

Happiness and Voting: Evidence from Four Decades of Elections in Europe

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Submitted to the Sloan School of Management
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Abstract

There is a growing interest among policymakers in the use of subjective well-being (or “happiness”) data to measure societal progress, as well as to inform and evaluate public policy. Yet despite a sharp rise in the supply of well-being-based policymaking, it remains unclear whether there is any electoral demand for it. In this paper, I study a long-run panel of general elections in Europe and find that well-being is a strong predictor of election results. National measures of subjective well-being are able to explain more of the variance in governing party vote share than standard macroeconomic indicators typically used in the economic voting literature. Consistent results are found at the individual level when considering subjective well-being and voting intentions, both in cross-sectional and panel analyses.

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Replication Materials The data, code, and any additional materials required to replicate all analyses in this article are available on the Harvard Dataverse Network, at: <http://dx.doi.org/10.7910/DVN/QWLGGN>

I. Introduction

Are governments held accountable for their performance? This question is central to one of the largest and longest-running literatures in political economy. A substantial body of empirical work links governments' re-election chances to the state of the economy, and has shown that voters tend to reward incumbents during periods of prosperity and punish them during downturns (e.g. Duch and Stevenson, 2008; Fair, 1978; Fiorina, 1981; Key, 1966; Kramer, 1971; Lewis-Beck and Stegmaier, 2000). One of the main reasons the research on 'retrospective voting' is so extensive is that it plays a central role in the way that democracies are thought to function. By holding governments accountable at the ballot box, voters are able to selectively retain high quality incumbents (Besley, 2006; Fearon, 1999) as well as to incentivize politicians to work hard to ensure positive outcomes (Barro, 1973; Ferejohn, 1986). But which outcomes do incumbents have incentives to maximize?

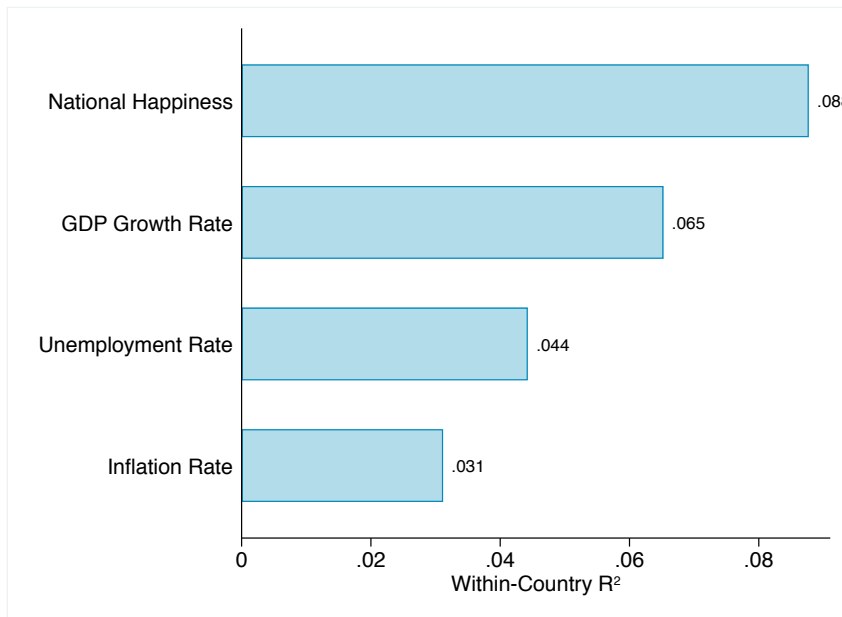
The past few years have seen a growing interest in measures of national performance that go "beyond GDP" (Fleurbaey, 2009). Various national statistical offices around the world have begun to systematically collect subjective well-being (SWB) data on a large scale in order to more broadly assess societal progress, inform public policymaking decisions, and evaluate policy outcomes (Krueger and Stone, 2014; O'Donnell et al., 2014).¹ However, while the voluminous evidence of 'economic voting' suggests incumbents have strong incentives to ensure a healthy economy in order to be re-elected, it remains unclear whether there is any electoral impetus for governments to measure – and focus policy on – voters' broader well-being in this way, conditional on the state of the economy.

In order to assess whether it may make any electoral sense for politicians to use SWB as a policy goal, this paper provides evidence of the extent to which national levels of happiness are able to account for the electoral fate of sitting governments at general elections, as well as whether individual-level happiness is able to explain voting intentions. Taken together the results provide evidence of an empirical link between subjective well-being and incumbent voting: good times keep governments in office, misery throws them out.

Since 1973, the Eurobarometer has regularly asked citizens of EU member states, "*On the whole, are you i) very satisfied, ii) fairly satisfied, iii) not very satisfied, or iv) not at all satisfied with the life you lead?*" Figure 1 shows the amount of variance in government party vote share over the past four decades that can be explained by national levels of SWB in the months prior to general elections and by each of the standard macroeconomic indicators. In a bivariate regression, life satisfaction is able to account for around 9% of the variance in the incumbent vote within countries, whereas economic growth—the more standard measure used in the retrospective voting literature—is able to explain around 6.5%. In section II of the paper, I enter SWB into a fuller vote share equation that is otherwise standard to the economic voting literature. Here the key question is whether or not SWB measures are able to add to our understanding of incumbent voting, controlling for the state of the economy (and, in turn, whether there is any electoral dividend for governments focusing on improving SWB beyond

¹The OECD reports that policymakers in over 20 countries around the world are now embracing SWB measures in some way (Durand, 2018). Reports and guidelines on the measurement and use of SWB in policymaking have been published, among others, by the OECD (2013) and US National Research Council (Stone and Mackie, 2013).

Figure 1: What best explains the variance in incumbent government vote share?



Notes: Each bar represents the within-country R^2 value from a separate bivariate within-country regression of cabinet vote share on each of the four indicators. Sample is 139 elections in 15 European countries, 1973-2014. National Happiness is the country-mean of the life satisfaction question at the closest Eurobarometer survey prior to the election. Macroeconomic variables are drawn from the OECD and refer to the country-year of each election.

ensuring a healthy economy). Entered together into a voting equation, I find that one standard deviation changes in national SWB and the economic growth rate are predictive of 6.1 and 2.9 percentage point swings in incumbent party vote share respectively.

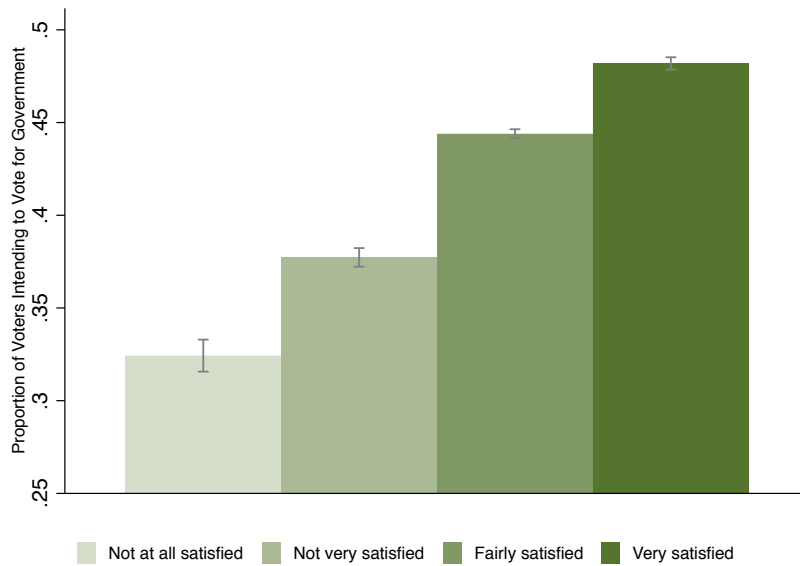
In section III of the paper, I turn to the micro-foundations of this aggregate relationship. Up until the early 2000s, the Eurobarometer also asked respondents, “*If there were a general election tomorrow, which party would you vote for?*” Using data from over 400,000 individuals in 447 national surveys, I find that happier survey respondents are more likely to also report an intention to vote for a governing party. Figure 2 plots the correlation between life satisfaction and incumbent voting in the data. While just over 30% of the people who are “not at all satisfied” with their lives would vote for the government, this figure rises to nearly 50% among those who are “very satisfied”.

Two basic concerns arise with this initial association: i) government-supporting voters may well be happier simply because their chosen party is in power,² and ii) the observed happiness-voting link may be driven by unobserved individual heterogeneity. In order to help mitigate the initial issue of reverse causality, I show that the individual-level result holds when controlling for a lagged dependent variable (whether the respondent voted for the current government at the last election), and for the respondent’s ideological closeness to the government.³ To more fully deal with the issue of (time-invariant) omitted variables, I turn in section IV of the paper

²Di Tella and MacCulloch (2005) show, using the Eurobarometer data, that individuals are happier when parties they are ideologically close to are in power. This leaves open the possibility that any observed relationship between SWB and government support could be driven by previous election results causing happiness rather than happiness causing future voting intentions.

³In the aggregate analysis, I also residualize national SWB from the partisanship of survey respondents (as well as from other demographic determinants of happiness).

Figure 2: Life satisfaction and the intention to vote for a governing party



Notes: Each bar represents the proportion of likely voters in each category of life satisfaction who respond that they would vote for a government party. 95% confidence intervals shown. Source: Eurobarometer, 1973-2000.

to long-run panel surveys in two of the countries—Great Britain and Germany—that enable me to estimate individual fixed-effect equations, which assess the extent to which a person becomes more (less) likely to support a governing party as she becomes more (less) happy over time. Although the data used in this paper are ultimately observational in nature, the empirical associations shown here nevertheless build upon – and are consistent with – causal evidence presented by Liberini et al. (2017), who leverage exogenous variation in subjective well-being induced by widowhood in order to show a significant effect of life satisfaction on individuals’ support for governing parties over time in Great Britain.

The findings contribute to a number of strands of literature in political science, economics, and psychology. First, the research adds to the huge body of work on retrospective voting (Healy and Malhotra, 2013). This literature has focused almost entirely on the state of the economy, and the terms retrospective voting and economic voting have in many ways become almost synonymous (for reviews of the economic voting literature see Hibbs, 2006; Lewis-Beck and Stegmaier, 2000). In this paper I seek to expand the evidence-base for retrospective voting beyond the economy, and in doing so I contribute to a small literature that has begun to investigate the links between voting and non-economic outcomes such as war casualties and responses to natural disasters (Bechtel and Hainmueller, 2011; Berry and Howell, 2007; Healy and Malhotra, 2009; Karol and Miguel, 2007).

Second, the results contribute to an emerging literature using subjective well-being data to answer questions in political economy (e.g. Alvarez-Diaz et al., 2010; Di Tella and MacCulloch, 2005; Flavin and Keane, 2012; Flavin et al., 2011; Pacek and Radcliff, 2011; Radcliff, 2001; Stutzer and Frey, 2006). The paper builds in particular on the findings of Liberini et al. (2017), who show that individuals’ self-reported well-being is associated with their probability of declaring support over time for a governing party between 1996 and 2008 in the United

Kingdom.⁴ The principal contribution of this paper is to show that these prior findings using self-reported voting intentions and political support translate into real-stakes electoral outcomes, and are consistent across a range of countries and time periods. Indeed the data suggest at the national level—across 15 countries over four decades—that happiness measures are strongly predictive of the electoral fate of governing parties at general elections.

