

# **Performance Pressure: Patterns of Partisanship and the Economic Vote<sup>\*</sup>**

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## **ABSTRACT**

Numerous studies have demonstrated a weakening identification of voters with political parties in Western Europe over the last three decades. We argue that the growing proportion of voters with weak or no party affinities has strong implications for economic voting in systems with high clarity of government responsibility. When the proportion of voters with partisan affinities is low, the effect of economic performance on election outcomes is strong; when partisans proliferate, economic conditions matter less. Employing Eurobarometer data for eight European countries from 1976 to 1992, we demonstrate this inverse association between partisanship and the economic vote. This finding implies a growing effect for the objective economy on the vote in Europe but a declining effect in the increasingly partisan United States. It also explains two puzzles in the economic voting and electoral forecasting literatures. First, weak results in aggregate level cross-national studies of economic voting may be attributable to characteristics of the electorate, not just to clarity of responsibility of the government. Second, the over-prediction of incumbent vote share in recent U.S. election forecasts may stem from rising partisanship.

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That economic voting varies across countries is well-known. Since Powell and Whitten (1993) first demonstrated the importance of political context, national differences in economic voting have predominantly been explained by political and institutional features that obscure or clarify government responsibility for economic outcomes. Yet even when accounting for clarity, considerable variation remains in the responsiveness of national electorates to economic aggregates (Chappel and Veiga 2000). We propose a simple explanation: that the effect of the economy on support for the government is not only conditioned by governmental responsibility, but also by differences among electorates themselves.

Specifically, we propose that the degree of partisanship within an electorate moderates the influence of the economy on voting. Small performance shocks that are unlikely to alter the party preference of stronger partisans often suffice to change the dichotomous vote choice of more fickle unaffiliated voters.<sup>2</sup> We extend this logic to assert that electorates that host a lower proportion of partisans – individuals with an affinity toward a political party – respond more to the economy. The effect of the economy on the vote, in short, should vary in inverse association to the partisanship of the electorate. In countries where fewer voters are closely attached to political parties, the performance of the objective economy should matter more; where partisan identification remains stronger, the economy should matter less.

Of course, the partisanship of electorates does not only vary across countries but across time. Little doubt exists that most western European electorates have become less attached to parties over the last three decades and, in certain countries, since considerably earlier (see, for example, Dalton 1996). Dalton and Wattenberg (2000, p. 26) prominently document the substantial drop in partisan identification between 1976 and 1992 in western Europe, with most of the trend resulting from the defection of weak party sympathizers while the proportion of their more

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<sup>2</sup> Note that our argument is complemented by, but in no way depends on, the literature on partisan perception of political events. Partisan voters perceive events more positively when their party is power and, consequently, underestimate the performance of the economy when their co-partisans are in opposition (cf. Campbell et al. 1960, p. 133; Wlezien, Franklin and Twiggs 1997; Bartels 2002; Zaller 2004).

strongly identifying former co-partisans in the electorate remained largely unchanged. Schmitt (2002 and 2003) demonstrates a similar pattern continuing through the 1990s.

Debate about the consequences of partisan retrenchment has been more varied. Scholars have connected partisan dealignment to effects ranging from greater volatility in vote shares, to increasingly personality-based politics, to increased split-ticket voting, to an increase in effective number of parties (Dalton, McAllister, and Wattenberg 2000). To this list we add an important yet previously ignored item: greater influence of the economy on election outcomes. At least since Converse and Dupeaux (1962), students of politics have associated strong partisan attachments with a dampened effect of short-term shocks on the vote. We apply this observation to a fundamental area of politics – how the voters hold governments accountable for economic performance – and connect it to observed trends in European partisan identification. If partisanship does inure the electorate to short-term shocks, partisan decline implies greater responsiveness to shocks, economic or otherwise.

Indeed, although we test only for an increase in the effect of economic variables on the vote, the logic of our argument obtains for any politically salient valence measure of government performance, be it lower taxes, greater benefits, lower crime, or better schools. At its most general – and simple – our argument posits that declining partisanship implies a greater weight for government performance in the vote. Conversely, where partisanship waxes, such as in the United States (Bartels 2000), the influence of performance on the vote should wane. The over-prediction of government vote share in recent years—2000 and 2004—by U.S. election forecasting models may reflect a failure to account for a declining effect of the economy on the vote in polarizing America.

Among other consequences, rising accountability for governments at the polls in certain European countries, and the possible opposite in the United States, imply changes in government responsiveness and policy goals. Where partisanship is lower and economic accountability

higher, governments could adapt through greater responsiveness on valence, rather than partisan, issues. Consequences could include the expansion of non-ideological policies aimed at greater efficiency in public goods provision or greater monetary and macroeconomic stability – at the expense of bold, ideologically appealing policies – much like we have seen in the United Kingdom. Interestingly, such policy moderation would imply that winning or losing elections (Anderson, et al, 2005) matters less to voters.

We organize the remainder of the paper in three parts. The following section reviews the relationship between partisanship, economic performance, and incumbent government support. We demonstrate, in a simple model of probabilistic voting, that decline in partisan attachment increases the effect of voter welfare on incumbent reelection probabilities. Section Two then turns to establishing the empirical variation in partisanship across countries – and perhaps more interestingly, over time – on which our argument rests. We test our hypothesis on semi-annual Eurobarometer vote intent data for eight European countries – Belgium, Denmark, France, Germany, Ireland, Italy, the Netherlands, and Great Britain – from 1976 to 1992, the last year for which we have complete data.<sup>3</sup> Panel analysis of aggregate data reveals a strong and robust increase in the effect of the economy on pro-government vote intent as partisanship has declined over time. Given sufficient clarity of responsibility, each one-point decrease in mean partisanship, based on a four-point partisan attachment scale, increases the effect of the economy on the pro-government vote by 6.3 percentage points. Finally, Section Three discusses the implications of our findings and concludes.

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<sup>3</sup> Eurobarometer surveys dropped party identification questions after 1994; our measure of clarity of responsibility, calculated by Nadeau, Niemi, and Yoshinaka (2002), ends in 1992. As figures below demonstrate, this period nevertheless captures large decreases in party identification.

## *Theory*

The economics of elections is one of the most studied relationships in political science (Lewis-Beck and Stegmaier 2000). That the economy matters is now almost a truism, but it is not always true. Extant research provides important coordinates, especially about how the economy matters for election outcomes. In general, we know the following:

- Performance matters more than policy per se, as people tend to reward or punish the incumbent party for economic conditions (e.g., Hibbs 1987; Lewis-Beck 1988; Alesina, et al. 1993).
- National-level conditions matter more than personal ones (e.g., Kinder and Kiewiet 1981; Kramer 1983; Lewis-Beck and Stegmaier 2000).
- Short-run economic change matters more than long-term economic levels (e.g., Lewis-Beck 1988; Alesina, et al. 1993; Campbell and Garand 2000)

We also know that economic effects on election outcomes are not universal.<sup>4</sup> Although there is strong support from studies of the US, France, the UK, and also Canada, things are less clear in other countries. Indeed, Paldam's (1991) analysis of almost 200 elections in 17 countries reveals only minor economic effects—either statistically insignificant or of trivial size. Given the mounting evidence demonstrating a strong, significant economic impact in individual countries, this result was striking. The contradictory finding served as a puzzle that motivated other work. Work by Powell and Whitten's (1993), the first and most influential, showed that the political context matters, especially those structural differences – such as voting cohesion of governing parties, strong committee systems that empower the opposition, bicameralism, coalition government, and minority government status – that lead to varying “clarity of responsibility” for governments. Where clarity of responsibility prevails, economic factors

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<sup>4</sup> Of course, the foregoing are general statements and conceal the rich complexity of the literature, which reveals many other things, e.g., the importance of performance reputations, which is partly about previous successes and failures (Sanders, 1996).

influence the incumbent vote; where responsibility is not clear, economics did not matter.

Whitten and Palmer (1999) and others, e.g., Nadeau et al. (2002) and Samuels (2004), have extended the analysis and offered further evidence of context's mediating effects.

