Political Economics II, Spring 2019

Part III, Political Selection

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Lecture 8, March 8

Last lecture

General selection patterns

- ▶ an inclusive meritocracy
- ▶ on average, high-ability politicians from diverse social backgrounds: no acute tradeoff between the two
- ▶ competence increases with political power, from nominated to local party leaders, mayors, and parliamentarians

Political parties

- ▶ appear to play an important role in screening, on average promoting the competent
- ▶ new Radical Right party appears to channel frustration of vulnerable groups and grow by overrepresenting these groups, relative to population and established parties

This lecture

Additional drivers of local leadership

- do other criteria – in particular, voter popularity, as expressed via preference votes – play a key role in the appointments of municipal party leaders?

Behavior of local party leaders

- how do they choose competence for followers on party ballot?
- how does this interact with representation of men and women?
- what are the effects of gender quotas in politics?
- does (gender) representation come at cost of competence

The Primary Effect:
Preference Votes and Political Promotions

Olle Folke, Torsten Persson, and Johanna Rickne

Lessons so far

Selection appears to work is some dimensions

- able people from diverse social backgrounds
- competence increases in political power
- party screening plays an important role

One of many remaining questions

- do parties select leaders who are popular with voters?
- broadly, what this paper is about

Elections and accountability

Two functions of elections

- ▶ to select representatives, and hold them accountable

Political competition can make election outcomes more efficient

- ▶ competition not only between parties, but within parties
- ▶ e.g., primary elections raise within-party competition and accountability in plurality systems

Common idea: PR good for representation but bad for accountability

- ▶ half of all democracies have some form of such system
- ▶ little research on within-party competition and accountability in PR
- ▶ especially true for closed-list, rather than open-list, PR

Preference voting

Electoral reform to raise accountability in closed-list PR

- ▶ voters can express preference for specific candidates on a given ballot: enough support move to top of list
- ▶ at least ten countries have pursued such reform

Commonly seen as failure – by researchers and reformers

- ▶ evaluations have focused on representation
- ▶ few "new" politicians elected: votes concentrated to top of ballot
- ▶ "closed lists in disguise" (e.g., Farrell, 2001, Müller, 2005)

This paper

Proposes and confirms new hypothesis

- ▶ preference vote may have a *primary effect*: may work like stand-in primary election for position as party leader
- ▶ test via within-party distributions of municipal-elections preference votes

No formal modeling

- ▶ hard nut to crack: strategic voting with downstream effects (Piketty, 2000, Razin, 2003, Meirowitz and Shotts, 2009) interacts with strategic decisions by parties in electoral competition

Why primary-effect hypothesis interesting?

- ▶ in PR systems, party leaders key – draw votes (Bittner, 2011), help determine policy (Wilson, 1994), and form coalitions (Laver and Schofield, 1990)

Roadmap

1. **Background and predictions**
2. Empirical strategy and results
3. Final remarks

Preference voting in Sweden

Debated since 1909, when plurality rule abandoned

- reform introduced only in 1998
- *one* preference vote per person – cf illustration
- "catapulted" to top of list if pass threshold of 50 votes *and* 5% of party's votes – about 20% of elected politicians clear it

Party ballot with preference vote boxes

VAL TILL KOMMUNFULLMÄKTIGE

Moderata Samlingspartiet

Du får bara markera en av dessa **anmälda** kandidater.

- ☐ 1 Hans Jonsson, Lantbrukare, Ringarum
- ☐ 2 Anna Nilsson, Leg. Sjuksköterska, Fil.mag., Gryt
- ☐ 3 Karin Magnusson, Fritidspedagog, Valdemarsvik
- ☐ 4 Monica Stillnert, Fru, Ringarum
- ☐ 5 Hans Andersson, Key Account Manager, Valdemarsvik
- ☐ 6 Per Hollertz, Lantbrukare, Redovisningskonsult, Ringarum
- ☐ 7 Anita Esbjörnsson, Revisor, Valdemarsvik
- ☐ 8 Charlotta Hollertz, Agronom, Mäklarassistent, Ringarum
- ☐ 9 Jan Ekroth, Företagare, Östra Ed
- ☐ 10 Göran Österdahl, Projektledare, Ringarum
- ☐ 11 Lennart Andersson, Yrkesofficer, Valdemarsvik
- ☐ 12 Tord Andersson, Egen företagare, Valdemarsvik
- ☐ 13 Lars Ekblad, Konsult, Valdemarsvik
- ☐ 14 Torbjörn Stackling, Företagsekonom, Gryt
- ☐ 15 Rolf Swärd, F.d. officer, Gryt
- ☐ 16 Joel M. Hodt, Organisationskonsult, Valdemarsvik
- ☐ 17 Per Gunnarsson, Lantbrukare, Östra Ed

Valdemarsviks Kommun
0001—01416

System commonly viewed as failure

Wasted votes

- ▶ preference votes concentrated on top-ranked candidates, more so in small local parties – cf Figure 1
- ▶ only 5 % who clear threshold need it to get elected

Low participation

- ▶ on average, only 30% of voters cast preference vote: similar to other voters, bar greater political knowledge and stronger party identification
- ▶ most common response (about 50%) for abstention: don't know enough about candidates
- ▶ municipality-election distribution is skewed, top (bottom) outliers are rural (urban) – cf Figure 2

