

Online Appendix

Table A.1: Location of Industrial Complexes (Appointment)

President	Gyeongin	Gangwon	Chungcheong	Yeongnam	Honam	Jeju
Park	9	4	6	21	12	0
Chun	4	6	39	23	20	0
T. Roh	7	15	54	76	53	1
Y. Kim	32	4	27	32	12	2
D. Kim	10	2	15	10	6	0
M. Roh	28	9	30	55	27	1
Lee	16	9	23	31	17	0
Total	106	49	194	248	147	4

Gyeongin: Gyeonggi-do, Seoul, Incheon

Gangwon: Gangwon-do

Chungcheong: Chungchengnam-do, Chungcheongbuk-do, Daejeon

Yeongnam: Gyeongsangnam-do (Gyeongnam), Gyeongsangbuk-do, Busan, Ulsan, Daegu

Honam: Jellanam-do (Jeonnam), Jellabuk-do, Gwangju

Jeju: Jeju-do

Figure A.1: The Number of Industrial Complexes (by Region)

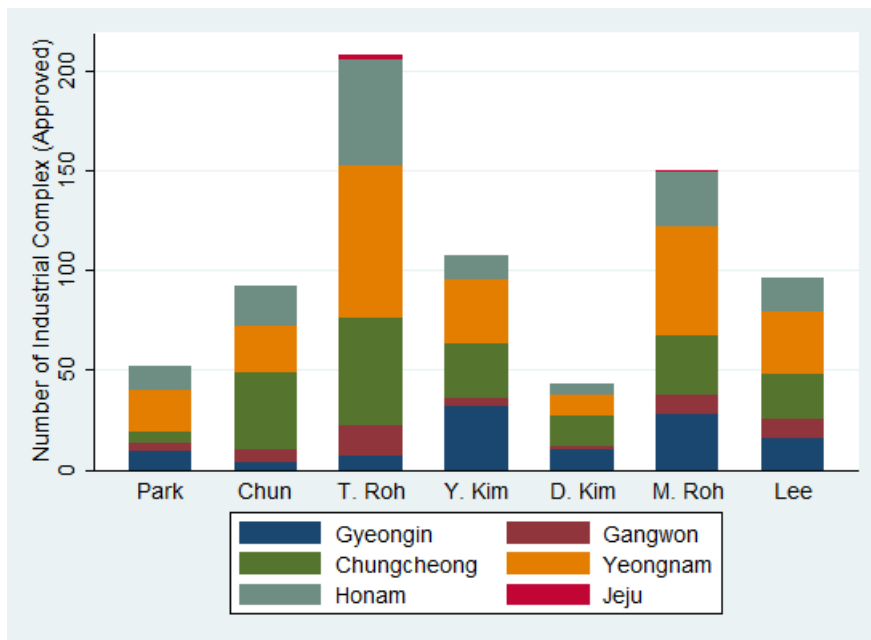


Table A.2: Industrial Complexes in Gyeongnam (by Appointed Year)

No.	Region	City	Name	Type	Appointment	Beginning	Completion	Space (km^2)
1	Gyeongnam	Ulsan	Ulsan-Mipo	National	1962	1962	1962	48,055
2	Gyeongnam	Masan	Masan Free Trade Zone	National	1970	1970	1970	954
3	Gyeongnam	Changwon	Changwon National	National	1974	1974	1974	36,756
4	Gyeongnam	Ulsan	Onsan	National	1974	1974	1974	25,590
5	Gyeongnam	Geoje	Jukdo National	National	1974	1974	1985	3,577
6	Gyeongnam	Geoje	Okpo National	National	1974	1974	1981	5,747
7	Gyeongnam	Geoje	Jisepo Resource Reserve	National	1974	1981	2006	2,927
8	Gyeongnam	Tongyeong	Anjeong	National	1974	1999	-	3,776
9	Gyeongnam	Jinju	Jinju Sanpyeong	Regional	1978	1978	1981	2,135
10	Gyeongnam	Yangsan	Yangsan Regional	Regional	1978	1979	1981	1,529
11	Gyeongnam	Haman	Chilseo Regional	Regional	1979	1991	-	3,067
12	Gyeongnam	Jinhae	Jinhae Regional	Regional	1982	1983	1995	3,138
13	Gyeongnam	Uiryeong	Bongsu Rural	Rural	1982	1983	1995	317
14	Gyeongnam	Hamyang	Ieun Rural	Rural	1984	1985	1986	40
15	Gyeongnam	Ulsan	Sanbuk Rural	Rural	1986	1987	1988	139
16	Gyeongnam	Milyang	Bubik Special	Rural	1986	1986	1987	108
17	Gyeongnam	Haman	Gunbuk Rural	Rural	1987	1987	1988	99
18	Gyeongnam	Hapcheon	Yulgok Rural	Rural	1987	1987	1990	234
19	Gyeongnam	Changnyeong	Namji Rural	Rural	1987	1987	1989	44
20	Gyeongnam	Yangsan	Wungsang Rural	Rural	1987	1988	1999	86
21	Gyeongnam	Uiryeong	Dongdong Rural	Rural	1987	1988	1991	291

