

# Online Appendix

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December 2017

## Abstract

This online appendix provides information about the data and methods for the following paper:

Bremer, Björn (2017). “The missing left? Economic crisis and the response of social democratic parties”. Forthcoming in *Party Politics*.

All replication files can be accessed online at <https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/LB06KC>.

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\*Previous versions of this paper were presented at the International Conference of Europeanists 2016, the Annual Meeting of the American Political Science Association 2016, and at the London School of Economics and Political Sciences. I am very grateful for all comments that I have received at these occasions. Moreover, I thank Hanspeter Kriesi, Matthias Matthijs, Waltraud Schelkle, Michael Klitgaard, Per Andersson, Sebastian Diessner, Sean McDaniel, two anonymous reviewers, and the three editors of this special issue for excellent feedback on earlier drafts. All remaining errors are my own.

†The author gratefully acknowledges funding from the ERC Project “Political Conflict in Europe in the Shadow of the Great Recession” (Project ID: 338875)

# 1 Data Collection

The data was collected as part of the POLCON project at the European University Institute. Table 1 includes a detailed list of all the elections included in this study. For each election, we selected all newspaper articles that were published within two months before the national election day and reported on the electoral contest as well as national party politics more generally. Editorials and commentaries were excluded and the selection of articles was done by an extensive keyword list including the names and abbreviations of political parties and key politicians from each party. In the case of early elections that did not have a two-month long election campaign, we selected the period from the announcement of the election until election day. We then coded a sample of the selected articles using core sentence analysis (CSA). Following this type of relational content analysis, each grammatical sentence of an article is reduced to its most basic ‘core sentences’ structure, which contains only a subject, an object, and the direction of the relationship between the two. The core sentence approach was developed by Kleinnijenhuis et al. (1997) and Kleinnijenhuis and Pennings (2001) and later extensively used by Kriesi et al. (2008) and Kriesi et al. (2012). This type of quantitative content analysis allows us to study both the salience that parties attribute to certain issues and the positions that they take towards these issues. For this purpose, we quantify the direction between actors and issues by using a scale ranging from  $-1$  to  $+1$ , with three intermediary positions  $-0.5$ ,  $0$ , and  $+0.5$ . For example, the grammatical sentence “Party A calls for leaving the Eurozone but supports a haircut on the country’s debt” leads to two coded observations: (Party A  $-1$  Eurozone; Party A  $+1$  haircut).

Table 1: Election Campaigns Studied

Country	Type of Election	
	Pre-crisis	Crisis
Austria	2006	2013
France	2007	2012
Germany	2005	2009, 2013
Greece	2007	2009, 2012*, 2015*
Ireland	2007	2011
Italy	2006	2013
Netherlands	2006	2010, 2012
Portugal	2005	2009, 2011, 2015
Spain	2004	2011, 2015
Switzerland	2007	2011, 2015
UK	2005	2010, 2015

*\*Data from both elections campaigns in that year is included in the dataset and analysed.*

Using this approach, one can obtain two types of sentences: sentences that describe a relationship between two actors (i.e. 'actor-actor sentences') and sentences that describe a relationship between an actor and an issue (i.e. actor-issue sentences). Several examples from our data can illustrate this further. For example, the following sentence was reported during the Swiss general election of 2015:

“Susanne Leutenegger Oberholzer (SP) demanded better employment protection for employees above 55.” (Neue Zürcher Zeitung, 24/09/2015: “*Das Bundesamt für Statistik wegputzen*”, own translation)

This example contains one actor-issue sentences and it is coded in the following way: (SP +1 employment protection). A second example comes from the British general election of 2015:

“Ed Miliband has pledged to slap a mansion tax on properties worth 2 million or more if Labour comes to power in the general election next month and the proceeds will be used to fund the NHS.” (The Times, 14/04/2015: *Sales of top London homes down 40 percent*)

This sentences contains two core sentences within one grammatical sentences. It leads to the following two observations: (Labour +1 mansion tax; Labour +1 health care.) Finally, the last example is a quote from Angela Merkel (CDU) that was reported by the Süddeutsche Zeitung during the 2009 election campaign in Germany:

“Importantly, a public, universal and cross-regional minimum wage that the SPD demanded would have cost many jobs.” (Süddeutsche Zeitung, 28/08/2009: *Merkel für Mindestlohn*, own translation)

This sentenced contains one actor-actor sentence (with an issue reference) from which we also derive two actor-issue sentences. It is coded in the following way: (CDU –1 SPD; CDU –1 minimum wage; SPD +1 minimum wage).

Table 2: List of Vague Issue Included in the Data

Category	Issue
Welfare	Reduction of unemployment
welfare	Reduction of youth unemployment
Economic liberalism	Support small and medium enterprises
Economic liberalism	Export oriented measures
Economic liberalism	Measures to promote innovation
Economic liberalism	Promotion of national business
Budgetary rigour	Measures to fight economic crisis

These examples show that the coding procedure is, in principle, relatively simple. However, there are also some difficult decisions that one has to make when coding articles.

