2007, p. 40) to take into account that the influence of strategy theoretically depends on nicheness, ideological proximity, and competitiveness.

First, I present the full regression table with all issue competition models (cf. Table 6.1). It is important to note that the interpretation of the reported coefficients changes between the basic linear-additive model and the following linear-interactive models: While the coefficient in the basic model can be interpreted as the effect of a one-unit change in the independent variable on the dependent variable, controlling for all other variables in the model, the interpretation for the linear-interactive model is somewhat more complex: Here, the effect of the interacting variables  $z$  varies over its value range, so that the coefficient of a variable  $x$  is not the only effect, but "just one effect  $x$  may have, namely, the effect of  $x$  at  $z = 0$ " (Kam and Franzese, 2007, p. 20). Hence, the  $t$ -test statistics are only valid for this one effect (Kam and Franzese, 2007, p. 43-44).

I present marginal effect and predicted value plots for each interaction effect examined in my analysis to facilitate interpretation. This allows a graphical representation of the different effects and the statistical significance across the value range of the variables.

In addition, I present the models nested by election and the models nested by country side by side: This makes it possible to review the influence of these two different but theoretically equally defensible nesting structures. Finally, I interpret similar results as indicating the robustness of the models or the effect studied.

Following McCoach (2019) I test the model assumptions by checking for normality, outliers, multicollinearity, homogeneity of variances, and normality of residuals. To keep the main text concise, I present the corresponding figures in the appendix.<sup>1</sup>

A sometimes overlooked fundamental of linear-additive models is that they "assume a linear interaction effect that changes at a constant rate with the moderator" Hainmueller et al. (2019, p. 163). To address this problem, the authors recommend two different estimation strategies that can be performed using the Interflex package they developed. I use the binning estimator strategy to test the assumption of linear interaction effects. For this purpose, the moderator is split into separate dummy variables that interact with the main independent variable (Hainmueller et al., 2019, p. 170). Results are plotted as a marginal effect plot, supplemented with the binning estimates and their corresponding standard errors. As default, the Interflex package generates three equal-sized bins based on the distribution of the moderating variable. Since the results support the assumption of a linear interaction effect, I do not change my models. The corresponding binning plots are in section 8.5 of the appendix.

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1 In summary, the robustness checks do not give rise to any decisive concerns. Only the homogeneity of variance shows deviations from the ideal form. Because regression models are relatively robust against this kind of violation and will show unbiased estimators (Best and Wolf, 2014, p. 91), I decided against any transformation of the dependent variable. Of course, the standard errors can be inflated, which affects the significance tests and confidence intervals, but this is of less importance here, as the use of these tests is controversial and therefore should not be the only (or primary) criterion.

### 6.1.1 Testing the Influence of Strategies – The Linear-Additive Base Model

The base model is suitable for testing hypotheses 1a, 1b, 1c as well as 2a, 2b, and 2c and the direction of the effects of the control variables (cf. Table 6.2 for a summary of hypotheses and results). It is the most parsimonious model, which completely dispenses the interaction effects and thus potentially has a lower agreement with reality. The interpretation of the content of the lagged variables is omitted, as these are technical control variables intended to reduce bias in the estimates.

For the presentation of the results, I use not only the regression table (cf. Table 6.1) but also the graphical representation based on a forest plot (cf. Figure 6.1), which compares different model specifications of possible nesting structures of the base model.

First, I consider the influence of positional competition strategies according to hypotheses 1a, 1b, and 1c. The confrontation strategy is coded with positive values, the adoption strategy with negative values. Therefore, an increase in the variable by one unit means that the party has a greater distance on the left-right dimension defined by the RILE than was previously the case.

Surprisingly, the results clearly show that positional competition has no impact on the electoral success of new parties. Therefore, I have to reject hypotheses 1a, 1b, and 1c, which claim an influence of positional competition on the vote share of new parties. This contradicts the usual theoretical assumptions as discussed earlier in this book. The empirical analysis shows an extremely small coefficient and standard error so that the effect must be described as indistinguishable from zero. This result holds across different nesting structures and is independent of the inclusion of interaction terms. The stringency of the estimation despite different model specifications shows the high robustness of the result. In substantive terms, it can therefore be concluded that the adoption or confrontation of the new party's position on the left-right dimension by the established party has no significance for the electoral success of the new party. Accordingly, hypotheses 1a, 1b, and 1c are to be rejected.

Since positional competition has such a small influence on the models, I only discuss the influence of issue competition strategies in the following text and presented figures. The models for the influence of positional competition are documented in the appendix (cf. Table 8.2).

