

# Coalition-Directed Economic Vote and the Finance Minister

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## **Abstract**

Recent experimental evidence finds that the decision maker in a collective decision making entity with proposal power attracts a disproportionate amount of the blame or reward by those materially affected by these decisions. In the case of coalition governments evidence suggests that voters have heuristics for assigning responsibility for economic outcomes to individual parties and that they tend to disproportionately direct the economic vote toward the Prime Minister party. This essay demonstrates that voters also identify the Finance Minister party as an agenda setter on economic issues depending on whether the coalition context exaggerates or mutes its perceived agenda power. We define cabinet context as the extent to which coalition parties take issue ownership for particular policy areas. We find that when decision making is compartmentalized, voters perceive the finance minister as having agenda power and hence it receives a relatively larger economic vote; in more “diffuse” cabinet contexts it is the PM Party that is attributed responsibility for the economy.

# 1 Introduction

Government policies in most democratic countries result from multiple parties making up the governing coalition arriving at a collective decision. To the extent that voters incorporate government performance into their vote preferences for particular parties, they need to assign administrative responsibility to particular parties in the coalition. Our understanding of how voters grapple with this challenge has advanced considerably over the past decades.

Recent scholarship suggests that voters exercise an informed coalition-directed vote. We have made advances on four fronts with respect to the relationship between voters and coalitions. First, we have gained a much richer understanding of how coalitions function. In particular, there is a recent literature, typically based on extensive data collection, suggesting that coalition policy choices reflect the outcome of an ongoing, and often complex, process of compromise amongst governing parties (Martin and Vanberg, 2014) and how this coalition governance varies cross-nationally (Martin and Vanberg, 2011; Falcó-Gimeno, 2014). Second, an emerging body of theoretically motivated empirical work suggests that voters do incorporate these features of coalition governance in their vote utility functions (Duch and Stevenson, 2008; Duch, May and Armstrong, 2010; Kedar, 2005; Bargsted and Kedar, 2009). Third, comparative scholars have also assembled persuasive evidence that voters, in countries with a history of multiparty coalition governance, are informed about important features of the coalition “landscape” such as the parties that make up the governing coalition, their ideological proximity, and the party allocation of crucial portfolios (Fortunato and Stevenson, 2013; Fortunato, Stevenson and Vonnahme, 2016; Fortunato, 2017). Finally, we are gaining an understanding of the mechanism for this coalition-directed vote: voters are not hyper-rational but rather they employ heuristics that are ecologically rational, i.e., these decision making shortcuts are useful given the institutional and political context in which voters find themselves (Duch, Przepiorka and Stevenson, 2015).

Future advances in our understanding of the coalition-directed vote will build on this notion that voters in coalition contexts deploy heuristics that are appropriate to their insti-

tutional and political context. The challenge is to better comprehend how the institutional context shapes and facilitates voter heuristics. How can we marry what we know about voter heuristics (that are ecologically rational) with the rich insights provided by students of coalition decision making institutions?

This essay contributes to such an understanding of the coalition-directed vote. Our point of departure is the institutional context: Falcó-Gimeno (2014) demonstrates that when the coalition government parties have clear ownership for particular policy areas, each party is perceived as responsible for the policy remit of their portfolios. We add to this insight individual-level heuristics: Experimental research suggests that proposal power is one of the key heuristics that individuals deploy for holding individual decision makers accountable for collective decisions (Duch, Przepiorka and Stevenson, 2015).

When ownership within a coalition for particular policy areas is clear (compartmentalization is high) responsible parties effectively have proposal power Falcó-Gimeno's (2014). In these institutional contexts, experimental results (Duch, Przepiorka and Stevenson, 2015) suggest voters should rely on proposal power as a heuristic for assigning policy making responsibility. We have evidence that this is indeed the case from Duch and Stevenson (2008, 2013) who find that the PM party in a coalition government receives a disproportionately high economic vote. The conventional wisdom is that the PM party is (perceived as being) the main agenda setter among the parties that form a coalition, and this is why the lion's share of the economic vote tends to be targeted toward this party.

Our results indicate that the Finance Minister party also shares some of the economic vote directed toward coalition governments when there are clear signals that this party is sharing agenda power. When the coalition government parties have clear ownership for particular policy areas voters perceive the party occupying the finance portfolio as having agenda power on issues concerning the economy. This increases the economic vote for the finance portfolio party and lowers it for the Prime Minister party. When policy decision making in a cabinet is diffuse, such that no single party has ownership for policy jurisdictions, the portfolio agenda

control heuristic is unlikely to be employed. We test this conjecture with data for 26 OECD countries over the period 1987 to 2009.

The remainder of the paper is structured as follows: The next section briefly reviews the literature on the attribution of responsibility for collective decisions and presents our argument. In sections 3 and 4 we then describe our data, discuss the methodology, and present the results. Finally, the last section summarizes the main contributions of the paper and concludes.<sup>1</sup>

## 2 Responsibility attribution for coalition decisions

We have made important strides over the past couple of decades in understanding vote choice in multi-party contexts. Duch and Stevenson (2008) argued for a theoretical specification in which rational voters assign varying degrees of responsibility to the different parties in a governing coalition. They concluded that many empirical results in the literature “leave little room to doubt that the distribution of [policy making] responsibility is an important factor conditioning both the magnitude of the economic vote across elections as well as its distribution across parties” (Duch and Stevenson, 2008, 253). They argued that economic voting is more important to the electoral fortunes of individual parties on whom policy making responsibility is concentrated than it is to those parties (in the same election) with less responsibility.<sup>2</sup>

Recent empirical studies document the rich and sometimes quite sophisticated calculus voters employ when assessing parties in multi-party coalition governments. Empirical findings suggest that significant numbers of voters in coalitional contexts engage in “coalition directed voting”, i.e., tactical voting for particular parties in order to try to bring a preferred coalition to power. Kedar (2005) or Bargsted and Kedar (2009), for example, find that voters in contexts with coalition governments engage in compensational voting, meaning that

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<sup>1</sup>All of the replication material for this essay is available at: <https://github.com/rayduch/Coalition-Directed-Economic-Vote-and-the-Finance-Minister>

<sup>2</sup>A similar, although differently motivated, argument is made by Anderson (1995).

certain voters vote for more extreme parties with the goal of shifting the policy position of governing coalitions closer to their ideal points. Based on data from 86 election surveys conducted in 22 countries, Duch, May and Armstrong (2010) find that in 75% of these surveys more than 50% of voters make coalition-directed calculations. However, in order to exercise these coalition-directed votes, voters in coalitional contexts are faced with the challenge of mapping the observed distribution of responsibility (namely, seats won and cabinet positions held) into actual administrative responsibility within the cabinet. This presumes, first, that voters acquire information about the composition of a coalition government and, second, they translate observed characteristics of the governing coalition into shares of actual responsibility.

