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RESEARCH NOTE

The electoral cycle effect in parliamentary democracies

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Abstract

Does government party support decline in a monotonic fashion throughout the legislative cycle or do we observe a u-shaped "electoral cycle effect"? Moving beyond the study of midterm election results, this is the first comparative study to assess the cyclical pulse of government party support in parliamentary democracies based on voting intention polls from 171 cycles in 22 countries. On average, government parties lose support during the first half of the electoral cycle, but at most partially recover from their initial losses. Under single-party government and when prime ministers control cabinet dissolution, support tends to follow the previously assumed u-shaped pattern more strongly. Finally, we find that government parties hardly recover from early losses since the 2000s.

Governance is a costly business in electoral terms. Existing studies show the average government party losing support at the next election (Nannestad and Paldam 1999; Wlezien 2017). At the same time, observers have found a u-shaped pattern of support for government parties throughout the electoral cycle: declining support at first, followed by a (partial) recovery (e.g., Tufte 1975; Erikson 1988; Campbell 1991). The strength of this "recovery" is, however, a point of contention: does government support decline in a monotonic fashion (Mueller 1970; Hix and Marsh 2011; Döring 2016) or do we observe a u-shaped "electoral cycle effect"?

Most work on this pattern of cyclical support for government parties in parliamentary democracies has analyzed mid-term or second-order elections, often in one or few countries (see, e.g., Reif and Schmitt 1980; Hix and Marsh 2007). Instead of looking at second-order election results to map party support during an electoral cycle, we capture parties' standing in national opinion polls. The unique cross-national focus is possible thanks to the availability of voting intention polls across many countries (Jennings and Wlezien 2016, 2018). This allows us to empirically examine the electoral cycle effect in much more detail than previous studies have done and to describe the conditions under which the electoral cycle effect is more pronounced.

By analyzing more than 25,000 opinion poll results for government parties from 171 electoral cycles between 1955 and 2017, we provide the first comparative study about patterns of government party support throughout the legislative cycle. We find that government parties tend to lose support during the first half of an electoral cycle, and can at most partially recover from these losses in the second part of the cycle. A small rise in support during the second half of the cycle tends to exist for single party governments and when the prime minister has the power to call early elections. Our analysis of general patterns as well as institutional and election-specific determinants contributes to the literature on political representation, responsiveness, and the political business cycle.

The electoral cycle effect

We define the expected pattern of support over a parliamentary term as the *electoral cycle effect*: government party support will decrease during the first part of an electoral cycle, and increase prior to the next election, while opposition party support will first increase and then decrease. Figure 1 plots a stylized version of what this cycle might look like under a single-party government. When a cabinet gets elected into office, the government is likely to enjoy a short "honeymoon" period of public support for a few months (phase 1). Afterward, we expect support to start declining. Election campaigns may have raised hopes in the electorate, but the government might be unable to fulfill the expectations of many voters (Mueller 1970; Stimson 1976). Moreover, grievance-asymmetry theory suggests that voters punish government parties more strongly for things that go badly than rewarding them for favorable outcomes (Nannestad and Paldam 1999). As a result, the support for the government should decrease (phase 2).

Yet, we expect a partial recovery from these losses. Following a period of stable, but low support (phase 3), government support should increase when the next election comes closer (phase 4). Previous studies about US elections show that governments try to enact policies with highly visible benefits in the election year, while voters are likely to reward incumbents for high growth in the last six months, rather than the entire term (Healy and Lenz 2013; Achen and Bartels 2016). Moreover, disapproval throughout a cycle may be a form of punishment by party supporters, but when the next election comes closer voters are more likely return to their former vote choice (Miller and Mackie 1973; Reif and Schmitt 1980). Increased partisan mobilization may also contribute to this recovery (Michelitch and Utych 2018).

We would not expect the electoral cycle effect to be equally strong under all circumstances. Based on the existing literature, we identify a number of moderator variables that we expect to affect the existence and strength of the electoral cycle effect. We argue, based on the "clarity of responsibility" literature, that the electoral cycle effect is weaker if voters do not know which party to blame for government policy (Powell and Whitten 1993, 398). In majoritarian systems and under single party governments, clarity of responsibility is higher than in coalition governments (Powell 2000; Lijphart 2012). It is more difficult for voters to determine which party should be held accountable for policies or the state of the economy when executive power is shared among more than one party. When a country is governed by a coalition, we would expect the largest party to be identified most strongly with the government and therefore show a stronger electoral cycle effect than junior opposition parties. Lastly, we expect that a lack of clarity of responsibility will result in weaker electoral cycle effects under minority governments. These governments require support from at least part of the opposition to implement their legislative agenda, which makes it more difficult for voters to hold specific parties to account for government policies (De Vries, Edwards, and Tillman 2011).

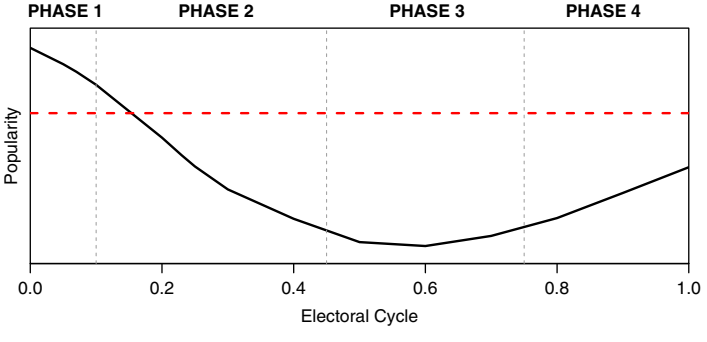

Figure 1. The expected popularity of government parties throughout an electoral cycle.
Note: The electoral cycle ranges from the government inauguration date to the next election date.

Voters' abilities to assign responsibility for policy to parties is partly balanced out by parties' abilities to control the electoral cycle. Calling elections strategically can be advantageous for government parties: they can use the timing of the elections to maximize their support, for example by enacting policies that provide benefits in the election year or by holding elections when the economy is doing well (Schleiter and Tavits 2016). Although these attempts are not always successful, we should expect that on average higher party control over election timing results in a stronger recovery for government parties in the last phase of the electoral cycle. Therefore, we predict the electoral cycle effect to be more pronounced when the prime minister has strong institutional powers to decide on dissolution of parliament (Goplerud and Schleiter 2016). *All in all, we thus expect to see stronger electoral cycle effects under single party governments, for the largest parties in coalitions, for majority governments, and when the prime minister has strong dissolution powers.*

Data and measurement

Although the precision of opinion polls for forecasting election results has been criticized, unquestionably polls play a role in (the media coverage of) politics, and within a margin of error show the relative standing of parties. We make use of recent datasets that contain poll data from legislative and presidential elections (Jennings and Wlezien 2016, 2018). We limit our analysis to legislative elections resulting in a sample of 22 countries, 171 electoral cycles, and 25,333 polls for government parties (see Tables A1 and A2 in the Supplementary Material for descriptive statistics). The unit of observation is a polling result for a government party. If more than one poll was published for the same party on the same day, the poll results are averaged. The dependent variable is the *Poll change* of each party calculated as difference between the current poll and the vote share at the previous election. For example, if party *A* gained 40 percent of the votes and drops to 30 percent in a poll, *Poll change* amounts to −10. The main independent variable *Electoral cycle* measures the difference between the date when a poll was published and the date of the government inauguration divided by the actual length of the electoral cycle. The variable can thus take values between 0 (inauguration) and 1 (day of upcoming election). The expected curvilinear effect of the time in the electoral cycle on poll support is modeled by including the square of *Electoral cycle*. We also add the cubic value of the *Electoral cycle* to allow for more complicated patterns of government party support over the electoral cycle. Including the cubic value improves the model fit and mirrors the loess regression lines (Figure A1 in the Supplementary Material) better.

We derive information on the type of government from the European Representative Democracy Data Archive (Andersson, Bergman, and Ersson 2014) and the ParlGov dataset (Döring and Manow 2018). The variable *Single party government* indicates whether the cabinet was formed by ministers from only one party. *Minority government* captures if a government commanded a majority in the lower house of the parliament. From the polling datasets (Jennings and Wlezien 2016, 2018), we recode a binary variable *Largest party* that indicates whether a party was the largest one in the coalition. The index developed by Goplerud and Schleiter (2016) operationalizes the dissolution power of the prime minister (*PM dissolution power*) and the government's power to dissolve the parliament (*Government dissolution power*). Both indices range on a continuous scale between 0 and 10 with a higher number signaling stronger dissolution power. We also add *Party support at the last election* and the *Election year* to control for the possibility that the electoral cycle effect has changed over time and that the "costs of ruling" (Stevenson 2002) increased in recent decades. The economic situation prior to an election has a considerable impact on vote choice (see, e.g., Lewis-Beck and Stegmaier 2000). An increase in GDP growth prior to an election is usually attributed to the incumbent resulting in increased popularity (Achen and Bartels 2016). We therefore merge each poll result with the economic situation during the lagged growth rate of the Gross Domestic Product (GDP) compared with the previous quarter and add *GDP change* to all

models. To check whether the relative GDP growth within a country leads to different conclusions, we also standardize *GDP change* by country and decade.

We test the relationship between the dependent and independent variables in a linear mixed-effects multilevel model with random intercepts for legislative cycles, parties and countries. As outlined above, our time variable (*Electoral cycle*) is expressed between 0 and 1 to allow for a comparison between election cycles and because countries and polls are taken at irregular intervals. Therefore, a panel data setup is not feasible and a multilevel model is the most appropriate choice. Autocorrelation of support for a party through a cycle is a potential issue that is explored in Section C of the Supplementary Material: when we model autocorrelation using a Continuous Autoregressive (CAR1) structure, our results are comparable in substantive terms and the findings presented here remain statistically significant (Pinheiro and Bates 2000, 229). The basic model includes the following independent variables: *El. cycle*, *El. cycle*^{2}, *El. cycle*^{3}, *GDP Change*, *Party support at last election*, *Election year*. To test the expectations, we add the interaction effects of the respective variable with *El. cycle*, *El. cycle*^{2}, and *El. cycle*^{3}.

