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

Alexei Zakharov, HSE, Moscow, Russia.

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Economic left/right: Redistribution and public goods production. Low taxes, low public goods production vs. high taxes and public goods.

Non-economic left/right: Human rights vs. authority, morality vs. personal liberty.

The goals of this work:

- Quantify the positions of political parties in a sample of countries over a period of time.
- See which factors affect the importance of economic vs. non-economic issues.

Average salience of the two ideological dimensions for 13 countries.
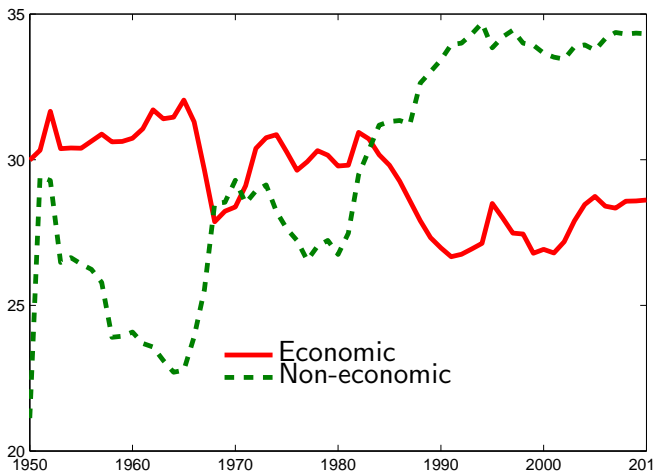
Why do party ideologies change?

- The economic vote.
- Changing preferences of the electorate: Inglehart (1990, 1997) — "value shift".
- Multi-dimensional instability — McKelvey (1976), Miller and Schofield (2003).
- Changing preferences of political actors. Wittman (1983), Aldrich (1995), Laver and Hunt (1992).
- Various other reasons: signaling, valence, etc.

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*".

Countries used in this study

Country	Years	#	Country	Years	#
Sweden	1952–2006	20	Norway	1953–2001	13
Denmark	1950–2007	22	Finland	1951–2003	15
Iceland	1953–2003	16	Belgium	1950–2003	17
Netherlands	1952–2003	16	Luxembourg	1951–1999	11
France	1951–2007	15	Italy	1953–2006	14
Spain	1977–2008	10	Greece	1974–2000	10
Germany	1972–2009	11	Austria	1953–2002	16
Switzerland	1951–2003	14	UK	1950–2005	16
Ireland	1951–2007	17	Cyprus	1996–2001	2
United States	1952–2008	15	Canada	1953–2006	18
Australia	1951–2007	23	New Zealand	1951–2008	20
Japan	1960–2003	15	Israel	1951–1999	14
Sri Lanka	1952–1977	6	Turkey	1950–2002	14
Albania	1991–2001	5	Armenia	1995–2003	3
Azerbaijan	1995-2000	2	Belarus	1995	1
Bosnia	1990-2002	5	Bulgaria	1990-2009	7
Croatia	1990-2007	6	Czech rep.	1990–2002	5
Portugal	1975–2009	13	Estonia	1992-2003	4
Georgia	1995–2004	3	Hungary	1990–2002	4
Latvia	1993–2002	4	Lithuania	1996–2000	2
Macedonia	1990-2002	4	Moldova	1994–2005	4
Montenegro	1990–2002	5	Poland	1991–2007	6
Romania	1990–2008	6	Russia	1993–2007	5
Slovakia	1990–2006	6	Slovenia	1990–2008	6
Ukraine	1994–2007	5	Korea	1992–2008	5
Mexico	1952–2000	18			

- Budge and Robertson (1987), Bartolini and Maier (1990), and Laver and Budge (1992): one-dimensional scales (left-right).
- Laver and Garry (2000) and McDonald and Mendes (2001): two-dimensional scales, (economic and social dimension).
- McDonald and Mendes (2001): one-dimensional scales correlate mainly with the economic dimension of the two-dimensional scale.

- The expert surveys: Morgan, (1978), Castles and Mair (1984), Laver and Hunt (1992) and Inglehart and Huber (1995).
- Advantages: importance of an issue to a party can be estimated directly, by asking the appropriate question.
- Disadvantage: experts can confuse the party pre-election program and the set of policies actually carried out by the party under the set of institutional constraints; expert surveys tend to be extremely stable over time (subjective evaluations).