Voters are indeed informed about *important* or *useful* features of the coalition “landscape”. Fortunato, Stevenson and Vonnahme (2016) assess whether survey respondents correctly ordered their country’s various possible party dyads on a left-right continuum. They find that the historical importance of left-right in coalition formation in a country predicts their success with which respondents order the dyads on a left-right continuum. Fortunato and Stevenson (2013) demonstrate that cabinet membership is a useful voter heuristic for inferring the policy position of cabinet parties – their analysis of 58 election surveys conducted in 18 countries finds that voters perceive cabinet parties to be more ideologically similar than parties that do not serve together in cabinet. These authors convincingly argue that this knowledge, that is context specific, constitutes the heuristics that allow voters to make “fast and frugal” inferences in situations in which doing so leads to correct predictions (on average, over populations). Building on the work of Goldstein and Gigerenzer (2002) they call these heuristics, and the people who use them in this way, “ecologically rational”.

These are two important advances in the study of comparative voting: evidence of a coalition-directed vote and empirical findings suggesting voters are informed about the coalition landscape. An outstanding puzzle though is identifying the precise decision making rule, or heuristic, that voter employ for allocating responsibility attribution to individual political

parties in the governing coalition. What are these ecologically rational heuristics?

Earlier empirical insights suggested that size or proportionality informed coalition-directed vote choice. Anderson (2000) analyses aggregate election statistics and finds that voters assign responsibility to the largest parties within the coalition: the larger the party in terms of seats the more voters can assume it was responsible for policy making in general. Duch and Stevenson (2008) find evidence for their proposition that the proportion of cabinet portfolios signals the responsibility each party holds within a coalition.

More recent empirical efforts suggest that voters may rely on a richer set of heuristics, than proportionality, for attributing responsibility to coalition parties. There is, in fact, considerable emerging evidence that voters do not employ a proportional heuristics for holding coalition parties responsible. Based on data from the 2009 German Election Study, Bowler, Gschwend and Indridason (2016) find little support for the notion that voters employ Gamson's Law of proportionality when allocating responsibility to parties in the governing coalition. Rather, factors contributing to a party's bargain strength, party size, and ideological centrality, seem to shape the coalition-directed vote. Angelova, König and Proksch (2016) come to a similar conclusion that proportionality does not seem to shape the coalition-directed vote of Germans, with results coming from the analysis of the German Internet Panel (2012-2015).

Duch, Przepiorka and Stevenson (2015) conduct lab experiments designed to isolate the heuristics individuals employ for holding decision makers accountable when decisions are made collectively (in their case employing majority voting rules). They find that neither voting weights nor veto power is the heuristic individuals use to punish unfair decisions. Their somewhat unexpected result is that individuals disproportionately focus responsibility attribution on the agenda setter — the individual with proposal power. The implication being that voters will attribute responsibility to the party with proposal power in the governing coalition. While surprising, the result accords well with evidence that agenda-setting power influences outcomes in voting bodies (e.g. Weingast and Marshall, 1988; Cox and Magar,

1999) as well as policy outcomes in coalition governments (e.g. Laver and Shepsle, 1996). Moreover, in the case of the senior coalition partner, Angelova, König and Proksch (2016) provide empirical support from German vote choice surveys that Ministerial agenda setting power shapes responsibility attribution.

The PM in most cases controls the agenda of cabinet deliberations and has strong influence over the legislative agenda. And there is evidence suggesting that the Prime Ministerial (PM) party is perceived to have a disproportionate influence on the decisions made within a coalition (Duch and Stevenson, 2008). But it is clearly the case that agenda setting power is often shared with other coalition members and, in particular, with the finance minister (FM) party (Jochimsen and Thomasius, 2014). The FM party often routinely drafts economic legislation and is the public spokesman for issues related to economic growth, trade balances, and budget balances. Voters are likely to learn about the party's economic decision making role because media representations of economic policy making focus on the FM party.

We have indirect data on the public's exposure to information about the FM party from Module 4 of the Comparative Study of Electoral Systems (CSES) survey (2011-2016)(The Comparative Study of Electoral Systems, 2017). Respondents to the 2011-2016 round of the CSES were asked "Which of these persons was the Finance Minister before the recent election (the list of choices contained the correct name in addition to three names of other cabinet ministers). This provides at least a rough measure of the public's familiarity with the Finance Minister.

Figure 1: Correctly Identified the Name of the Finance Minister: CSES 2011-17

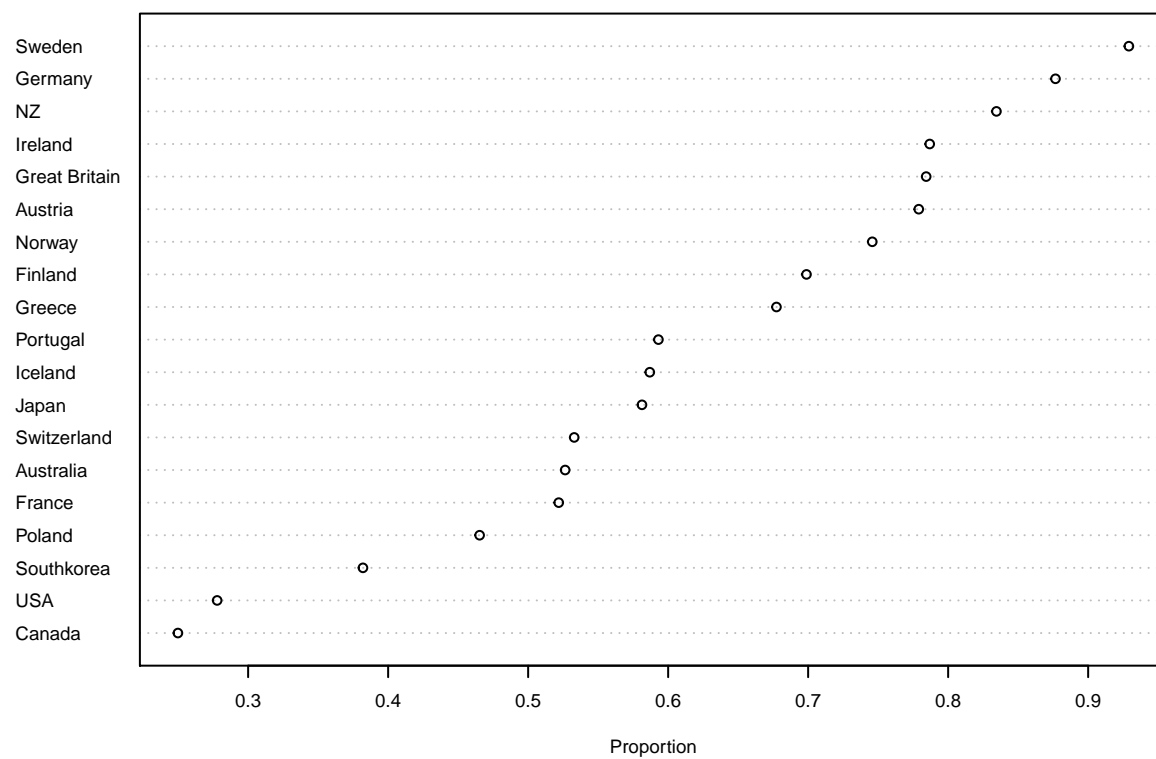




Figure 1 summarizes the results for the nineteen countries in which the question was asked. For the most part the vast majority of the voting public in developed democracies are knowledgeable about the Finance Minister. The North American public is an exception – in both Canada and the United States, less than one-third of the public could identify the Minister of Finance. Also less than half of the South Korean and Polish publics could identify the Finance Minister. On the other hand, for the other fourteen countries, at least 50 percent of the public, and sometimes as much as 90 percent, could identify the Finance Minister. Our only point here is to suggest that the public, particularly in contexts with multi-party governing coalitions, is exposed to considerable information about the Finance Minister that would certainly include information about the party to which it belongs.

