Dynamic Returns to Political Tenure

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Motivation

Motivation

- There is strong empirical evidence that politicians use public office to serve private interests. They can do so in various ways:
 - Monetary (e.g. Eggers & Hainmuller, 2009; Fisman et al., 2014)
 - Nepotism (Dal Bo et al., 2009; Fafchamps & Labonne, 2017, Folke et al., 2017)
 - Ideology (Mian et al., 2010)
- Some studies argue the benefits of a political career are primarily reaped during office itself (Amore & Bennedsen, 2013; Fisman et al., 2014; Bourveau et al., 2021)
 - An opposing perspective asserts that returns to politics might crystallize over an extended timeframe (Querubin & Snyder Jr, 2009; Dal Bo et al., 2009)
- Moreover, the factors influencing the magnitude of returns to political engagement remain ambiguous:
 - Political party structure (Eggers & Hainmueller, 2009)
 - Institutions (Fisman et al., 2014)
 - Human capital accumulation on the job (Matozzi & Merlo, 2008)

This Study

- Most empirical studies focus on a static setting, without considering the dynamic component inherent in the returns to politics
 - Considerable heterogeneity among candidates and politicians in terms of tenure and effort to get elected
- This study focuses on a dynamic environment with repeated elections: the case of the Netherlands (1860-1917)
- It uses the repeated allocation of Lower House membership to estimate the financial returns for each particular period of political office.
- Rich setting allows focus on party structure, electoral institutions and career paths-related explanations of returns to political office

The case of the Netherlands

- 19th century political changes comparable to many other (European) countries
 - Repeated suffrage extensions (1887, 1896) culminating in universal suffrage
 - From political factions to explicit political parties (Protestants, Catholics, Liberals)
- Bicameral system: a Lower House and an Upper House
 - Politics concentrated in Lower House: from 75 to 100 seats
 - Modest formal salary (2500 guilders) Comparable to a doctor or engineer
- The Netherlands had a district system from 1848-1917
 - Many elections and many close elections
 - Detailed electoral data allow to estimate the dynamic returns to politics
 - Considerable heterogeneity in electoral and demographic characteristics

Data & Methodology

Sources

- Elections: Repositorium Tweede Kamerverkiezingen
 - Repository Lower House Elections
 - Contains detailed data on every election that took place in the district system (1848-1917)
 - Includes a list of candidates for each election, and amount of votes obtained
 - On this basis, I calculate the electoral margin and find candidates in close elections
 - Metadata: newspaper recommendations of each candidate, turnout, no. of times participated, date of election
- Probate inventories: Memories van Successie
 - Archival source available from 1877-1921
 - Measure of returns to politics: end-of-life wealth
 - Main reason for absence: archival accessibility, probate inventory registered in other place than place of death.

Other Sources

- HDNG Database containing information about Dutch Municipalities, including demographics, religious composition, taxes levied, professional composition at various points in time
 - Used to gauge district heterogeneity
- Politiek Documentatie Centrum:
 - Used to find demographic characteristics for politicians
 - Age at election, lifespan, year of death
 - Non-politicians: from Delpher and genealogy websites

Close Elections

- I take into account multi-candidate elections (cf. Lee, 2008)
 - Somewhat more complicated definition of the running variable Margin. For candidate i in district j:

$$\mathsf{Margin}_{ij} = \begin{cases} \frac{\mathsf{Votes}_{ij} - \mathsf{Votes}_{ML}}{\mathsf{Votes}_{j}} & \text{if } i \in \{\mathsf{Winners}\}_{j} \\ \frac{\mathsf{Votes}_{MW} - \mathsf{Votes}_{ij}}{\mathsf{Votes}_{j}} & \text{if } i \notin \{\mathsf{Winners}\}_{j} \end{cases}$$

- where Votes_{ML}, Votes_{MW} are the Marginal Loser and Marginal Winner.
- I prioritized data collection for close elections: out of 6,679 candidate-election pairs, I collected probate inventories for 4,065 candidate-election pairs.
 - These pertain to 515 unique candidates, whereas in total, there are 905 unique candidates.
- There are 2,618 candidate-election pairs who took place in relatively close elections, for 1,652 of which I collected their probate inventory (63%).