Third, the analysis provides a novel test for predictions drawn from the theoretical literature on political agency (see Besley, 2006, for a review). I sketch a very simple example of a political agency model in order to draw out the principal predictions to be tested in the paper, as well as their policy implications. Central to political agency models is the principal-agent relationship between the electorate and the incumbent government. Voters are unable to directly observe either the actions or competence of the politicians to whom they have delegated policymaking authority, and are instead left to make judgements based on observable outcomes like their own welfare. In Ferejohn’s seminal model, for example, voters “are only able to assess the effects of governmental performance on their own well-being,” which is known to depend jointly upon policymakers’ actions as well as essentially probabilistic exogenous factors (Ferejohn, 1986, p.11). In earlier formal models elections are generally considered as a mechanism to mitigate the moral hazard problem: voters re-elect incumbents that deliver sufficient welfare to voters and throw out those who do not, in order to create incentives for politicians to exert costly effort to improve people’s lives (e.g. Barro, 1973). More recent theoretical work stresses the role of elections in dealing with adverse selection: voters observe their welfare in order to learn about an incumbent’s honesty, competence, or motivation, and re-elect only those they expect to perform better in the future than an unknown contender (e.g. Fearon, 1999).⁵ Common to all of these models is *retrospective voting*, the central prediction that voters’ welfare is positively related to incumbents’ re-election prospects.

Fourth, the analysis adds to a long-standing discussion on the concepts of utility and welfare. Self-reported measures of ‘experienced utility’ like SWB differ from the more standard economic concept of welfare based on ‘decision utility’, derived from revealed preferences (Kahneman et al., 1997; Rabin, 1998).⁶ Whereas the economic voting literature tests retrospective voting predictions empirically using economic and financial indicators as proxies for voters’ decision utility, SWB data offer an opportunity to test this prediction using an alternative measure of people’s experienced utility.⁷

Fifth, the findings contribute to an ongoing debate on the ends of public policymaking. In line with recommendations made by the Stiglitz-Sen-Fitoussi Commission (2010), many governments are beginning to collect SWB data on a large scale with the intention of using

⁴In a related paper, Esaiasson et al. (2017) show that subjective well-being is predictive of satisfaction with democracy, which may be seen as a measure of perceived government performance.

⁵Disentangling the sanction and selection mechanisms is difficult since they are often observationally similar—indeed, in many theoretical models the two work in the same direction (e.g. Alt et al., 2011; Banks and Sundaram, 1998; Besley, 2006)—and is not the focus of this paper.

⁶Despite the two “types” of utility being conceptually distinct, recent evidence presented by Benjamin et al. (2012) suggests that self-reports of life satisfaction are also good predictors of individuals’ choices and actions and thus come close to the more standard notion of decision utility (see also Benjamin et al., 2014a; Frijters, 2000).

⁷The term experienced utility is used broadly here since I focus on voters’ life satisfaction, which is only one element of the broader concept of subjective well-being (Kahneman and Krueger, 2006; Kahneman and Riis, 2005). For simplicity, I use the broad term “happiness” to refer to life satisfaction throughout the paper.

it to gauge success and guide policymaking. While one element of this paper is to test the retrospective voting prediction of political agency models, it is also worth noting that such models are game-theoretic in nature. The literature on political business cycles, in particular, reminds us that voters and governments act in equilibrium, with elected politicians making decisions in anticipation of voters' behavior (e.g. Rogoff, 1990). By establishing a link between life satisfaction and electoral outcomes, the findings suggest it may well be in governments' own electoral interest to collect and use SWB data in policymaking.

Finally, the analysis relates to work in political psychology, which has long studied the effects of discrete emotions – such as fear, anger, and hope – in shaping the political process, both on the part of voters as well as politicians (e.g. Civettini and Redlawsk, 2009; Parker and Isbell, 2010). Equally, research in political science has more recently begun to study the role of such emotions in the political sphere (e.g. Marcus and MacKuen, 1993; Valentino et al., 2011).⁸ In this paper, I add to this stream of research by studying a broader measure of overall subjective well-being, and in doing so build on a burgeoning literature in positive psychology, and more latterly in economics, that studies the determinants of happiness as well as the use of SWB data in public policy (e.g. Adler and Seligman, 2016; Diener et al., 2009; Dolan et al., 2008).

II. Conceptual Framework

Political agency theory provides an ideal framework in which to consider how a voter's well-being informs her decision whether or not to reelect an incumbent (Besley, 2006). This framework has been applied among others by Besley and Smart (2007) and Ferraz and Finan (2011), and is a simple formulation of a principal-agent problem with both adverse selection and moral hazard, in which an incumbent politician is an agent of the voters, who are unable to directly observe either their actions or type. Within this standard two-period model, elections play a role in selecting good incumbents for a second period, whilst also providing incentives for bad politicians to set well-being maximizing policy in order to “pool” with good types in the hope of being re-elected.⁹

The simple model presented in this section is intended to do two things. First, it establishes the basic prediction tested in the paper of a positive relationship between voter welfare and incumbent re-election. Second, it draws out an important policy implication of the findings—namely, that retrospective voting means politicians face incentives to undertake costly actions to improve the quality of citizens' lives.

I label the voter's payoff in the model as “utility”, or U (rather than “happiness”, or H). As discussed in the paper, studies of economic voting provide an empirical test for the retrospective voting hypothesis using the state of the economy as a proxy for the electorate's welfare, in the standard economic sense of decision utility. In the main analysis of this paper, I instead use SWB as a broader and more direct measure of social welfare or experienced utility, which it is

⁸See Marcus (2000) for a review.

⁹For a number of extensions to this ‘canonical’ model, such as the introduction of additional time-periods and term limits, see Besley (2006). For examples of alternative models that also combine moral hazard with adverse selection, see Alt et al. (2011); Ashworth (2005); Banks and Sundaram (1998); Duggan (2000). These alternative models as well as the extended models of Besley (2006) lead to the similar basic prediction tested in this paper, namely that, all else equal, incumbent reelection chances are increasing in voter welfare.

important to note is distinct.

A basic agency model

Consider a simple model with two time periods $t \in \{1, 2\}$ and two types—good and bad—of politician $i \in \{g, b\}$. In each period, the politician makes a policy decision $x_t \in \{0, 1\}$. The payoffs are dependent upon the state of nature $s_t \in \{0, 1\}$, each of which occurs with equal probability. Given the action $x_t(s_t i)$ of the incumbent, voters receive a payoff of U —which is interpreted as a high level of utility—if $x_t = s_t$ and zero otherwise.

Good politicians formulate policy to maximize voters’ welfare, but bad politicians get a private benefit of $r_t \in \{0, R\}$ from choosing $x_t \neq s_t$.¹⁰ This benefit is on top of E , which is enjoyed by all politicians and can be thought of as any psychological benefits (“ego rents”) derived from being in office as well as a basic salary. The private benefit r_t is drawn each period from distribution $G(r)$, whose mean is μ . The model assumes all players discount the future with a common discount factor $\gamma < 1$ and that $R > \gamma(\mu + E)$.

The timing and informational structure are as follows. Nature determines the state of the world at the beginning of each period, and draws the type of the politician (if she is newly elected) from a distribution where $Pr(i = g) = \pi$. Both are observable by the politician but not by the voter. Nature then draws r_1 from $G(r)$, after which the politician chooses her policy action $x_1(s_1 i)$, which is also unobservable by the voter. At the end of the period, voters observe their welfare (their payoff) and either vote to reelect the incumbent, or take a random draw from the pool of politicians. In the second period, nature again draws r from $G(r)$, the politician chooses her policy, and payoffs accrue to the players.

In period 2 there are no re-election incentives, so each politician will take her preferred action: good politicians will seek to maximize voter welfare, whereas bad politicians will set $x_t \neq s_t$. Voters thus have an interest in selecting good politicians for the second period. The key prediction to be tested in this paper is that at the end of period 1, voters will re-elect the incumbent if they receive the high level of utility U . Good politicians always provide U , whereas a politician who fails to deliver it is a bad type for sure. The probability that a bad politician will deliver the high level of well-being is $Pr(r_1 \leq \gamma(\mu + E))$. If voters observe U and use Bayes’ rule, they will update their beliefs about the incumbent and vote to reelect her, since the probability of a politician being good is greater than the proportion π of good politicians in the pool of candidates. That is,

$$\begin{aligned} Pr(i = g|U) &= \frac{Pr(U|i = g)Pr(i = g)}{Pr(U)} \\ &= \frac{Pr(U|i = g)Pr(i = g)}{Pr(i = g) + Pr(i = b)Pr(r_t \leq \gamma(\mu + E))} \\ &= \frac{\pi}{\pi + (1 - \pi)Pr(r_1 \leq \gamma(\mu + E))} \geq \pi. \end{aligned}$$

This has implications for the incentives given to politicians. Bad types face a trade-off in period 1 between extracting rents and being voted out of office, or behaving as a good type and

¹⁰Choosing to set $x_t \neq s_t$ can be interpreted in a number of ways, ranging from a politician exerting low effort, to giving in to special interests or pursuing a narrow ideological agenda, all the way to outright corruption.

enjoying the benefits of a second term. Provided r_1 is sufficiently small, they will set $x_t = s_t$ to maximize voters' welfare and secure reelection.

III. Aggregate SWB and Election Results

In this section I construct a panel of 15 European Union member countries between 1973 and 2014, and examine what best predicts the electoral fortunes of sitting governments. I follow the established literature in measuring national happiness using self-reports of life satisfaction drawn from large nationally representative surveys. Equally, I follow the conventions of the retrospective voting literature and seek to estimate otherwise standard models of incumbent voting. This allows me to assess the extent to which the use of a broad measure of national success like happiness in such models is able to add to our understanding of electoral accountability, beyond more standard (financial) predictors of election results.

I estimate cross-country panel regressions of the following form:

$$V_{jt} = \beta_1 SWB_{jt} + \beta_2 ECON_{jt} + Z'_{jt} + \xi_j + \gamma_t + \varepsilon_{jt}, \quad (1)$$

where V_{jt} is the total percentage of votes won collectively by all of the parties that are in the governing coalition in country j prior to each national general election t . SWB_{jt} is the national mean of life satisfaction, derived from responses to the life satisfaction question outlined in the introduction. This 1-4 scale question is drawn from the Eurobarometer survey closest in time prior to each election, which is on average around 4 months beforehand. ξ_j and γ_t are country and year fixed-effects, and ε_{jt} is an error term adjusted for clustering at the country level.

Following the literature, Z_{it} is a vector of time-varying controls including: i) the number of parties in government, ii) the sitting government's collective seat share, iii) government ideological disparity, and iv) party fractionalization. In the main analysis these are held constant, but in a supplementary set of regressions reported in the supplementary material (see Table S22, p. 50), they are interacted with SWB in order to more directly test the 'clarity of responsibility' thesis that politicians will be less likely to be held accountable for outcomes in instances where it is less clear who is responsible for outcomes (cf. Powell and Whitten, 1993).

National SWB is itself influenced by macroeconomic conditions (Di Tella et al., 2003, 2001). The vector $ECON_{jt}$ thus includes the election-year economic growth, unemployment, and inflation rates. The parameter β_1 , in this multivariate framework, provides an estimate of the association between incumbent vote share and the variation in subjective well-being that is not correlated with the three principal indicators of macroeconomic conditions. This is the key coefficient of interest, since one of the main contributions of this paper is to investigate whether measures of SWB are able to explain electoral outcomes over and above what is already known from the literature on economic voting.

Column 1 of Table 1 shows a relationship that is both statistically and substantively significant between life satisfaction and cabinet vote share. In order to enable comparison, all of the explanatory variables are standardized into z-scores such that they have a mean of 0 and a standard deviation of 1 across the sample of elections. The outcome is the percentage vote share of the incumbent government, lying between 0 and 100. Thus a one standard deviation

Table 1: Happiness and General Election Results in Europe

	DV: Government Vote Share					DV: Turnout		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
National Happiness	7.885*** (2.229)					6.127** (2.823)	-0.666 (1.582)	-0.729 (1.741)
GDP Growth Rate		3.915*** (1.304)			3.564** (1.377)	2.849** (1.246)		-0.556 (0.527)
Unemployment Rate			-2.649** (0.991)		-1.518 (1.333)	0.037 (1.236)		0.059 (1.122)
Inflation Rate				2.915* (1.365)	1.603 (1.671)	1.955 (1.483)		1.611 (1.240)
Further Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	139	139	139	139	139	139	139	139
R^2	0.767	0.758	0.738	0.736	0.772	0.793	0.923	0.928

*Notes: Robust standard errors in parentheses, adjusted for clustering at the country level. Sample is a panel of 15 European countries 1973-2014. Independent variables are all z-scored (mean=0, SD=1). Outcome variable in models 1 to 6 is collective cabinet vote share, lying between 0 and 100. Outcome variable in columns 7 and 8 is percent turnout, lying between 0 and 100. Life satisfaction is the national mean at the closest Eurobarometer survey prior to the election. Macroeconomic variables are country-year values drawn from the OECD. Country and year dummies are included in all models, together with the number of parties in government, government's prior seat share, party system fractionalization (ENEP), and cabinet ideological disparity. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.*

change in SWB is significantly associated with around a 7.9 percentage point swing in the vote share enjoyed by the governing coalition at the end of their term in office.