Preference votes by list rank
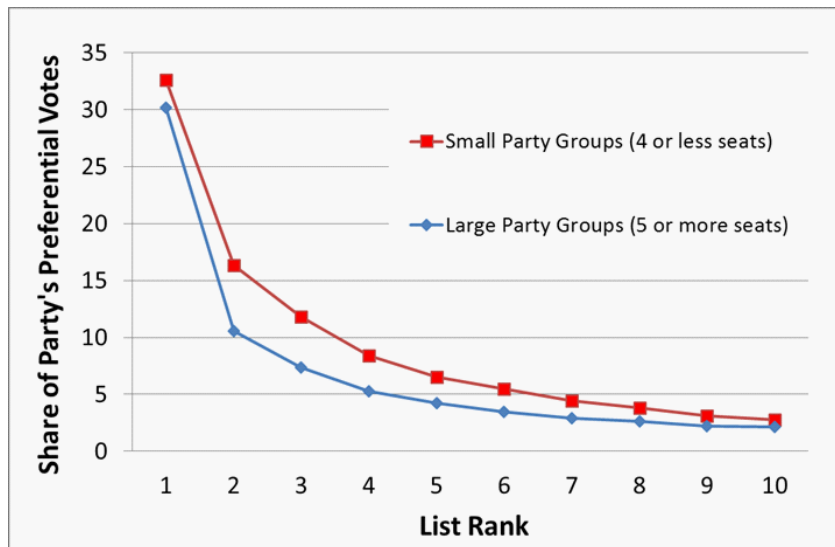
Distribution of preference vote by council-election
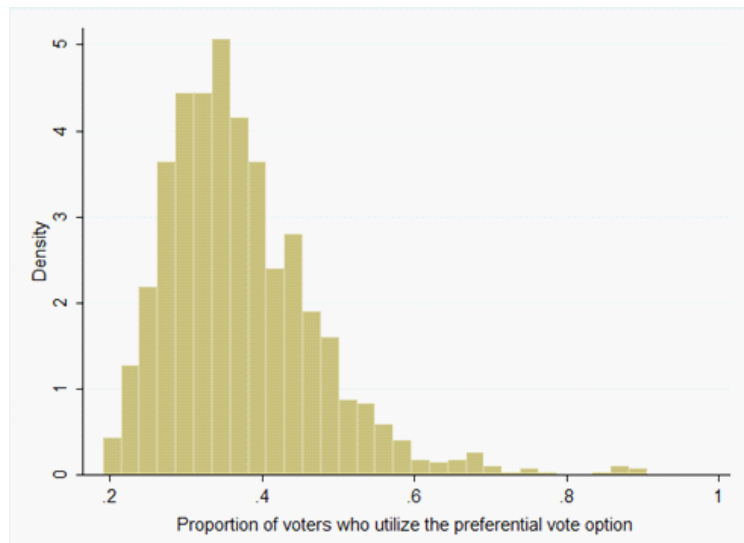
Anecdotally, preference votes do matter

Municipal elections low-information environments

- ▶ for voters and parties – rare opinion polls for party, not individual, popularity
- ▶ leading Social Democrat: "we would be stupid to ignore such information about individual candidates"

Media often report on preference voting

- ▶ who got many preference votes and how they fare in the party

Successful local politicians often get many preference votes

S. Henriksson (v), Fagersta

- ▶ illustrates prospective simultaneity problem

Prediction 1

Preference vote direct information on candidate popularity

- ▶ can use this in appointments, e.g., to local party leader or mayor
- ▶ "winning" the preference vote may be focal
- ▶ parallel to winning primary elections in plurality system
- ▶ test three predictions

P1 – The Primary Effect
Individuals who obtain most preference votes have greater probability of future political promotion

Prediction 2

Nominations may be limited to viable candidates

- ▶ analogy with primaries: restrictions on participation common
  – parties limit voter choices to "vetted" candidates to secure
  party cohesion
- ▶ parties in PR systems may restrict leader appointments to
  those already approved by local party elite

Tradeoffs in promotions

- ▶ if popularity not only criterion, popularity information most
  valuable for similar candidates
- ▶ competence important additional criterion

P2 – The Influence of Individual Characteristics
The primary effect is stronger for candidates
(a) *in top portion on the list*
(b) *with similar competence*

Prediction 3

Electoral competition

- parties behave more efficiently when neck-to-neck with other parties
- stiffer competition fosters larger response to preference votes that reveal candidate popularity

Majority vs minority

- analog with primaries: more transparent nomination to combat party divisions more valuable for majority parties that control important appointments than for minority parties

P3 – The Influence of Political Context
The primary effect is stronger for parties
(a) *facing strong external competition*
(b) *in political majority*

Roadmap

1. Background and predictions
2. **Empirical strategy and results**
3. Final remarks

Empirical Strategy

Main goal

- ▶ estimate effect on leadership selection of obtaining the most preference votes in a party group
- ▶ but looming simultaneity problems
- ▶ reverse causation: party rank affects list votes
- ▶ omitted variables: many variables – like unobserved ambition or ability – could affect both preference votes and party ranking

Regression Discontinuity Design

Essentially random who wins most preference votes when top-two candidates are neck to neck

- ▶ can treat as a lottery

If no systematic difference between winners and losers

- ▶ can estimate a causal effect
- ▶ specification includes both winner and first runner up from each party

Forcing variable

- ▶ in each election t, for each party, in each municipality, measure win/loss margin between top-two candidates
- ▶ divide by their total vote to get relative win margin

Outcome variables and sample restrictions

Local party leader in $t+1$

- ▶ proxy by top name on party's list
- ▶ validate for 2006 and 2010 elections: mayor (chair of council board) at t top-ranked in $t+1$ in 9/10 cases, vice mayor top ranked in 8/10 cases
- ▶ also use these powerful (full-time paid) positions as alternative outcome

Sample restrictions

- ▶ win/loss margin less than 50%
- ▶ third-ranked candidate far from threshold
- ▶ at least three elected representatives
- ▶ both top-two ranked in preference vote have "safe seats"

Results for main prediction **P1**

Graphical analysis

- ▶ standard RDD graphs – cf Figure 3
- ▶ bin averages of 50 observations (left)
- ▶ bin 1-percent intervals of forcing variable (right)

Size of estimate

- ▶ winning preference vote raises chance of promotion to party leader by 15-20 percentage points – about 60%

Primary effect of list victory

Dependent variable: 1st on party list at $t+1$
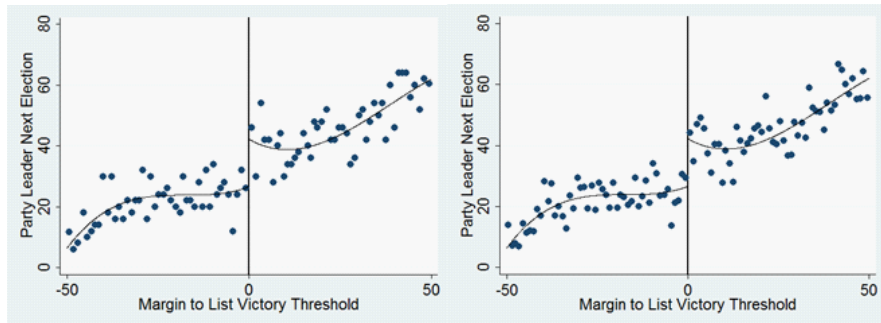
Regression analysis

