

# The Economy and the Vote in EP Elections. A Comparative and Dynamic Perspective

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## **Abstract**

Economic factors are said to be one of the most relevant factors influencing voting behavior. That should be true for the European Parliament (EP) elections for at least two reasons. First, the European Union is seen as focusing mainly on economic issues and second, EP elections are often considered as the second-order elections, i.e. as a referendum on the state of economy in the national states and the corresponding government responsibility. This paper aims at testing to which extent economic voting explains voting behavior in the EP elections over time.

As data on the 2004 and 2009 EP elections are used, the paper builds upon data before and at the peak of the world economic crisis and thus provides an ideal setting to probe a bit deeper in the mechanisms of signal extraction. The voting behavior is related to objective and subjective economic variables, as well as economic competence signals, the clarity of responsibility for economic policies and basic institutional features, and modeled in the Bayesian framework. The results reveal the context heterogeneity of economic voting, and indicate its systematic connection to alternative varieties of capitalism, to core political institutions, the clarity of the responsibility in liberal versus corporatist countries.

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# 1 Introduction

In comparative political science, elections to the European Parliament (EP) are generally considered to be “second-order [read: national] elections”. This implies a number of crucial features: First, while electoral contests in the primary arena determine who holds, defends, or gains national government offices, any other elections, including EP elections, are considered second-order elections. Secondly, EP elections are not only of comparatively lower significance to voters and political parties, but also tend to be concerned with national rather than genuinely European politics. Thirdly, voters typically do not take much interest in European affairs and often do not turn out in EP elections, while those who do participate often aim at staging protest against their national government, turn away from large, mainstream government parties and instead cast their votes for small, extremist opposition parties. This multifaceted empirical pattern was first diagnosed and, referring to the literature on state elections in the United States, labelled a “second-order election model” by Reif and Schmitt (1980).

While the second-order election model fails to pin down what exactly can be considered “national” and what “European”, there is a broad consensus that the economy belongs to the most salient issues on both the domestic and the European level. In a nutshell, the economic voting literature suggests that elections are, at least partly, referenda about the economy or alternative economic policies. The classical “sanctioning model” employs a retrospective, backward-looking perspective, attributes the economic development to the national government and posits that voters tend to reward parties in government when the economy is doing well and to punish governing parties in times of economic crisis (Kramer, 1971). The more recent “selection model” adopts a prospective, forward-looking perspective. Similar to classical models of issue voting, voters compare alternative political platforms and attempt to infer their competence in tackling economic problems (Duch and Stevenson, 2008).

The current financial and economic crisis presents a unique “laboratory” to assess the potential significance of the economic vote, to assess its variability across heterogeneous contexts, and to explore the rationale voters apply to extract politically relevant competence signals from raw economic indicators. In other words: The European Election Studies of 2004 and 2009 provide a unique opportunity to compare the economic vote (i.) across the heterogeneous member states of the European Union and (ii.) across the “normal economy” of 2004 and the deep financial and economic crisis of 2009.

This paper explores some of the major controversies in the economic voting literature by testing established hypotheses in these heterogeneous contexts. This coordinated series of parallel election study modules provides a detailed and rich data source for comparative electoral studies which does not only facilitate the specific analysis of voting behaviour in EP elections, but also contributes to general electoral research and allows for systematic robustness checks of the findings. Against this background, many substantive controversies regarding the extent and the weight of the economic vote stem from ostensibly “minor” technical decisions: The explanations of stated vote decisions vs. the modelling of the propensity to vote; the utilization of subjective assessments of the economy vs. objective

indicators of economic development as the core explanatory variable; the application of pooled, of one-stage, or two-stage multilevel models. Specifically, many analyses of the economic voting literature have opted to solve issues specific to this line of theorizing at the expense of any other aspect of electoral behaviour, while this contribution in contrast aim at integrating the economic voting argument with the voter utility functions.

We present the core theoretical argument as follows: At the outset, we briefly wrap up the theoretical issues at stake, critically review the SOE model (section 2) and introduce the basic notions of economic voting theories and some statistical controls (section 3). Next, we introduce the datasets which are utilized in the empirical research (section 4) and present the main findings of the analysis (section 5). The concluding section briefly reviews the principal empirical findings, critically evaluates their contribution to the literature on economic voting, and addresses a number of fruitful conceptual perspectives of future research (section 6).

## 2 Electoral Cycles: The “Second Order Election Model”

The second-order election model posits that EP elections are actually something like a (midterm) contest in political competition for national government office. From this angle, EP elections are not genuinely about Europe, but less significant referenda about national politics. This assertion is supported by a number of robust empirical regularities:

- In EP elections, turnout is usually lower than in elections to the respective national parliaments. Since potential voters conceive the first arena, i.e. elections to the national parliaments, as substantively important and the second arena, i.e. elections to local or state bodies or the EP as significantly less consequential, many of them do not bother show up at the polls. There is an additional potential for a turnout differential when, for instance, disaffected supporters of parties in government turn out to a much lower degree.
- Most significantly, parties in government tend to lose electoral support in EP elections, while opposition parties, especially small and/ or ideologically extreme parties, tend to systematically gain votes. Because considerably less seems at stake in EP elections, voters are more concerned with pivotal issues dominating the first arena (read: national politics) than with the political substance governing the secondary arena (read: European politics) so that first-order issues also tend to dominate SOE. Moreover, nationally oriented, disaffected voters frequently use EP elections as an opportunity to cast a protest vote, thereby providing ideologically extreme, populist, or newly-founded political parties a potential reservoir of electoral support.
- Vote gains and losses appear to follow a cyclical pattern that is governed by the temporal dynamics of the national electoral cycle. As indicated above, in EP elections, large government parties tend to systematically lose electoral support, while small ideologically extreme parties tend to gain vote shares. These vote shifts between national and European elections tend to be more abrupt when EP elections are held at

a domestic midterm. Supporters of the SOE model conclude that electoral behavior in EP elections tends to closely follow the approval ratings of domestic governments which, after a short “honeymoon” period, tend to decline towards the midterm and to improve in the run-up to the subsequent national elections. Thus, empirical analyses of alleged SOE effects typically include predictors capturing the electoral cycle (cf. for an extensive curve-fitting exercise Schmitt, 2005).