Our conjecture is that there are political contexts in which voters observe economic policy agendas that are set by the FM party. Given the weight that individuals accord agenda power (Duch, Przepiorka and Stevenson, 2015), our expectation is that responsibility for coalition decisions on economic issues would also be attributed to the FM party and that this party should share the economic vote with the PM party. But when is this sharing of agenda power more likely to happen? And does this inform vote choice? We estimate how much agenda setting power voters accord to the PM and FM parties and estimate the additional effect on the economic vote of occupying one or the other portfolio.

The extent to which parties can set the agenda on economic issues is dependent on whether cabinets operate in a compartmentalized fashion. In a compartmentalized context, coalition parties decide policy in the jurisdictions over which they have ministerial control without interfering in their partners' domains. At the other extreme, policies can be decided collectively by all coalition partners in all dimensions, regardless of the distribution of portfolios. Scholars disagree as to which of these styles prevail – some maintain that ministerial discretion is the rule and others consider it is the exception (see for instance the debate between Warwick (1999*b,a*) and Laver and Shepsle (1999*b,a*)). The internal governance of coalitions does not conform neatly into one or the other of these characterizations; rather,

the extent to which decision making is ministerial or collective varies, with some coalitions tending towards the former and others the latter.

Falcó-Gimeno (2014) shows, that for coalitions with members that have tangential preferences, a log-rolling of parties' ideal points is a simple way to resolve partners' differences in emphasis (Luebbert, 1986; De Winter, 2002). When each coalition member intensely cares about a particular set of issues that do not overlap with each other, compartmentalization is preferable and more likely. Specialization of preferences therefore leads to the compartmentalization of decisions. By contrast, in cases where there is greater preference overlap between partners, a collective decision making arrangement in all policy dimensions will lead to results that partners prefer over compartmentalization.<sup>3</sup>

When the overall compartmentalization of the coalition is high, control over particular portfolios sends a strong signal as to who is responsible for particular policy areas. In these contexts, voters will have a crisper signal of agenda setting powers for economic policy attached to the party that occupies the finance portfolio. In other, more diffuse, coalitions where ownership for specific policy remits is more blurred, the conventional view that the PM party will be identified as the sole responsible for the state of the economy is more likely to apply.

An empirical contribution of this essay is to demonstrate how the agenda setting power of cabinet contexts affects the economic vote. Employing surveys from multiple countries and over an extensive time period we identify how these agenda setting heuristics are employed by voters. We build on Falcó-Gimeno's (2014) description of how cabinet context varies in a systematic fashion. We argue that when the cabinet is compartmentalized as described by Falcó-Gimeno (2014), the FM party should also be identified as the proposal maker on issues concerning the economy (and hence the party to be rewarded or punished for the state of the economy).

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<sup>3</sup>It is beyond the scope of this paper to provide further explanation of this relationship between partners' preferences and coalition governance forms. Details are available in Falcó-Gimeno (2011, 2014).

### 3 Data and variables

Responsibility attribution, our dependent variable, is measured by the economic vote for specific parties in governing coalitions. Our primary independent variables refer to the coalition parties' agenda setting powers on economic matters, and the main moderating regressor measures the extent to which coalition members' preference profiles are compartmentalized. The data cover the period 1987 to 2009.

**Dependent Variable: The Party Economic Vote.** The Party Economic Vote (PEV) is based on Duch and Stevenson (2008). They generate a measure of economic voting for each governing coalition party that reflects the effect of perceptions of economic performance on vote preference for these political parties. The estimates of PEV in this study updates their original estimates using 297 voter preference surveys conducted in twenty-six western democracies from 1987-2009. The estimates are based on carefully specified statistical models of individual voting behavior for each  $k$  election survey. These models include a measure of subjective retrospective evaluations of the economy ( $X_{ik}$ ) along with a set of  $j$  appropriate control variables ( $Z_{jik}$ ). Once obtaining estimates of the coefficients of well-specified vote choice models, we use the estimated coefficients (and variance-covariance matrix) from the model to produce predicted changes in support for each survey respondent  $i$  when economic perceptions became more negative by one unit.

The magnitude of a party's economic vote (PEV) for this individual  $i$ , and election survey  $k$  is simply the change in  $\pi$  produced by a given change in her economic perceptions (say, from  $X_{ik}$  to  $X'_{ik}$ ):

$$PEV_{ik} = \frac{e^{\hat{\beta}_{1k}(X_{ik}) + \sum_{j=1}^{J_k} \hat{\phi}_{jk} Z_{jik}}}{1 + e^{\hat{\beta}_{1k}(X_{ik}) + \sum_{j=1}^{J_k} \hat{\phi}_{jk} Z_{jik}}} - \frac{e^{\hat{\beta}_{1k}(X'_{ik}) + \sum_{j=1}^{J_k} \hat{\phi}_{jk} Z_{jik}}}{1 + e^{\hat{\beta}_{1k}(X'_{ik}) + \sum_{j=1}^{J_k} \hat{\phi}_{jk} Z_{jik}}} \quad (1)$$

Based on our assessment of the distribution of economic perceptions over individuals in the 297 surveys we used in our empirical analysis, we defined a typical change in economic perceptions as a move of one category in our three-category measure. In all the empirical

analysis we report, we chose the direction of this change to reflect a worsening economy. To obtain an estimate of the average magnitude of the economic vote in the sample, we calculated Equation 1 for all individuals in the sample (i.e., using the measured values of  $Z_{jik}$  and  $X_{ik}$ ), setting  $X'_{ik}$  to be one category worse than  $X_{ik}$ . If the voter’s economic perceptions were already at the worst category, we did not change them. The economic vote for each individual was then averaged to produce an estimate of the average party economic vote in the sample,  $PEV_k$ .

We also generate measures of uncertainty around these predicted changes. The predicted changes in support for each party are averaged over the sample to get an estimate of the average party economic vote (PEV) using the procedures outlined in King, Tomz and Wittenberg (2000).

The 1,577 estimates obtained from these models (one for each party in the 297 voter preference surveys) are our measure of the  $PEV_k$  in each  $k$  voter preference survey. The values of the variable should be interpreted as follows: the more negative the values, the larger the economic vote for a particular party. Of particular interest in our analysis will be the PEV for the party holding the PM and Finance portfolio.<sup>4</sup> For the sake of readability, the PEV variable has been multiplied by 100. After the rescaling, our explanatory variable ranges from -13 to +11, approximately, for the full sample we work with (see details below).

