Democratization, Personal Wealth of Politicians and Voting Behavior

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Motivation

Motivation

- Between 1850 to 1920, a wave of democratization and liberalization swept over Western Europe, bringing about universal suffrage and an expansion of government.

- The double transition from autocracy to parliamentary democracy, and from passive government to engagement in social spending, has been widely studied in various disciplines.

  - Threat of revolution (Acemoglu and Robinson, 2000)
  - Electoral expedience (Lizzeri and Perisco, 2004)
  - Electoral competition (Llavador and Oxoby, 2005)

- The conception of politicians' self-interest in these studies revolves around safeguarding political power.

- However, politicians might also care about a more superficial form of self-interest: their personal wealth (Ferraz and Finan, 2009; Tahoun and Van Lent,2019).

This study

- I use the setting of the Netherlands to analyze politicians' voting behavior in parliament on all suffrage extensions and major fiscal legislation between 1872-1921
    - Inheritance taxation (*Successiewet*)
    - Income taxation (*Inkomstenbelasting*)

- I employ probate inventories collected from archival sources to identify the relationship between politicians' personal wealth and their voting behavior.

- Using data on the portfolio composition of politicians' wealth, I estimate politicians' net wealth at the time of voting, and relate this to the voting outcome.

- I provide instrumental variable (IV) estimates of personal wealth on the propensity to vote for reforms.
    - Politician's wealth is instrumented by parental wealth and by an indicator whether the politician's father was also politically active.

Results - Overview

- Major finding: richer politicians are more likely to vote against fiscal legislation than *ceteris paribus* poorer politicians
  - Instrumental variable analyses suggest there is a direct effect of politicians' personal wealth on accepting fiscal legislation.

- The effects are absent in suffrage extensions

- Consistent with the historiography, ideology and party are major determinants of voting behavior
  - But the effect of personal wealth is strong enough to materially influence the voting outcome

- Paradigm-shifting laws are the primary drivers for the effect
  - Consistent with the effect being more pronounced when expected costs of acceptance are higher

Background

Legislation and Politicians

- **Suffrage extensions:** Initially, very few enfranchised: based on tax burden.
  - Failed attempt at expansion in 1872, extensions in 1887, 1896 and 1917 (universal male suffrage).
  - Main causes of disagreement: specific numbers and precise criteria. Not a debate dominated by abstract principles.
  - Large effect on the electorate, but likely no effect for politicians personally.
- **Fiscal legislation:** 1850-1870: government size was very limited, no structural increase in government expenditures.
  - In 1878, a law project passed which introduced inheritance taxation for lineal descendants.
  - In 1893, first income taxation introduced. Precedents for successive increases in rates.
  - Potentially large effect on politicians' personal finances.
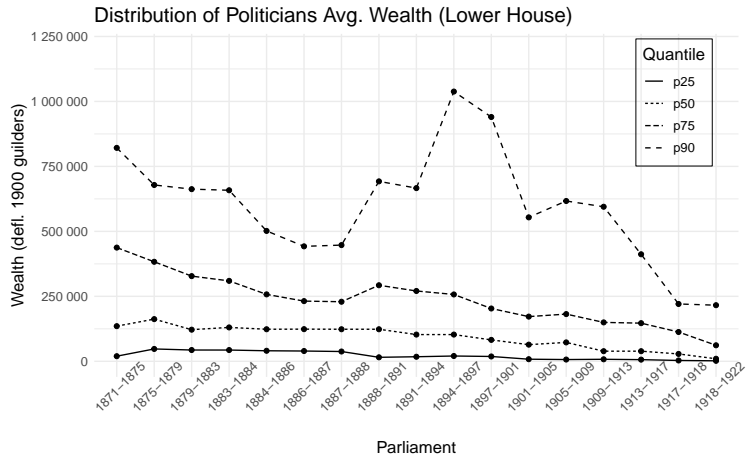
Parliamentary Wealth over Time

