You've Got Some Explaining To Do: The Influence of Economic Conditions and Spatial Competition on Party Strategy

Additional Materials

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Overview

In this document we provide our sample, show additional figures and discuss in greater detail a number of additional models.

Sample

In Table S.1 we provide our sample.

Additional Figures

In the manuscript we reference (but do not present) two additional figures. The first figure is the marginal effect of *real GDP per capita growth* across *government seats*. The second figure is Figure 2, but with 90% confidence intervals. We present these two figures here (Figures S.1-S.2).

Government Specification

In the manuscript, we specified electoral accountability with three alternative specifications. We realize that there are other perfectly reasonable means of specifying electoral accountability. In this section, we present the SAR results (and pre-spatial marginal effects) for the interactive relationships for a specification with dichotomous variables representing *prime minister* and *coalition partner*. Tables S.2 and S.3 provide the SAR results and pre-spatial marginal effects, respectively. For all three economic conditions, opposition parties and non-PM coalition partners do not respond to worsening economic conditions. On the other hand, the PM's party increases its *economic emphasis* in response to worsening unemployment (significant at the 90% confidence level), inflation (significant at the 90% confidence level), and GDP (nearly significant at the 90% confidence level). These results echo those found in the manuscript that suggest that parties that have a greater share of the policymaking authority are likely to devote a greater share of their manifestos to salient economic issues.

Directional Model

One implication of our theory of the valence considerations of economic emphasis is that we should expect to see parties shift their positions away from or toward the center in response to economic conditions. Of course, the extent to which parties shift will be moderated by the prospect of electoral accountability. We can look to the literature on ideological change for guidance as to what this pattern will look like.

This idea is related to the Bawn and Somer-Topcu (2012) argument that voters discount the promises of governing parties (due to frequent compromise while in government), whereas no dis-

counting occurs for opposition parties. Thus, government parties stand to benefit from occupying more extreme positions while opposition parties benefit from moderating their positions. An implication from this argument that we can address is whether parties have a different incentive to moderate their positions in response to economic conditions. Their theory suggests that government parties will shift away from the center and opposition parties will shift toward the center following poor economic conditions.

To test this empirical implication, we produce a variable called *centrist shift*, where positive values indicate that the party moved to the center of the ideological space (proxied by 0), and negative values indicate that the party made an extremist shift. For example, if a party is to the left of 0 (regardless of party family) at election $t-1$, and it shifted to the right at election t, then it would have a positive value. Of course, one issue with dealing with such a wide sample of aggregate-level election results is that we cannot calculate the actual "center" of the distribution (such as Bawn and Somer-Topcu 2012 do). Nevertheless, we think that treating 0 as the center is a good approximation of the actual center in a diverse sample such as this. We then interact our government specification variables (as shown in Models 1-3 in the manuscript) with the economic variables (*real GDP per capita growth*, *unemployment*, and *inflation*).

If government parties are more likely to shift toward the extremes during weak performance than opposition parties, then we would expect to see negative marginal effects for government parties (for *unemployment* and *inflation*) and positive marginal effects for opposition parties. We present these results and marginal effects in Tables S.4-S.7.

The first inference from Table S.4 is that, unlike the models of economic emphasis, there is no evidence of spatial interdependence in terms of parties' centrist or extremist shifts. The second inference is that we find additional evidence in favor of the implication mentioned above. For all three models, the marginal effects of *unemployment* and *inflation* are positive (and statistically significant or nearly so at the 90% confidence level) for parties with a minimal role in economic policymaking and negative for those with a larger role. Regardless of whether we measure government accountability with government dummy variables, PM and Finance Minister dummies, or the percentage of government seats, parties that face punishment for worsening economic conditions shift their positions toward the extreme.

Even after taking into account previous ideological shifts, niche party status, and previous electoral records, government and opposition parties shift their positions in response to economic conditions in distinct ways. Those parties with less risk of accountability shift to the center in response to worsening unemployment and inflation, whereas those parties most likely to be held accountable shift to more extreme ideological positions. These findings are entirely consistent with the theory offered by Bawn and Somer-Topcu (2012).

References

Bawn, Kathleen & Zeynep Somer-Topcu. 2012. "Government versus Opposition at the Polls: How Governing Status Affects the Impact of Policy Positions." *American Journal of Political Science* 56:433–446.

