Explaining the Oil Advantage: Effects of Natural Resource Wealth on Incumbent Reelection in Iran

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Supplementary Appendix

Note: Replication material for all tables and figures in the article and appendix can be found online at http://thedata.harvard.edu/dvn/dv/paasham

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1 Appendix A

In this Appendix section, I discuss alternative hypotheses that could be driving the resource-incumbency relationship presented in the main text. The first captures the idiosyncratic vetting process in Iran whereby the Guardian Council vets parliamentary (and presidential) candidates prior to the election. Second, I comment on the issue of challenger characteristics and their role in deciding incumbent reelection prospects.

Vetting and unfair elections

The results presented above could be capturing the importance of vetting and undemocratic candidate selection. It could be the case that the Guardian Council, which vets candidates for parliamentary elections, determines eligibility based on district-level satisfaction with the regime. This alternative explanation follows this line of reasoning: resource revenues are used for transfers of public and private goods which make voters content. When voters are content, the Council maintains the status quo to prevent popular opposition to the regime and does not disqualify the incumbent deputy. Allowed to run again, the deputy has a non-negative probability of reelection versus a deputy who is disqualified because the Council perceives the deputy's constituents being unhappy. If this were the case, then incumbent deputies from resource-rich districts are more likely to be reelected primarily based on favorable vetting and only indirectly because of deputy responsiveness to voter demands for benefits. In other words, the pattern of "higher resources, higher likelihood of reelection" is explained by vetting and not necessarily resources.

Given the opacity of Iranian elections, this could very well be the case. Yet, there are two strands of evidence that suggest otherwise. The first is qualitative evidence from case studies and speeches by the unelected clerical leaders that shows that vetting is based on ideological grounds and not based on responsiveness to voters. Since the first parliamentary elections in 1980, candidates have been disqualified on the basis of not being "loyal to the imam." This is vague language indeed but the phrasing was used to keep out communists and pragmatists who had not supported Khomeini's *velāyat-e faqih* (rule of the jurisprudent) system of governance. However, it was not until 1992 that some incumbents were disqualified from running again. (Figure 1 above shows the trend of increasing incumbent vetting.)

If the above alternative explanation were true, then it should be the case that vetted incumbents should have been disqualified on the grounds that voters in their districts were unhappy with the regime. It should not be the case that some incumbents in a given district were disqualified, while others in that same district were not. However, this is the opposite of what we have seen since the 1992 elections. The vetting that has occurred has been overwhelmingly on ideological grounds: in 1992 and 1996, incumbents were vetted if they were close to the "radical" factions.[1] Ideological vetting was particularly evident during the lead-up to the 1996 elections, when the speaker of the Guardian Council, Imami-Kashani, declared that "The basis for the approval or rejection of candidates would be their total and true allegiance to Islam, the system, and *velāyat-e faqih*."[2] In 2000 and 2004, incumbents who were reformists and tightly affiliated with Khatami were disqualified from

[1] Milani (1993); Baktiari (1996).

[2] Quoted in Moslem (2002, 238).

running again; in 2008 and 2012, those incumbent deputies who were either reformists or hardliners close with Ahmadinejad were not allowed to defend their seats.[3] This evidence makes it difficult to accept the premise that the Guardian Council is vetting candidates based on their performance in maintaining populace complacence and stability in their districts. Overwhelming support from case studies indicates that candidate ideology and factional alignment is the primary reason why some candidates are allowed to run while others are disqualified.

	Percent of seats held by						Total
Province	Indep.	Reform	Left	Moderate	Right	Radical	seats
Bushehr	25	75	0	0	0	0	3
Fars	28	17	0	5	17	33	18
Ilam	33	0	33	33	0	0	3
Kerman	0	30	30	10	0	30	10
Kohgiluyeh & Boyerahmad	0	0	0	0	67	33	3
Khuzestan	28	5	0	39	11	17	18

Table A.1: 2008 Majles election results by faction in resource-rich provinces. Resource-rich deputies are those from the top-six resource-producing provinces: Khuzestan, Kohgiluyeh & Boyerahmad, Kerman, Bushehr, Fars, Ilam. The threshold for inclusion as resource-rich for this table is producing at least 1% of total minerals value add to gross national resource product. Numbers indicate the percentage of seats held by deputies of a given faction in a given province. The last column provides a reference for the total number of seats in each province. Source: Sanandaji (2009); Parsons (2010)

Faction	Total Seats	Seats held by resource-rich deputies	Percent of seats held by resource-rich deputies
Independents	63	12	19.0
Reformists	38	10	26.3
Left Coalition	11	4	36.4
Moderates	48	10	20.8
Radicals/Right Coalition	125	20	16.0
Total	285	62	

Table A.2: 2008 Majles election results by faction. Resource-rich deputies are those from the top-six resource-producing provinces: Khuzestan, Kohgiluyeh & Boyerahmad, Kerman, Bushehr, Fars, Ilam.