Economic issues

Right	Left
Free enterprise, Economy, Protectionism (negative), Welfare state limitation, Labor groups: negative	Market regulation, Economic planning, Protectionism (positive), Keynesian demand management, Controlled economy, Nationalization, Marxist analysis, Welfare state expansion, Social justice, Labor groups (positive)

Right	Left
National way of life (positive), Traditional morality (positive), Law and order, Multiculturalism (negative), Political authority, Military (positive), Internationalism (negative)	National way of life (negative), Traditional morality (negative), Multiculturalism (positive), Social harmony, Underprivileged minority groups, Freedom and human rights, Democracy, Internationalism (positive), Peace, Anti-imperialism, military (negative)

Neutral issues

Foreign special relations (positive), foreign special relations (negative), European Community (positive), European Community (negative), Constitutionalism (positive), constitutionalism (negative), centralization, decentralization, political corruption, governmental and administrative efficiency, corporatism, productivity, technology and infrastructure, anti-growth economy, environmental protection, culture, social justice, education expension, education limitation, agriculture and farmers, underprivileged minority groups, non-economic demographic groups.

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

Assumption 1. 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

Liberty -1 on dimension 2

All other statements 0 on both dimensions

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

Assumption 2.

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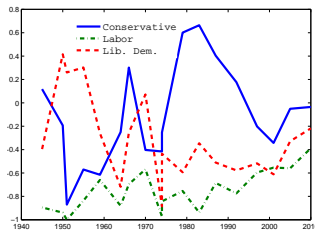
The policy position is $0.5 = (5 \cdot (-1) + 15 \cdot 1)/20$, the salience is $20\% = (5 + 15)/100$.

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 $100\% = (25 + 75)/100$.
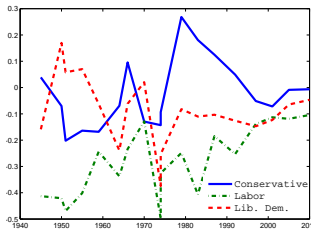
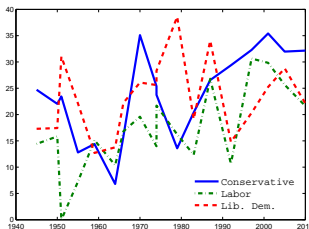# Great Britain: Economic left-right dimension.
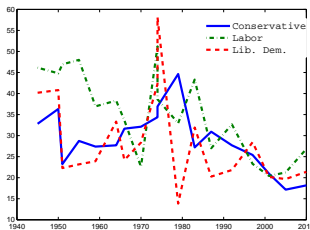
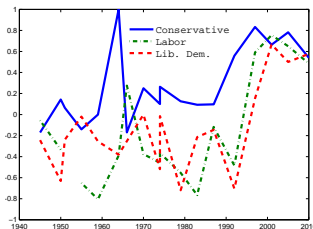(a) Salience

(b) Position (salience)

(c) Position (average)

(d) Salience

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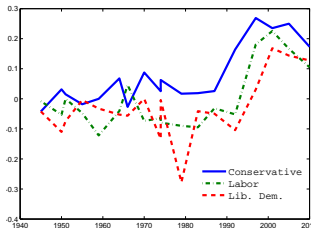
(f) Position (average)

The economic dimension

Components of the economic dimension, 1950–2010

	Right	Left
Declined	401 Free enterprise 408 Economic goals 702 Labor groups (positive)	403 Econ. planning 406 Protectionism (positive) 409 Keynesian policies 412 Controlled economy 413 Nationalization
Remain the same	505 Welfare state limitation	403 Market regulation 504 Welfare state expansion 503 Social justice 701 Labor groups (positive)
Increased	407 Protectionism (negative)	

The non-economic dimension

Components of the non-economic dimension, 1950–2010

	Right	Left
Declined	602 National way of life (negative)	603 Traditional morality (positive)
	106 Peace	104 Military (positive)
	103 Anti-imperialism	109 Internationalism (positive)
	105 Military (negative)	
	202 Democracy	
Remain the same	607 Multiculturalism (positive)	
	606 Social harmony	
	201 Freedom and human rights	
Increased	603 Traditional morality (negative)	601 National way of life (positive)
	705 Minority groups	605 Law and order
	108 Interantionalism (positive)	608 Multiculturalism (negative)
		305 Political authority