These empirical findings have been demonstrated to be very reliable and robust and are regarded as supportive for the SOE model. However, it has been contested whether the SOE model is also a valid explanation for the above-mentioned observational regularities, because the empirical picture is also consistent with a whole range of complementary or alternative substantive explanations. Thus, we seek to challenge the common and widely accepted SOE model of EP elections for both substantive and methodological reasons:

- In substantive terms, it is quite difficult to imagine how (a national segment of) EP elections might actually look like if these were genuinely European contests. Both at the national and at the European level, politics and electoral competition are structured by the semantics of left and right so that the basic features of a first-order national election should not differ much from a second-order European parliament.
- Even if the alleged regularities can be sustained by empirical analyses, the SOE model does not provide the sole, unambiguous theoretical explanation. The empirical evidence cited above would also be consistent with a number of alternative theoretical explanations, for instance with various flavors of directional or discounting models of voting (Grofman, 1985; Macdonald and Rabinowitz, 1989; Matthews, 1979), with models of EU issue voting (de Vries, 2007), or with policy balancing models (Kedar, 2005a,b, 2009). Moreover, non-centrist results which ostensibly appear to refute the median voter theorem, might also be the result of PR rules and political competition in multi-dimensional issue spaces.
- A crucial deficit has been pointed out by Manow (2005), who underscores that the key variable of the SOE model, government popularity, is not empirically observed but merely indicated by a proxy concept, an assumed curvilinear popularity pattern within the respective electoral cycles. Empirical examinations of the model thus do not rest on sound empirical data, but on additional assumptions which are doubtful themselves.
- From a methodological point of view, current analyses based on aggregate-level empirical generalizations cannot provide conclusive evidence for any kind of individual behavior, since they concentrate on ecological data and do not take into account the determinants of individual decisions by the voter. Thus, inferring individual behavior from aggregate electoral returns constitutes a crucial pitfall in methodological terms. The empirical data presented in support of the SOE model are not exploited

in a methodological meaningful way, but provide only limited and, above all, questionable and error-prone empirical evidence. Instead, any substantively meaningful analysis of voting behavior focuses at the micro-level of the individual voter and the causal forces that guide her voting decision (cf. for an extensive discussion of the ecological fallacy King, 1997).

The empirical regularities cited in favor of the SOE model are thus also compatible with a wide range of alternative and often conflicting theoretical interpretations, and in methodological terms the applied research strategy is dubious at best. While this notion does not suggest an outright rejection of the ideas and empirical regularities behind the conventional wisdom, principled criticism needs to be addressed to the utilized research tools. Therefore, the subsequent theoretical considerations and empirical analyses aim at scrutinizing the established terminology and the alleged empirical regularities at the voter level and thus at re-assessing the principle ideas of the SOE model.

There are also issues with the SOE model from a methodological perspective. In published work, empirical analyses routinely build upon the analysis of aggregate electoral returns and focus on the explanation of systematic vote gains and losses by certain political parties. Empirical studies essentially try to infer individual behavior from aggregate electoral data and thus fail to avoid the “ecological fallacy”, since researchers aim at examining voting behavior at the individual level, but erroneously refer to aggregate data patterns at the party level (King, 1997).

### 3 Theoretical Perspectives: Economic Determinants of Voting Behaviour

This paper examines (and explains) electoral behaviour, i.e. voter decision-making and party strategy in elections to the European Parliament. Theoretical arguments and empirical analyses have suggested that the economy and/ or the voters’ assessments of economy are crucial determinants of electoral behaviour. The very same contributions have however underscored that economic reasoning is by far not the only determinant of the vote, so that a wide range of alternative explanations needs to be controlled for so as to assess the real magnitude of the economic vote, to learn when and for whom economic developments matter or not.

#### 3.1 Determinants of Voting Behavior

The subsequent argument reviews theories of voting and party competitions and discusses the application of these established theoretical concepts to EP elections. In a nutshell, modern theories of voting and electoral behavior tend to disagree sharply about the motives of voter decisions and party strategies<sup>1</sup>:

$E_i$  The tradition of economic voting theories maintains that the electorate responds to evaluations of the past performance of political parties. Note that these approaches

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<sup>1</sup>Note that  $i$  denotes a voter and  $j$  a party

are closely connected to research traditions of SOE which is frequently tested by regressing the performance of government and opposition parties on an alleged popularity cycle.

$S_i$  The classic perspective on electoral behaviour has been proposed by the nestors of the “Columbia School” and highlights the importance of social structure for any explanation of political and, specifically, electoral behaviour: “[...] a person thinks, politically, as he is, socially. Social characteristics determine political preference” (Lazarsfeld et al., 1968, 27). Explanandum and explanans, social structure and electoral behaviour, are linked by similar political experiences which are reinforced by the identification and interaction with social classes and groups.