Basic Specification

• The basic specification that I use to estimate the returns to different periods of political activity, denoted by $\tau \in \{1, \dots, t^*\}$, is:

$$\log(1 + w_{ijp}) = \alpha_j + \gamma_p + \theta_{\tau}^{ITT} \cdot 1_{\mathsf{Margin}_i > 0} + \eta \cdot f(\mathsf{Margin}_i) + X_{ij}\beta + \epsilon_i \tag{1}$$

- where w_{ijp} is the end-of-life net wealth for candidate i from party p competing in district j.
- Using local linear polynomial regression on each side of the threshold (Cattaneo et al., 2014), with the optimal bandwidth (Cattaneo et al., 2019), forced equal bandwidth on both sides of the threshold

Results

Covariate Balance

- The identifying assumption of the design implies that for each au, treatment and control groups should be similar
 - This gives evidence that the potential outcomes are not discontinuous at the cut-off point.

| | Margin Within 0.2 | | | Mar | | | |
|----------------------------------|-------------------|--------------|----------|--------------|--------------|----------|----------------|
| | Mean Treated | Mean Control | p-value | Mean Treated | Mean Control | p-value | RD Estimate |
| Panel A: Newspaper Recomme | ndations | | | | | | |
| Rec.: Liberal | 0.079 | 0.039 | 0.076* | 0.050 | 0.081 | 0.450 | 0.009 (0.070) |
| Rec. Socialist | 0.016 | -0.028 | 0.000*** | 0.023 | -0.012 | 0.117 | 0.025 (0.041) |
| Rec.: Protestant | -0.009 | 0.085 | 0.000*** | -0.003 | 0.120 | 0.000*** | -0.086 (0.053) |
| Rec. Catholic | 0.009 | 0.008 | 0.957 | 0.036 | 0.031 | 0.845 | 0.003 (0.038) |
| Panel B: Election Characteristic | cs | | | | | | |
| Number of Tries Until Election | -0.215 | 0.076 | 0.006*** | -0.267 | -0.185 | 0.642 | -0.166 (0.220) |
| Election Year | 3.714 | 1.947 | 0.120 | 4.879 | 3.704 | 0.550 | 2.105 (4.465) |
| Year of Birth Candidate | 3.908 | 2.156 | 0.204 | 4.551 | 4.654 | 0.964 | 1.632 (4.212) |
| Log(Turnout) | 0.100 | 0.077 | 0.082* | 0.132 | 0.140 | 0.745 | -0.038 (0.043) |
| Log (Electoral Threshold) | 0.194 | 0.249 | 0.171 | 0.291 | 0.458 | 0.029** | -0.146 (0.182) |
| Log(Electorate Size) | 0.092 | 0.173 | 0.035** | 0.155 | 0.317 | 0.028** | -0.159 (0.164) |

Covariate Balance - Continued

• While there are imbalances between politicians and non-politicians, at the margin, they disappear