Results

Our basic model explains the change in support for government parties as a function of the electoral cycle. Figure 2(a) reports the expected values of support change across the electoral cycle, keeping all other variables at their mean or modes. The model predicts that on average government parties, see a decline in party support over the first half of the electoral cycle. Afterward, governments experience a very slight recovery, but cannot return to the levels when the government was inaugurated. The shape of the effect in the basic model mirrors the results of a bivariate analysis that fits a *loess* line to the relationship between the electoral cycle and government party support change (see Figure A1 in the Supplementary Material). On average, we do not observe an increase in support prior to the next election. The similarity of the shape between the base model and the loess regression shows that the findings are not artifacts of our modeling strategy.

How does this electoral cycle effect differ between systems and governments? First, we compare single party and multi-party governments (Figure 2(b)). Single party governments show a somewhat u-shaped electoral cycle effect, starting off well with early gains, but gradually losing support over the electoral cycle. The lowest point is reached at around 70 percent of the electoral cycle, after which the single government party recovers somewhat. For other types of governments (coalition or minority cabinets), we do not see a similar pattern. These government parties seem to be losing quite consistently over the electoral cycle, with only a slight, mostly linear decline. Against our expectations, neither being the largest party in the coalition nor minority government have a substantial impact on the electoral cycle effect (see Figures A5(a) and A5(b) in the Supplementary Material).

Regarding the dissolution power of governments, our analysis points to a sizable impact of prime ministerial dissolution power on the electoral cycle of government party support (Figure 2 (c)). When prime ministerial control is at the highest level (10 on a 0–10 scale), we observe a u-shaped pattern of government party support, starting off at a high level of support. When the prime minister has no control over the election timing, there seems to be only a limited electoral cycle effect with some losses early in the cycle that level off towards the second half of the term. These effects are not observable when dissolution power lies with the government as a whole (Figure A5(e) in the Supplementary Material). The strategic use of election timing thus only seems to work when it is put in the hand of a single, unified actor.

Do we observe a change in the "electoral cycle effect" over time? Having polling data for seven countries since the 1960s (Australia, Canada, Denmark, Germany, The Netherlands, Norway, and UK) allows us to test our model on this sub-sample and interact the absolute poll change with the decade of an election. Figure 3 shows that the u-shaped electoral cycle effect was stronger in the 1960s–90s, and has almost disappeared entirely since the 2000s. The cost of

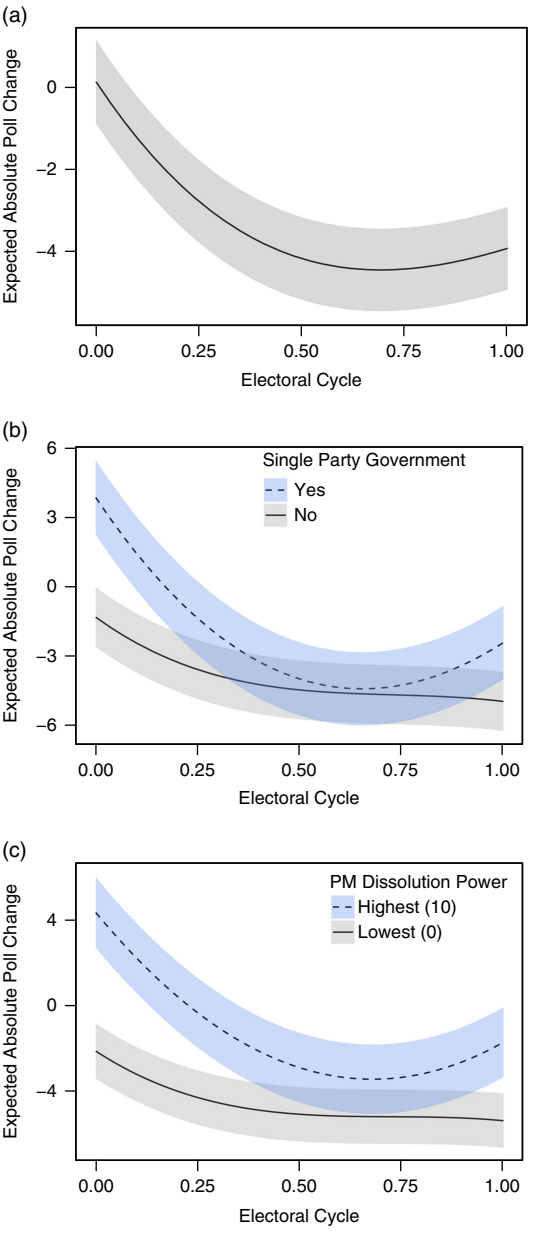

Figure 2. Moderated electoral cycle effects.
Note: The bands around the lines show the 95 percent confidence intervals. Figures are based on Models 1–3 of Table A3 in the Supplementary Material.

governing increased without the prospect of earning back support, particularly in countries with single party governments and strong prime ministerial dissolution power. Thus, whereas in the past government support was more likely to follow a u-shaped pattern, a linear decline is prevalent more recently. One potential explanation is the decline of party identification (Dalton 2000): dissatisfied government party supporters might have been more likely to "return" to their party at the general election ballot box in the past than they are today. Another reason for this development is the ideological convergence of political parties,

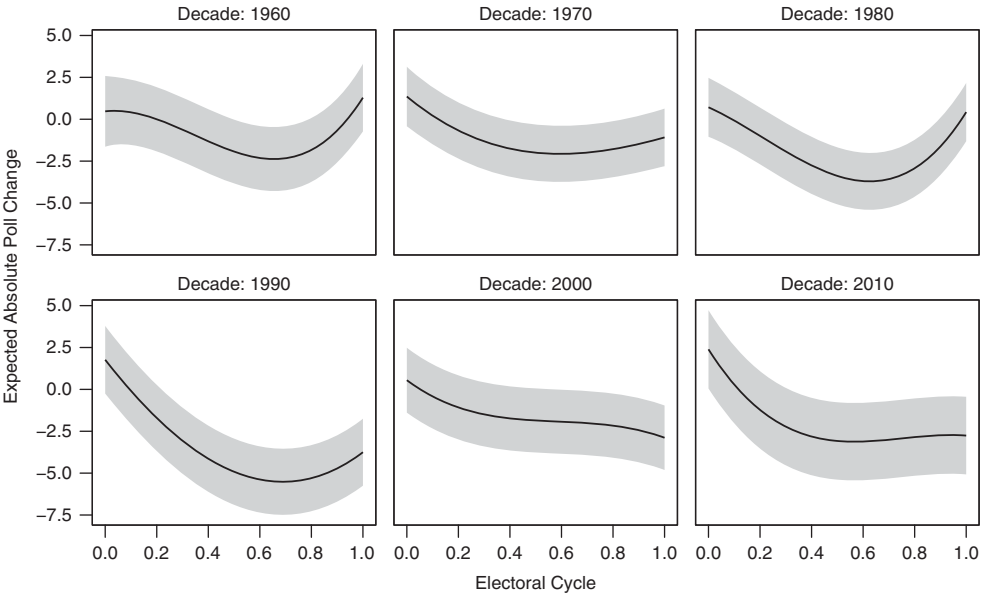

Figure 3. Historical development of the electoral cycle effect.
Note: This model only includes countries with available polling data since the 1960s (Australia, Canada, Denmark, Germany, The Netherlands, Norway, and UK). Each panel includes all cycles that *ended* in the respective decade. The gray bands show the 95 percent confidence intervals. The figure is based on Model 4 (Table A3) in the Supplementary Material.

especially in the UK. Parties' vote-seeking behavior might lead them to converge "too close" to the median voter, which reduces the clarity of the electoral choice between the two main contenders in a majoritarian system (Laver 2011, 494). The Supplementary Material reports several robustness checks; in all cases these confirm the results presented here. First, the patterns based on institutional clarity of responsibility are confirmed when conditioning the electoral cycle effect on (Lijphart's 2012) executive-parties and federal-unitary dimensions. Second, the models presented above include one moderator variable for the electoral cycle at a time to avoid multicollinearity due to including multiple interaction effects. Adding all of the significant variables to a single model confirms the patterns reported above. Third, we performed an analysis that included the subset of 15 countries for which we have at least three cycles. Fourth, we changed our measure of *Poll change* by looking at the percentage deviation from the election result, and ran an additional model with a lagged dependent variable. Fifth, instead of using the length of the actual cycle, we also measure the electoral cycle by using the "planned" length (i.e., the maximum number of years of a legislative period) as the end point of a cycle. Finally, in many countries, the government can strategically set the election date which could influence the shape of the support throughout the cycle. We distinguish between regular and early (opportunistic or failure) elections (Schleiter and Tavits 2016). Regular elections show a modest u-shaped electoral cycle effect with losses early in the term and a slight recovery from about midway through the cycle. In opportunistically called elections, we observe a recovery at the end of the cycle, whereas failure elections are characterized by a steady, almost linear, decline of government party support.

Discussion

Our results document the "electoral cycle effect" throughout more than 170 legislative cycles. The often assumed u-shaped electoral cycle pattern predicted from the study of mid-term and second-order elections holds only under certain circumstances. While we found consistent evidence that government party support decreases during the first part of an electoral cycle,

parties recover from these losses at most partially. Our general pattern matches best with recent analyses of national government parties' results in European Parliament elections (Hix and Marsh 2011; Döring 2016). A curvilinear effect is more evident under single party governments and if the prime minister has high dissolution power. Small coalition partners tend to lose more support compared with the largest coalition party. Despite these general trends, we still observe large deviations across countries and cycles. We hope that future research examines potential reasons for this variation more closely.