$PI_{ij}$  The contributions by the “Michigan School” turn their attention from objective social characteristics to subjective, group-based socio-psychological motivations of the vote. Theories of political socialization posit that voters tend to form generally stable attachments to political parties which tend to guide their evaluation of political issue and to determine their behavior at the ballot box.

$U_{ij}^R$  Rational choice-based theories of the “Rochester School” focus on short-term instrumentally rational voters who, in most cases, pursue policy-based interests. Most prominently, the spatial theory of voting posits that electors tend to chose those candidates or political parties whose policy positions are closest to their own (proximity voting) or that are supposed to change policies towards the direction preferred by the voter (directional voting).

This contribution focuses on the impact of economic voting in elections to the European Parliament. Thus, we expect that a voter’s evaluation of past economic performance or assumed competence in economic policies enters her utility function for the parties, i.e. the choice alternatives, which compete in the election. Alternative explanatory concepts, sociostructural approaches, party identification, or issue voting will be utilized as “controls” and also enter the respective utility functions.

More formally, the comprehensive utility voter  $i$  associates with a political party  $j$  in an election ( $U_{ij}$ ) is composed of the core economic voting considerations ( $E_i$ ) and a vector of controls, for instance long-term party attachments ( $PI_{ij}$ ), spatial policy utilities ( $U_{ij}^S$ ), and demographic properties of the voter ( $S_i$ ). We thus propose a unified model of voting that relates the voter’s  $i$  evaluation of political party  $j$  to economic voting considerations ( $E_i$ ), to long-term party attachments ( $PI_{ij}$ ), to spatial policy utilities ( $U_{ij}^S$ ), and to a normally distributed random error ( $\epsilon_{ij}$ ):

$$U_{ij} = f(E, C) + \epsilon_{ij} = f(E, P, U, S) + \epsilon_{ij} = E_i + S_i + PI_{ij} + U_{ij}^S + \epsilon_{ij} \quad (1)$$

In the remainder of this section, we elaborate on the determinants of economic voting and on the determinants of the alternative or complimentary explanations and discuss their specific contribution to the explanation of voting behavior and party strategy in EP elections.

### 3.1.1 Economic Voting

The economic voting literature assumes voters to be short-term instrumentally rational actors. Motivations for party preferences and voting behaviour may be founded upon the retrospective evaluation of or prospective assumptions on economic policies. Proponents of the retrospective economic voting approach assert that voters tend to evaluate the past performance of political parties. Voters aim at rewarding incumbents that, from their point of view, have performed well, while they are inclined to punish government parties that have established a poor record.

In contrast, proponents of the prospective economic voting approach, adopt a forward-looking perspective that is more compatible with the basic notions of Downs' 1957 theory of electoral behaviour. The related "selection" or "competence" models go beyond the simple reward-punishment logic, but builds on rational expectations on future economic policies. This group of theories builds upon a number of crucial assumptions: (i.) governments differ in their competence handling economic problems and implementing economic policies, (ii.) voters infer alternative parties' economic policy competence by observing past policies and past economic outcomes, (iii.) voters are rational actors and sufficiently competent to determine to which extent economic developments are either produced by the actions or inactions of the respective national government or the result of external shocks (the "signal extraction problem" in economic voting models).

The operationalization of the economic voting variables builds upon both individual-specific and alternative-specific data. In principle, any measurement of the economic vote needs survey information on either stated vote decisions or stated propensities to vote for the parties in the choice set, and information on subjective evaluations of the economy. The rationale behind this concept is that voters can only be motivated by economic developments to the extent they are aware of economic conditions, know how to interpret this data and know whom to blame or to praise for economic success or malice. Anything else being equal, voters are expected to punish incumbents and to turn towards the opposition in case of an economic downturn, and voters are expected to reward the government and turn away from the opposition in case of economic success. These individual-specific survey data are thus augmented by alternative-specific data, most significantly by information on the government status of a specific party:  $U_{ij} = f(E_i|G_j, \epsilon_{ij})$ .

However, some scholars have criticized and dismissed economic voting models that relate individual vote choices or preference structures to subjective assessments of economic development. For instance, van der Brug et al. (2007) argue that subjective assessments lack content validity, since they differ widely and systematically, while the state of the economy should be the same for each respondent in any given context and time point. While some voters are predominantly concerned with unemployment, others might more specifically associate low growth and high inflation rates with an economic crisis so that the core concept of economic voting becomes quite unclear and meaningless. van der Brug et al. (2007) argue that inconsistencies and misperceptions of the economy may not only arise from a lack of competence, but are contaminated with individual partisanship

and thus introduce endogeneity bias to the statistical estimates. Voters who support the party/ parties in government tend to evaluate the economy more favourably than voters who identify with opposition parties. As a consequence, any analysis that builds upon subjective assessments of the economy is likely to introduce endogeneity bias to the analysis and to vastly overestimate the extent and the political significance of the economic vote.

This analysis builds on subjective assessments by individual voters and on objective economic indicators: we model the economic vote by voter  $i$  for party  $j$  as a result of  $i$ 's subjective assessments of economic developments and the government/ opposition status of the parties in the choice set. These economic voting considerations correspond with principle ideas of the SOE model and provide an alternative explanation of the detected patterns of vote gains and losses. While some propositions refer to an theoretically supposed but empirically unobserved popularity cycle of government parties (Hix and Marsh, 2007; Marsh, 1998; Reif, 1997; Reif and Schmitt, 1980; Schmitt, 2005), others relate to actual, directly measured evaluations of government policies based on, most frequently, economic development (Kousser, 2004; Manow, 2005).

