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## STRATEGIC VOTING AND HAPPINESS

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**ABSTRACT:** In this paper we extend the research on happiness and spatial theory of voting by exploring whether strategic and sincere voting affect subjective well-being. We conduct the analysis with data on a large sample of individuals over 50 elections in 16 OECD countries. The results of the analysis show the existence of a negative effect of strategic voting on subjective well-being. In addition, the likelihood of being satisfied decreases when individuals vote strategically for a political party that wins the electoral race. Furthermore, when we analyse separately left-wing and right-wing voters, we find that the described effect holds for left-wing voters but no for right-wing voters. We discuss this evidence in the light of expressive voting theory (Hilman, 2010) and lack of empathy with future selves (Kahneman and Thaler, 1991). Our results are robust to different measures of strategic voting and subjective well-being.

JEL Codes: D72, D03, I31

Keywords: Happiness, life satisfaction, strategic voting, political ideology

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# 1 Introduction

In recent years, an increasing number of disciplines have explored the determinants of happiness and subjective well-being. In the economic literature, for the last twenty years, research on this issue has focused on identifying the impact on happiness of a large number of factors. We can distinguish between three different groups of determinants of happiness. The first one is individual socio-demographic characteristics such as age, gender, education, and marital status. The second group includes socio-economic factors such as income, social class, and employment status. And the last one consists of macroeconomic variables such as GDP, unemployment rate, inflation, etc. (See e.g., Clark and Oswald, 1996; Di Tella et al., 2001; Di Tella et al., 2010; van Praag and Ferrer-i-Carbonell, 2008).

However, even after accounting for a wide range of characteristics described above, happiness still remains largely unexplained. If money can buy happiness, why do some people living in the richest countries have a low level of happiness? (Easterlin, 2001). Being married is a source of happiness, but then why is it that divorce is so common. Other intriguing facts are that the relationship between age and happiness seems to be U-shaped (Oswald, 1997) and that being unemployed produces more unhappiness than the one corresponding to the equivalent income loss (Frey and Stutzer, 2000).

Only recently, a strand of the economic literature has focused its attention on the relationship between political behaviour and well-being, happiness and life satisfaction. The first attempt to explore the relationship between voting decisions and subjective well-being (henceforth SWB) was Radcliff (2001). He showed that SWB is positively affected by the presence of a Left-Wing Government. However, this result is not unequivocal. Di Tella and MacCulloch (2005) found that the SWB of right-wing individuals is positively affected by the presence of a government leaning towards the right of the ideological spectrum. Their result finds corroboration in the work of Napier and Jost (2008) who explained this positive relationship by means of the propensity of right-wing voters to justify income inequalities. In their study on Swiss Cantons, Frey and Stutzer (2002) found that the degree of direct democracy affects life satisfaction significantly. They link citizen participation to the level of monitoring of politicians' activity. In their view, a stricter control by citizens translates into the implementation of policies that are closer to the bliss point of the citizenry: satisfaction with the government choice is mirrored in a higher level of well-being.

Dolan et al. (2008) reversed the problem posed by Frey and Stutzer (2002) and studied for the first time the casual relationship between the decision to vote and SWB. They found that the probability of casting a ballot is not affected by life satisfaction. However, when they take into account individual political affiliation, they show that conservatives with higher SWB are less likely to vote. All the papers above disagree on which side of the ideological spectrum foster SBW. However, they seem to agree on the high importance of the ideological position of the government and citizens in individual well-being.

In this paper we explore whether individual life satisfaction and happiness is affected by the way in which people exercise their legal right to vote. Specifically, we test whether voters' life satisfaction is higher or lower when they engage in strategic voting. We use data on a large sample of individuals over 50 elections in 16 OECD countries. The years taken into account span from 1975 to 2002. We find that life satisfaction decreases with strategic voting for left-wing voters. In addition, the negative impact of strategic voting is only significant when the voted party is elected. However, right-wing voters seem to be unaffected by strategic voting and this occurs regardless of the electoral outcome. We obtain that strategic voting is more relevant for life satisfaction than the relative position of the government compared to that of the individual in the ideological left-right spectrum.

