Appendix (not intended for publication)

A Appendix - Surnames

In this appendix, we briefly describe the sources for classifying last names as Quechua, Aymara or Hispanic. We follow the procedure originally developed in Artiles (2020), for more precise explanations and original sources, please refer to this paper. We identify Hispanic surnames using the dictionary suggested by the Biblioteca Nacional de España (Platt, 1996), which includes an index of Hispanic surnames developed in Latin America and the United States. As stated by the author, "the word Hispanic refers to individuals born in Latin America or the United States, whose parents speak Spanish and whose principal cultural background was Spanish." This source includes the list of surnames in Carraffa and Carraffa (1920–1963), the traditional reference for Hispanic surnames. The list of surnames in Carraffa and Carraffa (1920–1963) can also be accessed through The Library of Congress. We complement Basque surnames using a list of surnames provided by the Real Academia de la Lengua Vasca. For the identification of native surnames, we look for the presence of linguistic roots from the Quechua and Aymara language families (the two most popular ethnic groups in Peru) within surnames. For the Quechuan language family, the main sources are the classic dictionary by González Holguín (1608)[1952] and a recent dictionary compiled by the Academia Mayor de la Lengua Quechua (2005). We also include the list of names provided by the Peruvian Registro Nacional de Identificación y Estado Civil (RENIEC, 2012). For the Aymara family, the main sources are the classic dictionary by Bertonio (1612)[2011], the list of surnames provided by De Lucca (1983), and a recent dictionary compiled by CONADI (2011). Finally, the analysis is complemented with two additional sources: (1) *Vocabulario Políglota Incaico*, originally compiled by Franciscan missionaries in Peru, which provides an extensive list of words in four dialects of Quechua (varieties of Cuzco, Ayacucho, Junín and Ancash) and Aymara, see Fide (1905)[1998]; and (2) the *An Crúbadán-Corpus Building for Minority Languages* project, which provides downloadable text datasets for different dialects of Quechua and Aymara based on online text resources, including translations of the Bible and the Universal Declaration of Human Rights.

