

Political Economics III – Spring 2016
**Selection of Political Leaders:
Drivers and Consequences**

Torsten Persson

Lecture 6, May 4, 2016

How do we proceed?

Last week we talked about

- ▶ general selection in Swedish municipal politics
- ▶ party selection of their leaders

This week we will talk about

- ▶ how leaders with different ability choose ability and gender of candidates on the party ballot, and how this choice affected by gender quotas
- ▶ whether powerful party leader confer “dynastic rents” on their close relatives, and if so along which channels

Gender Quotas and the Crisis of the Mediocre Man: Theory and Evidence from Sweden

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

General motivation

Conditions for well-functioning democracy

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

Hinges on party appointments

- ▶ more able followers may threaten leader survival, which may compromise meritocracy
- ▶ so may followers of different gender
- ▶ this can create vicious circle of mediocrity
- ▶ may need to be straightened out by some shock

Gender quotas: A contested issue

Used in election systems of more than 100 countries

- ▶ also discussed e.g., for company boards
- ▶ proponents refer to equal representation
- ▶ opponents refer to violations of meritocracy

Premise of meritocratic appointments

- ▶ if false, quotas could straighten out vicious circle of mediocrity
- ▶ but little theory and evidence to speak on this issue
- ▶ 1993 “zipper” quota in Sweden’s Social Democrats

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"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 the Social Democratic women's association, 1995-2003.

Study appointments and ability in Swedish politics

Step 1: Theory

- ▶ simple model where party leader with given competence chooses follower ability to trade off his own survival and electoral success

Step 2: Evidence

- ▶ test prediction: mediocre leaders have mediocre followers, when no distinction between men and women

Step 3: Evidence

- ▶ distinguish men and women and study effects of 1993 (s) 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 2011)

Supply of politicians

- ▶ who selects into politics in the wake of discrimination (Julio and Tavares 2011)

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)
- ▶ effects in other dimensions: higher ability measured by education (Baltrunaite et al 2012), equal parliamentary activity (Murray 2010), similar occupation and education (O'Brien, 2012)

Roadmap

1. Introduction
2. Context
3. A Simple Model
4. Data and Results for Ability
5. The Gender Quota
6. Making Theoretical Sense of Results
7. Final Remarks

Swedish municipalities

Lowest political units

- ▶ 280 units of different size (since 1974)

Considerable policy autonomy

- ▶ control day-care, schools, old-age care: spend 15-20% of GDP, employ 20% of labor force, set local income tax rate

Proportional elections — turnout typically 80-90%

- ▶ 31-101 (reflecting municipality size) council members, elected every four years (every three years before 1994)
- ▶ two blocks: left led by Social Democrats vs. center-right

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 leadership proposes electoral list, given member nominations (parties in left bloc), or internal primaries (parties in center-right bloc)
- ▶ candidate lists proposed by committee, few changes made in member meeting
- ▶ surveys of municipal politicians confirm predominant influence of party leadership

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Basic 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

$$c_K = \alpha l_K + (1 - \alpha) r_K. \quad (1)$$

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

Timing of events

1. Each party K has a leader with competence l_K
 2. Each leader chooses share of competent followers r_K
 3. Council election is held
 4. A popularity shock ε for each leader is realized, followed by contest in each party where leader's survival chance increasing in $l_K - r_K$
 5. Payoffs are realized
- ▶ Study the 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 zero 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
- ▶ consistent with citizen-candidate model

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

- ▶ picking 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

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

First-order condition, for given l_D and v_B

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

- ▶ 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*

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Linking data sets

Party ballots from Election Authority

- ▶ nine waves of elections 1982 to 2010
- ▶ list rank of each politician
- ▶ entire sample includes about 202,500 unique politicians, 53,200 of which elected
- ▶ 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, and military draft scores for full sample period

Full population data

- ▶ same variables used to calculate our competence measure

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Measuring competence

Estimate Mincer regression for population

- ▶ in each annual cross section, estimate:

$$y_{i,t} = f(\text{age}_{i,t}, \text{educ}_{i,t}, \text{empl}_{i,t}) + \alpha_m + \varepsilon_{i,t} \quad (3)$$

$y_{i,t}$ 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 employment sector
- ▶ estimate (3) separately for men, women, and retired
- ▶ estimate an individual fixed effect, average $\varepsilon_{i,t}$ across t

Binary competence measure

- ▶ a politician is competent (mediocre) if her $E(\varepsilon_{i,t})$ above (below) median for party – thus we do 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