| | Margin Within 0.2 | | | Mar | | | |
|---------------------------------------|-------------------|--------------|----------|--------------|--------------|----------|----------------|
| | Mean Treated | Mean Control | p-value | Mean Treated | Mean Control | p-value | RD Estimate |
| Panel C: District Characteristics | | | | | | | |
| District Population | 0.206 | 0.340 | 0.012** | 0.242 | 0.422 | 0.028** | -0.145 (0.133) |
| % Labor Force Industry District | 0.001 | -0.027 | 0.000*** | -0.001 | -0.023 | 0.027** | 0.017 (0.015) |
| % Labor Force Agriculture District | 0.005 | -0.025 | 0.000*** | -0.003 | -0.023 | 0.141 | 0.015 (0.020) |
| % Labor Force Services District | -0.005 | 0.052 | 0.000*** | 0.004 | 0.046 | 0.053* | -0.033 (0.032) |
| % Paying Wealth Tax District | 0.047 | -0.314 | 0.000*** | 0.008 | -0.333 | 0.053* | 0.260 (0.303) |
| Income Tax Share District | 0.093 | -0.113 | 0.002*** | 0.071 | -0.105 | 0.132 | 0.108 (0.207) |
| % Catholic District | -0.018 | -0.065 | 0.000*** | 0.003 | -0.046 | 0.020** | 0.048 (0.032) |
| % Protestant District | 0.012 | 0.063 | 0.000*** | -0.003 | 0.049 | 0.007*** | -0.051 (0.030) |
| Distance to the Hague - District | 0.603 | -7.986 | 0.012** | -5.849 | -9.677 | 0.498 | 2.718 (9.259) |
| Panel D: Birthplace Characteristics | | | | | | | |
| % Labor Force Industry Birth Place | 0.012 | -0.008 | 0.005*** | 0.003 | -0.009 | 0.342 | 0.005 (0.016) |
| % Labor Force Agriculture Birth Place | 0.012 | -0.005 | 0.054* | 0.000 | -0.008 | 0.556 | -0.001 (0.023) |
| % Labor Force Services Birth Place | -0.025 | 0.012 | 0.010** | -0.004 | 0.017 | 0.405 | -0.002 (0.035) |
| % Catholic Birth Place | -0.007 | -0.020 | 0.472 | 0.001 | 0.012 | 0.724 | -0.011 (0.048) |
| % Protestant Birth Place | 0.005 | 0.018 | 0.441 | -0.002 | -0.008 | 0.847 | 0.003 (0.046) |
| Distance to The Hague - BP | 0.970 | -2.642 | 0.356 | -3.390 | 1.287 | 0.512 | -3.165 (8.488) |

Main Results

- I first estimate the aggregate effect on personal wealth of being elected for the $t \in \{1,...,7\}$ 'th time
- Comparing the end-of-life wealth of elected and non-elected candidates who, if elected, would be elected for the t'th time
- These results reveal a "gate-keeping" pattern in that politicians who were narrowly elected twice ended up much wealthier than their losing counterparts

| | t = 1 | t = 2 | t = 3 | t = 4 | t = 5 | t = 6 | t = 7 |
|-------------------|---------|---------|---------|---------|---------|---------|---------|
| Coefficient (ITT) | 0.492 | 1.751** | -0.215 | -0.359 | -0.275 | -0.607 | 0.754 |
| SE (ITT) | (0.388) | (0.865) | (0.361) | (0.496) | (0.531) | (1.230) | (0.729) |
| Mean DV Treated | 11.206 | 11.501 | 11.596 | 11.551 | 12.074 | 11.907 | 11.630 |
| Mean DV Control | 10.986 | 10.335 | 11.951 | 11.600 | 11.208 | 12.988 | 10.828 |
| N (Treated) | 342 | 259 | 202 | 173 | 123 | 88 | 63 |
| N (Control) | 681 | 204 | 120 | 122 | 66 | 61 | 37 |
| Bandwidth | 0.209 | 0.180 | 0.301 | 0.195 | 0.232 | 0.198 | 0.373 |

Decomposition

Dynamic Returns to Politics

- The problem with these estimates is that each of these estimates might be tainted by future estimates, so it cannot be interpreted as a *ceteris paribus* estimate of the effect of the t'th period of political activity on end-of-life wealth.
- Assume the following structure at the margin of being elected:

$$w_i = \sum_{k=t}^{\infty} \theta_k c_{i,k} + u_i \tag{2}$$

• where $c_{i,k}$ is an indicator whether candidate i has been elected for the k'th time.

Dynamic Returns to Politics

• Differentiating equation 2 with respect to the independent variable $c_{i,k}$ makes clear that the raw regression discontinuity estimates might contain feedback effects from effects from participating and winning in the future:

$$\theta_k^{ITT} = \frac{dw_i}{dc_{i,k}} = \frac{\partial w_i}{\partial c_{i,k}} + \sum_{t>k} \theta_t \cdot \frac{\partial c_{i,t}}{\partial c_{i,k}}$$

$$= \theta_k^{ATT} + \sum_{t>k} \theta_t^{ATT} \cdot \pi_{(t-k)}$$
(3)

• After having estimated the ITT ("total") effects, and the incumbency advantages, equation 3 allows me to recursively compute estimates for the ATT ("clean") effects, under the assumption that the estimand $\theta_{t^*}^{ITT} = \theta_{t^*}^{ATT}$ for a final t^* .

