

The relation of ideological self-placement and EU support in 2017: How does left-right placement structure support for the European Union in the EU28 and for which part of the political spectrum is it most controversial?

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The Relation of ideological Self-Placement and EU Support in 2017.

How does Left-Right Placement structure Support for the European Union in the EU28 and for which part of the political Spectrum is it most controversial?

Abstract

The relation of left-right self-placement and EU support seems to have become more linear again in the previous years. After a rise of euroscepticism at both ends of the spectrum, the left has now become even more supportive than the center. The variance in attitudes towards the EU is, in contrast to expectations, higher on the right than on the left.

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1.0 Introduction

As a topic crucial for the legitimacy of further European integration, public support for the European Union and euroscepticism have been researched extensively by scholars worldwide, asking to find explanations and conditions for public support as well as researching the distribution of support or euroscepticism across other characteristics. This empirical study falls in the latter category, examining the ever-changing relation to political left-right ideology. In my theoretical section, I will first summarize the concepts of public support towards a political object, its relation to EU studies, the concept of euroscepticism and how they relate. Then I will give an overview on explanations of EU support before focussing on the relation of left-right ideology and support/euroscepticism. A description of the used data, the operationalizations and an explanation of the statistical models follow in the data and methodology section, preceding the empirical results. Finally, I will discuss the results.

This paper will set some expectations to the examined relation and will present some explanations, but won't examine the causal relationship in depth, because there are so many factors working, some of them might interact or have the same causes, which would make modeling very complex. So, this paper just shows general trends and tries to explain these, but does not aim to explain support on the individual level. Nevertheless, since the relation between left-right self-placement and attitudes towards the European Union does not remain constant, but is constantly changing (van Elsas and van der Brug 2015), and publications about the current relation in the last years do not exist, this paper aims to fill this gap using Eurobarometer data from May 2017. The latest studies I found use data from 2014 and before (van Elsas et al. 2016), the last study showing the relation for the complete political spectrum, and not focussing on the extremes, is showing the relation from 2010 (van Elsas and van der Brug 2015), at the heart of the economic crisis. The effect of the reconsolidation after the euro crisis in the last years has not been shown yet. I consider it possible, that the development of the last years, the normalization of the economic situation of the euro zone, the annexion of the Crimea through Russia and the election of Donald Trump as President of the United States, as well as current efforts of the European Union might have influenced the relation between left-right ideology and support for European integration and changed it again.

2.0 Theory

2.1 Public Support and Euroscepticism

Support refers to an evaluation an actor concludes for himself towards an object. Based on this evaluation, the actor develops attitudes regarding the entity. Support consists of the attitudes, either positive or negative, towards the object and the behavior resulting from these attitudes. Public support for political systems can be divided into specific and diffuse support. Specific support relates to the satisfaction with the outputs of the political system and the perceived performance of the systems political authorities. Specific support is object-specific towards the current political authorities and their perceived decisions, policies, actions, utterances or general style. Diffuse support relies on the importance the political system has to the actor for what it is rather than what it does. The actor evaluates the political system itself. The consequences of (positive) diffuse support are trust in the political system and a belief in the legitimacy of the system, or even identification with the political construct. Diffuse Support is constituted through socialization and experience. Some origins of diffuse support relevant to this study are political orientations and ideological commitments, which can set a framework and provide orientation for the evaluation of a political object. There might be spill-over-effects too. When an actor is developing political attitudes towards objects, which are often linked with specific attitudes towards another object, he might take on these attitudes as well. Because diffuse support is more fundamental, it is more durable than specific support. Positive diffuse support consists of attitudes towards a political object, which help the actor to accept outputs he is opposed to, because the actor evaluates the general process the decision was made positively. Specific support may vary with different policies or authorities, while diffuse support remains constant. But specific and diffuse support are linked. When specific support is low for a longer period of time, it might influence the evaluation of the whole system, when the process of policy-making or inauguration of the political authorities is considered to be (partly) responsible for unfavourable outputs. Since diffuse support is more durable than specific support, it also takes more time to establish when it is or has gone low (Easton 1965, 1975).

