

Opposition Party Policy Shifts in Response to No-Confidence Motions

Supplementary Materials

Overview

This document provides analyses discussed—but not presented—in “Opposition Party Policy Shifts in Response to No-Confidence Motions.”

The Effects of NCMs on Non-Economic Issues

In the manuscript we address the possibility of NCMs producing shifts in specific issue positions rather than the overall left-right position. To test this, we first classified NCMs into issue areas. Finding an issue area with a significant number of NCMs is challenging since NCMs in our data are on wide-ranging topics. One of the issue areas for which we have more than a few NCMs is the military area. These motions can range from criticizing overall defense policy (Canada on February 6, 1963) to arms transfers (Netherlands on February 21, 1980) and the wars in Iraq (Australia on February 5, 2003 and October 19, 2006 and Portugal on March 27, 2003) and Afghanistan (Canada on December 18, 2006).

We constructed the military position of parties by subtracting the anti-military emphasis (`per105`) from the pro-military emphasis (`per104`) using election manifestos.¹ Higher values suggest a more pro-military position. Once we have the positions of the parties on the military-scale, we calculated the government’s position using the governing parties’ military positions and weighting them by their seat share (as we calculated the left-right position of the government in the paper). Next, we created the move toward-away from government variable (our dependent variable in the paper) using the military positions of the parties. Similar to our original dependent variable, *ide-*

¹More specifically, pro-military emphasis includes those parts of each manifesto that discuss the need to maintain or increase military expenditure, modernize armed forces and improve in military strength, rearmament and self-defense, the need to keep military treaty obligations and the need to secure adequate manpower in the military. Anti-military emphasis includes parts that discuss favorable mentions of decreasing military expenditures or disarmament, the “evils of war”, and promises to reduce conscription.

ological change, negative values indicate that the party is moving away from the government's position.

Our data have 22 party shifts in response to military-NCMs. Figure S1 shows a frequency histogram for these party shifts (with respect to the government position) in response to military-NCMs. The figure shows that 15 of these 22 party shifts (68%) were away from the government's position, supporting our main hypothesis that opposition parties move away from government when there is a NCM and showing that these effects also hold for specific issue areas.

[Figure S1 about here]

Column 1 in Table S1 shows that opposition parties move an average of 1.44 points away from the government on the military-scale when there is a military-related NCM. Given that the average change on the military-dimension is 1.41, this is a substantively large effect. We are cautious in interpreting these results, however, given the limited number of military-NCMs in our data. This low number of cases also does not allow us to estimate an interaction model (of NCMs and performance) as we do in the manuscript. Nevertheless, in Column 2 in Table S2 we add two performance indicators, *real GDP per capita growth* and a count variable of all militarized interstate disputes for each country in the 12 months prior to the election (*number of MID*s). The coefficient for *military-NCMs* is -2.09 and highly significant when we control for the performance indicators.

[Table S1 about here]

To sum up, while these are preliminary analyses and should be used cautiously given the limited data and the potential problems with the manifesto data for single-issue positions, we have consistent evidence that opposition parties move away from government's military position when the government is challenged with a military-related NCM.

Proposers and Non-Proposers

In the *Sensitivity Checks* section of the paper we test whether there is any difference between how NCM-proposers and non-proposers respond to NCMs and information on government performance. Using the findings from Column 2 in Table 3 (Proposers and Non-Proposers Model) we calculated the marginal effects of an NCM for proposers and non-proposers across the values of GDP growth rate. Figure S2 shows these marginal effects. As we explained in the paper, we clearly see that proposers do not appear to be responding to NCMs. Nevertheless, as we also note in the text, the seemingly unrelated regression results show that the coefficients for the NCMs and for the interaction variable are not statistically different between proposers and non-proposers. One possibility is that we do not see the significant effects for proposers in this model because of the low number of proposers in the data and the high correlation between *NCMs* and *proposers*.