A different result is revealed by the analysis of the issue competition strategy of the established parties: Results show that a decrease in similarity,

Table 6.1: Multilevel Regression Models for the Vote Share of New Parties

	Base	Nicheness	Proximity	Competitiveness	Full
LDV $t_1$	0.72*** 0.02	0.71*** 0.03	0.71*** 0.03	0.72*** 0.02	0.72*** 0.02
LDV $t_2$	0.12*** 0.02	0.12*** 0.02	0.12*** 0.02	0.12*** 0.02	0.12*** 0.02
Issue Competition	-0.34 0.71	0.53 1.98	0.36 0.86	-0.36 0.71	1.85 2.07
Lagged Issue Competition $t_1$	-0.49 0.73	-0.64 0.73	-0.69 0.73	-0.42 0.73	-0.45 0.73
Positional Competition	0.00 0.01	0.00 0.01	0.00 0.01	0.00 0.01	0.00 0.01
Lagged Positional Competition $t_1$	0.00 0.00	0.00 0.00	-0.00 0.00	0.00 0.00	0.00 0.00
Party System Similarity Score	-1.94** 0.81	-1.92** 0.81	-1.90** 0.81	-1.91** 0.80	-1.85** 0.80
Electoral System	-0.11 0.42	-0.11 0.43	-0.11 0.43	-0.11 0.42	-0.12 0.42
Distance Median Voter New Party	-0.02*** 0.01	-0.03*** 0.01	-0.03*** 0.01	-0.02*** 0.01	-0.02*** 0.01
$\Delta$ Vote Share Est. Party (Competitiveness)	-0.07*** 0.02			-0.07*** 0.02	-0.07*** 0.02
Dummy Ideological Proximity	0.06 0.13		0.08 0.13		0.06 0.13
Issue Competition $\times$ Party System Similarity Score		-2.01 4.05			-3.35 4.05
Issue Competition $\times$ Ideological Proximity			-2.07 1.33		-1.87 1.33
Issue Competition $\times$ Competitiveness				0.35** 0.18	0.37** 0.18
Intercept	3.22*** 0.99	3.27*** 1.00	3.24*** 1.00	3.24*** 0.99	3.19*** 0.99
Decade FE	Yes	Yes	Yes	Yes	Yes
<i>Random Parts</i>					
Var: elec.i (Intercept)	4.77	4.87	4.82	4.72	4.68
Var: Residual	6.05	6.12	6.12	6.04	6.04
Num. groups: elec.i	122	122	122	122	122
AIC	7863.45	7868.85	7872.83	7859.21	7857.76
BIC	7965.96	7965.96	7975.34	7961.72	7976.45
Log Likelihood	-3912.73	-3916.43	-3917.42	-3910.61	-3906.88
Num. obs.	1628	1628	1628	1628	1628

Note: Multilevel models with non-hierarchical random intercepts for elections; decade FEs included but not shown

Levels of significance: \*\*\*  $p < 0.01$ ; \*\*  $p < 0.05$ ; \*  $p < 0.1$

i.e., an increased distance between the two parties, which I call the avoidance strategy, leads to a lower vote share for the new party. The negative coefficient of -0.34 has a standard error of 0.71, so the resulting confidence interval includes positive and negative values. Statistical significance is therefore not reached.

Table 6.2: Summary of Hypotheses and Results on the Influence of Strategies

No.	Hypothesis	Supported	Rejected
1a	If an established party adopts a new party's position, the new party's vote share decreases.		X
1b	If an established party maintains its distance from the new party, the new party's vote share is not affected.		X
1c	If an established party confronts a new party's position, the new party's vote share increases.		X
2a	If an established party utilizes the engagement strategy towards the issues of a new party, the new party's vote share decreases.	(X)	
2b	If an established party is indifferent to the issues of the new party, the new party's vote share is not affected.	(X)	
2c	If an established party avoids the issues of a new party, the new party's vote share increases.	(X)	

Note: Parentheses indicate a conditional result that is only true under certain moderating influences.

At first glance, these findings contradict the relationships claimed in hypotheses 2a, 2b, and 2c. If an established party removes the issues of the new party from its election program, this leads to a loss of votes for the new party. A possible explanation for this result could be the influence on public opinion respectively the public agenda: If the established party reduces its attention to the issues of the new party, its issues receive less attention in the election campaign, so that the voters do not have the issues of the new party in mind when they make their election decision. The causal mechanism linking issue competition strategies to voters via the public agenda thus outweighs possible issue ownership influences, which tend to produce the opposite result. In principle, this result is robust for different model specifications or nesting structures, as the forest plot Figure 6.1 shows.

Interestingly, this result changes when moderating factors are taken into account. So, to frame that result differently: hypotheses 2a, 2b, and 2c are only conditionally supported by the data. The influence of the moderating variables is explained in the next section, but before that, I present the linear-additive effect of these variables and the controls in the model.