Scholars researching public support of the European Union and european integration have adapted this distinction. While specific support is called policy support and relates to the support of the content of collective decisions and actions taken by EU actors, diffuse support

is labelled regime support. Regime support refers to the constitutional setting of the Union and the actors perception of the EU membership of his country. As the European Union has increased its competences and integration has deepened and widened, further integration as well as the status quo became much more dependent on public support. Regime support is crucial for maintaining legitimacy in times of low policy support, in order to maintain previous achievements (Hobolt and de Vries 2016). Scepticism towards european integration is often referred to as euroscepticism (e.g. Hooghe 2007; Boomgarden et al. 2011). The concept of euroscepticism can be divided into 'hard' and 'soft' euroscepticism. Hard euroscepticism refers to general opposition towards the european project or the EU, for example the belief, that the European Union in its current institutional structure is malfunctioning and not repairable. Soft euroscepticism refers to criticism of the institutional constitution or parts of it, or to unfavoured developments in certain (policy) areas, without general opposition towards european integration (Taggart and Szczerbiak 2002). While hard euroscepticism is synonymous with negative regime support, soft euroscepticism might be more close to negative policy support.

2.2 Explanations of EU Support

In their 2016 review of the literature about public support for european integration and euroscepticism, Hobolt and de Vries examine three main approaches for explaining support for the EU on the individual level (Hobolt and de Vries 2016). The first basic approach is a utilitarian approach, which assumes, that a person, a group or a nation state will favour EU membership and further integration, if the person, group or state will profit from it or if it is in line with their preferences. For example, better educated, high-skilled workers will favour integration more than lower skilled workers, because they are better prepared to compete in a common market (Gabel and Palmer 1995). But benefits do not have to be restricted to financial aspects. Garry and Tilley (2015) found empirical evidence, that people on the left are less supportive towards european integration in countries with extensive welfare systems, fearing that economic integration might lead to a liberalization, while in countries with less state intervention, people on the left hope, the policies for the common market might lead to more redistribution.

The second approach considers personal or collective identity influential in the evaluation of the EU. Since the EU evolved to a multi-level polity, more and more policy areas were

integrated, which threatens national sovereignty and national self-determination. Therefore, people with a stronger attachment to their country and people identifying strongly with their nation state tend to be more eurosceptic (Hooghe and Marks 2005). More restrictive views regarding immigration and a general hostility towards minority groups and other cultures in general cause lower levels of support for the EU too. Support for integration is lower, when people perceive it as a ‘cultural threat’ (McLaren 2002).

Last, we will consider the effects of cues and benchmarking. The core argument of cue-taking approaches is, that the EU is too complex and too distant from their daily lives for most citizens to evaluate the EU by themselves regarding their preferences and benefits, so they rely on proxies for their evaluation (Anderson 1998). The most important proxies are political parties and media. Supporters of national parties tend to follow their parties position on european integration (e.g. Hooghe and Marks 2005). The media has an effect on support, because it provides the information needed for the individual evaluation. The current news are salient to the recipients, so attitudes towards the EU are influenced by the news media because the the salient information are taken into account for the evaluation of the EU. Especially because the media often shifts focus to different topics over time, so different topics dominate public opinion at specific times. But there are long-term effects of media content measurable as well (Vreese and Boomgaarden 2006; Vliegenthart et al. 2008). But the evaluations of the EU and its institutions are influenced through benchmarks as well. For example, when european institutions perform better than national ones, support tends to be higher and the other way around. National contexts so provide a heuristic for the evaluation of efficiency and performance (Anderson 1998; Kritzinger 2003). Cue-taking and benchmarking especially stress the importance of national contexts for public support.

2.3 Left-Right Placement as a Predictor of EU Support

The left-right dimension is traditionally based on socioeconomic attitudes, especially regarding attitudes on redistribution. While voters and parties considering themselves to be on the right favour market liberalization and oppose state intervention, voters and parties on the left favour more market regulations and redistribution. But at the same time, the left-right dimension concerns socio-cultural issues as well. While the right represents conservatives in general, nation-state and national culture are typically emphasized. On the left, the concept of international solidarity has a long history. Feminism and environmentalism were integrated in

the last century. The socio-cultural dimension has become more important for the left-right self-placement of voters and parties, especially issues like national identity, immigration and multiculturalism. On the socio-cultural dimension, the right typically wants to constrain immigration and preserve national identity and sovereignty. In contrast, the left proposes multiculturalism (de Vries et al. 2013; Lefkofridi et al. 2014).