Incumbency Advantages

- I assume that the incumbency advantages are stationary, irrespective of the number of times one has been elected.
 - The incumbency advantage for the j + n'th election after having won for the n'th time is the same as the incumbency advantage for the j'th election after having won for the first time.
- Estimating the incumbency advantages π_t is relatively straightforward, using the following specification for the n'th order incumbency advantage:

$$\mathcal{I}[c_{i,t+n} = 1] = \alpha_t + \pi_n \cdot 1_{\mathsf{Margin}_{i,t} > 0} + \eta \cdot f(\mathsf{Margin}_{i,t}) + \epsilon_{it} \tag{4}$$

• where the dependent variable is 1 if candidate i won an election t + n, 0 if a candidate loses.

Dynamic Results

- After applying this method, the gate-keeping pattern visible in the main results is preserved
 - The naive estimates, especially for the first-period, have a tendency to be overestimated (cf. Eggers & Hainmueller, 2009)

| | t = 1 | t=2 | t = 3 | t = 4 | t = 5 | t = 6 | t = 7 |
|-------------------|---------|---------|---------|---------|---------|---------|---------|
| Coefficient (ATT) | 0.049 | 1.766** | -0.212 | -0.305 | -0.163 | -0.688 | 0.754 |
| SE (ATT) | (0.440) | (0.873) | (0.388) | (0.508) | (0.549) | (1.232) | (0.729) |
| Coefficient (ITT) | 0.492 | 1.751** | -0.215 | -0.359 | -0.275 | -0.607 | 0.754 |
| SE (ITT) | (0.388) | (0.865) | (0.361) | (0.496) | (0.531) | (1.230) | (0.729) |
| Mean DV Treated | 11.206 | 11.501 | 11.596 | 11.551 | 12.074 | 11.907 | 11.630 |
| Mean DV Control | 10.986 | 10.335 | 11.951 | 11.600 | 11.208 | 12.988 | 10.828 |
| N (Treated) | 342 | 259 | 202 | 173 | 123 | 88 | 63 |
| N (Control) | 681 | 204 | 120 | 122 | 66 | 61 | 37 |
| Bandwidth | 0.209 | 0.180 | 0.301 | 0.195 | 0.232 | 0.198 | 0.373 |

Explanations

Career Paths

- There is a literature showing that political office might give various advantages that are only accrued after a political career (Eggers and Hainmueller, 2009; Fafchamps and Labonne, 2017; Querubin et al., 2016; Folke et al., 2017; Geys, 2017).
- To investigate the effect of Lower House membership on political career trajectories, I estimate equations of the form:

$$y_{i,t^{+}} - y_{i,t^{-}} = \alpha_{j} + \gamma_{p} + \theta_{\tau}^{ITT} \cdot 1_{\mathsf{Margin}_{i} > 0} + \eta \cdot f(\mathsf{Margin}_{i}) + X_{ij}\beta + \epsilon_{i}$$
 (5)

- where y_{i,t^+} is an indicator variable equaling 1 when a candidate takes on career path k at any moment after the election at time t, and y_{i,t^-} is an indicator whether a candidate had taken on career path k before the election at time t.
- This specification detects changes in career paths due to being elected in political office.

Results: Career Paths

• I find *no* evidence that elected in office systematically affects career paths

| | t = 1 | t = 2 | t = 3 | t = 4 |
|--------------------------------|---------|---------|---------|---------|
| Panel A: DV: Wealth | | | | |
| Coefficient (ATT) | 0.215 | 1.748** | -0.164 | -0.321 |
| SE (ATT) | (0.396) | (0.867) | (0.348) | (0.506) |
| N (Treated) | 342 | 259 | 202 | 173 |
| N (Control) | 681 | 204 | 120 | 122 |
| Panel B: DV: Politics | | | | |
| Coefficient (ATT) | -0.052 | -0.007 | -0.058 | -0.173 |
| SE (ATT) | (0.082) | (0.122) | (0.141) | (0.205) |
| N (Treated) | 600 | 388 | 293 | 225 |
| N (Control) | 1267 | 293 | 224 | 157 |
| Panel C: DV: National Politics | | | | |
| Coefficient (ATT) | -0.106 | 0.079 | -0.089 | 0.010 |
| SE (ATT) | (0.069) | (0.104) | (0.103) | (0.150) |
| N (Treated) | 600 | 388 | 293 | 225 |
| N (Control) | 1267 | 293 | 224 | 157 |