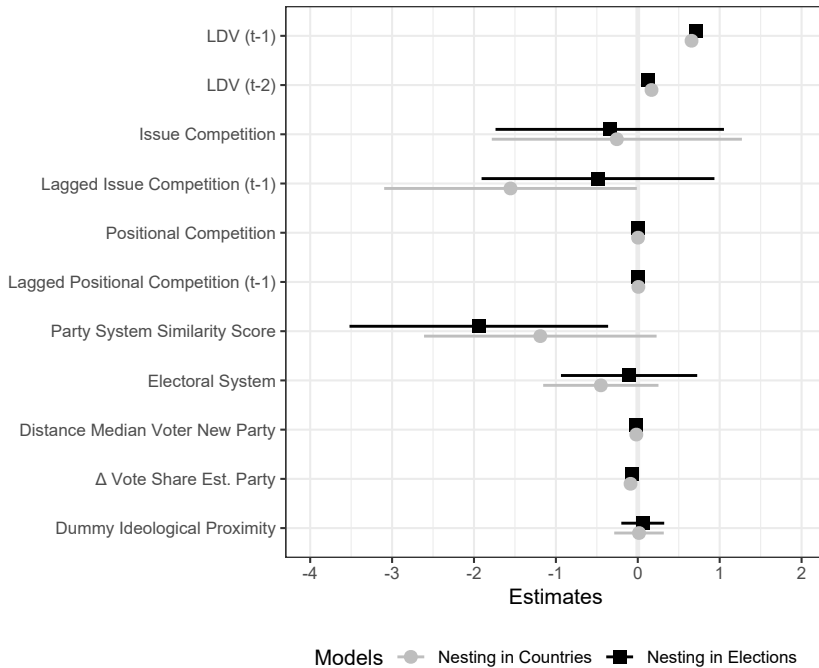


Figure 6.1: Base Models for the Vote Share of New Parties

In order to capture the influence of the new party's nicheness, I use the party system similarity score developed here. High scores indicate that the new party has a high average similarity with all other parties. Consequently, low scores indicate that the new party has a high degree of nicheness, i.e., it takes up issues that other parties ignore. The regression analysis shows a significant, negative effect of the party system similarity score on the election results of new parties. The more similar the new party is to all other parties, the lower its electoral success. From the voters' point of view, the new party is not a complementary offer in terms of content, so it makes sense that it would not benefit from such an issue emphasis. This result is consistent with my considerations presented earlier.

To measure whether both parties have a similar ideological positioning, I integrate a dummy variable into the model. The regression model uses Düpont's (2017) conception, which is an extension of the approach developed by Adams and Somer-Topcu (2009b). The coefficient is very small, while

at the same time, there is a relatively high standard error, so there is no statistical significance. The effect is therefore indistinguishable from zero. Substantively, then, there is no special bonus or malus for new parties that compete in the same ideological bloc as an established party. This result also holds when other conceptions of ideological proximity, such as joint membership in a party family, are considered.

In order to capture the competitiveness of the established party, I use the change in the established party's vote share: voters get an idea of whether the established party is likely to be able to implement its issues through anticipated vote gains – or losses. The analysis shows that the coefficient has the expected sign, i.e., an anticipated vote gain for the established party is associated with a vote loss for the new party. Moreover, this result is statistically significant.

I included an ordinal scaled variable in my model to account for the voting system as an influence on the party system. A majority system is coded zero, a mixed system one, and a PR system two. In theory, a more proportional electoral system should be associated with a higher vote share for the new party because the incentives for strategic voting are lower, and small parties should be more likely to succeed. However, the empirical analysis shows no effect.

One possible explanation for this finding is that strategic voting for new parties does not have the assumed negative effect, i.e., voters are not dissuaded from voting for new parties because of strategic considerations. In this sense, new parties are the result of persuaders. This allows us to draw a parallel with Down's reflections on the two different types of new parties: It seems that the voters in the sample see the new parties predominantly as a real type that is office-seeking and less as a blackmail vehicle to influence established parties.

Last but not least, I check whether the distance of the new party to the median voter has a significant influence. Here, consistent with my considerations, a negative sign emerges: An increase in the new party's distance to the center of gravity of the voter distribution is associated with a loss of votes for the new party. This result is statistically significant and independent of different model specifications or nesting structures.



### 6.1.2 Interactive Effects of Nicheness, Proximity and Competitiveness

The explanations so far have referred exclusively to the linear-additive base model. However, based on the theoretical considerations underlying this work, moderating influences on the relationship between strategies and vote share for new parties are a key component that has been formally captured in corresponding interactive hypotheses. Therefore, I extend the base model with three linear-interactive models to test these hypotheses. These models contain an interaction term consisting of the issue competition strategy and the moderating factor.

First, I test the interaction effect with the party system similarity score as a measure of nicheness. Then I deal with the ideological similarity of both parties. Finally, I analyze to what extent the competitiveness of the established party has a moderating influence on the effect of established party strategies. In the full chained interaction model, I integrate all three interaction terms.