These findings are relevant to the broader comparative debate on the representative link between voters and party governments. Parties increasingly seem to have to choose between responsible and representative party government or, to put it slightly differently, between office and votes (Mair 2009). Whereas parties might accept that there is some cost to governing, the knowledge that it will be difficult to regain early losses might be particularly worrisome from the perspective of responsible party government. Further research is warranted to study the causes of these changes in the prevalence of the electoral cycle effect: Is this an indirect effect of modern, critical voters, or do supply-side factors explain why government parties cannot recover their electoral losses?

Supplementary Material. To view supplementary material for this article, please visit https://doi.org/10.1017/psrm.2018.47

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Supplementary Material for 'The Electoral Cycle Effect in Parliamentary Democracies'

STEFAN MÜLLER AND TOM LOUWERSE

A. Descriptive Evidence

Table A1 shows the number of observations, mean, standard deviation, minimum, median and maximum value for all key dependent, independent and control variables (as well as alternative measurements). Each observations refers to one poll result for a government party. If more than one poll was published for the same party on the same day, the poll results are averaged. We limit our sample to countries where we have at least an average of 10 unique polls per cycle. The mean number of polls per cycle ranges from 13.5 (Belgium) to a maximum of 260 (United Kingdom). Overall, the average number of polls per cycle amounts to 92. Table A2 lists the availability of polls for all countries included in the analysis.[1] Figure A1 plots a loess regression line based on all poll results for government parties that are considered in the analysis. This loess smoother mirrors closely the shape of the electoral cycle effect in the base model (Figure 2(a) from the paper), indicating that the models are very similar to the aggregated descriptive evidence.

[1]Note that the reported results remain the same when we only consider the 15 countries for which we have at least three cycles (Section E).

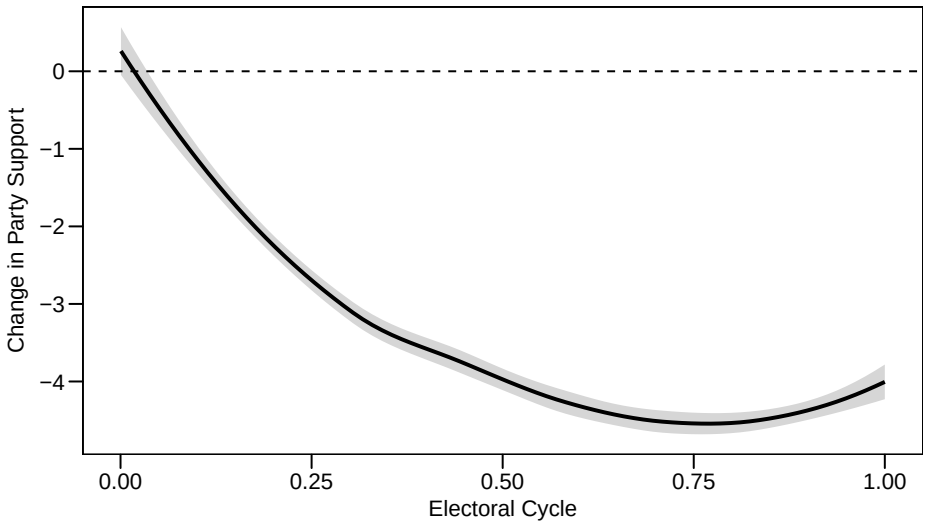
TABLE A1 *Descriptive statistics.*

Variable	N	Mean	SD	Min	Median	Max
Poll change	25239	-3.52	6.18	-34.42	-2.69	23.70
Poll change$_{t-1}$	25095	-3.51	6.16	-34.42	-2.65	23.70
Electoral cycle (planned)	25333	0.52	0.28	0.00	0.52	1.00
Electoral cycle (cabinet)	25333	0.55	0.30	0.00	0.57	1.00
Single party government	25333	1.31	0.46	1.00	1.00	2.00
Largest government party	25333	1.68	0.47	1.00	2.00	2.00
Minority government	22884	1.16	0.37	1.00	1.00	2.00
GDP change	25023	0.53	1.15	-7.61	0.59	21.58
GDP change (standardised)	25023	0.56	0.25	0.00	0.60	1.00
Election: Regular	25333	1.70	0.46	1.00	2.00	2.00
Election: Failure	25333	1.13	0.33	1.00	1.00	2.00
Election: Opportunistic	25333	1.18	0.38	1.00	1.00	2.00
PM dissolution power	25333	3.55	4.28	0.00	2.50	10.00
Government dissolution power	25333	1.76	3.40	0.00	0.00	8.50
Party support at last election	25239	31.18	12.84	3.40	35.40	53.66

TABLE A2 *Cases included in the analysis*

Country	Electoral Cycles	Mean Polls Per Cycle	Date of First Poll	Date of Last Poll
Australia	21	62.8	09-12-1960	12-04-2013
Austria	3	90.3	15-07-2006	23-09-2013
Belgium	2	13.5	15-02-2005	07-06-2010
Canada	18	77.3	16-07-1961	18-10-2015
Denmark	16	26.0	15-07-1960	17-06-2015
Finland	1	14.0	15-02-2010	15-03-2011
Germany	15	205.8	15-07-1960	18-09-2013
Greece	4	66.5	15-01-2007	17-09-2015
Hungary	1	19.0	26-11-2009	29-03-2010
Iceland	1	51.0	31-01-2012	26-04-2013
Ireland	12	44.3	28-02-1975	19-02-2016
Italy	1	201.0	17-01-2012	08-02-2013
Japan	5	36.0	09-05-1998	12-12-2012
Netherlands	12	117.0	01-07-1964	11-09-2012
New Zealand	8	69.0	27-11-1987	24-11-2011
Norway	12	91.4	15-10-1965	09-09-2013
Poland	1	94.0	14-08-2010	09-10-2011
Portugal	8	51.2	15-07-1986	02-06-2011
Spain	9	112.7	18-10-1980	20-12-2015
Sweden	3	206.3	13-01-2000	16-09-2010
Turkey	1	27.0	15-06-2010	15-05-2011
United Kingdom	16	260.9	16-08-1955	06-06-2017

Figure A1. Loess regression line with 95 per cent confidence intervals



B. Regression Tables For the Main Models

Models 1–4 from Tables A3 and A4 are used to estimate the predicted values of the interaction effects reported in the paper. Figure 2(a) is created based on Model 1, Model 2 predicts the impact of single-party governments in Figure 2(b), and Model 3 shows the influence of the Prime Minister dissolution power in Figure 3(c). Model 4 adds an interaction of the respective decade of each observation for the seven parliamentary democracies where polling data are available since the 1960s. The predicted values for the electoral cycle effect in each decade from the 1960s to the 2010s are plotted in Figure 3 in the paper.

TABLE A3 *Multilevel linear regression models of change in party support (coefficients with standard errors in parentheses).*

	Model 1	Model 2	Model 3
(Intercept)	1.59 (1.10)	1.84 (1.15)	1.25 (1.07)
El. cycle	−146.92 (3.34)***	−123.79 (3.98)***	−104.63 (4.34)***
El. cycle^2	108.30 (3.24)***	58.72 (3.88)***	58.54 (4.18)***
El. cycle^3	−12.55 (3.21)***	−23.70 (3.81)***	−23.94 (4.11)***
GDP Change	0.01 (0.02)	0.03 (0.02)	0.04 (0.02)
Party support at last election	−0.13 (0.03)***	−0.16 (0.04)***	−0.16 (0.03)***
Election year - 1986	−0.07 (0.02)**	−0.06 (0.02)**	−0.06 (0.02)**
Single party gov.		1.56 (0.96)	
El. cycle × Single party gov.		−104.23 (7.19)***	
El. cycle^2 × Single party gov.		169.79 (6.95)***	
El. cycle^3 × Single party gov.		15.50 (6.88)*	
PM diss. power			0.31 (0.11)**
El. cycle × PM diss. power			−12.95 (0.78)***
El. cycle^2 × PM diss. power			14.77 (0.75)***
El. cycle^3 × PM diss. power			2.35 (0.75)**
Log Likelihood	-65745.91	-65344.40	-65411.81
N	25328	25328	25328
N (Party-Elections)	232	232	232
N (Parties)	62	62	62
N (Countries)	22	22	22

$^{***}p < 0.001, ^{**}p < 0.01, ^{*}p < 0.05$

TABLE A4 *Multilevel linear regression models of change in party support (coefficients with standard errors in parentheses).*

	Model 4
(Intercept)	1.61 (1.45)
El. cycle	−37.34 (16.88)*
El. cycle^2	133.18 (16.61)***
El. cycle^3	65.67 (16.29)***
Decade – 1970s	−0.38 (1.15)
Decade – 1980s	−1.08 (1.17)
Decade – 1990s	−2.80 (1.28)*
Decade – 2000s	−0.79 (1.24)
Decade – 2010s	−1.28 (1.42)
GDP Change	0.07 (0.02)**
Party support at last election	−0.08 (0.03)*
El. cycle × Decade – 1970s	−32.73 (20.24)
El. cycle^2 × Decade – 1970s	−43.48 (19.84)*
El. cycle^3 × Decade – 1970s	−75.52 (19.38)***
El. cycle × Decade – 1980s	−13.72 (18.96)
El. cycle^2 × Decade – 1980s	46.13 (18.69)*
El. cycle^3 × Decade – 1980s	−15.99 (18.36)
El. cycle × Decade – 1990s	−171.52 (18.68)***
El. cycle^2 × Decade – 1990s	36.88 (18.37)*
El. cycle^3 × Decade – 1990s	−57.79 (18.05)**
El. cycle × Decade – 2000s	−60.29 (17.89)***
El. cycle^2 × Decade – 2000s	−108.68 (17.55)***
El. cycle^3 × Decade – 2000s	−93.27 (17.23)***
El. cycle × Decade – 2010s	−94.10 (17.83)***
El. cycle^2 × Decade – 2010s	−16.77 (17.57)
El. cycle^3 × Decade – 2010s	−106.98 (17.26)***
Log Likelihood	-49977.15
N	19624
N (Party-Elections)	151
N (Parties)	28
N (Countries)	7

