Codebook

"More Options, but Less Willing to Cast a Valid Vote: Evidence from Electoral Reform in Chile"
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*This codebook describes variables used in our scripts only; for a full description of the databases, remit to the sources.

1. **Codebook for "base_comunas_distritos.rds":**

Variable	Description	Source
region	Region	Servel
nom_comuna	Municipality name	
comuna_id	Unique identifier of municipality	
dip_dist_ant_id	Pre-reform district id	
dip_dist_ant_seats	Pre-reform district magnitude	
dip_dist_id	Post-reform district id	
dip_dist_seats	Post_reform district magnitude	
sen_dist_ant_id	Pre-reform senatorial district id	
sen_dist_ant_seats	Pre-reform senatorial district magnitude	
sen_dist_id	Post-reform senatorial district id	
sen_dist_ant_seats	Post-reform senatorial district magnitude	
sen_dist_id	Post-reform senatorial district id	
sen_dist_ant_seats	Post-reform senatorial district magnitude	

2. **Codebook for variables used from "resultados_elecciones_diputados_ce_1989_2017.xlsx":**

Variable	Variable Definition	Source
electo	Elected	Servel Database downloaded from https://www.servel.cl/centro-de-datos/procesos-electorales-detalle/?id=2 on November 10, 2023
ano_de_eleccion	Election year	
distrito	District id on election year	
lista	Letter of electoral list (as assigned by Servel)	
partido	Party	
sigla_partido	Party acronym	
candidato_a	Candidate name	
votos	Number of votes	

3. Codebook for variables used from "2021_11_Diputados_Votacion.txt"

Variable	Variable Definition	Source
electo	Elected	Servel https://www.servel.cl/centro-de-datos/procesos-electorales-detalle/?id=2 on November 10, 2023
distrito	District id	
lista	Letter of electoral list (as assigned by Servel)	
pacto	Name of electoral list	
partido	Party	
nombres	First names	
primer_apellido	First last name	
segundo_apellido	Second last name	
votos	Number of votes	

4. Codebook for "pred_plot.xlsx"

Variable	Variable Definition	Source
change	Change in district magnitude	Constructed from Table 1 (see R_2.do)
year	Year	
pred	Predicted value	
ci_low	Higher limit of confidence interval	
ci_high	Lower limit of confidence interval	

5. Codebook for "fig2_data.dta"

Variable	Variable Definition	Source
year	Election year	Servel
invalid_p2	Percent invalid votes presidential election	
blank_p2	Percent blank vots presidential election	
null_p2	Percent null votes presidential election	
invalid_d2	Percent invalid votes Lower House election	
blank_d2	Percent blank vots Lower House election	
null_d2	Percent null votes Lower House election	

6. **Codebook for "district_votes.dta":**

Variable	Variable definition	Source
dip_dist_seats	Post-reform Lower House district magnitude	Servel
sen_dist_seats	Post-reform Senate district magnitude	
dip_dist_ant_id	Pre-reform district id	
votosblancos_pres_1989	Blank votes 1989 presidential election	
votosblancos_pres_1993	Blank votes 1993 presidential election	
votosblancos_pres_2009	Blank votes 2009 presidential election	
votosblancos_pres_2017	Blank votes 2017 presidential election	
votosnulos_pres_1989	Null votes 1989 presidential election	
votosnulos_pres_1993	Null votes 1993 presidential election	
votosnulos_pres_2009	Null votes 2009 presidential election	
votosnulos_pres_2017	Null votes 2017 presidential election	
votostotales_pres_1989	Total votes 1989 presidential election	
votostotales_pres_1993	Total votes 1993 presidential election	
votostotales_pres_2009	Total votes 2009 presidential election	
votostotales_pres_2017	Total votes 2017 presidential election	
votosblancos_sen_1989	Blank votes 1989 Senate election	
votosblancos_sen_1993	Blank votes 1993 Senate election	
votosblancos_sen_2009	Blank votes 2009 Senate election	
votosblancos_sen_2017	Blank votes 2017 Senate election	
votosnulos_sen_1989	Null votes 1989 Senate election	
votosnulos_sen_1993	Null votes 1993 Senate election	
votosnulos_sen_2009	Null votes 2009 Senate election	
votosnulos_sen_2017	Null votes 2017 Senate election	
votostotales_sen_1989	Total votes 1989 Senate election	
votostotales_sen_1993	Total votes 1993 Senate election	
votostotales_sen_2009	Total votes 2009 Senate election	
votostotales_sen_2017	Total votes 2017 Senate election	
votostotales_dip_2005	Total votes 2005 Lower House	
votostotales_dip_2009	Total votes 2009 Lower House	
votostotales_dip_2013	Total votes 2013 Lower House	
votostotales_dip_2017	Total votes 2017 Lower House	
votosblancos_dip_2005	Blank votes 2005 Lower House	
votosblancos_dip_2009	Blank votes 2009 Lower House	
votosblancos_dip_2013	Blank votes 2013 Lower House	
votosblancos_dip_2017	Blank votes 2017 Lower House	
votosnulos_dip_2005	Null votes 2005 Lower House	
votosnulos_dip_2009	Null votes 2009 Lower House	