### 3.1.2 Party Identification

The Michigan School stresses the effect of stable, long-term affective party attachments on voting behavior. In essence, the political consequences of party identification ( $PI_{ij}$ ), a voter's underlying allegiance to a political party, form the central pillar of this model family (cf., among many others, Campbell et al., 1960). The contributions of the Michigan School maintain that party identification relates to affective bindings. While the concept of party identification has significantly influenced theoretical reasoning and applied electoral research, its specific theoretical contents, its impact on actual voting behavior, and its applicability as an independent variable in positive models of spatial voting has been questioned.

Critics emphasized and elaborated on the cognitive dimension of the presumed partisanship. This concept is, for instance, embodied by Fiorina's (1981) conceptualization of party identification as a permanently updated "running tally" that summarizes past experiences from early socialization to current evaluations of partisan records of policy performance: First, the redefinition of party identification by Fiorina (1981) introduces theoretical complications into the models, since party identification is affected by general ideological orientations, while ideology, in turn, is affected by party identification. Both influences are causally interrelated and cannot be disentangled easily. Secondly, the concept of party identification is also problematic in terms of formal and statistical modelling, since the respective indicators will be correlated with policy and non-policy predictors of actual voting behavior and thus introduce an endogeneity problem to unified models of issue voting and party competition (cf. the discussion in Adams et al., 2005, 247-253).



### 3.1.3 Policy-Based Models

The paper starts with an individual-level analysis of voting behavior in elections to the EP. As indicated above, we imply that a causally valid analysis of the electoral process needs to rely on individual-level data. Specifically, we apply current, rational choice-based models of spatial voting to voting behavior in EP elections. In classical Downsian proximity voting models, both voters ( $V$ ) and parties ( $P$ ) are represented by points within an  $n$ -dimensional political space which maps the political preferences on these  $n$  issue dimensions. Often, there is only one dimension, but here we opt for a two two-dimensional representation of the European political space that consists of a (domestic) left-right and a (European) integration-independence dimension. Everything else being equal, voters evaluate party alternatives by proximity in the classical Downsian spatial model. Thus, a party which is located closely to the voter's preferences on both dimensions yields a high utility, while another party that proposes policies which are distant from the voter's ideal point on either dimension should generate considerably smaller utilities.

The basic Downsian principle implies that  $v_i$  prefers the electoral platform that offers him/her the highest utility. In formal terms, the utility voter  $i$  assigns to party  $j$  given a set of explanatory variables  $U_{ij}^S$  declines with the (Euclidean) distance of a voter and a party alternative. Tailored to the two-dimensional European political space which comprises the domestic left-right (LR) and the European integration dimension (EU) spatial proximity utilities are given by the weighted Euclidian distance:

$$U_{ij}^S | x_{ij} = -||V - P||^2 \quad (2)$$

$$= -[(v_{i,LR} - p_{j,LR})^2 + (v_{i,EU} - p_{j,EU})^2]^{\frac{1}{2}} \quad (3)$$

$$= -[\beta_{11}(v_{i,LR} - p_{j,LR})^2 + 2\beta_{12}(v_{i,LR} - p_{j,LR})(v_{i,EU} - p_{j,LR}) + \beta_{22}(v_{i,EU} - p_{j,LR})^2]^{\frac{1}{2}} \quad (4)$$

While  $\beta_{11}$  and  $\beta_{22}$  indicate the specific weight of the first and second dimension of political competition, the off-diagonal elements  $\beta_{12} = \beta_{21}$  indicate interaction of these dimensions.

## 3.2 Hypotheses

Theoretical arguments and empirical analyses of the economic vote have often produced a quite heterogeneous picture. While some scholars referred to the profound consequences of the economy for the vote, others recognized neither substantively meaningful nor empirically valid association of both.

These ambiguities often stem from vastly diverging angles on the dependent variable. Some aggregate-level studies focus on the vote share of governing parties or of the party of the chief executive, while individual-level studies often concentrate on the vote either for a government or a opposition party:

**Hypothesis 1** Voters who are concerned about economic developments, tend to turn away from and punish parties in governments. In contrast, voters who feel satisfied

with economic developments, tend to support the current government.

Secondly, we assume that the strength of the economic vote varies across the contexts of the member states. There are two principle institutional features which are assumed to affect the economic vote: (i.) Economic voting should covary with the clarity of political accountability. In majoritarian systems which feature a single-party executive, a centralized state, few relevant veto players, and high systemic responsiveness we expect a significant, versatile extent of economic voting. In consensus democracies which are characterized by coalition governments, federal states, a high number of potential veto players, and little systemic responsiveness we expect little economic voting. (ii.) Economic voting should also covary with the degree of social protection that is established by alternative welfare regimes. In contexts of very high regulation, social protection, and decommodification I expect to find less economic voting than in contexts of deregulation, inchoate social protection, and little decommodification:

**Hypothesis 2** The political consequences of the economic vote vary significantly across voters, countries, and time. They are affected by institutional structures which govern political responsibility and responsiveness as well as social protection and decommodification.

Another controversy in the economic voting literature is about the merits and drawbacks of (i.) individual, subjective assessments of the economy or of (ii.) aggregate, real-world economic indicators. Supporters of the first perspective posit that only subjective assessments may be utilized as explanations for utilitarian, rationally instrumental voting behaviour. Supporters of the second perspective argue that only electoral responses to real economic developments address the political consequences of economic developments in a straightforward and substantively valid fashion. In contrast, the “parallel realities” captured by the voters were of no theoretical significance, contaminated with partisanship, and thus suffer from endogeneity bias and lead to the systematic overestimation of the economic vote:

**Hypothesis 3** Individual voters’ assessments of the economy are motivated by, but not reflections of real-world economic developments. Voters do not blindly react to socioeconomic indicators, but process economic indicators to extract competence signals.