Columns 2 to 5 replicate the finding that the electoral fate of incumbents is associated with the state of the macroeconomy. A one standard deviation change in the election-year economic growth rate is associated with a 3.9 percentage point change in government vote share, and a one standard deviation change in the unemployment rate over time is predictive of a swing of around 2.7 percentage points. Perhaps surprisingly, the inflation rate enters positively into the equation in column 4. However, inflation is positively correlated with the economic growth rate, and neither the unemployment nor inflation rates are significantly associated with cabinet vote share once all of the macroeconomic indicators are entered together into the model in column 5. Both economic growth as well as life satisfaction emerge as predictors of vote share when they are entered together into the equation in column 6, with the magnitude of the well-being coefficient twice that of economic growth.

To what extent is this association driven by differential turnout? Although the foregoing analysis shows a strong association between SWB and government party vote share, the electoral fate of governing parties may be dependent jointly on turnout as well as people's vote choices. Indeed an individual's decision of whether or not to vote to retain the governing party can be seen as one of two steps: i) whether to vote, and ii) whom to vote for. In columns 7 and 8, I estimate the association between SWB and electoral turnout. The data suggest that neither national happiness nor the main macroeconomic indicators are significantly related to aggregate turnout in the sample of elections. When estimating the determinants of turnout and government vote share simultaneously in a structural equation model (see Table S9, p. 36), I find that the association between SWB and governing voting is driven by vote choice rather

than turnout.

This general pattern of results is robust to a number of alternative econometric specifications and analytic choices. First, when replacing cabinet vote share with the vote share received by the main coalition party only, one standard deviation changes in aggregate life satisfaction and economic growth are associated with 5.2 and 2.8 percentage point swings in the incumbent vote respectively (see Table S6, p. 34). Second, the findings are robust to the inclusion of country-specific linear as well as quadratic time trends (see Table S8, p. 36).

Third, the results are robust when using alternative measures and definitions of national happiness. In the main analysis, I consider the association within-countries over time between the mean level of SWB – measured at the closest prior survey to each election – and government vote share. Rather than take the country-mean of the 4-point life satisfaction scale, I also instead code the percentage answering in each of the four response categories (see Table S12, p. 38). This does not alter the main result of the paper. The percentage responding that they are “not at all” satisfied—the lowest category—is able to explain the most variance in vote share of the four models. This suggests the strongest electoral dividends for politicians may be gained by ensuring their policies mitigate and alleviate misery.

Further, in Table S10 (p. 37) I also use the election-year mean (rather than the closest survey), as well as the variance of happiness, to predict electoral outcomes. The country-level standard deviation of SWB enters negatively into the equation, suggesting that happiness inequality may play a role in determining a government’s electoral fate come the end of their term in office. However, the variance is largely dominated by the level once both are included together in the vote share equation. Finally, I investigate the extent to which recent changes in SWB – rather than the level – are predictive of cabinet vote share. Here I code the annual growth rate of life satisfaction, which, akin to the GDP growth rate, is the percentage change from the year prior to the election to the election year. Recent SWB growth is strongly and positively related to government vote share, as one might expect. Splitting happiness growth into its positive and negative elements using a spline analysis, the data suggest that recent negative changes in SWB are a much stronger predictor of government vote share than positive ones.¹¹

Fourth, I show that the results are robust to adjusting the national life satisfaction measure for individual-level determinants of SWB (see Table S5, p. 33). This residualized measure of SWB—adjusted for individual demographics like gender, age, education, and marital status—can be thought of as what Di Tella et al. (1999) label a country’s level of “pure” subjective well-being, on which government policy ought to be focused. Adjusting in this way for demographics does very little to alter the results, however. In order to begin to deal with the issue of reverse causality noted above, I also residualize life satisfaction from individual partisanship, using a subset of surveys that asked about respondents’ ideology. Similar to Di Tella and MacCulloch (2005), I find that partisan individuals have higher life satisfaction when their chosen party is in office (see Table S7, p. 35). However, partialing out the variance in individuals’ life satisfaction that is attributable to their (un)favored party being in office at the time of the survey does not

¹¹One potential explanation for this is that while voters may attribute downturns in their well-being to government action, they may attribute upturns to their own efforts.

change the main findings of the paper.

IV. Individual Life Satisfaction and Incumbent Voting

In order to study the micro-foundations of the robust empirical link between the electorate’s aggregate subjective well-being and the vote share received by government parties at general elections, I turn in this section to the individual level. Until 2002, the Eurobarometer included the following voting intention question in some though not all survey rounds: “*If there were a general election tomorrow, which party would you vote for?*” In all, over 400,000 individuals in 447 usable national surveys between 1973 and 2000 were asked the life satisfaction question in the same survey as the voting intention question.

As noted above, the decision whether to support incumbent parties at the ballot box includes both the initial decision of whether to vote, as well as the subsequent choice of whom to vote for. Unfortunately, the Eurobarometer does not include an explicit question on whether or not respondent intends to vote. In the main analysis of vote choice, I restrict the sample to include “likely voters” only.¹² This group of respondents makes up around 71% of the sample, and includes those who answer the voting intention question positively with a particular political party.¹³

In the first instance, I find that happiness is positively related to being a “likely voter” in the sample. Column 2 of Table 2 suggests that individuals who are ‘very satisfied’ with life (as opposed to ‘not at all’) are around 5.6% more likely to be a probable voter. This is consistent with the findings of Flavin and Keane (2012), who show on a sample of US voters that life satisfaction is positively related to turnout intentions.

Restricting the sample to those who are likely to vote, Column 3 of Table 2 represents the basic correlation between SWB and incumbent voting (shown in Figure 2) in regression form, using a linear probability model (LPM).¹⁴ The coefficient on “very satisfied” with life as a whole (compared to “not at all satisfied”) suggests that such individuals are 16 percentage points more likely to support a governing party were an election held tomorrow. The addition of a series of fixed effects and other control variables in model 4 does little to alter this main finding. These controls include a standard set of demographics (gender, age, age², marital status, and education) as well as country and survey fixed effects, and the same set of national political controls included in the national-level analysis in Section II.¹⁵

¹²Results using the whole sample, rather than likely voters only, do not alter the pattern of results (see Table S14, p. 40).

¹³44.2% of these voters report intending to vote for a governing party, which is comparable to the mean vote share of 44.3% received by incumbent parties in these countries during the same 1973-2000 period. Mean turnout during the period is 80%, which is marginally higher than the group of “likely” voters included in the analysis.

¹⁴Marginal effects estimated from logit and probit models (see Table S17, p. 43) are very similar to those reported in the main analysis using LPMS.

¹⁵As above, I hold these clarity of responsibility variables constant in the main models, and interact them with subjective well-being in further analysis (see Table S23, p. 51).

Table 2: Individual Happiness and the Intention to Vote for a Governing Party

	DV: Likely to Vote		DV: Intends to Vote for Government Party					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Life Sat (v. not at all)								
Not very satisfied	0.020** (0.009)	0.016** (0.007)	0.053*** (0.008)	0.058*** (0.015)	0.059*** (0.014)	0.039*** (0.013)		0.033** (0.012)
Fairly satisfied	0.073*** (0.017)	0.039*** (0.009)	0.120*** (0.015)	0.128*** (0.016)	0.134*** (0.019)	0.088*** (0.016)		0.064*** (0.014)
Very satisfied	0.120*** (0.027)	0.056*** (0.009)	0.158*** (0.030)	0.168*** (0.019)	0.194*** (0.027)	0.131*** (0.022)		0.110*** (0.021)
Lagged DV								
Last vote was for governing party						0.724*** (0.015)	0.719*** (0.017)	0.720*** (0.017)
Finances Past Year (v. same)								
A lot worse							-0.146*** (0.024)	-0.126*** (0.020)
A little worse							-0.074*** (0.012)	-0.066*** (0.011)
A little better							0.045*** (0.007)	0.042*** (0.007)
A lot better							0.059*** (0.019)	0.048** (0.017)
Country Dummies	No	Yes	No	Yes	Yes	Yes	Yes	Yes
Survey Dummies	No	Yes	No	Yes	Yes	Yes	Yes	Yes
Demographic Controls	No	Yes	No	Yes	Yes	Yes	Yes	Yes
National Political Controls	No	Yes	No	Yes	Yes	Yes	Yes	Yes
Observations	411,989	411,989	291,523	291,523	188,945	188,945	67,040	67,040
R^2	0.006	0.056	0.006	0.053	0.058	0.396	0.337	0.340
Countries	15	15	15	15	15	15	12	12

Notes: Robust standard errors in parentheses, adjusted for clustering at the country level. Dependent variable is equal to 1 if the respondent is likely to vote in columns 1 and 2, zero otherwise. Dependent variable is equal to 1 if the respondent intends to vote for a government party in columns 3 to 8, zero otherwise. LPMs reported, see supplementary materials for non-linear models. Source: Eurobarometer 1973-2000. Sample in models 3 to 8 includes "likely voters" only. National political controls: number of parties in government, government's seat share, party system fractionalization (ENEP), and cabinet ideological disparity. Demographic controls: gender, age, age², marital status, and education level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

In columns 5 and 6 I add into the equation a lagged dependent variable (LDV), using a subset of 295 surveys in which respondents were also asked which party they voted for at the most recent general election. Controlling in this way for prior government support helps to mitigate the concern that any effect of life satisfaction on incumbent voting may be driven by government-supporting individuals having higher well-being simply because the party they support is in power (cf. Di Tella and MacCulloch, 2005). In line with this general concern, the addition of an LDV reduces the magnitude of the happiness-voting association. Nevertheless, the association remains both statistically and substantively significant. An alternative strategy uses a question asking respondents to place themselves on a 1-10 left-right ideology scale. I match these responses to expert judgements of the ideological position of the government, and introduce the absolute distance between voter’s and government’s ideology into the equation. Although voters who are ideologically further from the government are much less likely to vote for incumbents, this does not alter the main finding of a robust link between SWB and incumbent support (see Table S15, p. 41).

Given that the decisions of whether to vote and whom to vote for are inherently related, in Table S13 (p. 39) I estimate bivariate probit models that jointly estimate i) whether or not the respondent is a likely voter and ii) whether or not she will vote for the government. Doing so does not alter the main findings of the paper. While SWB is a significant predictor in both stages, the data suggest that the bulk of the association runs through vote choice rather than turnout decisions.

SWB is itself influenced by personal economic circumstances. Throughout the paper, the key question is not only whether happiness is associated with incumbent voting, but also the extent to which this holds over and above what is already well-known about economic voting. In just over 100 national surveys,¹⁶ respondents were asked the following “pocketbook” question: “*Compared to 12 months ago, do you think the financial situation of your household, now is ... ?*” The response categories are ‘*a lot worse*’, ‘*a little worse*’, ‘*about the same*’, ‘*a little better*’, and ‘*a lot better*’. In the final two columns of Table 2, I enter these as a set of dummy variables into the equation, leaving aside the ‘same’ response as the omitted category. Economic voting is evident in the data: in model 7, those responding that their household’s financial situation has deteriorated strongly in the past year are 14.6 percentage points less likely to intend to vote for a governing party, while those who feel their financial situation has improved significantly are 6 percentage points more likely to do so.