There are two major reasons why strategic voting can be expected to negatively affect voters' life satisfaction. Firstly, because people's thoughts and feelings are influenced by the actual, imagined, or implicit presence of other members of their recognizable group (Allport, 1985). People can feel socially influenced even when no other people are actually present, for instance through television or internalized cultural norms. When it comes to political elections, individuals identify themselves with the political party that best represents their own interest, or the interest of people with who they share a political ideology. From that perspective, every time a citizen casts her vote for a political party different from the one that best represents her preferences, she may feel that she has betrayed her political group and experience a loss in happiness.

Secondly, the act of voting itself represents a self affirmation of all the values and beliefs that constitute the essence of a person. Voting for a political party is a declaration of what a voter thinks about redistribution, economic policies, welfare and so on. In this light, voting strategically amounts to lying about the own essence. It is commonly accepted in modern psychology that

the act of lying is a source of stress for the individual because, for instance, it undermines self-image (Ariely, 2012). If a voter votes for a political party different from the one she prefers the most, she may undergo the same type of stress associated to lying. This then translates into a lower level of life satisfaction and happiness.

To the best of our knowledge this paper represents the first attempt to address the impact of strategic voting on happiness and life satisfaction. Our paper relates closely to some previous work which explores the relationship between happiness and political participation. More specifically, Flavin and Keane (2012) argue that subjective well being influences political participation. Thus, when people feel satisfied with their life they are more prone to vote and participate in public life. Weitz-Shapiro and Winters (2011) focus their attention on the direction of causality between happiness and voting. Using Latin America data they find that individual happiness affects voting but not the other way around. Barker and Martin (2011) discuss some empirical evidence on the link between happiness and political participation. They conclude that, although there is some evidence supporting the connection between political participation and happiness, there is stronger evidence showing that happy people participate more in democratic processes. We depart from this literature in two ways: first, we focus our analysis on the impact of voting on individual happiness; and second, we specifically explore the effect of strategic voting on well being rather than of general voting.

As it is standard in this literature, we use data on individual life satisfaction as a measure of subjective well being. Notwithstanding, as a robustness check, we also use data on happiness and subjective well being defined as in Inglehart et al. (2008). These authors point out that life satisfaction and happiness are highly correlated but they pick up different aspects of individual's life. Thus, life satisfaction is assumed to be strongly tied to economic conditions while happiness is supposed to be a more emotional perception of well being. Hence, Inglehart et al. (2008) suggest a third measure of subjective well being which is just a linear combination of happiness and life satisfaction. This measure provides a more complete measure of well being since economic conditions and emotional feelings are both complementary measures of subjective well being.

The remainder of the paper is organized in four sections. Section 2 describes the data and the procedure used to built our variables of interest. Section 3 describes the empirical methodology. Section 4 discusses the results, and Section 5 concludes.

## 2 Data

The data that we use in this study is drawn from a variety of sources. The main variable is based on the “Mannheim Standard Euro-Barometer” (henceforth “Euro-Barometer”), compiled by the European Commission. This database collects information on SWB, voting behaviour, and demographic characteristics from over half million face-to-face interviews in 16 OECD countries. The period of time of interest spans from 1973 to 2002. The dependent variable (SWB) used for our analysis is based on the answer to the following question: “*On the whole, are you very satisfied, not very satisfied or not at all satisfied with the life you lead?*”. The respondent had four available answers: “*Very Satisfied*”, “*Fairly Satisfied*”, “*Not Very Satisfied*”, and “*Not at all satisfied*”<sup>1</sup>. We merged these categories in order to create a dichotomous variable taking the value of 1 if the respondent declared to be very or fairly satisfied with her life and zero otherwise. We focused on strategic voting as the major explanatory variable. To identify an strategic voter, we relied on the definition given by spatial voting theory: a voter is considered to vote sincerely in an election if she casts her ballot in favour of the candidate whose ideological position is closest to her own (given the ideological positions of all the candidates in the election). In short, to vote sincerely means having a clear preference for a particular political party or candidate and to vote accordingly.

