Partisan Waves: International Business Cycles and Electoral Choice

Mark Andreas Kayser  Hertie School of Governance

Pundits have often claimed, but scholars have never found, that partisan swings in the vote abroad predict electoral fortunes at home. Employing semiannual Eurobarometer data on vote intention in eight European countries, this article provides statistical evidence of international comovement in partisan vote intention and its provenance in international business cycles. Electoral support for “luxury parties,” those parties associated with higher spending and taxation, covaries across countries together with the business cycle. Both the domestic and international components of at least one economic aggregate—unemployment—prove a strong predictor of shifts in domestic vote intention. Globalization, by driving business cycle integration, is also synchronizing partisan cycles.

Observers of politics have often remarked that international partisan sentiment seems to move in waves. Among developed democracies, the frequency of right-of-center governments rose in the 1980s, plummeted in the early 1990s, and rebounded after 2000. In the middle 1970s, only seven of the 19 wealthy democracies that then constituted the Organization for Economic Cooperation and Development (OECD) had right-of-center governments; one year after the election of Margaret Thatcher in 1979, this number stood at 13 of 23. In 1992, prior to the election of Bill Clinton, 13 of the then 23 OECD members hosted right-of-center governments; within four years this figure dropped to six, only to rebound to 15 six years later. Within more geographically proximate areas, and finer data, this pattern of partisan comovement is even more distinct, begging two questions: (1) how independent is partisan sentiment from that of other countries? and (2) what, if anything, causes such covariation in partisan support?

This article, in addition to establishing the existence of such partisan waves, argues that they are induced by the emergence of international business cycles. Recent decades have witnessed, in connection with the expansion of international trade, rising integration of national business cycles; by the late 1990s this trend culminated in the recognition by economists of a single European business cycle (Artis and Zhang 1997). As the partisan preferences of voters vary with the domestic economy (cf. Duch and Stevenson 2008; Stevenson 2001), these common economic cycles, I argue, also imply common partisan cycles.¹

A rich literature examining how the international economy structures domestic politics dates back to before Katzenstein (1985) and addresses such notable topics as the determinants of divergent policy responses to common economic shocks (Gourevich 1986); how relative factor endowments structure political cleavages under international trade (Rogowski 1989); to what degree

¹Noneconomic causes of partisan comovement present an additional, but causally more challenging, explanation. Scholars have demonstrated—but not explained—international correlation in ideological self-placement and policy mood (Kim and Fording 2001). Much like democratizing pressures diffuse across autocracies (Brinks and Coppedge 2006), partisan preferences abroad might influence partisan preferences at home. Although measuring such diffusion effects is possible, establishing causality is daunting. Quite possibly, both mechanisms might obtain, although serious theoretical impediments, discussed below, cast doubt on imitative diffusion at the mass level.
international economic integration constrains policy autonomy (Garrett 1998); what policy alternatives are left for the left (Boix 1998); and the size and role of the welfare state under globalization (Rodrik 1998). It is curious to note, however, that with the exception of Rogowski (1989), nearly all of the literature on the domestic political effects of the international economy actually concerns policy rather than politics. Politics, especially electoral politics, have elicited surprisingly little research attention.\(^2\) In contrast to the numerous studies on how global economic integration constrains domestic policy setting, only three studies have explicitly tested for international effects on the vote (Host and Paldam 1990; Midtbo 1998; Mishler, Hoskin, and Fitzgerald 1988), and similarly few studies have emerged in other areas of comparative politics in which cross-border effects might be expected. In other research domains, this neglect of cross-sectional covariation would be surprising. It is a rare study of economic voting in U.S. states that assumes cross-sectional independence and omits the national economy; comparative studies—even those with highly economically integrated samples—do this regularly.\(^3\)

This article peers into areas neglected by earlier research on comparative elections and on the consequences of globalization alike. Long-run estimates from an error correction model using Eurobarometer data from eight western European countries show that between one-third and one-half of a shift in vote intention among a country’s neighbors crosses borders. These international effects, however, are qualified by many of the same constraints that temper the international transmission of business cycles. Foreign swings in partisan preferences anticipate shifts in domestic preferences if, and only if, they (a) emerge from geographically proximate countries, (b) have occurred recently—indeed within three-quarters of a year, (c) are not offset by contrary swings or diluted by stability in other neighbors, and (d) are accompanied by a clear association between parties and policy outcomes.

It is no coincidence that many of the determinants of covariation in partisan sentiment—country size and proximity—resemble gravity model predictors of cross-border trade. Trade, after all, is the single strongest determinant of international business cycle transmission (Baxter and Kouparitas 2005; Kose, Otrok, and Whiteman 2003). Because states trade more with their proximate and large neighbors, they also experience synchronous (and similar) economic shocks and partisan responses. The results below confirm this: shifts in population-weighted averages of vote intention for the left in neighboring states predict similar partisan shifts at home.

How, specifically, does international economic integration translate into partisan electoral effects within a state? Political science offers varied theories about how the economy affects partisan popularity. Unemployment, however, has proven to be the most salient economic variable among voters and an important determinant of support for the left (e.g., Kuechler 1991). Indeed, not only do international business cycles induce comovement in domestic unemployment rates across countries, but also voters, as predicted by “luxury models” (Durr 1993; Stevenson 2001), respond similarly to changes in unemployment. Voters, less willing to tolerate generous public spending associated with the left in a deteriorating economy, turn to the right. Unaware of the source of economic fluctuations, voters, as shown below, react similarly to changes in the domestic and international components of unemployment.

Both findings of this article—partisan waves and their economic source—bear important implications for democratic accountability and international cooperation. What previously had been understood as domestic economic causes of electoral outcomes might, in fact, originate internationally. Governments, consequently, may become decoupled from accountability for economic results, as suggested by Hellwig (2001), while covariation in labor market shocks continues to yield synchronous changes in partisan sentiment across countries. Cross-national partisan comovement may also bear implications for international cooperation if governments of a similar partisan complexion are more likely to support particular international policy initiatives (cf. Putnam and Bayne 1984) or engage in similar international behavior, for example, conflict initiation (Palmer, London, and Regan 2004). Finally, partisan comovement might also explain a degree of policy comovement. Considerable research has emerged on the noneconomic, often imitative, international diffusion of policy—i.e., “contagion”—as opposed to common responses to common, often economic, shocks (Simmons, Dobbin, and Garrett 2006). Partisan comovement driven by economic comovement poses the possibility that some policy contagion is actually economic in origin—assuming that governments of similar partisan composition prefer similar policies.

The remainder of this article focuses on two new empirical claims, (1) establishing the existence and magnitude of comovement in vote intention and (2) tracing its provenance in international business cycles. The article proceeds by first demonstrating that vote intention for the left does covary across economically integrated countries and then identifying the source of this phenomenon

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\(^2\) See Kayser (2007) for a recent review of this literature.

\(^3\) A notable exception is Powell and Whitten (1993).
in international economic comovement. Toward this end, the second section builds the prima facie case for partisan waves by examining a rougher but more visible measure, the frequency of left and right governments in OECD countries, and lays out the theoretical groundwork for the economic mechanism by which partisan preferences cross borders. The following section moves on to test an error correction model with spatial lags for evidence of partisan comovement, first employing a naive model that only seeks to identify cross-border comovement, then exploring the effect of internationally correlated economic variables—most importantly, unemployment—in producing partisan swings. This analysis is then followed by an explicit test of the mechanism, and two rivals, with a multilevel model. Finally, the last section discusses implications for domestic and international politics and restates the main findings: (1) partisan vote intention does covary across countries, and (2) this pattern is driven, in large part, by common voter responses to cross-border economic shocks. International comovement in unemployment—one manifestation of an international business cycle—explains a substantial portion of cross-national comovement in partisan vote intention.

**Theoretical Foundations**

**Previous Studies**

In 1889, Sir Francis Galton, the scientist, statistician, and cousin of Charles Darwin, first worried that what appears as national effects might in actuality be international. Galton was referring to what would later be called common “umbrella” causation: just like a single external stimulus—rain—causes multiple individuals in a street to open umbrellas, a single international source can cause similar—and spuriously correlated—consequences in multiple countries (Weber 1978). In the realm of politics, could it be, as Galton first proposed, that what passes for domestic sources of change may often originate internationally or, as Weber proposed, that seemingly causally related concurrent phenomena might stem from a common source? I argue here with respect to partisan vote intention, that both obtain: the electoral popularity of left and right parties in European countries moves in partisan waves that are at least partly induced by international business cycles.