Entering both life satisfaction and household finances into the same regression in column 8, I find that—as in the aggregate analysis—both financial well-being as well as broader happiness enter independently and significantly into the equation. Compared with the national-level analysis, the dominance of SWB over the economic variables is less clear, with the two here similarly significant (substantively and statistically) in predicting voting intentions at the individual level.

V. SWB and Vote Choice in Individual Panel Data

The cross-sectional evidence of a strong link between SWB and the intention to vote for incumbent parties remains open to the critique that the estimated SWB coefficient may be largely

¹⁶Austria, Finland and Sweden joined after this question ceased to be asked.

driven by unobserved individual heterogeneity. Consequently, I turn now to long-run individual panel data from two of the countries used in the Eurobarometer analysis, Germany and Great Britain. This allows me to partial out time-invariant characteristics like permanent personality traits and attitudes, family background, social class and so on with individual fixed-effects, and ask the more stringent question of whether a person becomes more likely to support a governing party as she becomes happier over time.¹⁷

The German Socio-Economic Panel (SOEP) has followed a large representative sample of German households on an annual basis since 1984, and the British Household Panel Survey (BHPS) has similarly followed households in Great Britain since 1991.¹⁸ Throughout both panels, respondents have been asked whether they support a particular political party, and if so, which. In the BHPS, this is followed-up with a hypothetical vote intention question similar to that in the Eurobarometer if the respondent says they do not support any particular party. Using this information, I create an indicator variable equal to 1 if the individual is a supporter of a governing party during the month of interview.

Life satisfaction is asked slightly differently in the two surveys. In Germany, individuals are asked “*How satisfied are you with your life, all things considered?*”, with responses measured on an 11-point scale, on which 0 corresponds to “completely dissatisfied” and 10 to “completely satisfied”. In Britain, since 1996 respondents have been asked how satisfied they are with their life overall on a 1 to 7 scale, on which 1 means “completely dissatisfied” and 7 “completely satisfied”.

Results from fixed-effects linear probability models predicting individuals’ incumbent support over time are shown in Tables 3A and 3B. Like Liberini et al. (2017), I find SWB is associated with incumbent support within-people over time. The data suggest that, in both Germany and Great Britain, those who are “completely satisfied” with life overall—compared to being “completely dissatisfied”—seem to reward incumbents by increasing their likelihood of supporting a governing party by around 4 percentage points.

Results from fixed-effect logit models as well as random-effect probit models are consistent with the main results reported using LPMs (see Table S20, p. 47). In addition, estimates based on balanced samples in each country also suggest the results are not driven by particular types of people coming and going from the sample at different points in time (see Figure S1, p. 45).

Do these findings add anything to our understanding of electoral behavior, beyond what is already well-known from the extensive literature on economic voting? In each country (and as in the above analysis), both subjective well-being and household finances enter into the equation in a largely independent manner. While the Eurobarometer does not consistently include a well-defined household income variable, here in the panel analyses I am able include both objective

¹⁷I also include a selection of time-varying observables such as household income, financial situation, age and marital status. Nevertheless, it is worth noting that other “third” variables that vary over time may drive any observed relationship.

¹⁸I follow both panels through until 2014, including in the sample all individuals who are observed at least twice. Although the BHPS ceased to exist after 2008, I follow the sample through into the UK Household Longitudinal Survey (UKHLS) from 2010 to 2014. See data appendix for more details. Liberini et al. (2017) also study the question of subjective well-being and political support in the BHPS, between 1996 and 2008. I am able to confirm their main finding, as well as extend it using a further five waves of data. This is significant, since the Labour Party were in power in all but one of the years of their sample, whereas by extending the analysis to 2014 all three main parties in the UK are in government at different times.

Table 3A: Within-Person Analysis: Germany

	DV: Government Supporter		
	(1)	(2)	(3)
Life Satisfaction			
0	(ref.)		(ref.)
1	0.002 (0.011)		0.002 (0.011)
2	0.012 (0.010)		0.012 (0.010)
3	0.013 (0.009)		0.013 (0.009)
4	0.011 (0.009)		0.011 (0.009)
5	0.012 (0.009)		0.012 (0.009)
6	0.015* (0.009)		0.014 (0.009)
7	0.023*** (0.009)		0.022** (0.009)
8	0.026*** (0.009)		0.024*** (0.009)
9	0.029*** (0.009)		0.028*** (0.009)
Completely Satisfied	0.037*** (0.009)		0.035*** (0.009)
Financial Worries			
Very Concerned		-0.003** (0.002)	-0.002 (0.002)
Somewhat Concerned		(ref.)	(ref.)
Not At All Concerned		0.008*** (0.002)	0.007*** (0.002)
Household Income (ln)	-0.000 (0.001)	-0.000 (0.001)	-0.000 (0.001)
Observations	475,888	475,888	475,888
R^2	0.028	0.028	0.028
Individuals	55,001	55,001	55,001

*Notes: Robust standard errors in parentheses, adjusted for clustering at the individual-level. Individual fixed effects included in all models. Source: SOEP 1984-2014. Dependent variable in all models is equal to 1 if respondent supports a governing party, 0 otherwise. FE-LPMs reported; see appendix for non-linear specifications. Controls included in all models: region dummies, year dummies, age, age², marital status. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.*

Table 3B: Within-Person Analysis: Great Britain

	DV: Government Supporter		
	(1)	(2)	(3)
Life Satisfaction			
1	(ref.)		(ref.)
2	0.020*		0.019
	(0.012)		(0.012)
3	0.008		0.008
	(0.011)		(0.011)
4	0.019*		0.018*
	(0.010)		(0.010)
5	0.022**		0.018*
	(0.010)		(0.011)
6	0.032***		0.028**
	(0.011)		(0.011)
7	0.040***		0.035***
	(0.011)		(0.011)
Finances Today			
Finding it Very Difficult		-0.018**	-0.015*
		(0.008)	(0.008)
Finding it Quite Difficult		-0.009*	-0.008
		(0.006)	(0.006)
Just About Getting By		(ref.)	(ref.)
Doing Alright		0.015***	0.014***
		(0.003)	(0.003)
Living Comfortably		0.022***	0.020***
		(0.004)	(0.004)
Household Income (ln)	0.001	-0.001	-0.001
	(0.003)	(0.003)	(0.003)
Observations	162,068	162,068	162,068
R^2	0.017	0.017	0.017
Individuals	19,271	19,271	19,271

*Notes: Robust standard errors in parentheses, adjusted for clustering at the individual-level. Individual fixed effects included in all models. Source: Great Britain: BHPS/UKHLS 1996-2014. Dependent variable in all models is equal to 1 if respondent supports a governing party, 0 otherwise. FE-LPMs reported; see appendix for non-linear specifications. Controls included in all models: region dummies, year dummies, age, age², marital status. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.*

household income as well as subjective impressions of finances. The non-significant coefficient on (log) household income suggests that as people become richer and poorer over time they do not change their propensity to support the government. Nevertheless, as their impressions of their financial situation change, they do in fact vary their support for incumbent politicians.¹⁹

In the BHPS, two further subjective economic variables are available. A question on how the respondent sees her finances in the near future is included in all of the studied waves, and a question on how her household’s finances have changed over the past year is included up until the BHPS respondents were merged into the UKHLS after 2008. Results are consistent using these measures (see Figure S21, p. 48).

VI. Discussion

Various countries around the world have recently begun to go “beyond GDP” by measuring subjective well-being on a large scale, and using the data i) as a general measure of societal success and progress, ii) to guide and inform policy decisions, and iii) to evaluate the outcomes of government programs (Durand, 2018; O’Donnell et al., 2014). These practices are likely to continue to grow, in part because SWB is able to pick up the benefits of a great deal of government activity that traditional economic outcomes may struggle to (Krueger and Stone, 2014).²⁰ Yet despite the recent sharp rise in the supply of SWB-based public policymaking, an open empirical question is whether or not there is any electoral demand for it. The findings presented in this paper suggest there may be significant electoral incentives for politicians seeking re-election to consider SWB when deciding upon policy priorities.

Global, cognitive evaluations of life are currently the most widely used measure of SWB by researchers in the economic literature as well as by policymakers, but life satisfaction is only one component of SWB. Large-scale data on the emotional states of citizens is becoming more prevalent, and is beginning to provide policymakers with a fuller picture of national SWB (Kahneman et al., 2004; Krueger and Stone, 2014). Further research should investigate the extent to which measures of positive and negative affect, as well as eudaemonic measures of purpose, are able to add to our understanding of voting behavior.

A further dimension of SWB is temporal: while the main analysis studies voters’ current levels of life satisfaction, it may be that future expectations of life satisfaction are just as – or even more – important in driving vote choice. In a subset of waves of the German SOEP respondents were asked about their *anticipated* life satisfaction in 5 years’ time, using the same 0-10 response scale as with current life satisfaction. In Table S19, I find that people’s future life satisfaction dominates currently life satisfaction when it comes to predicting support for governing parties within-people over time. Anticipating being completely satisfied (as compared to completely dissatisfied) is associated with around a 6.5% higher probability of declaring support for a governing party.²¹

¹⁹Household income remains an insignificant predictor of incumbent support, even when subjective financial impressions are omitted from the equation.

²⁰Evaluations of two recent prominent programs in the USA, for example—the Moving to Opportunities experiment and the Oregon Medicaid expansion—showed positive outcomes in self-reported psychological well-being, which may have been elided by focusing solely on more traditional measures of program evaluation (Finkelstein et al., 2012; Ludwig et al., 2013).

²¹In some though not all waves of the Eurobarometer a question regularly asked respondents whether they

Open to further research is the broader question of what array of determinants of SWB, and potentially which domains of SWB, drive the link between national happiness and election results – and ultimately what incumbents might do to improve their chances of re-election. While SWB has been shown to be determined by a host of policy-relevant yet non-economic variables including physical and mental health, environmental quality, social cohesion, crime and corruption, quality of government services, and education (see, e.g., Clark et al., 2018; Diener et al., 1999; Dolan et al., 2008), the analysis of Liberini et al. (2017) suggests voters may also reward/punish incumbent politicians for boosts and dips in their happiness that are caused by factors outside of government control. Further research may continue to investigate i) the extent to which voters are able (or willing) to filter which elements of their well-being provide useful information about the quality and effort of incumbents, and ii) the theoretical implications of this for our understanding of democratic accountability.²²

Although SWB is a stronger predictor of incumbent vote share at general elections than economic growth, unemployment or inflation, macroeconomic variables are nevertheless significant predictors of government electoral success conditional on national happiness. Equally, at the individual level, SWB and personal finances are independently predictive of voting intentions. This suggests politicians face multiple incentives to improve people’s economic as well as broader non-economic well-being. Future theoretical work may look to model these dynamics within a multi-task political agency framework.²³

The data used here are observational, and it is worth re-iterating that it is not possible to interpret the empirical associations presented in this paper causally. Rather, the analysis is focused on determining what best predicts the electoral fate of governing parties. Despite this important caveat, however, a causal interpretation of the findings is suggested by the prior work of Liberini et al. (2017), who leverage exogenous variation in SWB in order to demonstrate a causal mechanism between happiness and self-reported incumbent voting intentions. The analysis presented here suggests that this effect is also evident at the national-level, across 15 countries over 4 decades, in real-stakes elections.

VII. Conclusion

In a classic study of retrospective voting, Fiorina (1981, p. 6) noted that despite voters’ general lack of in-depth knowledge about political and economic issues, “they typically have one

think life next year will be better, the same, or worse. Using this question in Table S16 (p. 42), I also find that optimism is positively related to government voting intentions. This relationship that is largely independent of current life satisfaction.

²²Determining what should and should not be relevant to voters is not typically straightforward, however. Government is expected to play a role—at least as a safety net—in a great many areas of people’s lives, and generally seek to create conditions that are conducive to people leading happier lives rather than directly seeking to influence their well-being. One possibility is that voters, knowing their well-being is at least partly dependent on government action, use their general overall SWB as a heuristic for incumbent competence and/or effort.