The second piece of evidence is that resource-rich districts in particular are not benefiting from vetting because of the ideological slants of their deputies. Tables A.1 and A.2 show that the top six resource-rich provinces are represented by all different factions and that no faction is over-represented by resource-rich provinces. In fact, four of these provinces are majority non-radical and non-right: of the six provinces, the only ones where members of the radical right or the right coalition make up at least half of a province's seats in parliament are Fars and the small, three-district province of Kohgiluyeh & Boyerahmad. Of the 18 parliamentary seats up for grabs in the most resource-rich province, Khuzestan,

[3]The vetting of the 2000 and 2004 elections are discussed in Maloney (2000), Moslem (2002), and Afroneh (2008). Candidate vetting for the 2008 and 2012 elections is analyzed by Gheissari (2009), Sanandaji (2009), and Alem (2011).

seven were won by moderates, one by a reformist, and five by independents; radicals and right-wingers combined only won five seats (28%) in Khuzestan. Given that the radicals and right-wing candidates are the least likely to be vetted, the fact that resource-rich provinces are mostly represented by independents, reformists, leftists, and moderates implies that vetting is working *against* incumbents resource-rich districts. That incumbents are successful in these districts (as the statistical evidence above shows) suggests that the resource-incumbency relationship would be even stronger were it not for unfavorable vetting.

There is an additional explanation based on vetting that is currently untestable and difficult to refute even with currently available qualitative evidence. Suppose it is the case that the Guardian Council does not want to induce instability in resource-rich regions that are vital to Iran's economy, so the regime favors these provinces with extra campaign resources and does not vet popular incumbents. If this were true, this would explain the result in Table A.1 that resource-rich provinces are often represented by non-right candidates who are not vetted, and more importantly, explain the relationship between resources and incumbency advantage. Unfortunately, as noted elsewhere in this paper, there is limited data available on candidate ideology (and there is weak individual-level data on which factions a candidate belongs to) to be able to find a relationship between resource-rich districts and representation by non-right deputies.

The evidence in Table A.1 also provides support against the rival hypothesis that resource-rich districts are ideologically conservative and therefore support the status quo and reject change. This would imply that the resource-incumbency relationship is driven more by ideology than by resource wealth and public goods provision, given conservative voters' opposition to representative changes. Ideally, survey data could be used to test whether or not individuals at the district level are ideologically conservative; in the absence of these data, the information on the factional affiliations of incumbent winners in resource-rich provinces suggests the opposite pattern. That is, resource-rich provinces are not overly represented by conservative MPs, with the lone exception being the small, three-seat province of Kohgiluyeh & Boyerahmad.[4]

Challenger characteristics

One weakness of the data used for this analysis is that we have no information about the characteristics and quality of challenger candidates. The *Majles* only publishes information on winners and not challenger vote shares and personal characteristics, so it is not possible to control in the above regressions for challenger quality or even the number of challengers in a race. Any student of electoral politics will know that incumbency reelection chances are determined in part by the quality and number of opponents. It could be the case that the resource-incumbency relationship simply reflects a scenario in which resource-rich districts attract a small number of challengers and thus the incumbent is at an advantage compared to districts with more challengers, particularly high quality challengers. However, this could just as easily run in the opposite direction: because the spoils of office are greater in resource-rich districts – because deputies will receive more money to allocate to their districts based on resource wealth – then the quality and number of challengers will be higher than in resource-

[4]I thank an anonymous reviewer for raising this alternative hypothesis.

poor districts. In other words, the rewards from being a deputy in an oil- or minerals-rich district are so high that strong competition will pose a threat to incumbents, reducing the likelihood of incumbent reelection.