Economic influences on domestic electoral politics have remained a mainstay of political science for decades. Numerous studies have demonstrated the effect of economic measures on, among other political variables, government vote share (van der Brug, van der Eijk, and Franklin 2007), the timing of elections (Kayser 2005), the duration of governments (Warwick 1994), and the partisan leanings of the electorate (Durr 1993; Stevenson 2001). Concurrent with many of these findings, research in economics has documented the growing interdependence of developed economies. Scholars now estimate that business cycles in western Europe have converged to the point that they can be considered a single regional cycle (Artis and Zhang 1997) and regional cycles have been identified as instances of a broader global cycle (Kose, Otrok, and Whiteman 2003). The mean cross-correlation coefficients of unemployment, inflation, and growth in gross domestic product (GDP) among west European democracies between 1975 and 1999 are .54, .75, and .36, respectively, and among bordering countries the respective figures change to .62, .71, and .41. So, to what degree does economic interdependence determine domestic political outcomes? Developed economies, especially in western Europe, have undergone substantial economic integration, but what consequences, if any, does that imply for presumably domestic politics?

Surprisingly little research has addressed the effect of the international economy on domestic politics per se (see Hellwig 2001 and Kayser 2006 for two exceptions), although an abundant literature on the possible constraining effects of economic integration on policy continues to thrive (see, for example, Garrett 1998). Among election studies—where economic effects are if not preeminent, then prevalent—one cause for the paucity of interest in international effects may stem from the failure of previous studies to find any evidence of comovement in the partisan vote.

Three studies have sought evidence of synchronicity in partisan vote shares, although none explicitly

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4 The data are from semiannual Eurobarometer surveys in eight European countries, 1976–97.  
5 In a quirk of nineteenth-century anthropology, the verbal comments following the presentation of a conference paper were summarized and included as a discussion at the end of the paper when it was published. The paper that prompted Galton’s query was Taylor (1889).  
6 “Thus, if at the beginning of a shower a number of people on the street put up their umbrellas at the same time, this would not ordinarily be a case of action mutually oriented to that of each other, but rather of all reacting in the same way to the like need of protection from the rain” (Weber 1978, 23).  
7 1975h1–1999h1, semiannual data, using the eight-country sample employed later in this article: France, Belgium, Netherlands, West Germany, Italy, Denmark, Ireland, and Great Britain. Figures represent highest cross-correlation within a four-period lag/lead. The respective figures within a two-period lag/lead do not differ much, yielding .51 (.61), .75 (.71), and .33 (.40) for unemployment, inflation, and GDP growth. Figures in parentheses are the averages for bordering states only.
suspected common economic causation. The first, by Mishler, Hoskin, and Fitzgerald (1988), inspired by the election of conservative governments in several English-speaking countries in the 1980s, simply included partisan election outcomes from the United Kingdom, Canada, and the United States in domestic vote models and, finding little, likened the enterprise to the vain hunt for the imaginary “Snark” in a Lewis Carroll poem.

Midtbo (1998) rather more earnestly applied a vector autoregression model to social democratic popularity and macroeconomic performance in Denmark, Norway, and Sweden. Like Mishler et al., he found no evidence of correlation in social democratic popularity across countries. Some evidence of partisan policy cycles—but no effect of macroeconomic performance—emerged. Unfortunately, the political and institutional similarity of Scandinavian states, considered beneficial by Midtbo for identifying cross-national effects, likely predetermined his null result. As this article demonstrates, low clarity of governmental responsibility for economic outcomes makes the Scandinavian states uniformly inappropriate cases in which to seek partisan reactions to the economy.

The third and methodologically most novel study, by Host and Paldam (1990), is the sole article to test explicitly for cross-national association in voting behavior, using data from 17 developed democracies between 1948 and 1985. Simply described—perhaps too simply—Host and Paldam assemble national data on change in election support from all 17 countries into a single vector, ordered by the date of the elections. They then analyze this vector of changes in partisan election shares for time-series autocorrelation. Observing no such evidence, they conclude that there is no “international element in the vote.”

Foresight of intent notwithstanding, all three earlier studies suffer from at least one critical flaw. The positive finding of this article rests on circumnavigating previous pitfalls by (1) allowing for the simultaneous influence of multiple countries, (2) accounting for geographical proximity, (3) measuring partisan sentiment at regular half-yearly intervals instead of at irregularly timed and sometimes temporally distant elections, and (4) accounting for institutional and political features that can mask government responsibility for economic outcomes.

The Snark Has Landed

While scholars have doubted the existence of cross-border effects on electoral choice, several empirical patterns suggest reconsideration. First is the casual evidence of partisan waves cited by journalists and political pundits: the conservative shift in the 1980s that first prompted scholars to consider the possibility of cross-border influences in political preferences has now been repeated in successive decades. The observation that has yielded the most interest among the press has been the periodic swings toward the right or the left among Western governments. After a rightward swing in the governance of many OECD countries in the 1980s, the next two decades—first early 1990s, and then again the early 2000s—witnessed pronounced shifts in the frequency of left and right rule.

Figure 1 plots the frequency of right (top) and left (bottom) governments in the OECD-23 between 1970 and 2002. After a brief surge in the frequency of left government in the early 1970s and subsequent erosion of left governance in the late seventies, the partisan frequency of government showed remarkable stability until the 1990s. Beginning around 1992, however, the left, in a reprisal of their experience in the 1970s, again expanded only to lose their advantage less than a decade later in a swing to the right.

A naive observer might view such a frequency plot and conclude that shifts in one or a few countries might trigger cascades in others. Alternatively, one could conclude that little change occurs since such figures, by only presenting the frequency of partisan governments, mask the actual degree of change in the vote. Small shifts in the vote, properly distributed, can appear as an international groundswell by flipping multiple governments. Equally troublesome, considerable shifts in the vote can fail to register as a discrete shift in governing parties when too small to induce change, inopportunistly distributed across countries, or when, say, a left government presides over a leftward shift. Little insight can be drawn from such rough data. Moreover, if countries do affect elections in one another—either via the economy or even via elections themselves—it is unlikely that geographically distant pairs would exhibit influence equal to that of proximate pairs or that small countries would exert the same influence as large countries. Vote share and weighting for

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8See, for example, Levy (2004) or The Economist (1997).
9This figure follows the Castles and Mair (1984) classification for government partisanship as extended by Armingeon et al. (2005) except in one circumstance: since we care about relative left-right positions, not absolute, center governments were recoded when a right or left was absent. Specifically, Canadian Liberals and U.S. Democrats were recoded as left while the Spanish UCD and AP were recoded as right.
10Where the number of governments changes, it is due to democratic breakdown (GRE, SPN, POR), or truly nonpartisan or equally balanced grand coalition governments.
11Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, and United States.
proximity and size certainly offer a finer and preferable measure than the frequency of partisan governance. Nevertheless, restricting our attention to coarse government frequencies for the moment, relatively synchronous directional shifts in multiple governments do cast doubt on the assumption of independent electoral processes across countries and beg more nuanced investigation.

Consider, also, a second reason to suspect cross-border effects on elections. Concurrent shifts in economic and ideological time-series suggest that partisan preferences might covary in multiple countries over time. If voters offer a consistent partisan response to common macroeconomic shifts, then the convergence of economic cycles in economically integrated regions such as western Europe suggests a similar convergence of cycles in partisan preference of voters. In an important article, Kim and Fording (2001), though not citing common economic causation nor explicitly focusing on voting, offer empirical evidence of such concurrent cycles in ideology in 13 Western democracies between 1952 and 1989. Party ideological positions derived from party manifestos and weighted by party vote shares (cf. Kim and Fording 1998) as well as more traditional left-right self-placement data demonstrate that neighboring democracies undergo common shifts in the ideology of the electorate. Jerôme, Jerôme-Speziari, and Lewis-Beck (2006) confirm “systematic movement” in the electoral support for the left when 15 European countries are treated as a single average. Given that both economic and ideological measures move in tandem and that average support for left parties in European elections suggests cyclicity, might we not suspect an international effect on domestic partisan support?

Common Shocks, Causality, and Contagion

If international partisan swings such as those in Figure 1 and, more persuasively, in the following section, do not simply arise from stochastic variation, what might explain them? How might the partisan vote in individual countries be influenced from abroad? This article argues that common economic causation from international business cycles accounts for considerable international comovement in the partisan complexion of the vote. That international economic integration induces international macroeconomic comovement is, of course, well established (see, for example, Kose, Otrok, and Whiteman 2003). Yet for common macroeconomic variation to yield common swings in partisan vote intention in multiple countries, often with governments of different political composition, requires similar responses to economic
change. What systematic dynamic in economic voting could explain such a pattern?

While a strong literature on the policy preferences of partisan government exists, work investigating voters’ partisan response to the economy has been thinner. Voters, consistent with the primary findings of the economic voting literature (see Duch and Stevenson 2008; van der Brug, van der Eijk, and Franklin 2007), could simply punish governments for poor economic performance regardless of their partisan composition. Among “high clarity” countries in which the responsibility for policy outcomes is readily apparent—for example, those with single-party governments and unified partisan control of the chambers of the legislature—support for such an accountability thesis is strong (Powell and Whitten 1993). Such behavior, however, is a largely nonpartisan phenomenon: a common negative economic shock across many countries would simply disadvantage incumbent governments of all types, not just the left or right.