#### Nicheness of the New Party

In order to test whether the nicheness of a new party has a moderating effect on the impact of the issue or positional competition strategy of an established party, I introduce an interaction of both variables into the model. This allows me to test hypothesis 3a and 3b (cf. Table 6.3). Since positional competition has such a small impact on the models, I consider hypothesis 3a to be supported and focus the presentation on the effects of issue competition strategies.

*Table 6.3: Summary of Hypotheses and Results on Nicheness*

No.	Hypothesis	Supported	Rejected
3a	Parties' nicheness has no impact on the influence of positional strategies.	X	
3b	High degrees of nicheness boosts the impact of issue competition strategies.		X

To measure nicheness, I use the party system similarity score developed and validated here. High values of this score mean that the election program of the new party has a high average similarity with the election programs of all other parties. In this case, the new party uses many terms used by the established parties, so it has a low degree of nicheness. Conversely, if the terms used by the new party differ from those of the established parties, it

can be said that the new party has a high degree of nicheness. Small values reflect this on the party system similarity score.

The coefficients reported in the regression table in the nicheness model show high agreement with the coefficients of the base model. This is true for all variables not involved in the interaction. This speaks for the robustness of the results presented in the previous section. The coefficients of the issue competition strategy and the party system similarity score apply here exclusively to the case where the other variable takes the value 0 and therefore differs from the base model.

The issue competition strategy positively affects the vote share of new parties if they have a party system similarity score of 0, i.e., if they have an extremely high nicheness. However, empirically, this case is infrequent. To be able to make statements about the entire range of values of the party system similarity score, I refer to the marginal effect plots (cf. Figure 6.2).

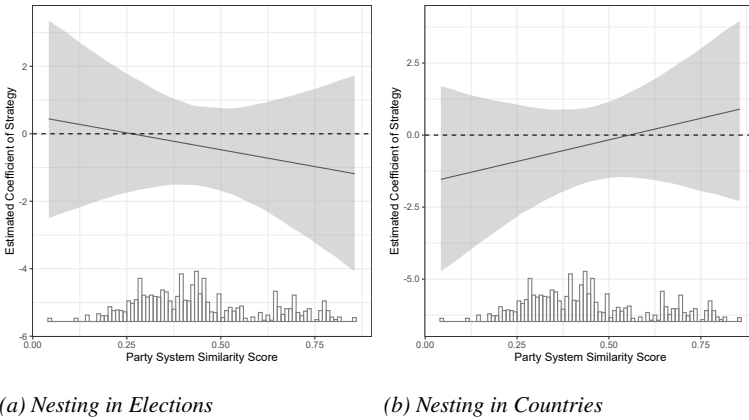


Figure 6.2: Marginal Effect Plots for the Moderation of Issue Competition Strategy by the Nicheness of the New Party

The plot shows that up to a party system similarity score of about 0.25, the issue competition strategy has a positive but non-significant effect. For the larger part of the value range, on the other hand, the effect is negative and insignificant. For parties with high similarity to all other parties, i.e., a low nicheness, an avoidance strategy is associated with losing votes. However, this observation only applies in the case of nesting in elections. If the country-nesting structure is taken into account, the opposite effect emerges. Combined with the high uncertainty of the estimation across both models, there are

considerable doubts about the robustness of this effect, which ultimately lead to the conclusion that we should speak of a null result here.

Another way to show the influence of the interaction term on the dependent variable is to select specific values and map the predicted values for them based on the regression model. The predicted value plots (cf. Figure 6.3) show the predicted election result of the new party for party system similarity scores of 0.25 (high nicheness) and 0.75 (low nicheness). To give an impression of the distribution of the observed values, I represent them as points colored by their party system similarity score.

According to hypothesis 3b, the slope of both estimation lines should differ significantly while the direction of the effect remains constant in order to speak of a booster effect of nicheness. However, on the other hand, the plots show two almost parallel lines whose level hardly differs with similar predicted election results of about 8 percent.

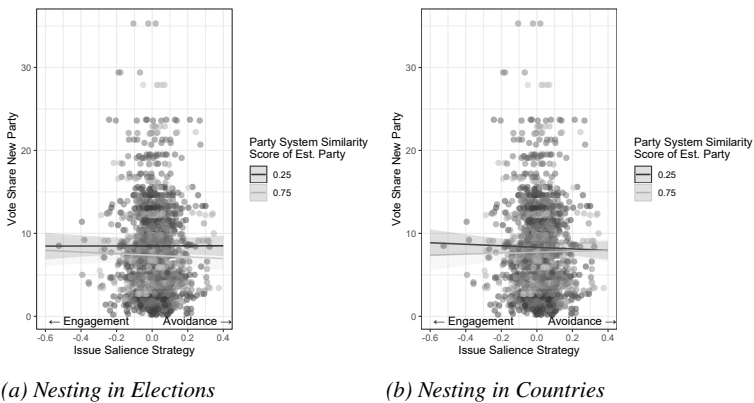


Figure 6.3: Predicted Values for the Vote Share of New Parties Depending on the Issue Competition Strategy and the Nicheness of the New Party

The calculations of model performance also show that the introduced interaction term does not increase the overall goodness of fit. These empirical results indicate that nicheness does not moderate the influence of issue competition strategies. Thus, I reject hypothesis 3b, which declared that high degrees of nicheness boost the impact of issue competition strategies.