Analyses of individual vote choice show much more consistent support for economic effects, and a role for contextual influences (again see Lewis-Beck and Stegmaier 2000). The problem in this research is establishing the causal direction at the individual level, that is, given that virtually every study relies on cross-sectional analysis of economic perceptions. Do the differences in economic perceptions at a particular point in time cause people to vote for or against the government? Or do judgments of the government, for cognitive or more purely "psychological" reasons, produce corresponding economic perceptions? There is growing evidence (Wlezien, Franklin and Twiggs 1997; Bartels 2002; Anderson, Mendes, and Tverdova 2004; Evans and Andersen N.d.) that politics powerfully structures our economic vision. This means that the individual-level evidence substantially overstates the effect of economics on the vote. Indeed, given the endogeneity of economic perceptions to political judgments, it is not clear what we learn from those studies about the effects of the economy on vote choice. It ultimately may be that the effect of the economy is an intercept at each point in time (Kramer 1983).<sup>5</sup>

As we have seen from research on election outcomes, political context accounts for much, but not all, of the differences in economic effects across countries and time. Curiously, while the empirical voting literature has focused on clarity of responsibility and political context, it has given little attention to results in a substantively similar but methodologically distinct literature. Since the 1970s, much formal literature on voting has represented voting decisions as a function of the payoffs to voters from candidates' policies and a stochastic shock term. Although initially introduced as an artifact to circumvent mathematical difficulties in deterministic models, the

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<sup>5</sup> To be absolutely clear, the economy at a particular point in time may affect people equally, leading all voters to become more likely (or less likely) to support the incumbent government.

stochastic term in probabilistic voting models has come to be understood as representing partisan bias in favor of a particular party (see, for example, Banks and Duggan 2003). Thus a direct implication of probabilistic voting models, as we show below, is that payoffs – increases in welfare from government performance, transfers, or public goods provision – are conditioned by partisanship (see, Persson and Tabellini 2000, for a concise overview).

We recognize this discrepancy between the formal and empirical voting literatures and accordingly hypothesize that partisan bias, not only political context, may mediate the effect of the economy on the vote. Additionally, we reveal that the micro-level influence of the economy (or party) on electoral preferences need not change as a result of shifting partisanship, though this is possible. Rather, as our model demonstrates, changing variance in partisan identification alone is sufficient.

### *The Model*

Consider how partisanship affects the strength of policy on a government's re-election probabilities in a conventional probabilistic voting model (Persson and Tabellini 2000; Coughlin & Nitzen 1981; Ledyard 1984; Hinich 1977). This is an especially useful choice of voting model because it introduces a term for a random variable, understood as partisan bias, to the conventional welfare maximization from candidates' policies. Suppose that voters choose between two parties, the incumbent, I, and challenger, C. Each voter has a positive or negative bias toward the challenger, C, the degree of which,  $\sigma$ , is distributed uniformly over  $[-1/(2\phi), 1/(2\phi)]$ ;<sup>6</sup> the aggregate bias in the electorate toward C is captured by  $\delta \sim U[-1/(2\psi), 1/(2\psi)]$ ; and in choosing a candidate, voters weigh their expected utility for the policies of candidate I,  $w(g^I)$  against those proposed by his challenger  $w(g^C)$  and overall bias. The swing voter is thus located by

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<sup>6</sup> Note that a uniform distribution is assumed only to make the math more tractable, and the implications hold for other distributions, including the Normal distribution.

$$\sigma_s = w(g^I) - w(g^C) - \delta. \quad (1)$$

The incumbent party captures all voters to their side of the swing voter giving them a vote share of

$$\pi^I = \varphi(\sigma_s + 1/(2\varphi)) \quad (2)$$

and probability of winning

$$Pr^I = Pr(\pi^I > 1/2). \quad (3)$$

Re-expressing  $\pi$  yields

$$Pr^I = Pr[\varphi(\sigma + 1/(2\varphi)) > 1/2] \quad (3.1)$$

or, in terms of  $\delta$

$$Pr^I = Pr[\varphi(w(g^I) - w(g^C) - \delta + 1/(2\varphi)) > 1/2]. \quad (3.2)$$

With a little algebra, we can then see that the incumbent party's probability of winning is the probability that the net expected utility of electing them exceeds the bias toward the challenger:

$$Pr^I = Pr[(w(g^I) - w(g^C)) > \delta]. \quad (3.3)$$

To understand the probability of net utility exceeding bias, however, we must return to the  $\delta$  distribution. Noting  $w(g^I) - w(g^C) = x$  as a critical value that must be exceeded implies that the probability of  $x > \delta$  is the probability of drawing a  $\delta$  less than  $x$ . Thus,

$$Pr^I = \psi[x + 1/(2\psi)] \quad (3.4)$$

or

$$Pr^I = \psi[(w(g^I) - w(g^C)) + 1/(2\psi)] \quad (3.5)$$

which simplifies to

$$Pr^I = \psi[(w(g^I) - w(g^C))] + 1/2. \quad (3.6)$$

Thus,  $\partial Pr^I / \partial w(g^I) = \psi$ . A lower variance in partisan bias, i.e., higher density  $\psi$ , *increases*, by definition, the marginal effect of policy  $w(g^I)$  on reelection probability. As partisanship decreases, policies that affect voter utility have a greater effect on election probability.

### *The Intuition*

The intuition behind this model and our theory is disarmingly simple and best conveyed graphically. At the simplest level, we are arguing that a decline in the proportion of voters with partisan affinities implies more people in the middle of a partisan distribution which, in turn, translates into a bigger return from a given shift in performance.<sup>7,8</sup> Figure 1, which continues with the same notation as above, shows two such hypothetical distributions, the first with density  $\varphi_1$ , the second with density  $\varphi_2$ . We use a uniform distribution for transparency and mathematical tractability but the comparative statics obviously hold for any unimodal symmetric distribution.<sup>9</sup>

Suppose, like in the model, that voters fall in a uniform distribution,  $\sigma$ , from most hostile,  $-1/(2\varphi)$ , to the most supportive,  $1/(2\varphi)$ , of the incumbent party, with uniform density  $\varphi_1$ . This is shown in the lower distribution in the figure. If we assume for the sake of simplicity that the parties are equally popular on partisan support, net partisan bias in the electorate,  $\delta$ , is set to zero. Having no experience with the challenger party, voters set their expectation for it at the mean performance, which we center at  $w(g^c) = 0$ , but judge the incumbent party on its performance in the previous period,  $w(g^I)$ . Under these assumptions, which add to clarity but are not necessary for the results, the position of the swing voter, first established in Eq. 1, simply becomes

$$\sigma_s = w(g^I). \quad (4)$$

Given average performance, the swing voter falls at the zero point in Figure 1, all voters to her left vote for the incumbent party, and the parties tie. If the incumbent party provides above

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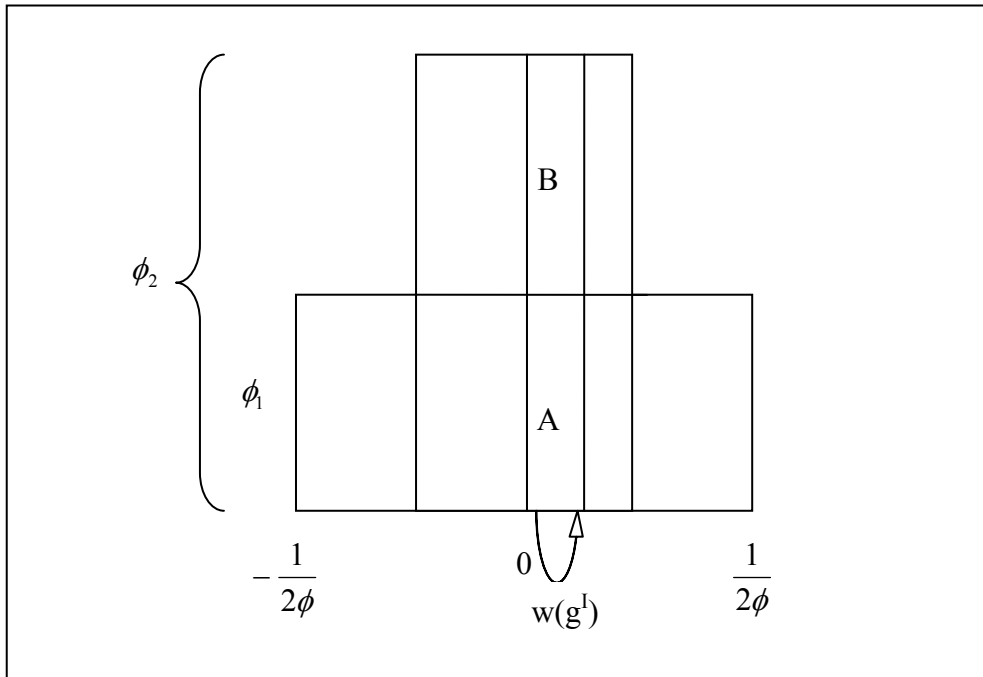
<sup>7</sup> Note that individual-level arguments about how distorted perceptions of the objective economy may lessen as individual partisanship wanes (CITE to follow) are complementary but redundant to our argument. We simply offer an argument about variance in partisan bias.