$^{***}p < 0.001, ^{**}p < 0.01, ^{*}p < 0.05$

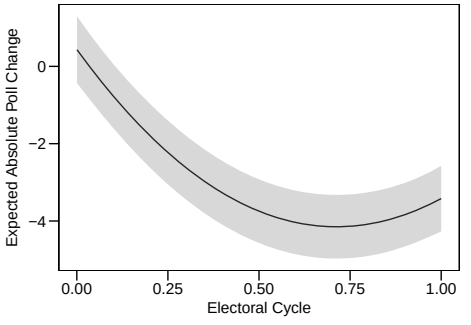
C. Regression Assumptions: Autocorrelation and Homoscedasticity

We study party support in opinion polls over an electoral cycle. As a result, the assumption that the residuals in our regression model are independent is potentially problematic due to (serial) autocorrelation. To assess the extent to which this affects our results, we replicate our main models and add an continuous autoregressive correlation structure (CAR1). We opt for a continuous-time specification because our time variable (Electoral cycle) is not integer valued and because the observations are not equally spaced over time. These models are estimated using the `nlme` R package. As it is difficult to specify non-nested structure for the random intercepts in `nlme`, we specify the three grouping levels in our models as nested, but this does not substantially affect our findings. Specifying a CAR(1) correlation structure complicates our model significantly in terms of computational time and feasibility. Particularly when we add interactions to the model, convergence becomes an issue. Therefore we have dropped the cubic time variable ($El.Cycle^3$), which was not significant in the basic model (5), from Models 6-8. We do include the cubic time variable in Model 9 because we expect the electoral cycle effect to diminish in recent decades. Such a decline is captured by the cubic term.

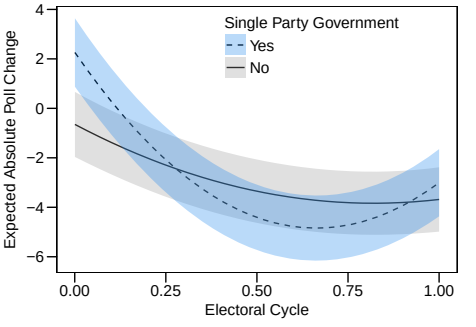
Substantively, the results of our CAR(1) models are comparable to the main models presented in the article even when omitting the cubic term of *Electoral cycle*. The shape of the effect plots is virtually the same for every model (compare Figures A2 and A3 with Figures 2 and 3 printed in the paper).

Figure A2. Moderated electoral cycle effects (multilevel mixed-effects linear regression models which considers a continuous autoregressive correlation structure (CAR1))

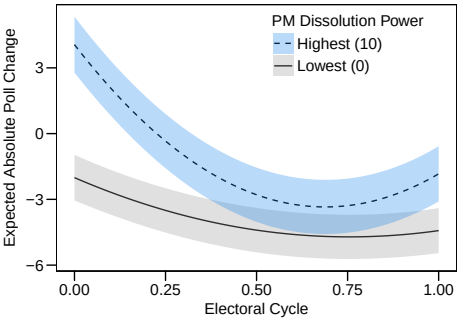
(a) Basic model



(b) Single party government

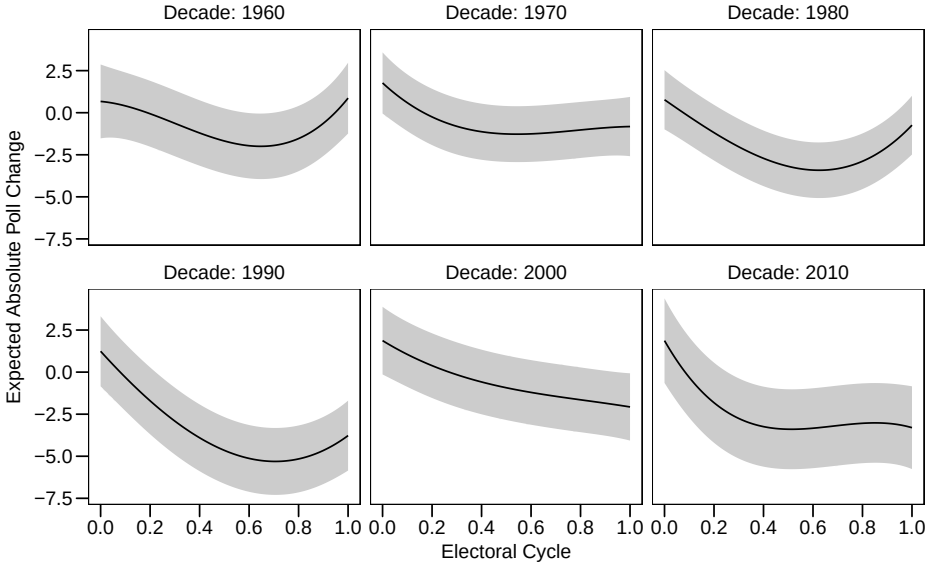


(c) Prime Minister dissolution power



Note: The bands around the lines show the 95 per cent confidence intervals. Figure A3(a) is based on Model 5, Figure 2(b) on Model 6 of Table A5, and Figure 2(c) on Model 7 of Table A6.

Figure A3. Historical development of the electoral cycle effect (multilevel mixed-effects linear regression models which consider the autoregressive correlation structure)



Note: The model only includes countries where we have polling data since the 1960s (Australia, Canada, Denmark, Germany, Netherlands, Norway, United Kingdom). Each panel includes all cycles that ended in the respective decade. The gray bands around the lines show the 95 per cent confidence intervals. The Figure is based on Model 9 (Table A7).

TABLE A5 *Multilevel mixed-effects linear regression models of change in party support (coefficients with standard errors in parentheses). The regressions replicate Models 1–3, but take into consideration the autoregressive correlation structure (using the nlme R package). Groups (in all models): 22 countries; 171 elections; 232 parties.*

	Model 5	Model 6
El. cycle	−153.951***	
	(5.968)	
El. cycle^2	110.175***	
	(5.753)	
El. cycle^3	−0.671	
	(5.609)	
El. cycle		−153.898***
		(5.951)
El. cycle^2		110.276***
		(5.686)
GDP change	0.025	0.025
	(0.028)	(0.028)
Party support at last election	−0.072**	−0.069**
	(0.025)	(0.025)
Election year - 1986	−0.070**	−0.072***
	(0.022)	(0.021)
Single party gov.	0.146	0.112
	(0.912)	(0.870)
Observations	25,328	25,328
Log Likelihood	−60,218.140	−60,220.810
Note:	*p<0.05; **p<0.01; ***p<0.001	

TABLE A6 *Multilevel mixed-effects linear regression models of change in party support (coefficients with standard errors in parentheses). The regressions replicate Models 1–3, but take into consideration the autoregressive correlation structure (using the nlme R package). Groups (in all models): 22 countries; 171 elections; 232 parties.*

	Model 7	Model 8
El. cycle	−129.430***	−99.929***
	(9.735)	(7.949)
El. cycle^2	58.030***	58.009***
	(9.242)	(7.488)
GDP change	0.038	0.037
	(0.034)	(0.027)
Party support at last election	−0.010	−0.106***
	(0.005)	(0.027)
Election year - 1986	−0.067*	−0.060**
	(0.027)	(0.021)
Single party gov.	−0.132	
	(0.861)	
El. cycle × Single party gov.	−70.313***	
	(16.069)	
El. cycle^2 × Single party gov.	139.662***	
	(15.334)	
PM diss. power		0.242**
		(0.083)
El. cycle × PM diss. power		−13.099***
		(1.268)
El. cycle^2 × PM diss. power		13.280***
		(1.217)
(Intercept)	−1.767**	0.073
	(0.656)	(0.854)
Observations	25,328	25,328
Log Likelihood	−61,119.890	−60,088.460
Note:	*p<0.05; **p<0.01; ***p<0.001	

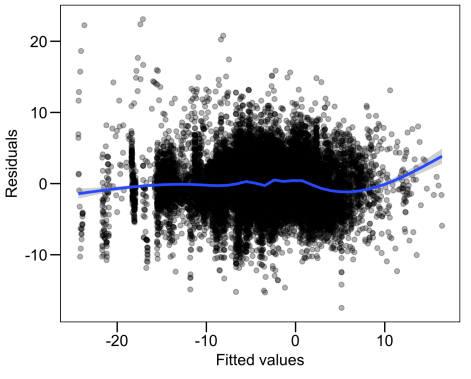
TABLE A7 *Multilevel mixed-effects linear regression models of change in party support (coefficients with standard errors in parentheses). The regressions replicates Models 4, but takes into consideration the autoregressive correlation structure (using the nlme R package). Groups: 7 countries; 109 elections; 151 parties.*