(cont. Codebook for “district_votes.dta”)	
Variable	**Variable definition**
votosnulos_dip_2013	Null votes 2013 Lower House
votosnulos_dip_2017	Null votes 2017 Lower House

7. **Codebook for "fig5_data.dta":**

Variable	Variable Definition	Source
dip_dist_ant_id	Pre-reform House district	Servel
iv_dip_21	Invalid votes House 2021	
votostotales_dip_2021	Total votes House 2021	
iv_pres_21	Invalid votes presidential 2021	
votostotales_pres_2021	Total presidential votes 2021	

8. **Codebook for "fig8_data.dta":**

Variable	Variable Definition	Source
dip_dist_ant_id	Pre-reform House district	Servel
votostotales_sen_2021	Total votes senatorial 2021	
iv_sen_21	Invalid votes senatorial 2021	

9. Codebook for "survey_data.dta":

Variable	Variable definition	Labels	Source
invalidos	Sum of Blank and Null votes		
version	Ballot version	1 = 25% Full, 2= 50% Full, 3= 75% Full, 4= Full	
full	Type of ballot	1= Full, 2= 75% Full, 3= 50% Full, 4= 25% Full	
MR	25% Full Ballot	1=25% Full, 0=Else	
SMR	50 % Full Ballot	1=50% Full, 0=Else	
TMR	75% Full Ballot	1=75% Full, 0=Else	
FULL	Full Ballot	1=Full, 0=Else	
esc	Education level	1=No studies, 2=Iincomplete primary, 3= Complete primary, 4= Incomplete secondary, 5=Complete secondary, 6=Incomplete vocational , 7=Complete vocational/incomplete university, 8=Complete university, 9=Postgraduate	
nse	Socioeconomic status	1=Low ; 2 =Mid-Low , 3= Middle, 4=Mid-High, 5=High	
interes	Interest in politics	1=Not interested, 2=Somewhat, 3=Quite, 4=Very interested	
mujer	Sex	1= Female, 2= Male	
edad	Age		
distrito	Post-reform Lower House district		
nulos	Null vote	1= Marked more than one candidate, 0= Else	
blancos	Blank vote	1=No candidate chosen, 0=Else	
area	Roral/urban	1 "Urban" 2 "Rural"	
nivel	" Educational level aggregated	1 "Less than secondary" 2 "Secondary" 3 "More than secondary"	

(Cont **Codebook for "survey_data.dta")**			
Variable	**Variable definition**	**Labels**	
ponderador	Post-survey weights constructed based on population distribution from the 2017 Chilean Census (see SM appendix 4)		
merge_ponderador	Match with post survey weights	1= No match for post-survey weights, 3= Matched	

10. Codebook for "tot21.dta":

Variable	**Variable Definition**	**Source**
dip_dist_ant_id	Pre-reform House district	Servel
blancos	Blank votes	
nulos	Null votes	
totales	Total votes	
dip	House election	
pres	Presidential election	
sen	Senatorial election	
año	Election year	

11. Codebook for "servel_data.dta":

Variable	Variable definition	Labels	Source
invalidos	Invalid votes		Servel
nulos	Null votes		
blancos	Blank votes		
did	Treat * Post		
comuna	Municipality		
año	Election year		
distrit_ant	Pre-reform House district		
magnitud	District magnitude		
treat	Treatment	1= Congress election, 0=Presidential election	
post	Post	1=post reform, 0=pre reform	
esc	Municipality average years of education (from Casen 2017)		Casen 2017
pobreza_multi_5d_17	Municipality poverty rate (from Casen 2017)		