<sup>8</sup> For a discussion of additional consequences, see Wlezien and Erikson (2001).

<sup>9</sup> Results hold for mildly asymmetric distributions as well, so long as the 0-point is not so far to the left or right that increases in polarization actually increase the density at that point.

average public welfare,  $w(g^I)$  is positive, the swing voter shifts to the right, and the incumbent party gains an additional  $\phi_1\sigma_s$  voters, the area in the figure labeled as A.

Figure 1: Two Distributions of Partisan Preference



Now consider what an identical shift in government performance implies in a less partisan electorate. The second (taller) distribution in Figure 1 shows more voters clustered in the center of the distribution which accordingly forces up the density from  $\phi_1$  to  $\phi_2$ . A in identical shift in government performance,  $w(g^I)$ , now captures a larger area – that is, more voters – than before. In addition to voters in area A, the identical government performance also delivers the voters in area B. An identical increase in public welfare gains more votes in less partisan electorates than in more partisan electorates. Conversely, negative incumbent performance also loses more votes when voters are less polarized. Performance matters more in moderate electorates.

The difference in votes for the incumbent party in the moderate as opposed to the more polarized distribution is

$$B = \pi_2 - \pi_1 = \phi_2 \left( \sigma_s + \frac{1}{2\phi_2} \right) - \phi_1 \left( \sigma_s + \frac{1}{2\phi_1} \right). \quad (5)$$

Thus, the difference in gains in vote share from a greater than average provision of public welfare, which measures from the mean performance,  $w(g)=0$ , simplifies to

$$B = \phi_2 w(g^I) - \phi_1 w(g^I), \quad (5.1)$$

or just

$$B = w(g^I) [\phi_2 - \phi_1]. \quad (5.2)$$

When incumbent performance is above average,  $w(g^I) > 0$ , and partisanship decreases,  $\phi_2 - \phi_1 > 0$ , the incumbent party wins additional votes ( $B > 0$ ). When the electorate shifts toward greater partisanship,  $\phi_2 - \phi_1 < 0$ , however, the same positive performance delivers fewer votes ( $B < 0$ ). Finally, and intriguingly, incumbent parties that deliver sub-standard levels of public welfare,  $w(g^I) < 0$ , but sufficiently polarize their electorates,  $\phi_2 - \phi_1 < 0$ , can actually reduce their losses.

Our model focuses on a hypothetical two-party system. Multi-party systems are obviously more complex. Under a single-party majority government, things remain straightforward. When times are good, for instance, individuals become more likely to vote for the majority party, and it gains support from weak partisans of the two other parties. As public identification with the parties increases, however, the numbers of people at the margins decline, thus dampening the effect of economic change. Things are less straightforward under coalition governments. If responsibility for economic performance is shared among government parties the particular division should not matter with respect to the incumbent party vote. That is, people should be more likely to support either one or both of the government parties when times are good and less likely to do so when times are bad. This ensures behavioral accountability. Things are much less straightforward if a coalition member wholly escapes credit or blame for economic outcomes or even benefits (suffers) when outcomes are bad (good). For instance, it may be that voters think that economic performance happened despite the contrary efforts of one

of the government parties. This makes it possible that support for the out-party increases (decreases) among some voters when times are good (bad). It clearly will reduce the clarity of responsibility for economic outcomes and dampen the electoral effects of economic change, just as Powell and Whitten (1993) argue. In short, coalition governments exceed our assumptions. We have no comparative statics to predict how partisanship mediates economic effects on the vote under coalition governments. We simply note that the same attributes of coalition governments that extend beyond our model are those that decrease clarity of responsibility. Given previous research of on clarity we therefore expect little effect for partisan attachment on the economic vote under coalition governments.

### *Toward an Empirical Analysis*

Our theoretical model has clear empirical implications. The vote (0, 1) is a function of the economy, partisan attachment, and clarity of responsibility. Consider first the individual-level equation for the incumbent government vote ( $v$ ) across individuals  $i$  and time  $t$  in a particular country:

$$v_{it} = \text{Ln} \left( \frac{\text{pr}(\text{vote} = 1)}{\text{pr}(\text{vote} = 0)} \right) = a_i + B_1 E_t + B_2 ID_{it} + B_3 E_t * ID_{it} + \gamma Z_{it} + e_{it}, \quad (6)$$

where  $E$  designates the objective national economy,  $ID$  the level of attachment with any of the political parties, and  $Z_t$  the set of other influences on the vote. We may observe two possible effects. First, the effect of the economy may not depend on party attachment. If so, the coefficient  $B_1$  would be positive and the coefficient  $B_3$  would be indistinguishable from zero.<sup>10,11</sup> Second, the effect of the economy may depend on partisan bias, so that the economy has a bigger impact on vote choice when  $ID$  is low. This is our expectation. If correct, the coefficient  $B_3$ , the parameter on the interaction term, should be negative, indicating that the

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<sup>10</sup> As discussed, this is expected where clarity of responsibility is high; where clarity is not high, we expect that the effect would be smaller—in the extreme, it would be 0.

<sup>11</sup> Because the party composition of government changes, party attachment ( $ID$ ) should not have any real main effect on the vote.

effect of the economy declines as attachments solidify.  $B_1$ , conveniently, would estimate the effect of the economy on the log odds of supporting the government when ID equals zero.

Things are much the same in the aggregate, which sums dichotomous vote choice across individuals in a country. Consider the equation for incumbent party vote share ( $V$ ) in a particular country:

$$V_t = a + B_1 E_t + B_2 ID_t + B_3 E_t * ID_t + \gamma Z_t + e_t, \quad (7)$$

where  $E$  represents the objective national economy, exactly as before, and  $ID$  is an aggregate summary variable, e.g., the mean, attachment to political parties. Again,  $Z$  designates the set of other influences on the vote aggregated to the level of the electorate. As in the individual-level equation, we allow for the economy to have a main effect and/or an effect that depends on party identification. This equation summarizes the individual-level equation. If the economic vote depends on the level of party attachment, the coefficient  $B_3$  would be negative. If the partisan distribution does not matter, the coefficient would equal zero regardless of the main effect. Recall that these expectations apply to countries where clarity is high. Where this is not true, we expect that the effects will be attenuated. Now, let us see what the data reveal.

### ***Data and Method***

Most European countries conduct election studies in election years, which can be pooled into a common data set with irregular intervals between observations. Eurobarometer (EB) surveys, on the other hand, provide regular, semiannual readings of electoral preferences from responses to a “trial heat” question asking how the respondent would vote were a general election to be held tomorrow. Although not the same thing as the vote, the responses provide numerous and periodic readings of political judgments over time. The EB surveys also include a question gauging party attachment in all eight of our sample countries from 1976 to 1994. No other

source offers such data at regular intervals in multiple countries over so long a period of time.<sup>12</sup> With these data, combined with measures of economic performance and clarity of responsibility, we explicitly test our aggregate-level hypotheses. The lack of true panels of even modest length preclude any serious individual-level analysis unfortunately.

### *Trends in Party Attachment*

The Eurobarometer regularly asked respondents about their identification with political parties in semi-annual surveys up to 1994.<sup>13</sup> Tallying these responses confirms the decline in party attachments also noted by other scholars (see, for example, Dalton and Wattenberg 2002, Schmitt 2003). Figure 2 plots the mean response by country over half-yearly EB surveys,<sup>14</sup> using a 4-point scale increasing in strength of party identification. We present statistics for eight of the nine countries that participated in the surveys since 1976, namely, Belgium, Denmark, France, Ireland, Italy, Germany, the Netherlands, and the United Kingdom.<sup>15</sup> Identification with particular political parties has clearly declined over time in Europe, most notably since the early-1980s. Through the 1970s, identification actually tended to increase. Since that time, however, the identification with parties has declined in all countries, especially – as the individual country figures in Appendix 1 show more clearly – in Italy and Ireland.