Figure 1: Parliamentary Wealth over Time

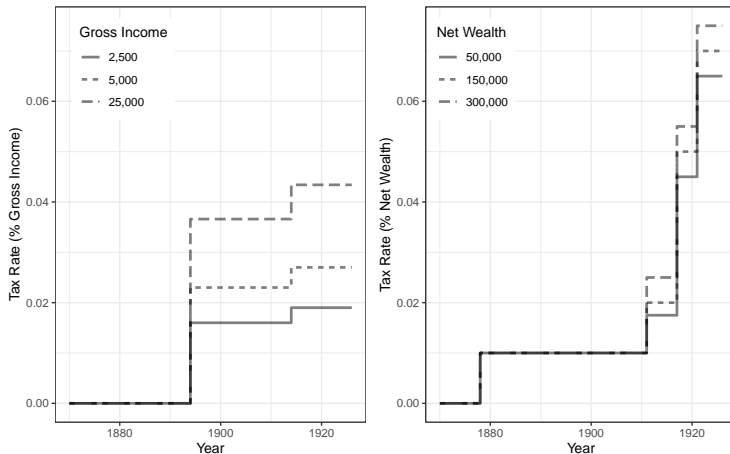# Personal Impact on Politicians

Figure 2: Tax Rates on Income (Left) and Wealth (Right)

Method

Empirical Model

- I firstly pool all laws, and model $V = \Pr(p_i = 1)$ as a function of a politician's wealth and party, augmented by controls:

$$V_{i,j} = \alpha + \beta \cdot \text{ihs Wealth}_{i,j} + \delta \cdot \text{Party}_i + \gamma \cdot \text{LawDum}_j + \eta \cdot \text{Controls}_{i,j} + \varepsilon_{i,j}$$

- In other specifications, I separately estimate regressions for suffrage extensions and fiscal legislation.

- I use the following recursive relationship to estimate a politician's wealth at the time of voting on law k as a function of their (deflated) wealth at death:

$$\text{Wealth}_{i,t+1} = \sum_J \text{AssetShare}_{i,j,t} \cdot \text{AssetReturn}_{i,j,[t,t+1]}$$

Two Ways to Address Endogeneity

- Even after correcting for differential wealth returns, politicians' wealth could be endogenously determined.
  - Particular voting behavior might be rewarded by interest groups (Fisman et al., 2014, Tahoun and van Lent, 2019)
  - I test whether there is a difference in the personal wealth - voting behavior relationship between politicians who died shortly after having vote and those who did not.
- There might still be many reasons why this approach does not isolate the effect of personal wealth on voting behavior.
  - E.g. politicians' consumption and investment behavior might be correlated with their voting behavior: politicians who vote against might have consumed more of their income, reducing the observed correlation between personal wealth and voting behavior.
  - More generally, unobserved politician fixed effects might be correlated with wealth.
- I use instrumental variable estimation to address this.
  - Two unrelated instruments: *Father Politician* and *Expected Inheritance*

Results

Descriptive Statistics

Table 1: Dissent in Voting Behavior in Key Laws

Category	Law	Year	N	Pct. In Favor	Status	Party Line			Dissent		
						Confessional	Liberal	Socialist	Confessional	Liberal	Socialist
Suffrage Extension	Electoral Law	1872	67	0.46	Rejected	Con	Pro	-	0.21	0.21	-
		1887	81	0.81	Accepted	Pro	Pro	-	0.34	0.03	-
		1892	98	0.42	Rejected	Con	Pro	Pro	0.15	0.35	0.00
		1896	91	0.74	Accepted	Pro	Pro	Pro	0.42	0.15	0.00
		1918	72	0.86	Accepted	Pro	Pro	Pro	0.30	0.00	0.00
Fiscal Legislation	Income Tax	1872	70	0.37	Rejected	Con	Pro	-	0.22	0.47	-
		1893	89	0.62	Accepted	Con	Pro	None	0.31	0.12	0.50
		1914	79	0.85	Accepted	Pro	Pro	Pro	0.32	0.00	0.00
	Inheritance Tax	1878	80	0.60	Accepted	Con	Pro	-	0.29	0.08	-
		1911	68	0.93	Accepted	Pro	Pro	Pro	0.14	0.00	0.00
		1916	77	0.62	Accepted	Con	Pro	Pro	0.17	0.00	0.00
		1921	72	0.76	Accepted	Pro	None	Pro	0.26	0.50	0.00

Party Line is defined as the median vote per party: 'Pro' if in favor, 'Con' if against, 'None' if no discerible party line (equally split), and '-' if N.A.
Dissent is defined as the percentage of politicians of each faction having voted against the party line.