Validating competence – Table 1

For each party, estimate

$$x_{i,t} = \beta c_i + \phi_{i,t} + \epsilon_{i,t}$$

	<i>Preference vote share</i>		<i>Re-election</i>		<i>List rank</i>	<i>Top rank</i>	<i>Cognitive score</i>	<i>Leadership score</i>
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Competent	0.70*** (0.01)	0.21*** (0.02)	7.53*** (0.37)	7.21*** (0.38)	-1.30*** (0.051)	3.92*** (0.24)	0.26*** (0.04)	0.39*** (0.04)
List rank FE		yes		yes				
Observations	58,934	58,934	64,361	64,361	64,361	64,361	7,915	6,318

Leader and follower competence – Table 2

Competence of	Binary Income Residual						Cognitive	Leadership
	(1)	(2)	(3)	(4)	(5)	(6)	Score	Score
Lagged Top 3	0.126*** (0.015)		0.124*** (0.014)	0.088*** (0.010)	0.080*** (0.013)	0.033** (0.016)	0.198*** (0.035)	0.119*** (0.033)
Top 3		0.074*** (0.014)	0.006 (0.014)					
Lagged Followers				0.445*** (0.020)				
Municipality FE					yes		yes	yes
Mun*Party FE						yes		
Observations	2,728	3,340	2,723	2,698	2,728	2,728	1,079	1,311

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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 of zipper quota – Figure 3
- ▶ much more effective than recommendations earlier and in other parties (Conservatives 1993, and Center party 1996) – Figure 4

A "zipped" ballot – Figure 3

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
13. 64, f.d. verkst. direktör, Träkvista

38. Margit Hammarström, 54, kokerska, Väsby

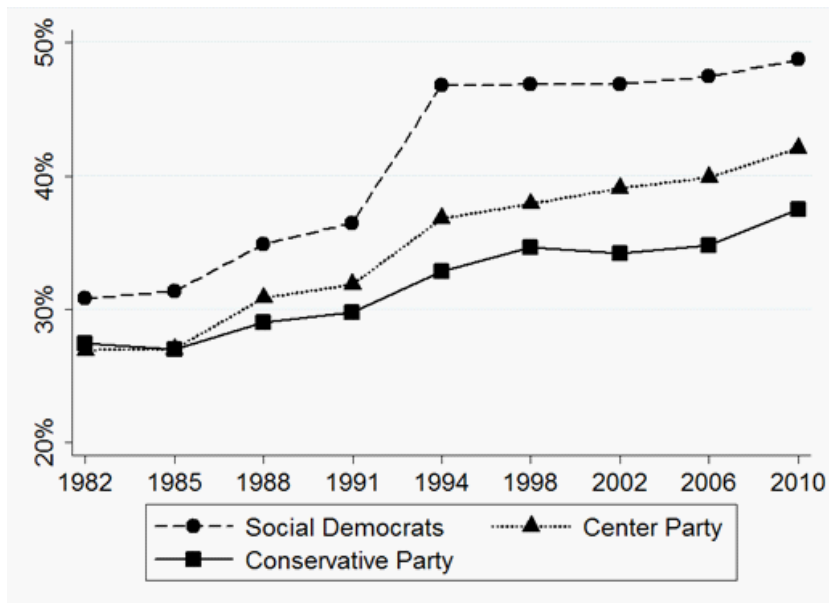
39. Leif Bengtsson, 62, undersköterska, Väsby

40. Maj-Britt Johansson, 79, pensionär, Färentuna

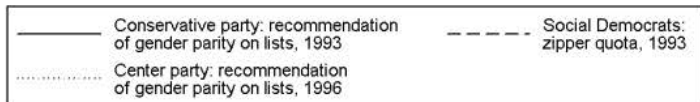
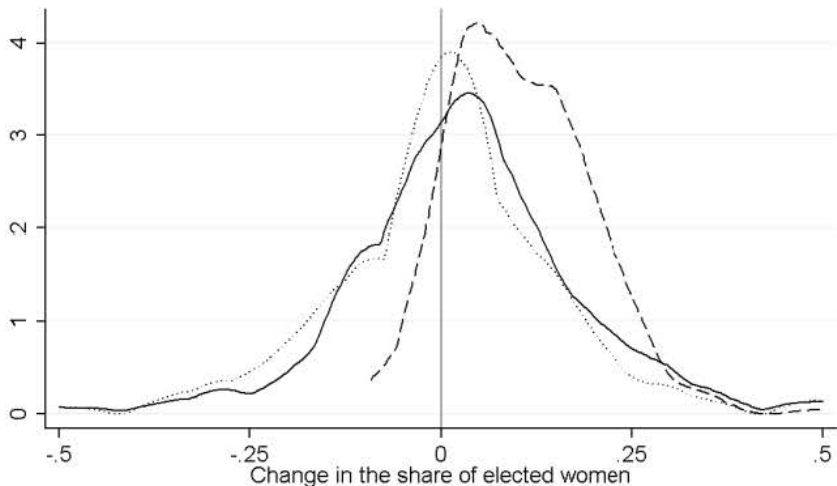
41. Bengt Ward, 53, Skå