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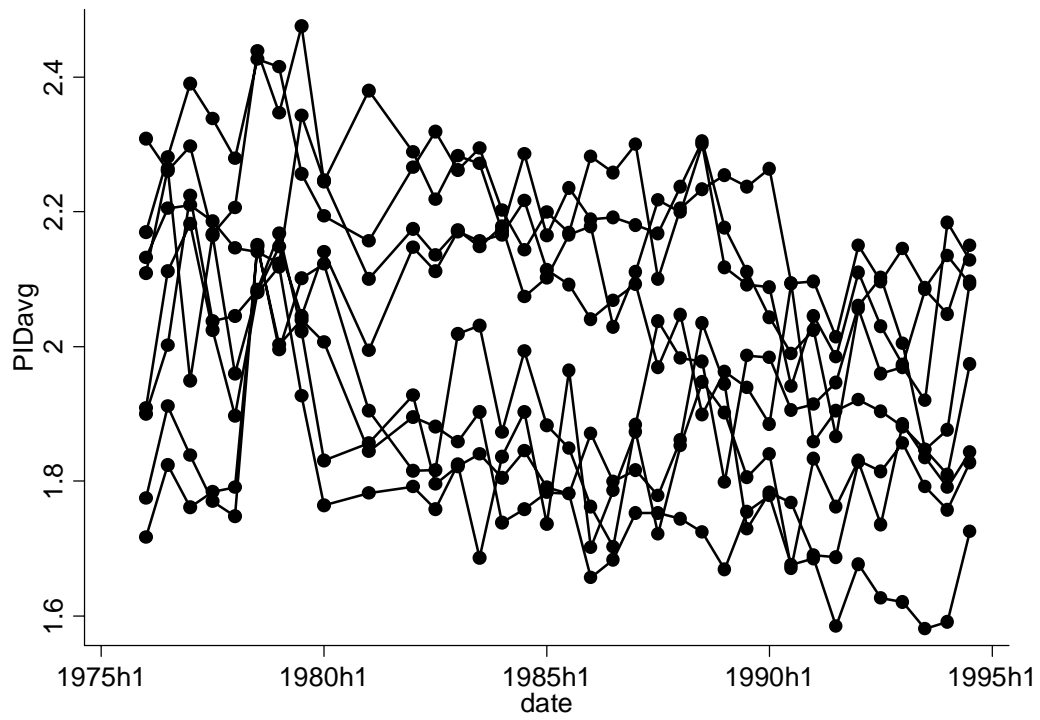
<sup>12</sup> We applaud the authors of the Mannheim Eurobarometer Trend File, 1970-1999, that combine individual country Eurobarometers into a single resource. The data are available at <http://webapp.icpsr.umich.edu/cocoon/ICPSR-STUDY/03384.xml>.

<sup>13</sup> Specifically, respondents were asked: “Do you consider yourself to be close to any particular party? <If yes> Do you feel yourself to be very close to this party, fairly close or merely a sympathizer?” We recoded these responses so that the response number increases in party attachment: (1) “close to no particular party”, (2) “merely a sympathizer”, (3) “fairly close”, and (4) “very close”.

<sup>14</sup> Where more than two EBs existed in a year, we chose the two including the most relevant survey questions. Also note that EB surveys vary in their timing with the “spring” survey, for example, sometimes coming as late as June or early as February. Most often, however, they occurred in or near April.

<sup>15</sup> We exclude Luxembourg for which we have no clarity of responsibility data.

**Figure 2: Mean Partisan Identification over Time**



**Figure 3: Percentage of Respondents “Close to No Particular Party”**

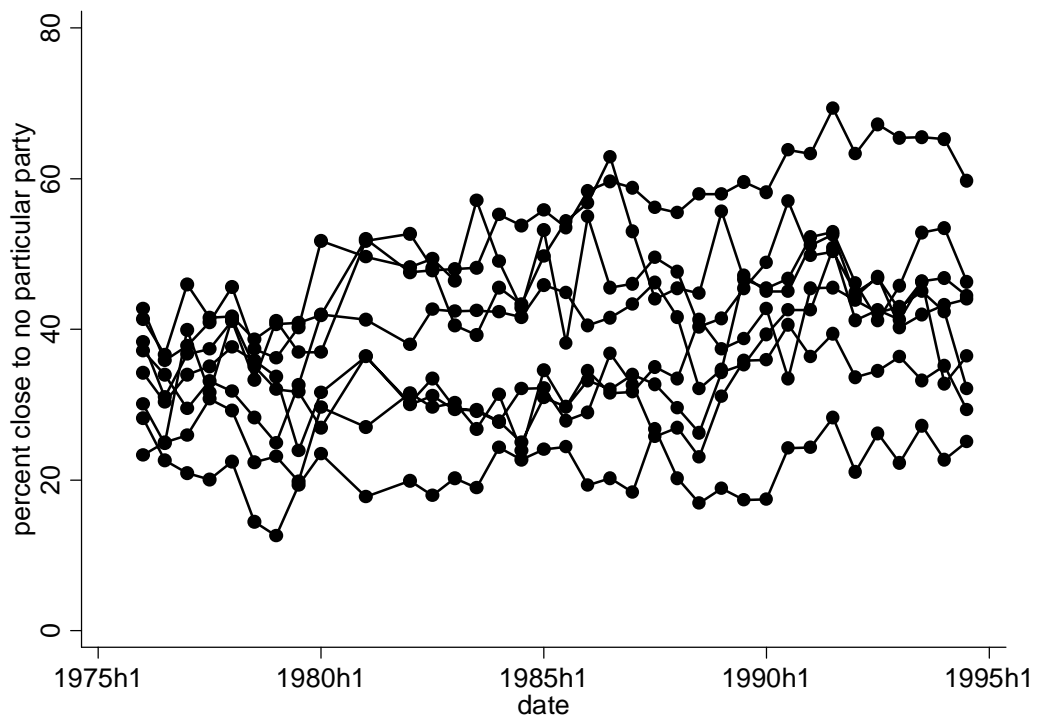


Figure 3 plots the percentages of respondents asserting that they were “close to no particular party.” Here we see an even more stark change over time. In the late-1970s, about 30 percent of respondents gave the response but by 1994 the number was over 40 percent. The lesson is clear: attachment with party has declined. This already is well-known; Its consequences for economic voting are not.

### *An Analysis of the Vote*

Our empirical analysis follows equation 7 above. The dependent variable is the share of the “vote” for the incumbent government party or parties in the biannual Eurobarometer trial-heat polls for each of the eight countries. The independent variables include measures of economic performance, party attachment, and other control variables. The primary measure of economic performance is the half-yearly percentage change in real GDP during each half-year in each country, using data drawn from the Organization for Economic Cooperation and Development (OECD) and the World Bank.<sup>16</sup> We have no priors about the main GDP effect in the presence of an interaction effect, as this represents the effect of real output growth when mean party identification equals zero, and out of sample extrapolation. In order to match earlier cross-sectional time-series studies that use objective economy, we also include measures of mean unemployment and the percentage change in the consumer price index (inflation) in each country and half-year, using OECD and IMF data.<sup>17</sup> If these indicators matter, we should observe coefficients that are less than zero, where voters punish government parties when economic misery is high.

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<sup>16</sup> Where quarterly GDP data is available these have been used to calculate the growth rate, where growth during the first half-year is from the 4<sup>th</sup> quarter of the previous year through the 2<sup>nd</sup> quarter of the current year and growth during the second half-year is from the 2<sup>nd</sup> quarter to the 4<sup>th</sup> quarter. The source for quarterly GDP data is the OECD Main Economic Indicators (CMPGDP.VIXOBSA Units: 2000=100, Power: -2) calculated as a volume index. For some years and especially in certain countries—Denmark, Germany, and Ireland—quarterly data were not available, and so annual data was used. In these cases, the percentage change was calculated and equal changes imputed for the two halves of the year. The source for annual data is the World Bank World Development Indicators.

<sup>17</sup> Specifically, unemployment data are from OECD Quarterly Labor Force Statistics (various years), seasonally adjusted. CPI figures are from the IMF’s International Financial Statistics.

Party attachment is initially measured as the mean identification score depicted in Figure 2. This is a full information measure, in that it takes into account all responses to the 4-point survey item. In follow-up analyses, as you will see, we also measure attachment using the percentage of non-partisans from Figure 3. As stated above, theory provides no priors about the main effect of party attachment on the vote in the absence indicators of government partisanship. We do have strong priors about how attachment regulates the economic vote, however: If party attachment matters, the coefficient for the interaction of real GDP growth and partisanship should be negative.

We estimate a pooled time-series model with country fixed effects on half-yearly data from 1976 to 1992, the last year for which we have clarity of responsibility data. Levin-Lin tests for non-stationarity assure us of the absence of unit roots. We adjust for time dependence with a (pooled) AR1 autoregressive parameter ( $\rho$ ) performed with Prais-Winsten regression. Earlier research, as we have discussed, has provided strong grounds to believe that economic effects on the vote should best material when governmental clarity of responsibility for outcomes is high. We accordingly estimate separate models for low and high levels of clarity.