OLS Estimates

- OLS Estimates of Wealth on the Propensity to Vote for Suffrage and Fiscal Legislation
  - Results show small but significant relationship

	Pooled			Suffrage	Fiscal
	Model 1	Model 2	Model 3	Model 4	Model 5
Personal Wealth		−0.007***		−0.008	−0.009*
		(0.003)		(0.005)	(0.005)
Personal Wealth x Fiscal			−0.007**		
			(0.004)		
Personal Wealth x Suffrage			−0.007*		
			(0.004)		
Liberal	0.385***	0.433***	0.433***	0.383***	0.373***
	(0.027)	(0.033)	(0.033)	(0.071)	(0.062)
Socialist	0.523***	0.602***	0.602***	0.568***	0.281***
	(0.034)	(0.047)	(0.047)	(0.113)	(0.080)
Law Fixed Effects	Yes	Yes	Yes	Yes	Yes
N	1028	675	675	249	270
Adj. R2	0.35	0.36	0.36	0.29	0.43

Heteroskedasticity-robust standard errors in parentheses. Results for lower house voting outcomes.
Control variables omitted from the table.
* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Alternative Explanations

- The effect of personal wealth on the likelihood to vote in favor of fiscal legislation seems to be robust to the inclusion of many controls

- But politicians who voted against could have been rewarded by interest groups
  - Wealth at death is higher because of voting profile $\rightarrow$ coefficient might be *overestimated*

- Test whether there is a difference in the relationship between wealth and voting behavior for politicians who died early and those who did not
  - The group who died shortly after voting is unlikely to have had opportunities to amass rents
  - If there is a substantial difference, reverse causality could play a large role

Alternative Explanations: Died Shortly After Vote

- The coefficient on personal wealth is significant in both analyses, as well as in the pooled case.

	Pooled		Suffrage		Fiscal	
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Personal Wealth	−0.008*	−0.010**	−0.012*	−0.013*	−0.009	−0.016*
	(0.004)	(0.004)	(0.007)	(0.007)	(0.006)	(0.008)
Died W 2 Yrs	0.028	0.033	0.032	0.023	0.031	−0.036
	(0.063)	(0.069)	(0.109)	(0.107)	(0.095)	(0.107)
Personal Wealth x Died W 2 Yrs	0.002	0.006	0.011	0.013	0.002	0.009
	(0.006)	(0.006)	(0.009)	(0.009)	(0.008)	(0.009)
Liberal	0.457***	0.376***	0.365***	0.361***	0.389***	0.368***
	(0.034)	(0.045)	(0.070)	(0.072)	(0.058)	(0.061)
Socialist	0.496***	0.381***	0.612***	0.600***	0.327***	0.277***
	(0.043)	(0.060)	(0.106)	(0.111)	(0.072)	(0.086)
Law Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
N	629	571	257	249	314	275
Adj. R2	0.33	0.36	0.30	0.31	0.41	0.42

Heteroskedasticity-robust standard errors in parentheses. Results for lower house voting outcomes.
Control variables omitted from the table.
* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

IV Estimates

- There are still various reasons why this coefficient might not reflect the true relationship between personal wealth and voting behavior.

- Politicians' consumption and investment behavior might be correlated with their voting behavior: politicians who vote against might have consumed more of their income, reducing the observed correlation between personal wealth and voting behavior.

- More generally, unobserved politician fixed effects might be correlated with wealth (omitted variable bias)

- I use instrumental variable estimation to address this.
    - Two unrelated instruments: *Father Politician* and *Expected Inheritance*

IV Estimates: Suffrage Extensions

- Father Politician is a good predictor for politicians' wealth.
- No precise relationship between personal wealth and propensity to vote in favor of suffrage extension.

