Changes in European voting patterns: is the new left-right dimension becoming more important, and why?

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- At the same time, a greater share of the rhethoric is focused around such issues as human rights, morality, law and order, or environmental protection.

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Is it because the preferences of the voters change with time?

The following three hypotheses can then be tested:

Hypothesis 1. The salience (or importance to voters) of different ideological dimensions varies over time; in particular, the importance of economic left-right dimension decreases, while the importance of the authority vs. liberty dimension increases over time.

Hypothesis 2. At any moment of time, the economic left-right dimension is more salient for older voters.

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Estimate a series of multinomial choice models based on mass survey data.

For that we need to produce a measure of ideological positions for both voters and political parties.

Extracting the ideological positions of political parties from the CMP data.

- The CMP project keeps track party policy mainfestos for a number of countries over a period of time.

- The unit of analysis is a party policy manifesto, usually produced in an election year.

- 56 issues, grouped into seven "policy domains"

- Each issue reflects a party's concern with some specific policy area and with direction of such policy.

- Example: If a manifesto sencence is coded as issue per202 ("democracy"), then it is deemed to contain "*favorable mentions of democracy as a method or goal in national and other organizations; involvement of all citizens in decision-making, as well as generalized support of democracy in one's country*".

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Assumption 1. Each statement in a party manifesto is a statement along the old and new left-right ideological dimensions.

Assignment of ideological positions to different CMP issues.

Economic — right Free enterprise, Economy, Protectionism (negative),
Welfare state limitation, Labor groups: negative

Economic — left Market regulation, Economic planning, Protectionism
(positive), Keynesian demand management, Controlled
economy, Nationalization, Marxist analysis, Welfare state
expansion, Social justice, Labor groups (positive)

Authority National way of life (positive), Traditional morality
(positive), Law and order, Multiculturalism (negative),
Political authority, Military (positive), Internationalism
(negative)

Liberty National way of life (negative), Traditional morality
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Assumption 2a. A party manifesto is an *exact* statement of the party's position on the two ideological dimensions.

Position of party i:

$$y_i = \sum_{k=1}^{56} w_{ik} v_k, \tag{1}$$

where w_{ik} is the weight of issue k in party i's manifesto, v_k — position of issue k.

Economic — right 1 on dimension 1

Economic — left -1 on dimension 1

Authority 1 on dimension 2

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All other statements 0 on both dimensions

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Assumption 2c.

- The *relative* frequency of left and right statements on each ideological dimension depends on the party's ideological position.

- The *total* frequency of both left and right statements on each ideological dimension depends on that issue's *salience* to the party.

Example. Suppose that party X makes a total of 100 statements in its policy manifesto, including 5 leftist and 15 rightist statements on ideological dimension 1.

The policy position is $0.5 = (5 \cdot (-1) + 15 \cdot 1)/20$, the salience is $20\% = (5 + 15)/100$.

Now let there be 25 leftist and 75 rightist statements out of 100.

The policy position is $0.5 = (25 \cdot (-1) + 75 \cdot 1)/20$, the salience is $100\% = (25 + 75)/100$.

Extracting the ideological positions of political parties from the CMP data: the salience method

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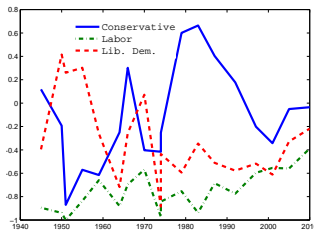
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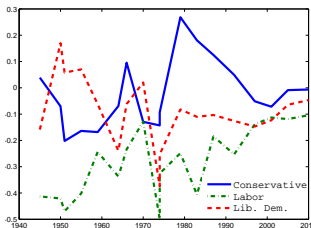
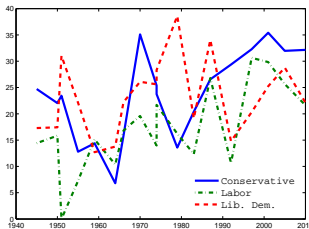# Great Britain: Economic left-right dimension.
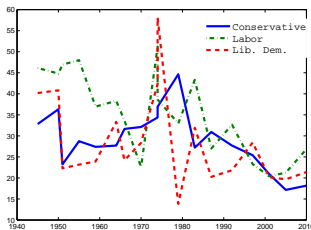
(a) Salience

(b) Position (salience)
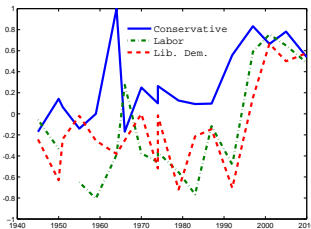

(c) Position (average)