**Main Independent Variables: PM and FM.** The principal independent variables measure the extent to which each party in the governing coalition is perceived as having proposal power over economic issues. Accordingly, our measure is simply whether or not the coalition party holds either the PM portfolio and the Finance portfolio through two binary variables: *PM Party* and *FM Party*, respectively. The original data comes from Seki and Williams’s (2014) Detailed Minister Summary dataset for the period 1991-2012. This contains information on ministers whose tenure started as early as 1987 and links ministers

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<sup>4</sup>The R code and original data for estimating these PEV is available from the authors. A description for the estimation is available in Duch and Stevenson (2008).

to portfolios which allows us to identify the parties holding the PM and Finance ministries.

**Moderating Variable: Compartmentalization.** At the cabinet level, we measure the extent to which government partners focus their attention and efforts on the same issues as opposed to being “specialized” in their interests, i.e., compartmentalized. This variable measures the extent to which policy preference profiles of the parties sharing office are distinct: If the members of the coalition are intense in the same policy areas, then their preferences will be overlapping. On the other hand, when the primary policy concerns of coalition members do not coincide then we have a compartmentalized cabinet. This is a *moderating* contextual variable because our conjecture is that the effect of economic agenda power –i.e. the main independent variable– on the economic vote –i.e. the dependent variable– will be moderated by the extent to which coalition parties are *in general* “policy distinct”.<sup>5</sup> On average, responsibility attribution for specific policy performances to the individual parties making up the coalition will be clearer in a compartmentalized cabinet (see Falcó-Gimeno, 2014).

To operationalize this variable, we first take each party’s score of salience for each preference category, namely, the share of the party election manifesto that refers to each issue, from the 2014b version of the Manifesto Project dataset (Volkens et al., 2014). We then group these narrow CMP issue categories into the 13-policy categories scheme built by Bäck, Debus and Dumont (2011).<sup>6</sup> In order to obtain a government-specific measure, we compute the cabinet standard deviation of these saliences for each jurisdiction. These standard deviations are then averaged across the 13 jurisdictions. This strategy produces an overall measure of the degree to which preferences are tangential or distinctive in the coalition cabinet. The salience approach assumes that a higher average standard deviation represents a more compartmentalized coalition. This measure has already been applied in the study of

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<sup>5</sup>This is in fact very much related to Narud’s (1996) contention that different partners should be held accountable for different policies depending on the extent to which voters relate government policy to the programmatic commitment of certain parties.

<sup>6</sup>These categories are: foreign affairs, interior, justice, finance, economy, defense, labor, education, health, agriculture, industry, environment, and social affairs.

oversight mechanisms in coalition governments: Falcó-Gimeno (2014) finds that coalitions with a large preference overlap (i.e. low compartmentalization) make more extensive use of cross-partisan junior ministers .

To give a stylized example, suppose that only two policies exist: X and Y. In a coalition cabinet formed by parties A and B, party A devotes 100% of its election programme to policy X (and 0% to policy Y) while the stated preferences of party B are only related to policy Y (0% to policy X and 100% to policy Y). The average policy standard deviation, i.e., the compartmentalization measure, will be 70.7. In another cabinet formed by parties C and D who both care only about policy X (100% to policy X and 0% to policy Y), the coalition would score 0 in the compartmentalization measure. In a third cabinet, party E preference profile is the same as party A and party C, but party F cares equally about both policies (50%-50% for X and Y). In such a case, the cabinet would score 35.4 in the compartmentalization scale, lower than the A-B cabinet but higher than the C-D coalition.

**Control Variables.** We control for two other measures related to the potential agenda setting capacity of the party on economic issues. First, the variable *Party Size (% Seats)* refers to the party’s seat share (Anderson, 2000) – these data are from Döring and Manow’s (2011) ParlGov database.<sup>7</sup> This variable can also be interpreted as a proxy for the proportion of ministries controlled by each party in the coalition – hence controlling for a possible “Gamson’s Law” effect. We also explore the extent to which each parties’ economic profile in their public pronouncements and campaign rhetoric affects their economic vote. The variable *Economic Profile* measures the salience of the economy for each party in terms of the share of their manifesto referring to economic issues – these data are from the Manifesto Project (Volgens et al., 2014). We follow Bäck, Debus and Dumont’s (2011) strategy in measuring how much each coalition party is interested in issues related to economic policies.

Table 1 provides summary information of our full sample, which contains a total of

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<sup>7</sup>We also employ this database to code our governments as coalitions or single-party cabinets.

Table 1: Descriptive Statistics

		N	Mean/Prop.	S.D.	Med.
Full Sample	Party Economic Vote	602	-0.123	2.790	0.081
	Party in Government	602	0.430	0.496	0
	Coalition	602	0.801	0.400	1
	Party Size (% Seats)	602	0.185	0.156	0.120
	Economic Profile	602	0.092	0.051	0.085
Coalition Parties	Party Economic Vote	228	-1.232	2.716	-0.623
	NO PM & NO FM	228	0.491	0.501	0
	PM & NO FM	228	0.167	0.373	0
	NO PM & FM	228	0.105	0.308	0
	PM & FM	228	0.237	0.426	0
	Compartmentalization	220	3.004	1.374	3.165
	Party Size (% Seats)	228	0.225	0.151	0.185
	Economic Profile	228	0.093	0.049	0.085

602 party-government observations.<sup>8</sup> Government parties represent about two-fifths of the cases and opposition parties account for approximately three-fifths. About 80% of our cases belong to contexts where a coalition government is in office. When we restrict our sample to incumbent parties in coalitions, we have information for 228 parties – although we lose 8 parties when we incorporate the data from the Manifesto Project (*Compartmentalization* variable).

Because both incumbent and opposition parties are included in the full sample, the average party economic vote is near zero. The average economic vote for coalition incumbent parties is about -1.25 (a unit worsening of perceived economic performance, on average, reduces the likelihood of voting for a coalition incumbent party by 1.25 percent).

The descriptive summaries in Table 1 indicate that in about one-quarter of the coalitions

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<sup>8</sup>Our full sample includes governments from Australia, Austria, Belgium, Canada, Czech Republic, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Lithuania, Luxembourg, Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, and Spain.

the Prime Minister and the Finance minister are from the same party. Nevertheless, 17% of the coalition parties in our sample occupy the PM without controlling the Finance Ministry. On the other hand, around 11% of these parties control the Finance Ministry but not the PM. About a third of our FM parties did not simultaneously occupy the Prime Ministership. This allows us to single out the FM and PM agenda power heuristics and empirically evaluate the hypothesized FM effect on the economic vote.

Regarding the main moderating variable, Table 1 shows that the average party in our sample belongs to a cabinet that is more “diffuse” than compartmentalized (value 3 in a range from 0 to 8.5), although there is substantial variation. Finally, our coalition parties command an average of 23% of the seats in parliament and devote around 9% of their election programs to economic issues.

## 4 Results

In this section we report estimates from random effects OLS linear regression models. To correct for the dependency between the units from the same survey (within any survey, the probabilities of voting for each party are likely to be dependent from each other), standard errors are clustered at the survey level. We also conduct a series of robustness checks on whether our findings are sensitive to the inclusion of controls for country and time effects.

