Party system change: evidence of changing policy spaces*

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Abstract

This paper measures the extent of party system change – seen as change in the underlying policy space and change in party positions in that space – in western European party systems. Change is measured using two directly comparable expert surveys of party positions on four "core" policy dimensions, conducted in 1989 and 2003. A distinction is made between "survivor" parties competing in both 1989 and 2003, "new" parties competing in 2003 but not 1989, and "extinct" parties competing in 1989 but not 2003. Principal findings concern: the changing relative importance of the core policy dimensions, as well as correlations of party positions on these; secular trends in European party policy positions; and, perhaps most strikingly, a distinct tendency for "new" parties to be born, and "old" parties to become extinct, at relatively more extreme locations in the policy space.

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1. Assessing Party System Change

Analyzing changes in the shape and size of party systems has long been a mainstay of the literature on comparative party systems. Systematically measuring and analyzing "party system change," however, is easier said than done. It is first necessary to characterize, as a system, the party system under investigation. The appropriate characterization depends crucially on which aspect of the party system is of interest. One characterization may be useful if we are interested in voting at elections, for example, or in the impact of electoral formulae in turning votes into seats. A quite different characterization may be useful if we are interested in government formation. We may or may not consider the policy positions of the various parties in the system to be important. We may or may not require some systematic method of describing the various non-policy characteristics of political parties. Absent a clear statement of analytical purpose, therefore, the notion of "party system change" is in effect meaningless. Our own interest in party system change in this paper stems from our interest in analyzing spatial models of elections and party competition. This focuses our attention on two types of system change.

One type of change is *exogenous* to party competition, and involves change in the parameters that define the structure of the system itself, in particular the structure of the policy space within which party competition is conducted. Thus at one point in time a party system may be effectively described in terms of party positions in a one-dimensional policy space. At another point in time an additional independent dimension of policy may become salient – for reasons that can be treated as being essentially exogenous to the process of party competition. Related to this possibility, there may be exogenous shifts in the policy preferences of the voters – shifts not fruitfully susceptible to analysis as endogenous outputs of the process of party competition itself.

Another type of change is an *endogenous* output of the process of party competition. Parties may change policy positions, for example, in response to changes in the incentives with which their leaders are faced. Changed incentives may arise from the types of exogenous shock we have just mentioned; or they may arise as a result of actions selected by other politicians in the system.

In what follows, we first discuss party system change in terms of the changing shape and structure of policy spaces over time, characterized in terms of the relative salience of key policy dimensions and the relationships between party positions on these different dimensions. We then discuss the changing positions of political parties, measured against the basis vectors of these underlying policy spaces. We measure such change by comparing two "expert surveys" of party policy positions dealing with many of the same matters; the first was conducted in 1989 by Laver

and Hunt (Laver and Hunt 1992), the second in 2003 by Benoit and Laver (Benoit and Laver 2006). While the 2003 survey vastly increased the country coverage of the survey conducted in 1989 – notably into the post-communist countries of Eastern Europe – we focus here on the set of western European countries that were investigated in both surveys. For this set of countries, directly comparable information about party policy positions is available at two distinct time points.

In addition to comparing the structures of the policy spaces, and the positions of political parties, in many European countries between these two time points, we are also able to analyze the policy positions of parties that disappeared from political competition between 1989 and 2003, and those of parties that entered political competition during the same period. We find considerable stability of European party systems between these two time points, but also evidence of systematic trends – notably a tendency for environmental policy to decline in importance over the period under investigation, and to become more aligned with into the more general left-right dimension of economic policy. There is also clear evidence that existing parties tend to die, and new parties tend to be born, away from the centers of the policy spaces under investigation. In general it is party births and deaths such as these, rather than dramatic shifts in the positions of parties competing in both 1989 and 2003, that contribute most to change in the party system.

2. Changing Policy Spaces

Core policy dimensions for comparative analysis

The Laver-Hunt and Benoit-Laver surveys overlap in measuring the positions of all political parties in each country under investigation on four "core" *a priori* substantive policy dimensions. In addition, these surveys measured the relative importance attached by each party to each dimension.[1] The four core policy dimensions concerned:

- ***Economic policy***, given substance in terms of the tradeoff between lower taxation and higher levels of public service provision.

- ***Social liberalism vs conservatism***, given substance in terms of attitudes on abortion, voluntary euthanasia and gay rights.

- ***Environmental policy***, given substance in terms of the tradeoff between: protecting the environment, even at the cost of economic growth; and promoting economic growth, even at the cost of damage to the environment.

[1] Benoit and Laver (2006) provide an extended discussion of the definition, and deployment in expert surveys, of these core dimensions. They also discuss the distinction between *a priori* and inductive policy dimensions.

- ***Decentralization policy***, given substance in terms of relative support for decentralizing, or centralizing, important aspects of political decision-making.

In comparing the parties, we distinguish three categories of parties. Survivor parties are parties that were measured as "politically significant" in 1989 by the Laver and Hunt survey (1992), and were also measured as such in 2003 by Benoit and Laver (2006). New parties are those that came into being between the two surveys, measured only in 2003. Finally, we identify defunct parties as those ceased to exist as politically significant forces between 1989 and 2003. As Table 1 indicates, we analyzed a total of 147 parties. Of these, 79 were compared between 2003 and 1989, while 29 parties appeared for the first time in 2003. A total of 39 parties, furthermore, ceased to exist between 1989 and 2003.

Table 1: Three categories of parties analyzed

	2003		
1989	Absent	Present	Total
Absent	0	29 New parties	29
Present	39 Defunct parties	79 Survivor parties	118
Total	39	108	147

Changing relative salience of core dimensions 1989-2003

The overall relative salience of a policy dimension can be measured as its mean relative salience across all parties, weighting this mean by party size. Table 2 summarizes the results of doing this for the 18 western European countries covered in both the 1989 and 2003 expert surveys, reporting the relative saliency rank of the four core dimensions in each year. Perhaps the most striking finding, looking across the entire set of party systems under investigations, is the increasing saliency rank of economic policy, and the decreasing saliency rank of the liberal-conservative dimension, between 1989 and 2003. In 1989, economic policy was the most salient of the four core dimensions for only about half of the western European countries investigated, with the liberal-conservative dimension ranked more highly than economic policy in many of the rest. By 2003, however, the economic policy dimension was the most salient in all but two countries; environmental policy remained most salient in Iceland and the liberal-conservative dimension had become most salient in Belgium. Table 2 also confirms that, if we seek a common two-dimensional representation of party policy positions in these different countries, the best

candidate would use economic policy and social liberalism, although this conclusion is far less clear cut for 2003 than it was for 1989.

Table 2: Ranking of core policy dimensions 1989 and 2003, in terms of mean dimension importance for party, weighted by party size

Country	*Economic policy*		*Liberal vs conservative*		*Environmental protection*		*Decentralization*	
	1989	**2003**	**1989**	**2003**	**1989**	**2003**	**1989**	**2003**
Austria	1	1	3	2	2	2	4	2
Belgium	1	2	2	1	4	4	3	3
Britain	1	1	2	2	4	4	3	3
Denmark	1	1	2	4	3	2	4	3
Finland	1	1	2	4	3	2	4	3
France	1	1	1	2	4	4	3	3
Germany	3	1	1	2	1	3	4	4
Greece	1	1	4	4	3	3	1	2
Iceland	3	2	2	4	1	1	4	3
Ireland	1	1	2	2	3	3	4	4
Italy	2	1	1	2	4	4	3	3
Luxembourg	3	1	1	2	2	3	4	4
Malta	3	1	2	2	1	2	4	4
Netherlands	2	1	1	2	2	3	4	4
Norway	2	1	1	3	3	2	4	4
Portugal	1	1	2	3	4	4	3	2
Spain	2	1	3	3	4	4	1	2
Sweden	1	1	2	3	2	2	4	4
Mean rank	1.67	1.11	1.89	2.61	2.78	2.89	3.39	3.17

Table 3 compares the relative salience of the core policy dimensions on a different basis. It deals only with parties competing in both 1989 and 2003, comparing the importance attached by each "survivor" party to each policy dimension in both years. Table 3 reports the means of these party-specific saliency shifts for each country.[2] Italy is excluded because there was too much party turnover between the two time points to make useful pair-wise comparisons. Highlighted mean differences are statistically significant using a two-tailed paired-case t-test. The conclusions to be drawn from Table 3 reinforce those drawn from Table 2. For most parties competing in both 1989 and 2003, economic policy increased in importance over the time period. Given the small numbers of parties involved in each individual party system, these increases generally did not show up as statistically significant (except for Germany and Luxembourg). The other core dimension of increasing importance in these pair-wise comparisons concerned policy

[2] The country means in Table 2 are not weighted by party size.

on decentralization, with statistically significant increases in the importance of this dimension in Belgium, Britain, Denmark, Ireland, Luxembourg and the Netherlands. Only in Britain and Belgium did decentralization policy become significantly less important.[3] Reinforcing the conclusions from Table 2, there was a general tendency for the liberal-conservative dimension to become less salient among parties competing in both 1989 and 2003 (Greece and Luxembourg, and to a lesser extent Germany are exceptions). Environmental policy became significantly less important to survivor parties in Austria, Britain and the Netherlands, though more important in France and Ireland.

Table 3: For pairs of parties competing in both 1989 and 2003, dimension importance 2003 minus dimension importance 1989

Country	*Economic policy*	*Liberal vs conservative*	*Environmental protection*	*Decentralization*
Austria	0.11	0.37	** -1.58	2.56
Belgium	0.80	0.43	2.74	* -3.39
Britain	1.39	-1.51	** -1.55	** -0.69
Denmark	-0.59	0.11	1.00	** 1.61
Finland	1.38	0.39	0.38	0.28
France	-0.14	-0.21	** 2.38	0.72
Germany	* 2.25	1.48	-0.97	-0.43
Greece	2.02	2.01	1.71	-0.63
Ireland	1.36	* -0.92	** 2.56	** 3.76
Luxembourg	** 1.69	2.24	-0.29	** 6.31
Netherlands	-0.81	-0.67	** -3.66	** 2.06
Norway	0.72	-1.62	0.53	0.11
Portugal	2.57	-0.19	-0.34	1.05
Spain	0.06	-1.04	0.96	-0.06
Sweden	-0.07	0.75	-0.60	0.05

* differences are statistically greater than zero at 0.10 level or better, using a two-tailed paired t-test (at the country level). ** indicates p<=.05

While Table 3 looks at survivor parties competing in both 1989 and 2003, Table 4 compares these with new parties that competed in 2003 but not in 1989. Aggregating across all western European countries under investigation,[4] Table 4 compares the changing salience of the four core policy dimensions for survivor and new parties. The results in Table 4 complement those in Tables 2 and 3 in an interesting way. New parties entering western European party

[3] Note the clear distinction between the size and the statistical significance of the mean shifts reported. This arises because a relatively smaller mean shift in a country where all parties are moving in the same direction may be more significant statistically than a relatively larger mean shift in a system where parties are not shifting in consistent directions.

[4] There are not enough new parties to conduct a useful analysis on a country-by-country basis.

systems after 1989 attach significantly less importance to environmental policy than do survivor parties, reinforcing a general conclusion that environmental policy is, if anything, become less important. New parties also tend to attach more importance to the liberal-conservative dimension and less to economic policy although, given the small numbers involved and the variability in the results for new parties, these differences are not significant statistically.

Table 4: Dimension salience 2003, by dimension and new party status

Dimension salience	*Mean*	*SE*
Economic policy (p=.11)		
Party competed in 1989	13.69	0.25
New party since 1989	12.70	0.56
Social policy (p=.26)		
Party competed in 1989	12.60	0.32
New party since 1989	13.31	0.54
Environmental policy* (p=.02)		
Party competed in 1989	12.26	0.34
New party since 1989	10.36	0.71
Decentralization policy (p=.07)		
Party competed in 1989	11.96	0.29
New party since 1989	10.96	0.47

*** Differences of means significant at better than 0.01*

Changing dimensional structure 1989-2003

We have so far been looking at the structure of the policy spaces under investigation by looking at the relative salience of each core policy dimension. We now look at the *dimensional structure* of these same policy spaces by looking at *interactions* between party policy positions on the set of core policy dimensions, taken as a whole. Thus, if party positions on all four core dimensions were perfectly correlated, then all of these positions could be seen as being related to some underlying "latent" dimension (for example a "left-right" dimension). This single latent dimension would in itself summarize all relevant information about relative party policy positions. If party policy positions on four salient policy dimensions were perfectly uncorrelated, then all four dimensions could be taken as measuring quite independent features of party policy – and all four would be needed to summarize party policy positions. We can explore the dimensional structure of party policy positions using standard techniques of dimensional analysis,

such as principal components analysis, factor analysis, or multidimensional scaling. In Table 5, we report the results from the most straightforward of these, a varimax-rotated principal components analysis of all western European party positions on the four core policy dimensions, comparing the dimensional structure of these positions in 1989 and 2003.[5]

Table 5 reveals several patterns of note. First, eigenvalues for the principal components in both 1989 and 2003, only one of which is greater than unity, reveal that a single latent dimension (which we might think of as a left-right dimension) does a good job of explaining variation in party policy positions on the four core policy dimensions. If, notwithstanding this, a two-component solution is forced in either year, the rotated component loadings show that the first component summarizes variation in European party policy positions on the first two core dimensions – economic policy and social liberalism – while the second component summarizes variation on the decentralization dimension. In 1989, environmental policy is a "complex" variable in terms of dimensional analysis – loading more or less equally on both the socio-economic policy and decentralization components. Thus environmentalist policy positions are somewhat associated in 1989 with both the left end of the socio-economic dimension and pro-decentralization policy stances. This situation had changed by 2003, when the second rotated principal component was unambiguously associated with decentralization policy, while environmental policy was unambiguously associated with the first principal component, on the left of this latent socio-economic policy dimension.

Table 5: Rotated principal components analyses of party positions on core policy dimensions, 1989 and 2003[6]

	1989 components		2003 components	
	1	2	1	2
Eigenvalue	2.59	0.82	2.39	0.99
Varimax rotated components				
Economic policy	0.67	-0.11	0.62	-0.21
Liberalism-conservatism	0.63	-0.05	0.52	0.09
Environment	0.38	0.44	0.59	0.15
Decentralization	-0.07	0.89	0.00	0.96

[5] Gratifying as it would have been to have conducted such an analysis on a country-by-country basis, there would have been insufficient cases in each country to have yielded reliable results.
[6] Full output from these analyses can be found in Table A1 in the Appendix.

Overall, all of the empirical findings from this part of the analysis are consistent with the same basic interpretation of the changing basis of European policy spaces over the period 1989-2003. Such change, as might be expected given two time points only 14 years apart, is modest; but it is nonetheless both distinct and substantively plausible. Economic policy, if anything, tended to become more important relative to the other core policy dimensions, while social liberalism tended to become less important. While there was some tendency for environmental policy to become less salient – notably among new parties entering the fray after 1989 – it was also the case that environmental policy became more distinctly aligned with the left of a latent socio-economic policy dimension. If anything, decentralization policy became more salient, while parties' positions on decentralization remained completely unrelated to their positions on the other three core policy dimensions.