B Appendix - Figures

FIGURE A.1: Timing for Recall Referenda

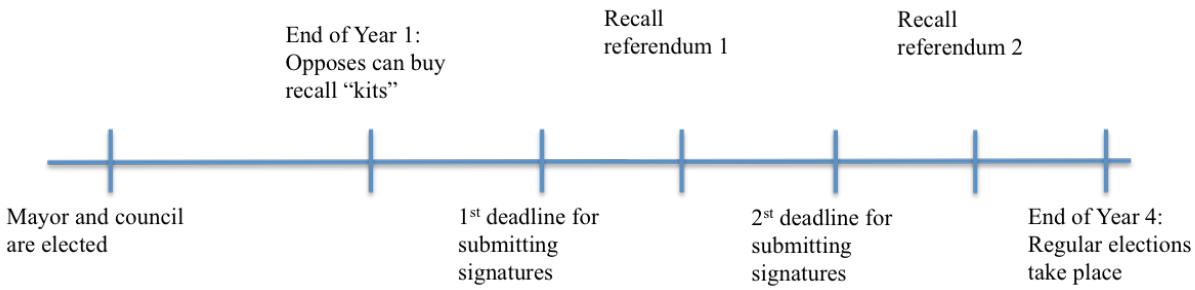
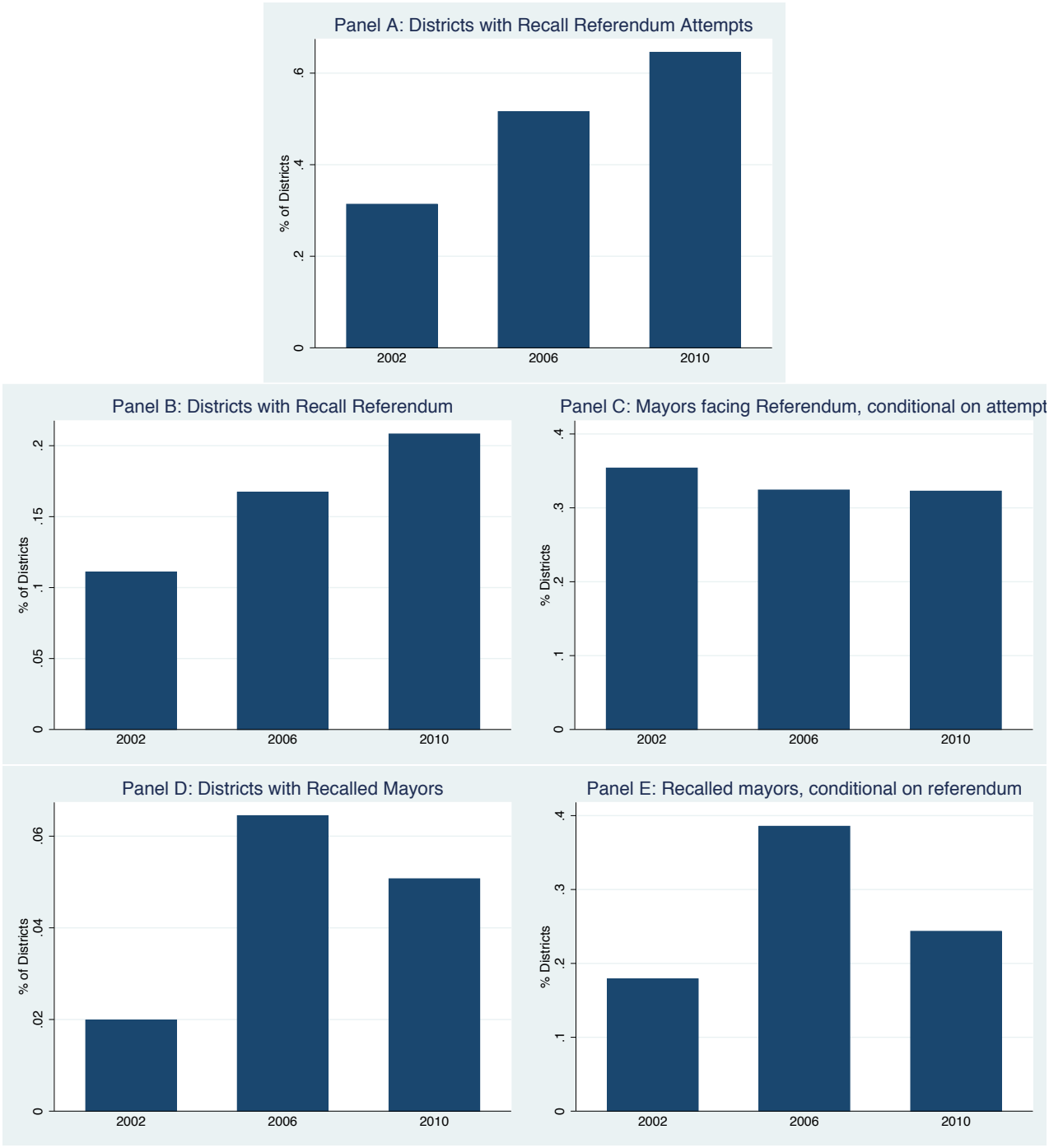
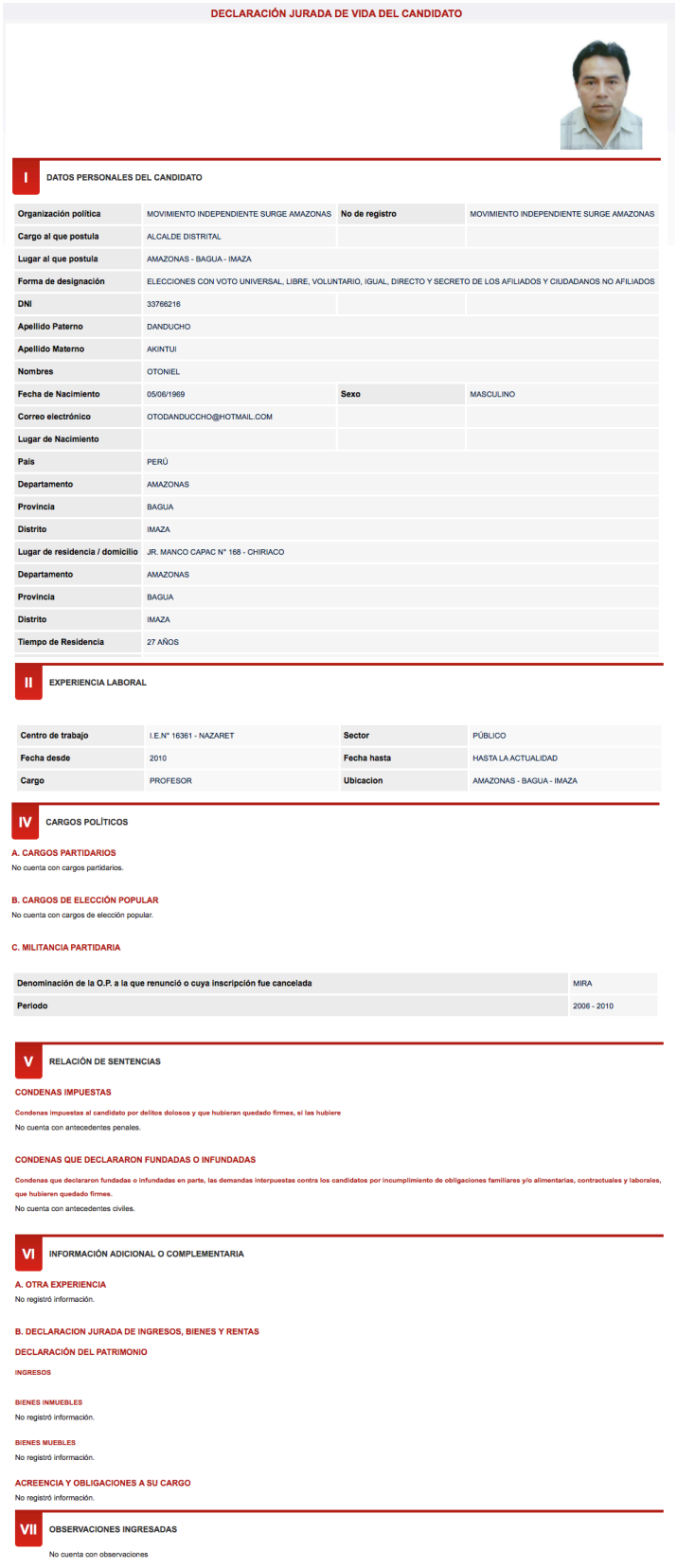