We assume that when an individual does not vote for her most preferred party she is casting a strategic ballot. Such voting behavior can be based on other considerations such as helping to bring about a certain coalition government, showing like/dislike for a certain candidate or punishing a political party for its past behavior. To identify who are the strategic voters in our sample, we first need to define the political party which is the nearest political party to the ideological preference of each voter. Next we check whether voters actually did vote for their most preferred party identified in this way. In order to do this, we matched the data contained in the “Mapping Policy Preferences: Estimates for Parties, Electors, and Government 1945-2002” (Budge et al., 2001) with some of the information contained in the Eurobarometer. The first dataset allowed us to locate each political party running in an election on a Left-Right unidimensional ideological spectrum. The second dataset provides information on the self-reported ideological position of each

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<sup>1</sup>We did not include in our analysis the categories “Do not know” and “No answer”.

voter. This information is obtained from the following question: “*when it comes to politics, do you usually think of yourself as extremely liberal, liberal, slightly liberal, moderate, middle of road, slightly conservative, conservative, extremely conservative? Indicate your preferences on a ten-point political scale (1 being extreme left, 10 being extreme right)*”; To identify the nearest party to the ideological preferences of each voter, we calculated the euclidean distance between the self-reported individual ideological preference and the ideological position of each competing party in a certain election. We then chose the party for which this distance was the minimum. Finally, we combined this information with the answer to the following question: “in the last election, which party did you vote?”. We consider that an individual votes sincerely when she casts his ballot for the party whose political platform (along the ideological space) is the closest to the one she prefers the most. Otherwise, she is considered to vote strategically.<sup>2</sup> Strategic voting is thus defined as a dichotomous variable which takes the value of one when a vote is strategic and zero when a vote is sincere.

### 3 Empirical Strategy

In order to test whether the propensity to report a high level of subjective well-being is affected by the way in which people vote, we use a logit model. The econometric specification can be written as follow:

$$Satisfaction_{i,c,t} = \alpha + \beta Strategic_{i,c,t} + \gamma Demo_{i,c,t} + \delta Socio-econ_{i,c,t} + \epsilon_{i,c,t}$$

where subscripts  $i$ ,  $c$  and  $t$  refer to individuals, countries and time, respectively. As we showed in the previous section, the dependent variable *Satisfaction* measures the individual’s propensity to report being satisfied with her life. This variable is dichotomous and takes the value of 1 when responders report that they are satisfied and zero otherwise. The variable *Strategic* indicates whether an individual cast her vote in favour of the candidate whose ideological position is the closet to her own or not (given the ideological position of all the other candidate in an election). The set of demographic and socioeconomic variables we consider include individual characteristics which the literature shows to relate to individual satisfaction and happiness (van Praag and Ferrer-i-Carbonell, 2008). In particular, demographic variables refer to personal attributes of the respondents. They include: age (grouped in

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<sup>2</sup>See Acacia (2011), for more detailed information.



three intervals ranging from 18 to 99 years old), gender, education (low or high education), relationship status (single, married, cohabit, divorced), having children or not, employment status (unemployed, self-employed, manual workers, owner of a shop, professional, retired, house keeper). As socioeconomic variables, we include family income and unemployment rate.

All our estimates include country fixed effects, time fixed effects, and their interaction. They are mainly designed to minimize any unobserved heterogeneity that could be correlated with our explanatory variables.

## 4 Estimation Results

First of all, it is worth noticing that in each specification that we discuss in this chapter the demographic and economic variables yield very similar results (in sign and magnitude) to the ones previously found in the literature (van Praag and Ferrer-i-Carbonell, 2008). For example, Table 1 shows that young people have a larger probability of being satisfied with their life compared to middle-aged individuals. On the contrary, old people have a higher probability to be happy compared to young individuals. People who are married or live together with their partner have a higher probability of reporting feeling satisfied. People with higher education have a larger probability of being satisfied than low educated individuals. Income has a similar effect: richer individuals are more likely to report being satisfied.

Regarding our research question, our primary specification lends support to the idea that strategic voting has an important impact on individual life-satisfaction. The results from Table 1 confirm that a voter has a lower probability of being satisfied if she decides to cast her vote for a political party which is not the one nearest to her ideological position. More specifically, voting for a party which is not the most preferred one decreases the probability of a voter being satisfied by 1.2%. This result seems to contradict the rationality assumption underlying the theory of voting. If people are utility (or hedonistic) maximizers and vote in a strategic way, thus decreasing their satisfaction, why do they do it? As Kahneman and Thaler (1991) have pointed out “some choices that people make may involve a lack of empathy for the future self who will have to live with those choices”. This failure in forecasting the cost (interpreted as a decrease in satisfaction) of their choice may mislead them to vote for a political party that is not the nearest to their ideology’ preferences.