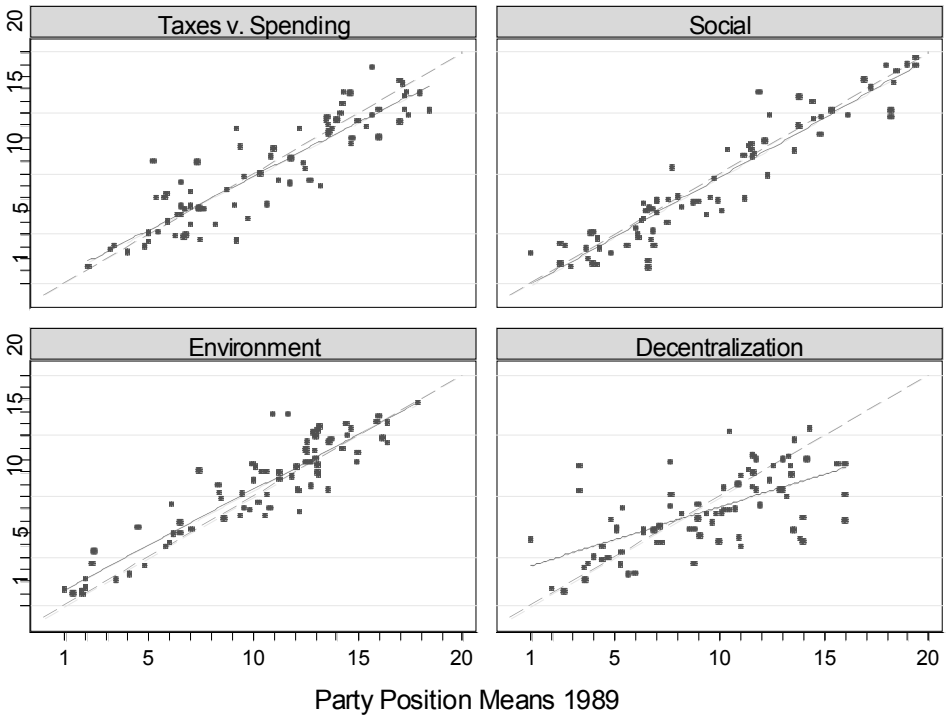
3. Changing Party Positions

We now turn to changes in party policy positions between 1989 and 2003 – measured in the background policy space defined by the four core policy dimensions estimated in both expert surveys. As before, we distinguish between "survivor" parties that competed in both 1989 and 2003, "new" parties that competed in 2003 but not 1989, and "defunct" parties that competed in 1989 but not 2003. We devote most of our attention to parties that competed in both 1989 and 2003. Italy was excluded from these analyses because so many Italian parties changed between 1989 and 2003; for this reason party system change in Italy is better treated as a *sui generis* case study than a set of cases in a cross-national analysis. Other than in Italy, however, more or less all major western European political parties, as well as many minor ones, are in our set of survivor parties. Figure 1 compares, for each of the core policy dimensions, party positions in 1989 with those of the same party in 2003. Table A2 in the Appendix shows the results of OLS regressions analyzing the patterns in Figure 1 by predicting 2003 party policy positions on each core dimension from the same party's 1989 policy position.

Both Figure 1 and Table A2 shows that 2003 party positions on social liberalism were more or less perfectly predicted by their 1989 positions. The slope of the relevant regression line is very close to and statistically indistinguishable from unity; the constant is very close to and statistically indistinguishable from zero; the adjusted r^2 value is 0.90. Party positions on economic policy and the environment were also very stable. The OLS regressions reported in Table A2 show slopes of about 0.9 and constants of about 1 (on the 1-20 scales used in the expert surveys), with adjusted r^2 values of 0.80 and 0.86 respectively. Party positions on the decentralization of decision-making were most in flux, with positions in 2003 difficult to predict

from their positions in 1989. A two-tailed paired-case t-test reveals that the only statistically significant "secular" shift of mean party positions across all western European survivor parties competing at both time points was on environmental policy, towards a somewhat more anti-environmentalist position in 2003 (mean party position 9.9 in 1989, and 10.4 in 2003).

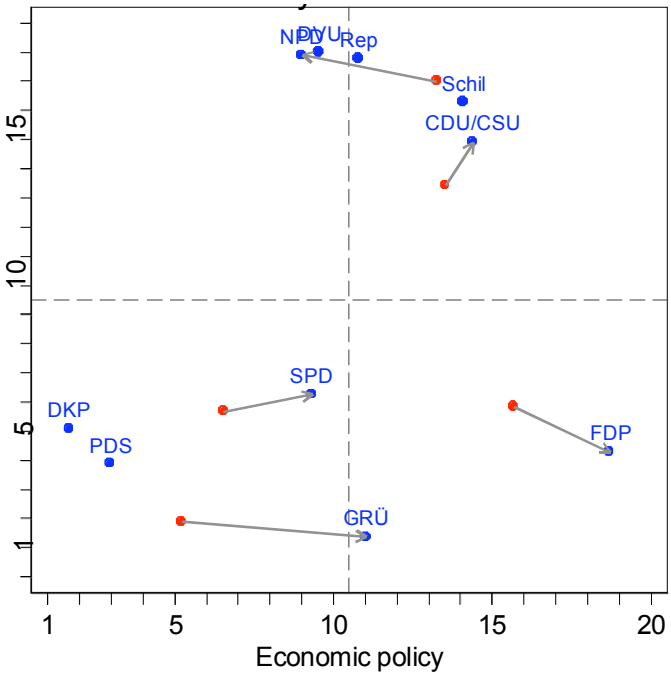
Figure 1: 1989 and 2003 policy positions of the set of western European parties present at both time points, by policy dimension



Notwithstanding the fact that the positions of survivor parties in 2003 can reliably be predicted from their positions in 1989, the scatter-plots in Figure 1 do show that many party positions did also change between these two time points. We present information on these party movements in two ways. Once way is to superimpose 1989 and 2003 country plots of the positions of all parties, including those of survivor, new and extinct parties, using a two-dimensional policy space defined by economic policy and social liberalism. Figure 2 shows, as an example, an overlaid plot of 1989 an 2003 party positions in Germany, connected by arrows to denote movement between 1989 and 2003. (Figure 2 also shows numerous new parties without arrows, namely DKP, PDS, Rep, Schil, and Rep). Consistent with Figure 1, this shows relatively little change in German party positions on social liberalism, but some distinct patterns in terms of economic policy. All of the main German "parties of government" (SPD, Greens, FDP and CDU) shifted to the right on economic policy. A number of new parties of the radical right appeared at a position that was

ultra-conservative on social policy but centrist on the economy – while the NPD moved towards the center on the economy, to occupy the same position as these. Similar plots for each of the other countries investigated can be found in Appendix B1.

Figure 2: Party policy positions in Germany, 1989 and 2003



For survivor parties competing in both 1989 and 2003, we can also plot *changes* in their position on, and *changes* in the importance they attach to, each policy dimension. Figure 3 shows such a plot for Britain. The top left panel shows that, on economic policy, the British Labour Party is judged to have moved rightwards, the Conservative Party and Liberal Democrats leftwards, between 1989 and 2003. While the two nationalist parties (PCy and SNP) do not seem to have changed economic policy positions, they were judged to be putting more weight on economic policy in 2003. In contrast, the bottom left panel shows that all of the British parties were judged to be less in favor of environmental protection in 2003, and to attach less weight to environmental policy, than was the case in 1989. With regard to decentralization policy, there was no change in the relative weight attached to this by any party – but a noticeable shift of Conservative Party policy towards favoring more decentralization. Similar plots for each of the other countries investigated can be found in Appendix B2.

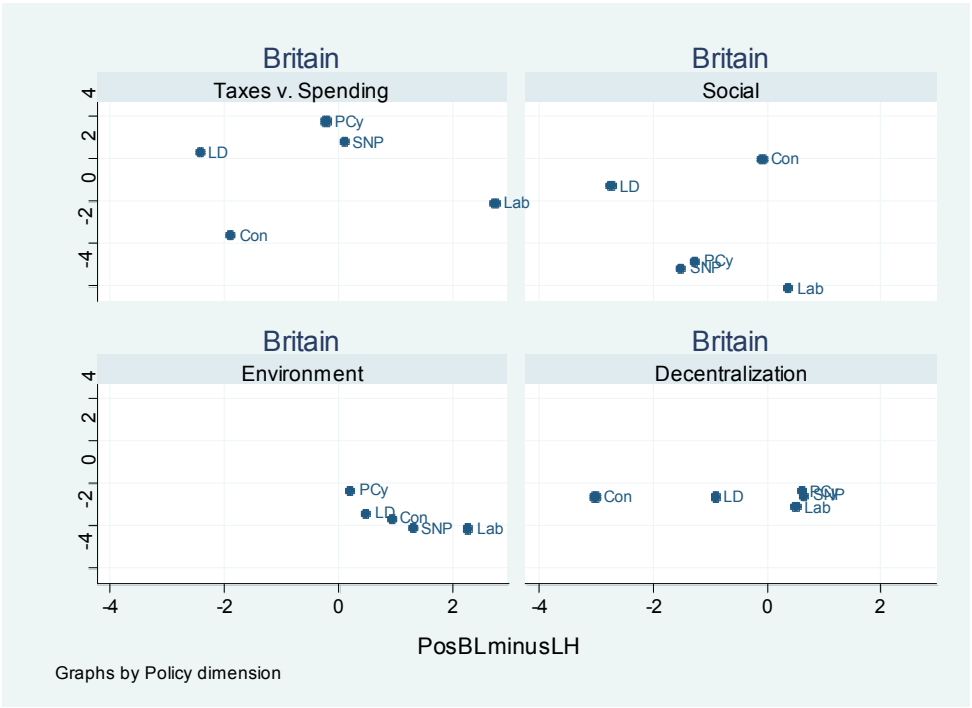
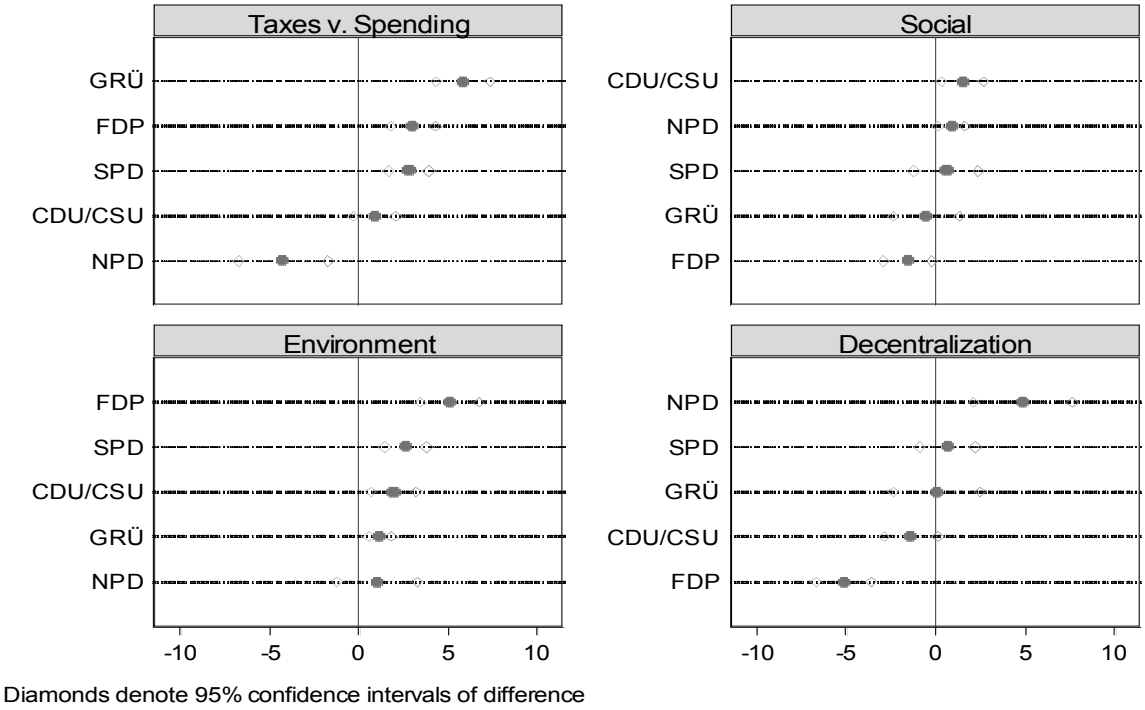


Figure 3: Changing party positions and dimension weights: Britain 1989-2003

Of course, a key question when assessing changes in policy positions concerns whether observed positional changes represent real movement, or might be attributed to instead to noise in measurement. Because expert surveys share sampling properties with surveys of other types, information about the uncertainty of their estimates can be found in the variance and number of expert placements (Benoit and Laver 2006). This enables us to compare positions with confidence intervals to assess whether real positional changes in party policy can be distinguished statistically from the case when no real movement has occurred. Figure 4 illustrates this comparison for the German (top panel) and British (bottom panel) survivor parties. For each party, the difference in expert survey means is denoted by the solid markers and the 95 confidence interval of this difference by the hollow diamonds to either side of the mean.



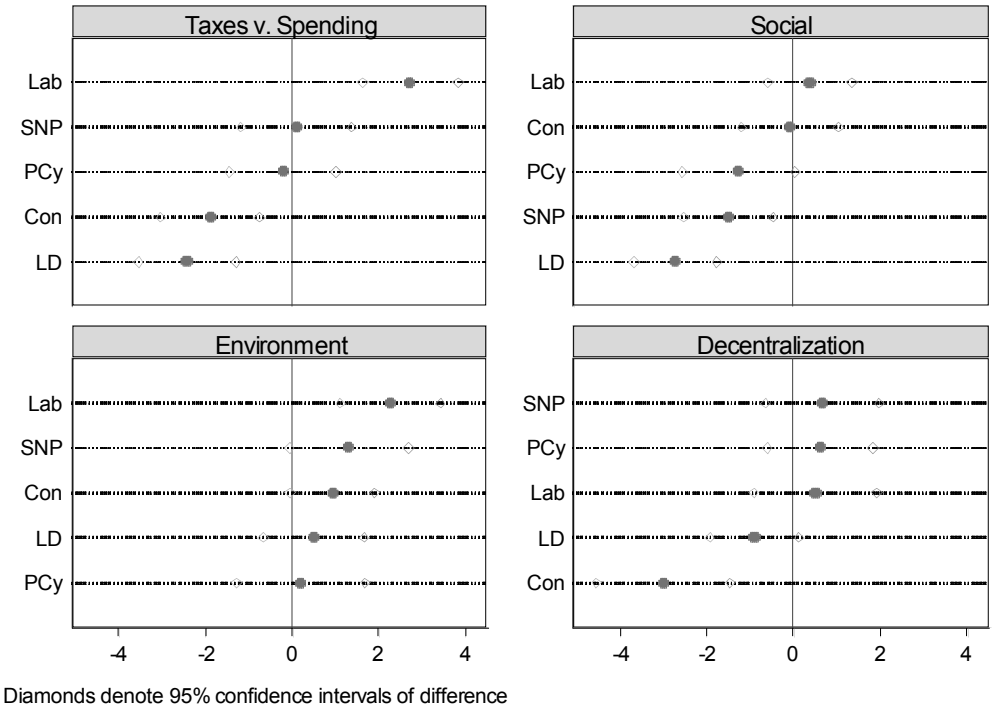


Figure 4: Changes in party positions, 2003 – 1989, for Germany (top panel) and Britain (bottom panel)

For Germany, Figure 4 shows us that movements on social policy were at most barely significant statistically; that the rightwards movements of the Greens, FDP and SPD on economic policy were significant, but that of the CDU/CSU was not; and that the main parties' shifts against environmentalism were all significant. For Britain we see that, in relation to economic policy, the rightward shift of Labour, and the leftward shift of the Conservatives and Liberal Democrats (LDs) were all significant, as was the liberal shift of the LDs on social policy. Only Labour's shift against environmentalism, and the Conservative's shift in favor of decentralization were significant on those respective policy dimensions.