	Personal Wealth	Vote	Personal Wealth	Vote	Personal Wealth	Vote
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Father Politician	2.125***		1.826**		1.329*	
	(0.676)		(0.788)		(0.793)	
Personal Wealth		−0.028		−0.046		−0.085
		(0.030)		(0.042)		(0.076)
Liberal	1.376**	0.446***	0.930	0.394***	1.134*	0.400***
	(0.667)	(0.069)	(0.667)	(0.086)	(0.683)	(0.120)
Socialist	0.768	0.500***	3.782***	0.699***	4.397***	0.847**
	(1.800)	(0.107)	(0.992)	(0.183)	(1.375)	(0.338)
Law Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Kleibergen-Paap F Stat.		9.5		6.43		3.77
N	236	236	213	213	180	180
Adj. R2	0.05	0.23	0.07	0.13	0.17	−0.16

Heteroskedasticity-robust standard errors in parentheses. Results for lower house voting outcomes.
Controls omitted from the table.
* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

IV Estimates: Fiscal Legislation

- Father Politician is a good predictor for politicians' wealth.
- Significant and negative relationship between personal wealth and propensity to vote in favor of suffrage extension.
  - About 2-3 times the effect size of the OLS analyses.

	Personal Wealth	Vote	Personal Wealth	Vote	Personal Wealth	Vote
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Father Politician	2.965***		2.424***		2.156***	
	(0.497)		(0.515)		(0.570)	
Personal Wealth		−0.041**		−0.049**		−0.062**
		(0.018)		(0.023)		(0.031)
Liberal	1.349**	0.522***	1.971***	0.454***	1.567**	0.448***
	(0.592)	(0.052)	(0.745)	(0.078)	(0.766)	(0.086)
Socialist	1.977*	0.534***	3.823**	0.450***	3.957**	0.447***
	(1.125)	(0.067)	(1.547)	(0.120)	(1.687)	(0.150)
Law Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Kleibergen-Paap F Stat.		20.58		13.41		12.36
Selection Ratio				20.88		1.04
N	346	346	312	312	240	240
Adj. R2	0.11	0.22	0.11	0.22	0.13	0.18

Heteroskedasticity-robust standard errors in parentheses. Results for lower house voting outcomes.

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

IV Estimates: Fiscal Legislation - Expected Inheritance

- Relationship persists when using a completely unrelated (and also plausible) instrument.

	Personal Wealth	Vote	Personal Wealth	Vote	Personal Wealth	Vote
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Expected Inheritance	0.262***		0.237**		0.235***	
	(0.088)		(0.111)		(0.084)	
Personal Wealth		−0.031*		−0.033*		−0.041**
		(0.017)		(0.017)		(0.020)
Liberal	1.573	0.544***	2.389*	0.545***	0.754	0.401***
	(1.042)	(0.073)	(1.318)	(0.124)	(0.899)	(0.141)
Socialist	0.082	0.511***	1.440	0.478***	0.029	0.349**
	(1.553)	(0.087)	(1.993)	(0.144)	(1.623)	(0.163)
Law Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Kleibergen-Paap F Stat.		2.33		2.1		2.41
Selection Ratio				0.63		0.55
N	171	171	152	152	108	108
Adj. R2	0.07	0.27	0.08	0.28	0.14	0.29

Heteroskedasticity-robust standard errors in parentheses. Results for lower house voting outcomes.