Results: Career Paths

 If career paths are a mechanism responsible for the returns to politics, we would expect career path changes concurrent with the period in which the wealth effect is realized

| | t=1 | t=2 | t = 3 | t = 4 |
|---|---------|---------|---------|---------|
| Panel D: DV: Provincial Politics | | | | |
| Coefficient (ATT) | -0.094 | -0.075 | 0.284** | -0.259 |
| SE (ATT) | (0.092) | (0.120) | (0.140) | (0.202) |
| N (Treated) | 600 | 388 | 293 | 225 |
| N (Control) | 1267 | 293 | 224 | 157 |
| Panel E: DV: City Politics | | | | |
| Coefficient (ATT) | -0.006 | -0.057 | -0.068 | 0.089 |
| SE (ATT) | (0.071) | (0.104) | (0.093) | (0.122) |
| N (Treated) | 600 | 388 | 293 | 225 |
| N (Control) | 1267 | 293 | 224 | 157 |
| Panel F: DV: Business and Entreneurship | | | | |
| Coefficient (ATT) | 0.126* | 0.038 | 0.048 | 0.138 |
| SE (ATT) | (0.072) | (0.120) | (0.124) | (0.103) |
| N (Treated) | 600 | 388 | 293 | 225 |
| N (Control) | 1267 | 293 | 224 | 157 |

In-Office Rents

- Another possibility is that politicians can use their Lower House mandate to accrue returns during their political activity (Fisman, 2001; Fisman et al., 2014).
 - For example, politicians may act with insider knowledge about laws affecting asset prices, or politicians' power might be bought by firms (Tahoun, 2014; Gonzalez et al., 2020).
- If the returns from politics come from outside, the circumstances under which you are active shouldn't influence the ability to extract returns
- I distinguish between (i) candidates whose party will be the incumbent party after the election, and (ii) candidates whose parties form the opposition.
 - Governance was marked by majority-rule, and one of the parties (Liberals or Confessionals) had the absolute majority in parliament. The initiative to amendments was ceded to members of the incumbent party

In-Office Rents Results

- I find that all the results are due to politicians elected when their party was (going to be) in power.
 - I find no such heterogeneity in corresponding career paths, as evidenced in Panels B and C

| | Elected when Party Opposition | | | | Elec | ted when P | arty Incum | bent |
|------------------------|-------------------------------|---------|---------|---------|---------|------------|------------|---------|
| | t=1 | t=2 | t=3 | t=4 | t=1 | t=2 | t=3 | t=4 |
| Panel A: Personal We | ealth | | | | | | | |
| Coefficient (ATT) | 0.034 | 1.644 | -0.194 | -0.667 | 0.724* | 1.949** | 0.454 | -0.884 |
| SE (ATT) | (0.659) | (1.660) | (0.580) | (0.656) | (0.389) | (0.872) | (0.470) | (0.682) |
| N (Treated) | 168 | 135 | 112 | 105 | 174 | 124 | 90 | 68 |
| N (Control) | 432 | 106 | 62 | 74 | 249 | 98 | 58 | 48 |
| Panel B: Political Car | reer | | | | | | | |
| Coefficient (ATT) | 0.061 | -0.194 | 0.107 | -0.160 | -0.194 | 0.008 | -0.338* | -0.191 |
| SE (ATT) | (0.116) | (0.154) | (0.164) | (0.184) | (0.119) | (0.159) | (0.176) | (0.265) |
| N (Treated) | 281 | 223 | 164 | 130 | 319 | 165 | 129 | 95 |
| N (Control) | 810 | 157 | 149 | 95 | 457 | 136 | 75 | 62 |
| Panel C: Non-Politics | or Busine | SS | | | | | | |
| Coefficient (ATT) | 0.076 | 0.263 | -0.122 | 0.396** | 0.122 | 0.089 | 0.092 | -0.010 |
| SE (ATT) | (0.093) | (0.199) | (0.145) | (0.156) | (0.087) | (0.136) | (0.144) | (0.167) |
| N (Treated) | 281 | 223 | 164 | 130 | 319 | 165 | 129 | 95 |
| N (Control) | 810 | 157 | 149 | 95 | 457 | 136 | 75 | 62 |