### Ideological Proximity of New and Established Parties

The second interaction term considered in the model captures the influence of the ideological proximity of both parties on the effect of positional or issue competition strategies as laid down in hypotheses 4a and 4b (cf. Table 6.4). Again, I present only the results for issue competition strategies in the main text because positional competition has only very small effects, which leads me to reject the associated hypothesis 4a.

The idea behind hypothesis 4b is based on the notion that parties with high ideological proximity compete for the same segments of the electorate and are thus more directly affected by the strategic policy moves of their rivals than is the case with parties that are more ideologically distant. Therefore, differing effects depending on ideological proximity are likely.

*Table 6.4: Summary of Hypotheses and Results on Ideological Proximity*

No.	Hypothesis	Supported	Rejected
4a	Ideological similarity boosts the impact of positional competition strategies.		X
4b	The effect of issue competition strategies on the vote share of new parties changes direction if parties are ideologically close.	X	

In order to assess the ideological proximity of the two parties, I use the a priori measurement of the assignment of parties to party families. Since the assignment of new parties to party families can be problematic, I use a simplified classification into a right-wing and a left-wing ideological bloc based on the work of Düpont (2017) and Adams et al. (2009). If both parties are located in the same ideological bloc, this is coded with one, and if the parties are in different blocks with zero.

An examination of the proximity model shows a picture similar to that of the nicheness model: the coefficients of the model match those of the base model for all variables not involved in the interaction. This confirms the substantive interpretation of the base model.

With regard to issue competition, the coefficient of 0.36 shows a small, positive effect whose standard error is smaller than in the nicheness model. Issue competition thus has a positive effect on the vote share of new parties if both parties are not in the same party family. This means that avoiding issues outside the same ideological bloc is associated with an increase in votes for the new party.

An examination of the marginal effect plots (cf. Figure 6.4) shows that the effect of the strategy within the same ideological group is negative, i.e.,

## 6.1 The Impact of Strategic Choices

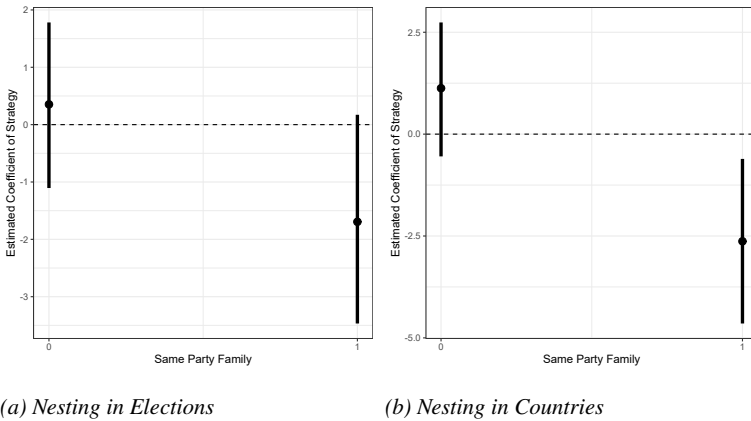


Figure 6.4: Marginal Effect Plots for the Moderation of Issue Competition Strategy by the Affiliation in the Same Ideological Bloc

that the avoidance of issues leads to a reduction in votes for the new party! The comparison of the nesting structures also shows that the effect is more substantial in the case of nesting in counties and even exceeds the threshold of statistical significance.

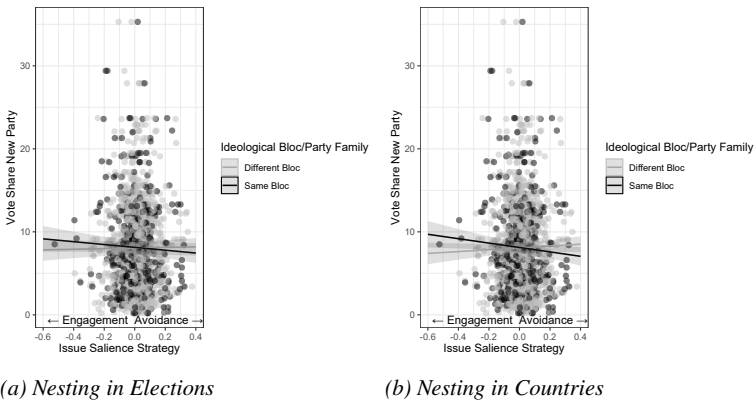


Figure 6.5: Predicted Values for the Vote Share of New Parties Depending on the Issue Competition Strategy and the Affiliation in the Same Ideological Bloc

This finding becomes even more evident when the predicted value plots (cf. Figure 6.5) are considered. Comparing both nesting structures shows

substantially similar results, with nesting in countries showing more substantial effects. This is true for all models discussed here. The avoidance strategy is generally associated with a lower vote share for the new party within an ideological bloc. In contrast, the opposite effect occurs for parties outside the ideological bloc.

