

Electoral rules and their impact

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Lecture Outline

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- 5 Electoral systems and social and economic outcomes
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 - Meltzer and Richards' Model (1981)
 - Iversen and Soskice, 2006
 - Political regimes and the size of government
 - Assessing policy choices under various institutional settings

The origins

- The history of electoral systems is characterized by two main observations:
 - ① The progressive simplification of systems (mathematics make life much easier!)
 - ② Long lasting disputes about which electoral systems is best.
- However, a driving force for the choice of electoral systems are the preferences of the constitution makers or reformers.
- Because, in any case, people think rules have consequences (though this is disputable).

Duverger's laws (1951)

- Plurality leads to two-party systems
 - Proportional representation leads to multi-party systems
 - Run-off leads to systems of multiple, loose and interconnected parties
 - Because of mechanical (transformation of votes into seats) and psychological (anticipation of the mechanical) effects
 - Psychological effects as party entry (citizen candidate model) and strategic voting
- ⇒ The impact of electoral systems on party systems format known as the duvergerian agenda.

Standard questions about the impact on electoral politics

- Party system format:
 - How many political parties can we expect?
 - What range of ideological extremism can we expect among representatives (relative to the range of extremism among voters)?
 - How politically stable can we expect governing coalitions to be (and hence, how much political stability)?

Standard questions about the impact on electoral politics (...)

- Political representation
 - How proportional is the expected relationship between votes and seats? What is the swing ratio?
 - Are there biases against some (types of) parties e.g., (a) in favor of the larger (smaller) parties? (b) in favor of some particular party or parties (due to the greater efficiency of their vote distribution or other factors?)
 - How well are minorities represented?
 - How much pork barrel politics are favored by a system? What about clientelistic dynamics?
 - What normative social choice criteria does the method satisfy. In particular, for unidimensional competition, can we expect that the preferences of the median voter (the Condorcet winner) will be favored?
 - What type of representation does this electoral system favor? Responsiveness, accountability, resoluteness. Type and 'quality' of representation.

Standard questions about the impact on electoral politics (...)

- Broader issues
 - What impact on party organizations, personalization,?...?
 - What impact on political participation?
 - What impact on policies and their outcomes? (growth, inequalities,...)
 - What impact on the stability of political systems?

Some wisdom before actually starting...

- Different electoral systems provide different types of incentives that help structure the nature of between-party and within-party competition, and the options and strategies open to voters.
- Seemingly small differences in electoral systems can make important differences for strategies and outcomes.
- If an electoral system can be expected to have some consequences, while another electoral system can be expected to have other consequences, the consequences of an electoral system that is a mixture of those need not be the average of the consequences of each electoral system separately, or even a simple additive function; there may be interactive effects.
- Causality is always an extremely complex issue (endogeneity).
- More later!

Five approaches to the study of electoral systems

- Social choice theory (axiomatic approach), not considered here.
- Mainstream empirical research (Lijphart, Norris for instance)
- Rational choice and game-theoretic models (i.e. Cox)
- Social physics (Taagepera)
- Embedded systems approach (i.e. Grofman)

Mainstream empirical research

- Seeks to measure the effects of particular electoral rules, cross-nationally or across different units in the same polity, by techniques such as regressing an outcome variable against electoral system features and some set of control variables.
- There are three key questions which have dominated the mainstream empirical literature:
 - How proportional are different voting methods in translating party vote share into party seat share?
 - How many parties can we expect?
 - How does electoral system choice impact on governability?

Indicators

- Party system format dimensions
 - Relevant parties (coalition or blackmail potentials, Sartori 1976), effective number of parties ($n = 1 / \sum (v_i^2)$, Laakso and Taagepera 1989; can be calculated based on votes or seats)
 - Polarization
- Disproportionality
 - Disproportionality (Gallagher's Least squares index: $LSq = \sqrt{((\sum (s_i - v_i)^2) / 2)}$; Loosemore-Hanby index of distortion: $D = 1/2 \sum |v_i - s_i|$)
 - And swing ratio k (Tufte 1973): $\ln(\frac{s}{1-s}) = k \ln(\frac{v}{1-v}) + \epsilon$
- Thresholds:
 - Effective threshold: $t = 0.75 / (m + 1)$, with m as effective magnitude
 - Effective nation-wide threshold: $T = \frac{0.75}{((M+1) * \sqrt{(S/M)})}$, with M average district magnitude, S total assembly size.

Some milestones after Duverger

- Sartori's (1968) Hypothesis: "Holding electoral system constant, the number of parties that we can expect to contest seats in a district, n_v , is an increasing function of M ."
- Rae's (1967) Hypothesis: The number of parties that can expect to win seats in a district, n_s , is a decreasing function of the threshold of exclusion (i.e. maximum support attained without winning a seat); party fragmentation then chiefly depends on district magnitude.
- Party competition depends on district magnitude with, on average, the following relation Taagepera Shugart (1989):
$$n = 1.25 + 2 \log(m)$$

Illustration 1: proportionality

Table 4.2: Electoral systems and proportionality

	Rose's Index of Proportionality	% Vote for the party in first place	% Seats for the party in first place	Number of countries
All Majoritarian	81.9	54.5	56.8	83
Alternative Vote	84.0	40.3	45.3	1
Block vote	75.6	52.9	56.2	10
2 nd Ballot	92.2	54.8	57.8	23
FPTP	83.0	55.1	57.8	49
All Combined	85.0	46.8	49.5	26
Independent	82.6	51.7	53.9	19
Dependent	90.1	33.9	36.9	7
ALL	91.2	45.3	43.8	61
Proportional				
STV	93.9	45.3	50.1	2
Party List	91.1	44.5	43.6	59
TOTAL	87.2	48.7	50.0	170

Note: The data includes the results in elections to the lower house of parliament from 1995 to June 2000 in 170 nations. The results of the elections were calculated from *Elections Around the World*. www.agora.stm.it/elections/alllinks.htm. The Index of Proportionality was derived from Richard Rose. Ed. 2001. *The International Encyclopedia of Elections*. Washington, DC: CQ Press.