FIGURE A.2: Incidence of Recall Referenda



Note: The figures show for each electoral term (A) the proportion of districts in which a recall kit was purchased in order to initiate a recall process against the incumbent mayor, (B) the proportion of districts in which the incumbent mayor faced a recall referendum, (C) the conditional probability of having a recall referendum on the mayor if a recall kit was purchased, (D) the proportion of districts in which the mayor was recalled, and (E) the conditional probability of an incumbent mayor being recalled if a recall referendum took place.

FIGURE A.3: Example from CV data 1 (2014 elections)



DECLARACIÓN JURADA DE VIDA DEL CANDIDATO

I DATOS PERSONALES DEL CANDIDATO

Organización política	MOVIMIENTO INDEPENDIENTE SURGE AMAZONAS	No de registro	MOVIMIENTO INDEPENDIENTE SURGE AMAZONAS
Cargo al que postula	ALCALDE DISTRITAL		
Lugar al que postula	AMAZONAS - BAGUA - IMAZA		
Forma de designación	ELECCIONES CON VOTO UNIVERSAL, LIBRE, VOLUNTARIO, IGUAL, DIRECTO Y SECRETO DE LOS AFILIADOS Y CIUDADANOS NO AFILIADOS		
DNI	33766216		
Apellido Paterno	DANDUCHO		
Apellido Materno	AKINTUI		
Nombres	OTONIEL		
Fecha de Nacimiento	05/06/1969	Sexo	MASCULINO
Correo electrónico	OTODANDUCCHO@HOTMAIL.COM		
Lugar de Nacimiento			
Pais	PERÚ		
Departamento	AMAZONAS		
Provincia	BAGUA		
Distrito	IMAZA		
Lugar de residencia / domicilio	JR. MANCO CAPAC N° 168 - CHIRIACO		
Departamento	AMAZONAS		
Provincia	BAGUA		
Distrito	IMAZA		
Tiempo de Residencia	27 AÑOS		

II EXPERIENCIA LABORAL

Centro de trabajo	I.E.N° 16361 - NAZARET	Sector	PÚBLICO
Fecha desde	2010	Fecha hasta	HASTA LA ACTUALIDAD
Cargo	PROFESOR	Ubicacion	AMAZONAS - BAGUA - IMAZA

IV CARGOS POLÍTICOS

A. CARGOS PARTIDARIOS

No cuenta con cargos partidarios.