4 top non-economic issues
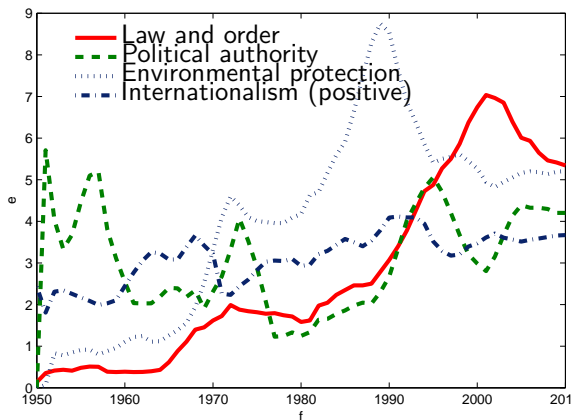
- Increased: Great Britain, Denmark, Sweden, Italy, Netherlands, US.
- Remained the same: Canada, Germany, Norway.
- Declined: France.

Average saliences for 5 European countries: Liberty vs. authority
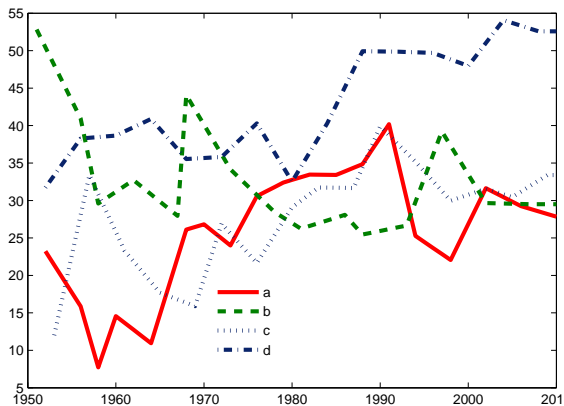
The regression equation

$$s_{jtk} = \alpha_k + \beta_k x_{jt} + \gamma_{kt} I_d + \delta_{kj} I_j + \epsilon_{jtk}, \qquad (2)$$

- Each observation is a country at a specific time period. Observations from 41 countries were used. The earliest date for which data was available for at least some countries was 1950.
- The dependent variable is the average salience of ideological dimension $k = 1, 2$ for country j at time t, weighted by the vote shares of the parties in that period.
- I_d — decade dummy, I_j — country dummy, x_{jt} — j at period t.

Country-level covariates

1. Interpersonal trust — the fraction people in the country who said that "Most people can be trusted". Source: EVS/WVS waves 1-4 averages.

2. Income — log per capita GDP in 2005 international dollars, corrected for PPP. Source: Penn World Tables 7.0.

3. Income, inflation — World Bank data when available.

4. Political regime characteristics. This variable ranges from 10 (full democracy) to -10 (full autocracy). Source: Polity IV.

5. Log population.

6. Presidential or non-presidential political system. Source: Persson and Tabellini (2003).

7. Majoritatian or non-majoritarian electoral system. Source: Persson and Tabellini (2003).

8. Ethnic and linguistic fractionalization. Source: Roeder (2001).

Dependent variable: weighted salience of economic issues.

	Model 1	Model 2	Model 3	Model 4
Log(GDP/Pop.)	2,49 (0,090)	2,35 (0,109)	5,76 (0,035)	7,56 (0,012)
Trust	206,5 (0,000)	241,3 (0,000)		
Trust×Log($\frac{GDP}{Pop}$)	-17,91 (0,000)	-21,30 (0,000)	-22,21 (0,000)	-21,90 (0,000)
Presidential	-2,70 (0,045)	-2,20 (0,108)	-80,25 (0,000)	-75,00 (0,000)
Majority	1,84 (0,063)	2,22 (0,028)	-3,00 (0,218)	-4,52 (0,070)
Fractionalization	0,07 (0,968)	0,31 (0,873)		
Polity IV	-0,20 (0,166)	-0,13 (0,385)	0,02 (0,899)	0,14 (0,526)
Log(Pop.)	-0,37 (0,253)	-0,41 (0,204)	-3,59 (0,159)	-3,73 (0,210)
Decade dummy	No	Yes	No	Yes
Country dummy	No	No	Yes	Yes
N	447	447	447	447
Adjusted R^2	0,32	0,33	0,50	0,51

- For a country with a 60% trust level (such as Sweden, Denmark or Nowray), doubling the per capita GPD is predicted to result in a 4-7% decrease in the economic dimension salience.
- For a country with a 20% trust level (such as France or Portugal) the corresponding figure would range from a 1% decrease to a 2% increase in salience.