If the left-right dimension can structure support for European integration, or its counterpart Euroscepticism, has been asked numerous times, aiming to structure positions of national parties (Ray 1999; Taggart and Szczepiński 2002; Hooghe et al. 2002; Statham and Koopmans 2009; Marks et al. 2011; Miklin 2014), or of the mass public (e.g. Hooghe and Marks 2005; Lubbers and Scheepers 2010; Garry and Tilley 2015; van Elsas and van der Brug 2015; van Elsas et al. 2016). Although results are mixed. Van Elsas and van der Brug (2015) explain the contradictory results in their long term analysis through changes in the relation of ideology and support. In the beginning, European integration was mainly market integration, which was opposed by people on the left because they feared market liberalization and welfare state dilution. But after the signing of the Maastricht treaty, Euroscepticism rose on the right, because the now formed European Union evolved into a more complex, multi-issue supranational polity, reducing national self-determination and sovereignty. But Euroscepticism on the left and on the right did not follow each other, they coexisted, creating a U-shaped relation between left-right ideology and Euroscepticism. While the center was most supportive, Euroscepticism was found mainly at both ends of the political spectrum. After the Euro crisis, the left opposed austerity policies and the neoliberal crisis management in general. The right opposed immigration. But nationalism seems not to be only an issue on right side of the political spectrum. Opposition to integration in political parties on the left is indeed concerned about the nation-state as well, leaving nationalism the common denominator for Euroscepticism across political ideology. But nationalism on the right is more ethno-cultural oriented, while nationalism on the left refers to the nation state as 'preventor of and for the popular classes' (Halikiopoulou et al. 2012). Second, parties on the extremes use Euroscepticism to differentiate themselves from the established parties and to get attention (Taggart 1998). These party positions might influence their supporters, structuring public opinion indirectly through party cues. While the relation of EU support and ideology is changing over time, this paper will look into its structure at the time the data was collected. Van Elsas et al. (2016) pointed out, that people on the right tend to reject the EU completely, while people on the left are not opposed to integration in principle, but are dissatisfied. If

there is a change of the relation, I would expect it to be caused by changing attitudes of people in left part of the political spectrum. Since the right opposes the EU more in principle, changes on the right side are less likely and slower.

Secondly, I want to know, on which side the attitudes are more diverse, where the topic is more controversial. On the right, I consider the loss of national sovereignty and the fear of immigration the major concern regarding the EU. On the left, however, I expect a more diverse picture, because the left seems more fragmented in its party structures, its goals and areas of focus. For example, the fear of welfare state dilution depends on the national context. In liberal countries, leftists support integration hoping for European economic policies being less liberal than the ones of their national governments (Garry and Tilley 2015). On the left, there are multiple areas people and parties can focus on, the positions considered as left have broadened. The left might include green and liberal parties. For example, supporters of green parties might favour integration because of advances in the field of environment policies, while alternatives and liberals promote multiculturalism. And the left has a history promoting international solidarity, with European solidarity and multilateralism being a step in the right direction. My expectation is, that the right is more concerned with national identity than with market liberalization, which leads to less support and more scepticism towards the European Union throughout the right, while the left is more fragmented.

3.0 Data and Methodology

I am using the data from the Eurobarometer 87.3 survey data, which were collected in May 2017 (European Commission 2017). Left-right position is measured by a self-placement on a scale from 1 to 10 with 1 being the extreme left and 10 the extreme right². For the analyses, a recoded version of this scale was used as well as three categorial variables representing the left, the center and the right. The center category summed the response categories 5 and 6. Although most respondents perceive 5 as the exact center, it is actually 5.5. Scales ranging from 1 to 10 have an even number of categories, so people would have to choose, if they are a bit left or right from the center. But most are unaware of this, which poses a methodological problem in the use of these scales. The category for the left represents 4 and lower of the original scale, the categorial variable for the right includes 7 and higher. The left-right scale

² Variable d1: „In political matters people talk about „the left“ and „the right“ How would you place your views on this scale?. Left 1 – 10 Right“