²³In a simple political agency model, such as that sketched in Section II, voters observe their utility U in order to update their beliefs about the incumbent. If we assume SWB is a good proxy for U , then insofar as a buoyant economy improves people’s life satisfaction it provides voters with information about the politician’s type. However, the data suggest that voters learn about incumbents through their life satisfaction *and* the state of the economy to some extent independently. This leaves open the possibility that SWB and material prosperity may be two arguments within the utility function, rather than SWB serving as a proxy for that function (see also Becker and Rayo, 2008; Benjamin et al., 2014b; Glaeser et al., 2016).

comparatively hard bit of data: they know what life has been like during the incumbent’s administration.” By focusing on self-reported measures of life satisfaction, the results of this paper suggest voters do indeed seem to use this piece of data at the ballot box in order to hold governments accountable for their performance.

It has long been thought that governments struggle to stay in power if the people are not happy. While this was once considered impossible to test empirically, developments over the past few decades in the measurement of subjective well-being now make the study of happiness and electoral accountability a much more feasible proposition. The data from four decades of general elections in Europe suggest that the electoral fate of incumbent governments goes hand-in-hand with the happiness of the people.

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Supplementary Material

HAPPINESS AND VOTING: EVIDENCE FROM FOUR DECADES OF ELECTIONS IN EUROPE

George Ward

S1 Additional Data Description

1. National-Level Analysis

SWB data are drawn from the Eurobarometer, a series of national surveys by the European Commission that began in 1973 and have been carried out typically twice a year since. The Eurobarometer began with the original 9 EU member states in 1973, and has expanded over time along with the European Union (EU). I examine a panel of the 15 longest-duration EU members during the 1973-2014 period. For each national survey, a new and independent random sample of approximately 1,000 individuals from each country is interviewed face-to-face. The countries included are: Austria, Belgium, Denmark, Finland, France, Germany, Great Britain, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, and Sweden. A number of further states joined the EU (and thus also the Eurobarometer) in 2004, but are not included as there is only a relatively small number of SWB surveys, and even fewer matching electoral data points, available for these countries.

National Happiness. I code responses to the question “*On the whole, are you i) very satisfied, ii) fairly satisfied, iii) not very satisfied, or iv) not at all satisfied with the life you lead?*” such that 4 corresponds to the “very satisfied” category and 1 to the “not at all” category. Following the literature, I then calculate each country’s linear average life satisfaction on this 1-4 scale at each survey.²⁴ In supplementary analysis, I first adjust these responses for individual-level determinants of life satisfaction such as demographic differences and political partisanship.

Government Vote Share. This is the total percentage of votes won collectively by all of the parties that are in the governing coalition prior to the election. In further models I also consider the vote share received by the main coalition party only. The sample consists of 145 parliamentary elections during the 1973-2014 period. Six elections are dropped from the analysis, leaving 139 in the regression analysis.²⁵ Electoral data is drawn from the University of Bremen’s Parliament and Government Composition (ParlGov) database.

Turnout. Votes cast as a percentage of the electorate (source: ParlGov).

Number of parties in government. The number of parties that are part of the governing coalition in the run-up to the general election.

Government seat share. Collective seat share in parliament of the governing coalition.

Government ideological disparity. A measure of how unified a governing coalition is in terms of its political positions. For each party in the coalition, the ideological position of the party is computed by taking the mean of four of the main left-right scales used in the political science literature (Benoit and Laver, 2006; Castles and Mair, 1984; Hooghe et al., 2010; Huber and Inglehart, 1995). The disparity measure is then calculated as the standard deviation of this scale across all of the parties in government prior to the election.

²⁴Treating categorical SWB answers as a linear measure is standard in the literature and has been shown to make little difference. Stevenson and Wolfers (2008) compare a number of different aggregation methods, and find the simple linear mean correlates almost perfectly with more technically sophisticated methods.

²⁵In each case the country was being led prior to the election by a non-partisan, meaning there is no incumbent vote share to be explained. These are: Greece 1989 (second election, at which the government was led by Ioannis Grivas); Greece 1990 (Xenophon Zolotas); Greece 2012 (second election, Panagiotis Pikrammenos); Italy 1994 (Carlo Azeglio Ciampi); Italy 1996 (Lamberto Dini); Italy 2013 (Mario Monti).

Party fractionalization. Effective Number of Parties (ENP), calculated following Laakso and Taagepera (1979) as $ENP = \frac{1}{\sum (v_i)^2}$, where v is percentage of votes for party i at the last election. (Source: Michael Gallagher - https://www.tcd.ie/Political_Science/people/michael_gallagher/ElSystems/Docts/ElectionIndices.pdf)

Economic Growth. Percentage change in per capita GDP (measured in USD 2010, PPP) from the year prior to the election to the year of the election.²⁶ All macroeconomic variables are drawn from the OECD (supplemented where unavailable by World Bank data).

Unemployment Rate. Percent of the civilian labor force unemployed (OECD).

Inflation Rate. CPI inflation rate (OECD).

Table S1: Summary Statistics: National-Level Analysis

Variable	Obs	Mean	Std. Dev.	Min	Max
Cabinet Vote Share	139	43.22	9.5	16.85	74.3
PM Party Vote Share	136	32.31	9.4	10.1	51.6
Life Satisfaction	139	3.1	.31	2.12	3.65
Per Capita GDP Growth Rate	139	1.85	2.63	-6.8	9.7
Unemployment Rate	139	7.94	4.07	.04	24.49
Inflation Rate	139	4.8	4.89	-.9	24.51
Turnout	139	78.79	9.55	57.22	95.09
Number of Parties in Government	139	2.21	1.21	1	6
Cabinet Seat Share	139	.53	.11	.12	.89
Cabinet Ideological Disparity	139	.84	.82	0	2.57
Effective Number of Parties	139	4.56	1.7	2.46	10.28

2. Individual-Level Eurobarometer Analysis

Intends to Vote for Government. Equal to 1 if intends to vote for a governing party. Derived from the question “*If there were a general election tomorrow, which party would you vote for?*” I match these responses to the parties in government (using the ParlGov database) during the month of the survey.

Prior to 1989, this question was phrased slightly differently as: “If there were a general election tomorrow, which party would you support?” I treat this as equivalent to the main question above. However, in a few countries (Italy, Luxembourg and Ireland) in the early rounds of the survey an alternative question that simply asked “*Generally speaking, which political party do you feel closer to?*” was included. I drop these surveys since this is not a voting intention question.

Life Satisfaction. “*On the whole, are you i) very satisfied, ii) fairly satisfied, iii) not very satisfied, or iv) not at all satisfied with the life you lead?*”

Demographics. 1 if female; age in years; age²; Education (dummies for left education at: 0-15 years old, 16-19 years old, 20+ years old, still studying, missing); Marital status (dummies for single, married, divorced/separated, widowed, missing).

Household Finances. “*Compared to 12 months ago, do you think the financial situation*

²⁶Results using lags of the main macroeconomic indicators are available upon request, and do not alter the results.

of your household, now is ... ?” The response categories are ‘a lot worse’, ‘a little worse’, ‘about the same’, ‘a little better’, and ‘a lot better’. Included in subset of surveys only. Ceased to be asked before Austria, Finland, Sweden joined the survey.

National Political Controls. As in the aggregate analysis.

Previous Vote. “*Which party did you vote for at the last General Election of [year of last general election in respective country]?*”

Ideological Distance. i) Individual’s ideology is taken from survey question: “*In political matters people talk of “the left” and “the right”. How would you place your views on this scale?*” 1 to 10 scale, on which 1 is far left and 10 far right. ii) Government ideological position is taken as the mean of the four main “expert” left-right scales in the literature (Benoit and Laver, 2006; Castles and Mair, 1984; Hooghe et al., 2010; Huber and Inglehart, 1995). This is calculated by the ParlGov database for each party, and lies on a 0-10 scale. I create a government ideological position by taking the mean of all of the parties in government, weighted by their respective vote shares at the previous election. iii) Both scales are normalized to sit between 0 and 1. iv) The absolute distance between the two scales is the ideological distance between voter and government.

Life Next Year. “*So far as you are concerned, do you think that [1981] will be better or worse than [1980]?*”

3. Individual-Level Panel Analysis

Note: Two important caveats on comparisons. First, political support is asked in a different manner in the SOEP and the BHPS, making exact comparison between the two datasets difficult. Second, although the BHPS comes relatively close, neither panel dataset can be fully described as having a “voting intention” question such as that used in the Eurobarometer (as well as elsewhere in other election studies).

3.1 British Household Panel Survey (BHPS)

The BHPS ceased to exist in 2008, but in 2010 its participants were subsumed into the UKHLS. I join together the two surveys, and follow the BHPS sample only, through until 2014.

I drop respondents in Northern Ireland from the analysis, since the party political landscape is very different to the rest of the United Kingdom.

Life Satisfaction. “*How satisfied are you with ... life overall?*” Responses are given on a 1 to 7 scale, on which 1 means “not at all satisfied” and 7 “completely satisfied”. In the UKHLS, the response categories remain on a 1 to 7 scale but change slightly to run from “completely dissatisfied” to “completely satisfied”. The question was first included in 1996 and repeated annually since, apart from in 2001.

Supports Government. Information is elicited in stages. Individuals are first asked whether they think of themselves as a supporter of any one political party (and if so which). If they say they do not, then they are asked whether they think of themselves as a little closer to one political party (and if so which). If they again say they do not, then they are asked: “*If there were to be a General Election tomorrow, which political party do you think you would be*

Table S2: Descriptive Statistics: Micro-Level Eurobarometer

Variable	Obs	Mean	Std. Dev.	Min	Max
Likely Voter	411989	.708	.455	0	1
Vote Intention: Governing party	411989	.313	.464	0	1
Vote Intention: PM party	395903	.24	.427	0	1
Life Satisfaction	411989	3.057	.762	1	4
Vote Intention: Gov (likely voters only)	291523	.442	.497	0	1
Vote Intention: PM (likely voters only)	280462	.339	.473	0	1
Life Satisfaction (likely voters only)	291523	3.094	.75	1	4
Financial Situation: A lot better	94276	.032	.175	0	1
A little better	94276	.164	.371	0	1
Stayed the same	94276	.481	.5	0	1
A little worse	94276	.234	.424	0	1
A lot worse	94276	.089	.284	0	1
Life Next Year: Better	129723	.348	.476	0	1
Same	129723	.403	.49	0	1
Worse	129723	.249	.433	0	1
Num. of Government Parties	411989	2.293	1.395	1	6
Government Seat Share	411989	.549	.098	.296	.99
Effective Number of Parties	411989	4.506	1.714	2.46	10.28
Gov. Ideological Disparity	411989	.8	.768	0	2.806
Female	411989	.519	.5	0	1
Age	411989	44.307	17.314	18	99
Education: until 16-19 years old	411989	.354	.478	0	1
Education: until 20+ years old	411989	.184	.387	0	1
Education: still studying	411989	.058	.234	0	1
Married/Live as Married	411989	.647	.478	0	1
Divorced/Separated	411989	.044	.204	0	1
Widow/Widower	411989	.078	.269	0	1

most likely to support?” Combining this information, I create an indicator variable equal to 1 if the respondent is a supporter of a governing party.

Demographics. Age in years; age²; Marital status (dummies for single married, divorced/separated, widowed); region. OLS models (pooled cross-section) also include: 1 if female; dummies for highest level of education achieved.