Illustration 2: fragmentation

Table 4.1: Electoral systems and party systems

	Mean number of parliamentary parties (with at least one seat)	Mean number of relevant parliamentary parties (with over 3% of seats)	Number of countries
All Majoritarian	5.22	3.33	83
Alternative Vote	9.00	3.00	1
Block vote	5.60	4.57	10
2 nd Ballot	6.00	3.20	23
FPTP	4.78	3.09	49
All Combined	8.85	4.52	26
Independent	8.89	3.94	19
Dependent	8.71	6.17	7
ALL Proportional	9.52	4.74	61
STV	5.00	2.50	2
Party List	9.68	4.82	59
TOTAL	7.05	4.12	170

Note: The data includes the results for 1,263 parties contesting the latest elections to the lower house of parliament from 1995 to June 2000. Parliamentary parties are defined as those winning at least one seat in the lower house. The results of the elections were calculated from *Elections Around the World*. www.agora.stm.it/elections/alllinks.htm.

Issues and challenges

- This traditional duvergerian approach is now 'closed' for simple electoral systems.
- Research concentrates on more complex systems, or outcome variable that are more loosely related.
- One important challenge remain the link between district and national dynamics.

Rational choice approaches

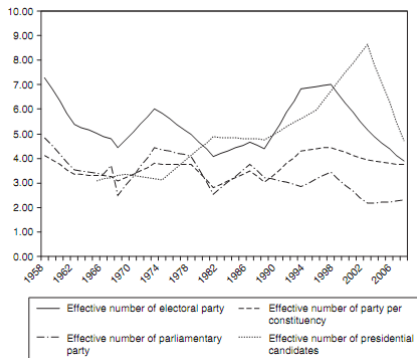
- Customarily is in the form of theorems about how electoral system effects are determined by the incentives different rules provide for the behavior of voters and parties/candidates under different assumptions about the utility functions (proximity versus directional, or some combination thereof) we ascribe to voters, and the utility functions (office seeking, policy seeking, or some combination thereof) we ascribe to parties/candidates.
- A key feature of this approach is a concern for strategic behavior on the part of voters and candidates/parties. Much of this work has modelled party platforms as points in a multidimensional issue space, and focused on how parties would locate themselves in terms of announced platforms in seeking to maximize their vote share or accomplish other objectives.
- Downs (1957) is the reference for this approach; while Cox (1997) is, perhaps, the most important contemporary exemplar.

Gary Cox and viable candidates

- How to think about electoral system in a deductive approach, going beyond pure spatial voting (focussing on the psychological dimension)
- Myerson Weber (1993): at equilibrium, behaviours depend both on preferences and perceptions of relative chances of various pairs of candidates being in contention for victory (pivotality)
- Cox (1997) generalized the argument: follows that $n = M + 1$

Application to two round majority elections

- Two round majority systems are often single member districts. Yet, the first round should be taken into account. Hence the idea of a trade-off between the top three candidates.
- Two ballot majority rule runoffs where exactly two (up to k) candidates advance should have no more than $3(k + 1)$ viable candidates.



Convergence and polarization

- The impact of electoral systems on party polarization has also been much debated following Downs' logics of two party convergence (towards the median voter's position) under plurality system.
- The very idea is highly dependent on its assumptions (15!) among which the presence of only two parties, unidimensionality of policy space, perfect information of voters,...

Table A.1: Summary of empirical findings on Party-system Polarization (adapted from Curini & Hino, 2012)

Paper	Type of data	Sample size	Time-period	Measure of Polarization	Hypotheses Tested	Conclusion
Dow, 2001	National mass surveys	4 countries	1988-1994	Two-dimensional space using parties' and voters' positions	<i>Electoral System</i>	Not confirmed
Budge & McDonald, 2006	Comparative Manifesto Project (CMP)	17 countries	1945-1998	Unidimensional space using the distance between the two most extreme parties	<i>Electoral System</i>	Not confirmed
Dalton, 2008	Comparative Studies of Electoral Systems (CSES) mass surveys	35 countries (most with 1 observation)	1996-2006	Unidimensional space using all parties' positions weighted by vote-shares	<i>Electoral System & Party-system size</i>	Both not confirmed
Ezrow, 2008	Expert-surveys and CMP for parties' positions/Eurobarometer for voters' positions	18 countries	1980-1990	Unidimensional space using all parties' positions weighted by vote-shares and voter distribution	<i>Electoral System & Party-system size</i>	Both not confirmed
Andrews & Money, 2009	Comparative Manifesto Project (CMP)	20 countries	1945-1998	2-dimensional space using the distance between the two most extreme parties	<i>Electoral System & Party-system size</i>	First not confirmed Second confirmed
Dow, 2011	CSES surveys	30 countries (most with 1 observation)	1996-2006	Same as in Ezrow 2008	<i>Electoral System & Party-system size</i>	First confirmed Second not confirmed
Calvo & Hellwig, 2011	CSES-2 surveys	13 countries	2001-2006	Conditional Logit estimates based on Adams, Merrill & Grofman (2005) predictions	<i>Electoral System</i>	Hypothesis Conditionally confirmed
Curini and Hino, 2012	CSES-3surveys	36 countries (some with more than 1)	1996-2006	Same as in Dalton 2008	<i>Electoral System Party-system size Coalition Habits &</i>	First and second not confirmed. Third and fourth confirmed