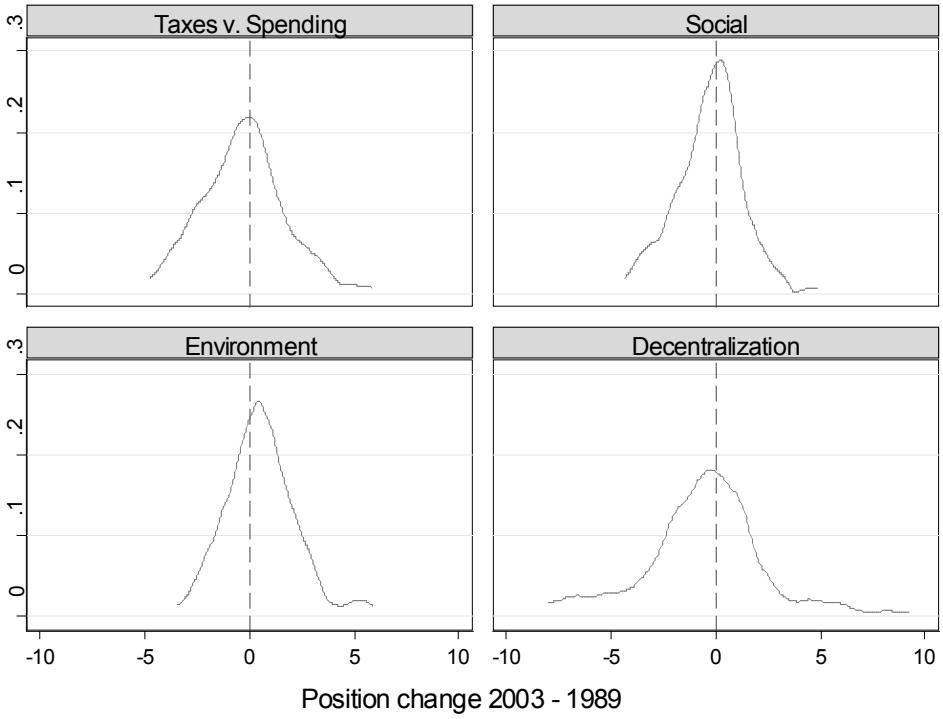
Table 6 attempts to summarize information about changing party positions by reporting, for each country, the mean policy shift by survivor parties between 1989 and 2003 on each policy dimension. Negative numbers imply a leftwards shift, positive numbers imply a rightward shift. Statistically significant shifts are indicated, computed using a paired t-test based on the standard deviations and respondent sample sizes reported in Laver and Hunt (1992) and Benoit and Laver (2006). Looking at the sign patterns in the final panel of columns, we see a fairly consistent pattern of parties tending to shift to a somewhat more decentralist policy stance (though this shift is statistically significant only in Greece). From the penultimate panel of columns, we see a consistent trend for survivor party policies to move away from environmental protection. This effect was statistically significant in Britain, Germany and the Netherlands (and, as already noted, statistically significant for Europe as a whole). The only significant counter-example was France, where survivor party policies tended to shift to a more pro-environmental position. Table 6 shows a modest trend among survivor parties towards social liberalism, with exceptions to this trend in Austria, Greece and Portugal. In relation to economic policy – shifts to the right are most noticeable in Germany and Luxembourg (though statistically significant in neither case). Strong, and statistically significant, leftwards shifts on economic policy are judged to have taken place in Belgium and Denmark.

Table 6: For survivor parties, position 2003 minus position 1989

Country	Increase taxes vs reduce spending			Liberal-conservative			Environmental protection			Pro decentralization			TOTAL	
	p>.05	*p*≤.05	Country Mean	*p*>.05	*p*≤.05	Country Mean	*p*>.05	*p*≤.05	Country Mean	*p*>.05	*p*≤.05	Country Mean	*p*>.05	*p*≤.05
Austria	3	1	-1.18	2	2	1.69	4	0	0.26	3	1	0.70	12	4
Belgium	5	3	** -2.07	5	3	* -1.42	8	0	-0.53	2	5	-1.01	20	11
Britain	2	3	-0.33	3	2	-1.04	4	1	** 1.05	4	1	-0.42	13	7
Denmark	3	4	** -2.10	6	1	-0.64	6	1	0.17	4	2	0.55	19	8
Finland	3	2	0.03	4	1	-0.33	5	0	0.18	5	0	-0.27	17	3
France	5	1	-0.47	5	1	-0.03	4	2	** -1.30	3	3	-0.32	17	7
Germany	1	4	1.65	2	3	0.18	1	4	** 2.37	3	2	-0.18	7	13
Greece	3	0	0.72	3	0	1.26	3	0	0.73	3	0	** -1.98	12	0
Ireland	3	2	-0.67	2	3	* -1.27	3	2	0.66	3	2	* -1.65	11	9
Luxembourg	4	0	1.51	4	0	-1.08	4	0	0.85	3	1	-2.94	15	1
Netherlands	3	2	-0.38	4	1	-0.57	1	4	** 3.23	4	1	-0.99	12	8
Norway	3	4	-0.20	6	1	-0.62	6	1	0.49	6	1	0.45	21	7
Portugal	4	0	0.30	2	2	* 1.62	3	1	0.34	2	2	-0.98	11	5
Spain	5	0	0.80	5	0	0.30	5	0	-0.14	5	0	0.15	20	0
Sweden	5	1	0.31	5	1	-0.24	5	1	0.76	4	2	-0.53	19	5
Total	52	27	-0.30	58	21	-0.29	62	17	** 0.53	54	23	-0.54	226	88

Note: p>.05 and p<=.05 columns indicate the number of parties in each country for which the paired t-test of difference in position was significant at the .05 level. "Country Mean" indicates the difference of means for all parties in the country, with ** indicating significance at the p<=.05 level and * indicating .05<p<=.10 level.

Figure 5. Kernel density estimates of differences in policy positions, pooled across countries and parties.

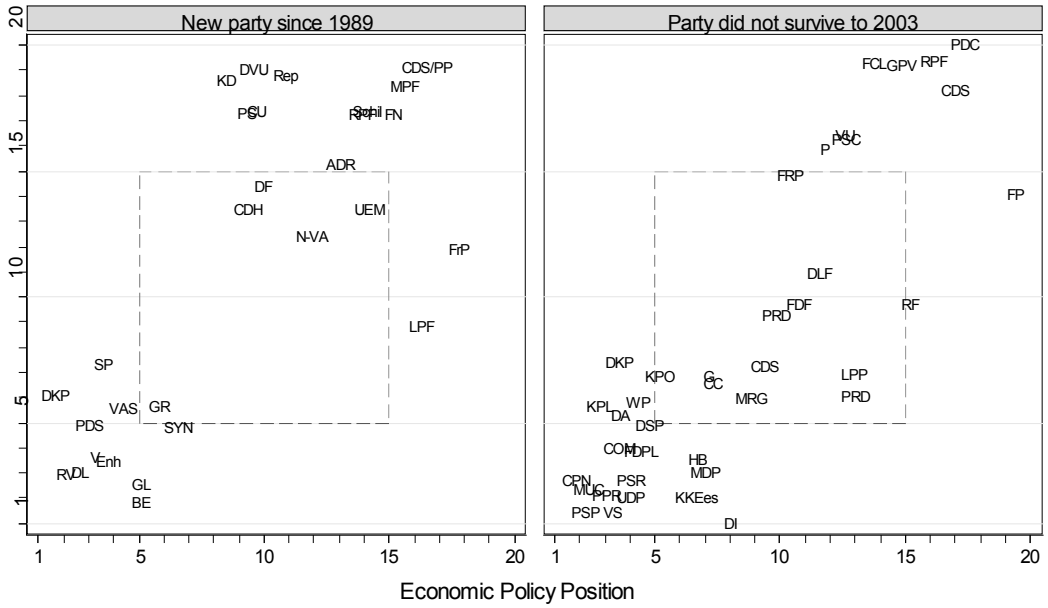


A final way of interpreting shifts in policy positions can be seen in Figure 5, which shows kernel density estimates that summarize all changes in the positions of Western European survivor parties between 1989 and 2003, across all countries. Figure 5 depicts the distribution of positive (shifts to the right) and negative (shifts leftward) changes for all parties and countries examined. The results show that changes to the left and right were more or less balanced for the economic and decentralization dimensions, yet slight net shifts to the right were observed on the social and environmental policy dimensions.

Party births and deaths

Most of the preceding analyses of changing party positions have, for obvious reasons, concerned parties competing in both 1989 and 2003, for which *changing* policy positions can be measured. However it is also important to look at the locations in the policy space where new parties are born, and existing parties die. Figure 6a shows the policy locations of all new party births in the western European countries under investigation, between 1989 and 2003.

(a) (b)



(c)

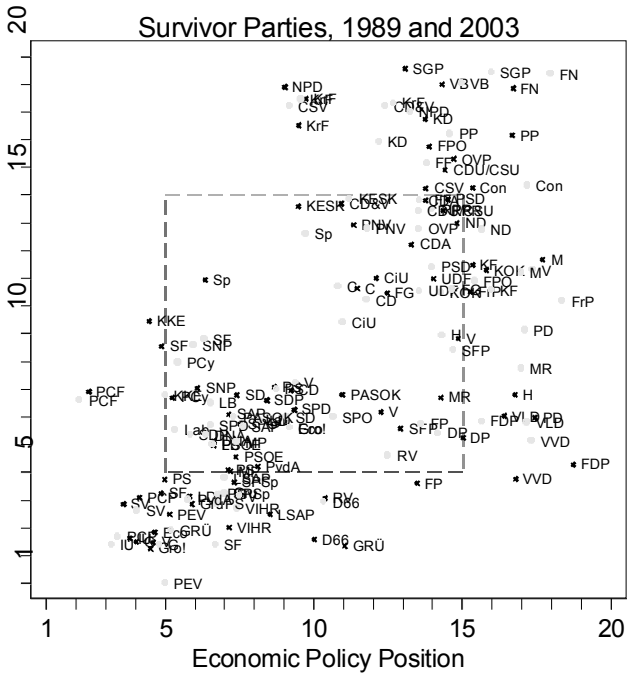


Figure 6. Policy locations of births, deaths, and survivor parties 1989-2003, in two-dimensional socioeconomic policy space.

A strong pattern emerges; there is a distinct hole in the policy center of the plot, as indicated by the significant absence of party births from the generous middle 50% region from 5 to 15 on each policy scale. In short, new party births did not occur near the center of the policy space. It is not merely that they did not *tend* to occur near the center; they did not occur *at all* near what is conventionally considered the center. This strong pattern is self-evident from simple inspection of Figure 6, but we can measure it systematically by calculating the *policy eccentricity* of each party. For any individual dimension, the policy eccentricity of a party is measured as the absolute value of the party's distance from the center of the policy scale. For any combination of dimensions, aggregate "Euclidean" policy eccentricity is the square root of the sum of the squares of these absolute values for each dimension under consideration.[7] Table 7 compares, for 2003, the policy eccentricity of survivor and new parties, and confirms the pattern that is clear from Figure 4.

Table 7: Policy eccentricity 2003, by dimension and new party status

	Mean	*SE*
Economic policy		
Party competed in 1989	3.81	0.23
New party since 1989	4.46	0.49
Social policy*		
Party competed in 1989	4.67	0.26
New party since 1989	5.83	0.42
Environmental policy		
Party competed in 1989	3.55	0.27
New party since 1989	4.07	0.42
Decentralization policy		
Party competed in 1989	3.02	0.23
New party since 1989	2.64	0.36
Euclidean socio-economic policy**		
Party competed in 1989	6.39	0.25
New party since 1989	7.77	0.42

**One-tailed difference of group means test significant at better than 0.05*
*** One-tailed difference of group means test significant at better than 0.01*

[7] The City Block eccentricity would simply sum these absolute values across dimensions. Both Euclidean and City-Block measures of party policy eccentricity were calculated, but the difference between them is not notable in this context.

The bottom rows of Table 7 show Euclidean *socio-economic* policy eccentricity – thereby measuring parties' Euclidean distances from the center of the policy space shown in Figure 6a. The difference between new and survivor parties is both notable and statistically significant. New parties do tend systematically to be born in positions further from the center of the policy space. The other rows of Table 7 show that this pattern arises almost entirely from the fact that new parties tend to adopt more extreme policies on the liberal-conservative dimension. New parties are somewhat more extreme than survivor parties on economic and environmental policy, but the differences are not statistically significant. But new parties are significantly more extreme than survivor party on the liberal-conservative dimension.

Table 8: Policy eccentricity 1989, by dimension and party survival status

	Mean	*SE*
Economic policy*		
Party survived to 2003	3.82	0.23
Party did not survive to 1989	4.61	0.42
Social policy		
Party survived to 2003	4.31	0.28
Party did not survive to 1989	5.82	0.42
Environmental policy		
Party survived to 2003	3.50	0.30
Party did not survive to 1989	3.39	0.45
Decentralization policy		
Party survived to 2003	3.24	0.26
Party did not survive to 1989	3.35	0.41
Euclidean socio-economic policy*		
Party survived to 2003	6.18	0.26
Party did not survive to 1989	7.68	0.50

**One-tailed difference of group means test significant at better than 0.05*
*** One-tailed difference of group means test significant at better than 0.01*

A similar analysis may be performed for defunct parties, portrayed graphically in Figure 6b. In the case of parties that did not survive to 2003, the majority tended to be fairly extreme leftist parties, with smaller numbers divided between the center region and the far right. This is a less striking pattern than the picture for party births, but suggestive nonetheless. We can investigate this further by looking more formally at the mean eccentricities comparing extinct versus survivor

parties, which we provide in Table 8. This table compares the 1989 policy positions of survivor parties with those that disappeared from competition between 1989 and 2003. The bottom rows of Table 8 show a striking similarity with those of Table 7. Parties were tending to die, between 1989 and 2003, in primarily the same, more extreme, zones of the policy space in which new parties were tending to be born. The main difference between the locations of party births and the locations of party deaths was that party deaths occurred at significantly more eccentric locations on the economic policy, as well as the liberal-conservative, dimension.