Four different specifications – cf Table 1 (only boldface here)

- ▶ **OLS**
- ▶ **2nd** and 3rd **order polynomial** control function
- ▶ close local linear control functions **(Imbens Kalyanaraman optimal** bandwidth, 20%, **10%**, and 5%)
- ▶ narrow estimation windows (10%, **5%**, and 2.5%)

Other robustness checks

- ▶ with and without a host of relevant control variables – cf Table 1
- ▶ graphic illustration of estimates with different bandwidths – narrow elections, and linear control functions – cf Figure 4

Win in t boosts chance of party leadership in $t+1$

Without Controls	OLS	quadratic polynomial	Linear I-K optimal	Linear 10% window	5% Window
Treatment Effect	24.74***	15.94***	11.97**	19.55***	19.90***
	(1.64)	(5.10)	(5.37)	(8.00)	(5.52)
Observations	4,486	4,486	1,988	898	406
With Controls					
Treatment Effect	11.79***	14.14**	9.87**	17.40**	18.81***
	(1.79)	(4.90)	(5.01)	(7.77)	(5.44)
Observations	4,485	4,485	1,980	890	402

Estimates of primary effect by bandwidth
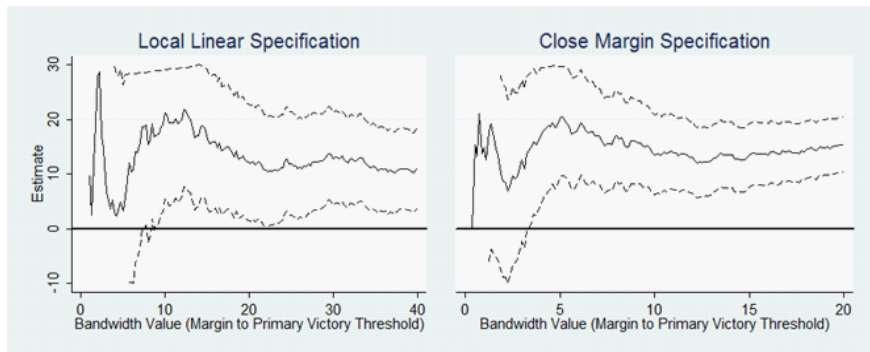
Appointments to mayor positions

Examine appointments to position that matters the most

- mayor and vice mayor
- typically the only full-time politicians
- appointments right after election at t

Examine effect graphically (and econometrically)

- smaller sample, so only 10 observations per bin
- probability of appointment doubles for winners of the preference vote – cf Figure 6 (and Table 2)

Primary effect on top positions

Dependent variable: Position of power at t
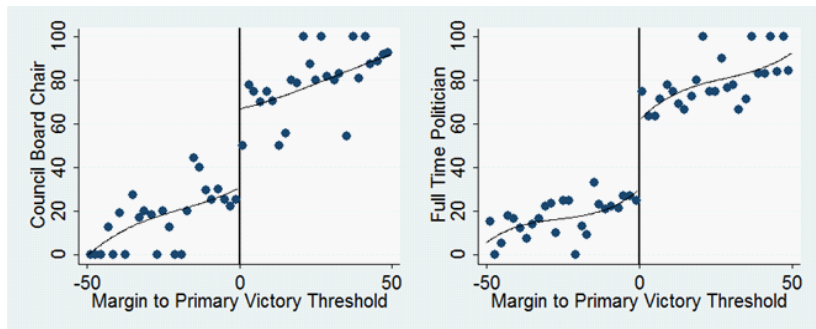
Validation tests of RDD

Different density on two sides of threshold?

- ▶ no – cf Figure A3

Placebo tests on pre-determined outcomes

- ▶ are (predetermined) current party leader, current list rank, years of education, and gender balanced around threshold
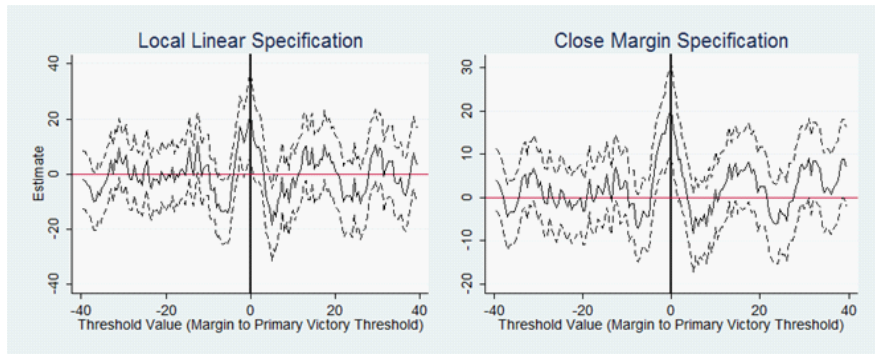- ▶ precisely estimated zeroes (Figure A4 and Table A1)

Test for placebo thresholds

- ▶ only significant effect at the true threshold – cf Figure A5

McCrary test rejects bunching across threshold
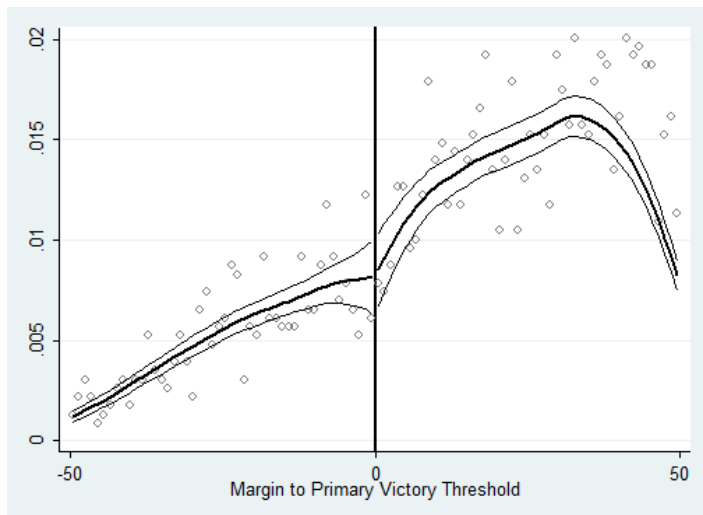
Significant effect only at true threshold

Results for **P2** and **P3**

Recall auxiliary predictions

- ▶ heterogenous primary effect by personal characteristics: stronger for candidates on top of list, and of similar competence?