Convergence and polarization

Table 1: The Impact of Electoral Rule Disproportionality on Platform Polarization in OECD Democracies (from 1960-2007)

Dependent Variable		Dalton Index of Party-System (Platform) Polarization											
		Model 1.a		Model 1.b		Model 2.a		Model 2.b		Model 3.a		Model 3.b	
Explanatory Variables		PR rule		District Magnitude		PR rule		District Magnitude		PR rule		District Magnitude	
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)				
H1	Electoral Rule Dummy (PR = 1)	1.659 (0.181)***	1.743 (0.193)***	--	--	1.326 (0.268)***	--	1.263 (0.283)***	--	--	--	--	--
H1	Log Avg. Electoral District Magnitude	--	--	0.264 (0.071)***	0.280 (0.074)***	--	--	0.195 (0.094)**	--	--	--	0.222 (0.068)***	--
H2	Effective Number of Parties (ENP)	0.009 (0.064)	--	0.033 (0.079)	--	-0.012 (0.151)	0.002 (0.154)	-0.136 (0.181)	-0.136 (0.181)	-0.136 (0.181)	-0.136 (0.181)	-0.136 (0.181)	-0.136 (0.181)
H2	Actual Number of Parties	--	-0.040 (0.041)	--	-0.033 (0.046)	--	--	--	--	--	--	--	--
	Country Dummies?	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Year Dummies?	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Other Institutional Controls?	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Economic Controls?	No	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes
	R ²	0.39	0.39	0.41	0.41	0.43	0.41	0.63	0.63	0.63	0.63	0.62	0.62
	N	307	307	255	255	237	237	123	123	123	123	123	123

* $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$

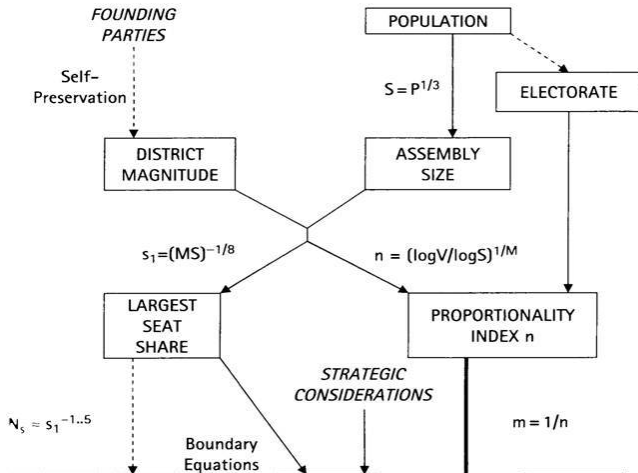
Robust standard errors clustered at the country level reported in parentheses. Country and year dummies (fixed effects) are included in all specifications. Other institutional controls include: a (dummy) variable indicating strong coalition habits and its interaction with ENP, the number of parties participating in government/cabinet, the type of political regime (presidentialism/parliamentarism), the degree of institutional constraints (a categorical variable taking values from 0 - 6), years of consolidated democracy, a (dummy) variable indicating government change and the ideological distance between incumbent and past government. Economic controls include: unemployment rate (in %), GDP growth rate (in %), government spending (as % of GDP), Gini coefficient of inequality. Model 3 has less observations due to missing economic data from 1960-1980. Models 1.b and 2.b also have some missing values for the average electoral district size. In all models the dependent variable (polarization) is constructed as in Dalton (2008).

Social physics approach

- The social physics approach is inspired by statistical thermodynamics ideas in physics.
- It makes use of only a handful of key variables
- It uses functional forms which must yield results consistent with the boundary conditions determining the range of feasible outcomes
- It does not attempt to predict the effects of electoral rules in individual political units, but seeks instead to precisely predict effects on average
- It requires that the left hand (dependent) and right hand (independent) variables be stated in a fashion that yields dimensionally comparability
- For instance, since the number of parties elected from a district of magnitude m must be between 1 and m , they take the geometric mean of these bounds as their best a priori estimate of the (effective) number of parties represented in a given constituency of size m .

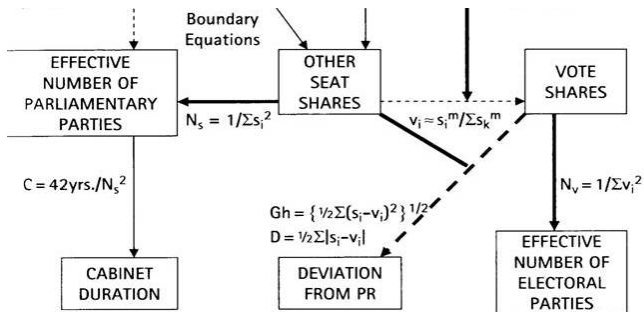
Taagepera's general theory

The electoral dynamics



Taagepera's general theory

The electoral dynamics



5 Macro-Duvergerian agenda, as of 2007. Thick arrows: definitions. Thin arrows: quantitative models. Dashed arrows: looser connections.