	Model 9
El. cycle	−36.443 (19.802)
El. cycle^2	113.910*** (19.545)
El cycle^3	45.021* (19.056)
Decade – 1970s	0.105 (1.290)
Decade – 1980s	−1.289 (1.277)
Decade – 1990s	−2.818* (1.391)
Decade – 2000s	0.051 (1.378)
Decade – 2010s	−1.769 (1.547)
GDP change	0.061 (0.036)
Party support at last election	−0.049 (0.026)
El. cycle × Decade – 1970s.	−25.622 (24.448)
El. cycle^2 × Decade – 1970s.	−43.601 (24.064)
El. cycle^3 × Decade – 1970s.	−67.089** (23.446)
El. cycle × Decade – 1980s.	−32.510 (23.188)
El. cycle^2 × Decade – 1980s.	27.980 (22.961)
El. cycle^3 × Decade – 1980s.	−22.610 (22.392)
El. cycle × Decade – 1990s.	−162.512*** (23.632)
El. cycle^2 × Decade – 1990s.	33.909 (23.325)
El. cycle^3 × Decade – 1990s.	−32.395 (22.766)
El. cycle × Decade – 2000s	−107.066*** (23.478)
El. cycle^2 × Decade – 2000s	−80.072*** (22.908)
El. cycle^3 × Decade – 2000s	−54.468* (22.427)
El. cycle × Decade – 2010s	−80.719** (25.459)
El. cycle^2 × Decade – 2010s	−9.092 (24.999)
El. cycle^3 × Decade – 2010s	−98.188*** (24.277)
(Intercept)	0.642 (1.365)
Observations	19,624
Log Likelihood	−45,448.730
Note:	*p<0.05; **p<0.01; ***p<0.001

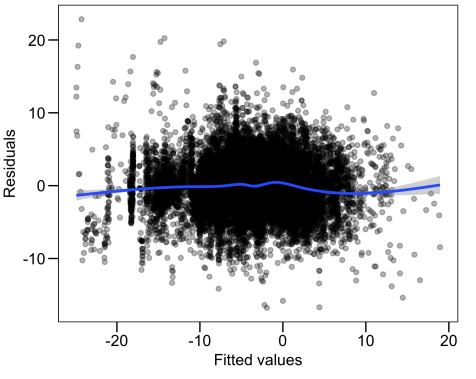
To test whether the standard deviations of the error terms are constant and independent across all values, we plot the predicted values against the fitted values (Figure A4). We use the base model (Model 1), the combined model that includes the relevant interactions (Model A5) and the base model that adds $Poll\ Change_{t-1}$ (Model A8). To each scatterplot a GAM smoother is added. The plots show that the models do not seem to be biased due to heteroscedasticity.

Figure A4. Plotting residuals against fitted values for Model 1, Model A5 and Model A8

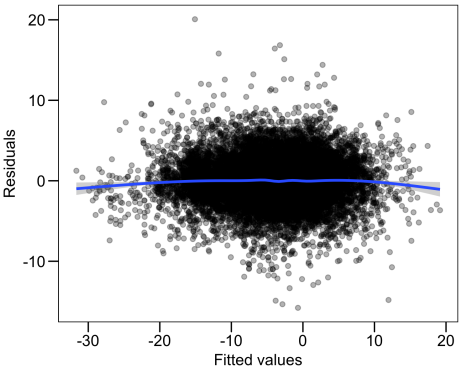
(a) Basic model (M1)



(b) Combined Model (M A5)



(c) Basic Model with lagged DV (M A8)



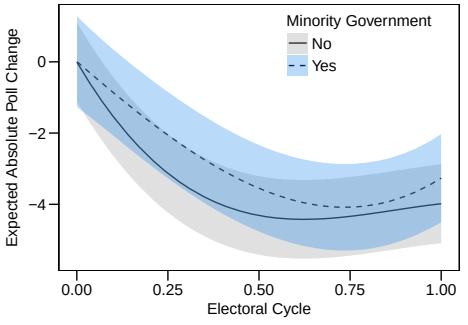
D. Additional Institutional Features

The paper shows plots with predicted values for three key moderators of the electoral cycle effect: (1) single-party government vs coalition government, (2) prime minister dissolution power, and (3) the development over time. In this section we show how additional institutional and economic variables influence the shape of the electoral cycle effect. The regression tables that were used to estimate the predicted values are printed below, and the captions of the plots indicate which model has been used for the prediction.

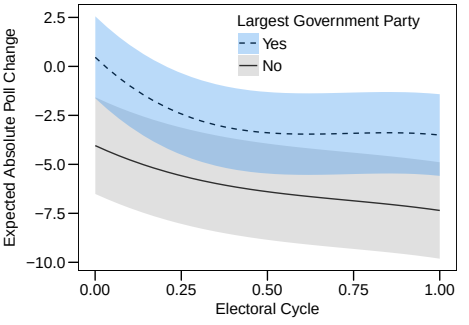
Figure A5(a), based on Model A1, checks whether the electoral cycle effect differs for minority governments compared to majority governments, but the shape of the effects are extremely similar. Model A2 tests whether being the largest party in a coalition affects the electoral cycle effect. Again, the results are inconclusive (Figure A5(b)). Model A3 uses Lijphart's (2012) executive-parties and federal-unitary dimensions as proxies for clarity of responsibility. As expected, the electoral cycle effect is more pronounced in countries with a strong executive and in unitary democracies (Figures A5(c) and A5(d)). Model A4 uses the dissolution power of the government (instead of the dissolution power of the prime ministerial party which is reported in the main part of the paper). The scores for government dissolution power (theoretically ranging from 0 to 10) are also derived from Goplerud and Schleiter (2016). The shape of the cycles is very similar when we set the dissolution powers to the lowest and highest value (Figure A5(e)). While we observe an effect for strong prime ministerial control over the electoral cycle (Figure 2(c) in the paper), we do not see a similar effect for countries with strong government dissolution powers.

Figure A5. Moderated electoral cycle effects

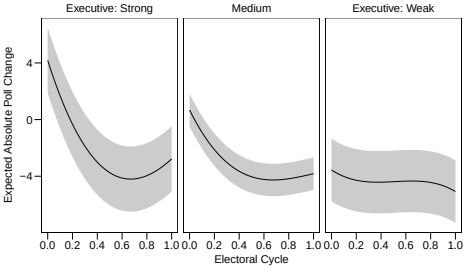
(a) Minority government (M A1)



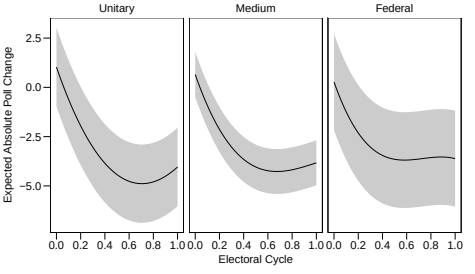
(b) Largest government party (M A2)



(c) Executive-Parties dimension (M A3)



(d) Federal-Unitary dimension (M A3)



(e) Government dissolution power (M A4)

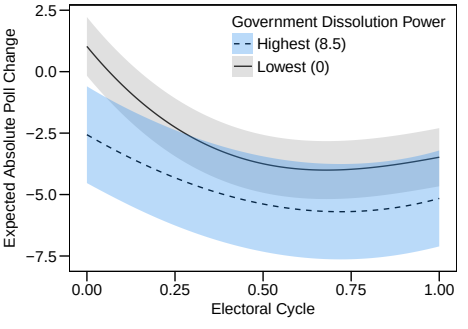


TABLE A8 *Multilevel linear regression models of change in party support (coefficients with standard errors in parentheses).*

	Model A1	Model A2
(Intercept)	1.31	−0.15
	(1.18)	(1.36)
El. cycle	−123.98***	−110.80***
	(4.04)	(4.24)
El. cycle^2	106.85***	26.35***
	(3.80)	(4.14)
El. cycle^3	−25.80***	−10.36*
	(3.77)	(4.10)
GDP Change	0.10***	−0.06**
	(0.02)	(0.02)
Party support at last election	−0.13***	−0.17***
	(0.03)	(0.05)
Election year - 1986	−0.07**	−0.09***
	(0.02)	(0.02)
Minority gov.	0.61	
	(0.36)	
El. cycle × Minority gov.	−25.15*	
	(10.25)	
El. cycle^2 × Minority gov.	−9.50	
	(9.53)	
El. cycle^3 × Minority gov.	38.56***	
	(9.34)	
Largest gov. party		3.42**
		(1.20)
El. cycle × Largest gov. party		7.75
		(5.75)
El. cycle^2 × Largest gov. party		44.23***
		(5.60)
El. cycle^3 × Largest gov. party		−17.09**
		(5.53)
Log Likelihood	-59431.04	-42723.80
N	22767	17530
N (Party-Elections)	229	142
N (Parties)	61	48
N (Countries)	22	17

$^{***}p < 0.001, {}^{**}p < 0.01, {}^{*}p < 0.05$

TABLE A9 *Multilevel linear regression models of change in party support (coefficients with standard errors in parentheses).*

	Model A3	Model A4
(Intercept)	2.55 (1.47)	2.51 (1.23)*
El. cycle	−171.07 (3.37)***	−157.49 (3.73)***
El. cycle^2	129.73 (3.28)***	118.64 (3.64)***
El. cycle^3	−17.76 (3.26)***	−17.96 (3.62)***
GDP Change	0.04 (0.02)*	0.01 (0.02)
Party support at last election	−0.16 (0.04)***	−0.15 (0.03)***
Election year - 1986	−0.07 (0.02)**	−0.07 (0.02)**
Executive-parties dim.	−0.72 (0.74)	
Federal-unitary dim.	0.13 (0.48)	
El. cycle × Executive-parties dim.	79.58 (3.79)***	
El. cycle^2 × Executive-parties dim.	−80.95 (3.62)***	
El. cycle^3 × Executive-parties dim.	−2.58 (3.59)	
El. cycle × Federal-unitary dim.	20.51 (2.48)***	
El. cycle^2 × Federal-unitary dim.	−13.12 (2.41)***	
El. cycle^3 × Federal-unitary dim.	−7.00 (2.39)**	
Gov. diss. power		−0.23 (0.14)
El. cycle × Gov. diss. power		5.86 (1.01)***
El. cycle^2 × Gov. diss. power		−5.11 (0.95)***
El. cycle^3 × Gov. diss. power		2.42 (0.93)**
Log Likelihood	-64305.52	-65702.82
N	25090	25328
N (Party-Elections)	228	232
N (Parties)	58	62
N (Countries)	19	22

$^{***}p < 0.001, ^{**}p < 0.01, ^{*}p < 0.05$

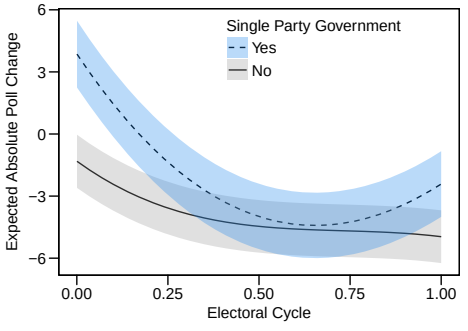
E. Combined Models and Focusing on Selected Countries

In the main part of the paper, we do not add all independent variables to one model to avoid multicollinearity. However, as we show in this section, the shapes of the estimated electoral cycle effects remain the same when we add both *Single party government* and *Prime Minister dissolution power* to the basic model (Model 1). Figure A6 shows the plots from the paper and contrasts them to the plots estimated from the combined model (Model A5).