B. CARGOS DE ELECCIÓN POPULAR

No cuenta con cargos de elección popular.

C. MILITANCIA PARTIDARIA

Denominación de la O.P. a la que renunció o cuya inscripción fue cancelada	MIRA
Periodo	2006 - 2010

V RELACIÓN DE SENTENCIAS

CONDENAS IMPUESTAS

Condenas impuestas al candidato por delitos dolosos y que hubieran quedado firmes, si las hubiere

No cuenta con antecedentes penales.

CONDENAS QUE DECLARARON FUNDADAS O INFUNDADAS

Condenas que declararon fundadas o infundadas en parte, las demandas interpuestas contra los candidatos por incumplimiento de obligaciones familiares y/o alimentarias, contractuales y laborales, que hubieren quedado firmes.

No cuenta con antecedentes civiles.

VI INFORMACIÓN ADICIONAL O COMPLEMENTARIA

A. OTRA EXPERIENCIA

No registró información.

B. DECLARACION JURADA DE INGRESOS, BIENES Y RENTAS

DECLARACIÓN DEL PATRIMONIO

INGRESOS

BIENES INMUEBLES

No registró información.

BIENES MUEBLES

No registró información.

ACREENCIA Y OBLIGACIONES A SU CARGO

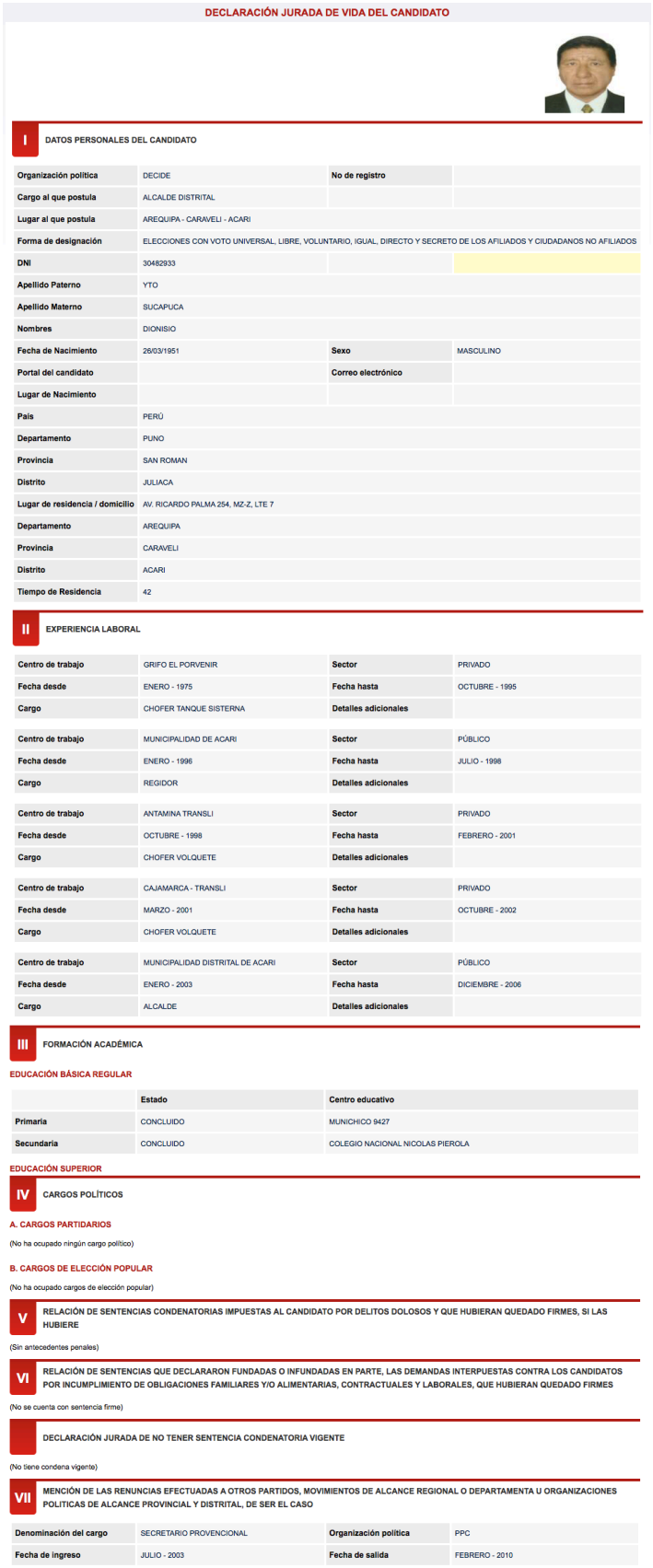
No registró información.