Embedded systems

- The hallmark of this style of work is concern for the impact of electoral rules in the context of the overall constitutional, social, and party systems in which they are embedded.
- Of special concern are:
 - How similar systems can yield different outcomes in different contexts,
 - The need for care in attributing causality to electoral system effects when the choice of electoral rules may be endogenously determined, which leads to an interest in experiments and natural experiments
 - Attention to how seemingly trivial differences in electoral rules, e.g., different rules for nominating candidates, can have major consequences.
 - The term embedded systems is introduced in Grofman (1999) but many others use this approach without calling it by that name.

Example: cleavages and electoral systems

Table 3. The Determinants of the Effective Number of Presidential Candidates

Dependent Variable: ENPRES			
Independent Variables	Model		
	1	2	3
CONSTANT	2.26 (.87)	4.30 (1.23)	2.68 (.36)
RUNOFF	.63 (.61)	-2.49 (1.56)	—
ENETH	.37 (.50)	-.98 (.77)	—
RUNOFF*ENETH	—	2.01 (.94)	.58 (.29)
Adjusted $R^2 =$	-.015	.202	.171
$N =$	16	16	16

Source: Neto & Cox 1997

Electoral rules and the number of parties

- Wrapping up what we have just seen.
- Considering other aspects of important election rules.
- Looking first at district dynamics and then at national dynamics

Electoral systems effects

- Mechanical effects:
 - $N_s < N_v$
 - Depends on effective threshold
 - Depends on districting maps
- Psychological effects:
 - Strategic voting and coordination (perceived chances of winning)
 - Strategic entry by candidates or parties
 - Campaign dynamics: medias, lobbies and pressure groups (campaign contribution, information signals,...), activists,...
- Policy space / cleavages:
- Equilibrium of $M+1$ as upper bound if sequential entry with myopic behavior
- Existence of party niches and logics of deterrence to entry by new parties

Electoral systems effects in context

- Multi-district dynamics
 - Absence in a lost district can be costly in other districts (and conversely)
 - Constraint on coherent platforms across districts
- Multiple offices / levels of government
 - Various electoral rules can contaminate each other; second order dynamics.
 - Synchronisation of elections (honeymoon, midterm,...).
- Ancillary rules for general elections
 - Cross-endorsements? Alliances? (encourages party fragmentation)
 - Thresholds, bonus,... (deters party fragmentation)
 - Rules for running (endorsements,...) and party funding.
 - Primaries and their organization.

Electoral systems and cleavages

- Structure and strength of socio-political cleavages (party id,...)
- Geographic distribution of social groups (concentrated or dispersed)

Party fragmentation at the national level

- Is a function of the electoral rules to translate votes into seats, including:
 - district magnitude
 - total number of seats in legislature and distribution of district magnitudes
 - other features as bonus, thresholds, tiers, cross-endorsement, alliance,...
- Is a function of cleavage structure
 - geographic distribution of groupings
 - overlay of district lines on geographic distribution of groupings
- Is a function of other institutions as...
 - Outcomes of elections for other offices
 - Synchronization of electoral cycles
- Is a function of party organizations
 - Party cohesion and institutionalization
 - Type of candidate selection and personalization

What is the 'best' electoral system for new democracies?

- In transitions to democracy, the electoral system is supposed to have a significant impact on democratic consolidation.
- Yet, two polarized positions:
 - Lijphart: power-sharing institutions are best because they lead to necessary cooperation.
 - Horowitz: proportional systems (and even STV) should be prohibited because they tend to reinforce cleavages; AV is best because it forces compromises.

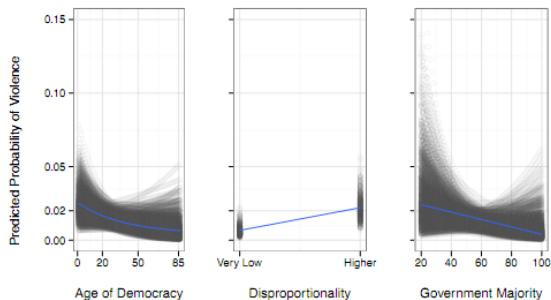
Norris: it depends!

- Proportional systems do not lead systematically to higher satisfaction among minorities.
- Majoritarian systems can accommodate specific institutions for minority representation (reserved seats; targeted redistricting,...)