Predicted and actual salience of economic issues for Model 4.
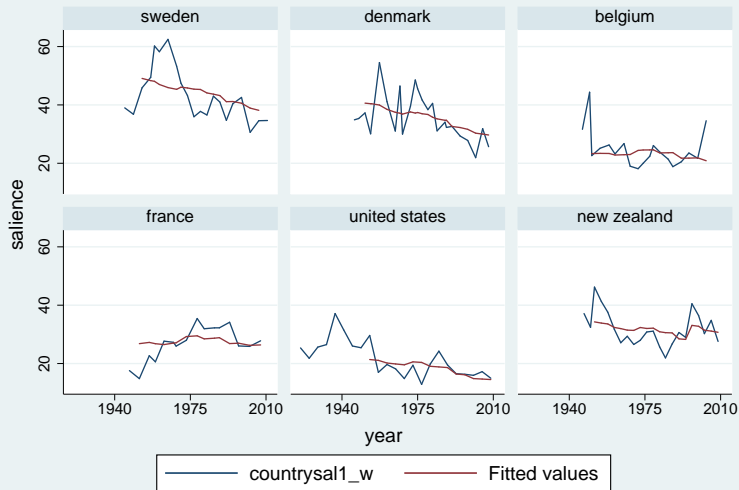
Graphs by country code

Dependent variable: weighted salience of non-economic issues.

	Model 1	Model 2	Model 3	Model 4
Log(GDP/Pop.)	-0,17 (0,930)	-0,10 (0,956)	-19,07 (0,000)	-19,51 (0,000)
Trust	-106,1 (0,046)	-199,7 (0,001)		
Trust$\times$Log($\frac{GDP}{Pop}$)	8,53 (0,121)	17,56 (0,003)	38,20 (0,000)	39,86 (0,000)
Presidential	7,85 (0,000)	6,69 (0,000)	89,38 (0,000)	89,28 (0,000)
Majority	0,27 (0,836)	-0,64 (0,627)	0,58 (0,837)	1,93 (0,503)
Fractionalization	-1,84 (0,469)	-2,30 (0,364)		
Polity IV	-0,15 (0,434)	-0,28 (0,141)	-1,25 (0,000)	-1,33 (0,000)
Log(Pop.)	-0,63 (0,139)	-0,55 (0,196)	15,76 (0,000)	17,47 (0,000)
Decade dummy	No	Yes	No	Yes
Country dummy	No	No	Yes	Yes
N	447	447	447	447
Adjusted R^2	0,14	0,17	0,52	0,52

- For a country with a 60% trust level (such as Sweden, Denmark or Nowray), doubling the per capita GPD is predicted to result in a 4-5% increase in the noneconomic dimension salience.
- For a country with a 20% trust level (such as France or Portugal) there would be a 9-10% decrease in salience.

Predicted and actual salience of non-economic issues for Model 4.
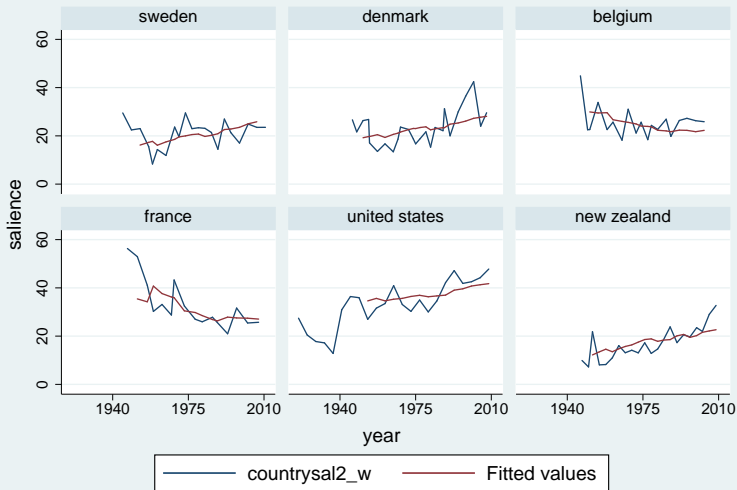
Graphs by country code