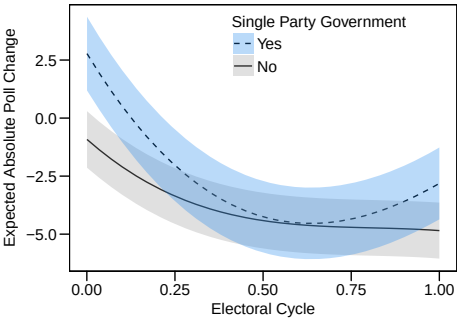
Figure A7 contrasts the results from the paper with a combined model that is restricted only to the countries with data for three or more electoral cycles (Model A6). Again, the shapes of the effects remain very similar.

Figure A6. Comparing the main effects with a combined model

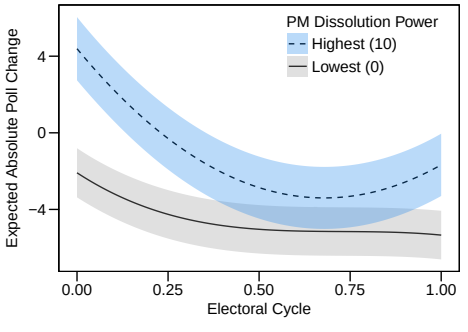
(a) Single party government (M 2)



(b) Single party government (combined; M A5)



(c) Prime Minister dissolution power (M 3)



(d) Prime Minister dissolution power (combined; M A5)

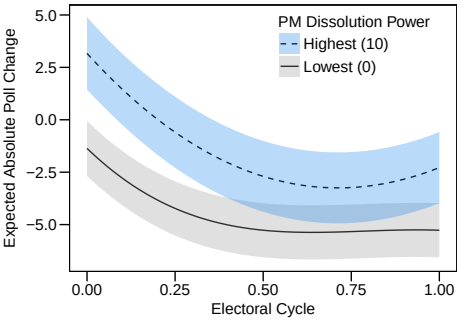
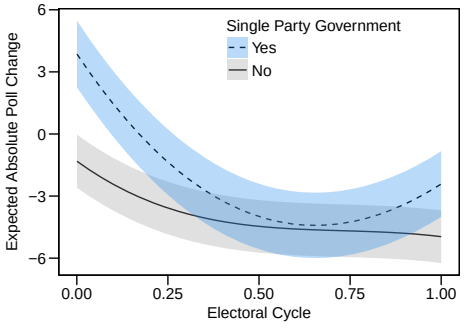
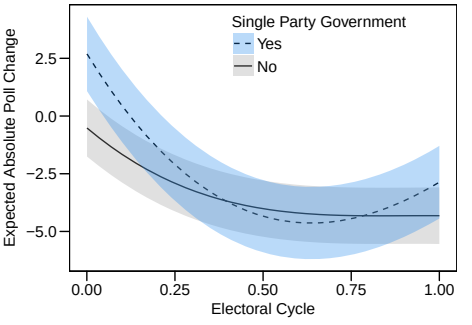


Figure A7. Comparing the main effects with a combined model that only considers countries with at least three electoral cycles

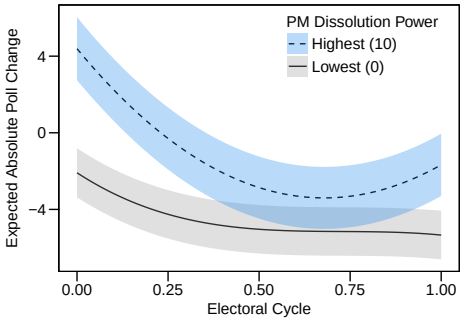
(a) Single party government (M 2)



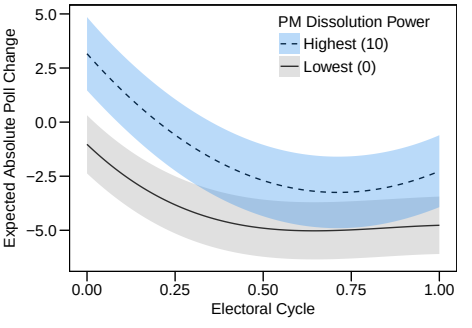
(b) Single party government (subset; M A6)



(c) Prime Minister dissolution power (M 3)



(d) Prime Minister dissolution power (subset); M A6

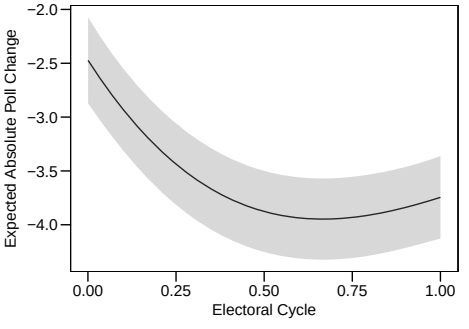


F. Alternative Operationalizations of Poll Change

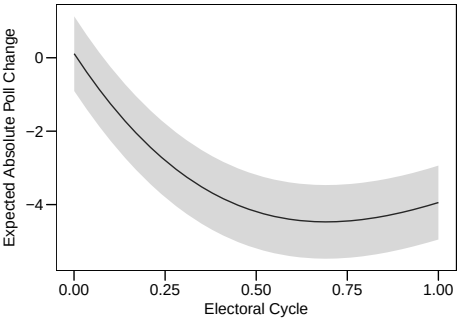
In the main part of the paper we use the *Absolute poll change* as the dependent variable. Here we show that the substantive conclusions do not change when we add the lagged *Poll change* (Figure A8(a) based on Model A7) or use the *Percentage poll change* as the dependent variable (Figure A8(c) based on Model A9). We decided to use the *Absolute poll change* as the main dependent variable because the absolute poll changes most closely mirror the descriptive evidence from the *loess* regression (Figure A1).

Figure A8. Comparing the electoral cycle effect with and without the lagged dependent variable (DV) (i.e., absolute poll change), and with the percentage poll change

(a) Basic model with lagged DV (M A8)



(b) Basic model without lagged DV (M A7)



(c) Percentage poll change as DV (M A9)

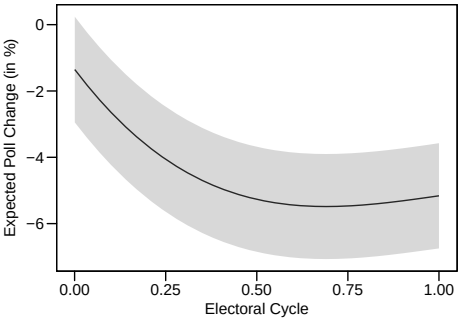


TABLE A10 *Multilevel linear regression models of change in party support (coefficients with standard errors in parentheses). Model 6 only includes countries with data for at least three cycles.*

	Model A5	Model A6
(Intercept)	1.50	1.23
	(1.09)	(1.09)
El. cycle	-106.40^{***}	-103.52^{***}
	(4.39)	(4.36)
El. cycle^2	47.15^{***}	52.14^{***}
	(4.25)	(4.28)
El. cycle^3	-29.33^{***}	-24.02^{***}
	(4.17)	(4.21)
GDP Change	0.04^{*}	0.04^{*}
	(0.02)	(0.02)
Party support at last election	-0.18^{***}	-0.16^{***}
	(0.04)	(0.04)
Election year - 1986	-0.06^{*}	-0.05^{*}
	(0.02)	(0.02)
PM diss. power	0.29^{**}	0.25^{*}
	(0.11)	(0.11)
Single party gov.	1.06	0.55
	(0.95)	(0.96)
El. cycle × PM diss. power	-9.31^{***}	-9.54^{***}
	(0.95)	(0.95)
El. cycle^2 × PM diss. power	6.47^{***}	6.09^{***}
	(0.92)	(0.92)
El. cycle^3 × PM diss. power	2.51^{**}	2.09^{*}
	(0.91)	(0.92)
El. cycle × Single party gov.	-51.29^{***}	-54.65^{***}
	(8.87)	(8.82)
El. cycle^2 × Single party gov.	133.38^{***}	130.47^{***}
	(8.49)	(8.56)
El. cycle^3 × Single party gov.	4.37	1.95
	(8.35)	(8.51)
Log Likelihood	-65266.35	-63782.26
N	25328	24763
N (Party-Elections)	232	221
N (Parties)	62	52
N (Countries)	22	15

$^{***}p < 0.001, {}^{**}p < 0.01, {}^{*}p < 0.05$

TABLE A11 *Multilevel linear regression models of change in party support (coefficients with standard errors in parentheses). Model A7 replicates Model 1, Model A8 adds the lagged DV, Model A9 uses the percentage change of a polling result compared to the previous election.*