Given the lack of data on challengers, it is not currently possible to determine which is the case in Iranian parliamentary elections. Better data collection or on-site research will have to be conducted to properly address this alternative explanation. Yet relying on rational choice theory, we can make two claims. The first is that if resource-rich provinces have lower quality challengers (the first case above), then this might simply be the result of potential challengers rationally anticipating the low chances of being elected and avoiding the election all together. This would reinforce the resource-incumbency relationship above, since potential challengers are making the decision to stay away based on anticipating higher incumbency reelection rates in resource-rich districts. The second claim we could make is that if the pattern were reversed – that there are more and higher-quality challengers in resource-rich districts – then the statistical findings above are underestimating the incumbency advantage in resource-rich districts, since these incumbents are still getting reelected in the face of stiffer competition from challengers.

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2 Appendix B

	Mean	Std. Dev.	Min	25%ile	Median	75%ile	Max	Num. missing
Incumbent	0.32	0.47	0.00	0.00	0.00	1.00	1.00	67
Resources	3.89	13.11	0.01	0.05	0.16	0.35	65.28	636
Resources (log)	-6.22	1.97	-9.41	-7.53	-6.47	-5.66	-0.43	636
SMD dummy	0.59	0.49	0.00	0.00	1.00	1.00	1.00	97
Prior terms served	0.34	0.72	0.00	0.00	0.00	0.00	5.00	67
Cleric dummy	0.19	0.39	0.00	0.00	0.00	0.00	1.00	67
GDP per cap (log)	9.19	0.82	7.43	8.60	9.22	9.85	10.63	636
Unemployment	12.52	3.91	5.00	10.19	11.62	14.33	24.42	636
Ethnic dummy	0.48	0.50	0.00	0.00	0.00	1.00	1.00	97
Public emp. (%)	0.26	0.07	0.08	0.21	0.25	0.30	0.46	134
Δ public emp. (%)	-0.05	0.11	-0.34	-0.08	-0.07	-0.03	0.66	162
Hospital beds	113.11	23.72	49.06	97.59	114.36	128.76	243.46	59
Δ beds (%)	0.07	0.16	-0.36	-0.04	0.07	0.17	0.75	87
S-T ratio	24.72	4.24	16.88	21.78	24.28	27.55	39.04	131
Δ S-T ratio (%)	0.05	0.18	-0.22	-0.11	0.00	0.25	0.51	158

Table B.3: Summary statistics for variables used in Table 2 (top) and Table 3 (bottom). Variables measured at the candidate level: incumbent reelection, cleric dummy, prior terms served. Variables measured at the district level: single-member district (SMD) dummy. Variables measured at the province level: resources, non-resource GDP per capita, unemployment rate, ethnic dummy, public employment, change in public employment, hospital beds per 100k persons, change in hospital beds, student-teacher ratio, change in student teacher ratio. Note that the resources variable ranges from 0.01% to 65.28%, whereas the log resources is the logarithm of the resources variable as it ranges from 0.0001 to 0.6528.

	1	2	3	4	5	6
Intercept	0.327***	0.330***	0.324***	0.146	0.580**	0.574**
	(0.095)	(0.092)	(0.093)	(0.213)	(0.259)	(0.284)
Oil	−0.014	−0.011	−0.010	−0.010	0.000	0.000
	(0.013)	(0.012)	(0.012)	(0.012)	(0.012)	(0.013)
SMD Dummy	0.031	0.022	0.022	0.026	0.019	0.019
	(0.030)	(0.029)	(0.029)	(0.029)	(0.029)	(0.029)
Oil × SMD	0.034**	0.031**	0.030**	0.029**	0.029**	0.029**
	(0.014)	(0.014)	(0.014)	(0.014)	(0.014)	(0.014)
Session (time)	−0.009	−0.013	−0.013	−0.036	−0.037	−0.038
	(0.014)	(0.014)	(0.014)	(0.028)	(0.028)	(0.030)
Prior terms		0.094***	0.092***	0.091***	0.091***	0.091***
		(0.017)	(0.017)	(0.017)	(0.017)	(0.017)
Cleric dummy			0.027	0.025	0.021	0.021
			(0.039)	(0.039)	(0.039)	(0.039)
GDP per capita (log)				0.036	0.006	0.008
				(0.038)	(0.039)	(0.044)
Unemployment rate					−0.012***	−0.012***
					(0.004)	(0.004)
Ethnic dummy						0.002
						(0.032)
AIC	1410	1389	1395	1401	1404	1411
BIC	1450	1434	1445	1456	1463	1475
$-2 \log L$	−697	−685	−688	−690	−690	−692
Num. obs.	1075	1075	1075	1075	1075	1075
Groups(Districts)	200	200	200	200	200	200
Groups(Provinces)	31	31	31	31	31	31

Standard errors in parentheses

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

Table B.4: Replication of Table 2, replacing provincial resource wealth as percentage of national resource GDP with oil income per capita (in 10,000s of rials, roughly equivalent to 1 USD), which is denoted above as "oil". See Table 2 for descriptions of other control variables and model specifications.