### Baseline model

We begin by demonstrating that the electoral fortunes of government parties are associated with the state of the economy, i.e., there is in fact an economic vote. Table 2 presents, in columns 1 and 2, the marginal effects of being a member of a single-party and a coalition government as compared to remaining in opposition; and, in columns 3 and 4, controlling the PM and the FM in a coalition government as compared to the rest of coalition partners. These estimates are based on the following two OLS regres-



sions:  $PEV = \alpha + \beta_1 PartyInGovernment + \beta_2 CoalitionGovernment + \beta_3 PM + \beta_4 FM + \beta_5 PartyInGovernment * Coalition + \beta_6 Coalition * PM + \beta_7 Coalition * FM + \beta_8 PM * FM + \beta_9 PartySize + \epsilon$ . Columns 2 and 4 include  $[+\beta_{10} EconomicProfile]$ . Recall that the dependent variable here is the magnitude of the economic vote for the individual parties in the coalition. The marginal effects reflect the change in the vote probability for the party associated with a one unit decline in subjective economic evaluations, as a consequence of the government/opposition status and the role played in a coalition government.<sup>9</sup> Hence a negative estimate for a given party characteristic in the model indicates the variable increases the PEV. Not surprisingly, the first two columns reveal that being in the government government, as opposed to staying in opposition, increases a party’s economic vote. However, the effect is different for single-party versus coalition governments. Consistent with previous literature, we find that incumbent parties in single-party governments receive a significantly larger economic vote than those that share office in a multiparty cabinet (Duch and Stevenson, 2008).

Though weaker than for single-party governments, the negative marginal effects for joining a coalition government, which are highly significant, confirm our expectation that the coalition parties are held responsible for economic outcomes – as the economy worsens, incumbent coalition parties are punished. Other postestimation analyses from these models suggest that non-incumbent parties benefit from bad economies, both if under the rule of a single-party incumbent or a coalition government. Voters moderate their responsibility attribution for economic outcomes when there is a multiparty government in office, but the economic vote clearly persists.

As part of our effort to “unpack” this average collective responsibility attribution, we hypothesized that the economic vote in coalitions will be stronger for certain parties, those heuristically perceived as having proposal power, than for others. Table 2 presents the marginal effects of PM and FM when the values of incumbent party and coalition government

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<sup>9</sup>The estimates in columns 3 and 4 are calculated at  $PartyInGovernment = 1$  and  $Coalition = 1$ .

Table 2: Baseline Model: Marginal Effects of Government Participation on the Economic Vote

	(1)	(2)	(3)	(4)
In a Single-Party Gov.	-2.93*** (0.29)	-2.76*** (0.30)		
In a Coalition Gov.	-1.11*** (0.22)	-1.10*** (0.22)		
PM			-2.59*** (0.53)	-2.58*** (0.52)
FM			-0.88** (0.44)	-0.90** (0.44)
Party Size (% Seats)	✓	✓	✓	✓
Economic Profile	✗	✓	✗	✓

Standard errors in parentheses

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

are set to 1. Columns 3 and 4 show that, controlling for party size and the extent to which the discourse of the party is attached to the economy, the party that controls the Prime ministership receives the largest economic vote. The estimate for the PM dummy indicates that this party is disproportionately punished for bad economic outcomes. The evidence suggests that voters are inclined to treat the PM party as the economic policy agenda setter which is consistent with our theoretical expectations.

It is the case, though, that the Finance Minister party is also singled out as responsible for economic outcomes. On average, controlling the FM significantly increases the economic vote on top of what a party receives as a result of occupying the Prime ministership. Although clearly smaller than for the PM (around a third the magnitude), the estimate is negative and reaches conventional levels of statistical significance. Holding the PM provides voters with a strong signal as to who sets the agenda for economic policy decisions, while occupying the finance portfolio sends a similar, although possibly weaker, signal.

## The effect of compartmentalization

The results presented in Table 2 do not take into account the coalition decision making context. Our earlier conjecture is that features of coalition government decision making can affect responsibility attribution. We claim that the FM party effect varies by these coalition features. Accordingly, we add the *Compartmentalization* variable to the OLS model above. First, on average, and contrary to our expectations, we find that the members of a compartmentalized coalition (where it is clear which issues are going to be managed by which party) receive an economic vote that is similar to that received by the members of more “diffuse” coalitions. However, our conjecture goes further than this “on average” correlation.

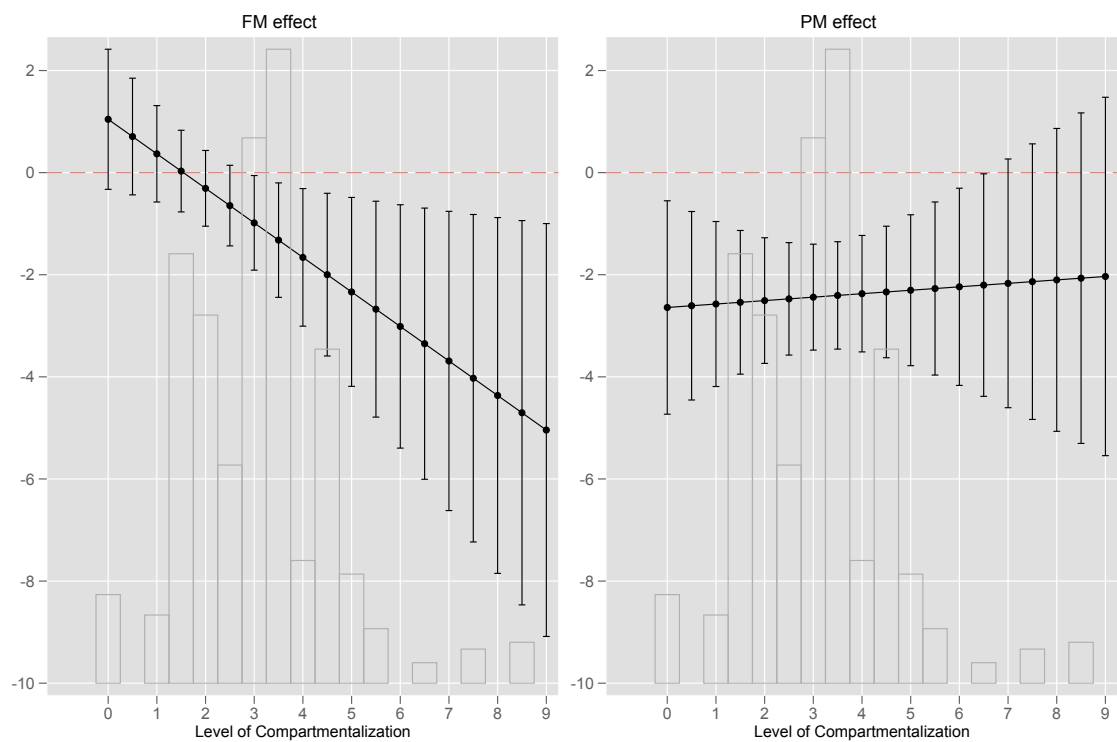
Our claim is that compartmentalization *conditions* the extent to which coalition parties are held responsible for economic outcomes. Accordingly, we explore whether the effects of controlling the PM and the FM are conditioned on compartmentalization. To accomplish this we include the variable *Compartmentalization* and its interaction with incumbent status, PM, FM, and the three-way interaction with PM\*FM to our baseline model above. Figure 2 shows the marginal effect of PM and FM roles in coalitions at different values of compartmentalization.<sup>10</sup> As the left-hand side plot shows, this specification suggests that in fact the FM party in certain contexts is seen as having proposal power over the economy. The marginal effect of occupying the finance portfolio ceases to be statistically significant for compartmentalization values below the median. The additional economic vote received by FM parties is essentially zero in a coalition in which agenda setting power is shared across coalition parties, i.e., a “diffuse” coalition. But as the agenda setting power in the cabinet becomes more compartmentalized, the economic vote for the FM party increases (becomes more negative).