12. Codebook for "municipality_votes.dta":

Variable	Variable Definition	Source
null_pres_2009	Percent null votes 2009 presidential election over total votes	Servel
null_pres_2017	Percent null votes 2017 presidential election over total votes	
blank_pres_2009	Percent blank votes 2009 presidential election over total votes	
blank_pres_2017	Percent blank votes 2017 presidential election over total votes	
votostotales_pres_2009	Total votes 2009 presidential election	
votostotales_pres_2017	Total votes 2017 presidential election	
blank_sen_2009	Percent blank votes 2009 Senate election over total votes	
blank_sen_2017	Percent blankk votes 2017 Senate election over total votes	
null_sen_2009	Percent null votes 2009 Senate election over total votes	
null_sen_2017	Percent null votes 2017 Senate election over total votes	
votostotales_sen_2009	Total votes 2009 Senate election	
votostotales_sen_2017	Total votes 2017 Senate election	
votostotales_dip_2009	Total votes 2009 Lower House	
votostotales_dip_2017	Total votes 2017 Lower House	
comuna	Municipality	
blank_dip_2009	Percent null votes 2009 Lower House election	
blank_dip_2017	Percent null votes 2017 Lower House election	
null_dip_2009	Percent blank votes 2009 Lower House election	
null_dip_2017	Percent blank votes 2017 Lower House election	
invalid_dip_2009	Percent invalid votes 2009 Lower House Election	
invalid_dip_2017	Percent invalid votes 2017 Lower House election	

(Cont **Codebook for "municipality_votes.dta")**		
Variable	**Variable Definition**	
invalid_sen_2009	Percent invalid votes 2009 Senate election	
invalid_sen_2017	Percent invalid votes 2017 Senate election	
invalid_pres_2009	Percent invalid votes 2009 presidential election	
invalid_pres_2017	Percent invalid votes 2017 presidential election	

13. Codebook for "ponderadores.dta":

Variable	**Variable definition**	**Labels**	**Source**
total	Total 2017 Census Population age 18 or more		2017 Census
total_grupo	Total Census population by subgroup category defined by either area, sex, education level or age group		
total_en	Total survey sample		Survey
total_grupo_en	Total survey sample by subgroup category defined by either area, sex, education level or age group		
area	Geographical area (urban o rural)	1=urban area, 0=rural area	Sociodemographic characterisitcs available both at Census data and survey
sexo	Sex	1=woman, 0=man	
nivel	Education level	1=Less than complete secondary, 2=Complete secondary, 3=More than complete secondary	
tramo_edad	Age groups	1= 18-35, 2=36-54, 3=55 or more	

14. Codebook for "pres_hist.csv":

This database is at the candidate/election/polling-station level

Variable	Variable Definition	Source
Año.de.Elección	Election year	Servel
Votación.Presidencial	Election round	
Candidato..a.	Candidate name or null or blank votes	
Comuna	Municipality	
Votos.Totales	Total votes obtained	

15. Codebook for "comunas_dist.csv":

Variable	Variable Definition	Source
comuna	Municipality	Servel
dip_dist_seats	Seats in House's district	
sen_dist_seats	Seats in Senate's district	

16. Codebook for "pop_elec2017.rds":

Variable	Variable definition	Labels	Source
distrito	Post reform Lower House district in 2017		Servel
muj	Woman	1=woman, 0=man	Instituto Nacional de Estadística - 2017 Census Data - downloaded from https://www.ine.gob.cl/estadisticas/sociales/censos-de-poblacion-y-vivienda/censo-de-poblacion-y-vivienda on June 16, 2023
urb	Urban area	1=urban area, 0=rural area	
educ	Education level	1=Less than complete secondary, 2=Complete secondary, 3=More than complete secondary	
edad	Age groups	1= 18-24, 2=25-24, 3=34-44, 4=45-54, 5=55-64, 6=65 or more	
N	Population in subcategory defined by district, muj, urb, educ, and edad categories		
per_dist	Proportion of district's total population in the subcategory		

17. Codebook for "pop_elec2021.rds":

Variable	Variable definition	Labels	Source
distrito	Post reform Lower House district in 2021		Servel
muj	Woman	1=woman, 0=man	Instituto Nacional de Estadística - 2017 Census Data - downloaded from https://www.ine.gob.cl/estadisticas/sociales/censos-de-poblacion-y-vivienda/censo-de-poblacion-y-vivienda on June 16, 2023
urb	Urban area	1=urban area, 0=rural area	
educ	Education level	1=Less than complete secondary, 2=Complete secondary, 3=More than complete secondary	
edad	Age groups	1= 18-24, 2=25-24, 3=34-44, 4=45-54, 5=55-64, 6=65 or more	
N	Population in subcategory defined by district, muj, urb, educ, and edad categories		
per_dist	Proportion of district's total population in the subcategory		

18. Codebook for "m_dip.rds":

Variable	Variable definition	Source
distrito	Post-reform district	Servel
m_dip	Post_reform district magnitude	