Based on these results, hypothesis 4b is supported. That means the effect of issue competition strategies on the vote share of new parties changes direction if both parties are ideologically close.

This is an interesting result, as it clarifies that in party competition, the relative position of the rival is of decisive importance for the direction of the effect of the established party's strategy.

Without considering the ideological proximity as an interaction term, the opposing effects would balance out on average. The base model erroneously shows an effect that is too small or points in the wrong direction. Moreover, the result supports the basic assumptions of Downsian theory, according to which competition for the same voter segments influences the effect of policy moves. The engagement strategy concentrates the issue competition in an ideological group on this issue and thus ensures increased public perception. This favors the new party in this case. At the same time, the avoidance strategy prevents this effect by lowering public awareness of the new party's issues through the silence of the established party, which harms the new party.

### Competitiveness of the Established Party

The third interaction term I consider in the model captures the influence of the competitiveness of the established party. The basic idea is that voters react differently to the strategies of competitive established parties than they do to less competitive parties.

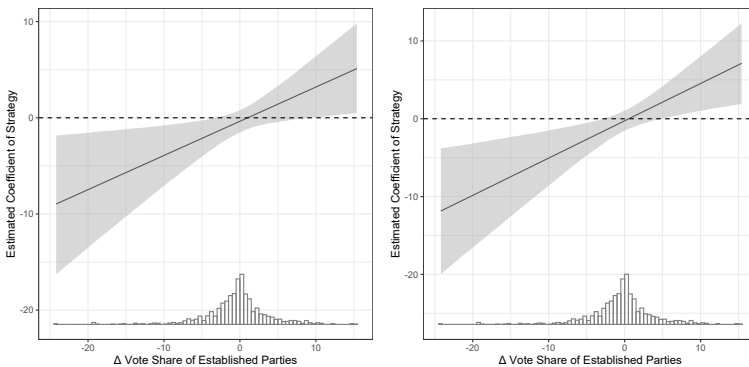
In order to assess the competitiveness of the established party, I take into account its expected vote gains and losses since the last election. Furthermore, I assume that voters take the expected gains and losses of the next election into account in their voting decision since this distribution of votes ultimately determines whether policies have a chance of being implemented. This leads me to hypotheses 5a and 5b (cf. Table 6.5), whereby the former can be considered rejected due to the low influence of positional competition and will not be discussed further.

The competitiveness model reproduces the coefficients reported for the other models. Strikingly, the issue competition strategy has a small negative

Table 6.5: Summary of Hypotheses and Results on Competitiveness

No.	Hypothesis	Supported	Rejected
5a	The effect of positional competition strategies on the vote share of new parties changes direction if the established party lost votes in the previous election.		X
5b	The effect of issue competition strategies on the vote share of new parties changes direction if the established party lost votes in the previous election.	X	

coefficient of -0.36 when the established party does not gain or lose votes. This means that avoidance of a new party's issues is associated with a low vote share of the new party at this point, but the effect is statistically not very pronounced.



(a) Nesting in Elections

(b) Nesting in Countries

Figure 6.6: Marginal Effect Plots for the Moderation of Issue Competition Strategy by the Previous Vote Gains/Losses of Established Parties

The marginal effect plots (cf. Figure 6.6) allow a more detailed analysis. It becomes clear how important it is to look at the interaction terms over the entire range of values. In the case of electoral losses of the established party, there is a clear negative influence of the strategy on the electoral success of new parties. This effect is significant. In the range of small vote gains and losses, the estimated line crosses the zero line, i.e., the coefficient becomes positive, and the effect changes direction. Thus, in the case of vote gains, an avoidance strategy is associated with a vote gain for the new party. This effect is barely significant for vote gains of up to 10 percent if the nesting structure is based on elections. In the case of nesting in countries, however, the effect

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is more pronounced so that it exceeds the level of statistical significance even in the positive value range.