Research on the effects of the economy on partisan vote choice—as opposed to simple referenda on government economic performance regardless of partisan composition—offers several, sometimes contradictory, predictions. To draw a broad distinction, partisan economic effects might emerge through two general mechanisms: (a) voters might punish left and right governments more severely for poor performance in their respective areas of perceived competence, or, alternatively, (b) they might select specific parties—regardless of who is in power—to safeguard their welfare. Consider the first mechanism. Proposed by Powell and Whitten (1993) and based on Hibbs (1977), partisan accountability posits that left and right governments are held more accountable for economic performance in their area of competence. Left governments—expected to be more sensitive to unemployment—are punished for growth in unemployment while right governments—understood to prioritize price stability—are punished for increases in inflation. More recent tests of the partisan accountability thesis, however, have generated mixed results (Carlsen 2000).

The economy might also have fundamental effects on the electoral fortunes of left and right parties independent of which is in government. Of the small number of theories that concern the direct partisan effects of the economy, two have found cross-national empirical support and might explain how international business cycles induce partisan waves. The first is the issue priority model explained by Anderson (1995, 47–48) that posits that voters reward the perceived issue competencies and priorities of parties. Thus, unemployment should benefit left parties and inflation right parties. The contrast with the arguably more prominent “luxury model” proposed by Robert Durr is stark.

The luxury model argues that voters receive utility from a convex combination of two bundles of goods, those private goods afforded by net, post-tax, income, and public goods and redistributive social services provided by taxes revenue. Given diminishing marginal utility from income, the preferred tax rate of the voters will under most circumstances be nonzero. At a high income level, the marginal return on tax-funded social spending—everything from infrastructure, to policing, to the social stability from redistribution—will exceed that of additional private consumption. Thus, the voters’ optimal tax rate also changes with income level, providing a mechanism by which political preferences for left (higher taxing) or right (lower taxing) political parties also change. When the economy is strong, income levels high, and economic insecurity low, voters are more likely to underwrite the more generous (read: costly) social and environmental programs often associated with the left. Conversely, when the economy contracts, unemployment rises, and insecurity over material welfare increases, voters are less indulgent of extensive social spending.

Voters in Durr’s model can be represented in a simplified voter utility function

\[ u = [(1 - \tau) y]^\alpha + \phi \tau y (1 - \delta) \quad |\alpha, \delta, \phi, \tau < 1, \]

in which the first term captures income \((y)\) after taxes \((\tau)\) and the second represents public goods and redistributive social programs financed by taxes. Because the marginal utility of net income diminishes as net earnings increase, the first term is raised to the fractional exponent \(\alpha\). The second term captures public goods and redistributive social programs financed by tax revenue.\(^{12}\) Because private income is likely to be weighted more heavily by voters than the benefits of social spending, the second term has also been parameterized for the relative weight that voters assign to it \((\phi)\) and the inefficiency of taxation \((1 - \delta)\).

Simply solving for the optimal level of taxation \((\tau)\) from the first-order condition yields

\[ \tau^* = 1 - \frac{(\phi - \delta \phi)}{\alpha} \frac{1}{y}, \]

from which one can see that the voter’s preferred level of taxation (for public goods provision and redistribution) rises with income level.\(^{13}\) This is the key insight of Durr’s model: assuming that the left is associated with greater

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\(^{12}\) Of course, public goods and redistributive social programs are also subject to diminishing marginal returns. As we are only interested in a comparative static, however, the second term is modeled linearly to simplify presentation.

\(^{13}\) This result easily extends to inflation and unemployment. Inflation erodes real income and unemployment lowers expected income. Thus, both inflation and unemployment lower voters’ preferred level of taxation.
spending on social programs and public goods, voters will be more likely to support them—and the concomitant taxation—in strong economies when income levels are high. Durr, in fact, cast his argument and empirical tests in terms of the left/right ideological leanings of voters and the economic conditions that they expect; he then, indeed, found that the “policy sentiment” of U.S. voters shifted to the left in strong economies and to the right when less prosperous developments were foreseen. His finding, however, was limited to the United States. The first evidence demonstrating that rising support for the left in strong economies is a “fundamental dynamic of democratic politics” was provided in a later article (Stevenson 2001). Using objective macroeconomic data and retrospective responses to changes in the economy, Stevenson demonstrated a similar empirical regularity in 14 Western democracies: voters shift their support to the right when the economy is weak and to the left when it is strong.

This empirical regularity identified by Durr and Stevenson bears more important implications than they initially considered once one takes the synchronicity of economic cycles among developed democracies into account. While neither author explicitly connected shifts in the left/right “policy mood” of the electorate to actual vote intention, it is not difficult to suppose that leftward ideological shifts in the electorate translate into greater electoral support for left parties.14 Given such a link, synchronous economic cycles would imply common shifts in the partisan fortunes of political parties. Specifically, high levels of free trade and capital mobility induce international business cycles, which, in turn, imply comovement in unemployment, inflation, and growth; voters in economically integrated countries respond to synchronous downturns by shifting their vote intention away from parties—often parties of the left—associated with higher spending and taxation, thereby producing similar partisan shifts in multiple countries; in short, partisan waves.

Stevenson, who unlike Durr favors objective economic measures, employs unemployment, inflation, and growth in his empirical tests. Although he finds some evidence for all three, it is the first variable—unemployment—that offers the most direct connection to voter welfare and insecurity and, given extant research, it is also the most likely of the three to sway partisan leanings consistently.15

Finally, as alluded to at the beginning of this section, partisan comovement might also originate from noneconomic sources. An alternative mechanism, popular in the literature, suggests that elite policy adoption and even mass behavior such as in support of democratization spread across borders through imitation (cf. Brinks and Coppedge 2006; Simmons, Dobbin, and Garrett 2006). One could argue that voters respond to foreign partisan sentiment itself. That voters imitate others is hardly a new claim as evidenced, for example, by research on cue taking among partisans and bandwagoning in sequential elections (Bartels 1988). Expressions of collective opinion have long been known to influence the formation of others’ opinions. Across countries, however, there are many daunting constraints on imitative behavior; the influence of group opinion diminishes when individuals believe the group is composed of individuals unlike themselves (Walker and Heyns 1962); media coverage of political events, polls, and elections erodes across borders; and parties and issues differ. Moreover, it is only the most informed voters who are likely to be aware of political developments abroad; as Zaller (2004) demonstrates, high-information voters are also (a) the most ideological and (b) the least likely to switch their vote. Mass-level imitation of political preferences or even voting across countries is an unlikely source of partisan waves.

Empirics

Data and Method

To demonstrate the existence and extent of partisan waves, and then later investigate its source, I begin with data on party vote intention from semiannual Eurobarometer surveys conducted between 1976 and 1997, as systematized in the 2001 Mannheim Eurobarometer Trend File.16 Eight countries, which form the sample for this article, conducted a nearly complete series of semiannual surveys from 1976 to 1997: France, Belgium, Netherlands, Germany, Italy, Denmark, Ireland, and Great Britain. The main part of this analysis examines dynamics and thus employs aggregated vote intention, the percentage of trends than levels in macroeconomic aggregates but, again, they estimate unemployment more accurately than inflation. Unable to judge inflation and growth, they are also unlikely to react to them with distinct partisan responses. As the measure with the most tangible consequences for the electorate, unemployment is not only the most accurately predicted (Aidt 2000; Paldam and Nannestad 2000) but also the most salient economic measure for voters (Kuechler 1991).

14 Although this is far from self-evident. Coordination issues arise between preferences and voting (Cox 1997; Fisher 2004).

15 Voters have repeatedly demonstrated little ability to judge specific economic measures other than unemployment (Aidt 2000; Paldam and Nannestad 2000). As Conover, Feldman, and Knight (1986) and Sanders (2000) point out, voters perform better at recognizing

16 Although this edition of the Mannheim Eurobarometer Trend File (Scholz and Schmitt 2001) includes data through 1999, several surveys after 1997 do not collect data on vote intention.
respondents intending to vote for specific parties. A subsequent examination of mechanisms in the third section employs a multilevel logit model with individual-level vote intention. Support for specific parties can only contribute to a valid measure of international vote intention to the extent that the observed parties resemble each other. For this reason and in order best to conform to the luxury model, I measure vote intention for “luxury parties” in each country.