Table 8.4: Indicators of Majority-Minority Political Support

State	Major Cleavage	Minority	Majority	Diff.	Sig.	Primary minority group	ElecSys
<i>Election Fair</i>		<i>% Fair</i>	<i>% Fair</i>				
Israel	Religion	52	15	38	**	Arabs/Muslims	PR
Spain	Region	92	79	12	*	Catalans, Galicians, Basques	PR
Czech Rep	Region	83	80	3		Moravians	PR
US	Racial	74	76	-1		Non-Whites	Maj
Britain	Region	79	81	-3	*	Scots/Welsh	Maj
Poland	Center-Periphery	70	73	-4	*	Rural	PR
Taiwan	Linguistic	58	64	-6	*	Mandarin/Hakka	Mixed
Ukraine	Linguistic	33	41	-8	*	Russians	Mixed
New Zealand	Ethnicity	71	80	-9	**	Maoris	PR
Romania	Linguistic	72	82	-10	*	Hungarians	PR
Lithuania	Ethnicity	39	58	-20	**	Russians/Poles	Mixed
<i>Satisfaction with Democracy</i>		<i>% Satisfied</i>	<i>% Satisfied</i>				
Israel	Religion	58	53	5		Arabs/Muslims	PR
Lithuania	Ethnicity	34	35	-1		Russians/Poles	Mixed
Ukraine	Linguistic	9	10	-1		Russians	Mixed
Australia	Center-Periphery	72	80	-8	*	Rural	Maj
Britain	Region	69	78	-9	**	Scots/Welsh	Maj
Poland	Center-Periphery	57	66	-10	**	Rural	PR
New Zealand	Ethnicity	62	72	-10	**	Maoris	PR
US	Racial	72	82	-10	*	Non-Whites	Maj
Taiwan	Linguistic	40	51	-10	**	Mandarin/Hakka	Mixed
Spain	Region	48	64	-15	**	Catalans, Galicians, Basques	PR
Romania	Linguistic	28	45	-17	**	Hungarians	PR
Czech Rep	Region	42	62	-20	**	Moravians	PR

Gandrud: proportional parliaments are nicer!



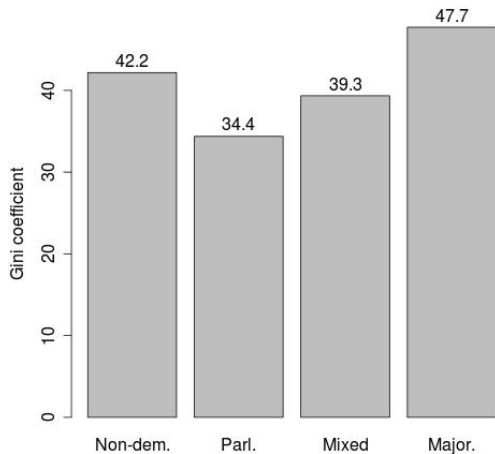
The graphs show all of the 1000 simulations at each fitted value of the variables. The simulations use Model 15 with the sample constricted to observations from 1990. See Table 5.

Birch: but in any case, no run-offs!

Table 4
Ordinary Least Squares Estimations of Level of Democracy, 1999
(standard errors in parentheses)

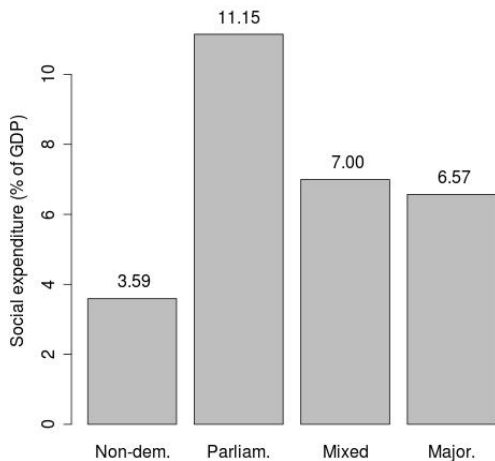
Variable	All Countries		Democratizing Countries Only	
	Polity Score	FHPR Rating (Inverted)	Polity Score	FHPR Rating (Inverted)
Two-round system in 1999	-3.411** (1.158)	-1.141** (0.371)	-2.665* (1.362)	-1.034** (0.395)
Single-member districts in 1999	-2.815* (1.134)	-0.859* (0.360)	-3.293* (1.456)	-0.133 (0.402)
President directly elected by TR system in concurrent elections	-1.206 (1.369)	0.083 (0.433)	-0.404 (1.511)	0.575 (0.413)
Per capita GDP (logged) in 1999	0.597 (0.409)	0.418** (0.129)	-1.089* (0.548)	0.097 (0.142)
Population in 1999 (thousands)	0.00001* (0.000)	0.000003 (0.000)	0.00001 (0.000)	0.0000001 (0.000)
Postwar state formation	-3.196** (1.231)	-0.581 (0.394)	-4.416* (1.868)	-0.505 (0.447)
Former British colony	1.625 (1.342)	0.589 (0.419)	0.802 (1.950)	0.326 (0.483)
Former French colony	-0.004 (1.369)	0.001 (0.434)	0.441 (1.615)	0.216 (0.429)
Middle East and North Africa	-9.367*** (2.515)	-2.958*** (0.800)	-11.745** (4.654)	-3.225** (1.024)