Finally, as a means of comparison we can look at the distribution in two-dimensional party space of survivor parties, shown in Figure 6c. The distribution of parties is much more even, with a high population in the interior 50% region, and a fairly even distribution among more extreme "left" and "right" parties on both dimensions. (There remains, however, an interesting "hole" at precisely the policy center, perhaps indicating something about the divided nature of party politics in 2003.) Overall, in comparing the three plots from Figure 6, we observe a very distinctive pattern of party turnover. Survivor parties tend to be located closer to the center of the space, while parties tend both to die and be born at relatively more extreme positions. The compete absence of party births in the center is probably the most striking finding we report in this paper.

4. Conclusions

Our purpose in this paper has been, in the context of the conventional spatial model of party competition, to characterize changing policy spaces, and party positions in these, between 1989 and 2003. Only 14 years elapsed between the two surveys and we would not expect to find huge changes in the structure of western European policy spaces. It is also important to note that estimates based on expert surveys, as with any other measurement instrument, comprise a mixture of the underlying data "signal" in which we are interested and "noise" arising from measurement error, so that we must be careful to base our conclusions on changes that can be shown to be statistically significant. Notwithstanding this, we do find some trends: a tendency for environmental policy to become less salient; for parties' positions on environmental policy to become more highly correlated with their positions on economic policy; and for the positions of survivor parties to become less in favor of environmental protection than they were in 1989. We also note tendency for the liberal-conservative dimension to decline in importance for survivor parties, which are at the same time tending to become more liberal on this dimension. This is offset by a clear countervailing tendency for new parties to adopt less centrist positions on the liberal-conservative dimension. Relative to the other core policy dimensions, economic policy is

tending to become more important. Though there is no clear tend across western Europe for survivor parties to shift left or right on economic policy, it is indeed the case that parties with more extreme economic policy positions in 1989 were more likely to have become extinct by 2003.

Overall, the most interesting results of this comparison of western European party systems in 1989 with those in 2003 concern patterns of party births and deaths. New parties simply do not seem to be born close to the center of the policy space, while exiting parties are more likely to die off at relatively more extreme policy locations. The most distinctive pattern of change we have uncovered, therefore, is one of relative flux towards the periphery of the policy space and relative stability towards the center.

Table A1: Rotated principal components analyses of western European party positions on social, environmental and decentralization policy, 1989 and 2003

```
Principal components/correlation                  Number of obs    =       127
                                                  Number of comp.  =         2
                                                  Trace            =         4
    Rotation: (unrotated = principal)             Rho              =    0.8522

    --------------------------------------------------------------------------
      1989       |   Eigenvalue   Difference         Proportion   Cumulative
    -------------+------------------------------------------------------------
           Comp1 |      2.59282      1.77673             0.6482       0.6482
           Comp2 |      .816086       .47719             0.2040       0.8522
           Comp3 |      .338896     .0866989             0.0847       0.9370
           Comp4 |      .252197            .             0.0630       1.0000
    --------------------------------------------------------------------------

Rotated components

    ------------------------------------------------
        Variable |    Comp1     Comp2 | Unexplained
    -------------+--------------------+-------------
      MeanPosLH1 |   0.6718   -0.1058 |       .1465
      MeanPosLH2 |   0.6340   -0.0456 |       .1956
      MeanPosLH5 |   0.3762    0.4370 |       .1931
     MeanPosLH12 |  -0.0722    0.8921 |      .05588
    ------------------------------------------------


Principal components/correlation                  Number of obs    =       121
                                                  Number of comp.  =         2
                                                  Trace            =         4
    Rotation: (unrotated = principal)             Rho              =    0.8447

    --------------------------------------------------------------------------
       Component |   Eigenvalue   Difference         Proportion   Cumulative
    -------------+------------------------------------------------------------
           Comp1 |      2.39308       1.4072             0.5983       0.5983
           Comp2 |       .98588       .52411             0.2465       0.8447
           Comp3 |       .46177      .302504             0.1154       0.9602
           Comp4 |      .159266            .             0.0398       1.0000
    --------------------------------------------------------------------------


Rotated components

    ------------------------------------------------
        Variable |    Comp1     Comp2 | Unexplained
    -------------+--------------------+-------------
      MeanPosBL1 |   0.6200   -0.2136 |       .1497
      MeanPosBL2 |   0.5226    0.0915 |       .3282
      MeanPosBL5 |   0.5852    0.1517 |       .1255
     MeanPosBL12 |  -0.0043    0.9607 |      .01763
    ------------------------------------------------
```

Table A2: OLS regressions predicting 2003 parties' policy positions from their 1989 positions, by dimension

-> Dimension = Taxes v. Spending

```
Linear regression                                      Number of obs =      79
                                                       F(  1,    77) =  411.62
                                                       Prob > F      =  0.0000
                                                       R-squared     =  0.7937
                                                       Root MSE      =  1.9779

------------------------------------------------------------------------------
             |               Robust
   MeanPosBL |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
   MeanPosLH |   .8880957   .0437735    20.29   0.000     .8009316    .9752598
       _cons |   .8961042   .5427219     1.65   0.103    -.1845932    1.976802
------------------------------------------------------------------------------
```

-> Dimension = Social

```
Linear regression                                      Number of obs =      79
                                                       F(  1,    77) =  889.84
                                                       Prob > F      =  0.0000
                                                       R-squared     =  0.9008
                                                       Root MSE      =  1.6117

------------------------------------------------------------------------------
             |               Robust
   MeanPosBL |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
   MeanPosLH |   .9804595    .032868    29.83   0.000     .9150109    1.045908
       _cons |  -.1017303   .3518718    -0.29   0.773    -.8023965    .5989359
------------------------------------------------------------------------------
```

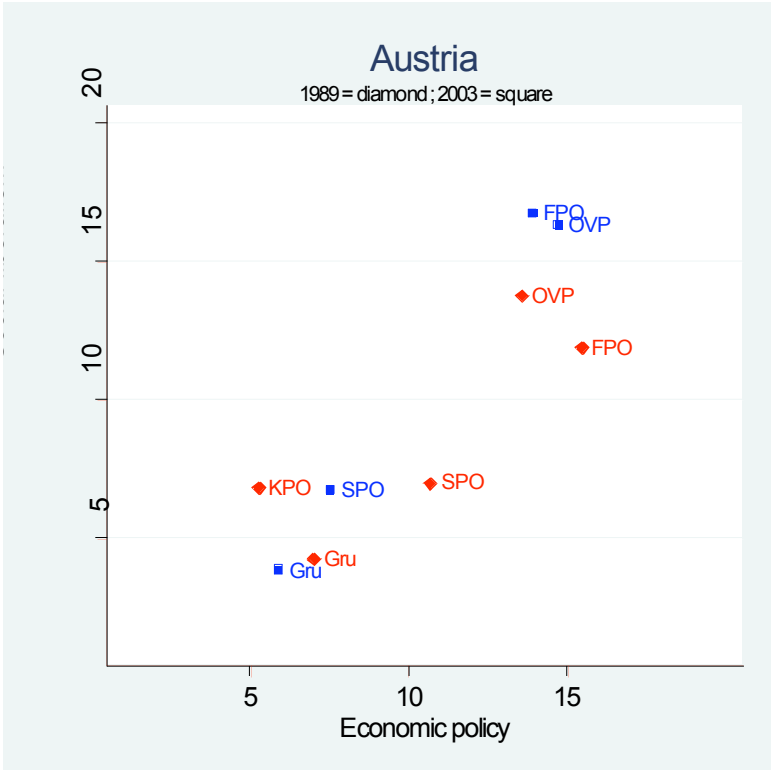
-> Dimension = Environment

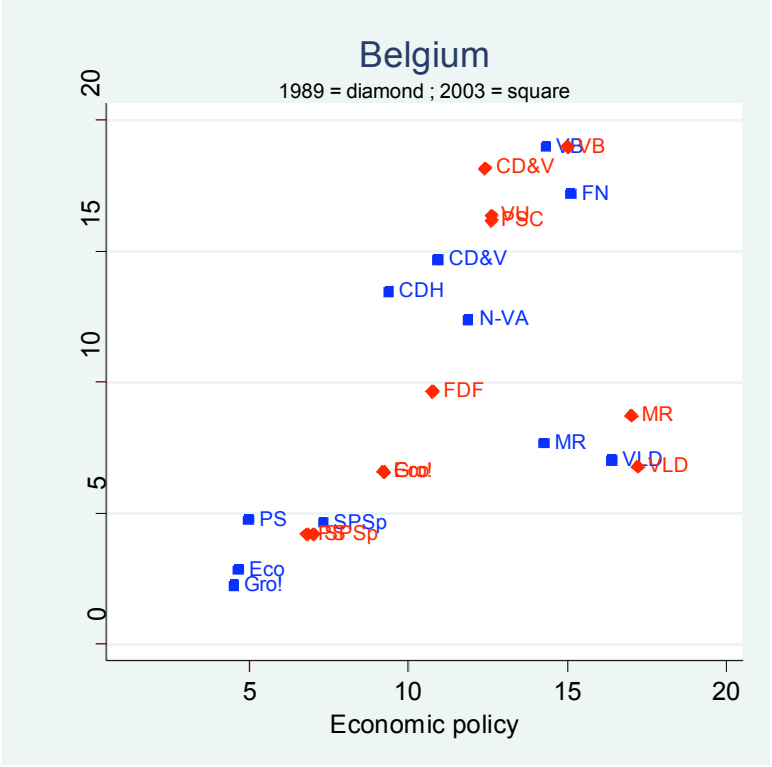
```
Linear regression                                      Number of obs =      79
                                                       F(  1,    77) =  805.27
                                                       Prob > F      =  0.0000
                                                       R-squared     =  0.8522
                                                       Root MSE      =  1.6724

------------------------------------------------------------------------------
             |               Robust
   MeanPosBL |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
   MeanPosLH |   .9115771   .0321234    28.38   0.000     .8476112    .9755429
       _cons |   1.415789   .3403115     4.16   0.000     .7381422    2.093436
------------------------------------------------------------------------------
```

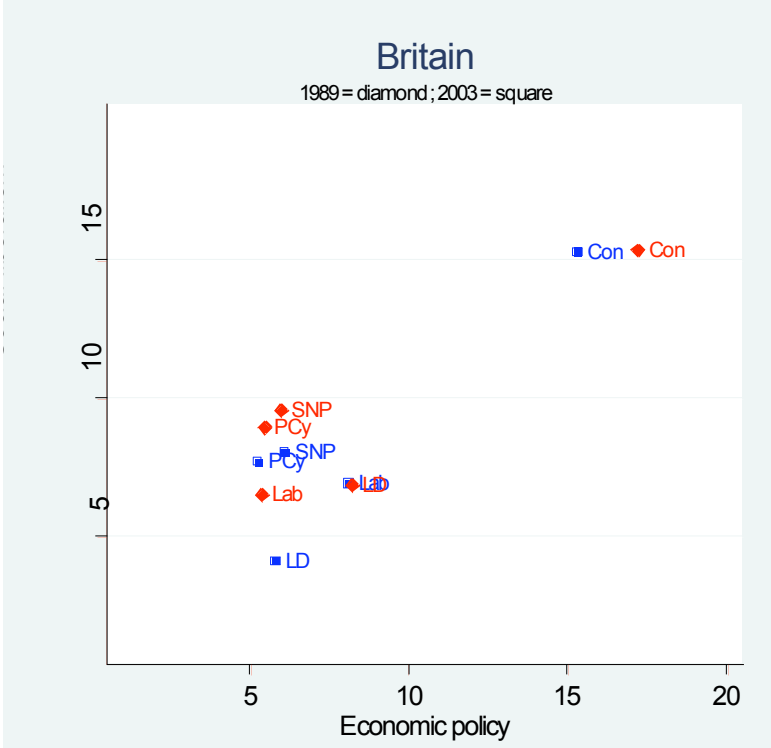
-> Dimension = Decentralization

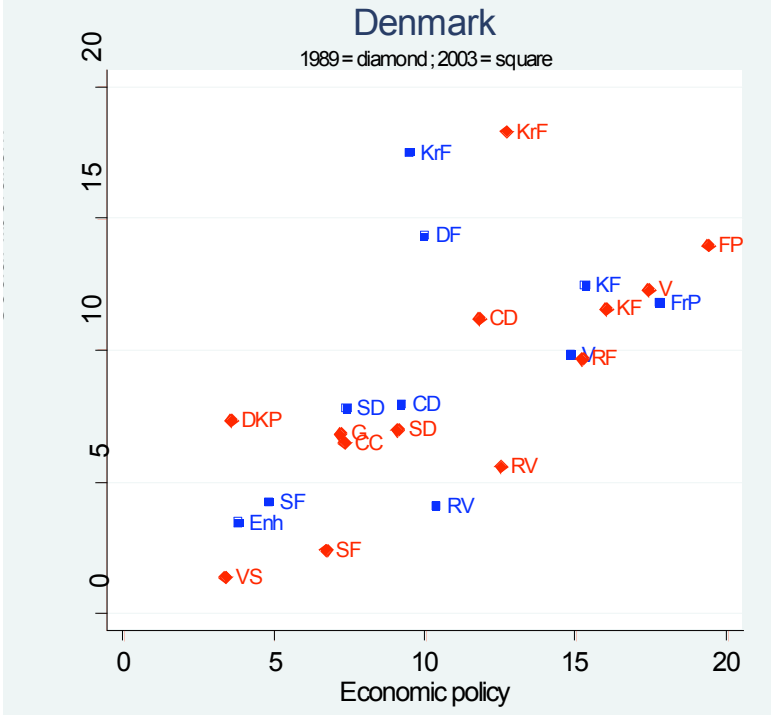
```
Linear regression                                      Number of obs =      78
                                                       F(  1,    76) =   41.20
                                                       Prob > F      =  0.0000
                                                       R-squared     =  0.4096
                                                       Root MSE      =  2.4868

------------------------------------------------------------------------------
             |               Robust
   MeanPosBL |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
   MeanPosLH |   .5392191   .0840021     6.42   0.000     .3719143    .7065238
       _cons |   3.742219   .8254051     4.53   0.000     2.098282    5.386155
------------------------------------------------------------------------------
```