Table A.3: Industrial Complexes in Jeonnam (by Appointed Year)

No.	Region	City	Name	Type	Appointment	Beginning	Completion	Space (km^2)
1	Jeonnam	Yeosu	Yeosu National	National	1966	1967	1979	50,253
2	Jeonnam	Suncheon	Suncheon Regional	Regional	1977	1978	1982	583
3	Jeonnam	Naju	Munpyeong Regional	Regional	1979	1987	1990	323
4	Jeonnam	Yeosu	Yeosu Ochen	Regional	1979	1981	1983	222
5	Jeonnam	Gwangyang	Gwangyang National	National	1982	1982	1992	96,405
6	Jeonnam	Hampyeong	Hakgyo Rural	Rural	1984	1985	1989	165
7	Jeonnam	Yeongam	Sinbuk Rural	Rural	1986	1986	1988	132
8	Jeonnam	Naju	Dongsu Rural	Rural	1986	1987	1990	209
9	Jeonnam	Jangseong	Donghwa Rural	Rural	1986	1987	1988	120
10	Jeonnam	Mokpo	Sanjeong Rural	Rural	1987	1987	1991	530
11	Jeonnam	Muan	Samhyang Rural	Rural	1987	1988	1989	220
12	Jeonnam	Gokseong	Gyeommyeon Rural	Rural	1987	1987	1989	522

Table A.4: Descriptive Stastics

Variable	Observations	Mean	Std. Dev.	Min	Max
Components of Independent Variables					
Space of Industrial Complex	1374	14160.04	20432.82	40	96405
Distance between Industrial Complexes and Counties					
in the Timing of Appointment	1351	9.014278	7.878051	1	53
at the Beginning of Construction	1195	8.405264	7.592179	1	50.4
at the Completion of Construction	588	7.204184	7.143233	1	37
Independent Variables					
Existence of Industrial Complex	3865	0.3554981	0.4787259	0	1
Industrial Complex in Appointment	3865	0.6364741	1.345274	0	11.47631
Industrial Complex in Beginning	3865	0.6032693	1.341094	0	11.47631
Industrial Complex in Completion	3865	0.3327555	1.084706	0	10.51206
Dependent Variables					
Votes for the Incumbent (%)	3865	39.42846	17.31848	3	100
The Incumbent's Winning	3865	0.483053	0.4997774	0	1
Turnout (%)	3865	79.42338	14.07894	48.51194	95.78164
Control Variables					
Gyeongnam Region	3865	0.5767732	0.4941349	0	1
Population Size	3809	8932.562	5829.55	140	58891
Household Size	3809	1903.014	1287.489	27	13475
Urbanization	3865	.2530527	.4348174	0	1