For example, it is often difficult to disentangle whether a sentence includes clear partisan statements that can be used to extract a direction between an actor and an issue or another actor. In general, we always tried to code as many sentences as possible including vague ones. Consequently, our list of issues also includes statements that could be considered valence issues, as defined by (Stokes, 1963). For example, a list of such issues with regard to the economy is shown in table 2. Generally, most actors agree on these issues and, hence, they do not help to classify parties based on their (relative) positions. Still, I keep all observations on these issues in the dataset in order to study salience. The only observations that are excluded from the analysis in this paper are actor-actor sentences without an issue reference. They neither include information about salience nor positions. Technically, actor-actor sentences with an issue reference are also not included in the analysis. However, during the coding procedure we always automatically coded all actor-issue sentences that derived from actor-actor sentences with an issue-reference (as shown above) and, hence, my analysis still captures the importance of these sentences for salience.

appendix

Depending on the country, we either coded a maximum of 20 core sentences for a given article or all core sentences in the first few paragraphs of any given article. In total, the resulting dataset contains nearly 81,159 core sentences and for each election I have on average 2136 core sentences, ranging from a minimum of 1453 core sentences for the Swiss election in 2012 to a maximum of 3944 core sentences for the Irish election in 2011. The newspapers that were used for the analysis in North-Western Europe are listed in table 3 and the newspapers that were used in South-Western Europe are listed in table 4. Note that in Northern Europe the newspapers were selected to represent a balance between tabloid and broadsheet newspapers; in Southern Europe, the newspapers were selected to present a balance between left-right newspapers.

Table 3: Western European Newspapers Used for Content Analysis

Country	Quality Newspaper	Tabloid
Austria	Die Presse	Die Kronenzeitung
France	Le Monde	Le Figaro
Germany	Süddeutsche Zeitung	Bild
Ireland	The Irish Times	The Irish Sun
Netherlands	NRC Handelsblad	Algemeen Dagblad
Switzerland	Neue Züricher Zeitung	Blick
United Kingdom	The Times	The Sun

To create the dataset, we coded the function, party affiliation, and (if available) name of actors, but for the present analysis the actors were grouped according to their party family (operationalised as shown in appendix 5). The issues, in turn, were coded inductively, i.e. coders were given a long list of possible issues but they were encouraged to

Table 4: Southern European Newspapers Used for Content Analysis

Country	Left Newspaper	Right Newspaper
Greece	Ta Nea	Kathimerini
Italy	Le Repubblica	Corriere della Serra
Portugal	Público	Diário de Notícias
Spain	El País	El Mundo

add to this list during the coding procedure. This resulted in more than 200 coded issues per election campaign and, as described in the main text, the issues were then aggregated into three economic categories prior to the analysis. Note that each category that I identified includes several different issues, which are listed in appendix 2. These issues, in turn, often contain several sub-issues that were coded inductively. For example, the issue ‘budgetary rigour’ contains the following sub-issues: ‘budgetary rigour (in general)’, ‘austerity measures’, ‘fighting deficit’, and retrenchment’. Note that I decided to split issues relating to taxation into two different categories: taxes with an explicit redistributive character (e.g. wealth tax, tax on top-income levels, etc.) were coded as redistribution (i.e. welfare), whereas all other statements about taxation that were more general were coded as budgetary issues.

The major benefit of using an inductive coding procedure is that it allows one to study the full complexity of political competition by coding all statements in the media irrespective of pre-developed categories. Still, there are some disadvantages of studying political competition in this way. First, the major disadvantage is that the data collection is very work intensive because it relies on manual coding. Coder disagreement is potentially also a problem but based on the experience of previous rounds of data collection, we attempted to reduce coder disagreement. For this purpose, we relied on refined coding instruction, trained all coders intensively and continuously monitored their progress. Moreover, each electoral campaign in a given country was coded by at least two coders to reduce individual biases. A third potential problem for our data is that it relies on the media to represent the positions of parties. Given that there is some variation in the way that different newspapers report on political competition this might introduce some biases. As a result, in some instances the representation of parties varies across newspapers, but these variations are generally small and not systematic. Moreover, using other data to check the robustness of our findings shows that by and large our coding procedure leads to positions that are similar to those recorded in other datasets (also see Helbling and Tresch, 2011).

## 2 List of Issues by Category

Table 5: List of Issues by Category (adopted from Kriesi et al. 2008)

Category	Issue
Welfare	Welfare (general)
	Redistribution
	Health care
	Retirement
	Unemployment
	Poverty
	Families
	Disability support
	Consumer rights
Economic liberalism	Economic liberalism (general)
	Housing market
	Labour market
	Free trade
	Agriculture
	Finance
	Enterprise
	Competition
	Market regulation
	Keynesianism
	Corporatism
	Promotion of business
	Budgetary rigour
Austerity	
Indirect taxation	
Direct taxation	

### 3 Methods

To study the salience that parties attribute to certain issues and the positions that parties take towards these issues, I calculate two key measures from the data. First, salience is measured by the share of core sentences coded for a party on a given issue category compared to all the sentences coded for that party. For example, if there are 10 core sentences for party A and three of these core sentences are about welfare policies, then the salience of welfare for party A is  $3/10 = 0.3$ . Second, I calculate the left-right position for a party as the average direction of all statements on an issue category, which ranges from  $-1$  to  $+1$  where  $-1$  is the left end of the spectrum and  $+1$  is the right end of the spectrum. For example, if party A has two positive statements ( $+1$ ) and one negative statement ( $-1$ ) towards welfare, the average position of party A towards welfare is  $1 + 1 + (-1)/3 = 0.33$ . Using these simple rules, I get a dataset with the salience and the positions for each party on each category for every election. In appendix 6.1 these numbers are summarised for the pre- and crisis period.