19. Codebook for "cep69mrp_dist.rds":

esc	Education level	1=Less than complete secondary, 2=Complete secondary, 3=More than complete secondary	CEP: Base consolidada downloaded on June 15, 2023 - plus non-public data on municipality to construct district variable
edad	Age groups	1= 18-24, 2=25-24, 3=34-44, 4=45-54, 5=55-64, 6=65 or more	
urb	Urban area	1=urban area, 0=rural area	
muj	Woman	1=woman, 0=man	
distrito	Post-reform district		
noconf_cong_na	Does not trust in Congress (recode of variable confianza_6_k)	1= Does not trust Congress or trust little in Congress, 0=otherwise, NA=does not answer or does not know	
endecad_na	Country is in decadence (recode of variable percepcion_4)	1=country is in decadence, 0=otherwise, NA=does not answer or does not know	
econmal_na	Current current economic situation is bad or very bad (recode of variable percepcion_2)	1=current economic situation is bad or very bad, 0=otherwise, NA=does not answer or does not know	
evaldem_na	Demoracy works bady or very bad (recode of variable democracia_20)	1=democracy works bad or very bad, 0=otherwise, NA=does not answer or does not know	

20. Codebook for "cep71mrp_dist.rds":

Variable	Variable definition	Labels	Source
esc	Education level	1=Less than complete secondary, 2=Complete secondary, 3=More than complete secondary	CEP: Base consolidada downloaded on June 15, 2023 - plus non-public data on municipality to construct district variable
edad	Age groups	1= 18-24, 2=25-24, 3=34-44, 4=45-54, 5=55-64, 6=65 or more	
urb	Urban area	1=urban area, 0=rural area	
muj	Woman	1=woman, 0=man	
distrito	Post-reform district		
noconf_cong_na	Does not trust in Congress (recode of variable confianza_6_k)	1= Does not trust Congress or trust little in Congress, 0=otherwise, NA=does not answer or does not know	
endecad_na	Country is in decadence (recode of variable percepcion_4)	1=country is in decadence, 0=otherwise, NA=does not answer or does not know	
econmal_na	Current current economic situation is bad or very bad (recode of variable percepcion_2)	1=current economic situation is bad or very bad, 0=otherwise, NA=does not answer or does not know	

21. Codebook for "cep79mrp_dist.rds":

esc	Education level	1=Less than complete secondary, 2=Complete secondary, 3=More than complete secondary	CEP: Base consolidada downloaded on June 15, 2023 - plus non-public data on municipality to construct district variable
edad	Age groups	1= 18-24, 2=25-24, 3=34-44, 4=45-54, 5=55-64, 6=65 or more	
urb	Urban area	1=urban area, 0=rural area	
muj	Woman	1=woman, 0=man	
distrito	Post-reform district		
noconf_cong_na	Does not trust in Congress (recode of variable confianza_6_k)	1= Does not trust Congress or trust little in Congress, 0=otherwise, NA=does not answer or does not know	
endecad_na	Country is in decadence (recode of variable percepcion_4)	1=country is in decadence, 0=otherwise, NA=does not answer or does not know	
econmal_na	Current current economic situation is bad or very bad (recode of variable percepcion_2)	1=current economic situation is bad or very bad, 0=otherwise, NA=does not answer or does not know	
evaldem_na	Demoracy works bady or very bad (recode of variable democracia_20)	1=democracy works bad or very bad, 0=otherwise, NA=does not answer or does not know	

22. Codebook for "cep82mrp_dist.rds":

Variable	Variable definition	Labels	Source
esc	Education level	1=Less than complete secondary, 2=Complete secondary, 3=More than complete secondary	CEP: Base consolidada downloaded on June 15, 2023 - plus non-public data on municipality to construct district variable
edad	Age groups	1= 18-24, 2=25-24, 3=34-44, 4=45-54, 5=55-64, 6=65 or more	
urb	Urban area	1=urban area, 0=rural area	
muj	Woman	1=woman, 0=man	
distrito	Post-reform district		
noconf_cong_na	Does not trust in Congress (recode of variable confianza_6_k)	1= Does not trust Congress or trust little in Congress, 0=otherwise, NA=does not answer or does not know	
endecad_na	Country is in decadence (recode of variable percepcion_4)	1=country is in decadence, 0=otherwise, NA=does not answer or does not know	
econmal_na	Current current economic situation is bad or very bad (recode of variable percepcion_2)	1=current economic situation is bad or very bad, 0=otherwise, NA=does not answer or does not know	