- Can trust be a proxy for other cultural characteristics that determine the income elasticity of economic issues?
- Does the effect of income on salience depend on the country's predominant religion?
    - Economic issues — no.
    - Non-economic issues: the effect of income is stronger for Protestant countries.
    - The effect of trust persists after including an interaction term for income and religion.

Robustness to alternative specifications: The effect on the coefficient for log income × trust.

	Economic		Authority vs. liberty	
	Model 1	Model 4	Model 1	Model 4
No changes	-18,69 (0,000)	-19,73 (0,001)	8,04 (0,142)	28,80 (0,000)
Western Europe	-29,25 (0,000)	-24,40 (0,001)	33,83 (0,000)	36,46 (0,000)
Non-west Europe	-22,01 (0,002)	-26,76 (0,021)	1,48 (0,895)	43,65 (0,004)
Before 1985	-7,15 (0,306)	-7,39 (0,490)	-8,61 (0,316)	18,00 (0,125)
After 1985	-21,37 (0,003)	-14,12 (0,401)	13,24 (0,159)	107,57 (0,000)
No Nordic countries	-16,88 (0,001)	-19,14 (0,013)	4,24 (0,565)	31,12 (0,001)
Log democracy age	-6,01 (0.024)	-7,80 (0.000)	5,77 (0.096)	5,62 (0.000)
Gini coefficient	-21,63 (0,000)	-16,43 (0,033)	11,60 (0,057)	30,10 (0,001)
Religion effects	-12,55 (0,105)	-21,88 (0,034)	12,19 (0,208)	32,18 (0,007)
Executive tenure	-18,272 (0,000)	-21,151 (0,001)	7,488 (0,189)	34,361 (0,000)
WB data on income	-4,50 (0,043)	-7,930 (0,001)	2,52 (0,404)	9,12 (0,003)

One possible unobservable variable affecting trust and issue salience is the country's institutional environment (Keefer and Knack, 1997, Guizo, Sapienza, and Zingales, 2004).
What can be used to instrument trust?

- Sullivan (1991) — the percentage of country's population belonging to the largest ethnolinguistic group.
- Keefer and Knack (1997) — the number of law students in 1963, as a fraction of the total number of students.
- Hall and Jones (1996) — country latitude.
- Putnam (1993), Guizo, Sapienza, and Zingales (2006) — religion. Wouldn't do, as it also affects institutions (Tabellini, 2010).

Instrumental variables approach to predict salience.

- Dependent variable: Interpersonal trust, per capita GDP, interaction term.
- Independent variables: Latitude of the capital, lagged per capita GDP, interaction term.

	Trust	Log income	Trust×Log income
Distance to equator	0,006 (0,000)	0,017 (0,150)	-0,268 (0,001)
Laggeg log income		0,096 (0,000)	-0,496 (0,213)
Interaction term		-0,002 (0,179)	0,033 (0,000)
N	563	445	442
Adjusted R^2	0,19	0,93	0,42

The effects of IV trust and GDP on the salience of economic and authority vs. liberty issues.

	Economic		Authority vs. liberty	
Log(GDP/Pop.)	2,50 (0,522)	5,77 (0,224)	4,12 (0,349)	-16,52 (0,005)
Trust	85,45 (0,004)		21,65 (0,512)	
Trust×Log($\frac{GDP}{Pop.}$)	-2,40 (0,426)	-8,01 (0,018)	-2,67 (0,430)	8,91 (0,034)
Presidential	0,50 (0,767)	-3,13 (0,855)	8,67 (0,000)	-52,44 (0,014)
Majority	7,13 (0,000)	-3,82 (0,123)	-0,36 (0,799)	-1,17 (0,702)
Fractionalization	-4,39 (0,061)		-1,83 (0,486)	
Polity IV	-0,75 (0,007)	0,07 (0,824)	-0,15 (0,616)	-1,24 (0,002)
Log pop.	-1,32 (0,001)	-8,02 (0,109)	0,70 (0,127)	25,55 (0,000)
Recession episode	1,99 (0,102)	1,46 (0,155)	0,29 (0,827)	-0,49 (0,698)
Inflation episode	0,77 (0,580)	2,74 (0,039)	1,31 (0,402)	0,87 (0,595)
Country dummy	No	Yes	No	Yes
Decade dummy	No	No	No	No
N	305	305	305	305
Adjusted R^2	0,19	0,50	0,13	0,34