The original clarity of responsibility measures for parliamentary governments produced by Powell and Whitten (1993) employed five components (voting cohesion of parties, opposition control of committee chairs, bicameralism, minority government status, and an indicator for coalition governments) to construct an averaged measure for each country that did not vary over time. A number of subsequent efforts have improved on this original measure. Notably, Whitten and Palmer (1999) permitted clarity to vary over time and Nadeau, Niemi, and Yoshinaka (2002), while retaining over-time variation, expanded clarity to include the proportion of dominant party seats in government, the ideological cohesion of governing parties, the number of significant parties and, in some models, the age of the government. We employ the measure developed by Nadeau et al. that omits the age of government, a variable that likely

captures the “cost of ruling” (Paldam and Skott 1995) more than clarity of responsibility. Following Powell and Whitten’s lead, we divide contexts into high and low/intermediate clarity.<sup>18</sup> Since Nadeau, Niemi, and Yoshinaka’s clarity measure ends in 1992, so must our analysis. We report the results of our model of vote share for high and low clarity groups in the first two columns of Table 1.

The first column exhibits little evidence of economic voting in low clarity contexts. While the coefficient for GDP change is positive and the coefficient for the interactive variable is negative, neither approaches conventional levels of statistical significance. (The coefficient for unemployment is trivially different from zero and the effect of inflation is actually positive!) This comports nicely with the previous scholarship. In low clarity countries, voters do not—presumably because they cannot—reliably reward and punish government parties for economic performance. Things are much different in high clarity contexts, as can be seen in column 2. Here we see strong evidence of economic voting. Most importantly, as indicated by the negative and significant ( $p < 0.02$ ) coefficient for the interactive variable, the effect of the economy is dependent on party attachment: The greater the identification with parties, the smaller the influence of the economy. The effect is striking. Consider the estimated effects of different rates of real GDP growth given mean identification (2.06) at the beginning of the period, in 1976, with the effects given mean identification (1.86) at the end, in 1992, which are shown in Table 2. Economic growth has no real effect on the incumbent vote share in early years when mean identification is relatively high. Indeed, as the first panel of Figure 4 reveals, the estimated effect of real GDP growth on the government’s share of the vote intent is nearly zero and clearly insignificant at the 1992 mean identification for high clarity countries. When attachment is high, the government is essentially insulated from the effects of short-run

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<sup>18</sup> Governments above the clarity index median (.617) are classified as high clarity, below this cut-off, low clarity. See Figure 3 in the appendix for the country distributions.

**Table 1: Party Attachment and the Economic Vote in High and Low Clarity Countries**

	(1)	(2)	(3)	(4)	(5)	(6)
	LoClarity	HiClarity	LoClarity	HiClarity	LoClarity	HiClarity
$\Delta$ Real GDP, %	7.862	12.771**	0.832	-4.607**	-1.906	-4.427*
	[7.902]	[5.840]	[2.325]	[2.147]	[3.570]	[2.452]
Mean Party ID	2.375	17.733**				
	[7.893]	[8.502]				
GDP % x Party ID	-2.852	-6.308**				
	[3.802]	[2.954]				
Non-Partisans, %			-0.082	-0.279**		
			[0.111]	[0.136]		
$\Delta$ GDP x Non-Part			0.031	0.119***		
			[0.064]	[0.046]		
Date					-0.213	-0.012
					[0.177]	[0.157]
$\Delta$ GDP x Date					0.074	0.110**
					[0.070]	[0.053]
Unemployment	-0.11	-0.654	-0.051	-0.763	-0.465	-1.210**
	[0.751]	[0.440]	[0.743]	[0.474]	[0.768]	[0.470]
Inflation	0.807*	-0.71	0.818*	-0.826*	0.382	-0.647
	[0.443]	[0.483]	[0.421]	[0.502]	[0.634]	[0.496]
Denmark	-15.504***	-4.801	-16.314***	-2.978	-16.544***	-1.517
	[2.808]	[3.952]	[2.678]	[3.561]	[2.975]	[3.550]
Great Britain		-0.296		1.309		1.017
		[3.842]		[3.787]		[3.797]
Germany	-15.679***	1.907	-15.902***	2.488	-17.048***	3.674
	[4.005]	[4.042]	[3.866]	[3.893]	[3.956]	[3.973]
Ireland		14.762***		16.166***		16.969***
		[4.431]		[4.526]		[4.525]
Italy	1.704	-2.8	0.579	-0.158	2.743	1.401
	[3.852]	[4.832]	[3.668]	[4.410]	[4.095]	[4.373]
Netherlands	-6.839		-8.213*		-9.177**	
	[4.753]		[4.856]		[4.569]	
Constant	48.766***	12.964	56.748***	59.590***	69.517***	50.943***
	[16.909]	[17.377]	[8.619]	[8.138]	[13.287]	[9.547]
R-squared	.414	.209	.414	.207	.347	.200
Chi-squared	107.25	256.10	107.72	266.81	103.01	261.95
Rho	.412	.254	.417	.251	.384	.287
Observations	132	131	132	131	136	135
Countries	5	6	5	6	5	6

Prais-Winsten AR1 regression; Response variable is percent of vote for government (votegov1); half-yearly observations 1976 to 1992; Panel corrected standard errors in brackets; \*p<.1, \*\*p<.05, \*\*\*p<.01, two-tailed; index4<=.617 is low clarity; index4>.617 is high clarity; In High Clarity regressions, we omit France dummy as fixed effect baseline; In Low clarity regressions, we omit Belgium as baseline. All models calculated including a large PID outlier in 1981h2. Omitting this date improves results.

Table 2: Predicted Effect of GDP by Level of Party Attachment in 1976 and 1992

Mean Attachment	GDP Growth				
	0	1	2	3	4
2.06	49.48	49.25	49.02	48.79	48.56
1.86	45.94	46.97	48.00	49.03	50.06

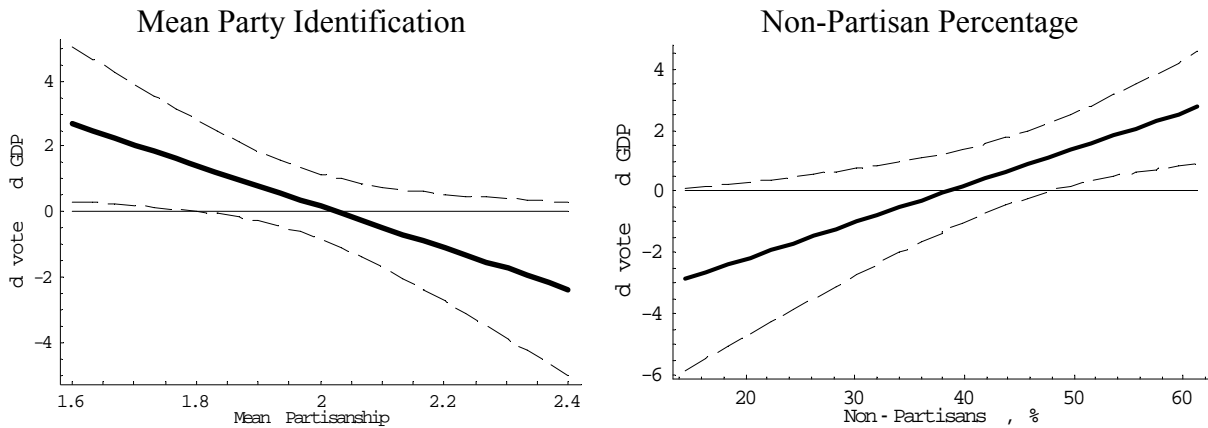
NOTE: Numbers in cells are the predicted vote share for all government parties.

economic swings. When attachment is relatively low, conversely, the economy has dramatic effects. With a mean identification of 1.86, which is what we observe in 1992, each percentage point increase in half-yearly GDP growth leads to slightly more than a one-point increase in the incumbent vote. This is a sizable return, equal to what we observe in US presidential elections (Fair 1996; Campbell 2004). Party attachment evidently matters a lot.

Using our alternative measure of party attachment produces an equally impressive pattern of results. This is clear in the third and fourth columns in Table 1. Understandably, given the new measure, the sign of the coefficient for the interactive variable flips, from negative to positive, revealing that the effect of the economy increases as the percentage of non-partisans increases. As with the summary measure, the effect is only significant in high clarity contexts, and the overall model statistics using the two measures are virtually indistinguishable. Panel 2 of Figure 4 buttresses this result. Among high clarity countries, economic growth has a strongly positive and statistically significant effect on government vote share once more than approximately 48 percent of the electorate are unaligned.<sup>19</sup> Conversely, once a little more than half of the electorate have partisan affinities, the economy does not exhibit a statistically significant effect on the vote. Patterns of partisanship have real implications, and it appears that

<sup>19</sup> We present the full effect of economic growth on the intended vote at each degree of partisan attachment,  $d \text{ vote} / d \text{ GDP} = b_1 + b_3 \text{ PID}$ , where variables are ordered as in Model 2 of Table 1.