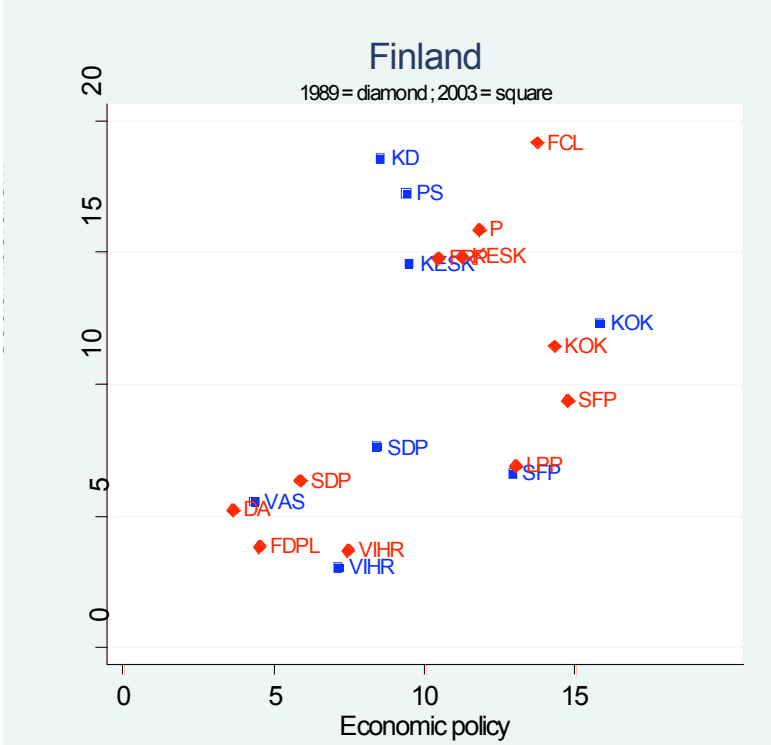
APPENDIX B1: Overlaid party policy positions, 1989 and 2003

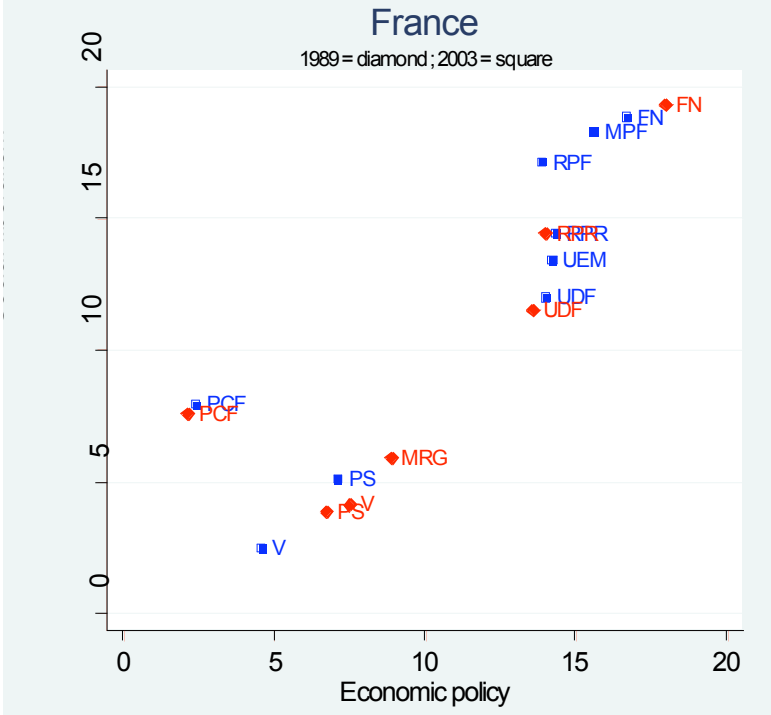


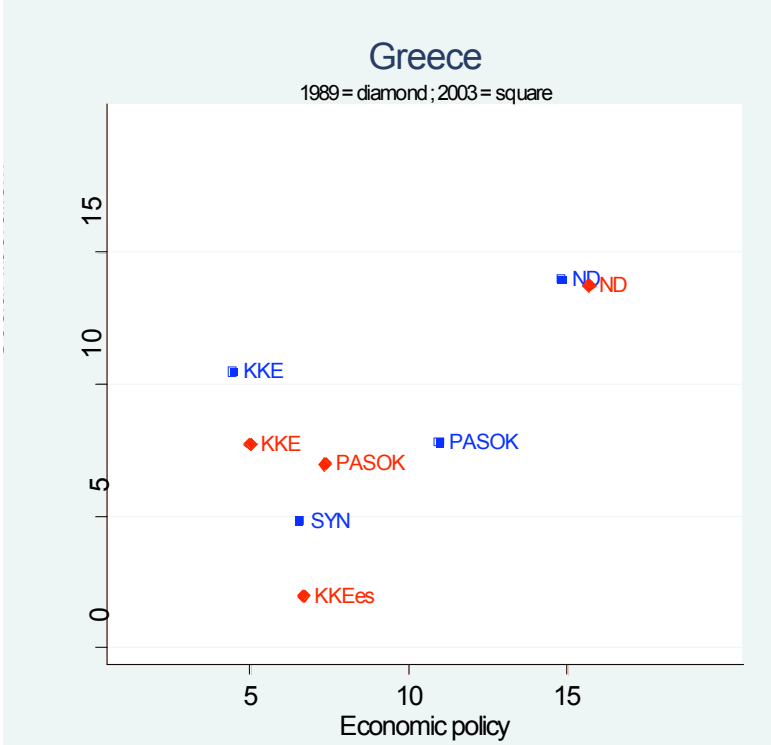


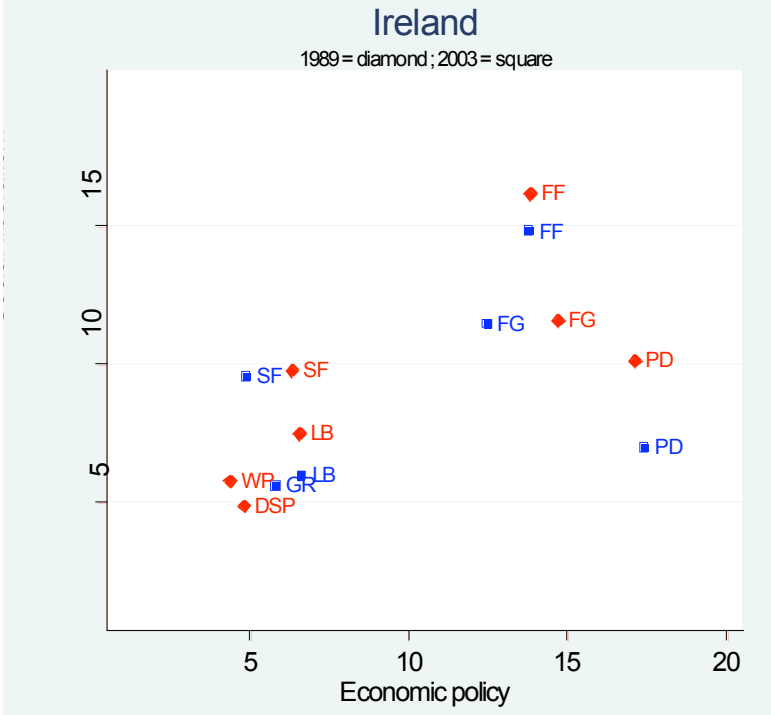

Britain
1989 = diamond ; 2003 = square
Con
Con
SNP
PCy
SNP
PCy
Lab
Lab
LD
5
10
15
5
10
15
20
Economic policy

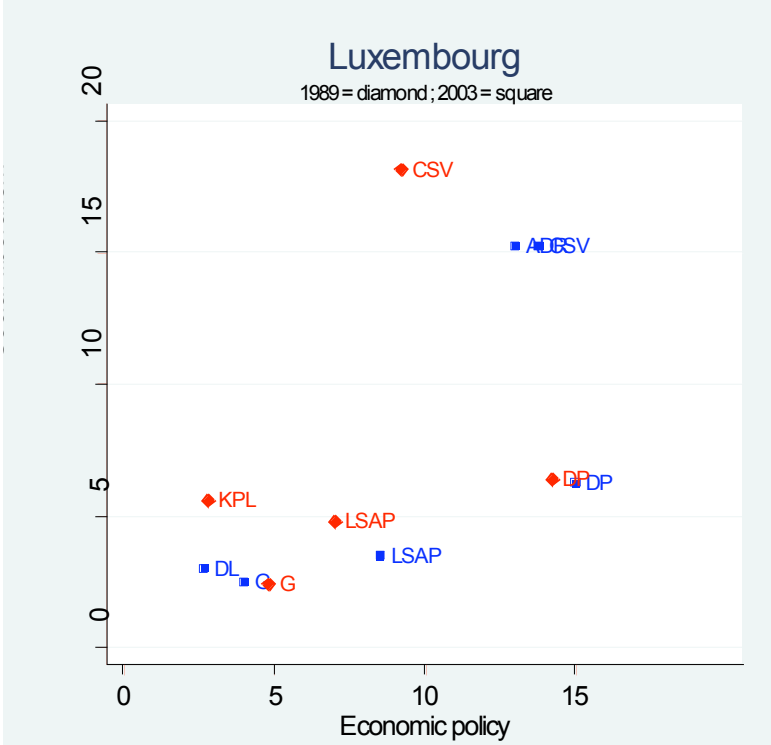

Denmark
1989 = diamond ; 2003 = square
KrF
KrF
DF
FP
KF
V
KF
FrP
CD
VRF
SD
CD
DKP
SD
CC
RV
SF
RV
Enh
SF
VS
0
5
10
15
20
0
5
10
15
20
Economic policy

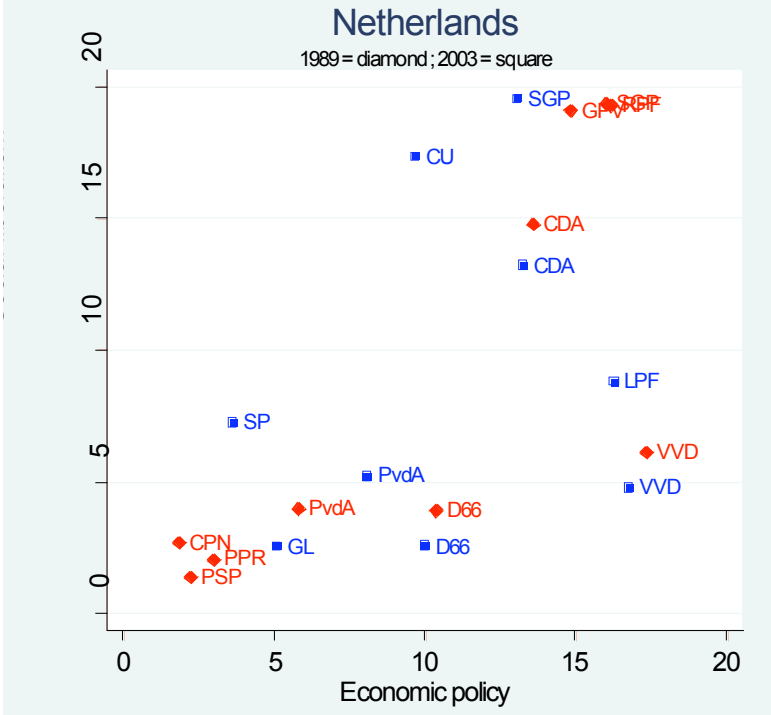

Finland
1989 = diamond ; 2003 = square
FCL
KD
PS
P
KESK
KOK
KOK
SFP
SDP
SDP
VAS
FDPL
VIHR
VIHR
0
5
10
15
20
Economic policy

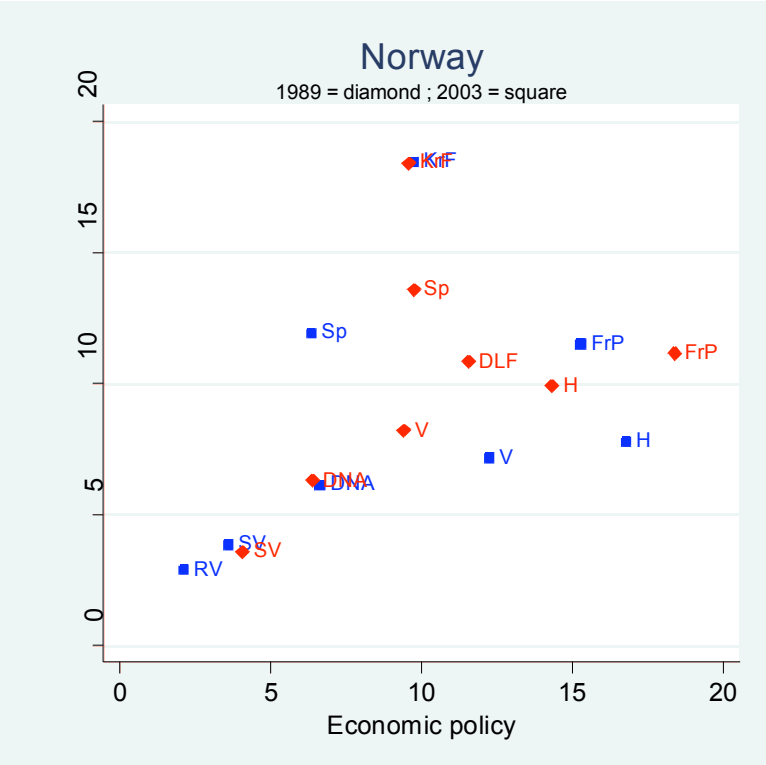

France
1989 = diamond ; 2003 = square
FN
EN
MPF
RPF
UEM
UDF
UDF
PCF
PCF
MRG
PS
V
V
0
5
10
15
20
Economic policy

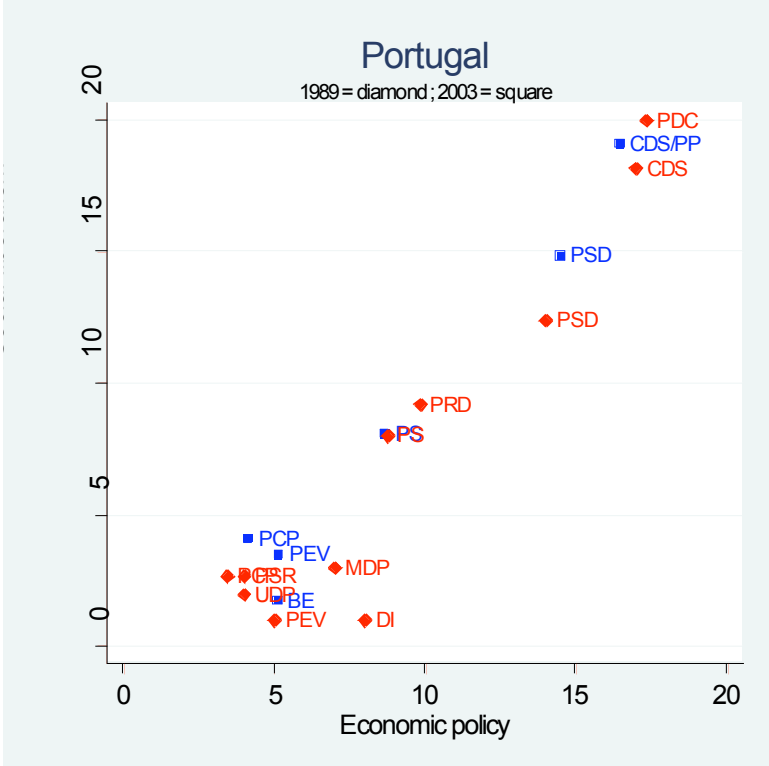

Greece
1989 = diamond ; 2003 = square
ND
ND
KKE
KKE
PASOK
PASOK
SYN
KKEes
0
5
10
15
5
10
15
Economic policy