VII OBSERVACIONES INGRESADAS

No cuenta con observaciones

Source: Example extracted from Infogob.

FIGURE A.4: Example from CV data 2 (2010 elections)



DECLARACIÓN JURADA DE VIDA DEL CANDIDATO

I DATOS PERSONALES DEL CANDIDATO

Organización política	DECIDE	No de registro	
Cargo al que postula	ALCALDE DISTRITAL		
Lugar al que postula	AREQUIPA - CARAVELI - ACARI		
Forma de designación	ELECCIONES CON VOTO UNIVERSAL, LIBRE, VOLUNTARIO, IGUAL, DIRECTO Y SECRETO DE LOS AFILIADOS Y CIUDADANOS NO AFILIADOS		
DNI	30482933		
Apellido Paterno	YTO		
Apellido Materno	SUCAPUCA		
Nombres	DIONISIO		
Fecha de Nacimiento	26/03/1951	Sexo	MASCULINO
Portal del candidato		Correo electrónico	
Lugar de Nacimiento			
País	PERÚ		
Departamento	PUNO		
Provincia	SAN ROMAN		
Distrito	JULIACA		
Lugar de residencia / domicilio	AV. RICARDO PALMA 254, MZ-Z, LTE 7		
Departamento	AREQUIPA		
Provincia	CARAVELI		
Distrito	ACARI		
Tiempo de Residencia	42		

II EXPERIENCIA LABORAL

Centro de trabajo	GRIFO EL PORVENIR	Sector	PRIVADO
Fecha desde	ENERO - 1975	Fecha hasta	OCTUBRE - 1995
Cargo	CHOFER TANQUE SISTERNA	Detalles adicionales	
Centro de trabajo	MUNICIPALIDAD DE ACARI	Sector	PÚBLICO
Fecha desde	ENERO - 1996	Fecha hasta	JULIO - 1998
Cargo	REGIDOR	Detalles adicionales	
Centro de trabajo	ANTAMINA TRANSLI	Sector	PRIVADO
Fecha desde	OCTUBRE - 1998	Fecha hasta	FEBRERO - 2001
Cargo	CHOFER VOLQUETE	Detalles adicionales	
Centro de trabajo	CAJAMARCA - TRANSLI	Sector	PRIVADO
Fecha desde	MARZO - 2001	Fecha hasta	OCTUBRE - 2002
Cargo	CHOFER VOLQUETE	Detalles adicionales	
Centro de trabajo	MUNICIPALIDAD DISTRITAL DE ACARI	Sector	PÚBLICO
Fecha desde	ENERO - 2003	Fecha hasta	DICIEMBRE - 2006
Cargo	ALCALDE	Detalles adicionales	

III FORMACIÓN ACADÉMICA

EDUCACIÓN BÁSICA REGULAR

	Estado	Centro educativo
Primaria	CONCLUIDO	MUNICHICO 9427
Secundaria	CONCLUIDO	COLEGIO NACIONAL NICOLAS PIEROLA

EDUCACIÓN SUPERIOR

IV CARGOS POLÍTICOS

A. CARGOS PARTIDARIOS

(No ha ocupado ningún cargo político)

B. CARGOS DE ELECCIÓN POPULAR

(No ha ocupado cargos de elección popular)

V RELACIÓN DE SENTENCIAS CONDENATORIAS IMPUESTAS AL CANDIDATO POR DELITOS DOLOSOS Y QUE HUBIERAN QUEDADO FIRMES, SI LAS HUBIERE