Eventually, the economic vote is embedded to political institutions. As indicated, both the “sanctioning” and the “selection model” of economic voting need to address the signal extraction problem in order to find out whom to reward and whom to blame. Those who want to “throw the rascals out” first need to determine who these “rascals” actually are; those who want to select competent agents need to identify whether these candidates can actually implement the policies they suggest. As a result we expect high levels of economic voting when there is clear accountability and responsibility of elected agents and significantly lower levels of economic voting when political responsibility is obscured:

**Hypothesis 4** The clarity of responsibility, for instance in majoritarian democracies, reinforces economic voting; the obliteration of political responsibility, for instance in consensus democracies, weakens the economic voting mechanism.

## 4 Electoral and Contextual Data

The empirical analysis builds on both micro-level and macro-level data. Micro-level data are taken from the 2004 and 2009 European Election Studies; so as to assess the conditioning effects of institutional contexts, the European Election Studies are augmented with data on political party, economic development, and socioeconomic institutions.

The primary data source that includes both information on individual voter’s ideological preferences, empirical information on non-policy related motivations, and the perceived policy positions of candidates and political parties are mass-level election studies. From the first direct EP elections in 1979 to the most recent ones in 2009, a series of altogether five independent election studies has been organized and conducted in any respective member state of the European Union under the label of the European Election Studies (henceforth: EES; <http://europeanelectionstudies.net>).

For the empirical analysis of electoral choice, the dataset is rearranged to a stacked format. While the original data matrix is provided by the EES team in an individual-specific structure that consists of  $N$  individual survey respondents, here data is reshaped to an alternative-specific format in which each choice alternative  $j$  of each voter  $i$  is an observation and  $N \cdot K$  observations are accumulated in the dataset, where  $N$  denotes the number of respondents and  $K$  the number of parties. Thus the number of observations amounts to 24,679 individual respondents for the 2004 EES and to 27,069 respondents for the 2009 EES. The analysis includes all the EU member countries in a given year, the dataset needed to be transformed to an alternative-specific layout so as to facilitate the statistical analysis by discrete choice and/ or hierarchical regression models. In the current dataset, the number of individuals is thus multiplied by the context-specific number of alternatives (= electoral lists or political parties) in the choice set of each individual respondent yielding an integrated dataset that contains the evaluations of more than 400,000 alternatives by more than 50,000 survey respondents.

The estimation of the economic voting models spelled out above depends on the availability of survey data that includes both information on propensity to vote and on subjective assessments of economic developments. Among the EES studies, only the two most recent ones that have been conducted in the aftermath of the 2004 and 2009 EP elections provide detailed information on recalled voting behavior in national and EP elections, stated party identification, individual and party positions within either dimension of the European political space, and, most significantly, assessments of the recent as well as future economic development:

$PTV_{ij}$  – **Stated Propensity to Vote/ Stated Utilities** The EES modules since 1989 include scalometers on which the survey respondents indicate the “Probability to ever vote for the following parties” from “not at all probable” (1) to “very probable” (10).

Some contributions have taken these PTV thermometer scores as stated utilities for the various political parties which compete in an election (van der Brug et al., 2007). If one provisionally accepts this perspective, the information provided by the PTV question goes significantly beyond the information given by the simple vote question and also includes (more fine-grained) assessments of utilities for those parties that were not the voter’s first choice. Critics argue however that the PTV item lacks content validity since it remains to be shown whether political preferences and political behaviour are strictly congruent or not. Moreover, it remains unclear and undefined whether the PTV refers to national elections, EP elections, or a very general propensity to consider the party at whatever electoral contest.

**$E_i$  – Subjective Retrospective Assessments of Economic Development** Subjective evaluations of economic development are available in the two most recent waves of the EES, 2004 and 2009. These data are assessed as sociotropic, retrospective assessments: “What do you think about the economy? Compared to 12 months ago, do you think that the general economic situation in [YOUR COUNTRY] is ...” In turn, survey respondents asked to assess national economic development on a five point scale: (1) “a lot better”, (2) “a little better”, (3) “stayed the same”, (4) “a little worse”, and (5) “a lot worse”.

**$PI_{ij}$  – Party Identification** Party identification is usually assessed by the following survey item: “Do you consider yourself to be close to any particular party? If so, which party do you feel close to?” Given the alternative-specific structure of the dataset  $P$  is inserted as a dummy variable that indicates whether a respondent identifies with a party alternative or not.

The European Election Studies of 2004 and 2009 form the principal empirical basis for the subsequent empirical analysis. About half of the observations were gathered in the context of a “normal economy” (2004), the remaining half were acquired at the peak of a significant economic downturn and financial crisis (2009). We believe that this stark and historically almost unique contrast helps to probe more deeply into problems of signal extraction and electoral behaviour in selection models of economic voting. The EES not only provide a rich, solid empirical foundation for the analysis of EP elections, but the parallel conduct of coordinated survey modules across the EU member states and EP elections makes it an ideal basis for any empirically rich study of contextual effects on and heterogeneity of electoral behaviour. In terms of the non-policy predictors, survey respondents are asked to provide information whether they hold a certain party identification, and the EES also report standard demographic information such as the respondents’ age or gender.