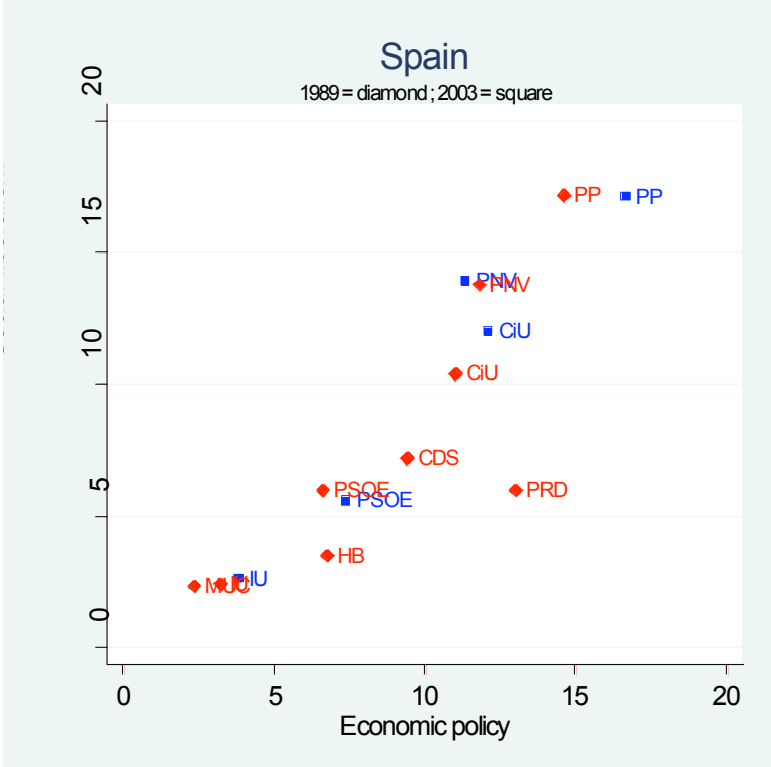

Ireland
1989 = diamond ; 2003 = square
FF
FF
FG
FG
PD
SF
SF
LB
PD
WP
GR
LB
DSP
5
10
15
5
10
15
20
Economic policy

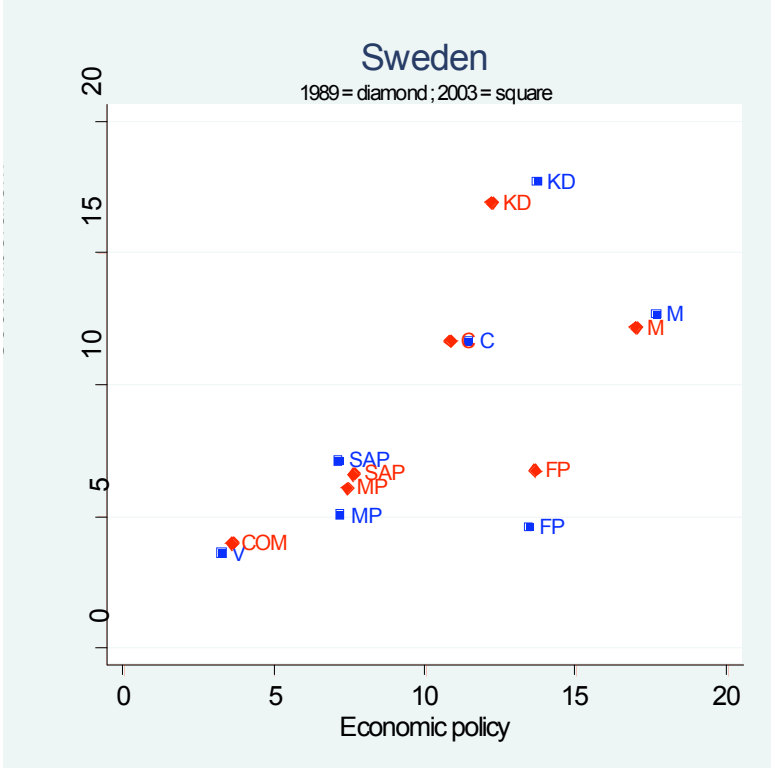

Luxembourg
1989 = diamond ; 2003 = square
CSV
KPL
LSAP
LSAP
DL
G
0
5
10
15
20
Economic policy


Netherlands
1989 = diamond ; 2003 = square
SGP
CU
CDA
CDA
LPF
SP
VVD
PvdA
VVD
PvdA
D66
CPN
PPR
GL
D66
PSP
0
5
10
15
20
Economic policy

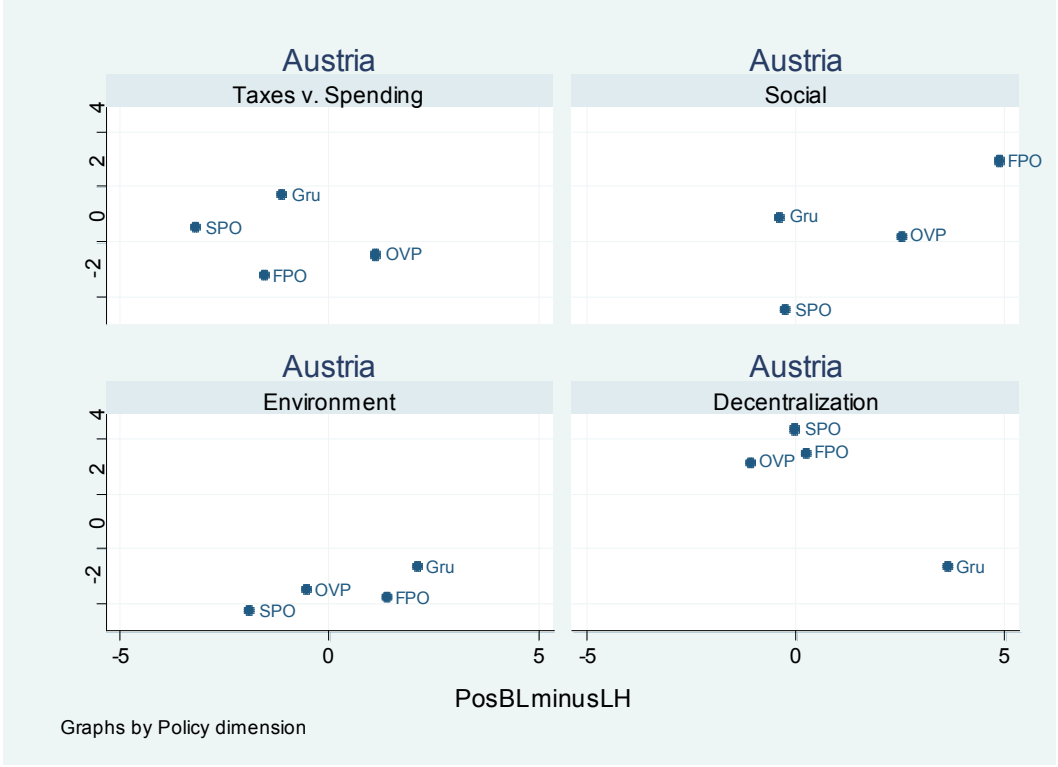

Norway
1989 = diamond ; 2003 = square
Sp
Sp
FrP
FrP
DLF
H
V
H
V
DNA
SV
SV
RV
0
5
10
15
20
Economic policy

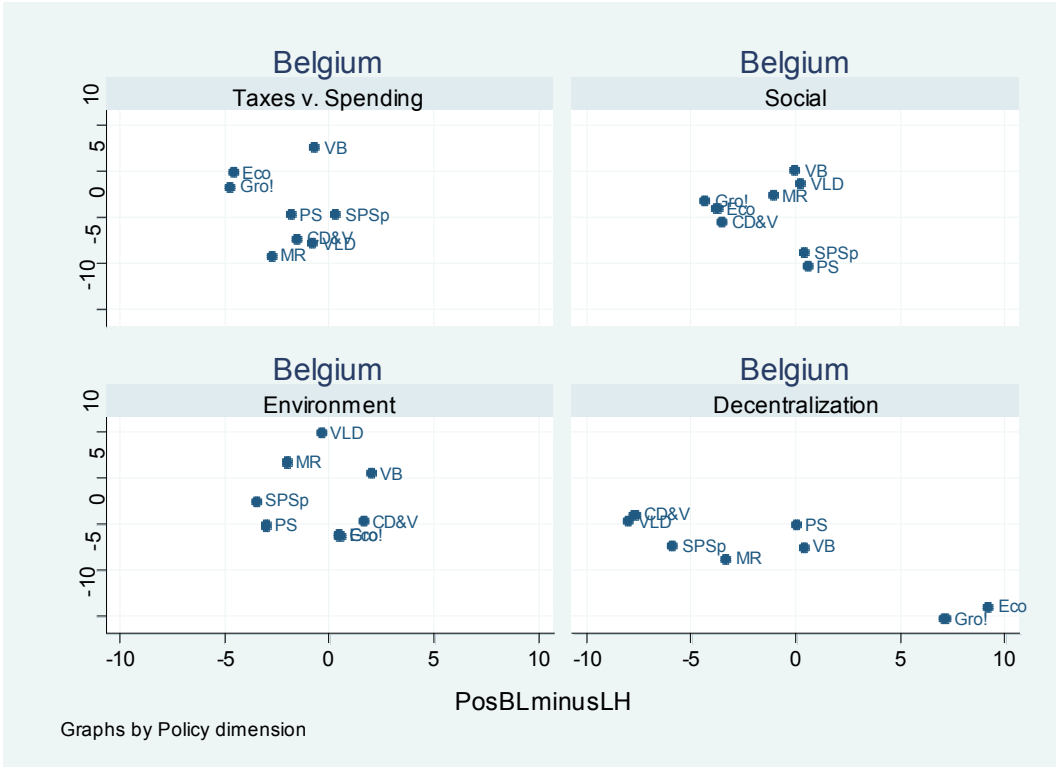

Portugal
1989 = diamond ; 2003 = square
PDC
CDS/PP
CDS
PSD
PSD
PRD
PCP
PEV
MDP
UDP
BE
PEV
DI
0
5
10
15
20
Economic policy

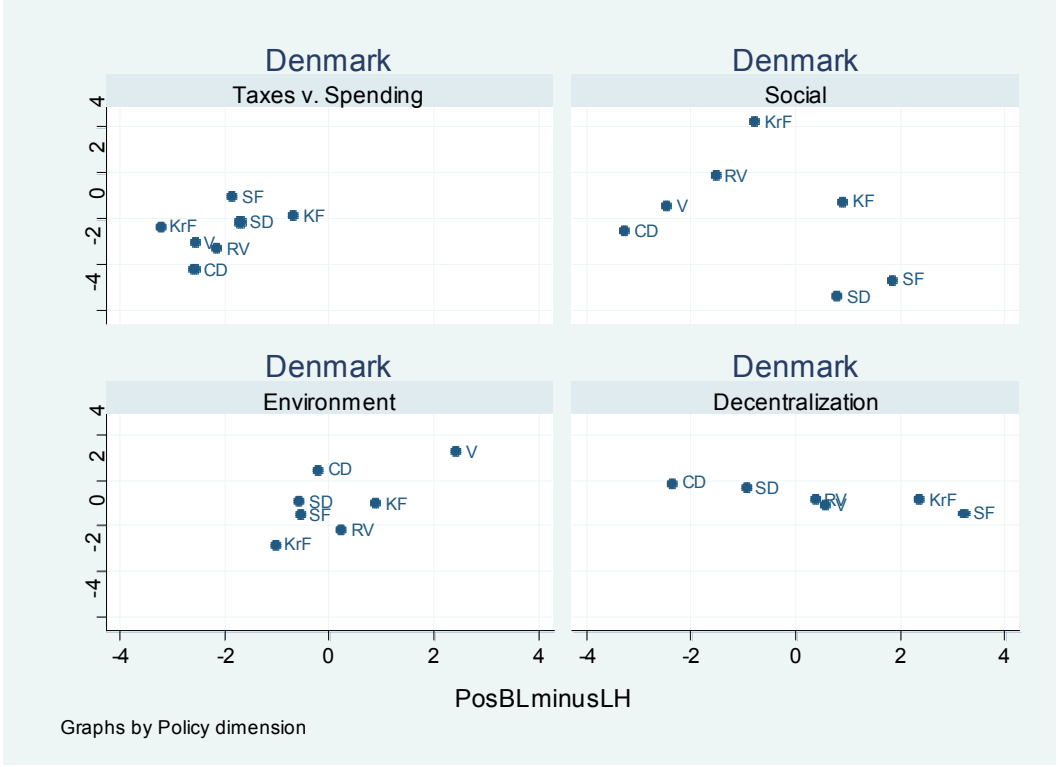

Spain
1989 = diamond ; 2003 = square
PP
PP
PNV
PNV
CiU
CiU
CDS
PSOE
PSOE
PRD
HB
IU
0
5
10
15
20
Economic policy