I also use these measures to calculate the salience and left-right position for every party on the aggregate level, i.e. for all economic issues. The salience of all economic issues for a party  $k$  is simply the sum of party-specific salience of all the three issue categories:

$$\text{Aggregate Salience}_k = s_{welfare,k} + s_{ecolib,k} + s_{budget,k} \quad (1)$$

where  $s_{welfare,k}$  is the number of core sentences for party  $k$  about welfare while  $s_{ecolib,k}$  and  $s_{budget,k}$  are the number of core sentences for party  $k$  about liberalism and budgetary rigour, respectively. The aggregate left-right position for any given party  $k$  is calculated as the mean of all statements from the three economic categories, weighted by the salience of the individual categories. It is computed as follows:

$$\text{Aggregate Left - Right Position}_k = \frac{s_{welfare,k} * \bar{x}_{welfare,k} - s_{ecolib,k} * \bar{x}_{ecolib,k} - s_{budget,k} * \bar{x}_{budget,k}}{s_{welfare,k} + s_{ecolib,k} + s_{budget,k}} \quad (2)$$

where  $\bar{x}_{welfare,k}$  is the average position of party  $k$  on welfare while  $\bar{x}_{ecolib,k}$  and  $\bar{x}_{budget,k}$  are the average positions of party  $k$  on economic liberalism and budgetary rigour, respectively. Appendix 6.2 shows the average values by party family across all 11 countries for the two periods under study.

I analyse this data by combining descriptive analysis with regression analysis to study how the party-specific salience and positions that social democratic parties attribute to economic issues changed during the Great Recession. For the regression analysis, my unit

of the analysis is a given party for each national election campaign in my sample. For example, for the German SPD I have three observations, one for each German election that is included in my dataset. In total, this gives me a dataset with 198 observations across eleven countries. Thus, my data for both the independent and dependent variable  $X$  and  $Y$  extends over  $n$  numbers of cross-sections and  $t$  points in time and, hence, the formal regression model can be written in the following form:

$$Y_{it} = \beta_k X_{kit} + u_{it} \quad (3)$$

where  $i = 1 \dots N$  refers to the cross-sectional unit,  $t = 1 \dots T$  refers to the time points and  $k = 1 \dots K$  are the explanatory variables. Note that in my dataset the number of cross-sectional units exceeds the temporal units, i.e. my data is “cross-sectional dominant” (Stimson, 1985). As explained in the main text, the dependent variable for my analysis are (1) the salience that parties attribute to economic issues and (2) the left-right position that parties take on these issues. My key independent variables are party family (operationalised as shown in appendix 5) and a dummy variable that equals one when the election occurred after 2008 and zero otherwise. The effect of the crisis on any given party family is then tested through an interaction effect between these two variables. To test the conditionality of the crisis effect, I use a three-way interaction term between party family, my dummy variable for the crisis, and different economic indicators. Finally, I also include country fixed effects and other control variables that could potentially explain party positions on economic issues. Additional confounding variables are not included in the regression model shown in the paper due to the small number of observations. However, a variety of other variables (e.g. Eurozone membership, international bail-outs, the presence of populist parties, or differences in the economic system) were also included as control variables and did not turn out to be significant. Note that in order to test the effect of time-invariant variables in my model (like party family) I do not include time-fixed effects. Moreover, I use generalised least square (GLS) regressions because it can be shown that a GLS estimator is more efficient than an ordinary least square (OLS) estimator, when there is a certain degree of correlation between the residuals in a regression model (Greene, 2012, p. 372). As a robustness check, I repeated the analysis using an OLS estimator. The results were virtually identical to the ones shown in the paper.



## 4 List of Key Variables Used in the Regression Analysis

Table 6: List of Dependent Variable

	<b>Variable</b>	<b>Coding</b>	<b>Source</b>
1	Saliency	Saliency of economic categories by party family and election (operationalised as described in 1)	POLCON project
2	Left-right position	Left-right position towards economic categories by party family and election (operationalised as described in 1)	POLCON project

Table 7: List of Independent Variables

	<b>Variable</b>	<b>Coding</b>	<b>Source</b>
1	Party Family	1 = Far Right, 2 = Conservative (baseline), 3 = Liberal Party, 4 = Moderate Left, 5 = Far Left, 6 = Green party, 7 = All other parties	Based on Chapel Hill Expert Survey (Bakker et al., 2015)
2	Crisis Election	1 = Election after 2008, 0 = Election before 2008	
3	Unemployment (t-1)	Unemployment in the year prior to the election	Eurostat & Swiss Federal Statistical Office
4	Inflation	Inflation in the year prior to the election	Eurostat
5	Gov Def (t-1)	Government deficit in the year prior to the election	Eurostat
6	Gov Debt (t-1)	Government debt in the year prior to the election	Eurostat & Swiss Federal Statistical Office