Ekerö
0002-01307

Female council shares – Figure 4a



Distribution of changed female shares – Figure 4b



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
- ▶ female Social Democrat strategy: convert 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 $\rho_t = 0$ for all elections up to 1991, or

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

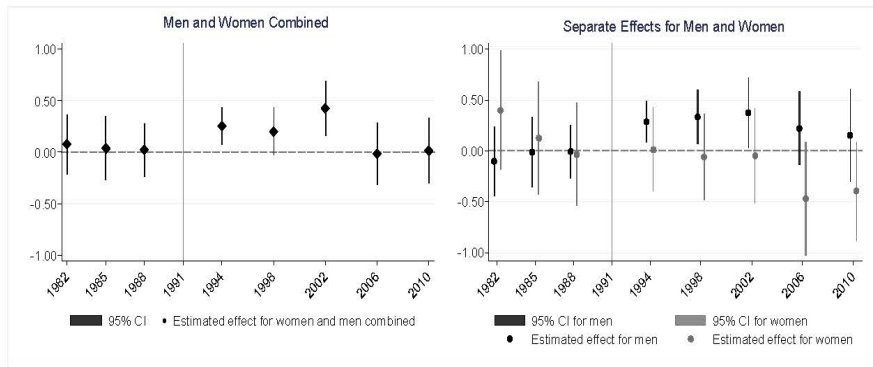
where $elec_t$ a dummy for election year t

- ▶ estimate for all municipalities with male party leader

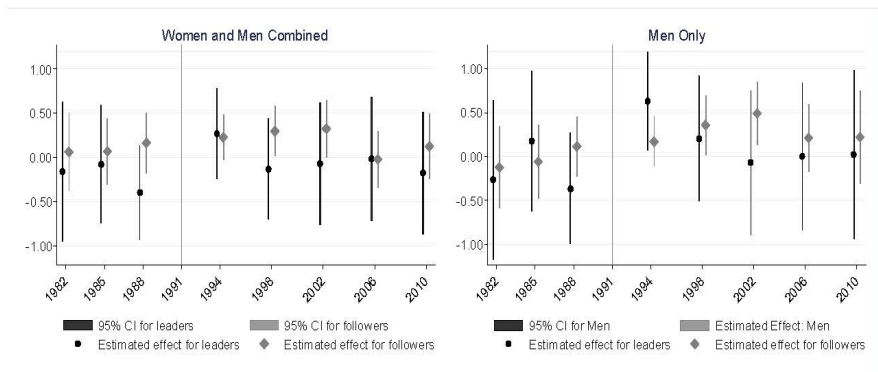
Simple DID – Table 3

	<i>All Politicians</i>		<i>Male Politicians</i>		<i>Female Politicians</i>	
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Post-Quota*Δw_{94-91}</i>	0.105 (0.099)	0.336*** (0.113)	0.303** (0.117)	0.383** (0.163)	-0.317 (0.198)	0.233 (0.215)
Municipality time trends		yes		yes		yes
Observations	1,795	1,795	1,795	1,795	1,783	1,783

Dynamic DID – Figure 5



Leaders vs. followers DID – Figure 6



Does effects run via resignations?

Intriguing time pattern

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

Could this reflect resignations?