Conversely, holding the Prime ministership leads to a larger economic vote irrespective of how agenda power is shared by coalition partners. However, as compartmentalization rises to high values (above 6), their economic vote falls to the point of being indistinguishable from

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<sup>10</sup>Where *PartyInGovernment* and *Coalition* are set to one.

Figure 2: Marginal Effect of FM and PM Role in Coalitions on Economic Vote at Different Values of Compartmentalization for Coalition Incumbent Parties (95% CI)



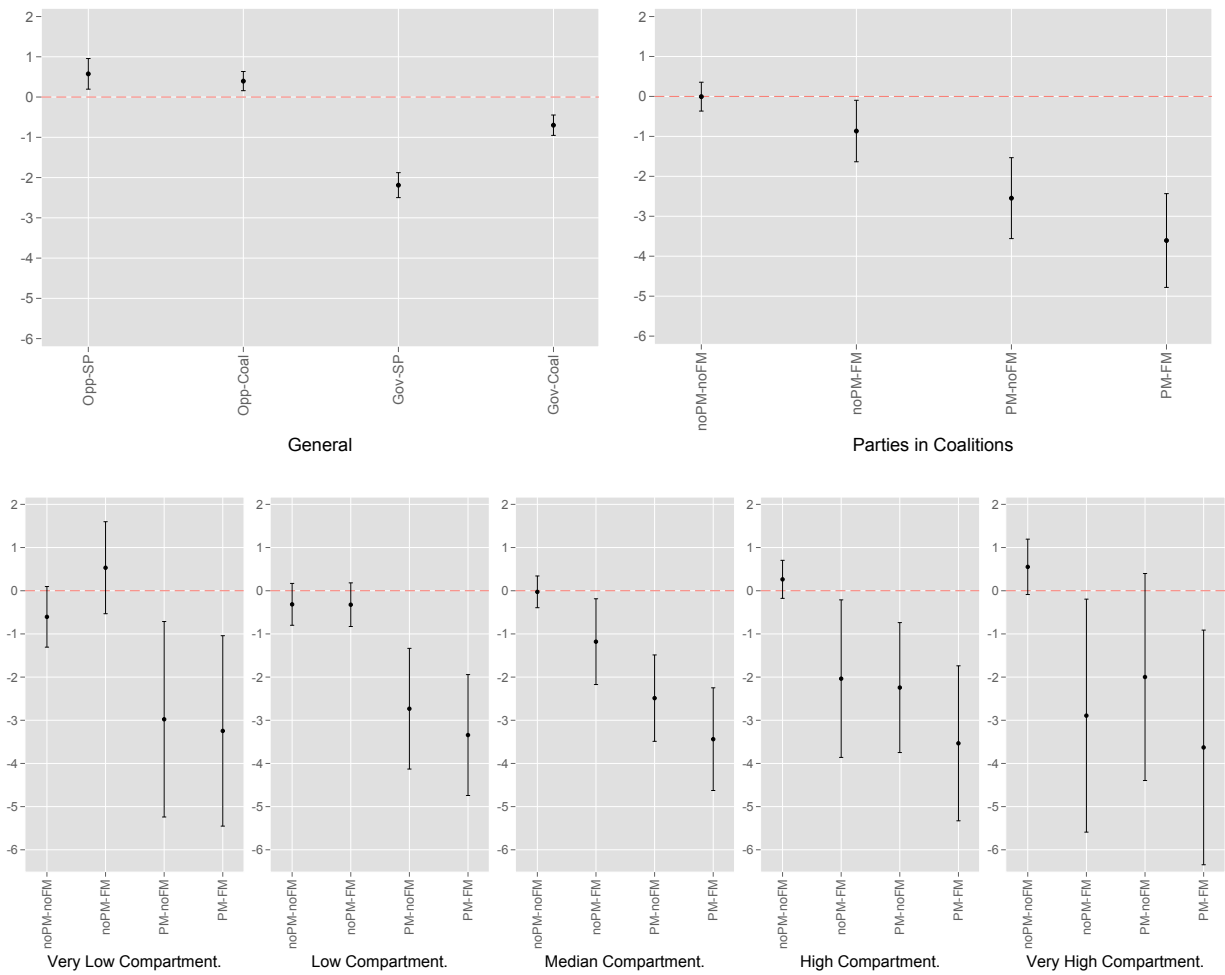
zero. At this high level of compartmentalization the perception of agenda power over the economy seems to “transfer” from the PM to the FM. That is, in “diffuse” coalitions voters essentially blame the PM party for poor economic outcomes, while in compartmentalized coalitions voters cease to see the PM party as solely responsible and focus more attention on the FM party.

Figure 3 further illustrates the importance of agenda power heuristics by presenting predicted values rather than marginal effects. This essay proposes a novel view of voter reasoning in contexts where parties share responsibility for policy making. We focus on one policy concern that shapes vote choice – specifically, the economic vote. Does this novel agenda setting argument provide much added value? If we ignore the agenda setting context then we have the conventional assessment of the economic vote magnitude that is summarized in the first graph of Figure 3. Here we simply estimate the economic vote for incumbent and opposition parties in single-party versus coalition government contexts. Clearly parties that govern alone have a very large economic vote compared to those who share power in a coalition government (three times larger).

But our argument is that the relatively small coalition party economic vote masks considerable contextual variation in responsibility attribution. Our contention is that voters employ information and decision-making short-cuts in order to determine how to allocate responsibility amongst parties in a governing coalition. Once we incorporate the agenda setting heuristic into the vote utility function, we obtain a much richer characterization of the economic vote. The remaining frames of Figure 3 illustrate the extent to which the economic vote is conditioned on the agenda setting heuristic. A party’s agenda setting power is determined by the portfolios it controls and the cabinet’s decision making process.

The second frame illustrates the importance of portfolio control in coalitions. We see that, the largest economic vote is accorded to coalition “super-parties” that control both the Prime ministership and the Finance Ministry in the cabinet. Voters consider these parties responsible for the economy irrespective of the type of coalition. Moreover, the economic

Figure 3: Economic Vote by Type of Government and Role in Coalition (Predicted Values; 95% CI)



vote directed toward a coalition party that controls the PM (but not the FM), is at the very least equivalent to an incumbent party in a single-party government. At the other extreme are coalition parties that neither control the PM nor the FM. For these parties the economic vote is effectively zero. On the other hand, controlling the finance portfolio, by itself, attracts a certain level of economic voting. Although weaker than for the PM, it is certainly present. In short, there is ample variation in the economic vote for parties in coalitions that is obscured if coalition context is ignored.