In-Office Rents: Other Evidence

- I also look at heterogeneity in various institutions associated with electoral discipline and monitoring
 - In office explanations would imply heterogeneity in the returns to politics according to these institutions, whereas network or career-based explanations do not
- I find that the results are driven by districts in which socialist candidates received
 a relatively high vote share in the preceding elections, as opposed to districts in
 which socialists received low vote shares
 - Confirming findings from a literature about revolutionary threat disciplining politicians self-interested behavior (Acemoglu and Robinson, 2001; Aidt and Franck, 2019)
- The effect is also mainly driven by districts with a low literacy rate, and by observations from before a major suffrage extension in 1896.

In-Office Rents: Anecdotal Evidence

- Anecdotal evidence consistent with a gate-keeping pattern
- About the entry of one of the first working class MP's, Heldt (Netscher, 1890): "While, after the opening of the meeting, the Minutes were read out as usual, there was certainly a bit of nervousness in the Chamber; they knew what had to be done. And what would they [the established MPs] see? A 'workman' [Heldt] who would possibly hesitate to take off his cap for the President, a smock, scenes, and God knows what else!"
- He was also refused an introductory handshake by about half of the parliament.
- However, his presence was quickly normalized, and later, he was even accused of being "a rentier" and "a baron" (Van der Meer, 1984)

Conclusion

Conclusion

- This study investigated the financial returns to politics from a dynamic perspective.
- In contrast to previous studies (Eggers & Hainmueller, 2009; Fisman et al., 2014)
 the method in this paper explicitly sets out to derive estimates of the returns to
 each additional period of political activity, tracing out a marginal return curve to
 political activity.
- I find that there is a convincing and robust causal effect of political activity on end-of-life wealth, corroborating several other studies.
 - However, this effect only manifests itself during the *second* term of political office, hinting at the existence of entry-barriers to rent-seeking behavior.

Conclusion

- The results might be inconsistent with theory and evidence that implies a constant marginal return curve to politics
 - e.g. insider trading by politicians (Bourveau et al., 2021) or embezzlement of public funds (Baltrunaite, 2020)
- On the other hand, the control group consist of well-connected individuals
 - Futher research: more general investigation of political office other than Lower House
- It corroborates several empirical studies that emphasize the important role of political institutions, most notably, suffrage extensions, in disciplining politicians (Aidt and Franck, 2019; Lacroix, 2023; Marcucci et al., 2023).
- From a historical perspective, the findings confirm widespread views about European politics in the nineteenth century as being dominated by a wealthy, oligarchical elite, subject to few constraints (Van Den Berg and Vis, 2013; De Rooy, 2014).

Thank You For Your Attention

Overview of Robustness Checks

Main Results:

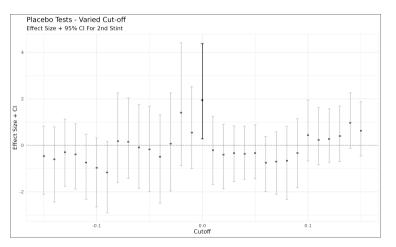
- Placebo Tests
- Control variables (all variables significant at 5% margin)
- RD Parameters
- Incumbency Advantage Estimation (district + party FE)
- Log-like transformations of the DV
- Poisson QMLE (Recommended by Chen & Roth, 2023)
- Exclusively within-election variation (district x year + party fixed effects)
- Extreme values / outliers
- Alternative definitions of the DV: ihs, wealth per unit of lifespan
- Clustering (election level)
- Pre-election Wealth Subsample
- Other identification strategy (IV)

Overview of Robustness Checks

- Granular version of career paths:
 - National: Minister, Upper House
 - **Provincial**: Executive, Representative
 - City: Mayor, Alderman
 - Professional: Law, Entrepreneur
- Duration version of career paths
- Heterogeneity of the effect by party:
 - Not substantially the case: what matters is the incumbency status and not the party per se
- A potential alternative explanation might be that political office induces increased thriftiness or higher financial literacy, and the increase accumulation coming from those might be responsible for the observed patterns.
 - Compare candidates who died early vs. late: also not the case

Robustness: Placebo

• Placebo Tests of the Main Estimate: these results show that the point estimates are highest for the true cut-off (c=0), and furthermore, the true estimate is the only statistically significant estimate.