Electoral systems and redistribution



Source: QoG

Electoral systems and redistribution



Source: QoG

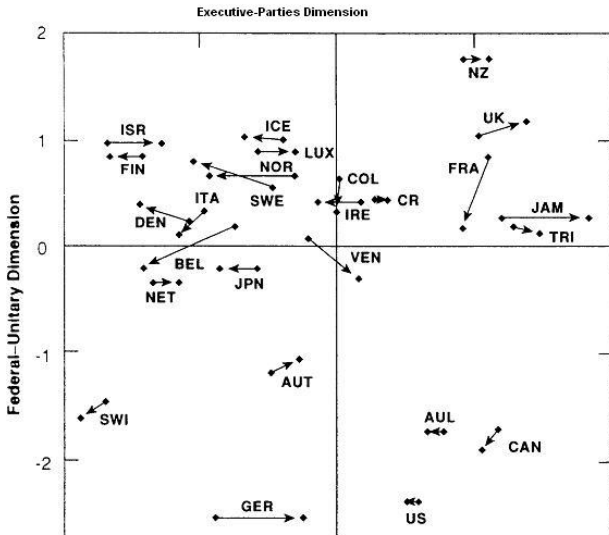
Lijphart: rediscovering institutions

Executive-Parties Dimension	Majoritarian model	Consensus model
Government	Concentration of power in a single-party majority cabinet	Executive power-sharing in broad multi-party coalition
Executive-Legislative relations	Executive dominance	Balance of power
Party system	Two-party system	Multi-party system
Electoral system	Majoritarian (disproportional)	Proportional
Interest group system	Pluralist	Corporatist

Federal-Unitary Dimension	Majoritarian model	Consensus model
Territorial structure	Unitary centralized	Federal and decentralized
Legislature	Unicameral	Symmetric and incongruent bicameralism
Constitution	Flexible	Rigid
Judicial review	Parliamentary sovereignty	Constitutional court
Central bank	Dependent on executive	Independent of executive

Lijphart in the real world

TWO-DIMENSIONAL CONCEPTUAL MAP



Lijphart: consequences

Lijphart (1999): consensus democracies are 'kinder and gentler' but makes no difference in terms of economic performance

Table 16.1. Bivariate Regression Analyses of the Effect of Consensus Democracy (Executives-Parties Dimension) on 17 Indicators of the Quality of Democracy

	Estimated regression coefficient	Standardized regression coefficient	Absolute t-value	Number of countries
Dahl rating (1969)	1.57***	0.58	3.44	26
Vanhanen rating (1980-88)	4.89***	0.54	3.75	36
Women's parl. repr. (1971-95)	3.33***	0.46	3.06	36
Women's cab. repr. (1993-95)	3.36**	0.33	2.06	36
Family policy (1976-82)	1.10*	0.33	1.41	18
Rich-poor ratio (1981-93)	-1.41**	-0.47	2.50	24
Decile ratio (c. 1986)	-0.38**	-0.49	2.20	17
Index of power res. (c. 1990)	3.78*	0.26	1.57	36
Voter turnout (1971-96)	3.07*	0.24	1.46	36
Voter turnout (1960-78)	3.31*	0.30	1.49	24
Satisf. with dem. (1995-96)	8.42*	0.36	1.55	18
Differential satisf. (1990)	-8.11***	-0.83	4.51	11
Government distance (1978-85)	-0.34**	-0.62	2.51	12
Voter distance (1978-85)	-5.25**	-0.64	2.63	12

Lijphart: consequences

Table 16.2. Bivariate Regression Analyses of the Effect of Consensus Democracy (Executives-Parties Dimension) on 10 Indicators of Welfare Statism, Environmental Performance, Criminal Justice, and Foreign Aid

	Estimated regression coefficient	Standardized regression coefficient	Absolute t-value	Number of countries
Welfare state index (1980)	4.90***	0.68	3.70	18
Adj. welfare index (1980)	4.29**	0.58	2.60	15
Social expenditure (1992)	2.66**	0.44	1.94	18
Palmer index (c. 1990)	4.99*	0.30	1.67	31
Energy efficiency (1990-94)	0.93***	0.51	3.50	36
Incarceration rate (1992-95)	-32.12*	-0.30	1.39	22
Death penalty (1996)	-0.35***	-0.44	2.86	36
Foreign aid (1982-85)	0.09*	0.30	1.38	21
Foreign aid (1992-95)	0.10**	0.39	1.86	21
Aid vs. defense (1992-95)	5.94***	0.51	2.58	21

* Statistically significant at the 10 percent level (one-tailed test).

** Statistically significant at the 5 percent level (one-tailed test).

*** Statistically significant at the 1 percent level (one-tailed test).

Meltzer and Richards 1981

- A major yardstick how to model the aggregation of preferences for redistribution (no fiscal illusion; non-myopic voters; no public goods)
- The basics:
 - People vary in how productive they are. Because productivity has a constant effect on your wage, those who cannot earn a higher wage than welfare would provide will choose not to work.
 - Income is not distributed evenly. Since it is skewed right, the mean income will exceed the median income.
 - Rule for decision is majority rule. The relevant variables are the mean population income and the median voter's or dictator's income.
 - Tax rates = distribution rates. All taxes go toward redistribution.
 - Taxes are flat.
 - Governments supply no public goods. In fact, they do nothing more than redistribute.
 - If you get taxed more, you work less.