The second row of frames in Figure 3 illustrates the importance of cabinet compartmentalization. It shows the predicted economic vote received by coalition incumbent parties that play different roles within the cabinet, under various coalition decision making contexts. Specifically, the five frames refer to different compartmentalization levels: two and one standard deviations below the median (very low and low, respectively), the median, and one and two standard deviations above the median (high and very high, respectively). When policy decision making in a cabinet is diffuse such that no single party has ownership for particular policy areas, responsibility attribution is focused on the PM party. The PM party has a large economic vote while the FM is completely relieved from responsibility over the economy by voters.

The third, fourth, and fifth frames in the bottom row illustrate how an increasing compartmentalization of cabinet decision making increases the economic vote of parties controlling the Finance Ministry. In the third frame where compartmentalization assumes moderate values, parties controlling the Finance Minister, but not controlling the Prime Ministership, see a quite dramatic increase in their economic vote. Finally, in the fourth and fifth graphs, where compartmentalization is high, controlling the FM or the PM appears to have similar implications for a party's economic vote. As a result, the economic vote for parties controlling the FM but not the PM is high, and similar to the economic vote for parties controlling the PM but not the FM. In fact, for very high values of compartmentalization – two standard deviations above the median – occupying the FM alone does lead to a substantially large

economic vote while it ceases to be statistically significant for a coalition party that controls the PM but not the FM. Clearly the agenda setting heuristic matters for vote choice and it is conditional on the compartmentalization of the cabinet.

Coalition governance style affects the heuristics voters deploy for holding incumbent parties responsible. When coalition parties equally share responsibility for policy areas voters tend to attribute responsibility for the state of the economy to the PM party. By contrast, in compartmentalized coalitions, where ownership for policy jurisdictions among parties can be singled out more easily, voters appear to see the coalition as more minister-led and perceive the minister in charge of the economy, i.e. the FM party, as equally, if not more, responsible for the economy than the PM party.

## **Robustness Checks**

Variation in our dependent variable could be the result of temporal, geographic, or institutional variation that may undermine the robustness of the main findings. The economy could be of increasing or decreasing importance over time in the vote utility function and this trend could be confounded with trends in compartmentalization. This could be either a general tendency or a country-specific one. Trends in compartmentalization may also be confounded with changes in coalition governance that result when the saliency of the economy in elections shifts in response to economic shocks in specific years. Another concern here is unaccounted for country-level heterogeneity. As long as there is sufficient within-country variation in compartmentalization, that provides us with the leverage necessary to identify the compartmentalization effect.

Table 3 presents the results of a series of robustness tests designed to address these issues. Models 2 to 6 take the random effects model summarized in Figure 2 and add a common time trend, country-specific time trends, year fixed effects, and country fixed effects in different combinations. The estimates refer to the marginal effect of occupying the Prime ministership and the finance portfolio at a low and high level of compartmentalization (one



Table 3: Robustness Check: Marginal Effect of PM and FM Roles in Coalitions with Different Model Specifications

	(1)	(2)	(3)	(4)	(5)	(6)
PM (low compartment.)	-2.52*** (0.67)	-2.46*** (0.65)	-2.34*** (0.69)	-2.46*** (0.66)	-2.40*** (0.69)	-2.37*** (0.70)
FM (low compartment.)	-0.13 (0.38)	-0.11 (0.39)	-0.021 (0.40)	-0.10 (0.39)	-0.037 (0.40)	-0.039 (0.40)
PM (high compartment.)	-2.33*** (0.68)	-2.32*** (0.68)	-2.25*** (0.71)	-2.20*** (0.68)	-2.29*** (0.71)	-2.11*** (0.73)
FM (high compartment.)	-2.09** (0.84)	-2.09** (0.84)	-2.10** (0.87)	-2.11** (0.86)	-2.07** (0.88)	-2.05** (0.89)
Common Time Trend	✗	✓	✗	✗	✗	✗
Country Time Trend	✗	✗	✓	✗	✗	✗
Year FE	✗	✗	✗	✓	✗	✓
Country FE	✗	✗	✗	✗	✓	✓
N	570	570	570	570	570	570

Standard errors in parentheses

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

standard deviation below and above the median), which captures the influence of the coalition decision making context on the agenda setting heuristics we are interested in. A comparison of these models indicates only small changes in the results. In particular, note that the estimate for the FM is always negative and statistically significant at a 95% confidence level. This confirms that the higher cabinet compartmentalization results in a larger economic vote for the FM party.

Our main findings are therefore robust to a variety of alternative model specifications; the effects are not dependent on differences between countries driving the results nor are confounded with temporal trends or specific shocks. We can confidently say that the agenda setting heuristic is relevant for voters' assessment of the economy in their vote choice when there is more than one party in the driver's seat and that is conditioned, as expected, on the compartmentalization of the coalition cabinet decision making process.

## 5 Conclusions

Comparative politics has made significant advances on a variety of dimensions to our understanding of coalition governance, both about how coalitions governments function but also about how voters respond to the coalition actors and, in particular, how they hold parties accountable for outcomes. This essay builds on these rich insights. We focus specifically on the coalition-directed economic vote: how voters hold coalition parties accountable for economic outcomes. Our contribution to this growing literature is to demonstrate how voters deploy an agenda setting heuristic in order to attribute responsibility in coalition contexts.

A challenge in the literature on coalition-directed voting is identifying those ecologically rational heuristics deployed by the average voter (Fortunato, Stevenson and Vonnahme, 2016). Duch, Przepiorka and Stevenson (2015) provide experimental evidence suggesting that agenda power is an important heuristic for responsibility attribution. The decision maker in a collective decision making entity with proposal power tends to attract a disproportionate amount of the blame or reward from those who are materially affected by these decisions.

The interesting puzzle is determining whether there are coalition contexts in which this agenda setting heuristic is useful for, and hence deployed by, the average voter. First, we provide empirical support for the conjecture that voters accord agenda setting power to specific coalition parties. The Duch, Przepiorka and Stevenson’s (2015) experimental results suggest that a party’s economic vote should be shaped by its ability to control the agenda for economic outcomes. Our results suggest that the PM party is certainly perceived as having agenda power, but voters also perceive the party in charge of the Finance Ministry as an economic policy agenda setter.

Our second contribution is novel in that it explores how the coalition context can condition responsibility attribution. We argue that there are features of coalitions’ decision making that can either exaggerate or mute responsibility attribution accorded to the agenda setters. Building on Falcó-Gimeno (2014) we argue that cabinet decision making can be structured in a compartmentalized fashion where coalition parties take issue ownership for

particular policy areas. In this case we conjecture that the proposal power that accrues to individual ministers is enhanced – it is more visibility associated with a particular party – and we expect to see the FM party receiving a relatively large economic vote. By contrast, in the case where coalition decision making is collective and parties have an overlapping association with policy areas, the agenda setting power heuristic attached to the FM role is reduced which results in a smaller economic vote for this party.