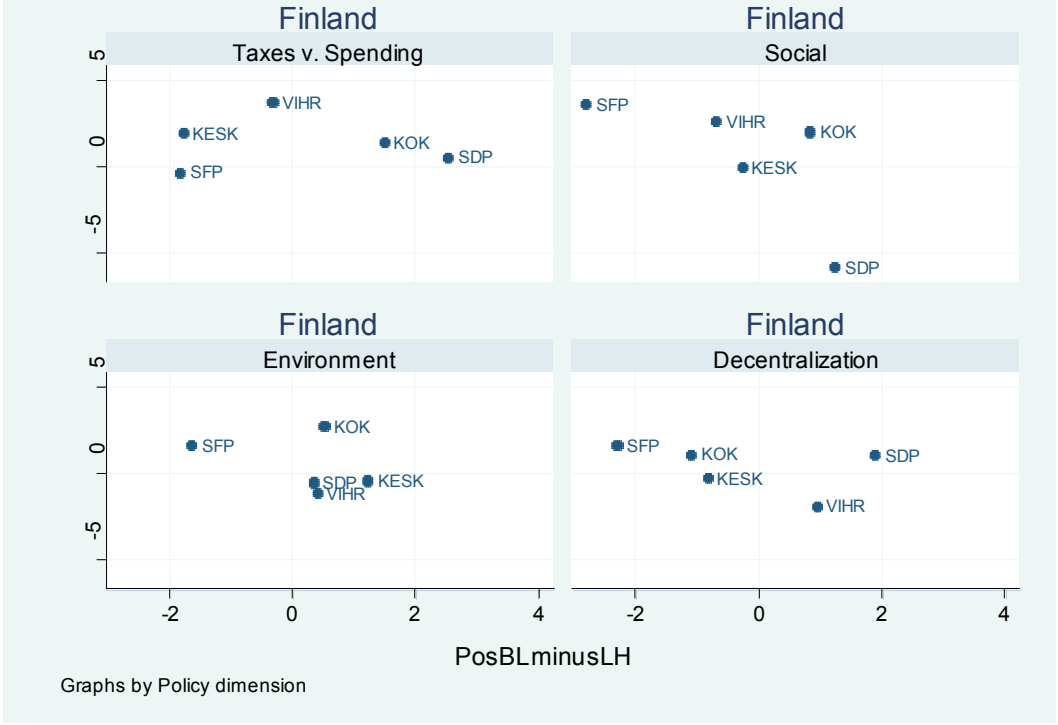

Sweden
1989 = diamond ; 2003 = square
KD
KD
M
M
C
SAP
SAP
MP
MP
FP
FP
COM
V
0
5
10
15
20
Economic policy

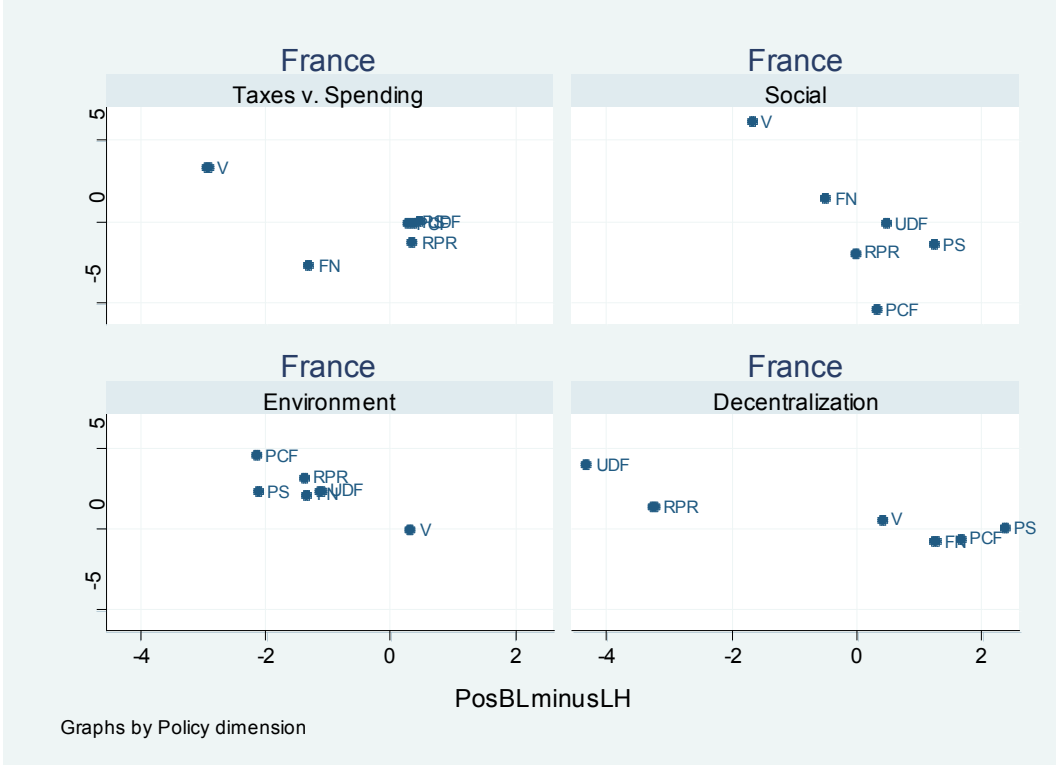
APPENDIX B2: Changes in party policy position and dimension weighting, by dimension, 1989 and 2003

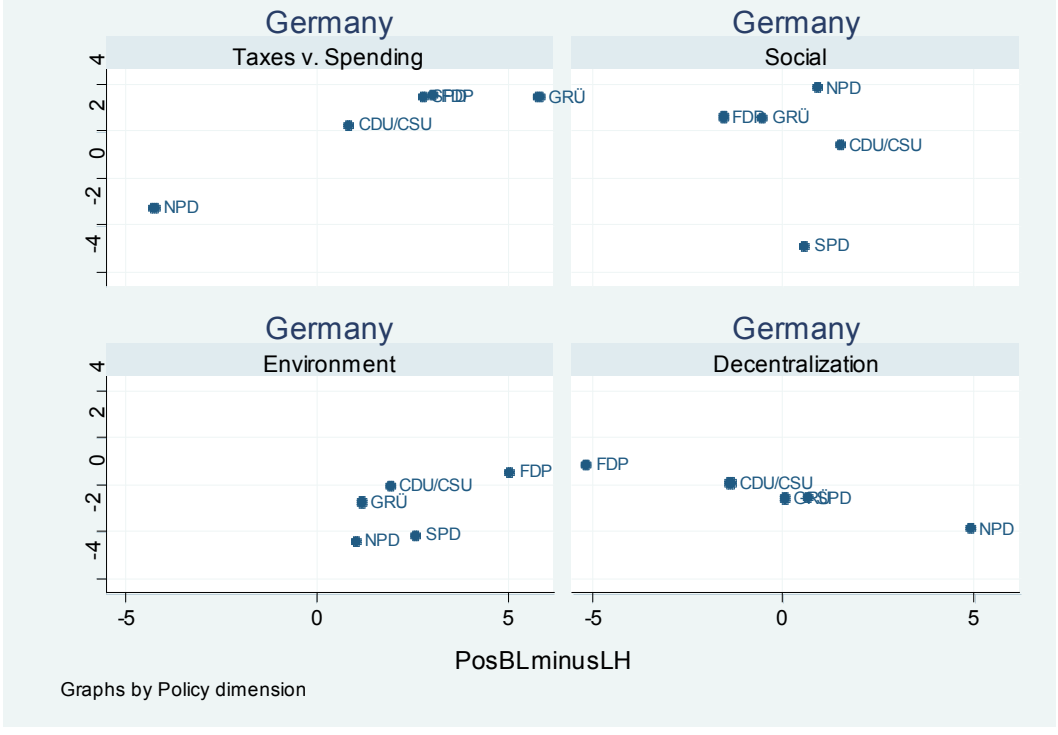


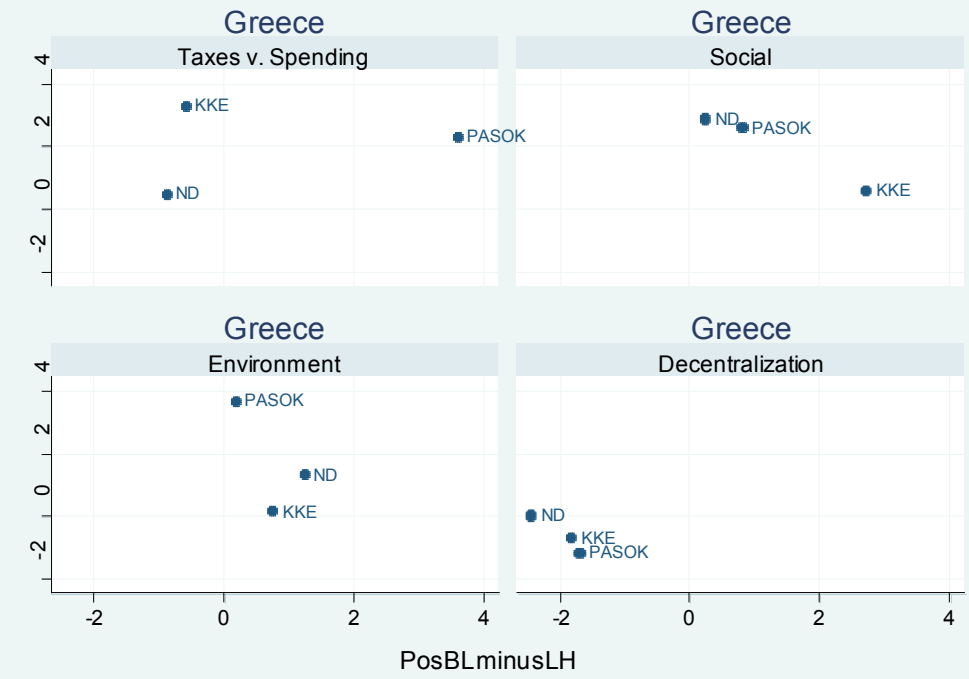


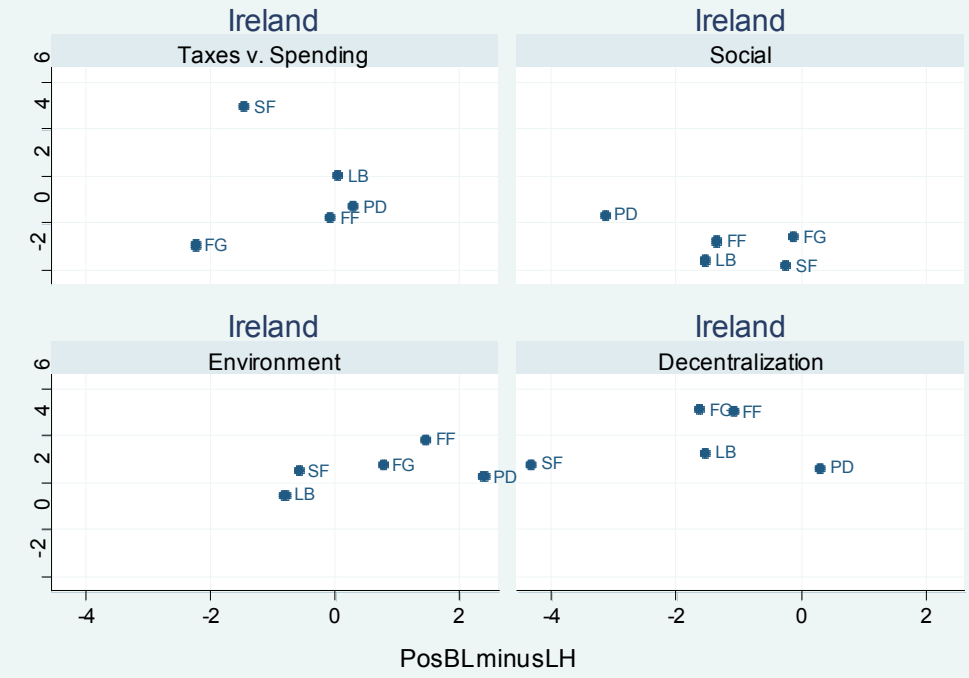

Denmark
Taxes v. Spending
Denmark
Social
Denmark
Environment
Denmark
Decentralization
SF
KF
KrF
SD
V
RV
CD
PosBLminusLH
Graphs by Policy dimension

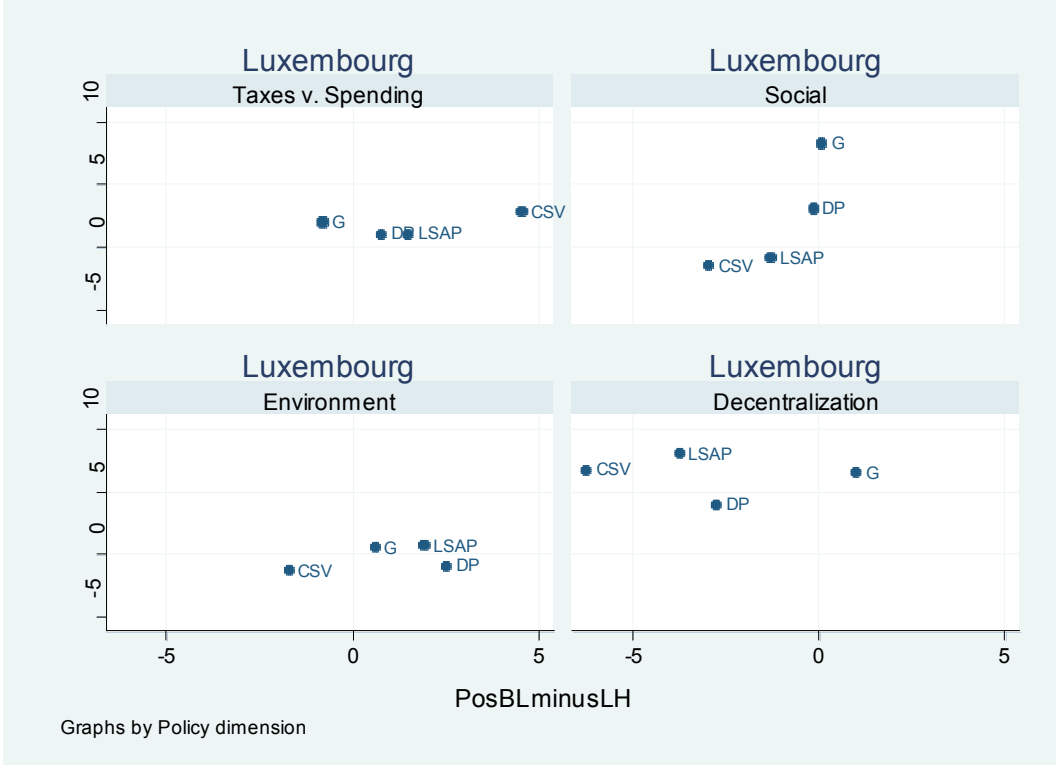

Finland
Taxes v. Spending
Finland
Social
Finland
Environment
Finland
Decentralization
VIHR
KESK
KOK
SDP
SFP
PosBLminusLH
Graphs by Policy dimension