The effects of IV trust and GDP on the salience of economic and authority vs. liberty issues.

- The within-country effect persists.
- The magnitude of the effect is unchanged.

Alternative measures of social capital

R. Puntam: Social capital =

- Interpersonal trust,
- Social norms,
- Organizational membership.

How does social capital affect growth and institutions?

- Keefer and Knack (1997), Knack (2002), Bjornskov (2006), La Porta et. al. (1997), Beugelsdijk et. al. (2004).
- Trust is the most important determinant of growth and governemntal performance
- Social norms are less important
- Organizational membership is of marginal importance

Civic norms used instead of trust

I follow Keefer and Knack (1997), WVS data (waves 2 and 4). I used the questions on the acceptability of the following behavior:

1. Claiming government benefits,
2. Avoiding a fare on public transport,
3. Cheating on taxes,
4. Someone accepting a bribe.

The civicness measure correlates with trust (0.44) at country level.

The effects civic norms on the salience of economic and noneconomic issues.

	Economic		Authority vs. liberty	
Log(GDP/Pop.)	-0,53 (0,516)	-3,14 (0,007)	0,38 (0,650)	-3,01 (0,027)
Civic norms	-30,35 (0,044)		14,08 (0,363)	
Trust×Log($\frac{GDP}{Pop}$)	3,54 (0,027)	-5,76 (0,009)	-1,87 (0,254)	3,66 (0,160)
Presidential	-0,17 (0,909)	-14,38 (0,000)	6,29 (0,000)	20,93 (0,000)
Majority	4,18 (0,000)	-3,05 (0,221)	-0,52 (0,646)	-0,38 (0,896)
Fractionalization	-4,54 (0,039)		0,12 (0,956)	
Polity IV	0,04 (0,819)	-0,03 (0,879)	-0,18 (0,367)	-1,31 (0,000)
Log(Pop.)	-1,82 (0,000)	-1,72 (0,543)	0,85 (0,022)	12,00 (0,000)
Country dummy	No	Yes	No	Yes
Decade dummy	No	No	No	No
N	432	432	432	432
Adjusted R^2	0,11	0,48	0,14	0,33

The effects civic norms on the salience of economic and noneconomic issues.

- The effect of civic norms on issue salience is much smaller than that of the average trust.
- The cross-income effect is significant only for economic issues; the magnitude of the effect is smaller than for trust.
- A one SD increase in norms changes economic salience by 1,7% more in the poorer country than in the richer country. The corresponding differential for a one standard deviation increase in civic norms is 1.1%.

- Economy does affect the popularity of incombents: economic voting literature — Fiorina (1981), Powell and Whitten (1993), Lewis-Beck and Paldam (2000).
- "It's the economy, stupid": issue ownership and issue trespassing. Whiteley et.al. (2005), Petrocik (1996), Riker (1993), Damore (2004, 2005), Arceneaux (2008).
- So, do episodes of high inflation and low GDP growth increase the salience of economic issues?

Defining inflation and low growth episodes.

- Only annual data from WB is available, from 1961.
- Inflation: A high-inflation episode is when average inflation is over I points over the last T years.
- Low-growth: Per-capita growth did not exceed X points over the last T years.

The following equation was estimated:

$$s_{1jt} = \alpha_1 + \beta_1 x_{jt} + \gamma_1 H_{jt} + \delta_1 D_{jt} + \epsilon_{1jt}, \qquad (3)$$

H_{jt} and D_{jt} are the dummy variables for high-inflation and low-growth episodes.

The definitions of high inflation and low growth eposides, depending on T (t-values for γ and δ are shown in parenthesis).