Luxury parties, as defined here, are the set of political parties that propose the most extensive—and likely expensive—social policies within a given country. More specifically, employing data from the Comparative Manifesto Project (Budge and Tanenbaum 2001), I calculate the mean proportion of sentences (or quasi-sentences where the authors formed long constructions with conjunctions or punctuation) in each party’s manifestos for all elections between 1970 and 1997 that supported policies that imply greater government spending and, potentially, taxation: (1) the environment [per501], (2) culture [per502], (3) social justice [per503], and (4) the welfare state [per504]. Each party is then ranked in descending order by its luxury score, i.e., the sum of (quasi-)sentences dedicated to positive support of these issues. Those parties that advocated big spending issues the most were classified as luxury parties and are listed in Table 5. In practice the overwhelming majority of luxury parties are parties of the left, although a few notable exceptions emerge.17

**Error Correction.** As is the case with all time-series data, stationarity is a concern. A panel stationarity test—as proposed by Levin, Lin, and Chu (2002)—suggests the presence of a unit root in at least some of the constituent data, stationarity is a concern. A panel stationarity test—of capturing long- and short-term dynamics in stationary data as proposed by Levin, Lin, and Chu (2002)—suggests the presence of a unit root in at least some of the constituent data, stationarity is a concern. A panel stationarity test—of capturing long- and short-term dynamics in stationary data as proposed by Levin, Lin, and Chu (2002)—suggests the presence of a unit root in at least some of the constituent data, stationarity is a concern. A panel stationarity test—

| 17The Wallonian Christian Social Party, usually classified as a party of the right, qualifies as a luxury party. Other parties such as Ecology Generation in France, the Agalev Flemish Greens in Belgium, or the PSDI Social Democrats in Italy—all usually classified as left—do not qualify as luxury parties. Also note one additional coding rule. Social liberal parties that promote egalitarian, redistributive, and environmental policies but strongly oppose raising taxes on all but the extremely wealthy do not qualify as luxury parties. Thus, D66 in the Netherlands and the Liberal Democrats in Great Britain are excluded.

18Most importantly, Levin Lin Chu panel tests of the dependent variable cannot reject the null of nonstationarity under any of several lag structures, although a single lag Levin Lin test of LuxVote comes close, p=.057. I err on the side of caution and assume nonstationarity bearing in mind that many ECs offer the same benefits of capturing long- and short-term dynamics in stationary data as in nonstationary but cointegrated data (DeBoef and Keele 2008).

19Specifically, a test of the LuxVote, NeighborsVote, and the economic variables in Table 2 is unable to reject a cointegration null, even when standard errors are bootstrapped to account for possible cross-panel correlation. The Westerlund test generates several coefficients to test whether the convergence parameter \( \phi = 0 \) for all \( i \) (see explanation below) versus several alternative hypotheses, that \( \phi_i < 0 \) for at least one \( i \) and that \( \phi_i < 0 \) for all \( i \). Rejection of \( H_0 \) is thus understood as rejection of cointegration for the whole panel. No test coefficients even approach significance, implying that the data are cointegrated.

20Of course, cointegration implies integration of the same order.

21Equation (2) can be derived from equation (1) by defining \( -(\gamma \phi) \) as \( \beta_\gamma \). It follows, then, that \( \gamma \), the parameter capturing the long-term equilibrium relationship, can be estimated from equation (2) as \( \frac{\beta_\phi}{\beta_\gamma} \).
**Spatial Autocorrelation.** In a single country time-series sample, equation (2) would suffice for most purposes. In time-series cross-section (TSCS) data, however, simply estimating (2) in the presence of spatial autocorrelation between panel units (countries) would produce dramatically biased and inconsistent OLS estimates (Anselin 1988). As I am explicitly concerned with cross-national effects, I accordingly modify (2) to allow for cross-national dependence by including the spatially lagged dependent variable on the right-hand side. In matrix notation, this yields

\[
\Delta y = y_{t-1} \beta_0 + \Delta X \beta_k + X_{t-1} \beta_j + \rho_k W \Delta y + \rho_j W y_{t-1} + \epsilon
\]

(3)

where \( y \) and \( X \) (as well as their first-differenced counterparts) are assumed to be at time \( t \) except for where otherwise noted; \( \rho_k \) captures the short-term association between left support domestically and in neighboring states; and \( \rho_j \), together with the coefficient of the temporally lagged dependent variable, captures the long-term effect of left vote intention in neighboring states, \( \frac{\rho_j}{\beta_h} \).

Equation (3) is actually an error correction version of a “spatial lag” regression model. A spatial weighting matrix together with the dependent variable enables the estimation of the spatial autocorrelation parameter \( \rho \). \( W \) is effectively an \( N \times N \) matrix identifying bordering states that then substitutes in population shares for each nonzero entry so that every row totals to unity. That is, it is row standardized (each row sums to one) and, because countries do not have borders with themselves, the diagonal is composed of zeros. It is then extended over time to take the shape \( N \times N \times T \) while \( \Delta y \) and \( y_{t-1} \) simply assume the shape of \( N \times T \). Note that, somewhat unconventionally, \( W \) actually performs two functions: both spatial and population weighting.

A careful reader of equation (3) will probably note the possibility of simultaneity bias introduced by inclusion of \( \Delta y \) on both sides of the equation. Although the zero diagonal in \( W \) ensures that no \( \Delta y_{i,t} \) is ever regressed on itself, cross-national effects in support for the left ensure that the \( y \) covariates are not fully exogenous to the dependent variable. This is unavoidable. In essence the choice between linear models with and without spatial weights amounts to a choice between omitted variable bias and simultaneity bias. Franzese and Hays (2007) have demonstrated that the former—that is, the spatial lag model—is by far the lesser of the two dangers, yielding less biased and more consistent estimates relative to panel OLS with-
work, in fact, motivates the puzzle of the failure of researchers to find comovement in the vote. National institutions, party systems, and voter strategic calculations intervene between ideological support and vote intention for specific parties. For this reason, the literature has distinguished between vote and popularity functions (Nannestad and Paldam 1994). As scholars from Downs (1957) to van der Brug, van der Eijk, and Franklin (2007) have argued, party popularity, let alone the ideological distribution of voters, can yield multiple distributions of the vote in multiparty settings depending on the strategic considerations of voters. Relative to the ideological findings of Kim and Fording (2001), actual vote intention also enables a better connection to—and, hence, test of—the luxury model explanation of partisan swings. The theory predicts that voters should shun spendthrift parties in times of economic insecurity. Ideological self-placement, unconnected to parties, would simply allow too much slippage between theory and test.

To these advantages, vote intention also offers a pragmatic attraction: it is regularly included as a question in all Eurobarometer surveys in our sample. Consequently, the following analyses all employ vote intention for luxury parties, LuxVote, as a dependent variable, first as a percentage of respondents, then later as an individual-level dichotomous measure. As mentioned above, luxury parties most often fall on the left and can therefore explain partisan comovement. An additional benefit of using the Eurobarometer vote intention measure is that the regular semiannual frequency of the data provides a means to capture common responses to simultaneous economic shocks not available to previous studies. The theory predicts that a country’s neighbors vote abroad emerges domestically in the long run. This is a notably large effect that contradicts earlier research and begs the question of why it did not emerge in previous studies. I offer two reasons.

First, the aggregation of multiple, sometimes contradictory, swings in partisan sentiment—or in the determinants of partisan sentiment—among neighboring countries tempers the “stimulus” received by a country. Studies such as that of Host and Paldam (1990) do not account for simultaneous shocks from multiple countries of varying size. Central tendency implies that large swings are rare and usually diluted by smaller or oppositely signed changes in other neighbors. The mean half-year to half-year change in NeighborsVote is only .176 percentage points with a standard deviation of 4.03. Thus, in 68% of observations, shifts abroad are associated with long-run partisan shifts at home of a modest 1.47 percentage points or less. The decision of earlier studies to test for effects from only a single foreign country did not replicate the aggregated “stimulus” that countries actually experience, thereby inflating variance in the stimulus and diminishing the estimated effect. Single country shocks simply have greater variance than aggregated shocks.

Table 1 presents the results for an initial “naive” model of partisan waves: it makes no allowances for economic effects but only seeks to capture the cross-border association in partisan vote intention. This is, in effect, a descriptive measure of the magnitude of partisan waves, regardless of their source. One immediately observes a cross-national pattern. The semiannual change in support for the luxury parties among a country’s neighbors predicts a substantively large and statistically significant change in support for them at home. In the long run, a one percentage point increase in the popularity of luxury parties in a country’s neighbors is associated with a .35 point increase in support for them at home.24 Thus, a four-point change in neighbors’ support for the left, i.e., one standard deviation above the within-country mean, is associated with a 1.4-point increase in support for luxury parties domestically. Over a third of a change in left support abroad emerges domestically in the long run. This is a notable large effect that contradicts earlier research.