was recoded to set the center to 0, so the scale is ranging from -4.5 to 4.5. To test a curvilinear relation using a regression, I squared the recoded left-right scale. Van Elsas and van der Brug (2015) constructed their curvilinear model the exact same way. I defined an extremism variable ranging from 0 to 4 by setting 5 and 6 of the original left-right scale to 0, 4 and 7 to 1, etc. To get a more detailed picture of the respondents attitudes towards the European Union, two dependent variables were used. The first one asks about the impression the person has of the EU³. This may concern elements both of regime support and policy support. The second question refers to the general position on EU membership, so to regime support. The respondents are asked, if they agree to the statement, that their country could face the future better outside of the EU⁴. For both variables, I tested a linear and curvilinear model based on the left-right scale and a linear model using the extremism variable as the predictor to describe the general relationship between political ideology and support. Because the relation of extremism and EU support might differ between left and right, I calculated regressions with variables ranging from moderately left/right to extremely left/right. To answer the question, if the variance in the attitudes are higher on the left than on the right, I interpreted the standard errors of dummy regressions for both variables using the categorial variables for the left, the center and the right as independent factors. The center category was the reference. All regressions were weighted to adjust the country samples to population size, making the sample representative for the EU28⁵. Since this paper does not aim to find causalities, no control variables were added. All regression models use ordinary least squares (OLS) regressions and were done using R 3.2.3 on Linux. All used functions are part of the base or the statistics package of the basic version. The R script is available in the appendix.

4.0 Results

For both dependent variables, the linear left-right regression provided the best fit of all three models (Adjusted R²: 0.009795; 0.02537)⁶. The model using the extremism variable had the

3 Variable qa9a: „In general, does the EU conjure up for you a very positive, fairly positive, fairly negative or very negative image?“

4 Variable qa18a_5: „Please tell me to what extent you agree or disagree with each of the following statements. [...] (OUR COUNTRY) could better face the future outside the EU: Totally agree, tend to agree, tend to disagree, totally disagree.“

5 Variable w23: EU28 from 2014 to 2019

6 See R Outputs in the Appendix: 6A, 6B

smallest R^2 for both variables (0.004129; 0.004313)⁷, followed by the curvilinear model (0.005217; 0.006123)⁸. All tested models were highly significant. People on the left have a more positive image of the EU and tend to disagree more to the statement, that their country could face the future better outside the EU. Within the left, there is no significant difference in the image of the EU, the extreme left does neither have a more negative image, nor a more positive. The extreme left are even slightly more disagreeing that their country would be better off outside the EU than the moderate left⁹. Within the right of the political spectrum, being extreme is related to having a negative image of the EU and the attitude that their country could be better off outside the EU in the future¹⁰.

In the dummy regressions, the general trend is observable as well. The lowest variation in attitudes consisted in the center, with the left and the right both having considerably higher standard errors for both variables. But against expectations, the standard errors are slightly higher on the right than on the left¹¹.

5.0 Discussion

The general structure of support for european integration seems to have become more linear again, with right-wing citizens being more eurosceptic. While I argued, that it is more likely to find change on the left than on the right, it does not explain why people on the left seem to be more satisfied with the EU and therefor more supportive than a few years ago. Maybe the ‘neoliberal character’ of the EU has lost its salience due to the recovery of the EU after the euro crisis. Or they conceive the EU necessary to regulate modern international capitalism, to prevent and manage large economic crises and to fight for citizens rights. The efforts against tax paradises and tax evasions of large international companies, or for data security and privacy might also contribute to this change. Additionally, the nationalistic agenda of Donald Trump, for example his threat to withdraw from the Paris agreement¹², may set a new

7 Outputs 2A, 2B

8 Outputs 3A, 3B

9 Outputs 4A, 4B

10 Outputs 5A, 5B

11 Outputs 1A, 2B

12 Trump declared the rejection after the survey was conducted (Shear 2017).

benchmark for the evaluation of domestic and European politics. Although these might be possible explanations, this development would need an in-depth analysis of its own.

The other main result of my study is, that the attitudes are more diverse on the right than on the left. This might be caused by the definition of the dummy variables. While there is a lot of scepticism at the extreme right, the moderate right is far more supportive, as shown by the regression of only the right side of the political spectrum. The moderate right might be relatively happy with the EU policies and does support further integration. Because my definition of the right does include the moderate right, there might be a lot of people supporting integration and a lot who do not, which leads to a high standard error for the dummy regression. Nevertheless, EU support might be more controversial on the right, because they have to trade off between the two opposing goods national self-determination and market integration, which are both important to people on the right.