#### 4.1 Economic Development and Political Regulation

The EES data are augmented with data on government participation derived from the ParlGov database (<http://www.ParlGov.org>) so that a meaningful identification of gov-

ernment and opposition parties becomes feasible:

**$G_j$  – Government Participation** Ultimately, the survey evidence complemented with real-world economic indicators which capture the short-term development of principle economic indicators (for instance growth, inflation, or unemployment) and also capture long-term stable regulation regimes at the national level (for instance the taxation of labour, data on productivity, income, and social inequality).

**Growth, Inflation, Unemployment – Indicators of Short-Term Economic Development** These indices assess various dimensions of current, volatile economic development, which are each considered salient to different socioeconomic groups of voters and political parties and affect the survey respondents’ assessments of the economy. Economic voting theories posit that voters care about these basic indicators and respond to the booms and slumps of the economy by either “sanctioning” incumbents in a backward-looking strategy or by “selecting” competent economic managers in a forward-looking perspective.

As indicated, different socioeconomic groups might feel threatened by recession, unemployment, or high inflation to a very different extent. Among these core indicators, only economic growth and unemployment continue to be properties of national economy in a strict sense, while inflation indicators have empirically converged because of the global economy and within the European Union, by definition, as of the fiscal policy convergence instituted by the Euro.

**Productivity, Income Inequality, Taxes on Labour – Indicators of Political Regulation** These indicators refer to long-term, stable socioeconomic contexts, to the competitiveness of the national economy, the degree of social protection, and levels of decommodification. Although these indicators do not directly capture economic developments, they indicate how far individual citizens are isolated and protected from markets and market failures by socioeconomic institutions. Thus, socioeconomic institutions define the citizen’s degree of vulnerability and thus are expected to exert a strong impact on the economic vote.

**The Clarity of Political Responsibility, majoritarian vs. consociational democracy** Eventually, the political and institutional exerts a significant effect on the economic vote. In high clarity conditions, voters are easily able to extract competency signals and to understand which parts of the economic development occur due to government actions and which parts due to external shocks. In contrast, consociational democracies tend to blur political responsibility and prevent the identification of responsible actors. In this papers we assess the stable features of majoritarian or consociational democracies by scores on the “executive-parties” and on the “federal-unity” dimensions taken from Lijphart (1999)

## 5 Empirical Findings: Economic Determinants of Voting Behaviour

### 5.1 The Statistical Model

The conceptual research design draws upon a suggestion by Przeworski and Teune (1970) who assign a novel meaning to the concept of “comparative research” which, in their terms, exclusively relates to studies “(...) in which the influence of larger systems upon the characteristics of units within them is examined (...) In this sense not all the studies conducted across systems or nations are comparative. (...) If the analysis is conducted exclusively at the level of nations, then (...) it is not comparative” (Przeworski and Teune, 1970, 74).

The “most different systems design” instead refers to a hierarchically ordered multilevel context: “Comparative research is inquiry in which more than one level of analysis is possible” (Przeworski and Teune, 1970, 37). Thus, a cross-level research design provides a vantage point for assessing the robustness of sub-systemic relations, most importantly general, well-established propositions like general theories of electoral behaviour and party competition.

#### 5.1.1 Partly Pooled Multilevel Model

The methodology spelled out in “The Logic of Comparative Social Inquiry” closely resembles modern multilevel analysis. The move towards these novel methods has rapidly gained momentum in empirical political science (for an introduction to applied multilevel analysis cf. the textbooks by Bryk and Raudenbush, 2002; Gelman and Hill, 2007; Jackman, 2009; Rabe-Hesketh and Skrondal, 2008; Snijders and Bosker, 1999). In case that lower-level (“micro”) units are nested within higher-level (“macro”) units, the micro-macro link is explored by these modern tools for multilevel analysis which have quickly become the standard of applied research in comparative politics. These novel methods enable researchers to link outcomes at the individual level to institutional or economic contexts at the polity level, while large-scale comparative datasets, for instance the EES survey series, provide a rich and extensive empirical foundation. In other words: Causal relations at the micro-level are allowed to vary from one context to another, while the variation is (supposed to be) accounted for by context-level conditions.

As a dependent variable we use propensity to vote which are, as suggested by van der Brug et al. (2007), interpreted as stated utilities. The statistical specification takes the form of a linear hierarchical model:

$$PTV_{ij} = \beta_{0j} + \beta_{1j}E_i + \gamma C + \epsilon_{ij} \quad (5)$$

Here the continuous dependent variable  $PTV_{ij}$  indicates the utility voter  $i$  attaches to party/ candidate  $j$ ;  $E_i$  reports voter  $i$ 's assessment of the economy, and  $C$  introduces a matrix of control variables.  $C$  includes following variables: voter's  $i$  positioning on the left-right dimension,  $v_{i,LR}$ , voter's  $i$  positioning on the European interaction dimension  $v_{i,EU}$ ,

interaction of those two dimensions, party identification,  $PI_{ij}$ , government participation of party  $j$ ,  $G_j$ , and the interaction effect of government participation and voter's  $i$  assessment of the economy.

The models that are being estimated have the following structure. The first model includes varying intercept, depending on the party, and can be written as:

$$PTV_{ij} = \beta_{0j} + \beta_1 E_i + \gamma_1 V_{i,LR} + \gamma_2 V_{i,EU} + \gamma_3 V_{i,LR} * V_{i,EU} + \gamma_4 PI_{ij} + \gamma_5 G_j + \gamma_6 G_j * E_i \quad (6)$$

The second model use in the estimations uses varying intercept and varying slope. The latter only for the economic assessment variable differentiated across the parties.

$$PTV_{ij} = \beta_{0j} + \beta_{1j} E_i + \gamma_1 V_{i,LR} + \gamma_2 V_{i,EU} + \gamma_3 V_{i,LR} * V_{i,EU} + \gamma_4 PI_{ij} + \gamma_5 G_j + \gamma_6 G_j * E_i \quad (7)$$

Both models are estimated using Bayesian inference methods, as presented for example by Gelman and Hill (2007), Jackman (2009). In this setting we apply non-informative priors.