The key independent variable in this section offers two marked improvements over earlier research by allowing for both simultaneous influence of multiple countries and accounting, albeit roughly, for geographic proximity. This variable, NeighborsVote, constructs a population-weighted average of the proportion of respondents intending to vote for luxury parties in each country’s neighbors, which are defined as any country that shares its borders and, for data availability, is one of the eight countries.23 Germany’s neighbors, for example, are France, Belgium, the Netherlands, and Denmark. The population-weighting ensures that partisan sentiment in France, for example, is a much larger component of NeighborsVote for Germany than is partisan sentiment in Denmark.

Table 1  Partisan Waves

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>(Std. Err.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LuxVote&lt;sub&gt;-1&lt;/sub&gt;</td>
<td>−0.317</td>
<td>(0.048)</td>
</tr>
<tr>
<td>ΔNeighborsVote</td>
<td>0.112</td>
<td>(0.055)</td>
</tr>
<tr>
<td>NeighborsVote&lt;sub&gt;-1&lt;/sub&gt;</td>
<td>0.101</td>
<td>(0.041)</td>
</tr>
<tr>
<td>Constant</td>
<td>9.275</td>
<td>(2.708)</td>
</tr>
</tbody>
</table>

N = 340; Country fixed effects ρ = .08; robust standard errors.

23 Ireland and Great Britain are considered neighbors although the British data exclude Northern Ireland.

24 $\frac{112}{\sqrt{317}} = .35$. 
Additionally, the population weighting and aggregation in NeighborsVote ensures that the shocks in large neighbors are accorded more influence than those in small neighbors.

Second, the international repercussions of a shock to partisan vote intent diminish quickly after the initial effect. Whether comovement in vote intent is actually caused by a common international shock or voters’ imitative response to partisan swings abroad, the duration of the effect of NeighborsVote is brief: only 68% (1 + (−.317)) of the initial effect from abroad persists after one period, implying that half of a shock’s full effect will have emerged after slightly less than two periods, just under a year.25 By focusing only on elections, which occur rather infrequently, previous studies likely missed most of any cross-border covariation in partisan vote intention. This omission, together with the failure to consider offsetting multiple foreign influences, may explain their failure to reject the null.

The initial results of Table 1, by accounting for temporal and geographic proximity and simultaneous shocks, already reveal that partisan vote intention does covary across borders. Contrary to the findings in previous studies, partisan comovement proves surprisingly strong between neighboring states, with over a third of a given shock abroad emerging domestically. A purely empirical study might stop at this point, but observing an empirical regularity is far from explaining it.

An Economic Source

How, in fact, do partisan waves originate? We have seen that partisan vote intention does covary in neighboring states. The source of such covariation, however, is less clear, as partisan waves could emerge from multiple sources: from cross-electorate international imitation, from common responses to international policy diffusion, or from common political responses to economic or political shocks. Very possibly multiple causes obtain but, among these, I argue, comovement in macroeconomic aggregates from international business cycles is a major source of covariation in national vote intention.

Comovement in European business cycles has risen over the last half century together with the increase in trade integration (Artis and Zhang 1997). One obvious indirect test for an economic source in partisan comovement is therefore its trend over time. Although an increasing degree of comovement in partisan vote intention across European countries would in no way establish economic causation, it would motivate closer scrutiny of potential economic sources. Figure 2 plots the magnitude of the ΔNeighborsVote coefficient from Table 1 in a 30-period moving window, beginning with the 30-period (i.e., 15-year) span from 1976 to 1990 and ending seven years later.26 The magnitude of comovement between changes in neighboring countries’ support for the left has increased over time in tandem with the strength of international business cycles.

Figure 2, however, is little more than suggestive since it implies a positive association with any variable that has increased over time. More compelling evidence of a role for international economic integration requires explicit economic variables. I address this need by expanding the naive model in Table 1 (a) to include economic variables and several controls, (b) to decompose the key independent variable—unemployment—into international and domestic components, and (c) to differentiate between states in which governments have high and low clarity of responsibility for economic outcomes.

The setup centers on two questions: Does foreign vote intention continue to predict domestic vote intention when entered in the same model as unemployment? And, do politically salient and internationally correlated economic variables prove strong predictors of vote intention? If foreign vote intention continues to predict domestic vote intention, we may infer that a mechanism other than common economic shocks underlies international partisan comovement; if only the economic variables prove significant but not the measures of foreign vote intention—then we should conclude that the international economy is the primary driver of partisan waves; if both prove significant, multiple effects likely obtain and the relative magnitude of each effect will be of interest.

**Variables.** Theory suggests that three macroeconomic measures could matter. The luxury model suggests that any variable that influences real disposable income—thus, GDP growth, inflation, and unemployment—has partisan effects; Hibbs’s (1977) partisan theory suggests an effect for just inflation and unemployment, as do Powell and Whitten (1993). Each of these three economic variables is included, together with an interaction with a left government dummy to test whether the effect on partisan vote intention is conditioned by the partisan character of the present government. The partisan accountability hypothesis, for example, predicts that voters punish right

25The proportion of an effect to emerge after t periods is given as \( p = (1 + \beta_0)^t \), which then implies that the number of periods for half of an effect to materialize is \( \frac{\ln(0.5)}{\ln(1 + (-0.317))} = 1.818 \).

26These time series are admittedly short, but a longer time series would provide even fewer coefficients to plot.
governments more for inflation and left governments more for unemployment.

Of these variables, expectations for an effect are highest for unemployment. Studies of voter perceptions have repeatedly revealed voters to be poor judges of inflation and even of GDP growth (Aidt 2000; Paldam and Nannestad 2000) while unemployment often emerges as both better known and more salient to voters (Kuechler 1991). Voters have little awareness of major economic aggregates other than unemployment and find them less salient.

Like inflation and growth, changes in unemployment are also highly correlated across countries. Simple cross-country correlations of first-differenced unemployment vary from .794 (Britain—Ireland) and .725 (Germany—Netherlands) to −.197 (Italy—Denmark) with a mean for all 28 dyads of .325; unsurprisingly, geographically proximate countries with strong trade ties—i.e., those most influential in the spatial weighting—tend to have more correlated changes in unemployment. Consequently, a significant role for unemployment in explaining variation in national vote intention implies an international connection. A large proportion of variation in unemployment clearly originates abroad.

Simply showing a partisan effect of unemployment, however, would constitute only indirect evidence of an international economic effect on domestic vote intention. To make the international role more explicit, I also decompose unemployment into its domestic and international components. Each country’s unemployment rate is regressed on the weighted mean unemployment of the other states. The unemployment predicted by mean unemployment abroad—unemployment-hat—is thus the international component in a country’s unemployment (IntlUnem) while the residual is the country-specific unemployment (DomesticUnem). Voters, of course, are unlikely to be able to distinguish whether recent job losses are attributable to changes that originate at home or abroad. Thus, we expect broadly similar regression coefficients for both components with a few caveats. Different variances imply different coefficient magnitudes for the two methods. Also, domestic unemployment, as a residual, will include more noise. The anticipated signs of both unemployment coefficients, reflecting the luxury model prediction, are, of course, negative.

Finally, before turning to the analysis, consider one control that accounts for potential sources of misestimation. The proportion of the population in full-time employment, Employment/Pop, calibrates the unemployment variable—5% unemployment among a workforce that constitutes most of the population has different implications than the same unemployment rate in a workforce that covers less of the population—and promises

Note: 30-period (15-year) moving window, robust s.e.
a possible direct partisan effect of its own. Individuals making contributions from their paychecks to support the welfare state are, all things equal, more likely to sympathize with the tax skeptical proposals of the right.

**Analysis.** The analysis proceeds as follows. All six models in Table 2 are highly similar with a few deviations: (1) the first three include unemployment in its differed and lagged form while the final three decompose unemployment into its domestic and international components before differencing and lagging each; (2) the second model of each category (i.e., unitary and decomposed unemployment) is estimated only for the four high-clarity states; and (3) although all models include country fixed effects, the last one in each category adds time fixed effects.

The second model and fifth model of Table 2 test for stronger effects in countries with high clarity of responsibility as implied by Powell and Whitten (1993). Clarity of governmental responsibility (Clarity) captures institutional and political features—such as coalition government, ideological cohesiveness of parties, opposition control of an upper chamber of the legislature—that obscure party responsibility for policy outcomes. Voters in high-clarity states are expected to respond more strongly to economic shocks because they can associate partisan control of government and economic outcomes. In order to avoid a triple interaction, these models rerun the full sample model on the subsample of high-clarity countries identified in the literature (Nadeau, Niemi, and Yosihnaka 2002; Powell 2000): Great Britain, Ireland, France, and Germany.

The third and sixth models of the table return to the full sample and add time fixed effects to the country fixed effects found in the other models. Just as the country fixed effects capture country-specific variation in vote intention, time fixed effects capture time-specific effects common across countries. This is particularly helpful in the present analysis to ensure that any effects of common economic variation that emerge are not capturing other contemporaneous international influences.