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Appendix

Complete R Outputs

Dummy Regressions

1A

Call:

```
lm(formula = Eurobarometer_87_3$qa9 ~ right_dummy + left_dummy,  
    weights = Eurobarometer_87_3$w23)
```

Weighted Residuals:

<Labelled double>

Min	1Q	Median	3Q	Max
-5.3540	-0.4229	0.0000	0.2510	7.3799

Labels:

value	label
1	Very positive
2	Fairly positive
3	Neutral
4	Fairly negative
5	Very negative
6	DK

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	2.72356	0.00955	285.19	< 2e-16 ***
right_dummy	0.22772	0.01618	14.08	< 2e-16 ***
left_dummy	-0.04330	0.01453	-2.98	0.00288 **

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.9447 on 22234 degrees of freedom

(7031 observations deleted due to missingness)

Multiple R-squared: 0.01253, Adjusted R-squared: 0.01244

F-statistic: 141 on 2 and 22234 DF, p-value: < 2.2e-16

1B

Call:

```
lm(formula = Eurobarometer_87_3$qa18a_5 ~ right_dummy + left_dummy,
```

weights = Eurobarometer_87_3\$w23)

Weighted Residuals:

<Labelled double>

Min	1Q	Median	3Q	Max
-6.2909	-0.4484	0.0427	0.5635	4.4276

Labels:

value	label
1	Totally agree
2	Tend to agree
3	Tend to disagree
4	Totally disagree
5	DK

NA(i) Inap. (not 1 in eu28)

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	2.94052	0.01076	273.240	<2e-16 ***
right_dummy	-0.30629	0.01814	-16.886	<2e-16 ***
left_dummy	0.14126	0.01620	8.721	<2e-16 ***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 1.02 on 20711 degrees of freedom

(12466 observations deleted due to missingness)

Multiple R-squared: 0.02656, Adjusted R-squared: 0.02647

F-statistic: 282.6 on 2 and 20711 DF, p-value: < 2.2e-16

Regressions

2A

Call:

lm(formula = Eurobarometer_87_3\$qa9 ~ extremism, weights = Eurobarometer_87_3\$w23)

Weighted Residuals:

<Labelled double>

Min	1Q	Median	3Q	Max
-5.3053	-0.4216	0.0000	0.2456	7.4308

Labels:

value	label
1	Very positive
2	Fairly positive
3	Neutral
4	Fairly negative
5	Very negative
6	DK

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	2.707860	0.008476	319.487	<2e-16 ***
extremism	0.046325	0.004799	9.654	<2e-16 ***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.9487 on 22235 degrees of freedom

(7031 observations deleted due to missingness)

Multiple R-squared: 0.004174, Adjusted R-squared: 0.004129

F-statistic: 93.2 on 1 and 22235 DF, p-value: < 2.2e-16

3A

Call:

lm(formula = Eurobarometer_87_3\$qa9 ~ leftright_sq, weights = Eurobarometer_87_3\$w23)

Weighted Residuals:

<Labelled double>

Min	1Q	Median	3Q	Max
-5.3260	-0.4179	0.0000	0.2475	7.4092

Labels:

value	label
1	Very positive
2	Fairly positive
3	Neutral
4	Fairly negative
5	Very negative
6	DK

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
--	----------	------------	---------	----------

(Intercept) 2.711757 0.007856 345.17 <2e-16 ***
leftright_sq 0.011117 0.001025 10.85 <2e-16 ***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.9482 on 22235 degrees of freedom

(7031 observations deleted due to missingness)

Multiple R-squared: 0.005262, Adjusted R-squared: 0.005217

F-statistic: 117.6 on 1 and 22235 DF, p-value: < 2.2e-16

4A

Call:

lm(formula = Eurobarometer_87_3\$qa9 ~ left, weights = Eurobarometer_87_3\$w23)

Weighted Residuals:

<Labelled double>

Min	1Q	Median	3Q	Max
-4.8460	-0.4012	0.0000	0.2992	7.4691

Labels:

value	label
1	Very positive
2	Fairly positive
3	Neutral
4	Fairly negative
5	Very negative
6	DK

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	2.693837	0.012102	222.597	<2e-16 ***
left	0.004429	0.005969	0.742	0.458

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.9346 on 14012 degrees of freedom

(16777 observations deleted due to missingness)

Multiple R-squared: 3.929e-05, Adjusted R-squared: -3.207e-05

F-statistic: 0.5506 on 1 and 14012 DF, p-value: 0.4581

5A

Call:

```
lm(formula = Eurobarometer_87_3$qa9 ~ right, weights = Eurobarometer_87_3$w23)
```

Weighted Residuals:

<Labelled double>

Min	1Q	Median	3Q	Max
-4.3725	-0.4758	0.0000	0.0959	5.8712

Labels:

value	label
1	Very positive
2	Fairly positive
3	Neutral
4	Fairly negative
5	Very negative
6	DK