	1	2	3	4	5	6
Intercept	0.147	0.162	0.161	0.032	0.403	0.372
	(0.116)	(0.113)	(0.113)	(0.214)	(0.245)	(0.271)
Oil share	-0.031^{**}	-0.026^{*}	-0.026^{*}	-0.024	-0.012	-0.013
	(0.015)	(0.014)	(0.014)	(0.014)	(0.015)	(0.015)
SMD Dummy	0.294^{***}	0.273^{***}	0.267^{***}	0.259^{***}	0.256^{***}	0.260^{***}
	(0.092)	(0.090)	(0.091)	(0.091)	(0.091)	(0.092)
Oil share × SMD	0.055^{***}	0.053^{***}	0.051^{***}	0.049^{***}	0.050^{***}	0.051^{***}
	(0.018)	(0.018)	(0.018)	(0.018)	(0.018)	(0.018)
Session (time)	-0.004	-0.008	-0.007	-0.026	-0.029	-0.033
	(0.013)	(0.012)	(0.012)	(0.029)	(0.028)	(0.031)
Prior terms		0.093^{***}	0.091^{***}	0.091^{***}	0.091^{***}	0.091^{***}
		(0.017)	(0.017)	(0.017)	(0.017)	(0.017)
Cleric dummy			0.023	0.022	0.016	0.017
			(0.039)	(0.039)	(0.039)	(0.039)
GDP per capita (log)				0.028	0.013	0.018
				(0.040)	(0.039)	(0.043)
Unemployment rate					-0.012^{***}	-0.012^{***}
					(0.004)	(0.004)
Ethnic dummy						0.008
						(0.032)
AIC	1406	1385	1392	1398	1401	1408
BIC	1446	1430	1441	1452	1460	1472
$-2 \log L$	-695	-684	-686	-688	-688	-691
Num. obs.	1075	1075	1075	1075	1075	1075
Groups(Districts)	200	200	200	200	200	200
Groups(Provinces)	31	31	31	31	31	31

Standard errors in parentheses

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

Table B.5: Replication of Table 2, replacing provincial resource wealth as percentage of national resource GDP with resource share of province GDP, which is denoted above as "oil share". See Table 2 for descriptions of other control variables and model specifications.

	1	2	3	4	5	6
Resources (log)	−0.063	−0.058	−0.058	−0.059	−0.059	−0.059
	(0.053)	(0.048)	(0.048)	(0.048)	(0.048)	(0.048)
SMD dummy	0.279***	0.274***	0.275***	0.274***	0.277***	0.277***
	(0.048)	(0.049)	(0.049)	(0.048)	(0.048)	(0.048)
Resources (log) × SMD	0.038***	0.039***	0.039***	0.039***	0.040***	0.040***
	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)
Prior terms		0.089***	0.090***	0.090***	0.090***	0.090***
		(0.020)	(0.020)	(0.021)	(0.020)	(0.020)
Cleric dummy			−0.007	−0.008	−0.007	−0.007
			(0.034)	(0.034)	(0.034)	(0.034)
GDP per capita (log)				−0.099	−0.095	−0.095
				(0.089)	(0.095)	(0.095)
Unemployment rate					−0.007	−0.007
					(0.006)	(0.006)
Ethnic dummy						−0.272
						(0.185)
R^2	0.35	0.36	0.36	0.36	0.37	0.37
Adj. R^2	0.32	0.34	0.34	0.34	0.34	0.34
Num. obs.	1084	1084	1084	1084	1084	1084

Clustered standard errors (by province) in parentheses
$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

Table B.6: Replication of Table 2, using OLS regressions with province and time fixed effects, standard errors clustered by province. The constant is excluded from regressions to avoid multicolinearity with the unit and time fixed effects.