(d) Salience

(e) Position (salience)
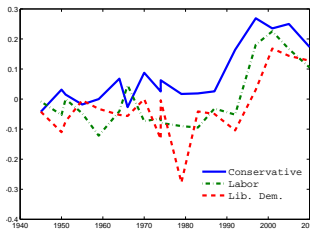
(f) Position (average)

Average salience of the two ideological dimensions for 9 European countries.
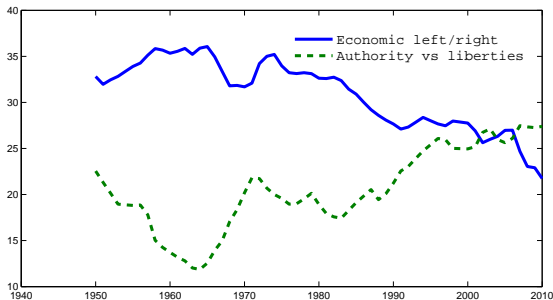
Average saliences for 5 European countries: Liberty vs. authority

- One or several surveys such as WVS can be used
- Mass survey data is not quite comparable to CMP data, as the survey questions are fixed
- For each respondent we must estimate her ideological position
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Questions e003-e004:
If you had to choose, which one of the things on this card would
you say is most important? And which would be the next most
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1. Maintaining order in the nation
2. Give people more say
3. Fighting rising prices
4. Protecting freedom of speech

Answers 1 and 3 are assigned position 1 on dimension 2.
Answers 2 and 4 are assigned position -1 on dimension 2.

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Estimating voter positions from mass survey data: The averages method

- Suppose that there are N_1 questions on first dimension, and N_2 questions on second dimension.
- Respondent i gives L_{ji} left answers and R_{ji} right answers to questions on dimension j.
- Her position on dimension j is $(R_{ji} - L_{ji})/N_j$.

Constructing a measure of respondent ideology that is consistent across several surveys is much easier said than done.

- Not all WVS waves contained all the necessary questions.
- For example, Wave 1 did not have any of the questions critical to the economic dimension.
- Data on some questions was missing. For Wave 4, the ideological positions could be constructed only for a few European countries.

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Average positions of the EVS Wave 2 respondents on the two ideology dimensions.
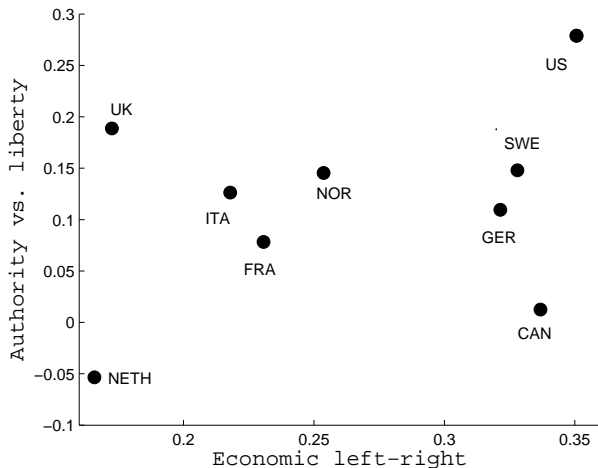
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Hypothesis testing

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The model

Let the utility of voter $i = 1, \ldots, N$, when voting for party j, be

$$u_{ij} = a_j + \alpha_j \cdot x_i + \beta_{1i}(v_{1i} - y_{1j})^2 + \beta_{2i}(v_{2i} - y_{2j})^2 + \epsilon_{ij} \equiv \bar{u}_{ij} + \epsilon_{ij}$$

- a_j — the valence parameter for party j; y_{1i}, y_{2i}— its ideological positions
- x_i — the socio-economic variables for voter i; v_{1i}, v_{2i}— her ideological positions
- α_j is a vector of parameters determining voter-specific valence
- β_{1i}, β_{2i} — the salience of two the ideological dimensions to voter i
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Let

$$\beta_{1i} = \bar{\beta}_1 + \gamma_1 g_i, \; \beta_{2i} = \bar{\beta}_2 + \gamma_2 g_i,$$

where g_i is the age of voter i.

Then, we can operationalize:

Hypothesis 2. $\gamma_1 < 0$,

Hypothesis 3. $\gamma_2 > 0$,

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$$P(\epsilon_{ij} \leq x) = e^{-e^{-x}}.$$

Let the choice set for voter i be J. The likelihood of the observed choice is then

$$L_i = \frac{e^{\bar{u}_{id_i}}}{\sum_{j \in J} e^{\bar{u}_{ij}}},$$

where d_i is the actual vote of i. The likelihood of the entire dataset will be

$$L = \prod_{i \in N} L_i.$$

The estimates of the parameters a_j, α_j, β_{1t}, and β_{2t} will be obtained through the maximization of the likelihood function L.

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$$L = \prod_{i \in N} L_i.$$

The estimates of the parameters a_j, α_j, β_{1t}, and β_{2t} will be obtained through the maximization of the likelihood function L.