Our empirical results confirm the initial conjecture. In all coalitions, irrespective of the particular context, the Prime Ministerial party receives the largest economic vote, especially when it simultaneously occupies the Finance ministry. Controlling the finance portfolio by itself, though, does also increase the economic vote, which endorses the idea that agenda setting power over economic issues is shared between different parties in coalition governments. Moreover, cabinet contexts in which responsibility is compartmentalized, provide voters with an even clearer signal regarding the agenda power of the party controlling the Finance Ministry. Accordingly, we find that in compartmentalized coalitions Finance Minister parties that do not control the PM have a high economic vote. In fact, it appears that as compartmentalization rises, voters' perception of the Finance Minister party's economic responsibility increases even at the expense of the Prime Minister party's responsibility.

## References

- Anderson, Christopher J. 1995. “The dynamics of public support for coalition governments.” *Comparative Political Studies* 28(3):350–383.
- Anderson, Christopher J. 2000. “Economic voting and political context: A comparative perspective.” *Electoral Studies* 19(2-3):151–170.
- Angelova, Mariyana, Thomas König and Sven-Oliver Proksch. 2016. “Responsibility attribution in coalition governments: Evidence from Germany.” *Electoral Studies* 43:133–149.
- Bäck, Hanna, Marc Debus and Patrick Dumont. 2011. “Who gets what in coalition governments? Predictors of portfolio allocation in parliamentary democracies.” *European Journal of Political Research* 50(4):441–478.
- Bargsted, Matias A. and Orit Kedar. 2009. “Coalition-Targeted Duvergerian Voting: How Expectations Affect Voter Choice under Proportional Representation.” *American Journal of Political Science* 53(2):307–323.
- Bowler, Shaun, Thomas Gschwend and Indridi H. Indridason. 2016. “Coalition Policy Perceptions.” Manuscript.
- Cox, Gary W and Eric Magar. 1999. “How much is majority status in the US Congress worth?” *American Political Science Review* 93:299–310.
- De Winter, Lieven. 2002. Parties and Government Formation, Portfolio Allocation, and Policy Definition. In *Political parties in the new Europe: Political and analytical challenges*, ed. Kurt R. Luther and Ferdinand Müller-Rommel. New York, NY: Oxford University Press.
- Döring, Holger and Philip Manow. 2011. “Parliament and government composition database (ParlGov).” An infrastructure for empirical information on par-

- ties, elections and governments in modern democracies. Development Version. URL:<http://dvn.eudo.eu/dvn/dv/parlgov> [last accessed February 19, 2016].
- Duch, Raymond M., Jeff May and David A. Armstrong. 2010. "Coalition-directed voting in multiparty democracies." *American Political Science Review* 104(04):698–719.
- Duch, Raymond M. and Randolph T. Stevenson. 2008. *The economic vote: How political and economic institutions condition election results*. Cambridge: Cambridge University Press.
- Duch, Raymond and Randy Stevenson. 2013. "Voter Perceptions of Agenda Power and Attribution of Responsibility for Economic Performance." *Electoral Studies* (32):512–516.
- Duch, Raymond, Wojtek Przepiorka and Randolph T. Stevenson. 2015. "Responsibility attribution for collective decision makers." *American Journal of Political Science* 59(2):372–389.
- Falcó-Gimeno, Albert. 2011. Coalition Governance: Causes and Consequences PhD thesis Universitat Pompeu Fabra.
- Falcó-Gimeno, Albert. 2014. "The use of control mechanisms in coalition governments: The role of preference tangentiality and repeated interactions." *Party Politics* 20(3):341–356.
- Fortunato, David. 2017. "The electoral implications of coalition policy making." *British Journal of Political Science* forthcoming.
- Fortunato, David and Randolph T. Stevenson. 2013. "Perceptions of Partisan Ideologies: The Effect of Coalition Participation." *American Journal of Political Science* 57:459–477.
- Fortunato, David, Randolph T. Stevenson and Greg Vonnahme. 2016. "Context and Political Knowledge: Explaining Cross-National Variation in Partisan Left-Right Knowledge." *Journal of Politics* 78(4):1211–1228.

- Goldstein, Daniel G. and Gerd Gigerenzer. 2002. "Models of Ecological Rationality: The Recognition Heuristic." *Psychological Review* 109(1):75–90.
- Jochimsen, Beate and Sebastian Thomasius. 2014. "The perfect finance minister: Whom to appoint as finance minister to balance the budget." *European Journal of Political Economy* 34:390–408.
- Kedar, Orit. 2005. "When Moderate Voters Prefer Extreme Parties: Policy Balancing in Parliamentary Elections." *American Political Science Review* 99(2):185–199.
- King, Gary, Michael Tomz and Jason Wittenberg. 2000. "Making the Most of Statistical Analyses: Improving Interpretation and Presentation." *American Journal of Political Science* 44:347–61.
- Laver, Michael J. and Kenneth A. Shepsle. 1996. *Making and breaking governments: Cabinets and legislatures in parliamentary democracies*. Cambridge: Cambridge University Press.
- Laver, Michael and Kenneth A Shepsle. 1999a. "Government formation and survival: A rejoinder to Warwick's reply." *British Journal of Political Science* 29(2):412–415.
- Laver, Michael and Kenneth A Shepsle. 1999b. "Understanding government survival: empirical exploration or analytical models?" *British Journal of Political Science* 29(2):395–401.
- Luebbert, Gregory M. 1986. *Comparative democracy: Policymaking and governing coalitions in Europe and Israel*. New York, NY: Columbia University Press.
- Martin, Lanny W. and Georg Vanberg. 2011. *Parliaments and Coalitions: The Role of Legislative Institutions in Multiparty Governance*. Oxford University Press.
- Martin, Lanny W. and Georg Vanberg. 2014. "Parties and Policymaking in Multiparty Governments: The Legislative Median, Ministerial Autonomy, and the Coalition Compromise." *American Journal of Political Science* 58(4):979–996.
- URL:** <http://dx.doi.org/10.1111/ajps.12099>

- Narud, Hanne Marthe. 1996. "Party Policies and Government Accountability." *Party Politics* 2(4):479–506.
- Seki, Katsunori and Laron K. Williams. 2014. "Updating the Party Government Data Set." *Electoral Studies* 34(2):270–279.
- The Comparative Study of Electoral Systems. 2017. "The Comparative Study of Electoral Systems CSES Module 4 Fourth Advance Release [dataset]." The Comparative Study of Electoral Systems [producer]. [www.cses.org](http://www.cses.org) [distributor].
- Volgens, Andrea, Onawa Lacewell, Pola Lehmann, Sven Regel, Henrike Schultze and Annika Werner. 2014. *The Manifesto Data Collection. Manifesto Project (MRG/CMP/MARPOR). Version 2014b*. Berlin: Wissenschaftszentrum Berlin für Sozialforschung (WZB) <https://manifestoproject.wzb.eu/> [accessed February 20, 2016].
- Warwick, Paul V. 1999a. "Getting the assumptions right: a reply to Laver and Shepsle." *British Journal of Political Science* 29(2):402–412.
- Warwick, Paul V. 1999b. "Ministerial autonomy or ministerial accommodation? Contested bases of government survival in parliamentary democracies." *British Journal of Political Science* 29(2):369–394.
- Weingast, Barry R. and William J. Marshall. 1988. "The industrial organization of Congress; or, why legislatures, like firms, are not organized as markets." *The Journal of Political Economy* 96:132–163.