Meltzer and Richards 1981

• Results

- If the median voter does not work (is on welfare), he will set tax rates at exactly the point that a stationary bandit would (sets tax rates just high enough to maximize receipts without decreasing total economic output too much).
- If the median voter earns less than the mean income, he will set tax rates at the point that maximizes his personal income (the combination of his reduced wages (since he'll work less when there are higher taxes) and his increased welfare payments).
- If the median voter earns exactly the mean income (or more), he will set tax rates at zero. Why can't reverse redistribution (extraction) occur? Because if there are more rich people than poor people, they can do better by working harder than extracting.
- Increase in inequalities increases demand for redistribution

Iversen Soskice

- Iversen and Soskice (2006) have argued that electoral systems generate different types of class alliances, leading to different types of redistributive behaviour.
- Iversen Soskice: PR systems redistribute more than majoritarian systems because dominated by center-left governments, because of coalition dynamics.
- Model: Society is divided in 3 classes (L , M , H) of equal size.
- Results:
 - Proportional case: three representative parties (L, M, H); policies are set by majority coalition of 2 parties; policy vector is result of bargaining where parties split the pie
 - Majoritarian case: two leadership parties (LM and MH), both with a non-binding M platform; probability each party to implement platform is $\pi_L M$ and $\pi_M H$
 - Result in PS: M is always chosen as formateur and systematically prefer to enter in coalition with L rather than H
 - Result in MS: ex ante probability of MH winning the election is > 0.5

Results

TABLE 5. Regression Results for Reduction in Inequality (Standard Errors in Parentheses)

	(1)	(2)	(3)
Inequality	-16.75 ^{***} (5.68)	13.17 (9.36)	12.48 (8.96)
<i>Political-institutional variables</i>			
Government partisanship (right)	—	-2.38 ^{***} (0.73)	—
Government partisanship relative to median legislator	—	—	-2.93 ^{***} (0.75)
Voter turnout	—	0.01 (0.10)	-0.06 (0.10)
Unionization	—	0.16 [*] (0.09)	0.15 [*] (0.09)
Number of veto points	—	-1.57 ^{**} (0.62)	-1.79 ^{***} (0.59)
Electoral system (PR)	—	5.00 ^{**} (2.15)	4.44 ^{**} (2.06)
<i>Controls</i>			
Per capita income	-0.001 ^{***} (0.00)	-0.001 (0.00)	-0.001 (0.000)
Female labor force participation	0.73 ^{***} (0.11)	0.36 [*] (0.20)	0.45 ^{**} (0.20)
Unemployment	0.81 ^{***} (0.27)	0.99 ^{***} (0.27)	1.08 ^{***} (0.26)
<i>R</i>	.4	.7	.7
<i>R</i> -squared	0.648	0.746	0.765
<i>N</i>	47	47	47

Note: Significance levels: *** < .01; ** < .05; * < .10 (two-tailed tests). All independent variables are measures of the cumulative effect of these variables between observations on the dependent variable. See regression equation and text for details.

Problem

- A general model of policy decision: Persson Tabellini (2000)
- Several politicians decide over policies in legislative bargaining; party platforms are neither binding nor enforceable
- Moreover, different types of core executive and legislative bodies: different agenda setters; different rights for approving, amending, or vetoing proposals
- Hence 3 types of conflict interests: among politicians (distribution of rents), among voters (distribution of income), between voters and politicians (aggregate rent): a multi-principal - multi-agent setting

Policy choice in a simple legislature

- Three groups of voters ($J = 1, 2, 3$) all of same size, each located in one of three districts (majoritarian elections).
- Voters preferences in district j : $w^j = c^j + H(g) = y - t + f^j + H(g)$ with c^j private consumption of the average individual in group j , t common tax rate, f^j transfer targeted to individuals in group J , and g a general public good
- Government budget constraint: $3t = g + \sum f^j + \sum r^l = g + f + r$
- Politicians determine policy choice to maximize present and future rents in office and voters coordinate their strategies within but not across districts
- Results:
 - Equilibrium is achieved if all incumbents are reelected; in equilibrium voters of non agenda setting districts cannot discipline their representative for more equitable redistribution since they compete to be within the majority.
 - Hence, the model displays three political failures, departing from socially optimal policy: waste ($r^l > 0$); public goods underprovided ($g^L < H_g^1 - 1(1/3)$); a minority (agenda setter) receives any equilibrium redistribution ($f^{al} > 0$).

Policy choice in Presidential-congressional regimes vs. Parliamentary regimes

- Presidential regimes
 - From the US model: different agenda setters (committees; houses) and President has a veto power
 - Results: rents and taxes are minimized because voters exploit separation of power properties; public goods are however underprovided because of the strong agenda setting powers of the minority (competition over transfers; targeted transfers).
- Parliamentary regimes
 - Fusion of power and possibility of government dismissal (governmental crisis): hence party discipline
 - Consequences: bargaining power is more evenly shared within the majority coalition, then less competitive for voters.
 - Results: Rents are higher (mutual veto rights give all members of government some bargaining power), voters cannot thus exploit conflicts among politicians; underprovision of public goods is less severe (members of the majority obtain redistributive benefits by jointly exploiting the minority).

Persson Tabellini 2005: The Economic effect of constitutions

- Datasets: panel data on fiscal policies (1960-1998, 60 countries) and cross sectional data on constitutional design
- Estimation methods: how would economic performance of country change if institutions were changed? (comparison of counterfactuals)
 - Simple OLS regression: assumptions: conditional independence and linearity
 - 2SLS and IV: assumption: linearity
 - Matching method: assumption: conditional independence

Hypotheses on tax and rents

	Electoral rules		Forms of government	
	Majoritarian	Proportional	Presidential	Parliamentary
Narrow vs. broad programs	Narrow	Broad	Narrow	Broad
	<i>Electoral competition</i>		<i>Confidence requirement</i>	
Overall spending	Small	Large	Small	Large
	<i>Size of constituency/electoral district</i>		<i>Confidence requirement</i>	
Political rents	Ambiguous	Ambiguous	Small	Large
	<i>Accountability, barriers to entry</i>		<i>Checks and balance</i>	