Household Finances. *“How well would you say you yourself are managing financially these days? Would you say you are... living comfortably; doing alright; just about getting by; finding it quite²⁷ difficult; finding it very difficult?”*

Table S3: Descriptive Statistics: BHPS

Variable	Obs	Mean	Std. Dev.	Min	Max
Supports Government Party	162068	.33	.47	0	1
Life Satisfaction	162068	5.19	1.33	1	7
HH Finances: Finding it Very Difficult	162068	.02	.14	0	1
Finding it Quite Difficult	162068	.05	.22	0	1
Just About Getting By	162068	.24	.43	0	1
Doing Alright	162068	.38	.48	0	1
Living Comfortably	162068	.31	.46	0	1
Household Income (ln)	162068	7.13	.74	-3	10.68
Age	162068	47.29	17.87	18	100
Married	162068	.68	.47	0	1
Divorced/Separated	162068	.08	.26	0	1
Widowed	162068	.07	.26	0	1

Table S4: Descriptive Statistics: SOEP

Variable	Obs	Mean	Std. Dev.	Min	Max
Supports Government Party	475888	.23	.42	0	1
Life Satisfaction	475888	7.07	1.78	0	10
Life Satisfaction in 5 Years	274767	7.03	1.93	0	10
HH Finances: Very Concerned	475888	.2	.4	0	1
Somewhat Concerned	475888	.5	.5	0	1
Not Concerned At All	475888	.31	.46	0	1
Log Income	475888	9.83	1.84	0	15.43
Age	475888	46.33	17.04	18	104
Married	475888	.64	.48	0	1
Divorced/Separated	475888	.08	.27	0	1
Widowed	475888	.06	.23	0	1

3.2 German Socio-Economic Panel (SOEP)

Life Satisfaction. *“How satisfied are you with your life, all things considered?”* Responses are measured on an 11-point scale, on which 0 corresponds to “completely dissatisfied” and 10 to “completely satisfied”.

²⁷In British usage, “quite” is similar to “fairly” (as opposed to a synonym of “very”, as in US usage).

Future Life Satisfaction. “*And how do you think you will feel in five years?*” Responses are measured on an 11-point scale, on which 0 corresponds to “completely dissatisfied” and 10 to “completely satisfied”.

Supports Government. Respondents are asked if they have a general preference for a political party, and if so, which. Equal to 1 if responds with a party that is in the governing coalition during the month of the survey.

Demographics. Age in years; age²; Marital status (dummies for single married, divorced/separated, widowed); region. OLS models (pooled cross-section) also include: 1 if female; dummies for highest level of education achieved.

Household Finances. Respondents are asked about their worries/concerns (*Sorge*) about their economic situation. 3 response categories: Very concerned, somewhat concerned, not concerned at all.

S2 Extra Tables for National-Level Analysis

Table S5: Robustness: Estimates using regression-adjusted SWB

	Government Vote Share		
	(1)	(2)	(3)
National Happiness	6.58** (2.46)	6.02** (2.37)	6.92** (3.18)
GDP Growth Rate	3.12** (1.13)	3.19** (1.15)	3.11*** (1.03)
Observations	139	139	127
R^2	0.79	0.79	0.79
SWB adjusted for survey FEs	Yes	Yes	Yes
SWB adjusted for demographics	No	Yes	Yes
SWB adjusted for partisanship	No	No	Yes

*Notes: Robust standard errors in parentheses, adjusted for clustering at the country level. Country and year dummies are included in all models, along with the number of parties in government, government's prior seat share, party system fractionalization (ENEP), and cabinet ideological disparity. Adjusted SWB values are the (z-scored) national mean of the residuals from initial individual-level life satisfaction regressions including differing combinations of predictors of SWB. These first-stage adjustment regressions are reported in Table S7. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.*

Table S6: Robustness: Predictors of Executive Party Vote Share

	PM Party Vote Share				
	(1)	(2)	(3)	(4)	(5)
National Happiness	6.15*** (1.78)				5.22** (1.99)
GDP Growth Rate		3.20* (1.51)			2.80* (1.56)
Unemployment Rate			-1.24 (1.47)		-0.07 (1.77)
Inflation Rate				1.41 (1.84)	1.35 (2.39)
Observations	136	136	136	136	136
R^2	0.81	0.81	0.79	0.79	0.83

*Notes: Robust standard errors in parentheses, adjusted for clustering at the country level. Country and year dummies are included in all models, along with the number of parties in government, government's prior seat share, party system fractionalization (ENEP), and cabinet ideological disparity. Life satisfaction is drawn from the closest Eurobarometer survey prior to the election. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.*

Table S7: Individual-Level Adjustment Regressions: Micro-Level Predictors of SWB

	DV: Life Satisfaction		
	(1)	(2)	(3)
Female	0.028*** (0.002)	0.034*** (0.002)	0.033*** (0.002)
Age	-0.013*** (0.000)	-0.012*** (0.000)	-0.012*** (0.000)
Age ²	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)
Married/Live as Married (vs. single)	0.164*** (0.004)	0.166*** (0.005)	0.166*** (0.005)
Divorced/Separated (vs. single)	-0.099*** (0.006)	-0.094*** (0.007)	-0.097*** (0.007)
Widow/Widower (vs. single)	-0.064*** (0.006)	-0.046*** (0.006)	-0.047*** (0.006)
Education to age 16-19	0.223*** (0.008)	0.190*** (0.008)	0.190*** (0.008)
Education to age 20+	0.406*** (0.012)	0.352*** (0.011)	0.351*** (0.011)
Education: Still studying	0.417*** (0.011)	0.376*** (0.011)	0.378*** (0.010)
Left-Right Placement (1-10)		0.029*** (0.001)	
Ideological Distance from Gov'		-0.139*** (0.018)	
Left-winger (vs. centrist)			-0.043** (0.017)
Right-winger (vs. centrist)			-0.092*** (0.021)
Right-wingness of Government (0-10)			0.023*** (0.007)
Left-Wing Individ' * Right-Wingness of Gov'			-0.016*** (0.003)
Right-Wing Individ' * Right-Wingness of Gov'			0.024*** (0.004)
Survey Dummies	Yes	Yes	Yes
Observations	1093594	744767	744767
R ²	0.06	0.06	0.06

Notes: Robust standard errors in parentheses, adjusted for clustering at the country level. Dependent variable in all models is a 1-4 life satisfaction scale. Country-survey means of the residuals from these regressions are used as predictors of government vote share in Table S5. Ideological distance is derived from i) the respondent's response to a 1-10 left-right self-placement ideology scale (in a subset of surveys where available), and ii) a 0-10 left-right scale of the government coalition (the mean of the four main left-right scales in the political science literature (Benoit and Laver, 2006; Castles and Mair, 1984; Hooghe et al., 2010; Huber and Inglehart, 1995), weighted by their respective vote shares at the previous election). The distance is the absolute value of the difference between the two, once they are both normalized to lie between 0 and 1. Sample is all of the Eurobarometer surveys for the 15 countries that include the life satisfaction question between 1973 and 2014. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table S8: Robustness: Country-Specific Time Trends

	Government Vote Share						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
National Happiness	5.33*	6.36**	6.48**	5.96**	7.25***	5.94	6.47*
	(2.53)	(2.74)	(2.41)	(2.18)	(2.43)	(3.77)	(3.54)
GDP Growth Rate	1.56*	2.33**	2.99**	0.91	0.26	3.20**	2.34*
	(0.74)	(0.94)	(1.15)	(0.84)	(1.04)	(1.10)	(1.31)
Country Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Dummies	No	Yes	Yes	No	No	Yes	Yes
Further Controls	No	No	Yes	Yes	Yes	Yes	Yes
Linear Time Trends	No	No	No	Yes	Yes	Yes	Yes
Quadratic Time Trends	No	No	No	No	Yes	No	Yes
Observations	139	139	139	139	139	139	139
R^2	0.52	0.71	0.79	0.70	0.75	0.81	0.82

Notes: Robust standard errors in parentheses, adjusted for clustering at the country level. Country dummies are included in all models. Further controls: number of parties in government, government's prior seat share, party system fractionalization (ENEP), and cabinet ideological disparity. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table S9: National SWB and Electoral Turnout

Model Type:	OLS	OLS	SEM		SEM	
Dep Var:	Turnout	Turnout	Turnout	Gov Vote	Turnout	Gov Vote
	(1)	(2)	(3)		(4)	
National Happiness	-0.67	-0.73	-0.67	7.86***	-0.73	6.08***
	(1.58)	(1.74)	(1.19)	(1.68)	(1.28)	(2.10)
GDP Growth Rate		-0.56			-0.56	2.81***
		(0.53)			(0.39)	(0.90)
Unemployment Rate		0.06			0.06	0.04
		(1.12)			(0.83)	(0.92)
Inflation Rate		1.61			1.61*	2.06*
		(1.24)			(0.91)	(1.12)
R^2	0.92	0.93				
Log-Likelihood			2676.76		2481.68	

Notes: Robust standard errors in parentheses, adjusted for clustering at the country level. All explanatory values are standardized to have a mean of 0 and SD of 1. Turnout and Vote Share are both percentages lying between 0 and 100. Sample is 139 elections. Country and year dummies are included in all models, along with the number of parties in government, government's prior seat share, party system fractionalization (ENEP), and cabinet ideological disparity. Turnout included as explanatory variable in vote share equations. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table S10: Robustness: Alternative SWB coding

	Government Vote Share									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
National Happiness (closest prior survey)	7.89*** (2.23)						7.57*** (2.05)	6.12** (2.58)	5.79** (2.21)	5.09** (2.06)
National Happiness (election-year mean)		7.93*** (1.70)								
National Happiness (Std Dev)			-2.06 (1.29)				-1.49 (1.12)			
National Happiness (Std Dev/Mean)				-5.42*** (1.60)				-2.26 (1.66)		
SWB Growth Rate					2.10*** (0.64)				1.35 (0.88)	
Spline: Growth Rate Negative						-5.21*** (1.07)				-4.12*** (0.78)
Spline: Growth Rate Positive						-1.82 (1.81)				-1.94 (1.62)
Observations	139	135	139	139	131	131	139	139	131	131
R^2	0.77	0.76	0.73	0.75	0.72	0.75	0.77	0.77	0.75	0.77

Notes: Robust standard errors in parentheses, adjusted for clustering at the country level. All explanatory values are standardized to have a mean of 0 and SD of 1. Country and year dummies are included in all models, along with the number of parties in government, government's prior seat share, party system fractionalization (ENEP), and cabinet ideological disparity. SWB growth rate is the percent change in $SWB_{electionyear-1}$ to $SWB_{electionyear}$. For spline analyses, negative (positive) growth is equal to the absolute value of the standardized growth rate if the unstandardized growth rate is below (above) zero. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table S11: Level of GDP per Capita & GDP Growth Rate

	Government Vote Share			
	(1)	(2)	(3)	(4)
National Happiness			7.90***	6.13**
			(2.22)	(2.85)
GDP per Capita (ln)	0.96	0.19	-0.11	0.25
	(2.63)	(2.88)	(2.76)	(2.72)
GDP Growth Rate		3.57**		2.86**
		(1.34)		(1.21)
Unemployment Rate		-1.48		0.08
		(1.30)		(1.18)
Inflation Rate		1.62		1.97
		(1.72)		(1.52)
Observations	139	139	139	139
R^2	0.72	0.77	0.77	0.79

*Notes: Robust standard errors in parentheses, adjusted for clustering at the country level. Independent variables are standardized (mean=0, SD=1). Country and year dummies are included in all models, together with the number of parties in government, government's prior seat share, party system fractionalization (ENEP), and cabinet ideological disparity. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.*

Table S12: Levels of National Happiness

	Government Vote Share			
	(1)	(2)	(3)	(4)
% Not at all satisfied	-1.06***			
	(0.29)			
% Not very satisfied		-0.46**		
		(0.19)		
% Fairly satisfied			-0.06	
			(0.16)	
% Very satisfied				0.41**
				(0.16)
Observations	139	139	139	139
R^2	0.76	0.74	0.72	0.75

*Notes: Robust standard errors in parentheses, adjusted for clustering at the country level. Independent variables are the percentage (0-100) at the closest Eurobarometer survey prior to the election of respondents responding to each category of the life satisfaction question. Full set of controls included, as in main analysis. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.*