Lags	Inflation (I)	Growth (X)
1	17% (2,19)	–
2	16% (1,91)	2% (2,6)
3	10% (1,36)	4% (1,90)
4	4% (1,77)	4% (1,63)

- Inflation: $T = 2$, $I = 16\%$. 63 episodes out of 373.
- Low growth: $T = 2$, $X = 2\%$. 77 episodes out of 391.
- Correlation is 0.31.

The effect of inflation and low GDP growth on economic issue salience.

	Model 1	Model 2	Model 3	Model 4
Log(GDP/Pop.)	6,93 (0,078)	8,16 (0,050)	8,69 (0,040)	4,30 (0,026)
Trust				280,04 (0,000)
Trust$\times$Log($\frac{GDP}{Pop}$)	-32,30 (0,000)	-32,36 (0,000)	-33,16 (0,000)	-25,44 (0,000)
Presidential	-75,48 (0,002)	-117,55 (0,001)	-89,28 (0,000)	-2,24 (0,135)
Majority	-5,42 (0,022)	-5,39 (0,024)	-5,79 (0,016)	2,20 (0,047)
Fractionalization				-0,37 (0,853)
Polity IV	0,13 (0,588)	0,22 (0,358)	0,31 (0,235)	-0,00 (0,988)
Log(Pop.)	-1,87 (0,657)	-3,06 (0,507)	-6,47 (0,182)	-0,69 (0,055)
Recession episode	1,64 (0,061)		1,13 (0,239)	1,33 (0,198)
Inflation episode		3,08 (0,016)	3,02 (0,023)	2,20 (0,083)
Decade dummy	No	No	No	No
Country dummy	Yes	Yes	Yes	No
N	336	329	321	321
R^2	0,50	0,50	0,50	0,32

The effect of inflation and low GDP growth on economic issue salience.

- The effect of inflation is more significant.
- If one includes terms for lagged inflation and lagged GDP growth, the term for lagged growth are not significant. The terms for lagged inflation are significant for $T = 1, 2, 3$, but the term for $T = 2$ is negative.

	Model 1	Model 2	Model 3	Model 4
Log(GDP/Pop.)	-0,08 (0,119)	-0,07 (0,146)	0,01 (0,898)	0,00 (0,937)
Trust	-2,66 (0,059)	-1,98 (0,186)		
Trust×Log($\frac{GDP}{Pop.}$)	0,28 (0,053)	0,22 (0,149)	-0,08 (0,703)	-0,30 (0,158)
Presidential	-0,01 (0,803)	-0,00 (0,829)	-1,10 (0,132)	-1,53 (0,031)
Majority	0,10 (0,002)	0,11 (0,001)	-0,05 (0,552)	-0,05 (0,517)
Fractionalization	0,05 (0,439)	0,06 (0,339)		
Polity IV	-0,00 (0,746)	-0,00 (0,842)	-0,01 (0,019)	-0,01 (0,014)
Log(Pop.)	-0,02 (0,033)	-0,02 (0,064)	0,13 (0,164)	-0,02 (0,793)
Decade dummy	No	Yes	No	Yes
Country dummy	No	No	Yes	Yes
N	447	447	447	447
R^2	0,03	0,12	0,21	0,31

The determinants of position on the non-economic dimension

	Model 1	Model 2	Model 3	Model 4
Log(GDP/Pop.)	-0,15 (0,026)	-0,14 (0,021)	0,19 (0,089)	-0,00 (0,975)
Trust	-5,36 (0,004)	0,39 (0,835)		
Trust$\times$Log($\frac{GDP}{Pop.}$)	0,46 (0,016)	-0,07 (0,686)	-0,05 (0,818)	-0,14 (0,569)
Presidential	0,15 (0,014)	0,22 (0,000)	1,25 (0,135)	0,57 (0,485)
Majority	0,06 (0,136)	0,14 (0,001)	-0,17 (0,095)	-0,02 (0,837)
Fractionalization	-0,05 (0,551)	-0,06 (0,429)		
Polity IV	0,00 (0,162)	0,01 (0,011)	0,01 (0,084)	0,00 (0,644)
Log(Pop.)	-0,08 (0,000)	-0,08 (0,000)	-0,13 (0,220)	-0,13 (0,252)
Decade dummy	No	Yes	No	Yes
Country dummy	No	No	Yes	Yes
N	447	447	447	447
R^2	0,13	0,29	0,48	0,53

- The results are less significant than for salience for economic dimension.
- Trust× income not significant, once country-level effects are included.
- Time dummies are significant.