(Sin antecedentes penales)

VI RELACIÓN DE SENTENCIAS QUE DECLARARON FUNDADAS O INFUNDADAS EN PARTE, LAS DEMANDAS INTERPUESTAS CONTRA LOS CANDIDATOS POR INCUMPLIMIENTO DE OBLIGACIONES FAMILIARES Y/O ALIMENTARIAS, CONTRACTUALES Y LABORALES, QUE HUBIERAN QUEDADO FIRMES

(No se cuenta con sentencia firme)

DECLARACIÓN JURADA DE NO TENER SENTENCIA CONDENATORIA VIGENTE

(No tiene condena vigente)

VII MENCIÓN DE LAS RENUNCIAS EFECTUADAS A OTROS PARTIDOS, MOVIMIENTOS DE ALCANCE REGIONAL O DEPARTAMENTA U ORGANIZACIONES POLITICAS DE ALCANCE PROVINCIAL Y DISTRITAL, DE SER EL CASO

Denominación del cargo	SECRETARIO PROVENCIONAL	Organización política	PPC
Fecha de ingreso	JULIO - 2003	Fecha de salida	FEBRERO - 2010

Source: Example extracted from Infogob.

FIGURE A.5: Example from CV data 3 (2006 elections)



REGISTRO DE LAS HOJAS DE VIDA DE LOS CANDIDATOS Y PLANES DE GOBIERNO PARA LAS ELECCIONES REGIONALES Y MUNICIPALES 2006

Constancia generada el día 26/01/2017 a horas 12:01 PM

[Imprimir Reporte] [Cerrar Ventana]

DECLARACIÓN JURADA DE VIDA DEL CANDIDATO

Manifiesto bajo juramento que los datos ingresados en las páginas de mi Declaración Jurada de Vida son fidedignos.

I. Datos personales del candidato

Partido o alianza electoral	ACCION POPULAR
Nro de registro	No hay datos para colocar
Cargo al que postula	ALCALDE DISTRITAL
Lugar al que postula	AYACUCHO - HUAMANGA - CARMEN ALTO
Forma de designación de su candidatura	Designación por órgano conforme al estatuto
Nombres	WALTER RICHARD
Apellidos	ATAURIMA ATAURIMA
Sexo	Masculino
Documento de identidad	DNI 10330734
Fecha de nacimiento	10-03-1964
Correo electrónico	wraa_33@hotmail.com
Página web	No hay datos para colocar
Lugar de nacimiento	
País	PERÚ
Departamento	JUNIN
Provincia	HUANCAYO
Distrito	HUANCAYO
Lugar de residencia y domicilio	
Dirección	Jr. Nueva Generación 123- Vista Alegre
Departamento	AYACUCHO
Provincia	HUAMANGA
Distrito	CARMEN ALTO
Tiempo de Residencia	40 años

II. Formación académica

Educación básica regular :

Primaria completa
Secundaria concluida

Estudios realizados

1 . -

Tipo de centro de estudios	Universitario
Centro de estudios	UNIVERSIDAD NACIONAL SAN CRISTOBAL DE HUAMANGA
Nombre del curso o carrera	INGENIERIA QUIMICA Y METALURGIA
Lugar	AYACUCHO
Fecha de inicio	20-07-1983
Fecha de termino	06-01-1990
Se obtuvo	Grado obtenido
Nombre	BACHILLER EN INGENIERIA QUIMICA Y METALURGIA
Comentario	No hay datos para colocar

2 . -

Tipo de centro de estudios	Técnico
Centro de estudios	INSITUTO SUPERIOR TECNOLOGICO MONSEÑOR VICTOR ALVAREZ HUAPAYA
Nombre del curso o carrera	MECANICA
Lugar	AYACUCHO
Fecha de inicio	03-04-1979
Fecha de termino	12-12-1981
Se obtuvo	Grado obtenido
Nombre	BACHILLER EN MECANICA
Comentario	No hay datos para colocar

III. Experiencia laboral

	Centro de trabajo	Sector	Fecha de ingreso	Fecha de salida	Cargo
1	ORNAMENTOS PRETREOS E.I.R.L	PRIVADO	28-12-2003	11-09-2006	GERENTE GENERAL
2	EPSASA	PUBLICO	07-04-2002	20-04-2003	DIRECTOR