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	<b>Variable</b>	<b>Coding</b>	<b>Source</b>
7	Prime Minister (t-1)	1 = Party lead the incumbent government, 0 = Party did not lead the incumbent government	
8	Government (t-1)	1 = Party participated in incumbent government, 0 = Party did not participate in incumbent government	
9	[Party Family] x Crisis Election	Interaction between party family and crisis election	
10	[Party Family] x Unemployment (t-1)	Interaction between party family and unemployment	
11	Crisis election x Unemployment (t-1)	Interaction between crisis election and unemployment	
12	[Party Family] x Crisis x Unemployment (t-1)	Three-way interaction between party family, crisis election, and unemployment	

## 5 List of Parties by Country and Party Family

Table 8: List of Party Families

Country	Party	Abbreviation	Party Family
Austria	Freedom Party of Austria	FPÖ	Far Right
	Alliance for the Future of Austria	BZÖ	Far Right
	Austria People's Party	ÖVP	Moderate Right
	Liberal Forum	LiF	Liberal
	NEOS – The New Austria	NEOS	Liberal
	Social Democratic Party of Austria	SPÖ	Moderate Left
	The Greens - The Green Alternative		Green
	Hans-Peter Martin's List		Other
	Team Stronach		Other
France	Front National	FN	Far Right
	Union for a Popular Movement	UMP	Moderate Right
	Union for French Democracy	UDF	Liberal
	Union of Democrats and Independents	UDI	Liberal
	Socialist Party	PS	Moderate Left
	Radical Party of the Left	PRG	Far Left
	French Communist Party	PCF	Far Left
	Europe Ecology – The Greens	ECO	Green
Germany	Christian Democratic Union / Christian Social Union of Bavaria	CDU/CSU	Moderate Right
	Free Democratic Party	FDP	Liberal
	Social Democratic Party of Germany	SPD	Moderate Left
	The Left		Far Left
	Alliance '90/The Greens		Green
Greece	The Popular Association - Golden Dawn	Golden Dawn	Far Right
	Independent Greeks	ANEL	Far Right
	Popular Orthodox Rally	LAOS	Far Right
	Panhellenic Citizen Chariot		Far Right
	New Democracy	ND	Moderate Right
	Union of Centrists		Liberal
	Drassi		Liberal
	Democratic Alliance		Liberal
	Recreate Greece		Liberal

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Country	Party	Abbreviation	Party Family
	Panhellenic Socialist Movement	PASOK	Moderate Left
	To Potami		Moderate Left
	Democratic Left	DIMAR	Moderate Left
	Social Agreement for Greece in Europe		Moderate Left
	Coalition of the Radical Left	SYRIZA	Far Left
	Communist Party	KKE	Far Left
	Movement of Democratic Socialists	To Kinima	Far Left
	Greek Anticapitalist Left		Far Left
	Popular Unity	LE	Far Left
	DIMAR		Green
Ireland	Fianna Fáil	FF	Moderate Right
	Fine Gael	FG	Moderate Right
	Libertas Ireland		Moderate Right
	Progressive Democrats	PD	Liberal
	Labour Party	Labour	Moderate Left
	Workers' Party		Far Left
	Anti-Austerity Alliance–People Before Profit	AAA-PBP	Far Left
	Socialist Party		Far Left
	United Left Alliance		Far Left
	Green Party		Green
	Fís Nua		Green
	Sinn Féin	SF	Other
	Christian Solidarity Party		Other
	Fathers Rights-Responsibility Party		Other
Italy	National Alliance	AN	Far Right
	Fratelli d'Italia		Far Right
	Forza Italia / The People of Freedom	FI / PdL	Moderate Right
	Union of the Centre	UDC+	Moderate Right
	Future and Freedom	FLI	Moderate Right
	Civic Choice	SC	Liberal
	Italy of Values	IDV	Liberal
	Democrats of the Left / Democratic Party	DS/PD	Moderate Left
	Left Ecology Freedom-Italian Left	SEL	Moderate Left
	Party of Italian Communists	PdCI	Far Left

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Country	Party	Abbreviation	Party Family
	Rifondazione		Far Left
	Rivoluzione Civile		Far Left
	Communist Refoundation Party	PRC	Far Left
	Five Star Movement	M5S	Other
	Lega Nord	LN	Other
	Fare		Other
	Italian Renewal	RI	Other
Netherlands	Party for Freedom	PVV	Far Right
	Christian Democratic Appeal	CDA	Moderate Right
	People's Party for Freedom and Democracy	VVD	Liberal
	Democrats 66	D66	Liberal
	Labour Party	PvdA	Moderate Right
	Socialist Party	SP	Far Left
	GreenLeft	GL	Green
Portugal	Social Democratic Party	PSD	Moderate Right
	People's Party for Freedom and Democracy	CDS	Moderate Right
	New Democracy Party	PND	Moderate Right
	People's Monarchist Party	PPM	Moderate Right
	Hope for Portugal Movement	MEP	Liberal
	Socialist Party	PS	Moderate Left
	Nós, Cidadãos!	Nos	Moderate Left
	Portuguese Communist Party	PCP	Far Left
	Left Bloc	BE+	Far Left
	Portuguese Workers' Communist Party	PCTP	Far Left
	Portuguese Labour Party	PTP	Far Left
Spain	People's Party	PP	Mod Right
	Union, Progress and Democracy	UPyD	Liberal
	Spanish Socialist Workers' Party	PSOE	Mod Left
	United We Can / Unidos Podemos	Podemos	Far Left
	Ciudadanos		Liberal
	United Left	IU	Far Left
	Republican Left of Catalonia - Catalonia Yes	ERC	Other