[Figure S2 about here]

Economic and Noneconomic NCMs

In addition to the differences between NCM-proposers and non-proposers, In the *Sensitivity Checks* section of the paper we also discuss the differences between economic and non-economic NCMs. Figure S3 shows the marginal effects of NCMs on party policy shifts for different values of GDP growth rate using the results from Columns 3 and 4 in Table 3. These plots of the marginal effects show that non-economic NCMs still push parties away from the government's position at low levels of economic performance (i.e., when *real GDP per capita growth* is less than about -2.5%). These results suggest that while NCMs that are about economic policies strongly clarify the government's weaknesses and motivate parties to change their left-right positions, NCMs on non-economic issues and events still affect the government's evaluations and encourage parties to move away from the government's position.

[Figure S3 about here]

Policy Shifts of Governing Parties

Though our focus is on the ideological movement of opposition parties, we also explore the possibility that governing parties change their positions away from their original position as a result of NCMs. The results for a sample including only the governing parties in Table S2 and the accompanying figure (Figure S4) show that governing parties also shift their positions away from their own position when there is an NCM but the effect is only statistically significant at very low levels of *real GDP per capita growth*.

[Table S2 and Figure S4 about here]

However, we note that the reason for the lack of statistical significance might be a result of our reduced number of cases for this model, which increases the standard error.

Alternative Explanations

In order to demonstrate the robustness of our key findings, we control for two additional factors that may explain both the occurrences of NCMs and party policy shifts. The first variable is the party's previous vote loss/gain. Party election performance has been an important indicator of party policy shifts in advanced democracies. Budge (1994) and Somer-Topcu (2009), for instance, argue that parties that lost votes in the previous election should shift their policy positions for the upcoming election to win votes. Hence, we add the previous vote change (between elections $t - 2$ and $t - 1$) to our main model to test whether parties change their positions in response to NCMs when we keep the previous election result fixed.

The second potential variable that may affect party policy shifts is the change in the preferences of the median voter. There is an extensive literature examining whether parties represent the

interests of voters and whether they change their positions in the same direction as public opinion. Adams et al. (2004) and Ezrow et al. (2011) show empirical evidence for the hypothesis that parties, and especially the mainstream parties, respond to changing public opinion and shift their positions in the same direction as the change in the median voter position.

To test the effects of public opinion changes on party shifts we use the Kim-Fording median voter position (see, Kim and Fording, 1998 for more details). Given the construction of our dependent variable we needed a variable that measures the change in the median voter position with respect to the government's position. Hence, we created a variable similar to our dependent variable. We coded the median voter position change +1 if the median voter approached the government's position, and -1 if it moved away from the government. We included this variable into our main model along with the previous election performance variable. If our explanatory variables work in a similar manner as before when we control for these two factors, we can rule out the alternative explanation that the shifts in opposition party behavior are a result of median voter shifts or election performance, and not a result of NCMs and government performance.

We report these results in Table S3.

[Table S3 about here]

Previous vote change (*lagged vote change*) does not have a significant direct effect on party shifts. On the other hand, *ideological change of median voter* has a positive and significant effect on opposition party shifts and the coefficient is in the expected direction. If the median voter has shifted away from the government (negative values for the variables), opposition parties, on average, are more likely to shift their positions away from the government as well. More importantly, the interactive relationship between NCMs and economic performance is robust when we keep the previous election performance and the change in the median voter position constant.

We also tested the conditional effect of the median voter shifts and previous election results on our main relationship between NCMs, economic performance, and party policy shifts. The results, which are available upon request, show that neither of these variables condition the relationship between NCMs, GDP growth, and party policy shifts.

Restrictions on the Initiation of NCMs

Institutional variations regarding the rules and requirements for NCM proposing may affect the costs of proposing NCMs and their effects on opposition policy shifts. To test whether institutional variations affect NCMs and condition our relationship between NCMs and party shifts, we created a dichotomous variable called *restriction*, which is coded 1 if the state has either a constructive vote of no-confidence (Spain, Germany, and Belgium after 1995) or restrictions based on the number of MPs required to propose the motion (Austria, Finland, France, Greece, Italy, the Netherlands, Portugal and Sweden).²

²Data for European countries are taken from Bergman, et al. (2006); data from non-European states are coded by the authors based on constitutional sources.