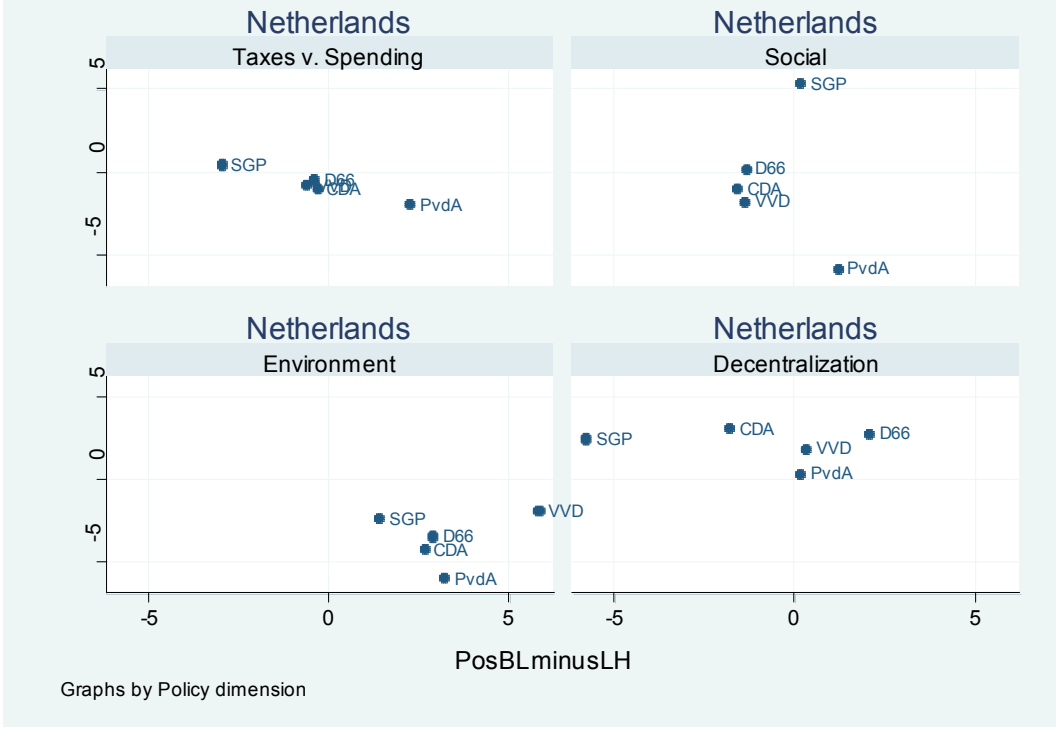

France
Taxes v. Spending
France
Social
France
Environment
France
Decentralization
V
FN
RPR
PCF
UDF
PS
-4
-2
0
2
-5
0
5
PosBLminusLH
Graphs by Policy dimension

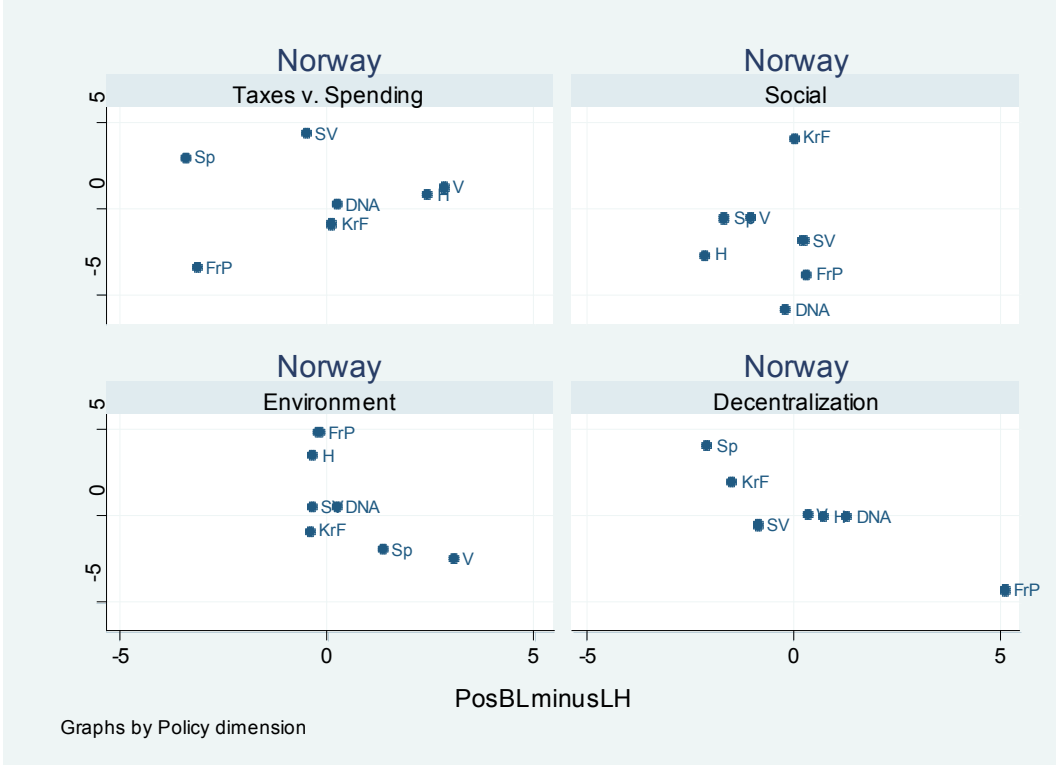

Germany
Taxes v. Spending
Germany
Social
Germany
Environment
Germany
Decentralization
GRÜ
CDU/CSU
NPD
FDP
SPD
-5
0
5
-4
-2
0
2
4
PosBLminusLH
Graphs by Policy dimension

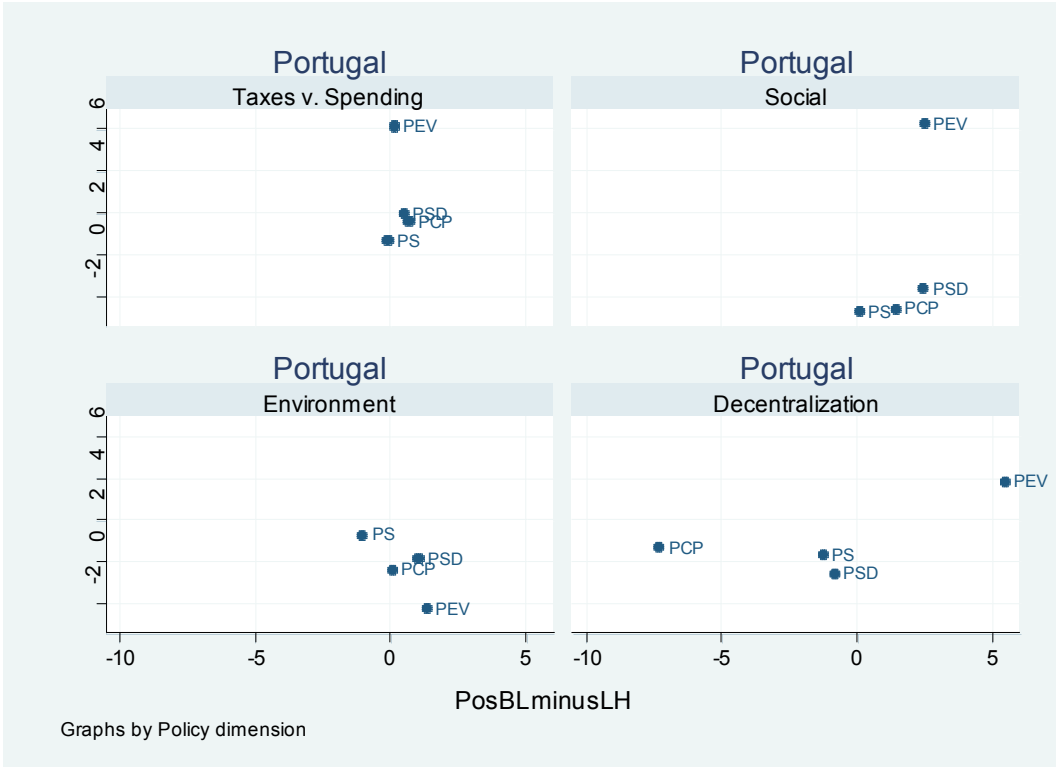

Greece
Taxes v. Spending
KKE
PASOK
ND
Greece
Social
ND
PASOK
KKE
Greece
Environment
PASOK
ND
KKE
Greece
Decentralization
ND
KKE
PASOK
PosBLminusLH
Graphs by Policy dimension

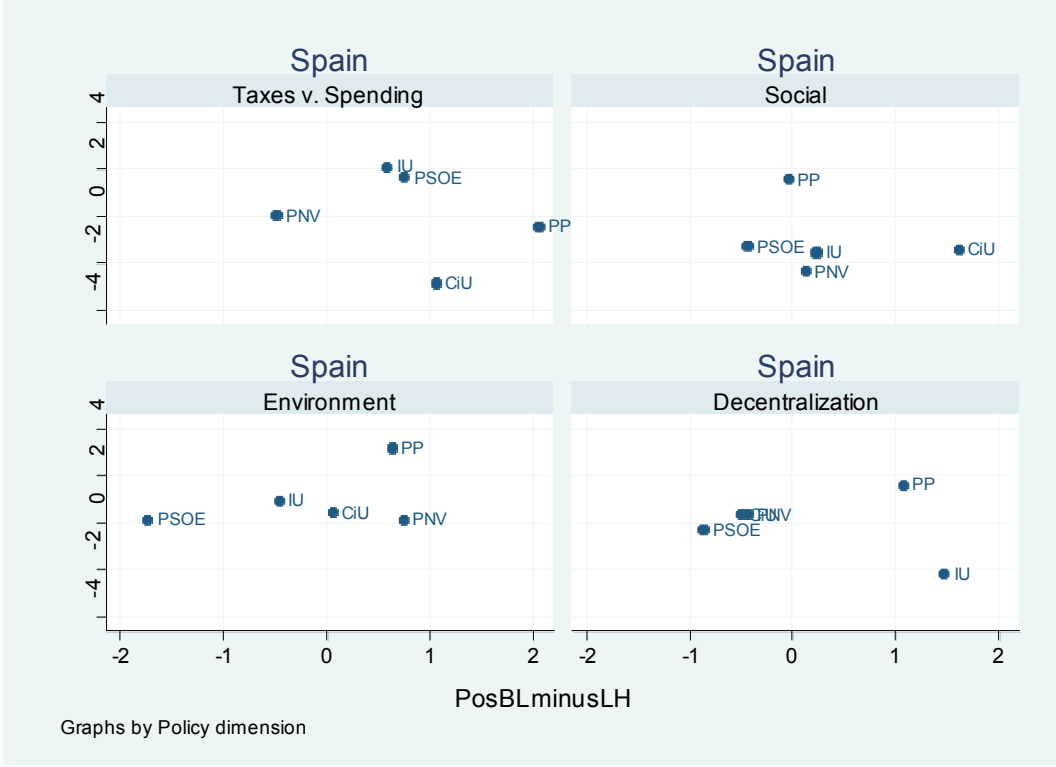

Ireland
Taxes v. Spending
SF
LB
PD
FF
FG
Ireland
Social
PD
FF
FG
LB
SF
Ireland
Environment
FF
SF
FG
PD
LB
Ireland
Decentralization
FG
FF
LB
SF
PD
PosBLminusLH
Graphs by Policy dimension

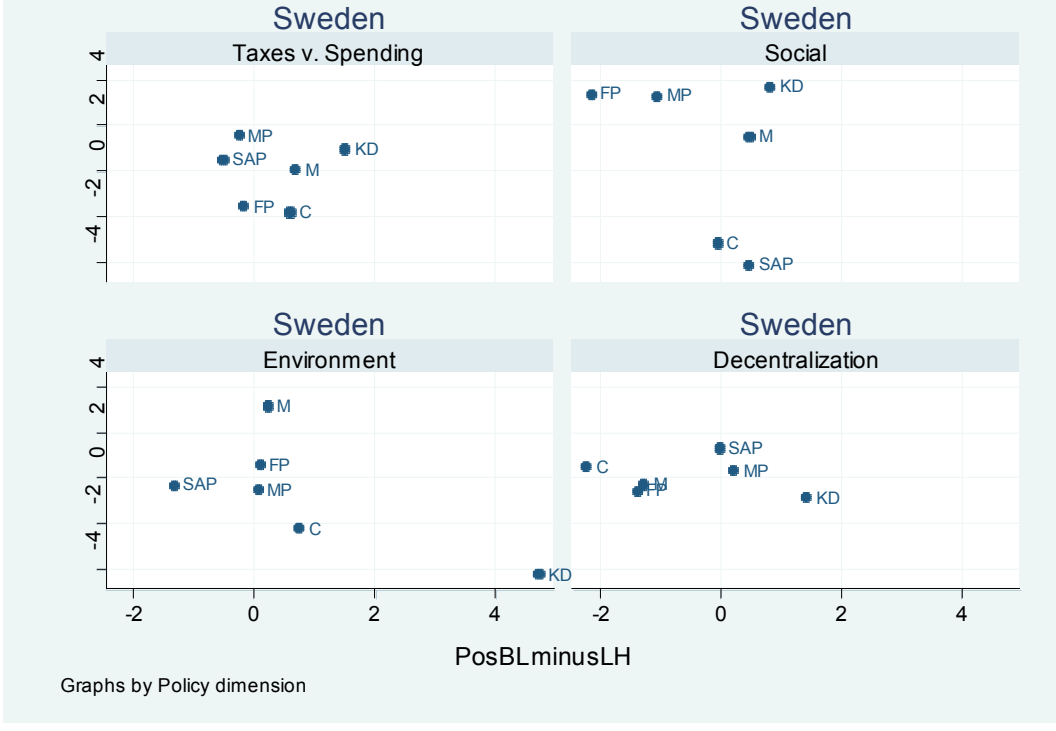

Luxembourg
Taxes v. Spending
Luxembourg
Social
Luxembourg
Environment
Luxembourg
Decentralization
G
CSV
DP
LSAP
10
5
0
-5
-5
0
5
PosBLminusLH
Graphs by Policy dimension


Netherlands
Taxes v. Spending
Netherlands
Social
Netherlands
Environment
Netherlands
Decentralization
SGP
D66
CDA
VVD
PvdA
5
0
-5
-5
0
5
PosBLminusLH
Graphs by Policy dimension


Norway
Taxes v. Spending
Norway
Social
Norway
Environment
Norway
Decentralization
SV
Sp
V
DNA
KrF
FrP
H
KrF
SV
V
H
FrP
DNA
FrP
H
SV
DNA
KrF
Sp
V
Sp
KrF
SV
V
H
DNA
FrP
5
0
-5
-5
0
5
PosBLminusLH
Graphs by Policy dimension


Portugal
Taxes v. Spending
Portugal
Social
Portugal
Environment
Portugal
Decentralization
PEV
PSD
PCP
PS
PEV
PSD
PS
PCP
PS
PSD
PCP
PEV
PCP
PS
PSD
PEV
6
4
2
0
-2
-10
-5
0
5
PosBLminusLH
Graphs by Policy dimension


Spain
Taxes v. Spending
Spain
Social
Spain
Environment
Spain
Decentralization
IU
PSOE
PNV
PP
CiU
PosBLminusLH
Graphs by Policy dimension


Sweden
Taxes v. Spending
Sweden
Social
Sweden
Environment
Sweden
Decentralization
MP
SAP
KD
M
FP
C
PosBLminusLH
Graphs by Policy dimension

References

Benoit, Kenneth, and Michael Laver. 2006. *Party Policy in Modern Democracies*. London: Routledge.

Laver, Michael, and W. Ben Hunt. 1992. *Policy and party competition*. New York: Routledge.