Somer-Topcu, Zeynep. 2009. "Timely Decisions: The Effects of Past National Elections on Party Policy Change." *Journal of Politics* 71(1):238–248.

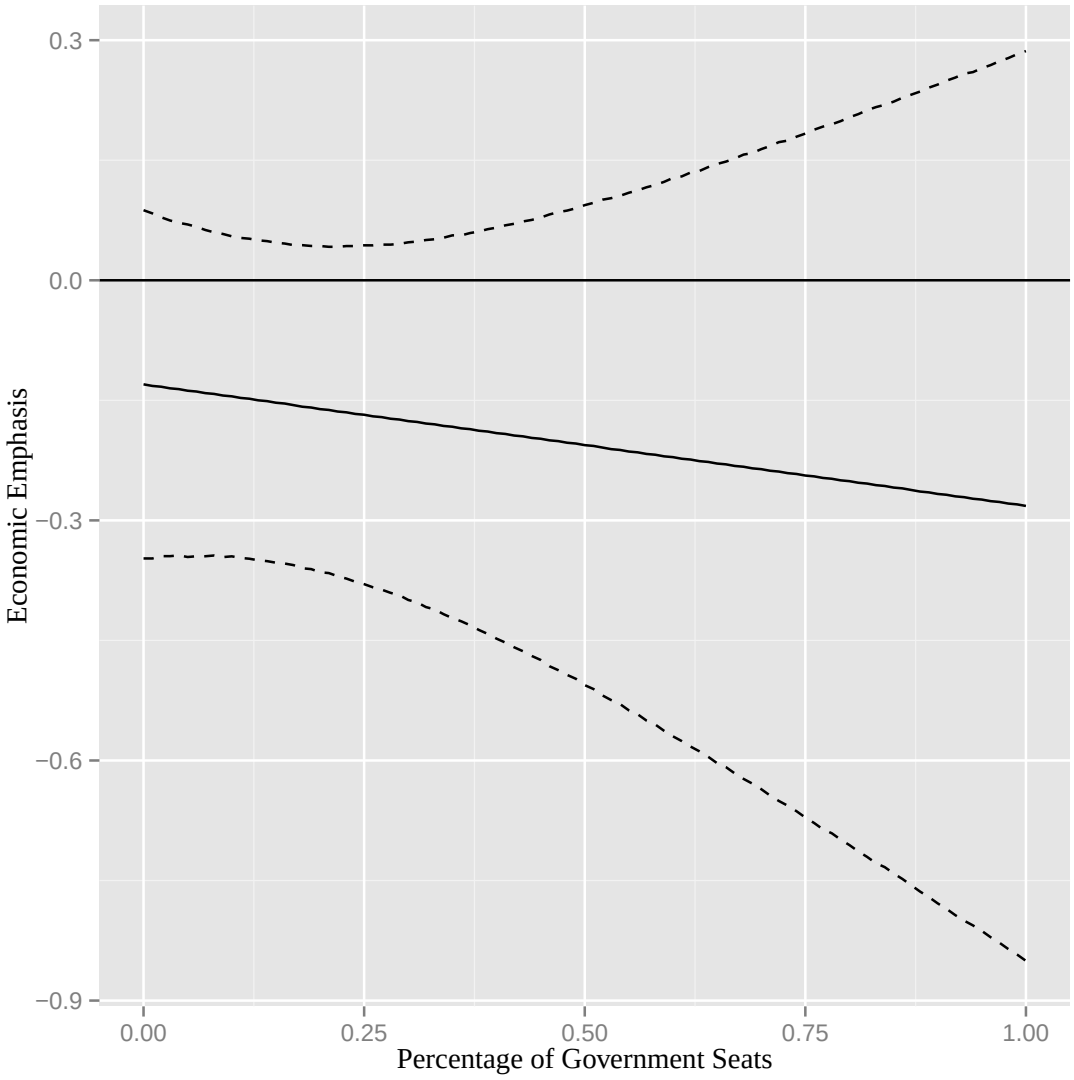
Tables & Figures

Table S.1: Summary Statistics

Country	**Obs.**	**Time**
Australia	56	1966–2004
Austria	42	1966–2002
Belgium	99	1971–2003
Canada	63	1957–2006
Denmark	138	1966–2005
Finland	84	1966–2003
France	35	1978–2002
Germany	18	1994–2005
Great Britain	34	1974–2005
Greece	21	1985–2000
Iceland	17	1991–2003
Ireland	34	1982–2002
Israel	51	1981–1999
Italy	84	1968–2006
Japan	72	1963–2003
Luxembourg	22	1984–2004
Netherlands	64	1971–2003
New Zealand	48	1966–2005
Norway	55	1973–2001
Portugal	48	1983–2005
Spain	72	1979–2004
Sweden	74	1968–2006
Total	1231	