- ▶ heterogenous primary effect by political context: stronger for parties in stiff political competition and majority parties?

Vetted vs non-vetted candidates – **P2** (a)

Measure trust of party elite by list position

- ▶ estimate primary effect separately for different candidate ranks
- ▶ find positive significant effect only for top-three candidates on list (Figure A7 and Table A3)
- ▶ RDD estimates for top-three vs lower ranks – cf graphical analysis in Figure 6 (regression estimates in Table 3)

Primary effect by list rank
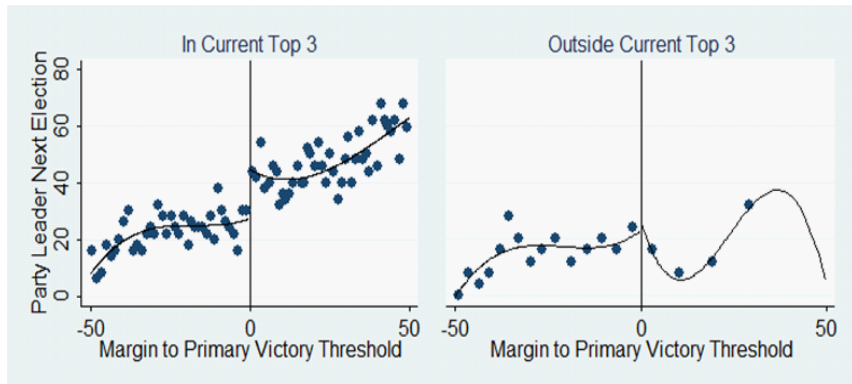
How measure competence?

- ▶ use Earnings score defined earlier

Compare close races of different kinds

- ▶ RDD estimates when top-two both competent (above median), both mediocre (below median), of mixed competence
- ▶ largest effects when both candidates have same competence – cf Figure 7 (regression estimates in Table 4)

Primary effect largest when competence equal
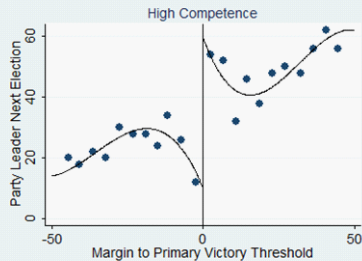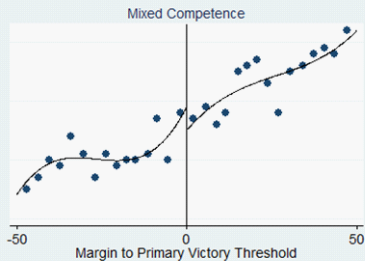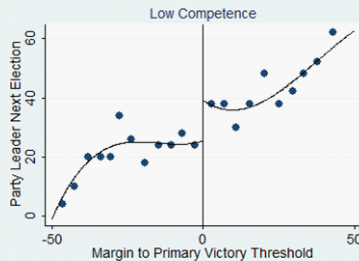
Heterogeneity by political context – **P3**

Measure external political competition

- ▶ Swedish politics follows block politics, despite many parties
- ▶ classify competition by vote differences in past election (above or below median)

Measure majority

- ▶ classify as majority or minority, depending on whether party belongs to municipality's governing coalition or not
  RDD estimates
- ▶ primary effect strongest for majority parties and stiff political competition – cf Figure 8 (regression estimates in Table 5)

Primary effect by political context
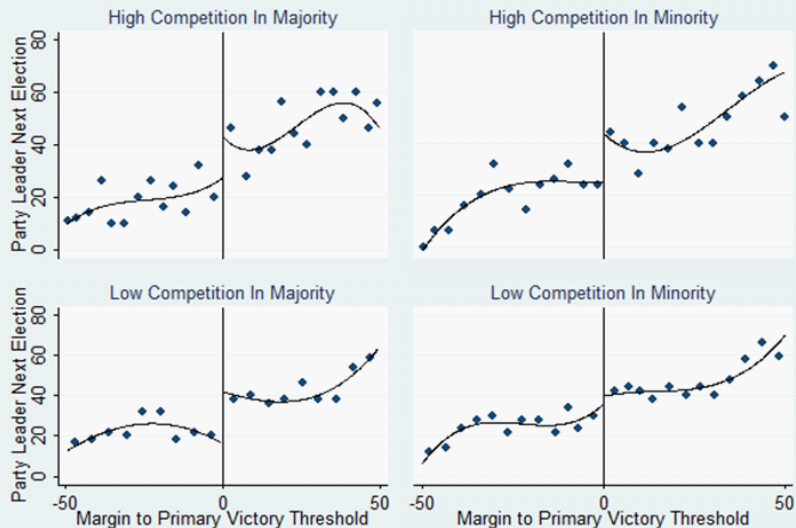
Brief discussion – Brazil

Open lists – no ordered ballots – in local council elections

- ▶ data from all parties in 2000-2012 elections to 5000 councils
- ▶ preference votes concentrated to few candidates, even though parties do not rank candidates
- ▶ most powerful municipality politician is directly elected mayor – local politics "presidential" rather than "parliamentary"
- ▶ each party can field candidate in mayoral election

Paper tests and finds another "primary effect"

- ▶ of winning party-specific open-list council vote on being candidate in the next mayor election
- ▶ effect on the order of 60-80% – same magnitude as in Sweden