In order to investigate further this self-damaging effect of strategic voting, we separated the data into two sub-samples, one for left-wing individuals and another for right-wing individuals. We classified individuals on left-wing and right-wing using the dataset "mapping policy preferences" of Budge et al (2001). We used an ideological space from 1 to 10, being 1 extreme left and 10 extreme right. We classified people reporting preferences from 1 to 5 as left-wingers and people from 6 to 10 as right-wingers. This analysis yields an interesting result (see Table 3). The negative coefficient associated with strategic voting is still significant at the one per cent level for those voters leaning towards the left of the political spectrum. However, for right-wing voters the coefficient becomes insignificant.

**Result 1:** *Strategic voting reduces the individual life satisfaction of leftist voters but not of rightist voters.*

This is not an intuitive finding. There is not obvious *a priori* reason why the negative impact of strategic voting on life satisfaction should be asymmetric across the political spectrum. Our conjecture is that it could be driven by the result of the electoral race since happiness and life satisfaction may be affected by the outcome of the election via the policies that will be eventually implemented. In order to check this hypothesis we extend our specification by taking into account the result of the electoral competition, that is, we include information on whether the party the individual voted for won the election or not. Table 4 shows that voting strategically affects negatively the probability of being satisfied when the party the individual voted for is indeed elected. On the contrary, when the voted party is not elected, strategic voting does not affect the probability of an individual reporting herself as satisfied with her life.

**Result 2:** *Strategic voting reduces life satisfaction if the party the individual voted for wins the election.*

A possible explanation for this result may be grounded on the sources of utility from voting. The classical theory of voting considers that individuals may obtain utility from the act of voting itself if by voting they feel that they are good citizens and are fulfilling their civic duty (Downs, 1957; Riker and Ordeshook, 1968). But individuals may also choose to vote as a form of expressive behavior (Hillman, 2010; Hamlin and Jennings, 2011). For example, voters may use their vote to express dislike for a candidate or for the past decisions of a party, even when voting is costly. More relevant for

the analysis, an individual may decide to vote against her ideology in order to express a particular feeling, usually one of complain or protest. The objective of this form of voting, called *expressive voting*, is not to influence the result of the election but to obtain utility thorough the act of voting itself as an act of self-reaffirmation. This theory is compatible with our results. Result 2 might be due to the individuals who voted for a party which ended up winning the election, but who did not actually want that party to be elected. They might have just used their vote to express their dissatisfaction with their most ideologically preferred party, perhaps because they disliked its past behavior or their running candidate. Under that interpretation, strategic voters vote against their ideology in order to obtain expressive utility at the moment of casting their ballot and because they do not expect to actually "suffer" the policies they vote for, i.e. they do not expect their vote to change the outcome of the election. And when their not-so-preferred alternative wins, these voters experience a decrease in happiness or life-satisfaction. Hillman (2010) refers to this as a "expressive-policy trap". Alternatively, voters might be actually aware of the negative impact of the election of a party different from their most preferred one in their future well-being, but they choose to ignore it. This may be the case if individuals discount heavily the future or if they regard their future self as a separate person and feel little empathy for her (Kahneman and Thaler, 1991).

When we take into consideration the political preferences of the voters, the results vary between left and right-wing voters (Table 5). People leaning towards the left of the political spectrum and who voted strategically for the party which did win the electoral race suffer a decrease in the likelihood of reporting themselves as satisfied. However, the probability of being satisfied for a right-wing voter does not depend on whether she voted sincerely or strategically for the party which won the election; the coefficient associated with strategic voting for that subsample remains negative but it is no longer significant. Hence, we could argue that left-wing individuals who voted strategically were expressing their dissatisfaction with their preferred party or, alternatively, that they were myopic about the effects of their voting decisions on their future satisfaction.

In order to check the robustness of our results we considered an alternative measure of strategic voting. To build this alternative variable we used the following question from the Euro-Barometer: "*generally speaking do you feel closer to one of the national political parties than the other? If yes, which one?*" We compare the answer to this question with the one about their vote

in the last election. We create a dichotomous variable that takes the value of one if the party they feel close to is not the same as the party they voted for, i.e. a strategic vote, and the value of zero otherwise, i.e. sincere vote. Table 2 (column 3) shows the results of the regression with this new measure of strategic voting. This variable is still significant at the five per cent level of significance. In addition, we also check that our results are robust to different measures of well being. Thus, results hold when we use a measure of happiness instead of our satisfaction measure. Also, the obtained results remain we using a measure of subjective well-being which is calculated as a linear combination of happiness and satisfaction following the procedure proposed by Inglehart et al (2008) (see Table 2).