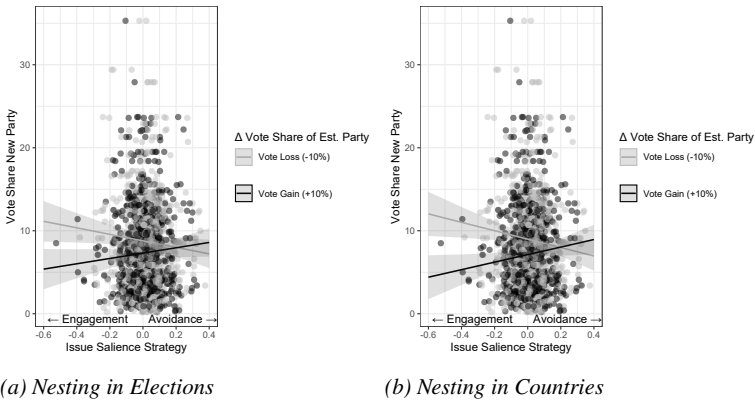


Figure 6.7: Predicted Values for the Vote Share of New Parties Depending on the Issue Competition Strategy and the Previous Vote Gains and Losses of Established Parties

For the substantive interpretation, I use the predicted value plots (cf. Figure 6.7). Here I have set vote gains and losses at ten percentage points, as this corresponds to the limits of the value distribution. The substantive interpretation does not change if vote gains and losses are lower.

The predicted election results for the new party differ significantly when different election results of the established party are taken into account. For example, the engagement strategy would predict an election result for the new party of up to 12 percent in the case of a vote loss of 10 percent. In contrast, a vote gain combined with the engagement strategy would only result in a vote share of around 6 percent for the new party.

Results support hypothesis 5b, i.e., the effect of the issue competition strategy changes direction when the established party is likely to suffer vote losses in the next election. I interpret this as evidence that voters take the competitiveness of the established party into account in their voting decision: An established party that is likely to win has a better chance of enforcing its policies, so an engagement strategy may succeed in keeping voters away from the new party. Conversely, an established party that is likely to lose does not have this advantage, so the engagement strategy does not convince a significant number of voters to leave the new party.



### Chained Interaction Model

In the previous discussion, I have analyzed the linear-additive effect of each dependent variable in the base model and presented three linear-interactive models, each of which considers the interaction between the issue competition strategy and one of three theoretically justified potentially relevant moderators. In the full model, I combine all three interaction terms into a chained-interaction model to control the estimates for each interaction effect.

The most significant difference between the full model and the other three linear-interactive models is that the issue competition strategy has a higher positive coefficient in the case where the party system similarity score, ideological proximity, and competitiveness are zero. At the same time, the standard error is significantly higher, so this effect is not statistically significant.

The individual interaction terms show coefficients in the full model that point in the same direction as in the individual models. While the interaction of the issue competition strategy with the party system similarity score shows a slightly higher coefficient (and a higher standard error), the interaction of the strategy with the ideological proximity is smaller, with the same standard error. The interaction with competitiveness shows a higher coefficient and an unchanged standard error. Thus, the effect remains statistically significant. None of these marginal changes lead to a substantial change in the interpretation.

### 6.2 Model Comparison and Summary

In this section, I compare the goodness of fit of the different models based on a set of model goodness criteria and the observed effect sizes to assess the relative importance of the variables represented in the models. I then summarize the results of the analysis.

The presented models integrate several lagged dependent and lagged independent variables, which strongly influences the goodness of fit of the models. Based on the model performance parameters, it becomes clear that the differences between the models are minor. Differences are most apparent in the (weighted) AIC and BIC values. Depending on how strongly parsimony is used as a decision criterion, either the Full Model or the Competitiveness Model is the best data approximation. This result is also confirmed by considering effect sizes using predicted values.

Table 6.6: Summary of Model Performance

Name	AIC	AIC_wt	BIC	BIC_wt	R2_conditional	R2_marginal	ICC	RMSE
<i>Multilevel Models nested in Elections</i>								
Base	7863.45	0.04	7965.96	0.10	0.81	0.66	0.44	2.37
Nicheness	7868.85	0.00	7965.96	0.10	0.81	0.65	0.44	2.39
Proximity	7872.83	0.00	7975.34	0.00	0.81	0.65	0.44	2.39
Competitiveness	7859.21	0.31	7961.72	0.81	0.81	0.66	0.44	2.37
Full	7857.76	0.65	7976.45	0.00	0.81	0.66	0.44	2.37
<i>Multilevel Models nested in Countries</i>								
Base	8167.92	0.00	8270.43	0.04	0.71	0.68	0.09	2.86
Nicheness	8177.26	0.00	8274.38	0.01	0.71	0.68	0.09	2.88
Proximity	8177.62	0.00	8280.13	0.00	0.71	0.68	0.09	2.88
Competitiveness	8161.65	0.09	8264.16	0.95	0.71	0.69	0.09	2.86
Full	8157.03	0.91	8275.72	0.00	0.71	0.69	0.09	2.85

Table 6.6 summarizes the root-mean-square error (RMSE), the interclass-correlation coefficient, Nakagawa's r-squared, the Akaike information criterion (AIC) and the Bayesian information criterion (BIC) for all models.<sup>2</sup>

The marginal r-squared is calculated based on the variance of the fixed effects. The conditional r-squared uses fixed and random effects. For the AIC and BIC, I also give the weighted values, which best are "interpreted as the probability that model i is the actual expected [...] best model for the sampling situation considered" (Burnham and Anderson, 2004, p. xxvi).