Primary effect in Brazil
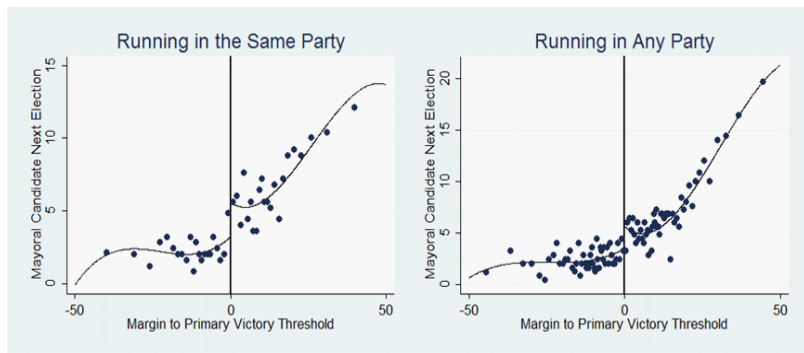
Roadmap

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Findings

Discover a new phenomenon – the primary effect

- ▶ causal – and large – effect of winning the most preference vote on chance of promotion to local party leader
- ▶ magnitude similar in Sweden's semi-open list system and Brazil's open-list system
- ▶ primary effect, and its heterogeneity in Sweden, suggests that preference voting works as internal-party primary

Earlier critique misses the target

- ▶ previous research had too narrow focus
- ▶ reform affects leadership promotion rather than representation
- ▶ has intended effect to raise within-party competition, but in unintended way

Future work

Theory

- ▶ better understand voting with downstream effects – as in theory of strategic voting (Piketty, 2000, Razin, 2003, Meirowitz and Shotts, 2009)

Empirics

- ▶ external validity – primary effect also in other countries?
- ▶ do party leaders appointed via primary effect select different – better or worse – policies than other leaders?
- ▶ answer needed before jumping to normative conclusions
- ▶ current design can perhaps serve as a "first stage"

Gender Quotas and the Crisis of the Mediocre Man

Tim Besley, Olle Folke, Torsten Persson, and Johanna Rickne

General motivation

Back to conditions for well-functioning democracy

- able (competent) politicians
- even representation: not only of socioeconomic groups, but other aspects like gender

Both hinge on appointments by party leaders

- able followers threaten leader survival, as may followers of different gender
- mediocre leaders defending their position can create vicious circle of mediocrity, some shock needed to break such "old-boys network"

Gender quotas: A contested issue

Used in elections by more than 100 countries

- ▶ some mandated, others voluntary
- ▶ mandates also discussed for company boards
- ▶ proponents appeal to equal representation, opponents appeal to meritocracy

So, do quotas violate meritocratic appointments, or can they instead support them by straightening out vicious circle of mediocrity?

- ▶ but .... little theory and evidence speak on this issue
- ▶ 1993 "zipper" quota in Sweden's Social Democrats

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- 1993 "zipper" quota in Sweden's Social Democrats

  "Our party's quota policy of mandatory alternation of male and female names on all party lists was informally known as the 'crisis of the mediocre man' in the Woman's Association"
  - Inger Segerström, Chairperson of Women's Association, 1995-2003.

Appointments and ability in Swedish municipal politics

Step 1: Theory

- show how party leaders with given competence choose follower ability, trading off own survival and electoral success

Step 2: Evidence

- show how local parties with mediocre leaders have mediocre followers

Step 3: Evidence

- study (causal) effects of 1993 quota on ability of men and women

Step 4: Back to theory

- extend model from Step 1 to help interpret the evidence

Related research: Theory

Citizen-candidate models

- ▶ otherwise ability and gender does not matter for policy and hence not to voters (Osborne and Slivinsky 1996, Besley and Coate 1997)

Models of political selection

- ▶ ability is valence for voters (Banks and Sundaram 1998)
- ▶ choices by mediocre leaders may compromise competence and diversity (Egorov and Sonin 2011)
- ▶ survival of leaders may depend on composition of followers (Gagliarducci and Paserman 2012)

Supply of politicians

- ▶ who selects into politics in the wake of discrimination (Julio and Tavares 2016)

Related research: Gender quotas in politics

Descriptive about quotas

- ▶ spread of reforms and numeric impact on representation (Dahlerup 2006, Krook 2009)
- ▶ case studies of substantive and symbolic representation (Franceschet, Krook and Piscopo 2012)

Effects of quotas

- ▶ candidate quotas often evaded (Norris 2004, Krook, 2010, Casas-Arce and Saiz 2011, Bagues and Esteve-Volart 2012)
- ▶ positive impact on votes in male-dominated parties (Cases-Arce and Saiz 2011)
- ▶ how do additional women compare to men: higher or similar education or occupation (Baltrunaite et al 2012, O'Brien, 2012), equal parliamentary activity (Murray 2010)

Roadmap

Context: Municipal party leaders

Predominantly male

- e.g., 80% of all first-ranked positions on party ballot in 1991 (83% in Social Democrats)

Control composition of the party list

- selection committee close to party leader proposes electoral list, after member nominations, or internal primaries
- few changes made in members' meeting
- surveys of municipal politicians confirm decisive influence of party leaders

Basic model structure

Election for municipal council

- two parties $K = D, B$

Politicians

- two types: competent and mediocre, share of competent r_K
- voter payoff increasing in r_K invariant to number of seats

Leaders

- have competence $l_K \in [0, 1]$, higher l_K more competent

Party competence

- weighted average of leader and follower competence

$$c_K = \alpha l_K + (1 - \alpha) r_K. \tag{1}$$

$0 < \alpha < 1$ is mechanic or substantive weight

Timing of events

1. Each party K has leader with competence l_K
2. Each leader chooses share of competent followers r_K
3. Council election is held: party's chance of winning increasing in c_K
4. Popularity shock ε for each leader realized, followed by contest in each party: leader's survival chance increasing in $l_K - r_K$
5. Payoffs realized

▶ study equilibrium by backward induction

Stage 4: Leadership contest

Leader survives if

$$r_K - l_K + \varepsilon < 0$$

- popularity shock ε has c.d.f. $Q(\cdot)$, symmetric around 0 with log-concave density $q(\cdot)$
- probability of leader survival $Q(l_K - r_K)$
- popularity shock not known at list-design stage 2