	1	2	3	4	5	6
Resources (log)	-0.288^{*}	-0.273	-0.273	-0.281	-0.284	-0.284
	(0.174)	(0.177)	(0.177)	(0.178)	(0.178)	(0.178)
SMD dummy	1.327^{**}	1.351^{**}	1.356^{**}	1.346^{**}	1.376^{***}	1.376^{***}
	(0.522)	(0.528)	(0.529)	(0.528)	(0.532)	(0.532)
Resources (log) × SMD	0.180^{**}	0.191^{**}	0.192^{**}	0.191^{**}	0.196^{**}	0.196^{**}
	(0.079)	(0.080)	(0.080)	(0.080)	(0.080)	(0.080)
Prior terms		0.414^{***}	0.416^{***}	0.418^{***}	0.417^{***}	0.417^{***}
		(0.083)	(0.085)	(0.085)	(0.085)	(0.085)
Cleric dummy			-0.032	-0.037	-0.036	-0.036
			(0.200)	(0.200)	(0.200)	(0.200)
GDP per capita (log)				-0.506	-0.507	-0.507
				(0.579)	(0.579)	(0.579)
Unemployment rate					-0.042	-0.042
					(0.033)	(0.033)
Ethnic dummy						-1.408
						(1.016)
AIC	1322	1299	1301	1302	1303	1303
BIC	1507	1488	1495	1502	1507	1507
$-2 \log L$	-624	-611	-611	-611	-610	-610
Deviance	1248	1223	1223	1222	1221	1221
Num. obs.	1084	1084	1084	1084	1084	1084

Standard errors in parentheses

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

Table B.7: Replication of Table 2, using Logit regressions with province and time fixed effects. The constant is excluded from regressions to avoid multicolinearity with the unit and time fixed effects.

	1	2	3	4	5
Resources (log)	−0.059	−0.054	−0.054	−0.059	−0.059
	(0.034)	(0.033)	(0.033)	(0.034)	(0.034)
SMD dummy	0.280**	0.275**	0.276**	0.275**	0.278**
	(0.103)	(0.102)	(0.102)	(0.102)	(0.102)
Resources (log) × SMD	0.038*	0.039*	0.039*	0.039*	0.040**
	(0.015)	(0.015)	(0.015)	(0.015)	(0.015)
Prior terms		0.089***	0.089***	0.090***	0.089***
		(0.017)	(0.017)	(0.017)	(0.017)
Cleric dummy			−0.005	−0.006	−0.006
			(0.040)	(0.040)	(0.040)
GDP per capita (log)				−0.050	−0.056
				(0.057)	(0.055)
Unemployment rate					−0.008
					(0.006)
AIC	1501	1482	1489	1494	1503
BIC	1679	1666	1677	1687	1701
$-2 \log L$	−714	−704	−706	−708	−711
Num. obs.	1084	1084	1084	1084	1084
Groups (time)	4	4	4	4	4

Standard errors in parentheses

$^{***}p < 0.001$, $^{**}p < 0.01$, $^{*}p < 0.05$

Table B.8: Replication of Table 2, using REML regressions with province fixed effects and time random effects. Model 6 from Table 2 was not replicable due to colinearities between the ethnic minority dummy, province fixed effects, and the time random intercept.

	1	2	3	4	5	6
Intercept	0.211	0.203	0.202	−0.057	0.382	0.459
	(0.157)	(0.151)	(0.151)	(0.284)	(0.319)	(0.333)
Resources (log)	−0.017	−0.017	−0.017	−0.023	−0.018	−0.022
	(0.021)	(0.020)	(0.020)	(0.020)	(0.020)	(0.021)
SMD Dummy	0.300*	0.287*	0.278*	0.300*	0.301*	0.296*
	(0.167)	(0.160)	(0.161)	(0.162)	(0.162)	(0.162)
Resources (log) × SMD	0.042*	0.042*	0.041*	0.044*	0.044*	0.044*
	(0.024)	(0.023)	(0.024)	(0.024)	(0.024)	(0.024)
Session (time)	−0.008	−0.011	−0.010	−0.042	−0.031	−0.021
	(0.013)	(0.013)	(0.013)	(0.031)	(0.031)	(0.033)
Number of prior terms		0.090***	0.089***	0.088***	0.087***	0.088***
		(0.018)	(0.018)	(0.018)	(0.018)	(0.018)
Cleric dummy			0.019	0.018	0.016	0.014
			(0.040)	(0.040)	(0.040)	(0.040)
GDP per capita (log)				0.046	0.011	−0.006
				(0.041)	(0.042)	(0.047)
Unemployment rate					−0.013***	−0.013***
					(0.004)	(0.004)
Ethnic minority dummy						−0.030
						(0.037)
N Observations	990	990	990	990	990	990
Groups(Districts)	183	183	183	183	183	183
Groups(Provinces)	29	29	29	29	29	29
AIC	1287	1269	1276	1281	1283	1290
BIC	1326	1314	1325	1335	1342	1353
$-2 \log L$	−635	−626	−628	−630	−630	−632