Robustness: FE

- The baseline estimates are estimates within-party, within-district.
- In Online Appendix Table D.12, I also rely on exclusively within-election variation by estimating Equation 1 and the derived ATT effects using district-year dummies.
 - The inference in this case is based on close candidates within the same election. The
 disadvantage is a potential loss in statistical power and increase in bias, since the
 optimal bandwidth might be relatively high in this case.
 - Although the magnitude of the effect in this case is decidedly smaller, the pattern is exactly the same as in Table 7.3. The statistical significance is also unaffected.
- I also estimate the effects based on only within-party variation, without district fixed effects (Online Appendix Table D.13). The results are also invariant to this decision.

Robustness: Log-like Transformations

- Chen and Roth (2023) argue that when the outcome variable is weakly positive, there is no treatment effect parameter that is an average of individual-level treatment effects, unit invariant, and point identified.
- Focusing on unit variance, they find that the effects found in various studies change radically depending on the units of measurement of the dependent variable.

Robustness: Log-like Transformations

• In the following Table, I explore the effects of using different scales on the estimates. I find that while the effect sizes vary, they are still comparable to the originally reported effect size.

| | t = 1 | t=2 | t = 3 | t = 4 |
|---------------------------------|---------|----------|---------|---------|
| Panel A: Personal Wealth/100 | | | | |
| Coefficient (ATT) | 0.012 | 1.477** | -0.447 | -0.159 |
| SE (ATT) | (0.367) | (0.586) | (0.761) | (0.491) |
| N (Treated) | 371 | 279 | 214 | 181 |
| N (Control) | 710 | 217 | 158 | 128 |
| Panel B: Personal Wealth/1000 | | | | |
| Coefficient (ATT) | 0.017 | 1.095** | -0.335 | -0.198 |
| SE (ATT) | (0.305) | (0.448) | (0.595) | (0.431) |
| N (Treated) | 371 | 279 | 214 | 181 |
| N (Control) | 710 | 217 | 158 | 128 |
| Panel C: Personal Wealth/10000 | | | | |
| Coefficient (ATT) | 0.008 | 0.810** | -0.196 | -0.217 |
| SE (ATT) | (0.231) | (0.324) | (0.418) | (0.332) |
| N (Treated) | 371 | 279 | 214 | 181 |
| N (Control) | 710 | 217 | 158 | 128 |
| Panel D: Personal Wealth/100000 | | | | |
| Coefficient (ATT) | -0.001 | 0.561*** | -0.121 | -0.122 |
| SE (ATT) | (0.138) | (0.196) | (0.231) | (0.195) |
| N (Treated) | 371 | 279 | 214 | 181 |
| N (Control) | 710 | 217 | 158 | 128 |

Robustness: Initial Wealth

- Even though there is evidence against the hypothesis that wealth might discontinuously influence the probability of election (Poulos, 2019) I conduct an analysis on a small subsample of observations for which I can construct a proxy of initial wealth.
- For a small subsample of observations, I have been able to find the probate inventories of parents and construct proxies of inheritance, defined as parental net wealth divided by number of offspring.
 - The sample for this analysis is limited by the availability of probate inventories: for the probate inventory to be publicly available, an individual's date of decease has to be between 1877 and 1928.
- Even though some of these analysis are too noisy to provide meaningful inference, the point estimates and patterns exactly match the pattern in the baseline analysis.