Stage 3: Council election

Voters

- ▶ get utility $v_K = c_K$ from party $K = D, B$ (competence is valence)
- ▶ do not care about survival of leaders beyond their competence

Competition for voters

- ▶ think about standard probabilistic-voting model
- ▶ probability party D wins is $P(v_D - v_B)$
- ▶ assume density $p(\cdot)$ has single maximum at $v_D = v_B$

Stage 2: List design

List choice by leader in party D

- pick competence equivalent to picking

$$v_D = \alpha l_D + (1 - \alpha)\, r_D$$

- ego rents e from surviving, and $E = 1$ from party winning
- expected payoff when choosing r_D

$$\widetilde{V}(l_D, r_D) = Q\,(l_D - r_D)\, e + P(\alpha l_D + (1 - \alpha)\, r_D - v_B)$$

First-order condition, for given l_D and v_B

$$-q\,(l_D - r_D)\, e + (1 - \alpha)p(v_D - v_B) = 0 \qquad (2)$$

- higher r_D, higher chances of external win and internal loss
- parallel condition for party B gives prediction:

Prediction *In any political equilibrium, more competent leaders pick more competent candidate lists*

Roadmap

Linking data sets

Party ballots from Election Authority

- ▶ ten waves of elections 1982 to 2014
- ▶ list rank of each politician
- ▶ Social Democrats make up roughly 40% of elected

Linked to rich socioeconomic data

- ▶ various registers give highly reliable information on income, education, age, sex, occupation, location, for full sample period

Full population data

- ▶ same variables used to calculate Earnings score

Measuring competence

Estimate Mincer regression for population

- ▶ in each annual cross section, estimate:

$$y_{i,t} = f(age_{i,t}, educ_{i,t}, occ_{i,t}) + \alpha_m + \varepsilon_{i,t} \tag{3}$$

  $y_{i,t}$ year t income for i, α_m municipality fixed effect

- ▶ f has a separate fixed effect for each possible interaction among dummies for cohorts, education, and broad occupation
- ▶ estimate (3) separately for men, women, and retired
- ▶ derive Earnings score: "individual fixed effect" averages $\varepsilon_{i,t}$ across t

Binary competence measure – as in model

- ▶ politician competent (mediocre) if her score $E(\varepsilon_{i,t})$ above (below) median for party – within-party analysis
- ▶ l_K average competence of party's top three ranked candidates in past election, r_K average across all elected politicians except top three

Validate earnings score

By other competence measures

- ▶ correlated with leadership and cognitive scores for men

By political success

- ▶ correlated with preference-vote shares, re-election, list-rank, top rank (Table 1)

By service delivery

- ▶ policy performance measures correlated with average earnings score in majority party (Table 2)

Leader and follower competence – Table 3

	Binary Income Residual						Cognitive Enlistment Score	Leadership Enlistment Score
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Lagged top-3 competence	0.123*** (0.015)		0.121*** (0.015)	0.096*** (0.011)	0.077*** (0.016)	0.014 (0.021)	0.179*** (0.043)	0.180*** (0.051)
Top-3 competence		0.081*** (0.015)	0.006 (0.016)					
Lagged follower competence				0.369*** (0.020)				
Election-period FE	yes	yes	yes	yes	yes	yes	yes	yes
Municipality FE					yes		yes	yes
Municipality*party FE						yes		
Observations	3,028	3,708	3,015	2,920	3,028	3,028	976	826

- ▶ as in model, correlated across followers and leaders
- ▶ also study shocks to follower competence (Table W6)

Roadmap

The Social Democrat zipper quota

Pre-history

- female members had long fought for better representation
- recommendations before 1988 and 1991 elections of 40-50% female candidates were not too successful
- 82% of local party leaders were men

1993 reform

- credible threat of breakout feminist party
- centrally imposed reform on local groups – cf Figure 2
- zipper quota much more effective than recommendations (Conservatives 1993, and Center party 1996) – cf Figure 3

A "zipped" ballot – Figure 2

VAL TILL KOMMUNFULLMÄKTIGE
Arbetarepartiet-Socialdemokraterna
Du får bara markera en av dessa **anmälda** kandidater.

1. Ulric Andersen, 60, oppositionsråd, Skå
2. Gun Häll, 57, studiestödshandläggare, Stenhamra
3. Sveneric Larsson, 67, f.d. närpolischef, Adelsö
4. Eleonor Eriksson, 32, studerande, Stenhamra
5. Georg Gustafsson, 44, egen företagare, Ekebyhov
6. Elisabeth Palm, 54, tandsköterska, Stenhamra
7. Fredrik Sirberg, 33, byggnadsarbetare, Munsö
8. Marianne Jacobsson, 75, f.d. rektor, Skå
9. Johan Hammarström, 19, personlig assistent, Väsby
10. Inger Andersen, 59, enhetschef, Skå
11. Lars Holmström, 39, byggnadsarbetare, Stenhamra
12. Hanna Svensson, 27, ombudsman, Helgö