Table A.5: Simple Regression Analysis

	(1)	(2)	(3)	(4)
Dep. Var.	Votes for the Incumbent		The Incumbent's Winning	
Indep. Var.	IC Dummy	IC Appointment	IC Dummy	IC Appointment
Industrial Complex	-3.421*** (0.704)	-1.242*** (0.270)	0.033 (0.083)	-0.013 (0.030)
Gyeongnam	2.331*** (0.706)	2.569*** (0.744)	0.597*** (0.077)	0.613*** (0.078)
1973 (year dummy)	-8.564*** (0.859)	-8.466*** (0.869)	-0.058 (0.125)	-0.053 (0.125)
1978 (year dummy)	-15.548*** (0.858)	-15.884*** (0.862)	-0.919*** (0.130)	-0.909*** (0.129)
1981 (year dummy)	-17.710*** (0.867)	-18.002*** (0.851)	-0.610*** (0.131)	-0.591*** (0.129)
1985 (year dummy)	-10.439*** (1.107)	-11.047*** (1.085)	-0.329** (0.152)	-0.313** (0.150)
1988 (year dummy)	-15.962*** (1.452)	-16.849*** (1.421)	-1.342*** (0.195)	-1.319*** (0.191)
Population	-6.945** (3.216)	-6.626** (3.192)	-0.136 (0.395)	-0.135 (0.395)
Households	4.396 (3.217)	4.374 (3.204)	-0.213 (0.394)	-0.207 (0.394)
Urbanization	-5.853*** (0.659)	-5.393*** (0.723)	-0.652*** (0.088)	-0.628*** (0.092)
Constant	81.839*** (6.641)	78.833*** (6.641)	3.063*** (0.830)	3.005*** (0.834)
Method	Fixed Effect	Fixed Effect	Logit	Logit
<i>N</i>	3793	3793	3793	3793

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table A.6: The Effects of Industrial Complexes on the Probability of the Incumbent Winning

	(1)	(2)	(3)	(4)
Indep. Var.	IC Dummy	IC Appointment	IC Beginning	IC Completion
Industrial Complex	-1.366*** (0.289)	-0.450*** (0.110)	-0.451*** (0.110)	-0.447*** (0.144)
1973 (year dummy)	-0.272** (0.133)	-0.221* (0.130)	-0.220* (0.130)	-0.145 (0.127)
1978 (year dummy)	-1.192*** (0.149)	-1.142*** (0.140)	-1.129*** (0.139)	-1.071*** (0.133)
1981 (year dummy)	-0.796*** (0.149)	-0.719*** (0.139)	-0.710*** (0.138)	-0.696*** (0.133)
1985 (year dummy)	-0.461*** (0.175)	-0.475*** (0.161)	-0.475*** (0.161)	-0.274* (0.156)
1988 (year dummy)	-1.733*** (0.232)	-1.478*** (0.210)	-1.443*** (0.209)	-1.181*** (0.201)
ICx1973	1.956*** (0.419)	0.631*** (0.155)	0.633*** (0.155)	0.802*** (0.241)
ICx1978	1.646*** (0.333)	0.584*** (0.125)	0.578*** (0.125)	1.058*** (0.197)
ICx1981	1.432*** (0.331)	0.429*** (0.123)	0.423*** (0.124)	0.609*** (0.162)
ICx1985	1.237*** (0.325)	0.444*** (0.121)	0.452*** (0.121)	0.271* (0.161)
ICx1988	1.650*** (0.340)	0.423*** (0.126)	0.392*** (0.128)	-0.010 (0.201)
Population	-0.281 (0.398)	-0.249 (0.402)	-0.219 (0.402)	0.026 (0.404)
Households	-0.080 (0.397)	-0.106 (0.399)	-0.130 (0.400)	-0.357 (0.402)
Urbanization	-0.576*** (0.090)	-0.591*** (0.096)	-0.582*** (0.097)	-0.574*** (0.091)
Gyeongnam	0.588*** (0.077)	0.600*** (0.078)	0.607*** (0.078)	0.588*** (0.077)
Constant	3.554*** (0.843)	3.411*** (0.860)	3.317*** (0.863)	2.712*** (0.854)
Method	Logit	Logit	Logit	Logit
<i>N</i>	3793	3793	3793	3793

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table A.7: The Effects of Industrial Complexes on Turnout