23. Codebook for "cep85mrp_dist.rds":

esc	Education level	1=Less than complete secondary, 2=Complete secondary, 3=More than complete secondary	CEP: Base consolidada downloaded on June 15, 2023 - plus non-public data on municipality to construct district variable
edad	Age groups	1= 18-24, 2=25-24, 3=34-44, 4=45-54, 5=55-64, 6=65 or more	
urb	Urban area	1=urban area, 0=rural area	
muj	Woman	1=woman, 0=man	
distrito	Post-reform district		
noconf_cong_na	Does not trust in Congress (recode of variable confianza_6_k)	1= Does not trust Congress or trust little in Congress, 0=otherwise, NA=does not answer or does not know	
endecad_na	Country is in decadence (recode of variable percepcion_4)	1=country is in decadence, 0=otherwise, NA=does not answer or does not know	
econmal_na	Current current economic situation is bad or very bad (recode of variable percepcion_2)	1=current economic situation is bad or very bad, 0=otherwise, NA=does not answer or does not know	
evaldem_na	Demoracy works bady or very bad (recode of variable democracia_20)	1=democracy works bad or very bad, 0=otherwise, NA=does not answer or does not know	

24. Codebook for "cep86mrp_dist.rds":

Variable	Variable definition	Labels	Source
esc	Education level	1=Less than complete secondary, 2=Complete secondary, 3=More than complete secondary	CEP: Base consolidada downloaded on June 15, 2023 - plus non-public data on municipality to construct district variable
edad	Age groups	1= 18-24, 2=25-24, 3=34-44, 4=45-54, 5=55-64, 6=65 or more	
urb	Urban area	1=urban area, 0=rural area	
muj	Woman	1=woman, 0=man	
distrito	Post-reform district		
noconf_cong_na	Does not trust in Congress (recode of variable confianza_6_k)	1= Does not trust Congress or trust little in Congress, 0=otherwise, NA=does not answer or does not know	
endecad_na	Country is in decadence (recode of variable percepcion_4)	1=country is in decadence, 0=otherwise, NA=does not answer or does not know	
econmal_na	Current current economic situation is bad or very bad (recode of variable percepcion_2)	1=current economic situation is bad or very bad, 0=otherwise, NA=does not answer or does not know	

25. Codebook for "mag.dta":

Variable	Variable Definition	Source
date	Date of election	Bormann & Golder (2022)< available at https://datafinder.qog.gu.se/dataset/gol; http://mattgolder.com/elections
country	Country of election	
tier1_avemag	Average district magnitude for election	

26. Codebook for "idea_turnout_xls":

Variable	Variable Definition	Source
Year	Year of election	International IDEA's Voter Turnout Database, downloaded from https://www.idea.int/data-tools/data/voter-turnout-database, downloaded on November, 30, 2022
Country	Country of election	
Voter Turnout	Percentage of voter turnout in election	
Invalid votes	Percentage of invalid votes in election	
Election type	Type of election	
Compulsory voting	Binary variable for whether voting was compulsory for the election	

27. Codebook for "idea_country_code.xls":

Variable	Variable Definition	Source
code	Country code	International IDEA
country	Country	

28. Codebook for "idea_export_voter_turnout_database_region.xlsx":

Variable	Variable definition	Source
Country (rename as pais)	Country of election	International IDEA's Voter Turnout Database, downloaded from https://www.idea.int/data-tools/data/voter-turnout-database on January 16, 2024
ISO3 (renamed as iso3)	3-digit country identifier	
Election Type (renamed as tipo_elec)	Type of election	
Year (renamed as date)	Year or Date of election (when exact date available)	
Invalid votes (renamed as invalid)	Percentage of invalid votes in election	
Compulsory voting (renamed as compulsory)	Binary variable for whether voting was compulsory for the election	

29. Codebook for "idea_export_electoral_system_design_database.xlsx":

Variable	Variable definition	Source
Country (renamed as pais)	Country of election	International IDEA's Electoral System Design Database, downloaded from https://www.idea.int/data-tools/data/electoral-system-design-database on January 16, 2024.
ISO3 (renamed as iso3)	3-digit country identifier	
Year (renamed as year)	Election year	
Electoral system family (renamed as elecsis_family)	National legislature electoral system family	
Electoral system for the president (renamed as pres_elec)	Electoral system for President (if applicable)	

30. Codebook for "V-Dem-CY-Full+Others-v13.rds":

Variable	Variable definition	Source
country_text_id (renamed as iso3)	3-digit country identifier	V-Dem Dataset downloaded from https://www.v-dem.net/data/the-v-dem-dataset/ on January 16, 2024.
year	Year	
v2x_polyarchy	Electoral democracy index	