I ran the regression for France, Germany, UK, Italy, Norway, Sweden, Netherlands, Canada, and US.

- γ_1 negative and significant Norway (marginally), Germany (marginally)

    γ_1 positive and significant Sweden, France, UK

- γ_2 negative and significant Canada

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The effect of change in voter's ideology on voting probabilities for UK.

	Conservative	Lib. Dem.	Labor
20-year old male, +1 sd on D1	+0.3995	+0.0001	-0.3996
70-year old male, +1 sd on D1	+0.2221	-0.0156	-0.2065
20-year old male, -1 sd on D1	-0.1733	-0.0077	0.1810
70-year old male, -1 sd on D1	-0.2038	-0.0048	0.2086
20-year old female, +1 sd on D1	+0.4025	-0.0082	-0.3944
70-year old female, +1 sd on D1	+0.1911	-0.0387	-0.1523
20-year old female, -1 sd on D1	-0.2556	-0.0121	0.2678
70-year old female, -1 sd on D1	-0.2108	0.0134	0.1974

All other covariates are fixed at mean values.

- Need data from other surveys deeper in time
- Obtaining a good measure of voter ideology from disparate, nonstandartized surveys is a formidable challenge

What can be used to predict the changes in the imporance of ideological issues?

- Inglehartian value change theory:
- Lack-of-core theory: negative autocorrelation

A number of regressions on CMP data. $N = 330$.

What can be used to predict the changes in the imporance of ideological issues?

- Inglehartian value change theory:
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A number of regressions on CMP data. $N = 330$.

year	-0,0017463 (-5,21)	0,0000882 (0,13)
pop	-4,16e-10 (-4,66)	5,71e-11 (0,14)
gdp2000_pe p	7,57e-07 (1,46)	-4,56e-06 (-2,87)
gdp_growth	0,0006212 (0,70)	0,0002827 (0,34)
gini	0,0002923 (0,48)	0,0001825 (0,26)
polity_	0,0016589 (2,86)	0,0008079 (1,26)
Country FE	No	Yes

Таблица: Dimension 1 salience

year	0,0005173 (0,48)	0,0060062 (2,52)
pop	2,15e-10 (0,75)	1,14e-09 (0,77)
gdp2000_pe p	1,44e-06 (0,86)	-0,0000114 (-2,01)
gdp_growth	-0,006107 (-2,14)	-0,0087868 (-3,00)
gini	-0,004895 (-2,49)	-0,0040587 (-1,65)
polity_	0,0012966 (0,70)	-0,0002271 (-0,10)
Country FE	No	Yes

Таблица: Dimension 1 average positions

year	-0,00278 (-4,44)	0,00057 (0,40)
pop	-9,57e-1 (-0,57)	8,97e-1 (1,01)
gdp2000_pe p	5,98e-0 (6,15)	-5,21e-0 (-1,54)
gdp_growth	-0,00264 (-1,59)	-0,00242 (-1,38)
gini	-0,00212 (-1,85)	-0,00344 (-2,34)
polity_	0,00018 (0,17)	-0,00028 (-0,21)
Country FE	No	Yes

Таблица: Dimension 1 polarization

year	0,0006735 (1,70)	0,0000246 (0,03)
pop	3,49e-10 (3,30)	7,58e-10 (1,55)
gdp2000_pe p	4,93e-07 (0,80)	1,03e-06 (0,55)
gdp_growth	-0,0036366 (-3,47)	-0,0032271 (-3,34)
gini	0,0016877 (2,33)	0,000628 (0,77)
polity_	-0,0034702 (-5,06)	-0,0031255 (-4,15)
Country FE	No	Yes

Таблица: Dimension 2 salience

year	0,0152154 (12,13)	0,014707 (5,71)
pop	3,41e-10 (1,02)	-3,79e-09 (-2,37)
gdp2000_pe p	-8,64e-06 (-4,45)	-2,38e-06 (-0,39)
gdp_growth	0,0088784 (2,67)	0,008918 (2,81)
gini	0,0071246 (3,11)	0,006613 (2,48)
polity_	0,0047064 (2,17)	-0,0008587 (-0,35)
Country FE	No	Yes

Таблица: Dimension 2 average positions

year	-0,001801 (-2,76)	0,0007784 (0,54)
pop	-3,59e-10 (-2,07)	-8,22e-10 (-0,92)
gdp2000_pe p	2,89e-06 (2,87)	-3,34e-06 (-0,97)
gdp_growth	-0,0000267 (-0,02)	-0,0009773 (-0,55)
gini	-0,0015011 (-1,26)	-0,0022631 (-1,52)
polity_	0,0004815 (0,43)	0,0016114 (1,17)
Country FE	No	Yes

Таблица: Dimension 2 polarization