Robustness: Initial Wealth

| | t = 1 | t=2 | t = 3 | t = 4 | t = 5 | t = 6 | t = 7 |
|-------------------|---------|---------|---------|---------|---------|---------|---------|
| Coefficient (ATT) | 0.319 | 3.665** | -1.193 | -1.175 | -0.369 | -0.269 | 0.108** |
| SE (ATT) | (1.333) | (1.579) | (1.389) | (1.632) | (0.364) | (0.490) | (0.051) |
| Coefficient (ITT) | 0.953 | 3.639** | -1.281 | -1.212 | -0.404 | -0.257 | 0.108 |
| SE (ITT) | (1.310) | (1.569) | (1.377) | (1.631) | (0.360) | (0.490) | (0.051) |
| Mean DV Treated | 1.547 | 1.413 | 2.106 | 2.647 | 5.551 | 4.376 | 0.654 |
| Mean DV Control | 0.646 | 2.466 | 0.798 | 2.988 | -0.827 | 8.120 | 1.263 |
| N (Treated) | 102 | 90 | 73 | 70 | 50 | 40 | 31 |
| N (Control) | 171 | 46 | 28 | 41 | 28 | 19 | 17 |
| Bandwidth | 0.186 | 0.197 | 0.147 | 0.188 | 0.257 | 0.126 | 0.175 |

Note: Table showing coefficient estimates of the effect of the $\{1, \ldots, t^*\}$ 'th period of political activity on Personal Wealth under different $t^* \in \{4,7\}$. All the ATT coefficients are derived andrecursively computed from ITT coefficients, which are in turn estimated using the methodology in Cattaneo et al. (2019) using MSE-optimal bandwidth. Standard errors for the ATT estimates are derived using the delta method. The estimates in both panels control for age at election, year of election, and newspaper recommendations. The estimates are conditional on party and district fixed effects. *: p < 0.10, **: p < 0.05, ***: p < 0.01.

Robustness: Heterogeneity according to Socialist District

Heterogeneity according to Socialist status:

| | Ele | Elected in Non-Soc. Distr. | | | | Elected in Soc. Distr. | | | |
|------------------------|-----------|----------------------------|---------|---------|---------|------------------------|---------|---------|--|
| | t=1 | t=2 | t=3 | t=4 | t=1 | t=2 | t=3 | t=4 | |
| Panel A: Personal We | ealth | | | | | | | | |
| Coefficient (ATT) | 0.299 | 1.905* | -0.133 | -0.960 | -0.224 | 0.261 | 3.607 | -0.253 | |
| SE (ATT) | (0.457) | (1.030) | (0.399) | (0.786) | (1.021) | (0.893) | (3.360) | (0.912) | |
| N (Treated) | 266 | 217 | 170 | 130 | 63 | 39 | 32 | 40 | |
| N (Control) | 552 | 168 | 100 | 97 | 97 | 31 | 18 | 22 | |
| Panel B: Political Car | reer | | | | | | | | |
| Coefficient (ATT) | -0.085 | -0.033 | -0.029 | -0.384* | -0.006 | 0.591* | 0.486 | 0.318 | |
| SE (ATT) | (0.092) | (0.145) | (0.157) | (0.209) | (0.240) | (0.340) | (0.613) | (0.257) | |
| N (Treated) | 446 | 330 | 245 | 178 | 112 | 53 | 46 | 43 | |
| N (Control) | 913 | 238 | 196 | 122 | 262 | 47 | 26 | 33 | |
| Panel C: Non-Politics | or Busine | ss | | | | | | | |
| Coefficient (ATT) | 0.135* | -0.009 | 0.022 | 0.248* | 0.081 | 0.198 | -0.089 | 0.023 | |
| SE (ATT) | (0.081) | (0.125) | (0.120) | (0.138) | (0.182) | (0.180) | (0.317) | (0.110) | |
| N (Treated) | 446 | 330 | 245 | 178 | 112 | 53 | 46 | 43 | |
| N (Control) | 913 | 238 | 196 | 122 | 262 | 47 | 26 | 33 | |

Note: Table showing coefficient estimates of the $\{1,\ldots,t^*\}$ 'th period of political activity on Personal Wealth and rough career path outcomes under different $t^*=4$ according to district socialist status. All the ATT coefficients are derived and recursively computed from ITT coefficients, which are in turn estimated using the methodology in Cattaneo et al. (2019) using MSE-optimal bandwidth. Standard errors for the ATT estimates are derived using the delta method. The estimates in both panels control for age at election, year of election, and newspaper recommendations. The estimates are conditional on party, district and decade fixed effects. *: p < 0.10, **: p < 0.05, ***: p < 0.01.