Standard errors in parentheses

* significant at $p < .10$; **$p < .05$; ***$p < .01$

Table B.9: Replication of Table 2, removing all districts in Khuzestan and Bushehr from the data. See Table 2 for variable descriptions and model specifications.

	1	2	3	4	5	6
Intercept	0.216*	0.200*	0.199*	−0.007	0.488*	0.476
	(0.115)	(0.112)	(0.112)	(0.243)	(0.289)	(0.312)
Resources (log)	−0.009	−0.011	−0.011	−0.013	−0.004	−0.004
	(0.013)	(0.012)	(0.012)	(0.012)	(0.013)	(0.013)
SMD Dummy	0.274***	0.273***	0.271***	0.278***	0.280***	0.280***
	(0.102)	(0.100)	(0.100)	(0.100)	(0.100)	(0.100)
Resources (log) × SMD	0.039**	0.040***	0.040***	0.041***	0.041***	0.041***
	(0.015)	(0.015)	(0.015)	(0.015)	(0.015)	(0.015)
Session (time)	0.000	−0.004	−0.004	−0.031	−0.016	−0.017
	(0.013)	(0.013)	(0.013)	(0.030)	(0.030)	(0.034)
Number of prior terms		0.093***	0.093***	0.092***	0.091***	0.091***
		(0.017)	(0.017)	(0.017)	(0.017)	(0.017)
Cleric dummy			0.009	0.007	0.002	0.003
			(0.040)	(0.040)	(0.039)	(0.040)
GDP per capita (log)				0.040	0.000	0.002
				(0.040)	(0.042)	(0.047)
Unemployment rate					−0.013***	−0.013***
					(0.004)	(0.004)
Ethnic minority dummy						0.003
						(0.032)
N Observations	1052	1052	1052	1052	1052	1052
Groups(Districts)	194	194	194	194	194	194
Groups(Provinces)	29	29	29	29	29	29
AIC	1373	1353	1359	1365	1366	1373
BIC	1413	1397	1409	1419	1426	1438
$-2 \log L$	−679	−667	−670	−671	−671	−674

Standard errors in parentheses

* significant at $p < .10$; ** $p < .05$; *** $p < .01$

Table B.10: Replication of Table 2, removing all districts in Bushehr and Kohgiluyeh & Boyerahmad from the data. See Table 2 for variable descriptions and model specifications.

	1	2	3	4
Resources (log)	0.035^{***}	-0.002	0.014	-0.148
	(0.010)	(0.030)	(0.022)	(0.094)
Session (time)	-0.067	0.045	0.060	0.604^{***}
	(0.045)	(0.080)	(0.158)	(0.202)
Number of prior terms	0.081^{***}	0.082^{*}	0.036	0.109^{***}
	(0.023)	(0.050)	(0.067)	(0.037)
Cleric dummy	0.033	0.059	-0.110	-0.016
	(0.050)	(0.111)	(0.139)	(0.088)
GDP per capita (log)	0.048	-0.061	-0.065	-0.961^{***}
	(0.064)	(0.111)	(0.232)	(0.289)
Unemployment rate	-0.014^{***}	-0.006	-0.021	-0.059
	(0.005)	(0.009)	(0.017)	(0.050)
Ethnic minority dummy	0.045	-0.067	-0.008	-0.567
	(0.039)	(0.079)	(0.143)	(0.524)
AIC	842	251	161	257
BIC	891	285	188	292
$-2 \log L$	-410	-115	-70	-118
Num. obs.	627	168	96	184
Groups (provinces)	30	20	9	5

Standard errors in parentheses

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

Table B.11: Replication of Table 2, with models broken down by the number of members per district (intercept coefficient is omitted). Incumbent reelection in (1) single-member districts only, (2) two-member districts only, (3) three-member districts only, and (4) four-member districts or greater. Note that this last model is effectively a regression of incumbent reelection in Iran's biggest cities, namely Tehran, Mashhad, Tabriz, Esfahan, and Shiraz.