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**Results.** With the modeling decisions and setup established, let us now consider the regression results. Table 2 quickly reveals several patterns. Most strikingly, change in vote intention abroad, \( \Delta \text{NeighborsVote} \), ceases to predict change in vote intention at home once economic variables are included. That spatially weighted measures of luxury party vote intention abroad prove a strong predictor of luxury party support at home when economic controls are excluded (i.e., in Table 1), but not when they are included, suggests that spatially lagged vote intention abroad may have been capturing the effect of the omitted economic and time variables. This, of course, in no way means that partisan vote intention does not covary across countries. Indeed, the results from Table 1 demonstrate that it does. What we learn from the present results is that comovement in partisan vote intention does not arise from short-run direct effects of partisan vote intention across borders—as would be the case with voter mimicry of foreign preferences—but from common responses to common external influences.

International business cycles, as evidenced by the strength of the unemployment variables, are certainly such an influence, but the long-run relationship between foreign and domestic vote intention also suggests other sources. Four of the six models predict a significant and substantial effect for \( \Delta \text{NeighborsVote},_{-1} \). Specifically, between 33 (Model 2.4) and 49% (Models 2.2 and 2.5) of a shift abroad crosses borders in the long run. The strong long-run influence of vote intention in neighbors suggests that nonmaterial influences—effects not captured by the economic variables—are also at work. The following section leverages individual-level data to consider several additional mechanisms in greater detail; the present section focuses on the central argument of this article: that the international economy strongly influences domestic shifts in partisan vote intention.

Of the three economic aggregates in the model, the results in Table 2 identify unemployment as the primary mechanism via which economic variation induces shifts in partisan vote intention. The first differences of both unemployment and its international and domestic components emerge in most models as significant predictors of domestic shifts in vote intention for luxury parties. Following Model 2.2, assume that the left is not in government and that country fixed effects are estimated: then a one percentage point shift in the period-to-period change in unemployment yields a 2% point drop in vote intention for the left at home in the short run; isolating the international component of unemployment increases the magnitude of this figure, dropping the change in left support by nearly three and a half points. The change in this

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28The first difference of Employment/Pop is excluded from the model because both of its constituent variables are available only as annual data and because it changes very slowly.

29Country and time fixed effects are estimated but omitted from the table to conserve space and clarify presentation. Robust standard errors are presented in parentheses and all significance tests are two-tailed.

30Powell (2000) also identified the Netherlands as a borderline high-clarity country; as expanded and extended measures of clarity record a much lower clarity score for the Netherlands (Nadeau, Niemi, and Yosihnaka 2002), I omit them from the high-clarity group.
Table 2  An Economic Source?

<table>
<thead>
<tr>
<th></th>
<th>Unemployment</th>
<th>Decomposed Unemployment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All (1)</td>
<td>HiClar (2)</td>
</tr>
<tr>
<td>LuxVote_{t-1}</td>
<td>-.344</td>
<td>-.312</td>
</tr>
<tr>
<td></td>
<td>(.054)**</td>
<td>(.071)**</td>
</tr>
<tr>
<td>ΔNeighborsVote</td>
<td>.089</td>
<td>.014</td>
</tr>
<tr>
<td></td>
<td>(.057)</td>
<td>(.071)</td>
</tr>
<tr>
<td>NeighborsVote_{t-1}</td>
<td>.117</td>
<td>.154</td>
</tr>
<tr>
<td></td>
<td>(.051)**</td>
<td>(.083)*</td>
</tr>
<tr>
<td>ΔUnemployment</td>
<td>-1.100</td>
<td>-2.117</td>
</tr>
<tr>
<td></td>
<td>(.641)*</td>
<td>(.979)**</td>
</tr>
<tr>
<td>Unemployment_{t-1}</td>
<td>-.123</td>
<td>-.287</td>
</tr>
<tr>
<td></td>
<td>(.187)</td>
<td>(.311)</td>
</tr>
<tr>
<td>ΔIntUnem</td>
<td>.604</td>
<td>.835</td>
</tr>
<tr>
<td></td>
<td>(.336)*</td>
<td>(.444)*</td>
</tr>
<tr>
<td>Inflation_{t-1}</td>
<td>-.113</td>
<td>-.231</td>
</tr>
<tr>
<td></td>
<td>(.177)</td>
<td>(.369)</td>
</tr>
<tr>
<td>ΔGrowth</td>
<td>-.159</td>
<td>-.394</td>
</tr>
<tr>
<td></td>
<td>(.246)</td>
<td>(.417)</td>
</tr>
<tr>
<td>Growth_{t-1}</td>
<td>-.238</td>
<td>-.949</td>
</tr>
<tr>
<td></td>
<td>(.330)</td>
<td>(.562)*</td>
</tr>
<tr>
<td>Employment/Pop_{t-1}</td>
<td>-.296</td>
<td>.225</td>
</tr>
<tr>
<td></td>
<td>(.148)**</td>
<td>(.388)</td>
</tr>
<tr>
<td>LeftGov</td>
<td>-1.647</td>
<td>-2.251</td>
</tr>
<tr>
<td></td>
<td>(.553)**</td>
<td>(.918)**</td>
</tr>
<tr>
<td>ΔUnem * LeftGov</td>
<td>-.013</td>
<td>-.500</td>
</tr>
<tr>
<td></td>
<td>(.494)</td>
<td>(.866)</td>
</tr>
<tr>
<td>ΔInflation * LeftGov</td>
<td>-.791</td>
<td>-1.171</td>
</tr>
<tr>
<td></td>
<td>(.428)*</td>
<td>(.576)**</td>
</tr>
<tr>
<td>ΔGrowth * LeftGov</td>
<td>.315</td>
<td>-.480</td>
</tr>
<tr>
<td></td>
<td>(.704)</td>
<td>(1.132)</td>
</tr>
<tr>
<td>Constant</td>
<td>23.916</td>
<td>4.026</td>
</tr>
<tr>
<td></td>
<td>(7.065)**</td>
<td>(10.904)</td>
</tr>
<tr>
<td>N.Obs.</td>
<td>313</td>
<td>155</td>
</tr>
<tr>
<td>N.Countries</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>R²</td>
<td>.2</td>
<td>.237</td>
</tr>
<tr>
<td>p</td>
<td>.532</td>
<td>.350</td>
</tr>
</tbody>
</table>

Spatially weighted error correction model with country (and in Models 2.3 and 2.6, time) fixed effects. Dependent variable is proportion of respondents intending to vote for a luxury party. ΔUnem * LeftGov employs Unemployment in Models 2.1–2.3 and IntUnem in models 2.4–2.6. Robust standard errors, \*\*\*p < .01; \*\*p < .05; \*p < .10.
effect when the left is in government is not statistically distinguishable from zero.

These unemployment results, both for the unitary and decomposed version of the variable, broadly comport with the expectations of the luxury model. The partisan accountability hypothesis and the issue priority hypothesis, in contrast, receive little support. Where the issue priority theory predicts that rising unemployment should motivate voters to support the left, we see a decline in the luxury party vote; where it predicts a shift in vote intention toward the right, we see a null result. Support for luxury parties increases, mostly insignificantly, with the change in inflation when the left is in office and declines, again insignificantly, when the right is in office.31

The partisan accountability hypothesis fares no better. When interacted with LeftGovt neither real GDP growth nor unemployment show any sign of partisan dependence. Inflation, however, yields results at least modestly consistent with the partisan accountability hypothesis, raising support for the left (more specifically, luxury parties) when the left is out of government. A better explanation of this inflation result might simply be the standard nonpartisan accountability model of government: voters punish governments that perform poorly. Indeed, this may explain the other half of the inflation effect: it decreases support for luxury parties—albeit by a substantially smaller magnitude—under left rule.

Luxury model effects are in no way incompatible with accountability effects. That is, voters can both punish or reward incumbents for economic outcomes and spurn parties associated with high spending and taxation in periods with weak economic performance. The focus of this article is not on the electoral accountability of governments since such a mechanism simply punishes or rewards whichever party is in office and does not deliver a systematic partisan effect. It is encouraging, however, to see such effects despite a dependent variable and model designed to investigate partisan effects. Not only does inflation harm the electoral fortunes of the parties in government—or those with a similar ideological position to those in government—but the sign, if not the significance, of the effect of change in GDP growth also usually matches accountability expectations. When the left is out of office, Growth reduces electoral support for luxury (read: left) parties in five of six models—presumably because voters are rewarding right governments; when the left is in power, faster growth increases the vote intention for luxury parties in four of six models.