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

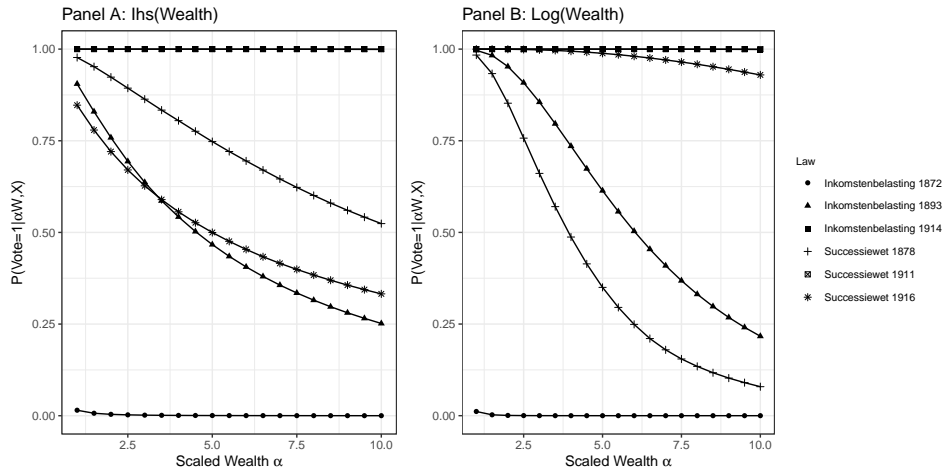# Impact on Probability of Acceptance

Figure 3: Wealth and Probability of Acceptance

Conclusion

Conclusion

- I find a significant and persistent negative effect of politicians' wealth on the tendency to vote in favor of tax increases

    - Dissenting politicians tend to prioritize their finances

- The effect is economically significant: poorer parliaments would have approved rejected laws sooner, and richer parliaments would have rejected laws increasing taxation that have been accepted.

- Clear relationship between personal wealth and voting behavior is absent in the case of suffrage extension

- Implications for democratization literature

    - Direct evidence that the personal profile of politicians influences government size
    - Partial explanation for why government size increased slowly over the nineteenth century (cf. Lindert, 2004) is the domination of politics by wealthy elites.
    - Exogenous negative wealth shocks facilitated expansion.

Robustness Checks

Robustness Checks - Logit Results

Table 2: Logit Analysis of Suffrage Extension and Fiscal Legislation

	Suffrage			Fiscal		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Personal Wealth	−0.039	−0.042	−0.038	−0.049*	−0.063*	−0.076*
	(0.029)	(0.030)	(0.032)	(0.029)	(0.034)	(0.039)
Number of Strikes		0.060	0.046		0.007	−0.081
		(0.064)	(0.061)		(0.031)	(0.131)
Vote Share		−0.484	−0.615		0.006	0.786
		(0.771)	(0.785)		(0.882)	(1.022)
Turnout		0.075	−0.337		0.161	−0.516
		(0.853)	(0.919)		(1.099)	(1.285)
Margin to Nearest Competitor		−0.779	−0.804		−0.356	−0.404
		(1.009)	(1.030)		(0.968)	(1.093)
Tenure		−0.019	−0.018		−0.005	−0.035
		(0.020)	(0.020)		(0.021)	(0.023)
Share Catholic			−0.249			−3.130***
			(0.643)			(0.831)
Share Tax Liable in District			5.445			30.544
			(16.118)			(20.464)
Party Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Law Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
N	282	260	249	342	315	270
R^2	0.01	0.03	0.03	0.01	0.01	0.10
Max. R^2	0.58	0.59	0.58	0.48	0.49	0.50

The dependent variable, Vote, is defined as 1 if the politician is in favor of the reform, 0 otherwise.
The reference political allegiance is confessional.
Standard errors in parentheses. Results for lower house voting outcomes.
* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Robustness Checks - Wealth at Death

Table 3: IV Analysis of Fiscal Legislation - Robustness Check

	OLS			IV		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Personal Wealth	−0.007*	−0.006	−0.009*	−0.037**	−0.046**	−0.049**
	(0.004)	(0.004)	(0.004)	(0.016)	(0.021)	(0.022)
Liberal	0.482***	0.384***	0.373***	0.510***	0.456***	0.420***
	(0.043)	(0.054)	(0.057)	(0.051)	(0.074)	(0.070)
Socialist	0.518***	0.337***	0.332***	0.558***	0.482***	0.482***
	(0.077)	(0.103)	(0.119)	(0.089)	(0.144)	(0.160)
Law Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Kleibergen-Paap F Stat.				20.46	13.01	13.5
N	347	311	272	351	316	277
Adj. R2	0.36	0.41	0.43	0.22	0.20	0.24