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Indep. Var.	IC Dummy		IC Appointment		IC Beginning		IC Completion	
Industrial Complex	-0.651 (0.640)	-3.983*** (0.604)	-0.021 (0.215)	-1.488*** (0.174)	0.001 (0.216)	-1.489*** (0.174)	0.107 (0.270)	-1.209*** (0.212)
1973 (year dummy)	-1.335*** (0.261)	-1.535*** (0.321)	-1.470*** (0.252)	-1.639*** (0.314)	-1.466*** (0.252)	-1.640*** (0.314)	-1.133*** (0.247)	-1.300*** (0.313)
1978 (year dummy)	3.745*** (0.317)	3.128*** (0.329)	3.723*** (0.298)	3.397*** (0.314)	3.697*** (0.297)	3.366*** (0.313)	3.935*** (0.284)	3.443*** (0.304)
1981 (year dummy)	5.815*** (0.321)	5.221*** (0.347)	5.401*** (0.298)	4.970*** (0.315)	5.380*** (0.297)	4.945*** (0.314)	5.523*** (0.285)	4.981*** (0.304)
1985 (year dummy)	9.100*** (0.421)	8.033*** (0.501)	8.632*** (0.392)	7.754*** (0.464)	8.623*** (0.391)	7.736*** (0.463)	9.050*** (0.377)	8.159*** (0.459)
1988 (year dummy)	3.036*** (0.582)	1.440** (0.656)	2.571*** (0.540)	1.254* (0.646)	2.509*** (0.541)	1.239* (0.649)	3.112*** (0.512)	1.690*** (0.631)
ICx1973	0.939 (0.752)	1.427 (0.985)	0.801*** (0.225)	0.887*** (0.323)	0.800*** (0.225)	0.887*** (0.323)	-0.457 (0.287)	-0.421** (0.196)
ICx1978	0.962 (0.699)	3.394*** (0.648)	0.237 (0.213)	0.671*** (0.177)	0.237 (0.213)	0.656*** (0.177)	-0.240 (0.281)	-0.102 (0.188)
ICx1981	-0.148 (0.697)	2.057*** (0.615)	0.207 (0.210)	0.743*** (0.192)	0.196 (0.210)	0.727*** (0.192)	0.052 (0.261)	0.602*** (0.220)
ICx1985	1.470** (0.700)	4.049*** (0.645)	1.036*** (0.211)	1.770*** (0.199)	1.060*** (0.211)	1.805*** (0.198)	0.922*** (0.262)	1.486*** (0.226)
ICx1988	1.717** (0.730)	4.386*** (0.637)	1.010*** (0.218)	1.798*** (0.201)	1.013*** (0.218)	1.806*** (0.202)	0.934*** (0.266)	1.578*** (0.245)
Population	5.092*** (1.172)	0.310 (1.558)	4.226*** (1.175)	-0.128 (1.538)	3.970*** (1.179)	-0.189 (1.540)	4.507*** (1.163)	0.083 (1.537)
Households	-5.202*** (1.209)	-2.263 (1.611)	-4.672*** (1.208)	-1.829 (1.587)	-4.448*** (1.210)	-1.777 (1.588)	-4.973*** (1.204)	-2.024 (1.593)
Gyeongnam	0.842*** (0.270)		0.912*** (0.273)		0.900*** (0.273)		0.853*** (0.268)	
Constant	68.054*** (2.602)	89.580*** (2.875)	71.873*** (2.609)	90.285*** (2.882)	72.529*** (2.626)	90.468*** (2.896)	71.510*** (2.497)	89.588*** (2.817)
Method	FE	cluster	FE	cluster	FE	cluster	FE	cluster
N	3793	3793	3793	3793	3793	3793	3793	3793

Standard errors in parentheses

* $p < .1$, ** $p < .05$, *** $p < .01$

Table A.8: Electoral fraud sample: Electoral Record of Haenam-gun/Jindo-gun precinct in the 1985 election

County	Eligible votes	Votes	Votes to parties/candidates						Null votes	Abstained votes
			Minjeong Party Jeong, Sichae	Shinsa Party Kim, Bongho	Gukmin Party Lee, Seongil	Minhan Party Min, Byeongcho	Shinmin Party Yun, Cheolha	Subtotal		
Total	92383	82051	22514	18977	16813	14797	7608	80709	1342	10332
Haenam	15466	18263	6107	4640	2331	3093	1835	18006	257	-2797
1st polling station	2821	7670	4442	1034	619	843	628	7566	104	-4849
2nd polling station	2774	2309	274	289	303	864	546	2276	33	465
3rd polling station	3246	2738	302	479	280	1124	520	2705	33	508
4th polling station	3013	2596	322	338	480	795	627	2562	34	417
5th polling station	1187	968	106	206	157	241	247	957	11	219
6th polling station	673	553	31	103	127	219	65	545	8	120
7th polling station	1140	926	103	192	232	228	143	898	28	214
8th polling station	612	503	69	105	86	135	102	497	6	109
Samsan	4193	3477	895	751	728	521	549	3444	33	716
Hwasan	6042	5048	1358	1102	1104	763	557	4884	164	994
Hyeonsan	5670	4845	743	1420	1065	1027	518	4773	72	825
Songji	9560	7814	1856	2048	1889	1242	652	7687	127	1746
Bukpyeong	5391	4455	1207	995	751	1021	418	4392	63	936
Bukil	3823	3172	871	618	542	821	268	3120	52	651
Okcheon	5176	4243	1048	1091	723	864	462	4188	55	933
Gyegok	4588	3819	737	933	722	995	378	3765	54	769
Masan	4232	3605	555	597	890	1346	184	3572	33	627
Hwangsan	8863	7369	1827	1266	2683	936	534	7246	123	1494
Sani	5768	4765	1103	1067	1247	794	467	4678	87	1003
Munnae	7177	5912	2223	1153	1188	841	401	5806	106	1265
Hwawon	6434	5264	1984	1296	950	533	385	5148	116	1170