In conclusion, short-run shifts in partisan popularity abroad cease to predict shifts in domestic vote intention at home when included in the same model with economic variables; increases in unemployment—and its international and domestic components—predict decreases in vote intention for luxury parties, especially in high-clarity countries. And this unemployment effect does not depend on the partisanship of the present government. The role of unemployment shocks as a source of partisan preferences helps explain why economic integration matters. Trade-integrated states experience greater comovement of business cycles (Baxter and Koupitas 2005; Kose, Otrok, and Whiteman 2003), which yield greater comovement of unemployment shocks and, ultimately, greater partisan comovement. Expressed more strongly, the present results suggest that international business cycles induce international partisan waves.

Robustness and Alternative Sources

Thus far I have focused on cross-border effects with the use of aggregate-level data and an error correction model. While ECMs are a strong tool for examining the dynamics underlying partisan waves, they, like all aggregate-level analysis, can be subject to estimation and inference problems when testing individual-level mechanisms. At the substantive level lies the threat of ecological fallacy: grouped data can suggest very different relationships than their individual-level components. Statistically, aggregation reduces the number of observations and the amount of information, thereby reducing the analysis’ power. The key luxury model mechanism in this article is undeniably at the individual level and therefore demands individual-level tests.

As much of the data in the previous analyses come from Eurobarometer surveys, it can be unpacked for individual-level analysis that supports the inclusion of classic demographic controls—such as ideology, class, education, and income—found in most voting models. The transition to individual-level data also liberates the analysis from time-series concerns since the Eurobarometer does not survey the same individuals in each wave. Consequently, we are able to employ survey questions that do not occur every half-year which, in turn, enables the use of variables measuring media access and individuals’

31 A better test of the issue priority hypothesis relative to the luxury model would drop the interaction with the partisanship of the government and constrain change in inflation. The issue priority hypothesis would predict a positive sign on change in unemployment and the luxury model a negative sign. Three such models have been run but are not reported here. A fully constrained model setting the change in inflation to zero, an attenuated model restricting the variance of changes in inflation, and a dummy interaction model all show the effect of shifts in unemployment on vote intention for luxury parties to be negative and significant at at least the .05 level.
perceived threat of war to test alternative explanations for the emergence of partisan waves.

Helpful though they are, individual-level data do not solve all problems. Key economic measures and the measure of foreign influence \( \text{NeighborsVote} \) are irreducibly aggregate and cannot simply be entered into an individual-level dataset. The repetition of observations would not only violate i.i.d. assumptions but also would inflate the denominator of the standard error equation, bias standard errors downward, and invite positive inference where there is none. Multilevel models circumvent this problem and, even more helpfully, help us understand inter-class dependencies. This section employs a two-level random coefficients logit model that combines individual- and country-level data to test the robustness of our key finding in Table 2—the importance of unemployment in transmitting partisan waves—and to investigate the two most important rival mechanisms.

**Estimation and Results.** I assemble the three empirical models presented in Table 3 on a standard individual-level voting foundation,

\[
\ln \left( \frac{p_{ij}}{1 - p_{ij}} \right) = \beta_0 + \beta_1 \text{LeftRight}_{ij} + \beta_2 \text{Education}_{ij} \\
+ \beta_3 \text{Income}_{ij} + \beta_4 \text{ManualLaborer}_{ij} \\
(4)
\]

The \( i \) subscript indexes individuals and the \( j \) subscript indexes countries. Each also varies over half-years. Country-level variables enter through the random intercept, which is estimated as

\[
\beta_0 = \gamma_0 + \gamma_0 \text{NeighborsVote}_j + \gamma_2 \text{Unemployment}_j \\
+ \gamma_3 \text{Inflation}_j + \gamma_4 \text{Growth}_j + u_0. \\
(5)
\]

Country-level coefficients can also enter through a random coefficient that enables a cross-level interaction:

\[
\beta_3 = \gamma_{10} + \gamma_{1i} \text{NeighborsVote}_j + u_{i}. \\
(6)
\]

By substituting equation (5) into equation (4), I construct the random intercept model in the first column of Table 3; simply adding \( \beta_3 \text{ThreatOfWar} \) yields Model 3.2; and, finally, replacing \( \text{ThreatOfWar} \) with \( \text{MediaUse} \) and substituting equation (6) for \( \beta_3 \) produces the cross-level interaction seen in Model 3.3.

The multilevel results in all three models of Table 3 broadly resemble those in Table 2.\(^{32}\) Unemployment significantly decreases vote intention for luxury parties while neighbors’ vote intentions do not show a relationship that can be distinguished from zero at standard levels of significance. All of the individual-level covariates emerge with their conventional signs: voters on the ideological right, with more education and greater incomes are less likely to support luxury parties while manual laborers—who are more likely to be working class and unionized—are more likely to vote for them. Perhaps of more interest are the coefficient estimates for the other economic variables. The direction of the effects of \( \text{Growth} \) and \( \text{Inflation} \) is consistent with predictions of the luxury

\[
\begin{array}{ccc}
\text{Table 3} & \text{Robustness and Alternative International Sources} \\
& \text{Econ} & \text{Threat} & \text{Media} \\
& (1) & (2) & (3) \\
\hline
\text{NeighborsVote} & .002 & .002 & .010 \\
& (.004) & (.004) & (.006)* \\
\text{LeftRight} & -.597 & -.598 & -.627 \\
& (.009)** & (.009)** & (.012)** \\
\text{Education} & -.067 & -.066 & -.067 \\
& (.006)** & (.006)** & (.007)** \\
\text{Income} & -.023 & -.025 & -.021 \\
& (.005)** & (.005)** & (.006)** \\
\text{ManualLaborer} & .273 & .275 & .222 \\
& (.038)** & (.038)** & (.039)** \\
\text{Unemployment} & -.064 & -.062 & -.029 \\
& (.011)** & (.011)** & (.015)** \\
\text{Inflation} & -.030 & -.024 & .021 \\
& (.014)** & (.014)* & (.014) \\
\text{Growth} & .018 & .015 & .017 \\
& (.017) & (.017) & (.017) \\
\text{ThreatOfWar} & -.021 & & (.006)** \\
& & & \\
\text{MediaUse} & & -.080 & \\
& & (.057) & \\
\text{NeighborsVote} * \text{Media} & & .003 & \\
& & (.001)* & \\
\text{Constant} & 3.239 & 3.303 & 2.544 \\
& (.414) & (.416) & (.510) \\
\text{N.Obs.} & 26967 & 26967 & 19333 \\
\text{LogLikelihood} & -13339.14 & -13332.13 & -9787.05 \\
& & & \\
\text{Random-Effects Parameters} & & \\
\text{sd}(u_{i1}) & 3.23e-07 & & \\
& & (.010) & \\
\text{sd}(u_{0i}) & .655 & .659 & .752 \\
& (.236) & (.237) & (.271) \\
\end{array}
\]

Two-level random coefficients logit. Dependent variable is vote intention for luxury party. Eurobarometer sample differs for Model 3.3 due to data availability. The upper level is country half-year (EB). All models estimated for high-clarity countries. **\( *p < .01; **p < .05; *p < .10.\)

\(^{32}\)All variables are defined in the data appendix (Table 4). The upper-level observations are country half-year.
## Table 4 Data Appendix

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition and Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>LuxVote</td>
<td>Luxury vote. In Table 2, the proportion of respondents intending to cast a vote for a “luxury party” (see next appendix) in the Eurobarometer’s vote intention question. In Table 3, a dummy variable indicating a vote for a luxury party. Source: Mannheim Eurobarometer Trend File: 1970–1999. Evi Scholz and Hermann Schmitt (2001).</td>
</tr>
<tr>
<td>Unemployment</td>
<td>Unemployment rate. Source: CPDS and OECD Quarterly Labor Force Statistics. BEL, DNK, FRA, IRL use repeated annual unem rate data from CPDS from 75h1 to 82h2 and 2-qtr means from OECD Quarterly Labor Force Statistics thereafter. OECD standard unemployment rate (SUR) as percentage of civilian labor force, seasonally adjusted. DEU (GER), ITA, UK: 2-qtr means of own national unemployment rate data, seasonally adjusted for all entries. Percent of total labor force. Source: OECD QLFS. NLD Unemployment rate (SUR) sa - units: Percent of civilian labor force. [UNEM].</td>
</tr>
<tr>
<td>IntlUnem</td>
<td>International unemployment. Mean unemployment in the other sample countries weighted by border and population [NbPopUn].</td>
</tr>
<tr>
<td>DomesticUnem</td>
<td>Domestic component of unemployment. The component of unemployment unique to each country, i.e., the residual not predicted by regressing each country’s unemployment on mean unemployment in the other sample countries (weighted by border and population) [NbPopUn].</td>
</tr>
<tr>
<td>Inflation</td>
<td>Percent change in CPI from previous half-year. Source: IMF International Finance Statistics quarterly consumer price index. [ΔCPI].</td>
</tr>
<tr>
<td>Growth</td>
<td>Percent change in real GDP from previous half-year. Half-year GDP is sum of corresponding quarterly figures. Source: IMF IFS Nat’l Acct data. FRA, GER, ITA, NLD, UK are seasonally adj. Where quarterly data not available, semiannual growth rate is imputed from annual data assuming constant rate over year: [ r = \frac{\ln(A) - \ln(P)}{2} \times 100. ] [rGDPₚ].</td>
</tr>
<tr>
<td>Population</td>
<td>Population in thousands. Germany is FRG+GDP from 1991 onwards. GB uses UK figures. Annual data from CPDS at Berne. [Pop].</td>
</tr>
<tr>
<td>Employ/Pop</td>
<td>Employment/Population. Annual observations are repeated for semiannual; therefore no first-differencing for this variable. Source: both employment and population from Comparative Politics Data Set (Armingeon et al. 2005). [EmpPop].</td>
</tr>
<tr>
<td>NeighborsVote</td>
<td>Mean proportion of respondents in neighboring states intending to vote for luxury parties. Weighted by country population. Neighbors defined as states that border one another. Great Britain and Ireland are considered neighbors. [NBVLUX].</td>
</tr>
<tr>
<td>LeftGov</td>
<td>Left government dummy. Coding follows Wolderndorp, Keman, and Budge. [Left-WKB2].</td>
</tr>
<tr>
<td>ManualLaborer</td>
<td>Dummy identifying skilled or unskilled manual worker. Based on Eurobarometer occup variable. Coded as 1 if occup = 12 in EB3-29; 11 or 12 in EB30-36; 17 or 18 in EB37-42; 13 or 14 in EB43 onwards. [MANUAL].</td>
</tr>
</tbody>
</table>
Table 5 Luxury Party Appendix