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Country	Party	Abbreviation	Party Family
	Democratic Convergence of Catalonia / Convergence and Union	CDC/CiU	Other
	Popular Unity Candidacy	CUP	Other
	Basque Nationalist Party	PNV	Other
	Together for Yes	JxS	Other
	Galician Nationalist Bloc	BNG	Other
	Commitment Coalition	CC	Other
	Amaiur		Other
	Asturias Forum	Foro	Other
Switzerland	Swiss Nationalist Party	PNOS	Far Right
	Swiss People's Party	SVP	Far Right
	Christian Democratic People's Party	CVP	Moderate Right
	Conservative Democratic Party	BDP	Moderate Right
	Ring of Independents	LDU	Liberal
	Free Democratic Party	FDP	Liberal
	Social Democratic Party	SPS	Moderate Left
	Swiss Party of Labour	AL	Far Left
	Green Party		Green
	Green Liberal Party	GLIB	Green
UK	UK Independence Party	UKIP	Far Right
	Conservative and Unionist Party		Moderate Right
	Liberal Democrats	LibDem	Liberal
	Labour Party		Moderate Left
	Green Party of England and Wales		Green
	Scottish National Party	SNP	Other

## 6 Nominal Changes of Parties in Response to the Crisis

### 6.1 Nominal Changes of Social Democratic Parties in Saliency and Left-Right Position by Issue Categories

Table 9: Nominal Changes of Social Democratic Parties in Saliency and Left-Right Positions on Welfare

Country	Saliency			Left-Right Position		
	Pre-Crisis	Crisis	Change	Pre-Crisis	Crisis	Change
Austria	0.36	0.34	-0.02	-0.52	-0.55	-0.03
France	0.22	0.28	0.06	-0.27	-0.95	-0.68
Germany	0.22	0.28	0.06	-0.42	-0.73	-0.31
Greece	0.15	0.08	-0.07	-0.31	-0.50	-0.19
Ireland	0.24	0.12	-0.13	-0.86	-0.44	0.41
Italy	0.05	0.20	0.15	-0.45	-0.00	0.45
Netherlands	0.27	0.22	-0.05	-0.58	-0.03	0.55
Portugal	0.06	0.10	0.04	0.57	-0.45	-1.01
Spain	0.14	0.14	0.00	-0.71	-0.67	0.04
Switzerland	0.19	0.28	0.09	-0.71	-0.81	-0.10
UK	0.27	0.28	0.01	-0.66	-0.64	0.02

Table 10: Nominal Changes of Social Democratic Parties in Saliency and Left-Right Positions on Economic Liberalism

Country	Saliency			Left-Right Position		
	Pre-Crisis	Crisis	Change	Pre-Crisis	Crisis	Change
Austria	0.05	0.20	0.15	-0.40	-0.79	-0.39
France	0.20	0.15	-0.05	-0.43	-0.76	-0.33
Germany	0.05	0.13	0.08	-0.36	-0.92	-0.56
Greece	0.14	0.17	0.04	0.18	-0.13	-0.31
Ireland	0.18	0.30	0.12	-0.38	-0.39	-0.01
Italy	0.10	0.21	0.11	0.37	-0.57	-0.94
Netherlands	0.09	0.08	-0.01	-0.23	-0.80	-0.57
Portugal	0.20	0.23	0.03	0.51	-0.29	-0.80
Spain	0.09	0.15	0.06	0.03	-0.45	-0.48
Switzerland	0.10	0.20	0.11	0.25	-0.55	-0.81
UK	0.13	0.15	0.02	0.17	-0.34	-0.51

*Note: The three tables above show averages for the pre-crisis and crisis positions of social democratic parties towards the three different economic categories.*

Table 11: Nominal Changes of Social Democratic Parties in Saliience and Left-Right Positions on Budgetary Rigour

Country	Saliience			Left-Right Position		
	Pre-Crisis	Crisis	Change	Pre-Crisis	Crisis	Change
Austria	0.03	0.05	0.02	0.70	0.61	-0.09
France	0.03	0.06	0.03	0.78	-0.18	-0.95
Germany	0.07	0.03	-0.03	0.56	0.00	-0.56
Greece	0.03	0.04	0.01	0.57	0.29	-0.28
Ireland	0.05	0.10	0.04	0.00	0.36	0.36
Italy	0.09	0.04	-0.05	-0.08	0.17	0.25
Netherlands	0.02	0.09	0.07	-0.33	0.96	1.30
Portugal	0.15	0.16	0.00	0.30	-0.08	-0.39
Spain	0.01	0.12	0.11	0.20	0.10	-0.10
Switzerland	0.05	0.00	-0.05	0.12	0.50	0.38
UK	0.03	0.14	0.11	0.06	0.05	-0.01