	Model A7	Model A8	Model A9
(Intercept)	1.59 (1.10)	0.62 (0.41)	−0.64 (1.50)
El. cycle	−146.92 (3.34)***	−43.55 (2.59)***	−133.69 (3.56)***
El. cycle^2	108.30 (3.24)***	36.00 (2.47)***	94.93 (3.45)***
El. cycle^3	−12.55 (3.21)***	−4.65 (2.40)	−16.63 (3.41)***
GDP Change	0.01 (0.02)	0.01 (0.01)	−0.00 (0.02)
Party support at last election	−0.13 (0.03)***	−0.05 (0.01)***	−0.10 (0.04)*
Election year - 1986	−0.07 (0.02)**	−0.02 (0.01)**	−0.07 (0.02)***
Poll change$_{t-1}$		0.67 (0.00)***	
Log Likelihood	-65745.91	-57922.56	-67132.56
N	25328	25203	25328
N (Party-Elections)	232	230	232
N (Parties)	62	62	62
N (Countries)	22	22	22

$^{***}p < 0.001, ^{**}p < 0.01, ^{*}p < 0.05$

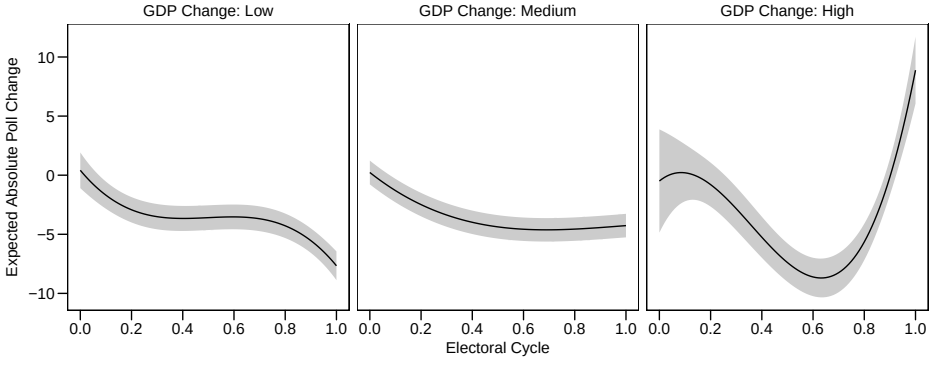
G. Economic Performance and the Electoral Cycle Effect

Additionally, we analyze how the GDP growth compared to the previous quarter (lagged by one quarter) affects the shape of the electoral cycle. Recall that we control for *GDP change* in all models in the paper. Thus, we analyze the shape of the electoral cycle effect after controlling for economic performance. We also check how low, medium, and high GDP change impacts the electoral cycle effect by adding an interaction *El. cycle*, *El. cycle*^{2} and *El. cycle*^{3} with the quarterly *GDP Change* (Figure A9). The results based on Table A10 are as expected from the economic voting literature: if the economy performs badly prior to an election (left-hand panel), government parties are expected to lose support dramatically before the election. However, if the economy performs very well (indicated by a large positive GDP Change), we observe a strong upturn in support for government parties (right-hand panel).

Additionally, we standardize *GDP Change* by country and decade in order to explore whether the effects of economic growth are dependent on the country-specific situation rather than absolute levels of growth. The quarter with the lowest GDP growth in each decade for each country gets the value 0, the highest value gets the value 1. This regression thus includes the relative economic performance to control for differences between countries and over time (Model A11). The curve-linear relationship for periods with high GDP growth becomes much smaller (Figure A10).

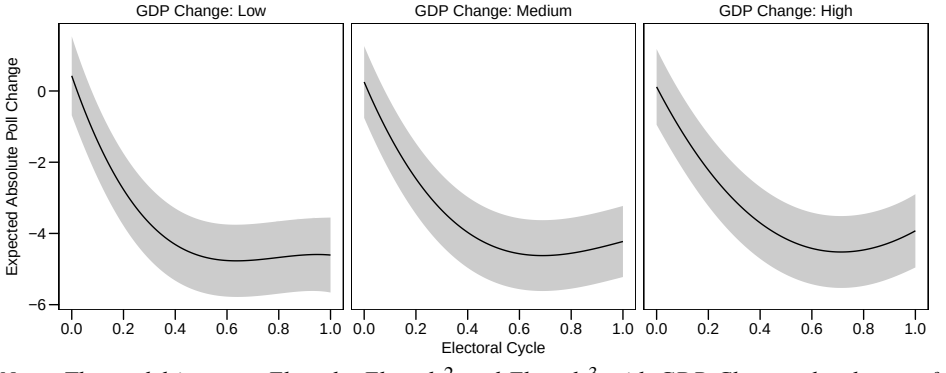
Taking the results from this section together, clearly shows that economic conditions matter for the electoral cycle effect. At the same time, the effects we report in this paper and the appendix exist *even* when controlling for economic performance.

Figure A9. The moderating impact of quarterly GDP growth and the electoral cycle effect



Note: The model interacts El. cycle, El. cycle^2 and El. cycle^3 with the quarterly GDP Change. GDP change is the percentage point change of the GDP (lagged by one quarter). Results are based on Model A10.

Figure A10. The moderating impact of standardised quarterly GDP growth and the electoral cycle effect



Note: The model interacts El. cycle, El. cycle^2 and El. cycle^3 with GDP Change, the change of the standardised GDP compared to previous quarter (lagged by one quarter). GDP Change is standardised for each country and decade where 0 is the lowest and 1 the highest value of GDP change in the respective country-decade subset. Results are based on Model A11.

TABLE A12 *Multilevel linear regression models of change in party support (coefficients with standard errors in parentheses). Model A10 adds interaction of GDP Change and El. cycle to Model A5, Model A11 uses a measure of GDP change which is standardized by country and decade.*

	Model A10	Model A11
(Intercept)	1.47 (1.09)	1.32 (1.10)
El. cycle	−113.20 (4.71)***	−108.92 (9.31)***
El. cycle^2	34.96 (4.62)***	51.84 (8.82)***
El. cycle^3	−37.36 (4.53)***	−45.88 (8.79)***
GDP Change	0.04 (0.02)*	−0.03 (0.03)
Party support at last election	−0.18 (0.04)***	−0.18 (0.04)***
Election year - 1986	−0.06 (0.02)**	−0.06 (0.02)**
PM diss. power	0.29 (0.11)**	0.29 (0.11)**
Single party gov.	1.03 (0.95)	1.05 (0.95)
El. cycle × GDP Change	13.27 (3.25)***	
El. cycle^2 × GDP Change	25.86 (3.45)***	
El. cycle^3 × GDP Change	17.00 (3.26)***	
El. cycle × PM diss. power	−9.81 (0.96)***	−9.23 (0.96)***
El. cycle^2 × PM diss. power	5.59 (0.92)***	6.47 (0.92)***
El. cycle^3 × PM diss. power	1.85 (0.91)*	2.48 (0.91)**
El. cycle × Single party gov.	−49.87 (8.87)***	−51.45 (8.89)***
El. cycle^2 × Single party gov.	135.10 (8.49)***	132.48 (8.53)***
El. cycle^3 × Single party gov.	5.51 (8.36)	4.19 (8.37)
GDP Change (standardized)		0.40 (0.15)**
El. cycle × GDP Change (standardized)		1.62 (14.22)
El. cycle^2 × GDP Change (standardized)		−7.05 (13.36)
El. cycle^3 × GDP Change (standardised)		29.96 (13.57)*
Log Likelihood	-65210.74	-65250.34
N	25328	25328
N (Party-Elections)	232	232
N (Parties)	62	62
N (Countries)	22	22

$^{***}p < 0.001, {}^{**}p < 0.01, {}^{*}p < 0.05$

H. The End of an Electoral Cycle

In the paper, we analyzed all parliamentary elections in our dataset, provided that the time between elections was at least half a year. We have not distinguished between regular and early (opportunistic or failure) elections. This coding is based on the dataset by Schleiter and Tavits (2016) and additional data collected by the authors. When an election lasts the maximum duration and is not affected by cabinet reshuffles, we regard the period as a *Regular election*. If the government takes the initiative to call an early election and opportunistic behavior by the incumbent government is observable, the cycle falls under the category *Opportunistic election.* A *Failure election* is either forced by the opposition or when the government fails due to, a lost vote of confidence, the resignation of a coalition party, the resignation of the prime minister. We collected additional information on the countries and elections missing from that dataset, based (in order of preference) on election reports in scientific journals, other scientific sources, newspaper reports from NexisLexis and Wikipedia. Figure A11 shows the number of elections analyzed for each country, faceted by the election type (*Regular*/*Opportunistic*/*Failure*). Note that the results do not change if we exclude countries with fewer than three cycles (Appendix, Section E).

Figure A12 displays the electoral cycle for three types of elections based on Model A12: regular elections, failure elections (where the government lost parliamentary support and was forced to resign) and opportunistic elections (where the government chose to resign early). Regular elections (left panel of Figure A12) show a modest u-shaped electoral cycle effect with losses early in the term and a slight recovery (but no rise) from about midway through the cycle. Opportunistic elections (middle panel) show a slightly different pattern: these governments start out with higher levels of support at the very start of the term, but then quickly lose support during the first half of the term. Only at the very end of the term we observe a somewhat of a recovery. Note that in these cases the timing of the elections is controlled by the government (or the PM alone). Perhaps the best governments can do is avoid further losses by calling early elections or they might be too optimistic about their chances of influencing the election result by controlling the timing. There are enough examples of governments calling early elections when polling well, but then losing support during the campaign. Early elections following government failure show an entirely different pattern from the previous two types: these cycles are characterized by a steady, almost linear, decline of government party support.