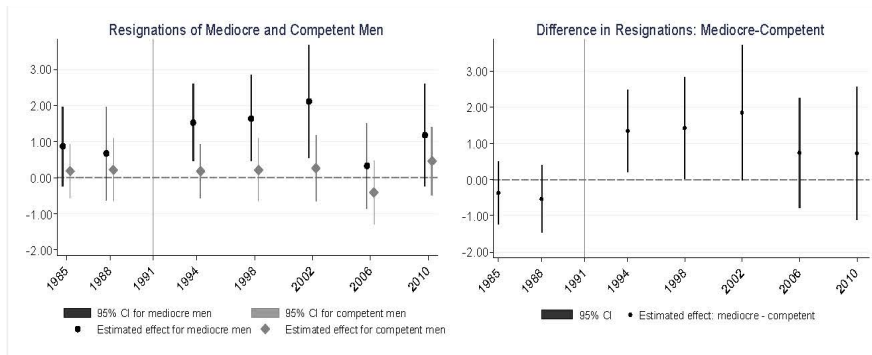
- ▶ yes, if mediocre leaders were more likely to resign
- ▶ to check this, estimate triple difference

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

$s_{i,t}$ is dummy for resignation before election t of leader i (one of top three) and l_i mediocracy dummy of leader i

- ▶ or run DID separately for competent and mediocre leaders

Leader resignations DID – Figure 7



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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

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

- ▶ $\mu(w_D)$ is concave function with max at $1/2$ – average voter likes equal representation

Leadership survival at stage 2

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

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

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

$$-\sigma_w q(l_D - \sigma(w_D, r_D))e + p(v_D - v_B)\mu_w(w_B)$$

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 $w_D = 1/2$

- ▶ define constrained share of competent $R_D(1/2, l_D)$ 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 quota is

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

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

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

which also has uncertain sign

- ▶ what is missing? – a role for resignations!

Allow for leader resignations

New stage 1.5, before the choice of r_D and w_D

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

Equilibrium resignations

- ▶ exists a cutoff such that $I_D < \hat{I}_D(k)$ resign, with $\hat{I}_D(k)$ increasing in k – more mediocre leaders resign as face greater threats from women
- ▶ a strict quota implies an approximate cutoff shift by

$$\hat{I}_D\left(\frac{1}{2}\right) - \hat{I}_D(0) \simeq \frac{\partial \hat{I}_D(0)}{\partial q} \left[\frac{1}{2} - W(0, I_D) \right]$$

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

- ▶ more competent leaders pick more competent followers, so expected follower competence rises after such resignations

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Final Remarks

Theory – new modeling

- ▶ selection of candidate ability in list system: mediocre leaders pick mediocre followers, as worry about their own survival
- ▶ female share raised by a quota: mediocre male leaders may shift attention from surviving to winning elections – this can raise leadership turnover and follower competence

Empirics – measurement

- ▶ residual ability measure: based on earnings outside of politics, conditional on observables
- ▶ closely associated with political success and with leadership and cognitive-ability scores from military draft

Empirics – substantive findings

- ▶ strong link between leader and follower competence
- ▶ a stricter quota raised competence, among men
- ▶ immediate wave of resignations by mediocre leaders, while more competent followers in subsequent elections

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- ▶ whether powerful party leader confer “dynastic rents” on their close relatives, and if so along which channels

Dynastic Political Rents

Olle Folke, Torsten Persson and Johanna Rickne

Understand incentives to seek political office

"The obvious starting point for analyzing incentives faced by politicians is to quantify the relative costs and benefits of a career in politics" (Keane and Merlo 2010)

"Politicians are rational individuals who make career decisions by comparing the expected returns of alternative choices" (Diermeier et al. 2005)

- ▶ growing body of work on monetary rewards from political office (Eggers and Hainmueller 2009, Querubin and Snyder 2009, Lundqvist 2013, Fisman et al. 2014, Kotakorpi, et al. 2014).
- ▶ much less work on rewards spread to relatives (Fafchamps and Labonne 2014, Bennedsen et al. 2015).

Dynastic political rents

Such rents are different from other types of rents

- ▶ not democratically legitimate, and may signal corruption

How can dynastic political rents occur?

- ▶ through nepotistic hires, nepotistic favors, indirect favors within or outside political hierarchy
- ▶ changed behavior of relatives

Research question

Do incomes go up for relatives to politicians in power?

- ▶ if see such effects – along which channel do they occur
- ▶ understudied – unlike income of politicians themselves, or returns to politically connected firms
- ▶ interesting to do in Sweden – low end of perceived corruption

Methodology

Exploit close elections in Swedish municipalities

- ▶ near-random shocks to which political block holds power

Study individual data

- ▶ close relatives to top politicians in largest party of each political bloc
- ▶ relatives of powerful politicians in majority vs. opposition

Contribution – compare to few existing studies

Fafchamps and Labonne (2014) on Philippines, Gagliarducci and Manacorda (2015) on Italy

- ▶ observe family links directly, so do not have to rely on last-name approximations
- ▶ have considerably better outcome data