38. Margit Hammarström, 54, kokerska, Väsby
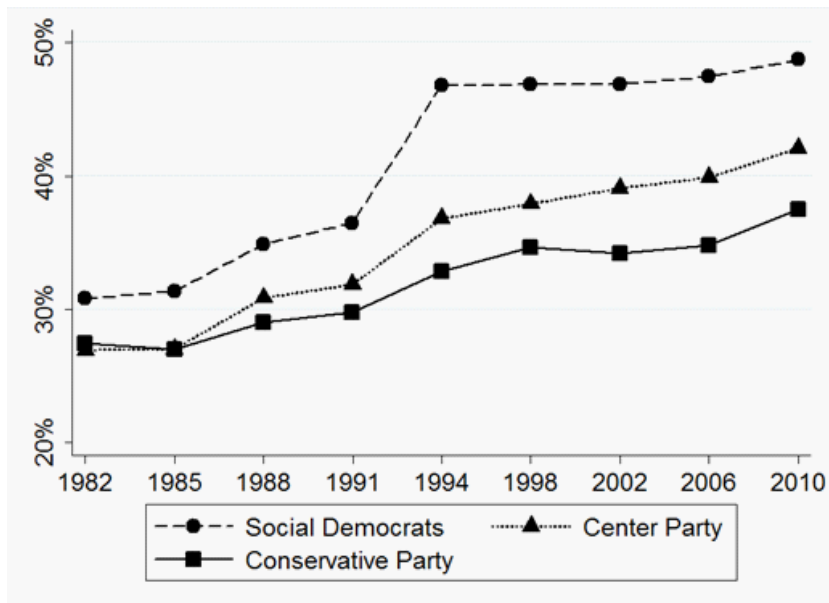39. Leif Bengtsson, 62, undersköterska, Väsby
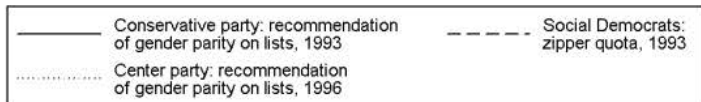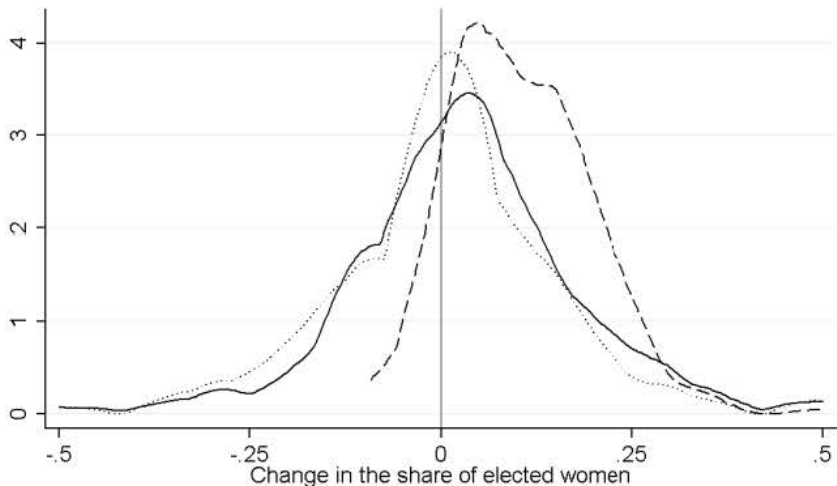40. Maj-Britt Johansson, 79, pensionär, Färentuna
41. Bengt Ward, 53, Skå

Ekerö
0002-01307

Female council shares – Figure 3a

Distribution of changed female shares – Figure 3b

Change in the share of elected women

Conservative party: recommendation
of gender parity on lists, 1993

Social Democrats:
zipper quota, 1993

Center party: recommendation
of gender parity on lists, 1996

What to expect from the quota?

Different window on leaders and followers

- ▶ quota may have disrupted cosy coexistence of mediocre male leaders and followers
- ▶ larger shock if larger "quota bite" in 1994 election – less room for mediocre leader to survive by picking mediocre followers
- ▶ strategy of female Social Democrats: "turn numbers to influence!"

Difference in differences (DID) formulations

$$r_{m,t} = \Delta w_{m,94-91} \times \rho_t + \alpha_m + \varepsilon_{m,t}$$

where $\rho_t = 1$ for all elections after 1991, or

$$r_{m,t} = \beta_t \Delta w_{m,94-91} \times elec_t + elec_t + \alpha_m + \varepsilon_{m,t}$$

where $elec_t$ a dummy for election year t

- ▶ estimate for sample of municipalities with *male* party leader, which fullfilled the quota requirement

Simple DID – Table 4

|	All Politicians		Male Politicians		Female Politicians	
	(1)	(2)	(3)	(4)	(5)	(6)
Post-Quota$*\Delta w_{94\text{-}91}$	0.097	0.288**	0.249**	0.441**	-0.267	0.072
	(0.101)	(0.117)	(0.120)	(0.178)	(0.200)	(0.209)
Municipality FE	yes	yes	yes	yes	yes	yes
Muncipality time trends		yes		yes		yes
Observations	1,996	1,996	1,996	1,996	1,983	1,983

Dynamic DID – Figure 4
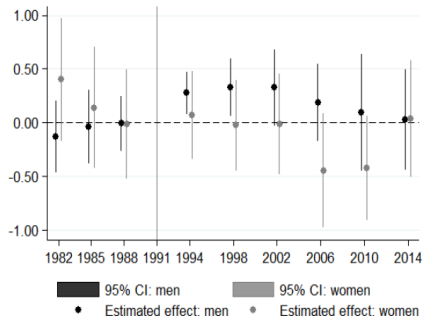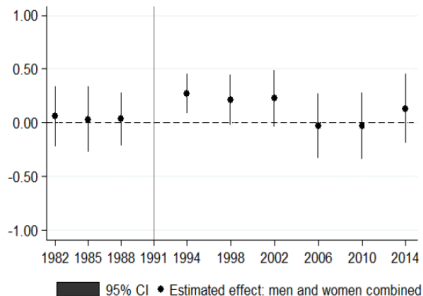
Results robust to

- dropping sample restrictions (Table W7)
- measuring quota bite in alternative ways (Table W8)
- controlling for municipal variables interacted with electoral-year dummies in the dynamic DID (Table W9)
- using shares of competent in other parties as placebo (Table W10)
- measuring follower competence by Leadership and Cognitive scores (Tables W11 and W12)

Leaders vs. followers DID – Figure 5
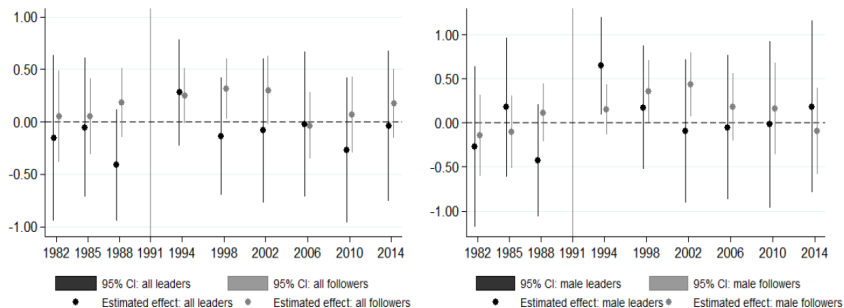
- ▶ higher competence not only mechanical effect of fewer men
- ▶ among men, effect on leaders immediate, on followers lagged

Do effects run via resignations?