Figure A11. The number of elections for each country, faceted by election type

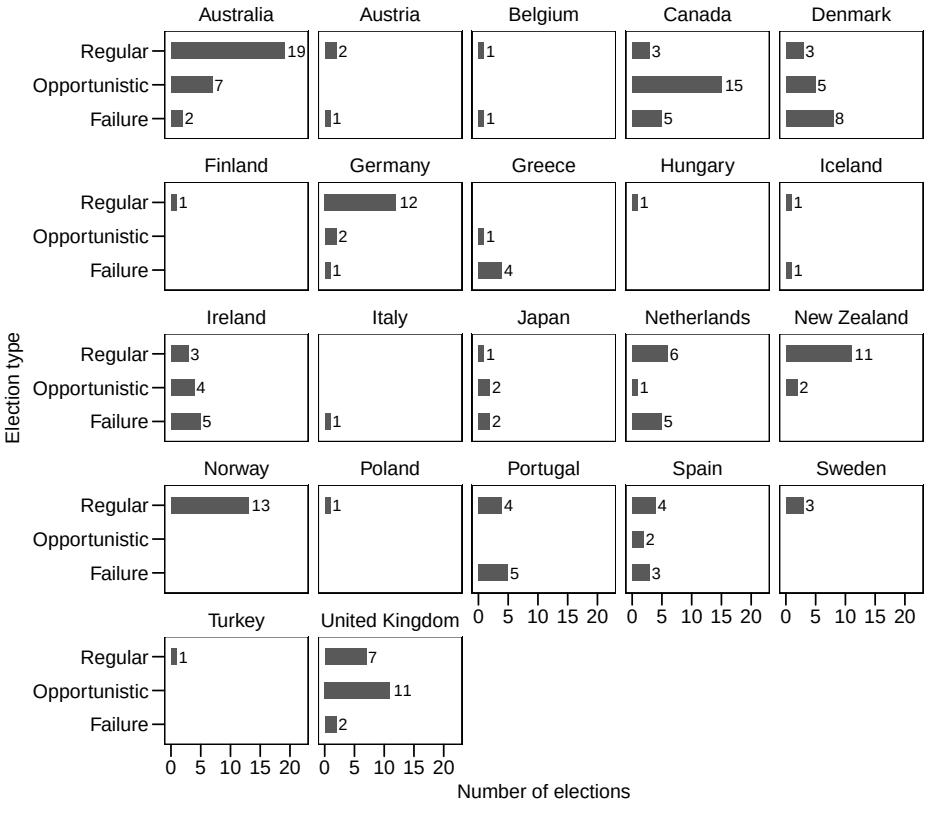
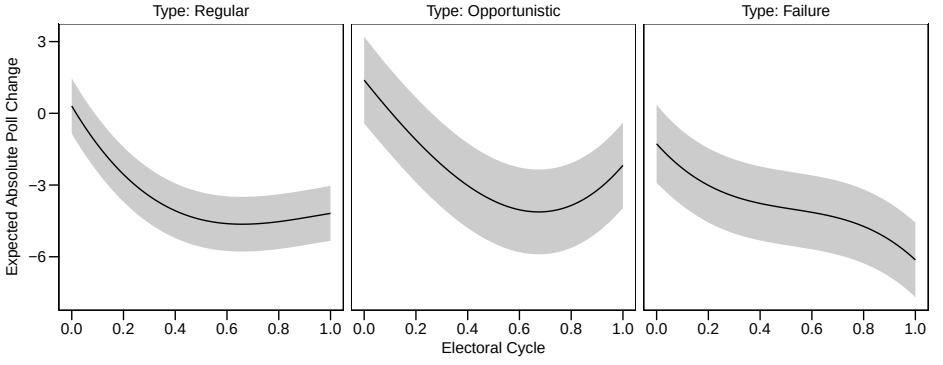


Figure A12. The moderating impact of the election type and the electoral cycle effect



Note: The plot shows the interaction of El. cycle, El. cycle^2 and El. cycle^3 with the type of election (Regular, Opportunistic, or Failure). For the classification of the elections see Schleiter and Tavits (2016). Results are based on Model A12.

I. A Different Measurement of the End of the Electoral Cycle

Beside the nominal measure of the end of an electoral cycle, we also check whether the results persists when we use a different specification of *Electoral cycle*. The main measure ranges between 0 (date of cabinet inauguration) to 1 (date of next election). A concern might be that this measure is endogenous to poll support: governments may call early elections when their poll numbers are favorable.

An alternative, exogenous measure of the point in the electoral cycle, uses the 'planned' end date of the cycle. For instance, if elections are scheduled every four years, *Electoral cycle* would take the value of 1 four years after the previous election. If a legislative period was interrupted by an early election after two years, *Electoral cycle* would end at 0.5. Model A14 uses this alternative measurement of *Electoral cycle*. Comparing the coefficients from Model A13 and Model A14 shows that in both models the size, direction and standard errors of the coefficients for *El. cycle*, *El. cycle*^{2} and *El. cycle*^{3} are very similar to the respective coefficients for *El. cycle (planned)*, *El. cycle*^{2} *(planned)* and *El. cycle*^{3} *(planned)*. The coefficients for the other independent variables and interactions across Models A13 and A14 are almost identical. Figure A13 compares the shape of the electoral cycle based on Model A13 (Figure A13(a)) and Model A14 (Figure A13(b)). The shapes are very similar. Thus, the results are not driven by our main measurement of the point of an observation during the electoral cycle.

We nevertheless prefer our measure based on the actual cycle, because the points in the cycle are better comparable across elections: all cycles start at 0 and end at 1, whereas in a measure based on planned length some cycles will have elections mid-way and end there. Future work could look into this issue in more detail by analyzing the moment at which early elections were called in more detail.

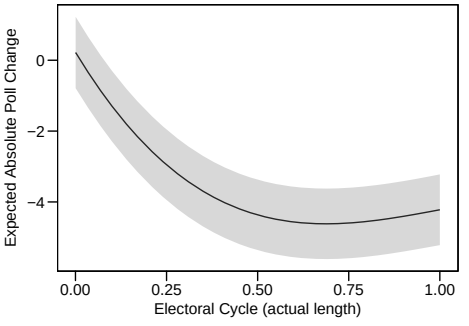
References

Goplerud, Max, and Petra Schleiter. 2016. "An Index of Assembly Dissolution Powers." *Comparative Political Studies* 49 (4): 427–456.

Schleiter, Petra, and Margit Tavits. 2016. "The Electoral Benefits of Opportunistic Election Timing." *The Journal of Politics* 78 (3): 836–850.

Figure A13. Comparing the electoral cycle effect conditional on different measurements of the end of the cycle

(a) Basic model with actual length (M A13)



(b) Basic model with planned length (M A14)

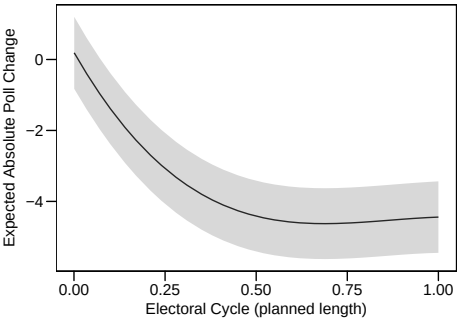


TABLE A13 *Multilevel linear regression models of change in party support (coefficients with standard errors in parentheses). Model A12 includes the type of election, Model A13 reproduces Model A5 to compare the coefficients to Model A14 that uses the planned length of the electoral cycle for each country.*

	Model A12	Model A13	Model A14
(Intercept)	1.33 (1.23)	1.50 (1.09)	1.12 (1.10)
El. cycle	−127.84 (10.99)***	−106.40 (4.39)***	
El. cycle^2	−61.78 (10.47)***	47.15 (4.25)***	
El. cycle^3	−45.28 (10.13)***	−29.33 (4.17)***	
El. – Opportunistic	1.43 (0.99)		
El. – Regular	0.36 (0.84)		
Single party gov.	1.01 (0.95)	1.06 (0.95)	0.68 (0.94)
GDP Change	0.03 (0.02)	0.04 (0.02)*	0.05 (0.02)*
Party support at last election	−0.19 (0.04)***	−0.18 (0.04)***	−0.17 (0.04)***
Election year - 1986	−0.05 (0.02)*	−0.06 (0.02)*	−0.04 (0.02)*
PM diss. power	0.26 (0.11)*	0.29 (0.11)**	0.25 (0.11)*
El. cycle × El. – Opportunistic	19.42 (12.76)		
El. cycle^2 × El. – Opportunistic	163.31 (12.16)***		
El. cycle^3 × El. – Opportunistic	58.47 (12.05)***		
El. cycle × El. – Regular	24.91 (10.95)*		
El. cycle^2 × El. – Regular	114.54 (10.44)***		
El. cycle^3 × El. – Regular	15.57 (10.17)		
El. cycle × PM diss. power	−9.20 (0.98)***	−9.31 (0.95)***	
El. cycle^2 × PM diss. power	5.81 (0.95)***	6.47 (0.92)***	
El. cycle^3 × PM diss. power	1.53 (0.94)	2.51 (0.91)**	
El. cycle × Single party gov.	−49.14 (8.97)***	−51.29 (8.87)***	
El. cycle^2 × Single party gov.	143.55 (8.59)***	133.38 (8.49)***	
El. cycle^3 × Single party gov.	3.26 (8.43)	4.37 (8.35)	
El. cycle (planned)			−115.53 (4.47)***
El. cycle^2 (planned)			44.03 (4.31)***
El. cycle^3 (planned)			−24.69 (4.24)***
El. cycle (planned) × PM diss. power			−6.60 (1.03)***
El. cycle^2 (planned) × PM diss. power			11.17 (0.94)***
El. cycle^3 (planned) × PM diss. power			1.29 (0.92)
El. cycle (planned) × Single party gov.			−48.21 (9.54)***
El. cycle^2 (planned) × Single party gov.			55.90 (8.55)***
El. cycle^3 (planned) × Single party gov.			−12.00 (8.31)
Log Likelihood	-65129.41	-65266.35	-64382.21
N	25328	25328	24929
N (Party-Elections)	232	232	232
N (Parties)	62	62	62
N (Countries)	22	22	22

$^{***}p < 0.001, ^{**}p < 0.01, ^{*}p < 0.05$