### 5.1.2 Two-Step Strategies

Rather than (partly) pooling the contexts and estimating parameters and random coefficients in one step, two-step strategies estimate the quantities of interest separately for each context “country-years” in our case) in the first step and then account for the variation of these parameters by contextual data in the second step. Datasets that collect national surveys generally feature a special structure, since the number of countries tends to be limited, while larger country-specific survey samples ( $N \sim 1,000$ ) allow for the separate but consistent estimation of micro-level variances and covariances within each macro-level “data cluster”. Given these types and structures of comparative data, a two-step strategy often provide a feasible, flexible, and statistically less demanding alternative to the estimation of fully-integrated multilevel models: The first step adheres to estimating the micro-level model within each macro-level context so as to derive estimates of the micro-level parameters.

The successive second step explores the variation of the estimated parameters and relates them to context-level predictors. Theoretically, anything that can be achieved in a two-step approach, can also be done in one step and *vice versa*. The feasibility of either fully-integrated or two-step models crucially depends on the dimensionality of the dataset and the objectives of statistical inference. The literature explicitly recommends to application of two-step strategies when the number of macro-level observations is limited and thus renders the computation of fully-integrated models problematic.<sup>2</sup>

Particularly, two-step strategies offer additional flexibility in statistical modelling. At the micro level, it is, for instance, feasible to utilize different sets of independent variables from one context to another or to estimate more sophisticated statistical models. At the macro-level, these approaches allow for the handling of more complicated error structures,

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<sup>2</sup>Scholarly advice on the lower limit for the applicability of fully-integrated one-step models differs somewhat; the instructions range from about 30 to 50 (cf. Bowers and Drake, 2005).

for instance when the contextual units exhibit a time-series-cross-section structure. Ultimately, turning to more pragmatic aspects, the practical estimation of fully-integrated nonlinear multilevel models is still computationally demanding and thus often rather impractical, while a functionally equivalent two-step model might be easier to set up and can be estimated much faster (for a demonstration that the efficiency of a one step-strategy is maintained in two-steps cf. Long Jusko and Shivley, 2005).

## 5.2 Estimation Results

There is a context-dependency of the economic vote. The two hierarchical models we used include individual voters  $i$  which are nested in the party alternatives  $j$ . Stated utilities,  $PTV_{ij}$ , are modeled by a series of alternative or complementary theories of electoral behaviour, economic voting, party identification and the spatial theory of issue voting. The multilevel estimates from those models give strong and remarkably robust support to those theories. Controlling for alternative explanations, economic voting still remains a significant and forceful predictor of voting behaviour: Negative assessments of economic development tend to harm government and to benefit opposition parties; positive assessments are prone to benefit government parties and further reduce the support of opposition parties.

Table 1: Estimates of the varying intercept model

Variables	2004				2009			
	Mean	SD	2.5%	97.5%	Mean	SD	2.5%	97.5%
$E_i$	0.172	0.012	0.148	0.196	0.079	0.0179	0.047	0.112
$PI_{ij}$	4.604	0.036	4.535	4.673	3.438	0.037	3.365	3.5117
$V_{i,LR}$	-0.045	0.001	-0.046	-0.044	-0.053	0.001	-0.055	-0.051
$V_{i,EU}$	-0.013	0.001	-0.014	-0.0116	-0.017	0.001	-0.014	-0.009
$V_{i,LR} * V_{i,EU}$	0.001	0.000	0.000	0.001	0.001	0.001	-0.001	0.002
$G_j$	2.023	0.153	1.724	2.317	1.001	0.158	0.676	1.296
$G_j * E_i$	-0.551	0.024	-0.599	-0.504	-0.180	0.028	-0.232	-0.125

Regarding alternative explanations and controls, there is ample evidence for the statistical significance of party identification. The core concept of the Michigan School posits that voters who hold a long-term commitment to a particular political party, a party identification, tend to state very significantly higher PTV scores. Sure enough, these concepts have also been harshly criticized for not providing any theoretical merit, but rather correlating endogenous variables without any substantive or theoretical leverage (Adams et al., 2005, 247-253). Furthermore, stated utilities are strongly affected by proximity and/ or distance in the two-dimensional political space. Programmatic and ideological proximity on the domestic left-right dimension and, to a somewhat lesser extent, on the European integration-independence dimension systematically increase propensity to vote or stated party utilities. There is only very limited evidence for interactive effects of both dimensions that define the European political space.

In the table 1 the results of the estimation of the varying intercept models for the years 2004 and 2005 are presented, whereas table 2 includes the results of the estimation of varying intercept, varying slope model also for both years in the sample. While the em-



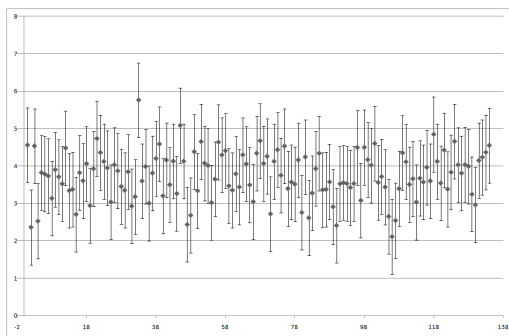
pirical results hold across these alternative models, specification tests reveal that varying slope models provide a superior fit to the data. As a result, there is ample evidence for the heterogeneity of the economic vote across alternative socioeconomic and institutional contexts. The economic vote is thus not independent of institutional features, but instead strongly affected and deeply characterized by economic and institutional context.