Figure 4: Effect of Mean Party Identification on the Economic Vote<sup>20</sup>



recent declines in overall attachment have changed the nature of incumbent judgments. To underscore the point, we estimated the models using a time trend variable in the place of measures of party attachment. The results are shown in the final two columns of Table 1. They are virtually identical to the results using the percentage of non-partisans. As time has elapsed and partisanship decreased, the effect of the economy on the vote has increased. Politicians face greater performance pressure.

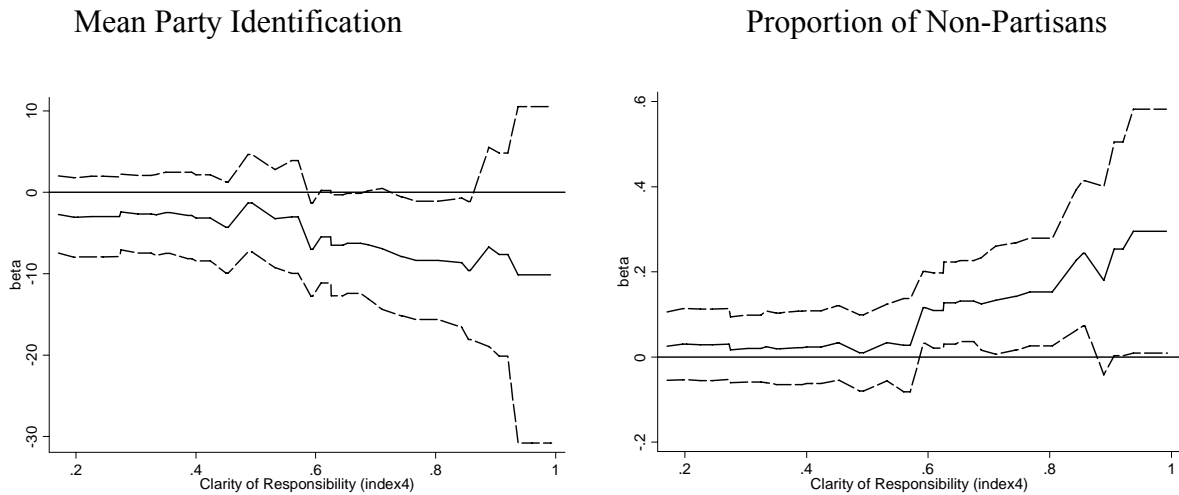
### *An Explicit Consideration of Clarity*

The previous section has used the median clarity of responsibility measure to separate governments into two discrete categories. The evidence of partisanship's mediating effect on the economic vote is therefore estimated for the half of governments with highest clarity. We should not, however, assume that the estimated effects that we report obtain equally for all governments in this category. Serious consideration of clarity posits that party identification's conditioning effect should increase in the level of clarity and thus also within discrete categories.

<sup>20</sup> standard errors of GDP coefficient calculated at each PIDavg as  $s(b_1 \text{ at } X_2) = [(\text{var}(b_1) + X_2^2 \text{var}(b_3) + 2X_2 \text{cov}(b_1, b_3))]^{1/2}$ , where variables are ordered as in Model 2 of Table 1.

Where voters can most clearly assign responsibility for outcomes to parties in government – at clarity levels even above the median – the effect of the economy on the vote should be greatest, and the mediating role of party attachment most pronounced.

Figure 5: Mediating Effects on the Economic Vote at Different Clarity Cut-offs



We confirm this relationship by estimating the conditioning effect of party attachment on the economic vote above increasing clarity thresholds. For governments above a threshold of .617, the median clarity, the first panel of Figure 5 reports the interactive effect estimated in Model 2: A one point increase in mean partisan attachment decreases the effect of economic growth on the vote by 6.3 points. Setting a higher clarity threshold yields even stronger effects. Among governments with clarity of responsibility above .925 – at this level, exclusively British and French – a one point increase in mean partisan attachment decreases the effect of economic growth on the vote by 10.14 points. This is a sixty-one percent difference in the magnitude of the mediating effect. As we hypothesized at the beginning of this paper, the effect of the economy on the vote depends on partisan attachment of voters and the responsibility of governments.

## *Discussion and Conclusion*

What we have demonstrated is highly intuitive yet previously neglected. It should come as little surprise to discover that the votes of people at the partisan margin are more susceptible to short-term forces, such as the economy. They are the true “floating voters” whose support of political parties can change easily with performance. The results also conform to others’ characterizations, including Zaller’s (2004) important finding that low information voters are more responsive to the economy. It may be that low information voters are more responsive to the economy *because* they are more moderate.

Though our results may help us understand evolving patterns of electoral behavior in Europe over the last three decades, our model is not tied to any particular historical trend. It can also account for the implications of rising party identification, for example, in the present day United States (Bartels, 2000). As partisanship increases we predict declining economic voting and closer elections over time. This may explain the widespread overpredictions of incumbent vote share by US presidential election forecasters in 2000 and 2004, whose models rely heavily on economic performance.<sup>21</sup> Drawing firm conclusions requires additional research, of course.<sup>22</sup>

Our results also have broader implications, most importantly for the nature of party competition. When party attachment declines, performance matters more and policy matters less to voters. In effect, the public becomes more centrist. This gives incentives to parties to do the same, and there is indeed evidence of party convergence in parts of Europe (e.g., Klingemann, Hofferbert, and Budge 1994; Bara and Budge 2001). As policy differences dissipate and governments increasingly compete on valence issues, we find ourselves choosing between different management teams, a far cry from the pitched class-centered competition that typified

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<sup>21</sup> See the post-mortems in the Spring 2001 issues of *PS: Political Science and Politics* and *American Politics Research* and the Spring 2005 issue of *PS: Political Science and Politics*.

<sup>22</sup> Note also that there are complementary implications of changing partisan attachment for political influences on individuals’ economic perceptions. As attachment decreases, we may expect that the endogeneity of perceptions to vote choice also declines. As attachment increases, conversely, the endogeneity of perception to vote choice may increase.

European politics through the 1970s (also see Clarke et al, 2004). To voters, winning and losing on Election Day now matter less. For governments, meanwhile, winning and losing are less strictly controllable. Indeed, accountability for the economy in Europe is increasing at the same time that domestic control of the economy seems to be decreasing. This implies greater electoral uncertainty for governments and also gives governments incentives to attempt to compensate, to find ways to reduce the uncertainty, such as the opportunistic timing of elections (Kayser 2005). Ultimately, rather than finding that the hold of governments on office has become more tenuous, we may find that incumbent politicians have found new ways to secure electoral advantage.