Finally, and in order to check that our results are robust to the estimation method, we estimate our primary specification using OLS. We obtain that the OLS estimates offer the same qualitative results as the ordered logit. Moreover, it is worth pointing out that all our estimates report standard errors that are robust to heteroskedasticity of unspecified form.

## 5 Conclusion

In this paper we have explored the impact of strategic voting on subjective well-being. Specifically, our results bring evidence that ideological considerations display a sizeable influence on the reported level of life satisfaction. Voting for a political party with a platform far away from a person's own ideological preferences decreases her subjective life satisfaction. We found however that this effect is asymmetrical across the political spectrum. Left wing strategic voters suffer from a decrease on their probability of being satisfied with their lives while no effect appears for right-wing strategic voters.

We then looked at the outcome of the electoral race because we wanted to investigate whether there was a disassociation between the act of voting and the actual outcome from of the election. Expressive voting theory and/or lack of empathy for future selves can explain why voters who voted an elected party may feel unhappy with the final outcome of the election. Results indeed show evidence of the presence of these factors. Again these effects only affected left-wing voters.

Admittedly, this asymmetry across the political spectrum is the most intriguing of our results. Unfortunately, our database does not allow us to disentangle the reasons behind this. Our conjecture is that right-wing voters

might be less motivated by ideology and thus be less prone to expressive motivations. If ideology is less salient for a voter this implies that she is less likely to punish their prefer party according to ideology. Another conjecture is that non-ideological motives may be more silent for right-wing voters. This may be the case when electoral competition takes place in other dimension apart from the left-right dimension such us nationalism, religion or race. These are avenues for further research that the present work leaves opened.

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**Table 1 - General Result**

Dependent Variable		Subjective Life Satisfaction	
		(Coeff)	(Std error)
Strategic		-0.126***	▾ (0.037)
Age:	Middle	-0.095***	▾ (0.035)
	Old	0.330***	▾ (0.067)
Female		0.124***	▾ (0.032)
Education to age:	<=15	-0.484***	▾ (0.045)
	>=18	0.183***	▾ (0.051)
Marital status:	Separated	-0.534***	▾ (0.110)
	Divorced	-0.245***	▾ (0.079)
	Single	0.186***	▾ (0.063)
	Married	0.237***	▾ (0.052)
	De facto	0.577***	▾ (0.119)
Child		-0.118***	▾ (0.035)
Income level:	<=4000	-0.313***	▾ (0.038)
	>=8000	0.459***	▾ (0.038)
Working Status:	Unemployed	-0.958***	▾ (0.057)
	Self-employed	-0.459***	▾ (0.078)
	Manual worker	-0.179***	▾ (0.050)
	Owner of a Shop	▾ 0.153	▾ (0.119)
	Professional	▾ -0.097	▾ (0.105)
	House keeper	▾ -0.092	▾ (0.056)
	Retired	▾ -0.091	▾ (0.056)
<i>F(21, 490)</i>		75.44***	
<i>Prob &gt; F</i>		▾ (0.000)	
<i>N</i>		59,429	

*Note: Probit regressions with robust standard errors. All regressions include year and country dummies, country-specific time trends.*