Heteroskedasticity-robust standard errors in parentheses. Results for lower house voting outcomes.
* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Robustness Checks - Log Wealth

Table 4: IV Estimates of Wealth on the Propensity to Vote for Fiscal Reforms

	Personal Wealth	Vote	Personal Wealth	Vote	Personal Wealth	Vote
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Father Politician	1.368***		1.287***		1.567***	
	(0.177)		(0.189)		(0.221)	
Personal Wealth		−0.084**		−0.093**		−0.091**
		(0.038)		(0.043)		(0.040)
Liberal	0.406**	0.520***	0.377	0.384***	0.348	0.380***
	(0.189)	(0.050)	(0.247)	(0.064)	(0.280)	(0.073)
Socialist	−0.679	0.423***	−0.062	0.249**	1.462**	0.341***
	(0.427)	(0.078)	(0.624)	(0.098)	(0.601)	(0.113)
Law Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Kleibergen-Paap F Stat.		43.07		33.97		42.59
N	321	321	292	292	230	230
Adj. R2	0.20	0.31	0.15	0.33	0.19	0.33

Heteroskedasticity-robust standard errors in parentheses. Results for lower house voting outcomes.

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Robustness Checks - Exclusion Restriction

- Threats to identification imply that instrument might in itself suffer from endogeneity bias.
    - Politicians whose fathers were politically active could share a latent encompassing ideology (e.g. a penchant for increasing the size of the government)
    - They could therefore be inclined to vote in favor of laws that expand government
- Robustness checks to make exclusion restriction plausible: government intervention
    - In this set of laws, it is unlikely that wealth affects voting behavior (No direct effect).
    - Any empirical correlation is then due to an (indirect) *latent political family-effect*.
    - An empirical correlation would thus imply a violation of the exclusion restriction.

Robustness Checks - Exclusion Restriction

- No indication of direct effect of Political Family on voting behavior.
  - Implying the exclusion restriction for the other set of laws likely holds.

	OLS					IV	
	-	Count	Dummy	Count	Dummy	-	Dummy
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Personal Wealth	0.000	0.001	0.001	−0.001	−0.001	−0.039	0.002
	(0.002)	(0.003)	(0.003)	(0.003)	(0.003)	(0.143)	(0.014)
Political Family		−0.007	−0.017	−0.009	−0.010		
		(0.015)	(0.029)	(0.021)	(0.038)		
Liberal	0.432***	0.430***	0.431***	0.444***	0.445***	0.531	0.434***
	(0.031)	(0.031)	(0.031)	(0.047)	(0.046)	(0.383)	(0.060)
Socialist	0.518***	0.519***	0.519***	0.518***	0.517***	0.616	0.496***
	(0.039)	(0.040)	(0.039)	(0.066)	(0.066)	(0.439)	(0.082)
Law Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kleibergen-Paap F Stat.						0.4	27.95
N	727	727	727	469	469	334	399
Adj. R2	0.46	0.46	0.46	0.43	0.43	0.22	0.42

Personal Wealth is instrumented by Father Politician (Model 6) and Political Family (Model 7).
Heteroskedasticity-robust standard errors in parentheses. Results for lower house voting outcomes.
* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Appendix

Specification Endogeneity Test

- I use a dummy variable indicating whether a politician died within $x \in \{2, 5\}$ years after having cast the vote on a particular law, and estimate the following model:

$$V_{i,j} = \alpha + \beta_1 \cdot \text{ihs Wealth}_{i,j} + \beta_2 \cdot \text{Died within X years}_i +$$
$$\beta_3 \cdot \text{ihs Wealth x Died within X years}_{i,j} +$$
$$\beta_4 \cdot \text{Party}_i + \beta_5 \cdot \text{LawDum}_j + \gamma \cdot \text{Controls}_{i,j} + \varepsilon_{i,j}$$