Concerning the r-squared statistics, the differences are only apparent after the second decimal place so that the proportion of explained variance can be considered identical for all models. This applies to both the fixed and the random effects.

There are differences between the models in the RMSE, whereby the nicheness and the proximity model have a poorer fit. However, the base, the full, and the competitiveness models have an advantage here.

The AIC and BIC also show differences between the models, most evident in the weighted values. Concerning the AIC, the full model can be considered the best of the models compared, regardless of the nesting structure chosen. Looking at the BIC, which takes the number of variables in the model more negatively into account, i.e., assigns a higher role to the parsimony of the model, the competitiveness model is the best model under scrutiny.

<sup>2</sup> To calculate model performance and check robustness, I use the performance package (Lüdecke et al., 2021) for R.

I come to the same conclusion when comparing the predicted values of the different models. This shows that competitiveness has the most significant effect, followed by ideological proximity. The moderating effect of nicheness is smaller so that we could speak of a zero result here.

The coefficients of the positional competition models (cf. section 8.6) range from about 0.01 for effect conditioned by nicheness, to about 0.006 in the proximity model, to -0.0125 for the competitiveness model. Thus, the competitiveness model also shows the most considerable effects here. Even with a significant policy move of 40 points on the RILE scale, the new party's predicted vote share only changes by 0.24 - 0.5 percentage points.

In the issue competition models, the effects are also small. However, the marginal effect plots show coefficients of -2 for nicheness, -2.5 for ideological proximity, and -10 for the interaction with competitiveness.

A change of 0.5 points on the issue competition scale scaled between -1 and 1 thus leads to a change of 1-5 percentage points in the expected vote share of the new party. Thus, the effect of issue competition is greater than the influence of positional competition by a factor of 4 to 10. Considering the average size of a new party is 7 percent, gains and losses of this magnitude can make the difference between being re-elected to parliament or sinking into irrelevance. Based on these results, the competitiveness model seems to be the most appropriate, followed by the full model, which takes all interaction terms into account but violates the parsimony principle.

*Table 6.7: Summary of Hypotheses and Results*

No.	Hypothesis	Supported	Rejected
1a	If an established party adopts a new party's position, the new party's vote share decreases.		X
1b	If an established party maintains its distance from the new party, the new party's vote share is not affected.		X
1c	If an established party confronts a new party's position, the new party's vote share increases.		X
2a	If an established party utilizes the engagement strategy towards the issues of a new party, the new party's vote share decreases.	(X)	
2b	If an established party is indifferent to the issues of the new party, the new party's vote share is not affected.	(X)	
2c	If an established party avoids the issues of a new party, the new party's vote share increases.	(X)	
3a	Parties' nicheness has no impact on the influence of positional strategies.	X	
3b	High degrees of nicheness boosts the impact of issue competition strategies.		X
4a	Ideological similarity boosts the impact of positional competition strategies.		X
4b	The effect of issue competition strategies on the vote share of new parties changes direction if parties are ideologically close.	X	
5a	The effect of positional competition strategies on the vote share of new parties changes direction if the established party lost votes in the previous election.		X
5b	The effect of issue competition strategies on the vote share of new parties changes direction if the established party lost votes in the previous election.	X	

*Note:* Parentheses indicate a conditional result that is only true under certain moderating influences.

Concerning the hypotheses, I summarize my findings in Table 6.7. The overall view of the results shows that my main hypothesis, according to which positional and issue competition strategies of established parties influence the vote share of the new party, is partly correct: Issue competition influences the vote share to a considerable amount, while positional competition does not. The coefficients estimated in the base model for the issue competition strategy contradict the directions formulated in the hypothesis. However, if additional interaction terms are taken into account, it becomes apparent that many of the observed effects fit the theory well. Therefore, I consider these hypotheses to be conditionally correct.

The linear-interactive competitiveness model shows pronounced effects in line with theoretical considerations. The same is true for the proximity model, but effect sizes are considerably smaller here.

For an established party, these results mean that it should keep the new party's issues in mind when choosing its strategy. Especially when the polls point to a victory, it may make sense to take up the new party's problems to keep its voters away from the ballot box. Ideological proximity to the new party should also be considered: Within the same ideological bloc, the avoidance strategy is associated with a smaller share of the vote for the new party, while the engagement strategy leads to a smaller percentage of the vote for the new party if the two are in different ideological blocs.