First, we tested whether restrictions correlate with initiation. We calculated the total number of NCMs over the entire time period for each of the 19 sample countries. We then performed a negative binomial regression³ with the main predictor being the *restriction* variable. As Table S4 shows, the coefficient for *restriction* is negative, but far from being statistically significant at conventional levels (p-value = 0.59). This suggests that having stronger restrictions—in the form of a constructive vote of no-confidence or proposal restrictions—do not influence the pattern of NCMs. One possible explanation for this null finding is that NCMs may be correlated with strong restriction systems in either of two ways: strong restriction systems may have fewer NCMs by increasing the potential costs, or more NCMs because states implement these restrictions in an attempt to reduce existing cabinet instability (see, e.g., the case of Germany; Diermeier, Eraslan and Merlo 2002: 894).

[Table S4 about here]

Given that NCMs may not be costly overall, and that institutional requirements do not hasten their usage, we doubt that opposition parties will respond to NCMs differently across systems. We produced a three-way interaction (including *restriction*, *NCMs* and *real GDP per capita growth*) to test this possibility. The first inference from the results in Table S5 is that we cannot reject the hypothesis (p-value 0.59) that $NCMs \times GDP$ and $NCMs \times GDP \times Restriction$ are equal. This implies that having strong restrictions does not modify the conditional relationship between *NCMs*, *GDP* and *Ideological Change*. Furthermore, F-tests suggest that the marginal effect of an *NCM* across *real GDP per capita growth* is statistically identical in systems with strong and weak restrictions. These results suggest that our theory is generally applicable in a wide range of systems, whether they attempt to restrict the usage of NCMs or not.

[Table S5 about here]

Electoral Consequences of Ideological Change

Previous empirical research by Williams (2011) shows that governing parties lose in the presence of NCMs. However, we are unaware of any research examining how *policy shifts* moderate these effects, and whether there are actual electoral benefits for opposition parties when they move away from governments that are challenged by NCMs.

To test this proposition we estimate a model where our dependent variable is party vote change between elections $t - 1$ and t . Our main independent variables are the number of *NCMs* and *ideological change* with respect to government's positions (note that this *ideological change* is our dependent variable in the paper). Because we would like to know whether opposition parties' election results depend on their movements with respect to the government's position in the presence

³The likelihood ratio test suggests overdispersion ($\chi^2 = 139$, p-value < 0.001), implying that the negative binomial distribution is more appropriate than the Poisson (Long 1997).

of NCMs we include the interaction between the number of NCMs and the ideological change variable ($NCMs \times ideological\ change$). Because this proposition suggests that NCMs should have an effect on voters, their evaluations of government's competence, and hence on political party strategies only when they are coupled with weak government performance, we estimate our model on only those cases where *real GDP per capita growth* is negative.⁴

We also add the *niche party* dummy variable into this model. We expect niche parties to have less changes in their vote shares from one election to the next as their small group of core voters would be less likely to change their votes for other parties. Mainstream and more catch-all parties, on the other hand, experience more fluctuations in their vote shares. The model also includes the lagged dependent variable, that is the *previous vote change* between elections $t - 2$ and $t - 1$, following the practice in the literature (see, e.g., Adams and Somer-Topcu, 2010) to correct for serial correlation in our model, and the vote share of the party at election $t - 1$ to keep the previous vote share fixed as we test the effects of the main variables.

Table S6 shows the results for this electoral consequences model. Since it is difficult to interpret the full interactive relationship by solely examining the coefficients we calculated the marginal effects of party moves on their vote shares for different values of NCMs. In Table S7 we show the marginal effect of a 16-point (one standard deviation) party policy shift toward the government's position on the 201-point left-right scale on changes in parties' vote shares as the number of NCMs increases from 0 to 4 (the maximum number of NCMs in our data).