## 6.2 Aggregate Nominal Changes by Party Families

Table 12: Aggregate Nominal Changes of Different Party Families

Party Family	Salience			Left-Right Position		
	Pre-Crisis	Crisis	Change	Pre-Crisis	Crisis	Change
Far Left	0.36	0.40	0.04	-0.63	-0.72	-0.09
Mod Left	0.37	0.46	0.09	-0.24	-0.41	-0.17
Mod Right	0.37	0.43	0.06	-0.13	0.07	0.20
Far Right	0.24	0.27	0.03	-0.09	-0.05	0.03

*Note: The table shows average values for each party family across all eleven countries included in this study. For each party family a pre-crisis-average and a crisis-average are calculated for both the salience that parties attribute to all economic issues and the left-right position that they adopt towards these issues.*

## 7 Observed Shifts in Salience and Left-Right Position by Social Democratic Parties

### 7.1 Observed Shifts in Salience by Issue Category

Figure 1: Observed Shifts in Salience by Issue Category for the Moderate Left in Different Countries

	Welfare	Economic Liberalism	Budgetary Rigour
+	France, Germany, Italy, Portugal, Switzerland	Austria, Germany, Greece, Ireland, Italy, Portugal, Spain, Switzerland	Austria, France, Ireland, Netherlands, Spain, UK
≈	Austria, Spain, UK	Netherlands, UK	Greece, Portugal
-	Greece, Ireland, Netherlands	France	Germany, Italy, Switzerland

*Note: Changes in salience are coded in the following way: + = Increase in issue salience; ≈ = approximately the same level of salience (between -0.02 and 0.02); - = decrease in salience.*

### 7.2 Observed Shifts in Left-Right Positions by Issue Category

Figure 2: Issue Positions of the Moderate Left on Welfare Before and After the Crisis in Different Countries

		After the Crisis		
		Pro	Ambivalent	Contra
Before the Crisis	Pro	Austria, France, Germany, Greece, Ireland, Spain, Switzerland, UK	Italy, Netherlands	
	Ambivalent			
	Contra	Portugal		

*Note: Issue positions are coded in the following way:  $-1$  to  $-0.26$  = pro welfare;  $-0.25$  to  $0.25$  = ambivalent;  $0.26$  to  $1$  = contra welfare.*

Figure 3: Issue Positions of the Moderate Left on Economic Liberalism Before and After the Crisis in Different Countries

		After the Crisis		
		Pro	Ambivalent	Contra
Before the Crisis	Pro			Italy, Portugal
	Ambivalent		Greece	Netherlands, Spain, Switzerland, UK
	Contra			Austria, France, Germany, Ireland

*Note: Issue positions are coded in the following way:  $-1$  to  $-0.26$  = contra economic liberalism;  $-0.25$  to  $0.25$  = ambivalent;  $0.26$  to  $1$  = pro to economic liberalism.*

Figure 4: Issue Positions of the Moderate Left on Budgetary Rigour Before and After the Crisis in Different Countries

		After the Crisis		
		Pro	Ambivalent	Contra
Before the Crisis	Pro	Greece, Austria	Germany, France, Portugal	
	Ambivalent	Ireland, Switzerland	Italy, Spain, UK	
	Contra	Netherlands		

*Note: Issue positions are coded in the following way:  $-1$  to  $-0.26$  = contra budgetary rigour;  $-0.25$  to  $0.25$  = ambivalent;  $0.26$  to  $1$  = pro budgetary rigour.*

## 8 Additional Results (Three-Way Interactions)

Table 13: GLS Regression - Salience of Economic Issues by Different Party Families

	Dependent Variable		
	Welfare	Eco Lib	Budget
	(1)	(2)	(3)
Far Right	-0.04 (0.13)	-0.23 (0.14)	-0.01 (0.12)
Liberal	-0.01 (0.11)	0.02 (0.12)	-0.09 (0.10)
Moderate Left	0.04 (0.10)	-0.004 (0.10)	-0.01 (0.09)
Far Left	0.31** (0.12)	-0.04 (0.13)	-0.03 (0.11)
Green	-0.13 (0.11)	-0.10 (0.12)	-0.03 (0.10)
Other	0.08 (0.12)	-0.12 (0.12)	0.02 (0.11)
Crisis Election	0.02 (0.08)	0.09 (0.08)	-0.01 (0.07)
Unemployment (t-1)	-0.01 (0.01)	0.005 (0.01)	0.01 (0.01)
Inflation (t-1)	-0.01 (0.01)	0.02 (0.01)	0.01 (0.01)
GDP Growth (t-1)	-0.001 (0.003)	0.01* (0.003)	-0.0001 (0.003)
Gov Deficit (t-1)	0.002 (0.001)	-0.005*** (0.002)	-0.002 (0.001)
Gov Debt (t-1)	-0.001 (0.001)	-0.001 (0.001)	0.0003 (0.001)
Government (t-1)	-0.03 (0.02)	0.02 (0.02)	-0.01 (0.02)
Prime Minister (t-1)	0.02 (0.03)	-0.02 (0.03)	-0.01 (0.02)
Far Right x Crisis Election	-0.09 (0.14)	0.13 (0.15)	-0.03 (0.13)
Liberal x Crisis Election	0.07 (0.12)	-0.004 (0.13)	0.12 (0.11)
Moderate Left x Crisis Election	0.04 (0.11)	0.01 (0.11)	0.005 (0.10)
Far Left x Crisis Election	-0.24* (0.13)	0.06 (0.14)	-0.03 (0.12)
Green x Crisis Election	-0.002 (0.12)	0.01 (0.13)	-0.002 (0.11)
Other x Crisis Election	-0.23* (0.13)	0.08 (0.14)	0.02 (0.12)
Moderate Left x Unemployment (t-1)	-0.002 (0.01)	0.001 (0.01)	-0.01 (0.01)
Crisis Election x Unemployment (t-1)	0.001 (0.01)	0.0001 (0.01)	-0.01 (0.01)
Mod Left x Crisis x Unempl (t-1)	-0.002 (0.01)	-0.003 (0.01)	0.01 (0.01)
Constant	0.31*** (0.09)	-0.0001 (0.10)	0.04 (0.08)
Observations	198	198	198
Log Likelihood	97.34	90.99	112.33
Akaike Inf. Crit.	-104.68	-91.98	-134.65
Bayesian Inf. Crit.	31.98	44.68	2.01