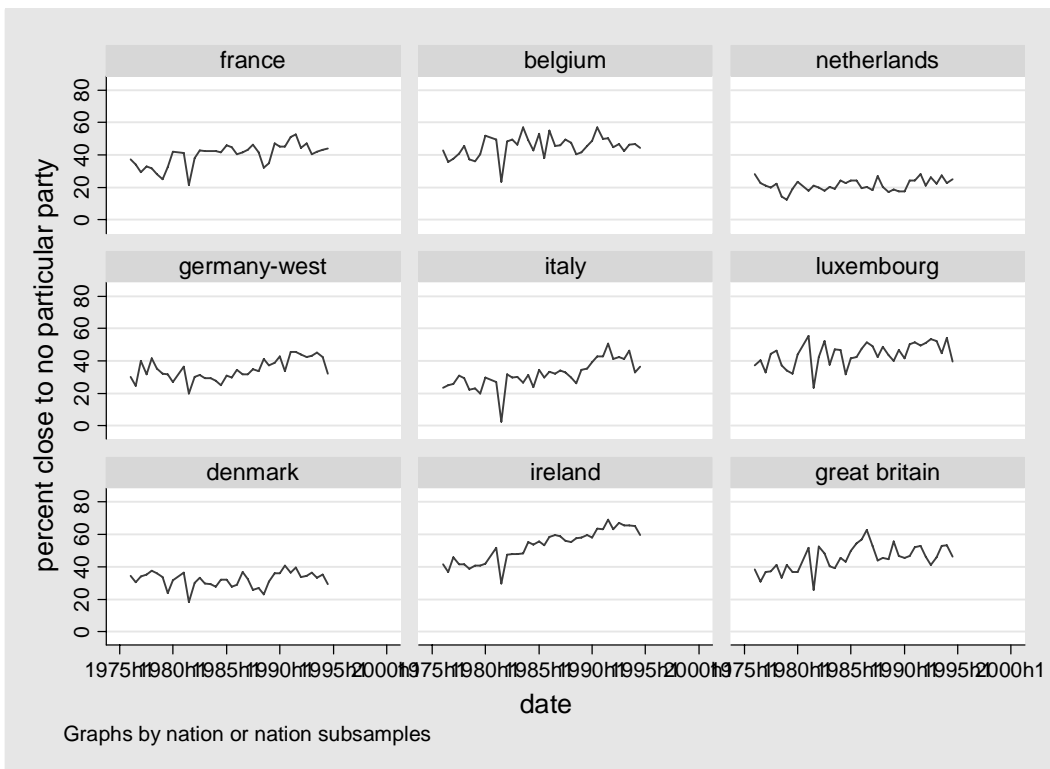
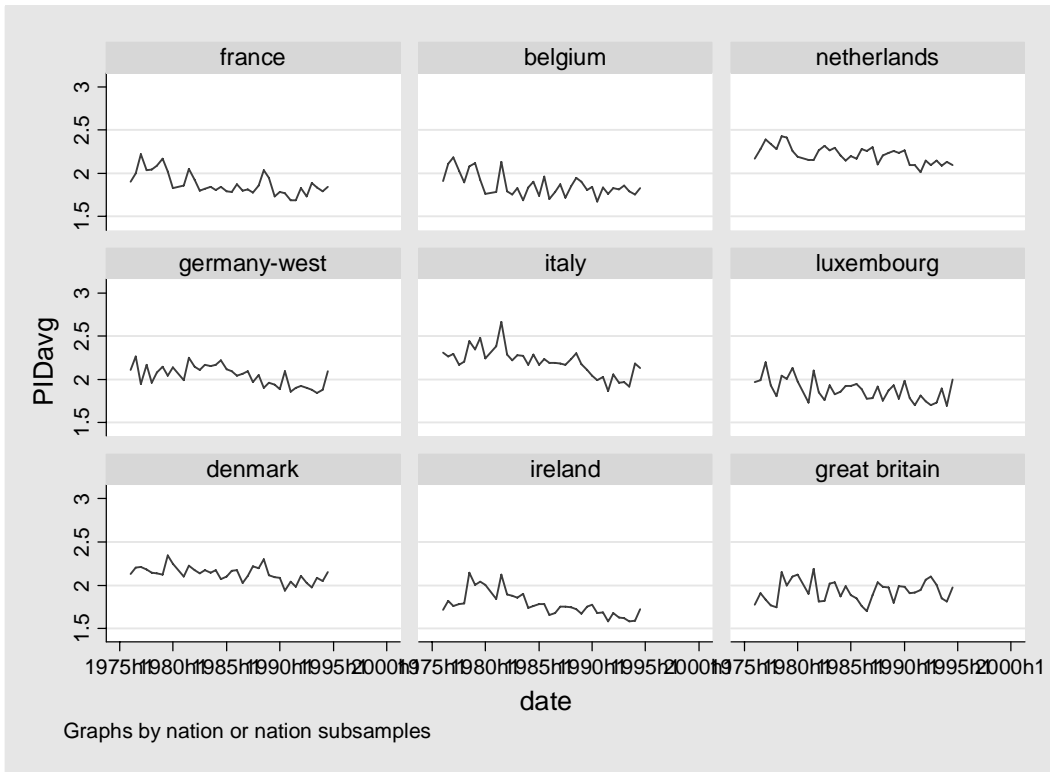
## References

- Alesina, Alberto, John Londregan and Howard Rosenthal (1993). "A Model of the Political Economy of the United States," *American Political Science Review* 87: 12-33.
- Alesina, Alberto and Howard Rosenthal. (1995) *Partisan politics, divided government, and the American economy*. Cambridge: MIT Press.
- Alford, Robert R. (1963) *Party and Society: Class Voting in Anglo-American Democracies*. New York: Rand McNally.
- Anderson, Christopher, Andre Blais, Shaun Bowler, Todd Donovan, and Ola Listhaug. (2005) *Losers Consent: Elections and Democratic Legitimacy*. Oxford: Oxford University Press.
- Anderson, Christopher, Silvia Mendes, and Yuliya Tverdova. (2004) "Endogenous Economic Voting: Evidence from the 1997 British Election." *Electoral Studies* 23:683-708.
- Banks, Jeffrey S. and John Duggan. 2003. Probabilistic Voting in the Spatial Model of Elections: The Theory of Office-Motivated Candidates. Manuscript. University of Rochester.
- Bara, Judith and Ian Budge. (2001) "Party Policy and Ideology: Still New Labour?" In Pippa Norris (ed.), *Britain Votes, 2001*. Oxford: Oxford University Press.
- Bartels, Larry M. (2000) "Partisanship and Voting Behavior, 1952-1996." *American Journal of Political Science* 44 (1): 25-50.
- Bartels, Larry M. (2002) "Beyond the Running Tally: Political Bias in Political Perceptions." *Political Behavior* 24:117-149.
- Berelson, Bernard R., Paul F. Lazarsfeld, and William N. McPhee. (1954) *Voting: A Study of Opinion Formation in a Presidential Campaign*. Chicago: University of Chicago Press.
- Brody, Richard. (1991) *Assessing the President: The Media, Elite Opinion, and Public Support*. Stanford: Stanford University Press.
- Budge, Ian, Hans-Dieter Klingemann, Andrea Volkens, Judith Bara and Eric Tanenbaum. (2001) *Mapping Policy Preferences: Estimates for Parties, Electors, and Governments 1945-1998*. Oxford: Oxford University Press.
- Campbell, Angus, Philip E. Converse, Warren E. Miller and Donald E. Stokes. (1960) *The American Voter*. New York: Wiley.
- Campbell, James E. (2004) "Forecasting the Presidential Vote in 2004: Placing Preference Polls in Context." *PS: Political Science and Politics* 37:763-7.
- Campbell, James E. and James C. Garand. (2000) *Before the Vote: Forecasting American National Elections*. Thousand Oaks, Calif.: Sage Publications.
- Chappell, Henry W. and Linda G. Veiga. (2000) "Economics and Elections in Western Europe: 1960-1997." *Electoral Studies* 19:183-97.
- Clarke, Harold D., David Sanders, Marianne C. Stewart, and Paul Whiteley. (2004). *Political Choice in Britain*. Oxford: Oxford University Press.
- Clarke, Harold, Marianne Stewart, and Gary Zuk. (1986). "Politics, Economics, and Party Popularity in Britain, 1979-83." *Electoral Studies* 5:123-42.
- Converse, Phillip E. (1964) "The Nature of Belief Systems in Mass Publics." In *Ideology and Discontent*, ed., David Apter. New York: Free Press.
- Converse, Philip E. and Georges Dupeux. (1962) "Politicization of the Electorate in France and the United States." *Public Opinion Quarterly* 26:1-23.
- Dalton, Russell J. (1996a) *Citizen Politics in Western Democracies: Public Opinion and Political Parties in Advanced Industrial Democracies*. Chatham House.
- Dalton, Russell J. 1996b. "A Divided Electorate?" in Gordon Smith et al., eds. *Developments in German Politics*. London: Macmillan.