**Table 2 - Robustness Check**

<b>Dependent Var</b>		<b>(a)</b>	<b>(b)</b>	<b>(c)</b>
		<i>Happyness</i>	<i>LifeSat-Happy</i>	<i>Life Sat</i>
Strategic		-0.175*** (0.091)	-0.228*** (0.067)	
Strategic_alternative				-0.180*** (0.049)
Age:	Middle	-0.252*** (0.084)	-0.179*** (0.059)	-0.042 (0.046)
	Old	0.374*** (0.147)	0.497*** (0.080)	0.379*** (0.081)
Female		0.009*** (0.082)	0.741 (0.049)	0.151*** (0.040)
Education to age: <=15		-0.494*** (0.116)	-0.459*** (0.083)	-0.504*** (0.052)
>=18		0.049*** (0.120)	0.048 (0.069)	0.200*** (0.054)
Marital status:	Separated	-0.524*** (0.231)	-0.444* (0.234)	-0.470*** (0.140)
	Divorced	-0.447*** (0.079)	-0.300 (0.222)	-0.267*** (0.183)
Single		0.144*** (0.063)	0.284** (0.112)	0.119 (0.078)
Married		0.610*** (0.135)	0.534*** (0.101)	0.290*** (0.060)
De facto		0.924*** (0.389)	0.717*** (0.236)	0.639*** (0.140)
Child		-0.033*** (0.051)	-0.075*** (0.047)	-0.113** (0.045)
Income level:	<=4000	-0.285*** (0.083)	-0.374*** (0.092)	-0.406*** (0.047)
	>=8000	0.311*** (0.120)	0.333*** (0.079)	0.429*** (0.049)
Working Status:	Unemployed	-0.852*** (0.186)	-0.636*** (0.159)	-0.974*** (0.078)
	Self-employed	-0.374*** (0.395)	-0.141 (0.254)	-0.175 (0.112)
Manual worker		-0.128*** (0.139)	-0.080 (0.083)	-0.145** (0.062)
Owner of a Shop		0.324 (0.412)	0.147 (0.261)	-0.112 (0.134)
Professional		<i>Omitted</i>	<i>Omitted</i>	-0.112 (0.128)
House keeper		-0.139 (0.141)	0.067 (0.103)	-0.065 (0.070)
Retired		-0.325 (0.197)	-0.082 (0.119)	-0.029 (0.064)
<i>Prob &gt; F</i>		<i>F(20, 72)</i> 13.27*** (0.000)	<i>F(19, 73)</i> 20.66*** (0.000)	<i>F(21, 384)</i> 58.79*** (0.000)
<i>N</i>		9,412	9,412	35,344

Note: All regressions include: robust standard errors; year and country dummies and country-specific time trends. Regression (b) cut points: Cut1=-2.13(0.133); Cut2=-1.04 (0.125); Cut3=0.982(0.122); Cut4=2.053(0.122).

**Table 3 - Ideological Preferences**

<b>Dependent Var</b>		<b>(a)</b>	<b>(b)</b>
		<i>Left</i>	<i>Right</i>
Strategic		-0.150*** √(0.048)	-0.070 √(0.057)
Age:	Middle	-0.063 √(0.044)	-0.164*** √(0.051)
	Old	0.326*** √(0.087)	0.276*** √(0.086)
Female		0.175*** √(0.042)	0.60 √(0.048)
Education to age: <=15		-0.498*** √(0.055)	-0.452*** √(0.055)
>=18		0.166*** √(0.059)	0.202*** √(0.063)
Marital status:	Separated	-0.461*** √(0.151)	-0.621*** √(0.166)
	Divorced	-0.156 √(0.115)	-0.343*** √(0.111)
Single		0.127 √(0.082)	0.261*** √(0.094)
Married		0.232*** √(0.076)	0.324*** √(0.065)
De facto		0.557*** √(0.144)	0.609*** √(0.154)
Child		-0.123*** √(0.040)	-0.103* √(0.056)
Income level:	<=4000	-0.316*** √(0.051)	-0.301*** √(0.056)
	>=8000	0.384*** √(0.045)	0.533*** √(0.061)
Working Status:	Unemployed	-1.008*** √(0.075)	-0.853*** √(0.081)
	Self-employed	-0.566*** √(0.112)	-0.406*** √(0.106)
Manual worker		-0.079 √(0.064)	-0.291*** √(0.075)
Owner of a Shop		0.200 √(0.145)	0.145 √(0.157)
Professional		-0.123 √(0.140)	-0.025 √(0.151)
House keeper		-0.120* √(0.066)	0.060 √(0.077)
Retired		-0.112 √(0.074)	-0.057 √(0.081)
		<i>F</i> (21, 470) 48.36***	<i>F</i> (21, 488) 46.38***
<i>Prob &gt; F</i>		√(0.000)	√(0.000)
<i>N</i>		30,022	29,407

*Note: All regressions include: robust standard errors; year and country dummies and country-specific time trends.*