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01  
Reference party: Moderate Right  
Reference country: United Kingdom

*Note: Country fixed effects are included in the models but not shown. Similarly, three-way interaction terms for other party families are included in model 2 but not shown.*

Table 14: GLS Regression - Left Right Positions of Different Party Families

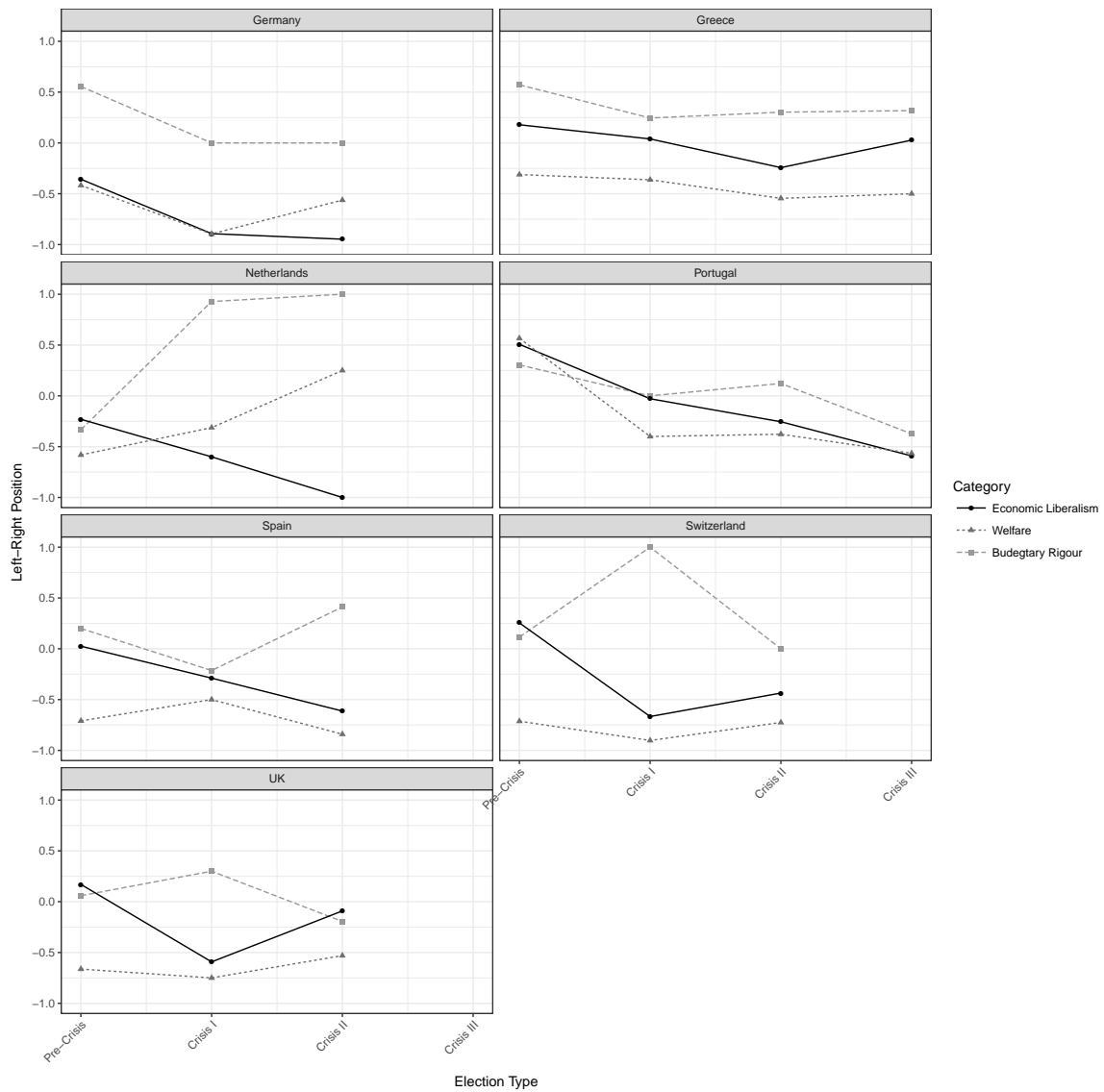
	Dependent Variable		
	Welfare	Eco Lib	Budget
	(1)	(2)	(3)
Far Right	0.36 (0.74)	-1.02 (0.89)	1.02 (1.02)
Liberal	0.38 (0.62)	-0.25 (0.74)	0.19 (0.86)
Moderate Left	0.11 (0.55)	0.01 (0.66)	-0.57 (0.76)
Far Left	-0.59 (0.68)	-1.05 (0.82)	-1.50 (0.94)
Green	-0.38 (0.62)	0.55 (0.74)	-0.89 (0.86)
Other	0.07 (0.65)	0.25 (0.78)	-1.06 (0.90)
Crisis Election	0.94** (0.44)	-0.11 (0.53)	0.31 (0.61)
Unemployment (t-1)	0.13** (0.06)	-0.02 (0.07)	-0.02 (0.09)
Inflation (t-1)	0.04 (0.06)	-0.07 (0.07)	-0.09 (0.08)
GDP Growth (t-1)	0.01 (0.02)	0.02 (0.02)	-0.03 (0.02)
Gov Deficit (t-1)	0.002 (0.01)	-0.01 (0.01)	0.02* (0.01)
Gov Debt (t-1)	-0.01* (0.003)	-0.003 (0.004)	0.001 (0.005)
Government (t-1)	0.06 (0.12)	0.08 (0.14)	0.17 (0.16)
Prime Minister (t-1)	-0.01 (0.14)	0.08 (0.17)	0.03 (0.19)
Far Right x Crisis Election	0.12 (0.78)	0.74 (0.93)	-1.10 (1.08)
Liberal x Crisis Election	-0.19 (0.67)	0.71 (0.80)	-0.01 (0.92)
Moderate Left x Crisis Election	-0.53 (0.59)	-0.59 (0.71)	0.48 (0.82)
Far Left x Crisis Election	-0.04 (0.72)	0.47 (0.87)	1.19 (1.00)
Green x Crisis Election	-0.60 (0.66)	-0.61 (0.80)	0.83 (0.92)
Other x Crisis Election	-0.23 (0.73)	-0.04 (0.88)	0.41 (1.02)
Moderate Left x Unemployment (t-1)	-0.005 (0.07)	0.01 (0.09)	0.08 (0.10)
Crisis Election x Unemployment (t-1)	-0.08 (0.06)	0.02 (0.07)	0.004 (0.08)
Mod Left x Crisis x Unempl (t-1)	0.01 (0.07)	-0.003 (0.09)	-0.11 (0.10)
Constant	-1.16** (0.50)	0.29 (0.61)	0.62 (0.70)
Observations	198	198	198
Log Likelihood	-165.52	-193.98	-215.79
Akaike Inf. Crit.	421.03	477.96	521.58
Bayesian Inf. Crit.	557.69	614.62	658.25