As Table S7 shows, for a 1-standard deviation shift in party position toward the government, a party, *ceteris paribus*, loses 0.1% of votes when there is one NCM, and this decreases to -1.54% when there are four NCMs. The effect is significant at the p-value of 0.1 for two NCMs and at the p-value of 0.05 for three or more NCMs. Substantively, the effect of -0.58 for two NCMs suggests, for instance, that if a party moves 16 points away from the government rather than toward the government, that party can expect to have a 1.16% vote difference between the two scenarios (i.e., instead of losing .58% the party can increase its vote share by .58%). This effect increases to a 2.12% vote difference for three NCMs and to a 3.08% vote difference for four NCMs. This is a significant gain for opposition parties considering that we are focusing on multi-party parliamentary systems and given that the average absolute vote change for opposition parties in our data is 2.85%.

[Tables S6 and S7 about here]

0.1 Sample

In Table S8 we present the sample countries, number of observations and start and stop dates.

[Table S8 about here]

⁴Confirming our expectations, there are no significant effects of policy changes in the presence of NCMs for positive growth rates. These results are available upon request.

Tables & Figures

Table S1: Regression Results for the Relationship between International Conflict and Military-Related No-Confidence Motions on Ideological Change of Opposition Parties Relative to Government

	Military	Full Military
Military No-Confidence Motions	-1.435** (0.765)	-2.086*** (0.133)
Real GDP Per Capita Growth		-0.052 (0.044)
Number of MIDs		0.043 (0.091)
Niche Party	0.256 (0.209)	0.191 (0.238)
Effective Number of Parties	-0.009 (0.054)	-0.036 (0.060)
Lagged Ideological Change	-0.237*** (0.072)	-0.208*** (0.074)
Constant	-0.043 (0.249)	0.165 (0.307)
Observations	565	474
Adjusted R^2	0.074	0.057

Robust standard errors (clustered by election) in parentheses:

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table S2: Regression Results for the Relationship between Economic Growth and No-Confidence Motions on Ideological Change for Government Parties

	Government
No-Confidence Motions	-1.821 (1.753)
Real GDP Per Capita Growth	-0.358 (0.664)
NCMs×GDP	0.888** (0.428)
Niche Party	0.645 (3.835)
Effective Number of Parties	0.845 (0.539)
Lagged Ideological Change	0.158** (0.077)
Constant	-9.673*** (2.492)
Observations	364
Adjusted R^2	0.03

Robust standard errors (clustered by election) in parentheses:

*** p<0.01, ** p<0.05, * p<0.1

Table S3: Regression Results for the Relationship between Economic Growth and No-Confidence Motions on Ideological Change: Controlling for Previous Vote Change and Change in Median Voter Position

	Alternative
No-Confidence Motions	-2.474*** (0.937)
Real GDP Per Capita Growth	-1.101*** (0.397)
NCMs \times GDP	0.920** (0.451)
Niche Party	2.634 (1.795)
Effective Number of Parties	-0.219 (0.467)
Lagged Ideological Change	-0.190*** (0.064)
Lagged Vote Change	-0.259 (0.161)
Ideological Change of Median Voter	3.054*** (0.859)
Constant	1.561 (2.126)
Observations	503
Adjusted R^2	0.081

Robust standard errors (clustered by election) in parentheses:

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table S4: Negative Binomial Regression Results for the Relationship between Institutional Restrictions and the Occurrence of No-Confidence Motions

	Count
Restrictions	-0.216 (0.400)
Constant	2.708*** (0.303)
Observations	19
Pseudo R^2	0.002
*** p<0.01, ** p<0.05, * p<0.1	

Table S5: Regression Results for the Relationship between Economic Growth and No-Confidence Motions on Ideological Change in Systems with Strong and Weak Restrictions

	Restrictions
No-Confidence Motions	-0.701 (1.310)
Real GDP Per Capita Growth	-0.908* (0.513)
Restrictions	2.900 (2.025)
Restrictions×NCM	-1.747 (2.336)
Restrictions×GDP	0.089 (0.774)
NCMs×GDP	0.695* (0.465)
NCMs×GDP×Restrictions	-0.002 (1.030)
Niche Party	1.245 (1.503)
Effective Number of Parties	0.039 (0.433)
Lagged Ideological Change	-0.232*** (0.059)
Constant	-1.176 (2.377)
Observations	570
Adjusted R^2	0.052