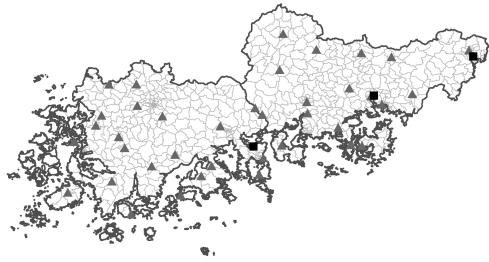
Minjeong Party is the authoritarian incumbent party.

Abnormal ballot count is detected from the first polling station of Haenam county (shadowed in gray color).

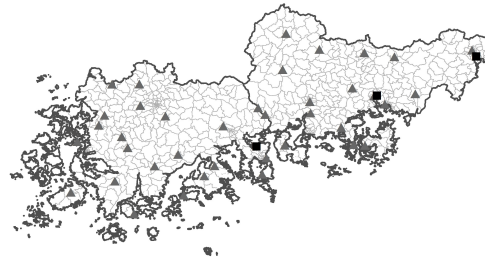
Polling station records except for those from Haenam county are not reported for brevity.

Figure A.2: Distribution of Abnormal Ballot Counts

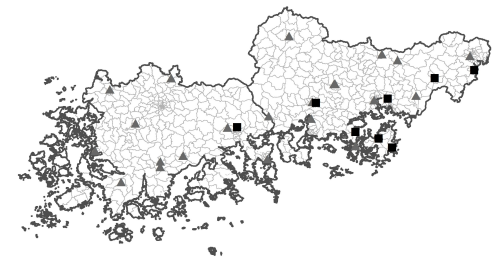
1971 Election



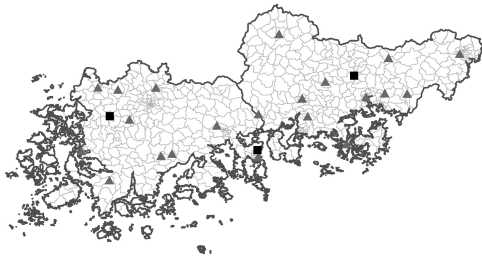
1973 Election



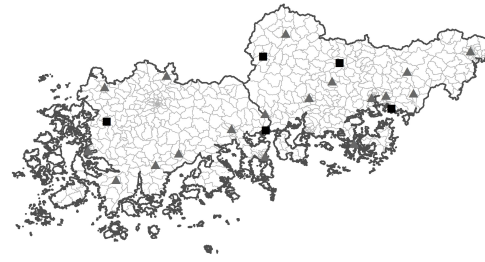
1978 Election



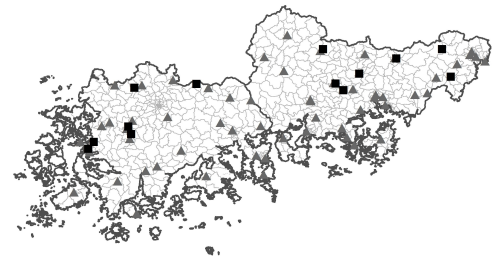
1981 Election



1985 Election



1988 Election



Source: National Election Commission, *Korea Industrial Complex Yearbook* (2010). Black squares mark newly announced industrial complexes and grey triangles indicate the polling stations with abnormal vote counts.