**Table 4 - Party voted for is part of the new government**

<b>Dependent Var</b>		<b>(a)</b>	<b>(b)</b>
		<b>Yes</b>	<b>No</b>
Strategic		-0.288*** █(0.064)	0.132 █(0.049)
Age:	Middle	-0.101* █(0.055)	-0.120*** █(0.043)
	Old	0.334*** █(0.088)	0.287*** █(0.087)
Female		0.021 █(0.047)	0.209*** █(0.046)
Education to age: <=15		-0.489*** █(0.064)	-0.483*** █(0.056)
	>=18	0.136*** █(0.060)	0.221*** █(0.062)
Marital status:	Separated	-0.682*** █(0.169)	-0.369** █(0.146)
	Divorced	-0.368*** █(0.125)	-0.105 █(0.095)
	Single	0.147 █(0.091)	0.242*** █(0.081)
	Married	0.251*** █(0.070)	0.318*** █(0.074)
	De facto	0.400*** █(0.145)	0.741*** █(0.145)
Child		-0.087*** █(0.049)	-0.140*** █(0.045)
Income level:	<=4000	-0.367*** █(0.053)	-0.281*** █(0.049)
	>=8000	0.536*** █(0.061)	0.404*** █(0.045)
Working Status:	Unemployed	-0.895*** █(0.080)	-1.006*** █(0.067)
	Self-employed	-0.418*** █(0.114)	-0.505*** █(0.104)
	Manual worker	-0.141* █(0.080)	-0.183*** █(0.061)
	Owner of a Shop	0.046 █(0.153)	0.224 █(0.143)
	Professional	0.114 █(0.501)	-0.222 █(0.142)
	House keeper	0.028 █(0.073)	-0.229*** █(0.074)
	Retired	0.014 █(0.079)	-0.174** █(0.073)
		<i>F</i> (21, 483) 42.26***	<i>F</i> (21, 489) 51.32***
<i>Prob &gt; F</i>		█(0.000)	█(0.000)
<i>N</i>		28,575	30,535

*Note: All regressions include: robust standard errors; year and country dummies and country-specific time trends.*

**Table 5 - By ideology when the party voted for is elected**

<b>Dependent Var</b>		<b>(a)</b>	<b>(b)</b>
		<i>Left</i>	<i>Right</i>
Strategic		-0.404*** █ (0.080)	-0.135 █ (0.095)
Age:	Middle	-0.106 █ (0.077)	-0.113 █ (0.075)
	Old	0.287** █ (0.125)	0.357*** █ (0.117)
Female		0.013 █ (0.075)	0.031 █ (0.063)
Education to age:	<=15	-0.315*** █ (0.080)	-0.612*** █ (0.080)
	>=18	0.197*** █ (0.070)	0.090 █ (0.086)
Marital status:	Separated	-0.706*** █ (0.243)	-0.668*** █ (0.220)
	Divorced	-0.383** █ (0.196)	-0.357** █ (0.157)
	Single	0.150 █ (0.149)	0.148 █ (0.128)
	Married	0.248** █ (0.127)	0.259*** █ (0.080)
	De facto	0.188 █ (0.213)	0.662*** █ (0.209)
Child		-0.093 █ (0.066)	-0.086 █ (0.069)
Income level:	<=4000	-0.448*** █ (0.078)	-0.305*** █ (0.075)
	>=8000	0.348*** █ (0.073)	0.672*** █ (0.090)
Working Status:	Unemployed	-0.963*** █ (0.119)	-0.857*** █ (0.113)
	Self-employed	-0.649*** █ (0.213)	-0.295** █ (0.138)
	Manual worker	-0.133 █ (0.113)	-0.162 █ (0.106)
	Owner of a Shop	0.185 █ (0.252)	-0.173 █ (0.195)
	Professional	-0.004 █ (0.258)	0.183 █ (0.218)
	House keeper	0.024 █ (0.117)	-0.029 █ (0.092)
	Retired	-0.093 █ (0.122)	-0.078 █ (0.104)
		<i>F</i> (21, 438) 22.14***	<i>F</i> (21, 471) 27.14***
<i>Prob &gt; F</i>		█ (0.000)	█ (0.000)
<i>N</i>		11,942	16,633

*Note: All regressions include: robust standard errors; year and country dummies and country-specific time trends.*

2011

- 2011/1, **Oppedisano, V.; Turati, G.:** "What are the causes of educational inequalities and of their evolution over time in Europe? Evidence from PISA"
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2012

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## 2013

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