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01  
Reference party: Moderate Right  
Reference country: United Kingdom

*Note: Country fixed effects are included in the models but not shown. Similarly, three-way interaction terms for other party families are included in model 2 but not shown.*

## 9 Positions of Social Democratic Parties Over Time

Figure 5: Average Positions of Social Democratic Parties by Country and Election Type



Note: Countries that only had one election from 2009 to 2015 are not shown in the graph. The two elections in Greece in 2012 and in 2015, respectively, are treated as one observation.

## References

- Bakker R, de Vries C, Edwards E, Hooghe L, Jolly S, Marks G, Polk J, Rovny J, Steenbergen M and Vachudova MA (2015) Measuring party positions in Europe: The Chapel Hill expert survey trend file, 1999–2010. *Party Politics* 21(1): 143–152.
- Greene WH (2012) *Econometric Analysis*. Seventh edition edition. Harlow; New York: Pearson Addison Wesley.
- Helbling M and Tresch A (2011) Measuring party positions and issue salience from media coverage: Discussing and cross-validating new indicators. *Electoral Studies* 30(1): 174–183.
- Kleinnijenhuis J, de Ridder JA and Rietberg EM (1997) Reasoning in Economic Discourse: An Application of the Network Approach to the Dutch Press. *Text Analysis for the Social Sciences: Methods for Drawing Statistical Inferences from Texts and Transcripts. Mahwah: Erlbaum* : 191–207.
- Kleinnijenhuis J and Pennings P (2001) Measurement of party positions on the basis of party programmes, media coverage and voter perceptions. In: Laver M (ed.) *Estimating the Policy Position of Political Actors*. London: Routledge, pp. 162–182.
- Kriesi H, Grande E, Dolezal M, Helbling M, Höglinger D, Hutter S and Wüest B (2012) *Political Conflict in Western Europe*. Cambridge: Cambridge University Press.
- Kriesi H, Grande E, Lachat R, Dolezal M, Bornschie S and Frey T (2008) *West European Politics in the Age of Globalization*. Cambridge: Cambridge University Press.
- Stimson JA (1985) Regression in Space and Time: A Statistical Essay. *American Journal of Political Science* 29(4): 914–947.
- Stokes DE (1963) Spatial Models of Party Competition. *The American Political Science Review* 57(2): 368–377.