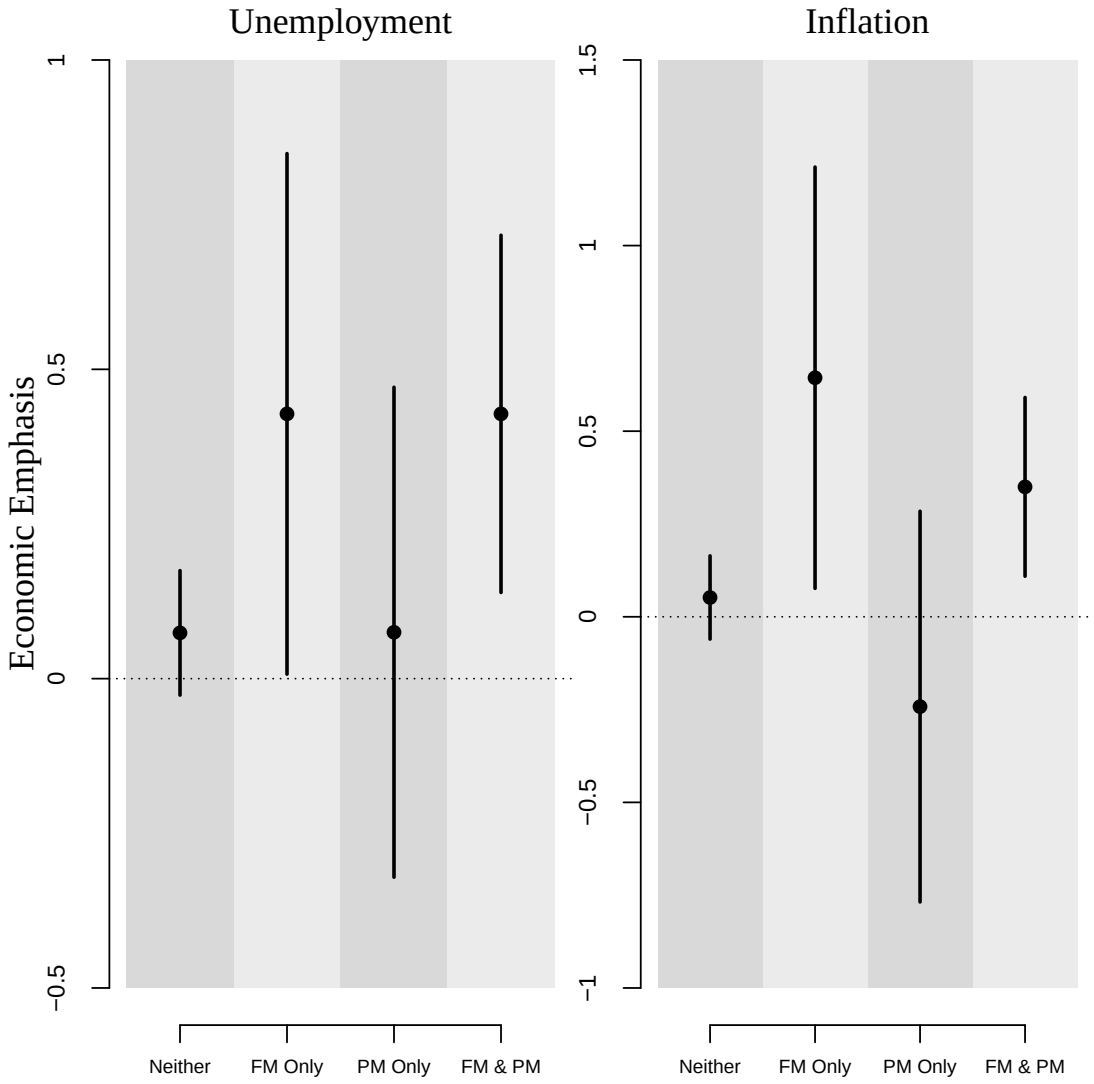
Note: Start and end dates are determined by the availability of economic and government data, respectively.