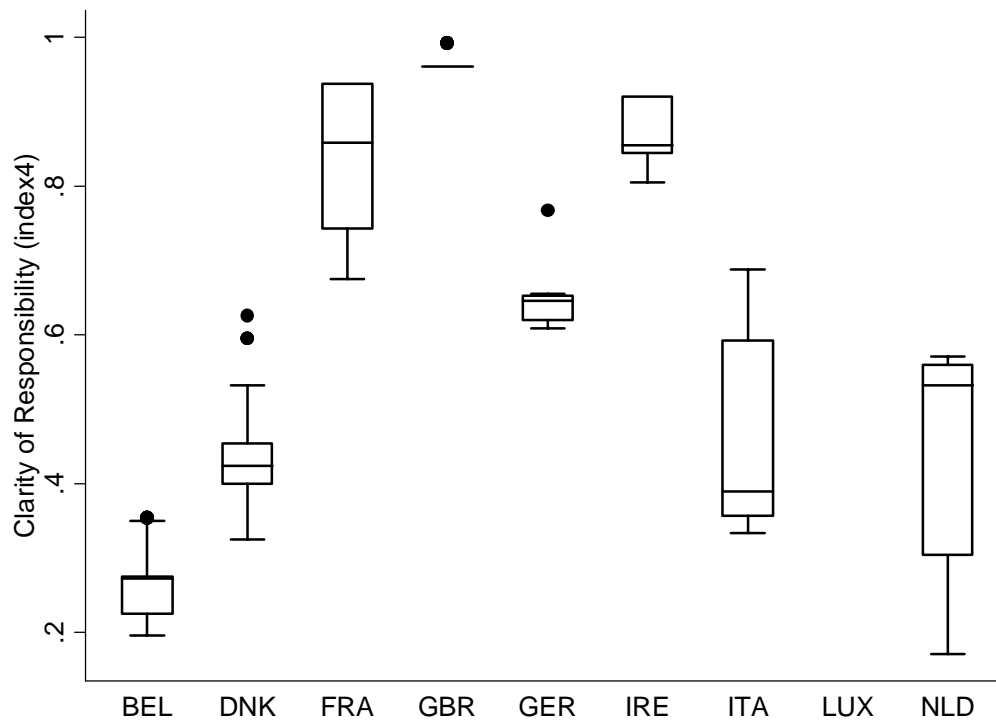
- Dalton, Russell J, Ian McAllister and Martin P. Wattenberg. (2002) "The Consequences of Partisan Dealignment." In Dalton and Wattenberg (eds.), *Parties Without Partisans: Political Change in Advanced Industrial Democracies*. Oxford: Oxford University Press.
- Dalton, Russell J. and Martin Wattenberg. (2002) *Parties without Partisans: Political Change in Advanced Industrial Democracies*. Oxford: Oxford University Press.
- Downs, Anthony. (1957) *An Economic Theory of Democracy*. New York: Harper Colins.
- Duch, Raymond M., Harvey D. Palmer, and Christopher J. Anderson. (2000). "Heterogeneity in Perceptions of National Economic Conditions." *American Journal of Political Science* 44: 635-52.
- Erikson, Robert. (1989) "Economic conditions and the Presidential vote." *American Political Science Review* 86: 567-573.
- Erikson, Robert S, Michael MacKuen, and James Stimson. (2002). *The MacroPolity*. Cambridge: Cambridge University Press.
- Evans, Geoffrey and Robert Andersen. (N.d.) "Political Conditioning of Economic Perceptions: Evidence from the 1992-1997 British Electoral Cycle." *Journal of Politics*, forthcoming.
- Fair, Ray C. (1996), "The Effect of Economic Events on Votes for President: 1992 Update." *Political Behavior* 18:119-139.
- Gomez, Brad T. and J. Mathew Wilson. (2001) "Political Sophistication and Economic Voting in the American Electorate: A Theory of Heterogeneous Attribution." *American Journal of Political Science* 45: 899-914.
- Hellwig, Timothy (2001). "Interdependence, Government Constraints and Economic Voting." *Journal of Politics* 63:1141-1162.
- Hibbs, Douglas A., Jr. (1987) *The American Political Economy*. Cambridge, Mass: Harvard University Press.
- Kayser, Mark Andreas (2005) "Who Surfs, Who Manipulates? The Determinants of Opportunistic Election Timing and Electorally Motivated Economic Intervention." *American Political Science Review* 99: 17-28.
- Keith, Bruce et al. 1992. *The Myth of the Independent Voter*. Berkeley and Los Angeles: University of California Press.
- Kinder, Donald R., and D. Roderick Kiewiet. (1981) "Sociotropic Politics: The American Case." *British Journal of Political Science* 11:129-161.
- Klingemann, Han-Dieter, Richard I. Hofferbert, and Ian Budge. (1994) *Parties, Policies, and Democracy*. Boulder, CO: Westview Press.
- Kramer, Gerald H. (1971) "Short-term Fluctuations in U.S. Voting Behavior, 1896-1964." *American Political Science Review* 65: 131-143.
- Kramer, Gerald H. (1983). "The Ecological Fallacy Revisited: Aggregate- Versus Individual-Level Findings on Economics and Elections, and Sociotropic Voting." *American Political Science Review* 77:92-111.
- Lewis-Beck, Michael S. (1988). *Economics and Elections*. Ann Arbor: University of Michigan Press.
- Lewis-Beck, Michael S. and Mary Stegmaier. (2000) "Economic Determinants of Election Outcomes." *Annual Review of Political Science* 3:183-219.
- Lynch, G. Patrick. (1999) "Presidential Elections and the Economy 1872 to 1996: The Times They Are A Changin' or the Song Remains the Same." *Political Research Quarterly* 52(4):825-44.
- Nadeau, Richard, Richard G. Niemi, and Antoine Yoshinaka. 2002. "A Cross-National Analysis of Economic Voting: Taking Account of the Political Context across Time and Nations." *Electoral Studies* 21: 403-23.
- Nannestad, Peter and Martin Paldam. (1994) "The VP-Function: A Survey of the Literature On Vote and Popularity Functions after 25 Years." *Public Choice* 79:213-45.

- Norpoth, Helmut. (1996) "The Economy." In Lawrence Leduc, Richard Niemi, and Pippa Norris (eds.), *Comparing Democracies*. London: Sage.
- Paldam, Martin. (1991) "How Robust is the Vote Function? A Study of Seventeen Nations Over Four Decades." In Helmut Norpoth, Michael S. Lewis-Beck, and Jean Dominique Lafay (eds.), *Economics and Politics: The Calculus of Support*. Ann Arbor: University Of Michigan Press.
- Paldam, Martin and Peter Skott. (1995) "A Rational-Voter Explanation of the Cost of Ruling." *Public Choice* 83(1-2):159-72.
- Powell, G. Bingham and Guy D. Whitten. (1993) "A Cross-National Analysis of Economic Voting: Taking Account of the Political Context." *American Journal of Political Science* 37:391-414.
- Rahn, Wendy, M. 1993. "The Role of Partisan Stereotypes in Information Processing about Political Candidates." *American Journal of Political Science* 37: 472-96.
- Samuels, David J. 2004. "Presidentialism and Accountability for the Economy in Comparative Perspective." *American Political Science Review* 98(3): 425-36.
- Sanders, David. (2000) "The Real Economy and the Perceived Economy in Popularity Functions: How Much do Voters Need to Know?" *Electoral Studies* 19:275-294.
- Sanders, David. (1996) "Economic Performance, Management Competence, and the Outcome of the Next General Election." *Political Studies* 44: 223.
- Schmitt, Hermann. (2002) "Partisanship in Western Europe and the US: Causes and Consequences." Paper presented at the Annual Meeting of the American Political Science Association, Boston.
- Schmitt, Hermann and Sören Holmberg. 1995. "Political Parties in Decline?" in Hans-Dieter Klingemann and Dieter Fuchs, eds. *Citizens and the State*. Oxford: Oxford University Press.
- Schmitt, Hermann and Evi Scholz (2002). Mannheim Eurobarometer Trend File, 1970-1999. <http://webapp.icpsr.umich.edu/cocoon/ICPSR-STUDY/03384.xml> or [http://www.gesis.org/en/data\\_service/eurobarometer/standard\\_eb\\_trend/trendfile.htm](http://www.gesis.org/en/data_service/eurobarometer/standard_eb_trend/trendfile.htm).
- Stokes, Donald E. (1963) "Spatial Models of Party Competition." *American Political Science Review* 57: 368-377.
- Stokes, Donald. E. 1966. "Party Loyalty and the Likelihood of Deviating Elections." In Campbell et al, eds., *Elections and the Political Order*. New York: John Wiley & Sons.
- Whitten, Guy D., and Harvey D. Palmer. (1999) "Cross-National Analyses of Economic Voting." *Electoral Studies* 18:49-67.
- Wlezien, Christopher, and Robert S. Erikson. 2004. The Fundamentals, the Polls, and the Presidential Vote. *PS: Political Science and Politics* 37:747-751.
- Wlezien, C., and R.S. Erikson. (2001) "Campaign Effects in Theory and Practice." *American Politics Research* 29:419-437.
- Wlezien, Christopher, Mark Franklin, and Daniel Twigg. (1997) "Economic Perceptions and Vote Choice: Disentangling the Endogeneity." *Political Behavior* 19:7-17.
- Woldendorp, Jaap, Ian Budge, and Hans Keman. (2000) *Party Government in 48 Democracies, 1945-1998*. London: Kluwer.
- Zaller, John. (2004) "Floating Voters in US Presidential elections, 1948-2000. In Paul Sniderman and Willem Saris (eds.), *The Issue of Belief: Essays in the Intersection of Non-Attitudes and Attitude Change*. Princeton, N.J.: Princeton University Press.
- Zaller, John R. (1992.) *The Nature and Origins of Mass Opinion*. Cambridge: Cambridge University Press.

Appendix Figures 1 and 2:



Appendix Figure 3:



Appendix Table 1: Summary Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
PIDavg	296	2.005992	.1978088	1.580943	2.663144
PID1	296	37.93098	11.71695	2.509907	69.33334
rGDPr	304	1.225225	1.146575	-2.728732	4.063599
unem	304	8.474178	2.884095	3	17
dcpi	304	3.08271	2.424476	-.8368449	12.15333
index4	272	.6144897	.2476059	.1707141	.992