Amore-Bennedsen-Nielsen (2015) on Denmark

- ▶ use more plausible and interpretable shifts of political power: governing majority vs. opposition, rather than large vs. small municipalities

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Data

Start from extensive politician data set (Election Authority)

- ▶ all politicians, in all parties, in all municipalities, in all elections 1991-2011

Identify close relatives (Generation and Sibling Registers)

- ▶ from politician ID-number, get relatives' ID-numbers

Measure income of relatives and politicians (Income Register)

- ▶ (mostly) third-party reported earnings from tax-returns
- ▶ separately observe employment and business earnings
- ▶ can observe occupation and employer

Treatment and control groups

Study political coalitions

- ▶ party proliferation due to PR, so a party rarely rules alone
- ▶ left and center-right blocks well-defined in most municipalities

Treatment group

- ▶ children and siblings to top-three politicians on party list of largest party in *governing* block – don't study spouses for reasons of selection (Folke and Rickne 2016)
- ▶ mayor (KSO) nearly always from top three, and chair of important committees very often (Table 3)

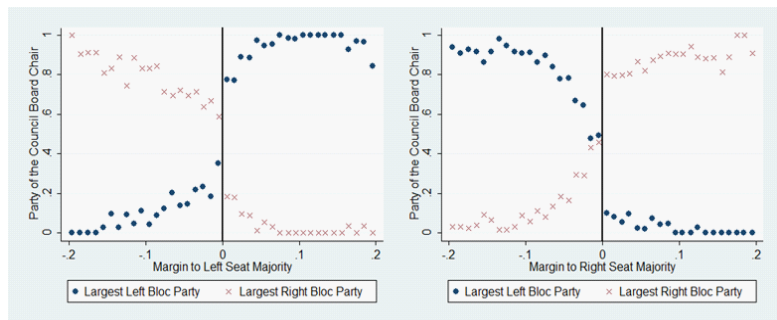
Control group

- ▶ children and siblings to top-three politicians on party list of largest party in *opposition* block
- ▶ never appoints chairs, but often vice chairs (Table 3)
- ▶ *politician* characteristics are quite balanced across the two groups (Table 3)

Identifying variation

Largest party in block appoints the mayor

- ▶ probability of this event by (block vote share – 50%)



- ▶ tempting to use fuzzy RDD, but do not have enough power
- ▶ use strategy in spirit of RDD: limit sample to close elections

Main estimating equation

$$Y_{n,t}^i = \beta P_{p,m,t}^i + \lambda_t + \rho_n + \varepsilon_{n,t}^i$$

- ▶ $Y_{n,t}^i$ average earnings for individual i , living in municipality n , in election period t
- ▶ $P_{p,m,t}^i = 1$ if i has top-politician relative, whose party p appoints mayor in municipality m , in election period t

Identification threat due to selection

- ▶ ruling-party and opposition-party politicians may differ, as may income of relatives – especially if one block sure to win
- ▶ consider “close” elections: (block vote share – 50%) within 5% points – probability to appoint mayor comparable for largest party in two blocks
- ▶ use variety of controls, and test that sample is balanced

How define close election?

Not as simple as in majoritarian elections

- ▶ because of many parties and PR, mapping from party vote shares to bloc majority is quite complex

Resolve by simulation

- ▶ use technique in Folke and Rickne (2016) described in Online Appendix
- ▶ in two thirds of elections in 1991-2010, one or more bloc is within 10 percentage points from majority, in 44% of elections within 5 percentage points from majority – this is our main estimation sample

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Table 4 – effects on total earnings?

	Living in any municipality				Living in municipality of politician			
	Relatives to		Relatives to		Relatives to		Relatives to	
	top- three politicians	5%	top-ranked politician	5%	top-three politicians	5%	top-ranked politician	5%
Panel A. Total earnings								
Log Earnings								
Treatment	0.08*** (0.02)	0.06* (0.04)	0.08* (0.04)	0.06 (0.06)	0.11*** (0.04)	0.12** (0.06)	0.16** (0.06)	0.17* (0.10)
Earnings								
Treatment	6.16*** (2.21)	1.41 (3.71)	6.94 (4.28)	4.76 (8.23)	6.19** (2.63)	6.69 (4.17)	8.92** (4.47)	12.07 (7.37)
Obs.	23,826	10,507	8,315	3,626	10,206	4,568	3,504	1,561
Mean dep var	190.07	193.77	196.23	199.85	162.34	165.13	166.08	164.49

- ▶ large estimates, only significant if look in same municipality

Robustness tests

Earnings from employment or business?