<table>
<thead>
<tr>
<th>Country</th>
<th>Zeus Code</th>
<th>Party Name</th>
<th>LuxuryScore</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>801</td>
<td>Greens</td>
<td>40.11</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>PCF Communists</td>
<td>19.00</td>
</tr>
<tr>
<td></td>
<td>200</td>
<td>PS Socialists</td>
<td>18.57</td>
</tr>
<tr>
<td>Belgium</td>
<td>201</td>
<td>SP Flemish Socialists</td>
<td>24.67</td>
</tr>
<tr>
<td></td>
<td>400</td>
<td>PSC Francophone Christian Social Party</td>
<td>20.60</td>
</tr>
<tr>
<td></td>
<td>800</td>
<td>Ecolo Francophone Ecologists</td>
<td>19.28</td>
</tr>
<tr>
<td></td>
<td>200</td>
<td>PS Francophone Socialists</td>
<td>18.60</td>
</tr>
<tr>
<td>Netherlands</td>
<td>203</td>
<td>PPR Radical Political Party</td>
<td>26.56</td>
</tr>
<tr>
<td></td>
<td>200</td>
<td>PvdA Labour</td>
<td>26.19</td>
</tr>
<tr>
<td></td>
<td>800</td>
<td>GL Greens</td>
<td>25.22</td>
</tr>
<tr>
<td>Germany</td>
<td>800, 805</td>
<td>Greens—Alliance 90</td>
<td>29.49</td>
</tr>
<tr>
<td></td>
<td>200</td>
<td>SPD Social Democrats</td>
<td>26.69</td>
</tr>
<tr>
<td></td>
<td>103</td>
<td>PDS Party for Democratic Socialism</td>
<td>26.63</td>
</tr>
<tr>
<td>Italy</td>
<td>800</td>
<td>FdV Greens</td>
<td>41.92</td>
</tr>
<tr>
<td></td>
<td>102</td>
<td>RC New Communists</td>
<td>18.11</td>
</tr>
<tr>
<td></td>
<td>100, 103</td>
<td>PCI-PDS Communists</td>
<td>13.49</td>
</tr>
<tr>
<td></td>
<td>200</td>
<td>PSI Socialists</td>
<td>12.55</td>
</tr>
<tr>
<td></td>
<td>101</td>
<td>PdUP Proletarian Unity</td>
<td>11.82</td>
</tr>
<tr>
<td></td>
<td>104</td>
<td>DP Proletarian Democracy</td>
<td>11.67</td>
</tr>
<tr>
<td>Denmark</td>
<td>7</td>
<td>EL Unity List</td>
<td>28.00</td>
</tr>
<tr>
<td></td>
<td>104</td>
<td>FK Common Course</td>
<td>27.18</td>
</tr>
<tr>
<td></td>
<td>101</td>
<td>SF Socialist Peoples Party</td>
<td>21.53</td>
</tr>
<tr>
<td></td>
<td>200</td>
<td>SD Social Democrats</td>
<td>19.30</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>DKP Communists (later Unity List)</td>
<td>11.82</td>
</tr>
<tr>
<td></td>
<td>201</td>
<td>VS Left Socialists (later Unity List)</td>
<td>7.34</td>
</tr>
<tr>
<td>Ireland</td>
<td>202</td>
<td>DLP Democratic Left</td>
<td>42.76</td>
</tr>
<tr>
<td></td>
<td>201</td>
<td>WP Workers Party</td>
<td>42.13</td>
</tr>
<tr>
<td></td>
<td>800</td>
<td>Greens</td>
<td>35.26</td>
</tr>
<tr>
<td></td>
<td>200</td>
<td>LP Labour Party</td>
<td>29.72</td>
</tr>
<tr>
<td>Great Britain</td>
<td>200</td>
<td>Labour Party</td>
<td>18.13</td>
</tr>
</tbody>
</table>

Zeus code is the Mannheim Eurobarometer Trend File party classification that corresponds to the given Manifestos Project party name. Luxury scores capture the mean percentage of phrase fragments in party manifestos in all elections since 1970 dedicated to luxury issues: (1) the environment (per501); (2) culture (per502); (3) social justice (per503); and (4) the welfare state (per504). See the Manifesto Project code book for full definitions. Available with the dataset in Budge, Klingemann, Volkens, Bara, and Tanenbaum (2001).

model in five out of six cases and Inflation significantly lowers the odds of voting for a luxury party in Models 3.1 and 3.2.

Having reassured ourselves of the robustness of our earlier findings in Model 3.1, we can now investigate the two most prominent alternative mechanisms. Might variation in the Cold War threat of conflict induce a common and synchronous shift among voters toward defense-oriented parties of the right and away from luxury parties? Model 3.2 suggests that this is indeed the case. Employing the (recoded) Eurobarometer survey question on the likelihood of world war that was collected roughly yearly up to 1988, we observe that individuals with higher assessments of the likelihood of war are significantly less likely to vote for luxury parties. This result, however, seems to complement rather than undermine the effect of the economy.

Comovement in vote intention for the left could also emerge from imitative diffusion effects. Voters, observing their peers abroad, might mimic their preferences or
behavior. A prerequisite for this type of cross-border influence is knowledge: those voters who are the least aware of developments abroad must also be the least likely to imitate them. Model 3.3 tests this proposition employing a cross-level interaction between the frequency of individual news consumption, MediaUse, and the vote intention for luxury parties in a country’s neighbors. Like the previous model, the results here also suggest an additional, albeit less significant, influence: the effect of neighboring countries’ vote intention increases together with news consumption. Taken together with the results of the previous model, this suggests that multiple mechanisms may influence international comovements in vote intention. Economic influences consistent with the luxury model, however, rank foremost among effects and prove robust not only to rival mechanisms but also to different estimation techniques, datasets, and levels of observation.

Conclusion

This article provides the first evidence of a phenomenon long discussed by observers of politics but never established by scholars—that the electoral fortunes of the left and right covary across nations. A given shift in vote intention for luxury parties among a country’s neighbors corresponds to a similar shift, of about half its magnitude, over the long run at home. Partisan sentiment, it appears, moves in international waves. Analysis further suggests that such partisan comovement arises in large part from the common causality of synchronous business cycles. Covariation in unemployment, in particular, induces contemporaneous shifts in support for luxury parties across multiple countries as voters, weighing private income more than public benefits, shift their support away from parties associated with higher taxation and spending. As international trade and, consequently, business cycle integration have risen over time, so has comovement in the partisan preferences of electorates.

The implications of these findings are manifold. A large proportion of what is commonly interpreted as national economic effects on the vote in studies of economic voting—or, indeed, most research employing macroeconomic regressors—is likely international. International covariation in partisan vote intention and, indeed, governance, is connected to the emergence of international business cycles which, in turn, are strongly related to cross-border trade. Thus, continuing economic integration, especially in western Europe, does not only have implications for policy (e.g., Boix 1998; Garrett 1998) but also for politics per se. The second-order effects are no less substantial. If partisan complexion influences foreign policy, partisan waves could yield more fruitful opportunities for international cooperation. A necessary step toward such an outcome, however, is first what this article establishes, the existence and economic origin of partisan waves.

References