Intriguing time pattern

- ▶ competence of male leaders improves already in 1994, of male followers only in next two elections

Could this reflect leader resignations?

- ▶ yes, if mediocre leaders were more likely to resign
- ▶ to check, estimate *individual-level* triple difference

$$
\begin{aligned}
s_{i,t} = \ & \beta_t(\Delta w_{m,91-94} \times elec_t \times l_i) + elec_t \times l_i + \Delta w_{m,91-94} \times l_i \\
& + \Delta w_{m,91-94} \times elec_t + a_m \times l_i + l_i + elec_t + \alpha_m + \varepsilon_{i,t}
\end{aligned}
$$

  $s_{i,t}$ dummy for surviving – not resigning *before* election t – of leader i (from top 3), and l_i individual dummy for mediocracy

- ▶ or, run DID separately for competent and mediocre leaders

Leader resignations DID – Figure 6
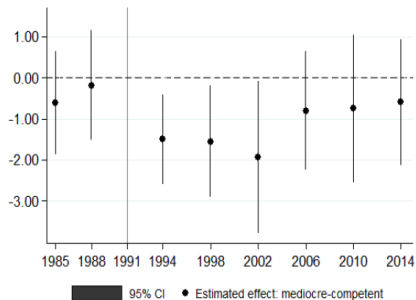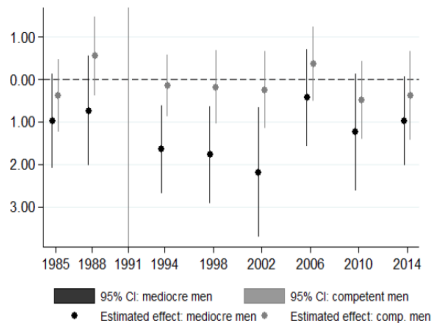
Roadmap

Extend simple model

Distinguish male and female candidates

- w_D, party D share of women, chosen along with r_D at stage 2

Preferences of representative voter

$$v_D = \alpha l_D + (1 - \alpha)r_D + \mu(w_D)$$

- $\mu(w_D)$ concave, max at $1/2$ – average voter wants equal representation

Leadership survival at stage 2

$$\sigma(w_D, r_D) - l_D + \varepsilon < 0$$

- "threat function" $\sigma(\cdot)$ increasing and convex in both arguments
- probability of survival now $Q(l_D - \sigma(w_D, r_D))$

Optimal choice of candidates

Focus on partial equilibrium

- ▶ party D choices, for given v_B offered by party B

Unconstrained optimum conditions

- ▶ for share of competent r_D

$$-\sigma_r q(l_D - \sigma(w_D^*, r_D^*))e + p(v_D - v_B)(1 - \alpha) = 0$$

  leader faces similar tradeoff as in simple model

- ▶ for share of females w_D

$$-\sigma_w q(l_D - \sigma(w_D^*, r_D^*))e + p(v_D - v_B)\mu_w(w_D^*) = 0$$

  1st term negative, so sets $w_D^* < 0.5$ where μ slopes upward

Interpretation?

- ▶ think about this as the pre-quota equilibrium

Effects of quota

Suppose central party sets $w_D = w$

- define constrained share of competent $R_D(w, l_D)$ from

$$-\sigma_r(w, R_D(w, l_D)) q(l_D - \sigma(w, R_D(w, l_D)))e$$

$$p(\alpha l_D + (1-\alpha)R_D(w, l_D) + \mu(w) - v_B)(1-\alpha) = 0$$

- effect on competence induced by $w = \frac{1}{2}$ quota

$$\Delta r_D = \int_{w_D^*}^{1/2} \frac{\partial R_D(w, l_D)}{\partial w} dw \cong \frac{\partial R_D(w_D^*, l_D)}{\partial w} \left[\frac{1}{2} - w_D^*\right]$$

  which has uncertain sign, as sign of $\frac{\partial R_D(w_D^*, l_D)}{\partial w}$ uncertain

- whichever sign, effect proportional to quota bite $\left[\frac{1}{2} - w_D^*\right]$
- effect on leadership survival

$$\Delta\sigma = \int_{w_D^*}^{1/2} \frac{d\sigma(w, R_D(w, l_D))}{dw} dw \cong \frac{d\sigma(w_D^*, R_D(w_D^*))}{dw} \left[\frac{1}{2} - w_D^*\right]$$

  which also has uncertain sign

- what is missing? – a role for resignations!

Allow for leader resignations

New stage 1.5, before choice of r_D and w_D

- ▶ incumbent leader l_D may resign – if so, new leader with competence z_D drawn at random
- ▶ let $W(w, z_D)$ be choice by new leader when female quota is w
- ▶ higher l_D has higher payoff if stays in office

Equilibrium resignations

- ▶ exists a cutoff such that $l_D < \hat{l}_D(w)$ resign, with $\hat{l}_D(w)$ increasing in w – more mediocre leaders resign as face greater threats from women
- ▶ a strict quota $w = \frac{1}{2}$ implies an approximate cutoff shift by

$$\hat{l}\left(\frac{1}{2}\right) - \hat{l}_D(0) \simeq \frac{\partial \hat{l}_D(0)}{\partial w}\left[\frac{1}{2} - W(0, l_D)\right]$$

Prediction *A quota raises resignation rates for mediocre leaders, with larger effect at greater quota bite*

- ▶ expected follower competence rises with increasing resignations by mediocre leaders

Roadmap

Final remarks

Theory – new modeling

- ▶ selection of candidate ability in list system: mediocre followers picked by mediocre leaders who worry about their own survival
- ▶ if female quota shift such leaders' attention from surviving to winning elections, leader turnover and follower competence rise

Data – new measurement

- ▶ measure ability by Earnings score
- ▶ validated in three ways

Empirics – new substantive findings

- ▶ strong link between leader and follower competence
- ▶ a stricter quota raised competence, among men
- ▶ immediate wave of resignations by mediocre leaders, and more competent followers in subsequent elections
- ▶ like in Lecture 1, more equal representation does not compromise meritocracy