Figure S.1: Marginal Effects of Real GDP Per Capita Growth on Economic Emphasis across Values of Percentage of Government Seats



Dashed lines indicate 95% confidence intervals.

Figure S.2: Marginal Effects of Unemployment and Inflation on Economic Emphasis across the Prime Minister's Party and Ownership of the Finance Portfolio



Vertical lines indicate 90% confidence intervals.

Table S.2: Spatial Autoregression (SAR) Results for the Interactive Effects of Economic Conditions and Government Status (Prime Minister or Coalition Partner) on Campaign Emphasis of the Economy

Variable	**Parameter Estimate**	**Standard Error**
ρ	0.166***	(0.031)
Intercept	-0.399	(0.878)
GDP Growth	-0.145	(0.113)
Unemployment	0.067	(0.063)
Inflation	0.028	(0.070)
Prime Minister	-2.255	(1.991)
Coalition Partner	-1.388	(2.007)
PM×GDP	-0.277	(0.306)
PM×Unemployment	0.229	(0.170)
PM×Inflation	0.197	(0.156)
CP×GDP	0.230	(0.270)
CP×Unemployment	0.233	(0.218)
CP×Inflation	0.297	(0.216)
Vote Share$_{ijt-1}$	0.118***	(0.025)
Economic Talk$_{ijt-1}$	0.315***	(0.031)
Avg. Economic Talk$_{jt-1}$	0.059	(0.048)
Avg. Family Economic Talk$_{jt-1}$	-0.098***	(0.027)
Absolute Purged Left-Right	-0.119***	(0.023)
Niche Party	-0.835	(0.652)
N		1231
Tests of Spatial Interdependence		
Moran's I		0.175***
Geary's C		0.706***
Robust LM		34.53***
Wald Test		28.60***

Table S.3: Pre-Spatial Marginal Effects for Growth, Unemployment and Inflation across Government Status (Prime Minister and Coalition Partner)

X Variable	**Z Variable(s)**	**Marginal Effect**
Real GDP Per Capita Growth	Opposition	-0.145
		[-0.366, 0.077]
	Coalition Partner	0.086
		[-0.398, 0.570]
	Prime Minister	-0.422
		[-0.988, 0.144]
Unemployment	Opposition	0.067
		[-0.056, 0.190]
	Coalition Partner	0.300
		[-0.112, 0.712]
	Prime Minister	0.295*
		[-0.017, 0.606]
Inflation	Opposition	0.028
		[-0.109, 0.165]
	Coalition Partner	0.325
		[-0.077, 0.727]
	Prime Minister	0.225*
		[-0.047, 0.497]

Note: $** = p < .05$, $* = p < .1$ (two-tailed). Marginal effects reported are $\beta_X + (\beta_{XZ} \times Z)|Z = 1$. Brackets contain 95% confidence intervals.

Table S.4: Spatial Autoregression (SAR) Results for the Interactive Effects of Economic Conditions and Government Status on Ideological Shifts Relative to the Center

Variable	**Model 1**		**Model 2**		**Model 3**	
	Parameter	**S.E.**	**Parameter**	**S.E.**	**Parameter**	**S.E.**
ρ	-0.053	(0.041)	-0.057	(0.041)	-0.059	(0.041)
GDP Growth	-0.180	(0.285)	-0.221	(0.263)	-0.179	(0.259)
Unemployment	0.296**	(0.129)	0.292**	(0.128)	0.301**	(0.129)
Inflation	0.265*	(0.158)	0.199	(0.147)	0.200	(0.145)
Government Party	8.285***	(2.992)				
Government Seats (%)			12.250***	(3.80)		
Prime Minister					8.802*	(5.081)
Finance Minister					5.777	(4.901)
Government Party×GDP	0.332	(0.456)				
Government Party×Unemployment	-0.621**	(0.286)				
Government Party×Inflation	-0.640	(0.259)				
Seats×GDP			0.623	(0.579)		
Seats×Unemployment			-0.983**	(0.327)		
Seats×Inflation			-0.727**	(0.308)		
PM×GDP					0.108	(0.746)
PM×Unemployment					-0.730	(0.564)
PM×Inflation					0.343	(0.458)
FM×GDP					0.328	(0.872)
FM×Unemployment					-0.371	(0.559)
FM×Inflation					-1.138**	(0.470)
Vote Share$_{ijt-1}$	0.033	(0.037)	-0.001	(0.048)	-0.026	(0.047)
Shift$_{ijt-1}$	-0.093*	(0.049)	-0.094*	(0.049)	-0.096**	(0.048)
Absolute Left-Right	0.284***	(0.052)	0.280***	(0.052)	0.280***	(0.051)
Niche Party	-3.370***	(1.477)	-3.559**	(1.474)	-3.584**	(1.478)
Intercept	-5.656***	(1.843)	-4.561**	(1.774)	-4.457**	(1.780)
N		1094		1094		1094
Tests of Spatial Interdependence						
Moran's I		-0.05*		-0.05*		-0.05*
Geary's C		0.87*		0.87*		0.87*
Robust LM		1.66		1.89		2.02
Wald Test		1.70		1.97		2.09