	1	2	3	4	5	6
Intercept	0.526***	0.486***	0.492***	−0.721	−0.329	−0.106
	(0.175)	(0.173)	(0.173)	(0.915)	(0.988)	(1.141)
Resources (log)	0.014	0.014	0.016	0.011	0.017	0.017
	(0.025)	(0.025)	(0.025)	(0.025)	(0.026)	(0.026)
SMD Dummy	0.022	−0.015	−0.037	−0.014	−0.029	−0.034
	(0.207)	(0.204)	(0.208)	(0.209)	(0.209)	(0.210)
Resources (log) × SMD	0.022	0.017	0.013	0.014	0.012	0.012
	(0.030)	(0.029)	(0.030)	(0.030)	(0.030)	(0.030)
Number of prior terms		0.097***	0.095***	0.092***	0.090***	0.092***
		(0.030)	(0.031)	(0.031)	(0.031)	(0.031)
Cleric dummy			0.043	0.034	0.032	0.029
			(0.080)	(0.081)	(0.081)	(0.081)
GDP per capita (log)				0.117	0.096	0.076
				(0.086)	(0.089)	(0.102)
Unemployment rate					−0.013	−0.014
					(0.012)	(0.013)
Ethnic minority dummy						−0.026
						(0.065)
N Observations	280	280	280	280	280	280
Groups(Provinces)	30	30	30	30	30	30
AIC	409	406	411	414	422	428
BIC	431	431	440	447	458	467
$-2 \log L$	−198	−196	−198	−198	−201	−203

Standard errors in parentheses

* significant at $p < .10$; **$p < .05$; ***$p < .01$

Table B.12: Replication of Table 2, using data from only the 2008 parliamentary election. See Table 2 for variable descriptions and model specifications.

	1	2	3	4	5	6
Session (time)	−0.109	7.155***	−42.896***	0.068**	1.342***	0.228***
	(0.507)	(0.966)	(2.741)	(0.027)	(0.395)	(0.024)
Resources (log)	0.379**	0.927***	5.449***	0.009	−0.490***	−0.050***
	(0.150)	(0.289)	(0.811)	(0.006)	(0.117)	(0.007)
GDP per capita (log)	−2.638***	−14.464***	73.216***	−0.051	−5.997***	−0.522***
	(0.883)	(1.677)	(4.780)	(0.040)	(0.688)	(0.044)
Pub. emp.		−0.020***				
		(0.003)				
Hospital beds				0.000		
				(0.000)		
S-T ratio						0.045***
						(0.002)
AIC	3335.145	4302.303	6182.013	-1017.626	2993.796	-1607.482
BIC	3363.305	4335.060	6210.290	-987.716	3022.074	-1574.500
$-2 \log L$	-1661.573	-2144.152	-3085.006	515.813	-1490.898	810.741
Groups (provinces)	31	31	31	31	31	31
Sessions	4	4	4	4	4	4

Standard errors in parentheses

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

Table B.13: Replication of Table 3, using REML model with province random intercepts and time trend (intercept coefficient omitted).

	1	2	3	4	5	6
Resources (log)	0.272^{*}	0.948^{***}	5.081^{***}	0.070^{***}	-0.464^{***}	-0.034^{***}
	(0.157)	(0.291)	(0.838)	(0.015)	(0.122)	(0.004)
GDP per capita (log)	-2.875^{**}	-23.189^{***}	57.995^{***}	-0.431^{***}	-4.756^{***}	0.146^{***}
	(1.115)	(2.055)	(5.940)	(0.103)	(0.867)	(0.027)
Pub. emp.		-0.027^{***}				
		(0.004)				
Hospital beds				0.000		
				(0.000)		
S-T ratio						0.039^{***}
						(0.001)
R^2	0.996	0.936	0.995	0.581	0.998	0.956
Adj. R^2	0.996	0.933	0.995	0.551	0.997	0.954
Provinces	31	31	31	31	31	31
Sessions	4	4	4	4	4	4

Standard errors in parentheses

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

Table B.14: Replication of Table 3, using OLS with province and time fixed effects (coefficients omitted).