Robust standard errors (clustered by election) in parentheses:

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table S6: Regression Results for the Relationship between Ideological Change and No-Confidence Motions on Change in Vote Share from Election $t - 1$ to Election t : when Real GDP Per Capita $< 0\%$

	Electoral
No-Confidence Motions	-0.43 (0.29)
Ideological Change	0.02 (0.03)
NCMs \times Ideological Change	-0.03** (0.01)
Niche	-0.78 (1.37)
Vote $_{t-1}$	0.10*** (0.04)
Δ Vote $_{t-1,t-2}$	0.16 (0.26)
Constant	0.16 (0.68)
Observations	79
Adjusted R^2	0.12

Robust standard errors (clustered by election) in parentheses:

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table S7: Marginal Effect of Approaching the Government across the Number of NCMs in the 12 Months Prior to the Election: Electoral Model

Conditioning Variable (<i>NCMs</i>)	Marginal Effect for 1 Std. Dev. ^a	95% C.I.
NCMs = 0	0.38	[-0.59, 1.35]
NCMs = 1	-0.10	[-0.74, 0.55]
NCMs = 2	-0.58*	[-1.22, 0.064]
NCMs = 3	-1.06**	[-2.03, -0.090]
NCMs = 4	-1.54**	[-2.95, -0.128]

^a The standard deviation shift is 16 points. ** p<0.05, * p<0.1

Table S8: Summary Statistics

Country	Obs.	Time
Australia	23	1972–2007
Austria	21	1970–2006
Belgium	43	1971–2007
Canada	17	1972–2004
Denmark	83	1971–2007
Finland	37	1970–2007
France	24	1973–2007
Germany	15	1972–2007
Great Britain	16	1970–2005
Greece	11	1981–2000
Iceland	16	1971–1995
Ireland	21	1973–2007
Italy	37	1972–2006
Netherlands	25	1971–2006
New Zealand	21	1972–2005
Norway	41	1973–2001
Portugal	25	1980–2005
Spain	44	1982–2004
Sweden	50	1970–2006
Total	570	

Note: Start and end dates are determined by the availability of economic and NCM data.

Figure S1: Histogram of Military-Related Ideological Change Following Military-Related No-Confidence Motions