S3 Extra Tables for Individual-Level Eurobarometer Analysis

Table S13: Individual SWB and Likelihood of Voting

Model Type:	Probit	Probit	Bivariate Probit		Bivariate Probit	
Dep Var:	Likely Voter	Gov Voter	Likely Voter	Gov Voter	Likely Voter	Gov Voter
	(1)	(2)	(3)		(4)	
Life Satisfaction (v. not at all)						
Not very satisfied	0.045** (0.020)	0.147*** (0.022)	0.043** (0.022)	0.148*** (0.022)	0.050*** (0.018)	0.120*** (0.021)
Fairly satisfied	0.113*** (0.027)	0.321*** (0.030)	0.116*** (0.027)	0.319*** (0.029)	0.134*** (0.023)	0.276*** (0.036)
Very satisfied	0.168*** (0.029)	0.426*** (0.040)	0.177*** (0.030)	0.422*** (0.039)	0.203*** (0.024)	0.405*** (0.056)
Last vote was for gov' party					0.020 (0.081)	1.526*** (0.092)
Observations	411989	411989	411989		266899	
Log-Likelihood	-237065.1	-248186.3	-429179.6		-242168.21	

*Notes: Robust standard errors in parentheses, adjusted for clustering at the country level. All models include country and survey dummies, along with the number of parties in government, government's seat share, party system fractionalization (ENEP), cabinet ideological disparity, respondent's gender, age, age², marital status, and education level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.*

Table S14: Robustness to using whole sample, not “likely voters” only

	Baseline Results			LDV		Econ Vote	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Life Satisfaction (vs. not at all)							
Not very satisfied	0.041*** (0.005)	0.040*** (0.005)	0.043*** (0.007)	0.044*** (0.007)	0.032*** (0.006)		0.020*** (0.005)
Fairly satisfied	0.108*** (0.013)	0.095*** (0.008)	0.100*** (0.009)	0.105*** (0.011)	0.077*** (0.010)		0.052*** (0.008)
Very satisfied	0.158*** (0.020)	0.136*** (0.012)	0.138*** (0.012)	0.158*** (0.020)	0.121*** (0.017)		0.095*** (0.016)
Lagged DV							
Last vote was for governing party					0.506*** (0.029)	0.509*** (0.031)	0.508*** (0.031)
Financial Situation Past Year (vs. same)							
A lot worse						-0.120*** (0.016)	-0.103*** (0.014)
A little worse						-0.063*** (0.009)	-0.055*** (0.009)
A little better						0.059*** (0.008)	0.056*** (0.008)
Financial Situation: A lot better						0.073*** (0.022)	0.062** (0.021)
Country Dummies	No	Yes	Yes	Yes	Yes	Yes	Yes
Survey Dummies	No	Yes	Yes	Yes	Yes	Yes	Yes
Demographic Controls	No	No	Yes	Yes	Yes	Yes	Yes
National Political Controls	No	No	Yes	Yes	Yes	Yes	Yes
Observations	411989	411989	411989	266899	266899	94276	94276
R^2	0.008	0.026	0.038	0.039	0.230	0.205	0.207
Countries	15	15	15	15	15	12	12

Notes: Robust standard errors in parentheses, adjusted for clustering at the country level. LPMs reported. Dependent variable in all models is equal to 1 if respondent intends to vote for a governing party. All models include country and survey dummies, along with the respondent’s gender, age, age², marital status, and education level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table S15: Alternative Partisanship Controls

	Vote Intention for Government Party				
	(1)	(2)	(3)	(4)	(5)
Life Satisfaction (vs. not at all)					
Not very satisfied	0.063*** (0.015)	0.031*** (0.010)	0.023** (0.010)		0.024** (0.009)
Fairly satisfied	0.141*** (0.020)	0.079*** (0.014)	0.055*** (0.014)		0.043*** (0.010)
Very satisfied	0.202*** (0.028)	0.130*** (0.019)	0.096*** (0.017)		0.086*** (0.015)
Partisanship					
Ideological Distance from Gov.		-1.150*** (0.113)	-0.764*** (0.094)	-0.888*** (0.098)	-0.882*** (0.097)
Last vote was for governing party			0.659*** (0.025)	0.641*** (0.027)	0.640*** (0.027)
Financial Situation Past Year (vs. same)					
A lot worse				-0.103*** (0.015)	-0.088*** (0.014)
A little worse				-0.056*** (0.009)	-0.050*** (0.008)
A little better				0.036*** (0.006)	0.033*** (0.005)
A lot better				0.057*** (0.017)	0.047** (0.016)
Country Dummies	Yes	Yes	Yes	Yes	Yes
Survey Dummies	Yes	Yes	Yes	Yes	Yes
Demographic Controls	Yes	Yes	Yes	Yes	Yes
National Political Controls	Yes	Yes	Yes	Yes	Yes
Observations	173581	173581	173581	63069	63069
R^2	0.056	0.187	0.449	0.412	0.414
Countries	15	15	15	12	12

Notes: Robust standard errors in parentheses, adjusted for clustering at the country level. LPMs reported. Dependent variable is equal to 1 if the respondent intends to vote for a governing party. See data appendix for more details on variable definitions. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table S16: Robustness: Future SWB

	Vote Intention for Government Party				
	(1)	(2)	(3)	(4)	(5)
Life Next Year (vs. same)					
Worse	-0.107*** (0.018)	-0.074*** (0.012)	-0.067*** (0.011)	-0.044*** (0.010)	-0.041*** (0.009)
Better	0.079*** (0.015)	0.072*** (0.015)	0.068*** (0.014)	0.062*** (0.013)	0.060*** (0.013)
Life Satisfaction (vs. not at all)					
Not very satisfied			0.031** (0.012)		0.024** (0.010)
Fairly satisfied			0.071*** (0.013)		0.046*** (0.012)
Very satisfied			0.119*** (0.020)		0.087*** (0.016)
Financial Situation Past Year (vs. same)					
A lot worse				-0.120*** (0.018)	-0.106*** (0.017)
A little worse				-0.059*** (0.010)	-0.053*** (0.010)
A little better				0.032*** (0.006)	0.030*** (0.006)
A lot better				0.041** (0.017)	0.032* (0.016)
Lagged DV					
Last vote was for governing party		0.716*** (0.015)	0.714*** (0.016)	0.712*** (0.018)	0.711*** (0.018)
Country Dummies	Yes	Yes	Yes	Yes	Yes
Survey Dummies	Yes	Yes	Yes	Yes	Yes
Demographic Controls	Yes	Yes	Yes	Yes	Yes
National Political Controls	Yes	Yes	Yes	Yes	Yes
Observations	91,101	73,588	73,588	59,803	59,803
R^2	0.061	0.353	0.356	0.354	0.356
Countries	15	12	12	12	12

Notes: Robust standard errors in parentheses, adjusted for clustering at the country level. LPMs reported. All models include country and survey dummies, along with the number of parties in government, government's seat share, party system fractionalization (ENEP), cabinet ideological disparity, respondent's gender, age, age², marital status, and education level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table S17: Robustness: Non-Linear Models

	Vote Intention for Government Party							
	(1) Logit	(2) MFX	(3) Logit	(4) MFX	(5) Logit	(6) MFX	(7) Logit	(8) MFX
Life Satisfaction (vs. not at all)								
Not very satisfied	0.234*** (0.036)	0.058*** (0.009)	0.270*** (0.065)	0.067*** (0.016)	0.271*** (0.081)	0.067*** (0.020)	0.233*** (0.077)	0.058*** (0.019)
Fairly satisfied	0.512*** (0.072)	0.125*** (0.017)	0.574*** (0.077)	0.140*** (0.019)	0.600*** (0.101)	0.144*** (0.024)	0.426*** (0.080)	0.104*** (0.019)
Very satisfied	0.664*** (0.133)	0.164*** (0.032)	0.740*** (0.089)	0.182*** (0.022)	0.884*** (0.134)	0.216*** (0.032)	0.703*** (0.113)	0.173*** (0.027)
Lagged DV								
Last vote was for governing party (d)					4.060*** (0.129)	0.748*** (0.012)	4.159*** (0.168)	0.729*** (0.013)
Financial Situation Past Year (vs. same)								
A lot worse							-0.756*** (0.135)	-0.171*** (0.027)
A little worse							-0.385*** (0.064)	-0.092*** (0.015)
A little better							0.245*** (0.036)	0.061*** (0.009)
A lot better							0.266*** (0.082)	0.066*** (0.020)
Country Dummies	No		Yes		Yes		Yes	Yes
Survey Dummies	No		Yes		Yes		Yes	Yes
Demographic Controls	No		Yes		Yes		Yes	Yes
National Political Controls	No		Yes		Yes		Yes	Yes
Observations	291,523		291,523		188,945		67,040	
Pseudo-R ²	0.005		0.040		0.334		0.289	
Log-Likelihood	-199219		-192223		-86390		-32727	

Notes: Robust standard errors in parentheses, adjusted for clustering at the country level. Dependent variable in all models is equal to 1 if respondent intends to vote for a governing party. Life satisfaction is measured on a 1-4 scale. National political controls: number of parties in government, government's seat share, party system fractionalization (ENEP), and cabinet ideological disparity. Demographic controls: gender, age, age², sets of dummies for level of education and marital status. All models include country FEs and survey dummies. Columns entitled "raw" refer to logistic regression coefficients, "MFX" to the estimated marginal effects from the previous column. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

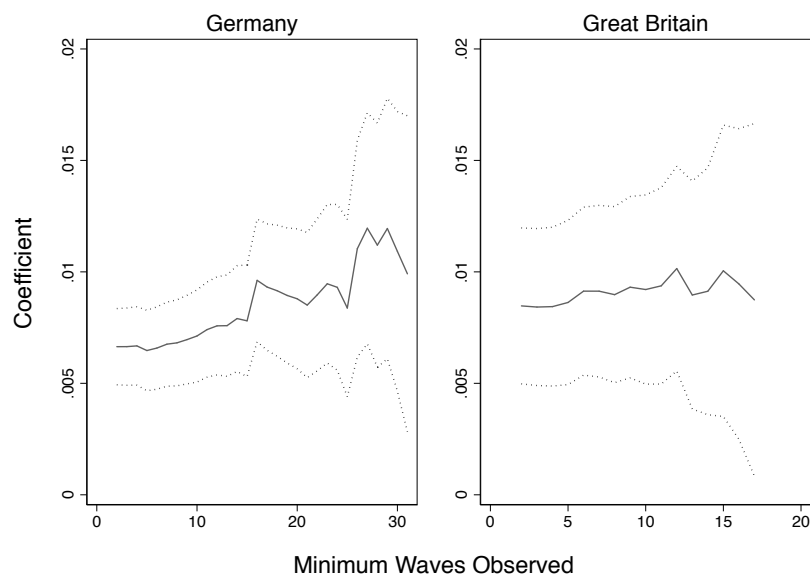
Table S18: Predictors of Intention to Vote for a Prime Minister Party

	Baseline Results			Lagged Dep Var		Econ Vote	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Life Satisfaction (vs. not at all)							
Not very satisfied	0.046*** (0.009)	0.057*** (0.016)	0.061*** (0.017)	0.060*** (0.016)	0.044*** (0.015)		0.036** (0.013)
Fairly satisfied	0.086*** (0.013)	0.121*** (0.019)	0.128*** (0.020)	0.137*** (0.022)	0.100*** (0.019)		0.073*** (0.016)
Very satisfied	0.102*** (0.029)	0.161*** (0.022)	0.167*** (0.023)	0.196*** (0.028)	0.146*** (0.024)		0.120*** (0.022)
Lagged DV							
Last vote was for governing party					0.574*** (0.048)	0.574*** (0.050)	0.572*** (0.050)
Financial Situation Past Year (vs. same)							
A lot worse						-0.151*** (0.023)	-0.128*** (0.021)
A little worse						-0.074*** (0.011)	-0.065*** (0.010)
A little better						0.034*** (0.009)	0.030*** (0.009)
Financial Situation: A lot better						0.060** (0.021)	0.048** (0.021)
Country Dummies	No	Yes	Yes	Yes	Yes	Yes	Yes
Survey Dummies	No	Yes	Yes	Yes	Yes	Yes	Yes
Demographic Controls	No	No	Yes	Yes	Yes	Yes	Yes
National Political Controls	No	No	Yes	Yes	Yes	Yes	Yes
Observations	280462	280462	280462	185993	185993	66630	66630
R^2	0.002	0.035	0.046	0.058	0.293	0.261	0.264
Countries	15	15	15	15	15	12	12

Notes: Robust standard errors in parentheses, adjusted for clustering at the country level. LPMs reported. Dependent variable in all models is equal to 1 if respondent intends to vote for the party of the incumbent prime minister (or equivalent, e.g. Chancellor). All models include country and survey dummies, along with the number of parties in government, government's seat share, party system fractionalization (ENEP), cabinet ideological disparity, respondent's gender, age, age², marital status, and education level. Sample restricted to likely voters only. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

S4 Extra Tables for Individual-Level Panel Analysis

Figure S1: Balanced and Unbalanced Panel Estimates



Notes: Coefficients and 95% confidence intervals reported for a series of regressions, varying how many waves the respondent is present in each dataset. In the SOEP (BHPS) I observe 31 (17) waves of data. The rightmost estimate in each panel is that of a regression using a balanced panel of individuals who are visible in the data in all survey rounds, and the leftmost estimate that of a regression using the whole sample of data (i.e. everyone with ≥ 2 waves of responses). The coefficient is that on z-scored life satisfaction, from an LPM predicting government support controlling for the full set of demographics, log income, and individual and wave fixed effects – as in the main models in the text.