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	2.71606	0.03264	83.21	< 2e-16 ***
right	0.09217	0.01167	7.90	3.31e-15 ***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.9677 on 5790 degrees of freedom

(26171 observations deleted due to missingness)

Multiple R-squared: 0.01066, Adjusted R-squared: 0.01049

F-statistic: 62.41 on 1 and 5790 DF, p-value: 3.308e-15

6A

Call:

```
lm(formula = Eurobarometer_87_3$qa9 ~ leftright, weights = Eurobarometer_87_3$w23)
```

Weighted Residuals:

<Labelled double>

Min	1Q	Median	3Q	Max
-5.5956	-0.4188	0.0000	0.2485	7.2728

Labels:

value	label
1	Very positive
2	Fairly positive
3	Neutral
4	Fairly negative
5	Very negative
6	DK

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	2.778958	0.006410	433.50	<2e-16 ***
leftright	0.044699	0.003007	14.87	<2e-16 ***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.946 on 22235 degrees of freedom

(7031 observations deleted due to missingness)

Multiple R-squared: 0.00984, Adjusted R-squared: 0.009795

F-statistic: 221 on 1 and 22235 DF, p-value: < 2.2e-16

2B

Call:

lm(formula = Eurobarometer_87_3\$qa18a_5 ~ extremism, weights = Eurobarometer_87_3\$w23)

Weighted Residuals:

<Labelled double>

Min	1Q	Median	3Q	Max
-6.4130	-0.4791	0.0477	0.5323	3.4797

Labels:

value	label
1	Totally agree
2	Tend to agree
3	Tend to disagree
4	Totally disagree
5	DK

NA(i) Inap. (not 1 in eu28)

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
--	----------	------------	---------	----------

(Intercept) 2.978178 0.009589 310.586 <2e-16 ***
extremism -0.051545 0.005412 -9.524 <2e-16 ***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 1.031 on 20712 degrees of freedom

(12466 observations deleted due to missingness)

Multiple R-squared: 0.004361, Adjusted R-squared: 0.004313

F-statistic: 90.71 on 1 and 20712 DF, p-value: < 2.2e-16

3B

Call:

lm(formula = Eurobarometer_87_3\$qa18a_5 ~ leftright_sq, weights = Eurobarometer_87_3\$w23)

Weighted Residuals:

<Labelled double>

Min	1Q	Median	3Q	Max
-6.3985	-0.4717	0.0427	0.5359	3.4969

Labels:

value	label
1	Totally agree
2	Tend to agree
3	Tend to disagree
4	Totally disagree
5	DK

NA(i) Inap. (not 1 in eu28)

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	2.976983	0.008865	335.80	<2e-16 ***
leftright_sq	-0.013099	0.001155	-11.34	<2e-16 ***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 1.03 on 20712 degrees of freedom

(12466 observations deleted due to missingness)

Multiple R-squared: 0.006171, Adjusted R-squared: 0.006123

F-statistic: 128.6 on 1 and 20712 DF, p-value: < 2.2e-16

4B

Call:

```
lm(formula = Eurobarometer_87_3$qa18a_5 ~ left, weights = Eurobarometer_87_3$w23)
```

Weighted Residuals:

<Labelled double>

Min	1Q	Median	3Q	Max
-6.1238	-0.4631	-0.0032	0.5408	3.2334

Labels:

value	label
1	Totally agree
2	Tend to agree
3	Tend to disagree
4	Totally disagree
5	DK

NA(i) Inap. (not 1 in eu28)

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	2.993901	0.013669	219.036	< 2e-16 ***
left	0.017407	0.006702	2.597	0.00941 **

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 1.017 on 13051 degrees of freedom

(20127 observations deleted due to missingness)

Multiple R-squared: 0.0005166, Adjusted R-squared: 0.00044

F-statistic: 6.745 on 1 and 13051 DF, p-value: 0.009409

5B

Call:

```
lm(formula = Eurobarometer_87_3$qa18a_5 ~ right, weights = Eurobarometer_87_3$w23)
```

Weighted Residuals:

<Labelled double>

Min	1Q	Median	3Q	Max
-5.8328	-0.4157	0.2096	0.6116	4.0525

Labels:

value	label
1	Totally agree
2	Tend to agree
3	Tend to disagree
4	Totally disagree
5	DK

NA(i) Inap. (not 1 in eu28)