Results (1)

Table 6.1
Size of government and constitutions: Simple regression estimates

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Dependent variable	<i>CGEXP</i>	<i>CGEXP</i>	<i>CGEXP</i>	<i>CGREV</i>	<i>CGEXP</i>	<i>CGEXP</i>	<i>CGEXP</i>
<i>PRES</i>	-6.08 (1.97)***	-5.29 (1.92)***		-5.17 (2.44)**	-8.29 (2.72)***	-3.46 (3.88)	-7.49 (2.72)***
<i>MAJ</i>	-3.29 (1.73)*	-5.74 (1.95)***		-3.03 (1.85)	-5.59 (2.68)**	-2.93 (3.09)	-4.81 (2.75)*
<i>PROPRES</i>			-7.08 (2.70)**				
<i>MAJPAR</i>			-7.30 (3.02)**				
<i>MAJPRES</i>			-10.36 (2.70)***				
Continents	No	Yes	Yes	Yes	Yes	Yes	Yes
Colonies	No	Yes	Yes	Yes	Yes	Yes	Yes
Sample	1990s, broad	1990s, broad	1990s, broad	1990s, broad	1990s, narrow	1960–1990s, broad	1990s, obs as (6)
Number of observations	80	80	80	76	62	60	60
Adjusted R^2	0.58	0.63	0.63	0.58	0.60	0.54	0.63

Note: Robust standard errors in parentheses. All regressions include standard controls: *LYP*, *GASTIL*, *AGE*, *TRADE*, *PROP65*, *PROP1564*, *FEDERAL*, and *OECD*. Narrow sample corresponds to countries where *GASTIL* is less than 3.5.

*significant at 10%; **significant at 5%; ***significant at 1%.

Results (2)

Table 6.2
Size of government and constitutions: Heckman and instrumental-variables estimates

	(1)	(2)	(3)	(4)
Dependent variable	<i>CGEXP</i>	<i>CGEXP</i>	<i>CGEXP</i>	<i>CGEXP</i>
<i>PRES</i>	-10.50 (3.98)***	-5.37 (2.19)**	-8.65 (3.63)**	-4.50 (3.89)
<i>MAJ</i>	-5.69 (1.86)***	-4.92 (2.57)*	-3.90 (3.46)	-5.12 (3.61)
Continents and colonies	Yes	Yes	No	<i>COL_UKA</i> , <i>LAAM</i>
Sample	1990s. broad	1990s. broad	1990s. broad	1990s. broad
Endogenous selection	<i>PRES</i>	<i>MAJ</i>	<i>PRES</i>	<i>PRES</i> <i>MAJ</i>
Method of estimation	Heckman two-step	Heckman two-step	2SLS	2SLS
Rho	0.64	-0.02		
Chi-square: over-id			4.64	3.61
Adjusted R^2			0.59	0.60
Number of observations	75	75	75	75

Note: Standard errors in parentheses. Critical value of $\chi^2(4, 0.05) = 9.49$. Always included in second-stage specification (columns 1–4): *AGE*, *LYP*, *TRADE*, *PROPI564*, *PROP65*, *GASTIL*, *FEDERAL*, and *OECD*. First-stage specification of Heckman (columns 1–2) includes *CON2150*, *CON5180*, *CON81*, *AGE*, *ENGFAC*, *EURFRAC*, *LAT01*, and *LAAM*. First-stage specification of 2SLS (columns 3–4) includes *CON2150*, *CON5180*, *CON81*, *AGE*, *ENGFAC*, *EURFRAC*, and *LAT01*.

Results (3)

Table 6.3
Size of government and constitutions: Matching estimates

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable	CGEXP	CGEXP	CGEXP	CGEXP	CGEXP	CGEXP
<i>PRES</i>	-7.30 (2.30)***	-7.91 (2.90)***	-5.87 (4.93)	-7.92 (5.11)	-2.54 (2.30)	-4.00 (3.45)
<i>MAJ</i>	-5.76 (2.94)*	-6.55 (2.82)**	-4.87 (3.65)	-4.08 (4.16)	-6.59 (3.06)**	-8.81 (3.15)***
Method of estimation	Kernel	Kernel	Stratification	Stratification	Nearest neighbor	Nearest neighbor
Sample	1990s, broad	1990s, broad	1990s, broad	1990s, broad	1990s, broad	1990s, broad
Logit specification	1	2	1	2	1	2
Number of observations on common support	65 <i>PRES</i> 67 <i>MAJ</i>	40 <i>PRES</i> 57 <i>MAJ</i>	65 <i>PRES</i> 67 <i>MAJ</i>	40 <i>PRES</i> 57 <i>MAJ</i>	65 <i>PRES</i> 67 <i>MAJ</i>	40 <i>PRES</i> 57 <i>MAJ</i>

Note: Standard errors in parentheses obtained by bootstrapping. Kernel, stratification, and nearest-neighbor estimators described in section 5.5.
Logit specifications underlying the propensity score estimates:

1: *LYP, PROP65, GASTIL, FEDERAL, COL_UKA, LAAM*

2: *LYP, PROP65, GASTIL, FEDERAL, ENGFRAC, EURFRAC, LATOI*

*significant at 10%; ** significant at 5%; *** significant at 1%.

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