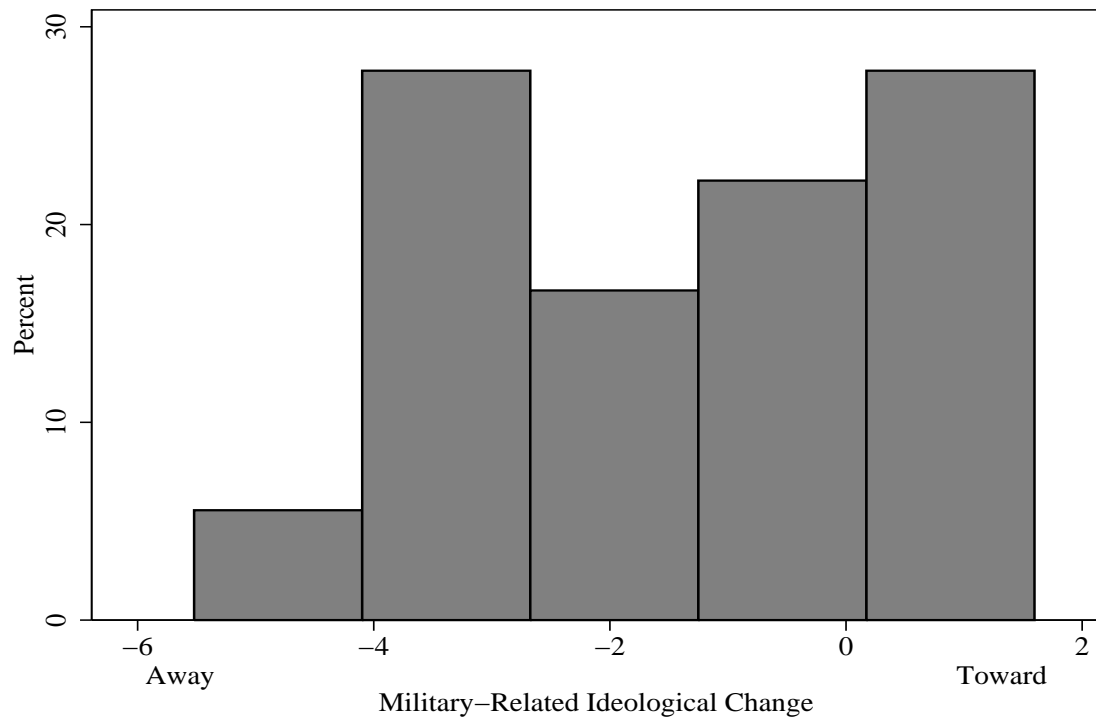
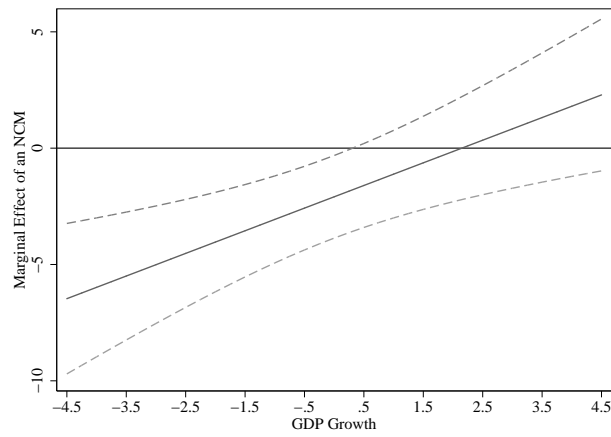
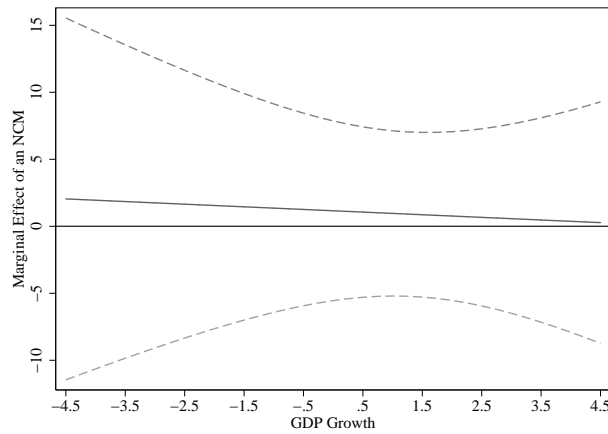


Figure S2: Marginal Effects of a No-Confidence Motion across GDP Growth for Proposers and Non-Proposers