Note: $** = p < .05$, $* = p < .1$ (two-tailed). Weights matrix represents the inverse of absolute relative distance of left-right scores at election t. Positive values of *shift* indicate movement to the center.

Table S.5: Pre-Spatial Marginal Effects for Growth, Unemployment and Inflation on Ideological Shifts Relative to the Center across Government Status: Model 1

X Variable	**Z Variable(s)**	**Marginal Effect**
Real GDP Per Capita Growth	Opposition	-0.180
		[-0.738, 0.378]
	Government	0.152
		[-0.551, 0.855]
Unemployment	Opposition	0.296**
		[0.043, 0.549]
	Government	-0.325
		[-0.828, 0.177]
Inflation	Opposition	0.265*
		[-0.045, 0.575]
	Government	-0.374*
		[-0.778, 0.030]

Note: $** = p < .05$, $* = p < .1$ (two-tailed). Marginal effects reported are $\beta_X + (\beta_{XZ} \times Z)|Z = 1$. Brackets contain 95% confidence intervals.

Table S.6: Pre-Spatial Marginal Effects for Growth, Unemployment and Inflation on Ideological Shifts Relative to the Center across Government Status: Model 2

X Variable	**Z Variable(s)**	**Marginal Effect**
Real GDP Per Capita Growth	Seats = 0%	-0.221
		[-0.736, 0.294]
	Seats = 50%	0.091
		[-0.440, 0.622]
	Seats = 100%	0.403
		[-0.567, 1.373]
Unemployment	Seats = 0%	0.292**
		[0.041, 0.543]
	Seats = 50%	-0.199
		[-0.520, 0.122]
	Seats = 100%	-0.691**
		[-1.283, -0.099]
Inflation	Seats = 0%	0.199
		[-0.089, 0.487]
	Seats = 50%	-0.164
		[-0.454, 0.126]
	Seats = 100%	-0.528**
		[-1.043, -0.013]

Note: $** = p < .05$, $* = p < .1$ (two-tailed). Marginal effects reported are $\beta_X + (\beta_{XZ} \times Z)|Z = 1$. Brackets contain 95% confidence intervals.

Table S.7: Pre-Spatial Marginal Effects for Growth, Unemployment and Inflation on Ideological Shifts Relative to the Center across Government Status: Model 3

X Variable	**Z Variable(s)**	**Marginal Effect**
Real GDP Per Capita Growth	Opposition	-0.179
		[-0.687, 0.329]
	FM Only	0.148
		[-1.608, 1.904]
	PM Only	-0.071
		[-1.464, 1.323]
	FM & PM	0.257
		[-0.719, 1.233]
Unemployment	Opposition	0.301**
		[0.048, 0.554]
	FM Only	-0.07
		[-1.162, 1.022]
	PM Only	-0.429
		[-1.534, 0.676]
	FM & PM	-0.80**
		[-1.382, -0.218]
Inflation	Opposition	0.20
		[-0.086, 0.486]
	FM Only	-0.938**
		[-1.867, -0.009]
	PM Only	0.543
		[-0.341, 1.427]
	FM & PM	-0.595**
		[-1.112, -0.078]

Note: $** = p < .05$, $* = p < .1$ (two-tailed). Marginal effects reported are $\beta_X + (\beta_{XZ} \times Z)|Z = 1$. Brackets contain 95% confidence intervals.