Eventually, we explore the overtime variation and put an emphasis on the implications of contextual differences of an economy condition differences between those two years, as given by a good performance of the economy' in 2004 in contrast to a world-wide economic and financial crisis in 2009. Across the different estimation techniques, the estimated effect of subjective assessments of the economy on the propensity to vote is consistently higher in 2004 and less consequential in 2009. Retrospective assessments of economic development on a five-point scale, the key explanatory variable in this study, reflect the financial and economic crisis very strongly. While in 2004 only 43 percent of the respondents thought the economic situation in their respective country had become "a little" or "a lot worse" during the last twelve months, in 2009 more than 76 percent held sceptical views about the economy.

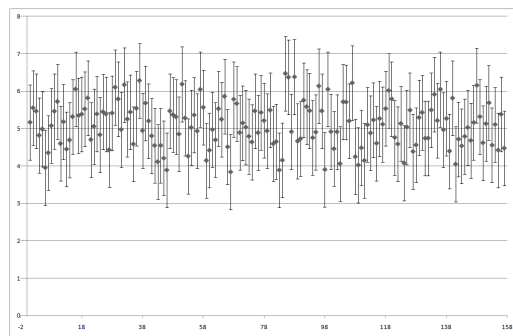
Table 2: Estimates of the varying intercept, varying slope model

Variables	2004				2009			
	Mean	SD	2.5%	97.5%	Mean	SD	2.5%	97.5%
$E_{ij}$	0.322	0.202	-0.075	0.701	0.012	0.264	-0.420	0.269
$PI_{ij}$	4.552	0.036	4.481	4.623	3.431	0.037	3.356	3.503
$V_{i,LR}$	-0.043	0.001	-0.044	-0.042	-0.053	0.000	-0.055	-0.051
$V_{i,EU}$	-0.012	0.001	-0.013	-0.011	-0.012	0.001	-0.014	-0.009
$V_{i,LR} * V_{i,EU}$	0.000	0.000	-0.001	0.001	0.001	0.001	-0.001	0.002
$G_j$	1.925	0.256	1.423	2.414	1.031	0.222	0.626	1.512
$G_j * E_i$	-0.5045	0.0677	-0.6293	-0.3761	-0.1813	0.0473	-0.2792	-0.0962

One can notice that also when looking at the figure 5.2, where the estimates of the varying slope conditioned on the party alternative +/- standard deviation are presented. There is a clear difference visible between the estimates for 2004 and those for 2009.



(a) Intercept 2004



(b) Intercept 2009

The empirical evidence presented in tables 1 and 2 clearly show that these subjective retrospective assessments are not reflected by an excessive increase of the economic vote from 2004 to 2009. Instead the European voters appear to be able to derive the information necessary to attribute blame or form expectations about the competence of (incumbent)

politicians. Obviously, the voters in the 2009 European Parliament elections do not hold their governments directly and personally responsible for the world financial and economic crisis, consider the economic downfall an exogenous, external effect, and refrain from retrospective and/ or prospective economic voting. The low extent of economic voting in 2009, as opposed to more effective consequences of the economy on voting behaviour in 2004, underscores the ability and preparedness of voters to extract signals from real-world economic developments.

## 6 Conclusion

The analyses in this paper support the virtual universal belief that elections to political office are at least partly “referenda over the economy” (Duch and Stevenson, 2008, 1). Building on differently operationalized key variables and statistical estimation techniques the political consequences of economic development are indeed very robust, statistically significant, and politically meaningful. The second main finding underscores the context-dependency of the economic vote. Part of the variation is explained by economic key indicators, by socioeconomic institutions like welfare regimes, and by political institutions which affect the accountability and responsibility of political agents.

The EES provide an ideal empirical foundation of the analysis of voting behaviour in general and of the economic vote in particular. They do not only provide rich empirical data to explore electoral behaviour at the individual level, but also allow to explore the robustness of alleged causal relations across the contexts of the EU member states and over time. In other words the systematic multilevel structure of the EES cannot only be utilized for an analysis of the specifics of EP elections, but rather contribute to the general understanding of economic voting.

While this draft paper has concentrated on the presentation of descriptive evidence on the economic vote, on references to its contextual variation and offered some preliminary causal explanations, there are still a number of loose ends which need to be integrated so as to provide a substantively interesting and theoretically meaningful picture of this phenomenon. For instance, the systemic features of the economic vote in political competition need more systematic exploration. So as to assess the potential political consequences, one needs to consider that not all voters do employ the same mechanism of electoral behaviour, but are prone to be significantly affected by these consideration to a very different extent. Voters who hold a strong party identification and thus prefer a specific party to all others by a wide margin will not too often be affected by the economic vote. In contrast voters with (almost) tied preference hierarchies might react even to very small, infinitesimal perceived booms and slumps of the economy and are thus likely “economic voters”.

Moreover, future versions of this paper need to explore the supply side of EP elections more carefully and systematically. When economic voting, as many contributions suggest, is driven by electoral cycles which are at least partly controlled by the incumbent governments the specifics of second-order elections to the EP as opposed to first-order elections to the national parliaments may be accounted for by determining the position of the EP elections within the national economic cycles.

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