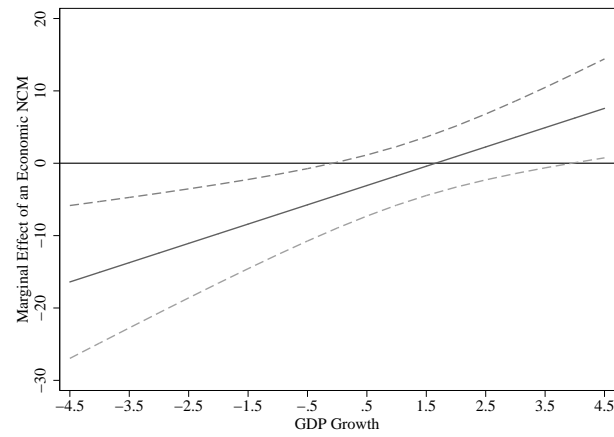
(a) Non-Proposers



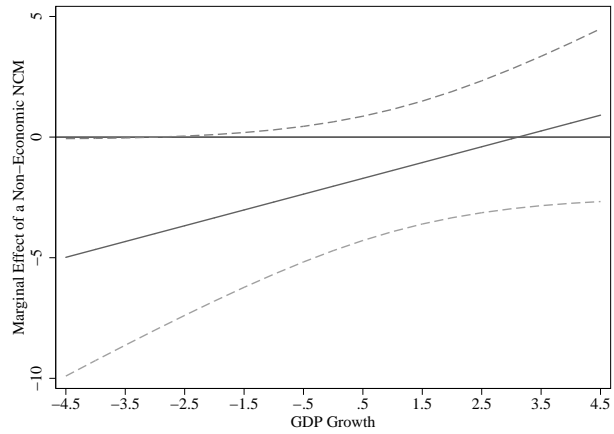
(b) Proposers

Note: The solid lines in the figures show the marginal effect of an NCM on the dependent variable of party policy shifts with respect to the government position for the different values of GDP growth rates. The dashed lines are the 95% confidence intervals.

Figure S3: Marginal Effects of a No-Confidence Motion across GDP Growth: Economic versus Other No-Confidence Motions



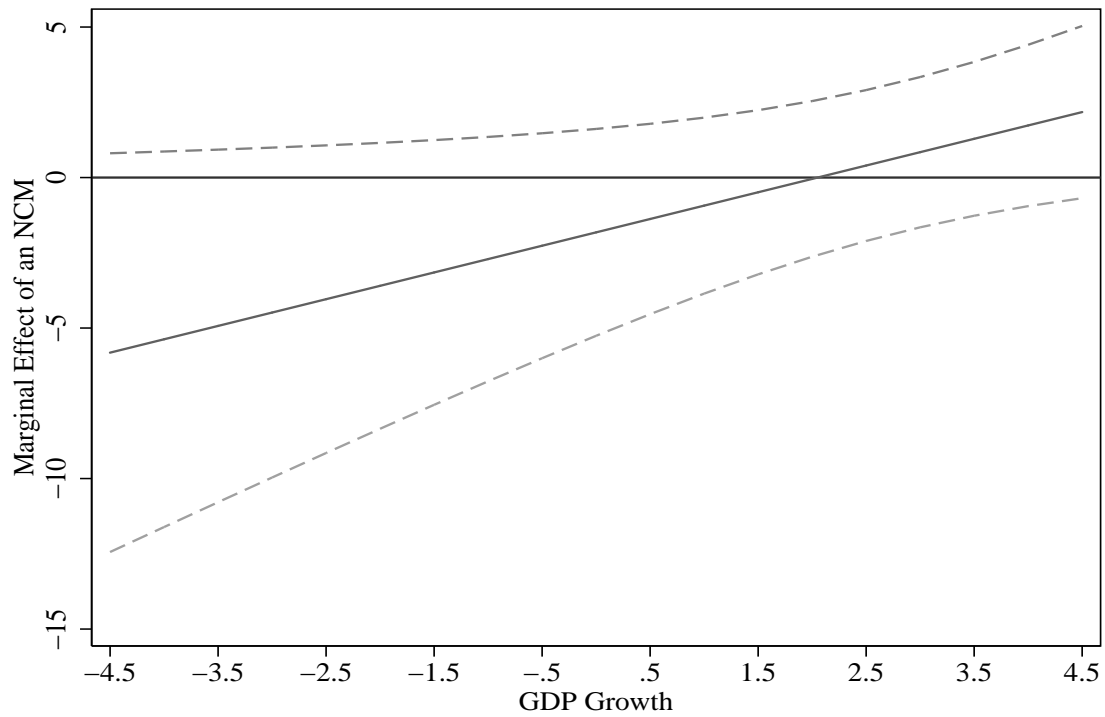
(a) Economic



(b) Other

Note: The solid lines in the figures show the marginal effect of an NCM on the dependent variable of party policy shifts with respect to the government position for the different values of GDP growth rates. The dashed lines are the 95% confidence intervals.

Figure S4: Marginal Effect of a No-Confidence Motion across GDP Growth for Government Parties (Government Model)



Note: The solid lines in the figures show the marginal effect of an NCM on the dependent variable of party policy shifts with respect to the government position for the different values of GDP growth rates. The dashed lines are the 95% confidence intervals.