Here I try to use WVS data to construct a two-dimensional measure of personal ideological preferences.

- Economic dimension
- Non-economic dimension

Then I try to see what individual-level covariates determine her ideological position.

One problem is that one cannot easity estimate issue salience with WVS data.

The first dimension

WVS questions used:

1. People who are unemployed should have to take any job available or lose their unemployment benefits vs People who are unemployed should have the right to refuse a job they do not want,

2. People should take more responsibility to provide for themselves vs The government should take more responsibility to ensure that everyone is provided for,

3. Private ownership of business should be increased vs Government ownership of business should be increased,

4. Incomes should be made more equal vs We need larger income differences as incentives,

5. Confidence in labor unions

The second dimension

WVS questions used:

1. Which of the following goals are condsidered most important (A high level of economic growth (-1), Strong defence forces (-1), People have more say about how things are done (1), Trying to make our cities and countryside more beautiful (1))

2. Which of the following goals are condsidered most important (Maintaining order in the nation (-1), Give people more say (1), Fighting rising prices (-1), Protecting freedom of speech (1))

3. Which of the following is more important (A stable economy (-1), Progress toward a less impersonal and more humane society (1), Ideas count more than money (1), The fight against crime (-1))

4. Emphasis on money and material possessions (yes — -1, no — 1).

5. Respect for authority (yes — -1, no — 1).

6. Emphasis on family life in the future (yes — -1, no — 1).

7. Confidence in churches (yes — -1, no — 1).

8. Homosexuality is justifiable (yes — 1, no — -1).

9. Abortion is justifiable (yes — 1, no — -1).

10. Divorce is justifiable (yes — 1, no — -1).

	Economic left-right		Authority vs. liberty	
	Averate	PCA	Average	PCA
Trust	0,011 (1,93)	0,131 (4,76)	-0,044 (-10,17)	-0,167 (-5,78)
Income	0,020 (34,42)	0,085 (27,60)	-0,009 (-21,12)	-0,066 (-21,91)
Trust× income	0,000 (0,21)	-0,026 (-5,50)	-0,006 (-8,08)	-0,028 (-5,60)
Age	-0,019 (-38,41)	-0,025 (-10,24)	-0,001 (-5,13)	0,020 (8,06)
Age squared	-0,000 (-1,70)	0,000 (1,53)	0,000 (18,33)	0,000 (17,65)
Year of birth	-0,023 (-91,61)	-0,026 (-17,97)	0,003 (15,17)	0,054 (42,10)
Gender	-0,034 (-14,68)	-0,19 (-17,43)	-0,007 (-4,52)	-0,059 (-5,10)
Married	-0,001 (-0,41)	0,050 (3,73)	0,056 (27,38)	0,229 (16,48)
Orthodox	-0,013 (-2,96)	-0,217 (-9,21)	0,111 (30,57)	0,536 (19,38)
Catholic	0,041 (14,99)	0,066 (5,02)	0,035 (16,66)	0,463 (32,84)
Muslem	-0,056 (-10,49)	-0,207 (-3,24)	0,225 (71,28)	1,214 (60,10)
Protestant	0,074 (19,48)	0,230 (12,98)	0,045 (15,62)	0,501 (25,82)
> 2 children	-0,109 (-41,38)	-0,065 (-5,11)	0,063 (31,99)	0,426 (33,42)
Educ. age	0,006 (32,65)	0,011 (10,93)	-0,005 (-35,20)	-0,031 (-30,22)
R^2	0,19	0,05	0,15	0,2
N	79779	51488	93712	60336

The results.

- Trust has a compound effect on income
- It's hard to construct a measure of issue salience using WVS data
- Some counterintuitive finds: people tend to be *less* liberal on the second dimension if born at a later date, given that their age is fixed. This, however, conforms to the

The future research agenda

More questions than answers.

- Look at party-level data.
- Look at issue-level data.
- Try to construct some dynamic measure of trust.
- A formal model.