Table S19: Future Life Satisfaction (German SOEP)

	DV: Government Supporter		
	(1)	(2)	(3)
Life Sat' in 5 Years			
1	0.025*		0.027*
	(0.013)		(0.014)
2	0.019		0.022*
	(0.012)		(0.012)
3	0.029**		0.034***
	(0.011)		(0.012)
4	0.029***		0.036***
	(0.011)		(0.012)
5	0.041***		0.048***
	(0.011)		(0.012)
6	0.052***		0.059***
	(0.011)		(0.012)
7	0.057***		0.063***
	(0.011)		(0.012)
8	0.058***		0.063***
	(0.011)		(0.012)
9	0.068***		0.071***
	(0.011)		(0.013)
Completely satisfied	0.065***		0.065***
	(0.012)		(0.013)
Life Sat' Today			
1		0.003	-0.006
		(0.015)	(0.015)
2		0.006	-0.005
		(0.013)	(0.013)
3		0.011	-0.006
		(0.012)	(0.013)
4		0.009	-0.011
		(0.012)	(0.013)
5		0.011	-0.013
		(0.012)	(0.012)
6		0.014	-0.016
		(0.012)	(0.013)
7		0.022*	-0.012
		(0.012)	(0.013)
8		0.026**	-0.010
		(0.012)	(0.013)
9		0.032***	-0.007
		(0.012)	(0.013)
Completely satisfied		0.036***	-0.001
		(0.012)	(0.014)
Observations	274,767	274,767	274,767
R^2	0.018	0.018	0.018
Individuals	36559	36559	36559

Notes: Standard errors in parentheses, clustered on individuals. Dependent variable in all models is equal to 1 if respondent is a government supporter, zero otherwise. Individual fixed effects included in all models. Demographic controls in all models: age, age², marital status, region dummies. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table S20: Panel Data Estimates: Non-Linear Specifications

	Germany		Great Britain	
	(1) Logit FE	(2) Probit RE	(3) Logit FE	(4) Probit RE
Life Satisfaction (z-score)	0.063*** (0.008)	0.068*** (0.004)	0.060*** (0.012)	0.030*** (0.006)
Household Income (ln)	-0.008 (0.007)	0.021*** (0.003)	-0.000 (0.018)	0.012 (0.009)
Observations	286784	475888	118342	162068
Individuals	23481	55001	11768	19271
Log-Likelihood	-117288	-202325	-48337	-85344

*Notes: Robust standard errors in parentheses, adjusted for clustering at the individual-level. Great Britain: BHPS/UHLS 1996-2014. Germany: SOEP 1984-2014. Dependent variable in all models is equal to 1 if respondent supports a governing party (see text for details and caveats). Life satisfaction is z-scored in each dataset to have mean of 0 and SD of 1. Controls included in all models: region dummies, year dummies, age, age², marital status dummies. Gender and education level dummies also included in pooled cross-section models. Sample for conditional logit models is individuals who changed their incumbent voting behavior at least once during the sample period. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.*

Table S21: SWB and Financial Indicators in Great Britain

	BHPS 1996-2014			BHPS 1996-2008		
	(1)	(2)	(3)	(4)	(5)	(6)
Household Income (ln)	0.000 (0.003)	-0.001 (0.003)	0.001 (0.003)	0.005** (0.002)	0.004* (0.002)	0.004* (0.002)
Life Satisfaction						
1	(ref.)	(ref.)	(ref.)	(ref.)	(ref.)	(ref.)
2	0.020 (0.013)	0.019 (0.013)	0.020 (0.013)	0.017 (0.013)	0.017 (0.013)	0.017 (0.013)
3	0.007 (0.011)	0.006 (0.011)	0.006 (0.011)	0.004 (0.011)	0.003 (0.011)	0.001 (0.011)
4	0.018 (0.011)	0.016 (0.011)	0.017 (0.011)	0.013 (0.011)	0.012 (0.011)	0.009 (0.011)
5	0.020* (0.011)	0.017 (0.011)	0.019* (0.011)	0.022** (0.011)	0.020* (0.011)	0.017 (0.011)
6	0.031*** (0.011)	0.026** (0.011)	0.030*** (0.011)	0.030*** (0.011)	0.027** (0.011)	0.023** (0.011)
7	0.039*** (0.012)	0.034*** (0.012)	0.039*** (0.012)	0.025** (0.012)	0.022* (0.012)	0.018 (0.012)
Finances Today						
Finding it Very Difficult		-0.018** (0.009)				-0.013 (0.009)
Finding it Quite Difficult		-0.007 (0.006)				-0.002 (0.006)
Just about getting by Doing Alright		(ref.) 0.014*** (0.003)				(ref.) 0.013*** (0.003)
Living Comfortably		0.019*** (0.004)				0.016*** (0.004)
Finances in Future						
Worse Off			-0.026*** (0.004)			-0.013*** (0.004)
About same			(ref.)			(ref.)
Better Off			0.005* (0.003)			0.013*** (0.003)
Finances Over Past Year						
Worse Off					-0.007** (0.003)	-0.004 (0.003)
About same					(ref.)	(ref.)
Better Off					0.008*** (0.003)	0.005* (0.003)
Observations	154,966	154,966	154,966	126,691	126,691	126,691
R^2	0.016	0.017	0.017	0.026	0.026	0.027
Individuals	19,092	19,092	19,092	19,092	19,092	19,092

Notes: Standard errors in parentheses, clustered on individuals. Individual fixed effects included in all models. Demographic controls in all models: age, age², marital status, region and wave dummies. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

S5 Clarity of Responsibility

An important finding of the research on economic voting is that cross-national evidence is often unstable due to variation in institutional design across countries and the extent to which it is clear who is responsible for outcomes (Powell and Whitten, 1993). This ‘clarity of responsibility’ thesis suggests, for example, that where parties govern in coalitions—in which responsibility is diffuse—voters find it more difficult to hold incumbents accountable for performance. Much of this variation (political institutions and electoral systems, for instance) is constant within countries over time, and is thus partialled out by the country fixed effects in the main models. Nevertheless, I control for four standard clarity of responsibility variables that vary over time: i) the number of parties in government, ii) the sitting government’s collective seat share, iii) government ideological disparity, and iv) party fractionalization. In the main analysis, these are held constant. In order to more directly test the hypothesis, I also interact subjective well-being (at the macro and micro level) with these variables.

There is some suggestive evidence for the thesis. In the aggregate analysis, the more parties there are in the governing coalition, the lower is the SWB effect on vote share. Equally, in situations where governments have a large seat share (and thus usually a more comfortable governing majority), the electorate is more likely to punish or reward incumbents for the level of national happiness. In the individual-level analysis, where parties govern in large coalitions—particularly when these groups of parties are ideologically diverse—the strength of the relationship between subjective well-being and vote intentions is weaker.

Table S22: Macro: Clarity of Responsibility

	Government Vote Share					
	(1)	(2)	(3)	(4)	(5)	(6)
Subjective Well-being						
National Happiness	7.89*** (2.23)	7.96*** (2.18)	4.95* (2.55)	6.78*** (2.20)	8.01*** (2.29)	5.41* (2.89)
Clarity of Responsibility Controls						
Parties in Government	4.03 (2.56)	4.12* (2.34)	3.51 (2.25)	4.08 (2.46)	3.97 (2.51)	4.86*** (1.60)
Government Seat Share	3.25* (1.74)	3.23* (1.76)	4.61*** (1.15)	3.73* (1.80)	3.26* (1.75)	4.93*** (1.05)
Government Ideological Discordance	-0.66 (1.50)	-0.70 (1.44)	-0.52 (1.46)	-0.86 (1.47)	-0.63 (1.50)	-1.22 (1.54)
Party Fractionalisation	-0.11 (2.02)	-0.14 (2.02)	0.28 (2.18)	-0.10 (2.20)	0.03 (1.74)	0.28 (2.13)
Interactions						
SWB * Parties in Gov.		-0.16 (0.83)				-2.96** (1.12)
SWB * Gov. Seat Share			3.15*** (0.81)			3.93** (1.32)
SWB * Ideological Discordance				1.45** (0.67)		0.67 (1.37)
SWB * Party Fractionalisation					0.50 (2.15)	1.45 (2.04)
Observations	139	139	139	139	139	139
R^2	0.77	0.77	0.79	0.77	0.77	0.81

Notes: Robust standard errors in parentheses, adjusted for clustering at the country level. Sample is a panel of 15 European countries 1973-2014. Dependent variable in all models is the collective vote share received by incumbent parties (0-100). Life satisfaction is the national mean at the closest Eurobarometer survey prior to the election. All independent variables are z-scored such that mean=0, SD=1. Country and year dummies are included in all models. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table S23: Micro: Clarity of Responsibility

	Vote Intention for Government					
	(1)	(2)	(3)	(4)	(5)	(6)
Subjective Well-being						
Life Satisfaction (z-score)	0.041*** (0.004)	0.041*** (0.003)	0.041*** (0.004)	0.041*** (0.003)	0.041*** (0.004)	0.041*** (0.002)
Clarity of Responsibility Controls						
Parties in Government	0.007 (0.018)	0.010 (0.018)	0.007 (0.018)	0.007 (0.018)	0.007 (0.018)	0.007 (0.019)
Government Seat Share	0.055** (0.019)	0.054** (0.019)	0.055** (0.019)	0.054** (0.019)	0.055** (0.019)	0.054** (0.018)
Government Ideological Discordance	0.009 (0.017)	0.008 (0.017)	0.009 (0.017)	0.010 (0.017)	0.009 (0.017)	0.010 (0.018)
Party Fractionalization	0.004 (0.034)	0.003 (0.034)	0.004 (0.034)	0.003 (0.034)	0.003 (0.035)	0.003 (0.034)
Interactions						
SWB * Parties in Gov.		-0.008* (0.005)				0.000 (0.006)
SWB * Gov. Seat Share			-0.000 (0.005)			0.005 (0.004)
SWB * Ideological Discordance				-0.013* (0.006)		-0.015** (0.007)
SWB * Party Fractionalisation					-0.006* (0.003)	-0.000 (0.003)
Country Dummies	Yes	Yes	Yes	Yes	Yes	Yes
Survey Dummies	Yes	Yes	Yes	Yes	Yes	Yes
Demographic Controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	291523	291523	291523	291523	291523	291523
R^2	0.052	0.053	0.052	0.053	0.053	0.053
Countries	15	15	15	15	15	15

Notes: Robust standard errors in parentheses, adjusted for clustering at the country level. LPMs reported. Dependent variable in all models is equal to 1 if respondent intends to vote for a governing party. All models include country and survey dummies, along with the respondent's gender, age, age², marital status, and education level. Likely voters included only. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.