	1	2	3	4	5	6
Session (time)	−0.085	7.720***	−44.579***	0.307***	1.545***	0.245***
	(0.525)	(0.995)	(2.852)	(0.066)	(0.411)	(0.025)
Resources (log)	0.277*	1.076***	5.577***	0.070***	−0.507***	−0.051***
	(0.156)	(0.299)	(0.847)	(0.015)	(0.122)	(0.007)
GDP per capita (log)	−2.692***	−15.406***	76.224***	−0.431***	−6.360***	−0.551***
	(0.915)	(1.726)	(4.976)	(0.103)	(0.718)	(0.046)
Pub. emp.		−0.023***				
		(0.004)				
Hospital beds				0.000		
				(0.000)		
S-T ratio						0.045***
						(0.002)
R^2	0.996	0.933	0.995	0.581	0.997	0.824
Adj. R^2	0.996	0.929	0.994	0.551	0.997	0.816
Provinces	31	31	31	31	31	31
Sessions	4	4	4	4	4	4

Standard errors in parentheses
$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

Table B.15: Replication of Table 3, using OLS with province fixed effects (coefficients omitted) and time trend.

	1	2	3	4	5	6
Resources (log)	0.344**	1.219***	5.167***	0.068***	−0.549***	−0.034***
	(0.135)	(0.250)	(0.841)	(0.015)	(0.117)	(0.004)
GDP per capita (log)	−2.831***	−19.723***	56.975***	−0.410***	−4.029***	0.146***
	(0.131)	(1.750)	(5.900)	(0.101)	(0.462)	(0.027)
SMD-province dummy	3.427***	39.552***	1.570	−0.001	−1.900***	0.026
	(0.910)	(2.358)	(4.634)	(0.063)	(0.672)	(0.021)
Pub. emp.		0.002				
		(0.003)				
Hospital beds				0.000		
				(0.000)		
S-T ratio						0.039***
						(0.001)
AIC	3182.984	3848.856	5931.784	-904.152	2863.134	-2637.615
BIC	3350.580	4020.579	6100.114	-748.211	3031.464	-2464.657
$-2 \log L$	-1555.492	-1887.428	-2929.892	489.076	-1395.567	1355.808
Groups (time)	4	4	4	4	4	4
Provinces	31	31	31	31	31	31

Standard errors in parentheses

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

Table B.16: Replication of Table 3, using REML model with province fixed effects (coefficients omitted) and time random effects, adding single-prov dummy.

	1996	2000	2004	2008
Public-sector employees	4218	4415	5958	5398
Private-sector employees	10354	11855	18744	17268
Total employed persons	14572	16269	24703	22666

Table B.17: Public, private, and total employment over time, 1996-2008, in thousands of employed persons. Source: Statistical Center of Iran, Statistical Yearbooks.

	Resources (log)	Incumbent Reelection
Correlation	0.274	0.108
OLS coefficient	2.695	8.683
	(2.792)	(9.505)

Standard errors in parentheses

Table B.18: Correlations between turnout and resources, and turnout and incumbent reelection, along with estimated coefficients from OLS regression with province fixed effects. Data at province level for 2000, 2004, and 2008 elections. Source: Ministry of Interior.

	Election	Turnover (%)
Post-Communist States	Legislative, Executive	84
Jordan	Legislative	81
Egypt	Legislative	70
Latin America & Caribbean	Legislative, Executive	68
India	Legislative	50
The Philippines	Mayoral	41
United States	Legislative	10
Iran	Legislative	65

Table B.19: Incumbency Reelection Rates in Select Countries and Regions. Turnover refers to the percentage of incumbents who ran again for office but did not win. Post-Communist states: average from 42 elections in Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Macedonia, Moldova, Poland, Romania, Russia, Slovakia, and Slovenia. Latin America & Caribbean: average from 52 elections in Argentina, Bolivia, Colombia, Costa Rica, Ecuador, El Salvador, Honduras, Peru, Uruguay, Venezuela, Barbados, Belize, Jamaica, and Trinidad and Tobago. Sources: Post-communist states – Bernhard and Karakoc (2011); United States – Lee (2008); Latin America – Molina (2001); The Philippines (2005) – Cruz and Schneider (2013); Egypt (avg. 1987-2005) – Blaydes (2011); Jordan (1993, 2003)– Lust Okar (2006); India – Uppal (2009).