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	3.03650	0.03559	85.31	<2e-16 ***
right	-0.15819	0.01277	-12.39	<2e-16 ***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 1.018 on 5413 degrees of freedom

(27765 observations deleted due to missingness)

Multiple R-squared: 0.02757, Adjusted R-squared: 0.02739

F-statistic: 153.5 on 1 and 5413 DF, p-value: < 2.2e-16

6B

Call:

lm(formula = Eurobarometer_87_3\$qa18a_5 ~ leftright, weights = Eurobarometer_87_3\$w23)

Weighted Residuals:

<Labelled double>

Min	1Q	Median	3Q	Max
-5.9892	-0.4591	0.0636	0.5472	3.9890

Labels:

value	label
1	Totally agree
2	Tend to agree
3	Tend to disagree
4	Totally disagree
5	DK

NA(i) Inap. (not 1 in eu28)

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
--	----------	------------	---------	----------

```

ausstieg klimaabkommen(Intercept) 2.886423 0.007171 402.51 <2e-16 ***
leftright -0.077918 0.003353 -23.24 <2e-16 ***
---
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

```

Residual standard error: 1.02 on 20712 degrees of freedom
(12466 observations deleted due to missingness)
Multiple R-squared: 0.02542, Adjusted R-squared: 0.02537
F-statistic: 540.1 on 1 and 20712 DF, p-value: < 2.2e-16

```

R Script

```

library(haven) # package to import and export SPSS, Stata and SAS files, in this case: Importing a Stata dataset
Eurobarometer_87_3 <- read_dta("~/localpath/ZA6863_v1-0-0.dta")

```

```

# defining missings

```

```

Eurobarometer_87_3$qa9[Eurobarometer_87_3$qa9 == 6]<-NA # recoding DK as Missing
Eurobarometer_87_3$qa18a_5[Eurobarometer_87_3$qa18a_5 == 5]<-NA
Eurobarometer_87_3$d1[Eurobarometer_87_3$d1 > 10]<-NA # recoding DK and Refusal as Missing

```

```

# recoding the independent variable

```

```

leftright <- Eurobarometer_87_3$d1 - 5.5
leftright_sq <- leftright^2
extremism <- sqrt(leftright^2)-0.5
left <- leftright*-1
left[left < 0] <- NA
right <- leftright
right[right < 1] <- NA # 0.5 is not included, because it is the perceived center.

```

```

center_nom <- leftright== -0.5 | leftright==0.5
right_nom <- leftright > 1
left_nom <- leftright < -1
center_dummy <- center_nom
center_dummy[center_nom==T] <- 1
center_dummy[center_nom==F] <- 0
right_dummy <- right_nom
right_dummy[right_nom==T] <- 1

```

```

right_dummy[right_nom==F] <- 0
left_dummy <- left_nom
left_dummy[left_nom==T] <- 1
left_dummy[left_nom==F] <- 0

# regressions
summary(lm(Eurobarometer_87_3$qa9 ~ right_dummy + left_dummy, weights = Eurobarometer_87_3$w23))
# center is the reference category
summary(lm(Eurobarometer_87_3$qa18a_5 ~ right_dummy + left_dummy, weights =
Eurobarometer_87_3$w23))

summary(lm(Eurobarometer_87_3$qa9 ~ extremism , weights = Eurobarometer_87_3$w23))
summary(lm(Eurobarometer_87_3$qa9 ~ leftright_sq, weights = Eurobarometer_87_3$w23))
summary(lm(Eurobarometer_87_3$qa9 ~ left, weights = Eurobarometer_87_3$w23))
summary(lm(Eurobarometer_87_3$qa9 ~ right, weights = Eurobarometer_87_3$w23))
summary(lm(Eurobarometer_87_3$qa9 ~ leftright, weights = Eurobarometer_87_3$w23))

summary(lm(Eurobarometer_87_3$qa18a_5 ~ extremism , weights = Eurobarometer_87_3$w23))
summary(lm(Eurobarometer_87_3$qa18a_5 ~ leftright_sq, weights = Eurobarometer_87_3$w23))
summary(lm(Eurobarometer_87_3$qa18a_5 ~ left, weights = Eurobarometer_87_3$w23))
summary(lm(Eurobarometer_87_3$qa18a_5 ~ right, weights = Eurobarometer_87_3$w23))
summary(lm(Eurobarometer_87_3$qa18a_5 ~ leftright, weights = Eurobarometer_87_3$w23))

```