- ▶ all employment, none from business – Table 4

What if replace current earnings with lagged earnings?

- ▶ no effect in 5% election sample – Table 5

Predetermined characteristics as dependent variable?

- ▶ no significant effect on age, years of education – Table W1

Robust to control variables?

- ▶ no significant effect of party ruling in previous election, age and education of children and siblings, in 5% election sample – Table W2

Roadmap

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Table 6 – Children vs. siblings?

	Children in same municipality as politician				Siblings in same municipality as politician			
	Relatives to top-three		Relatives to top-ranked		Relatives to top-three		Relatives to top-ranked	
	All	5%	All	5%	All	5%	All	5%
Log Earnings Treatment	0.09* (0.05)	0.06 (0.07)	0.22*** (0.08)	0.22* (0.13)	0.09 (0.06)	0.18* (0.09)	0.01 (0.11)	0.02 (0.14)
Earnings Treatment	3.34 (3.07)	1.05 (5.11)	16.25*** (5.12)	18.80** (8.31)	6.99 (4.64)	10.43 (7.65)	-1.81 (8.27)	0.41 (13.25)
Obs.	6,412	2,876	2,221	991	3,794	1,692	1,283	570
Mean dep var	135.9	137.2	135.1	133.1	207.0	212.7	219.6	219.1

- ▶ effect on children of mayors, but not on siblings
- ▶ large income hike, almost 20% of earnings

Table 7 – Children of new or incumbent mayors?

	Children			
	of first-time chairs		of incumbent chairs	
	All	5%	All	5%
Log Earnings				
Treatment	0.26*** (0.10)	0.40** (0.17)	0.14 (0.19)	0.09 (0.20)
Earnings				
Treatment	15.74** (6.13)	22.23** (10.07)	6.78 (16.30)	7.70 (22.19)
Obs.	1,617	698	604	293
Mean dep var	128.70	124.75	152.36	152.87

► result stronger for new mayors (low power for incumbents)

Further on mechanisms

Earnings from municipality employment?

- ▶ no significant effects – Table 8

Employment in parent's pre-election sector?

- ▶ no significant (positive) effects – Table 8

Being a university student?

- ▶ do find negative effect – Table 8

Living in same municipality?

- ▶ do find a positive effect – Table 8

Table 8 – Behavioral changes?

	Children of top-three		Children of top-ranked	
	All	5%	All	5%
Panel C. Being a tertiary student				
Treatment	-0.00 (0.01)	0.01 (0.02)	-0.04* (0.02)	-0.03 (0.03)
Obs.	6,412	2,876	2,221	991
Mean	0.29	0.30	0.30	0.31
Panel D. Living in municipality of parent politician				
Treatment	0.03*** (0.01)	0.01 (0.01)	0.04*** (0.01)	0.02 (0.02)
Obs.	10,207	4,443	3,546	1,561
Mean	0.52	0.52	0.52	0.52

- ▶ results consistent with children postponing university and working in mayor's municipality instead

Short-run vs. long-run outcomes

Results concern only a four-year election period

- ▶ censoring makes it hard to look at very long run
- ▶ use power shifts in 1991-2002 elections to study effects 8-11 years out
- ▶ caveats: lower power, some opposition politicians in control group may return to power in the interim

Results are mixed

- ▶ positive effects on earnings appear to remain, but negative effects on university education appear to disappear – Table 9

Table 9 – Long-run outcomes?

	Children of top-three		Children of top-ranked	
	All	5%	All	5%
Panel A. Total earnings				
Treatment	10.46** (4.54)	6.20 (8.13)	12.03 (8.02)	27.07* (15.88)
Obs.	4,269	1,850	1,479	638
Panel B. Years of education				
Treatment	0.14 (0.09)	0.13 (0.14)	0.02 (0.16)	-0.18 (0.26)
Obs.	4,269	1,850	1,479	638

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Final remarks

Dynastic political rents to relatives of Swedish mayors

- ▶ higher earnings for children, but not for siblings
- ▶ large in relative terms, but earnings of children not very high
- ▶ larger impact for new mayors than incumbents
- ▶ effects arise in private sector, and partly reflect staying at home to work, rather than moving elsewhere to study
- ▶ in medium run, positive effects on earnings remain and negative effects on university education disappear

All in all, political dynastic rents look like marginal phenomenon

- ▶ quantitatively smaller effects than in earlier studies for Italy and Philippines
- ▶ no sign that mayors staff bureaucracies with their own relatives