IV. Cargos políticos

a. Cargos partidarios

	Cargo	Ámbito o circunscripción	Partido o alianza electoral	Ingreso	Salida
1	SECRETARIO GENERAL	Distrital	ACCION POPULAR	24-06-2005	11-09-2006

b. Cargos de elección popular

	Cargo	Región/prov./dist.	Proceso electoral	Partido o alianza electoral por la que postulo	Ingreso	Salida
	No hay datos para colocar	No hay datos para colocar	No hay datos para colocar	No hay datos para colocar	No hay datos para colocar	No hay datos para colocar

V. Otra experiencia

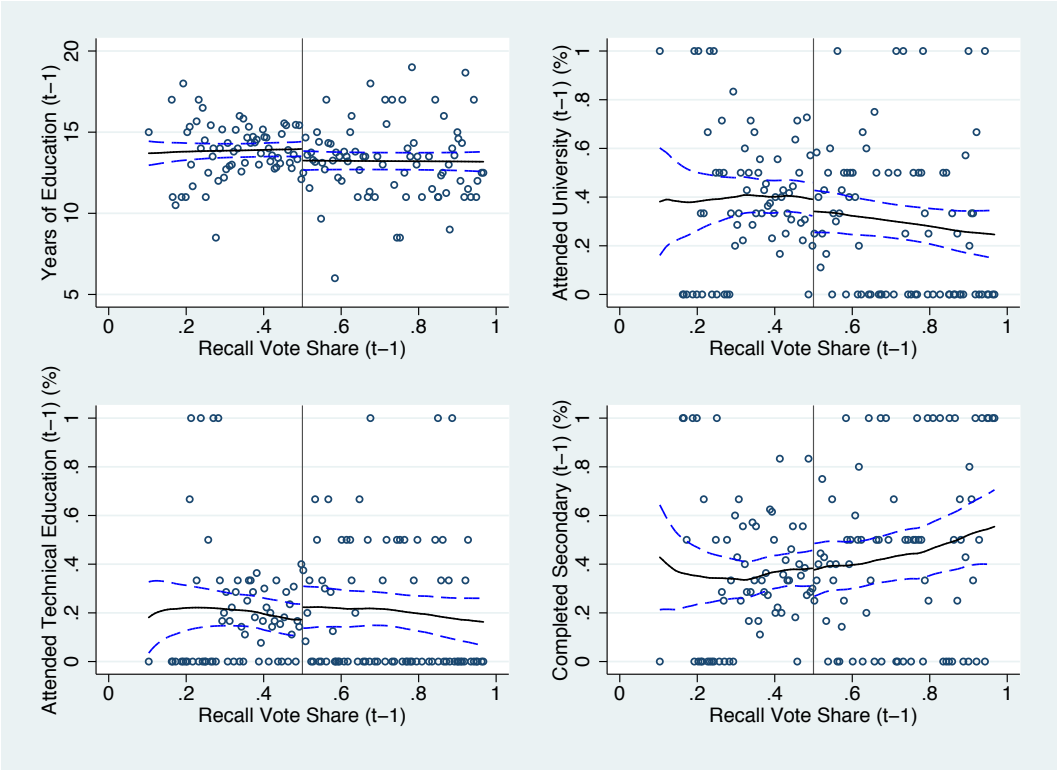
	Cargo	Entidad / Institución	Ingreso	Salida
1	PRESIDENTE	CENTRO SOCIAL DEPORTIVO VISTA ALEGRE	02-12-2000	15-08-2002
2	PRESIDENTE	LIGA DISTRITAL DE FUTBOL CARMEN ALTO	20-08-2002	28-04-2006

VI. Antecedentes Judiciales y/o Penales

Materia de la demanda	No hay datos para colocar
Nro expediente	No hay datos para colocar
Juzgado	No hay datos para colocar
Fecha de interposición	No hay datos para colocar
Fecha de sentencia firme	No hay datos para colocar
Nombre del demandante	No hay datos para colocar
Petitorio de la demanda	No hay datos para colocar
Fallo	No hay datos para colocar
Observaciones	No hay datos para colocar

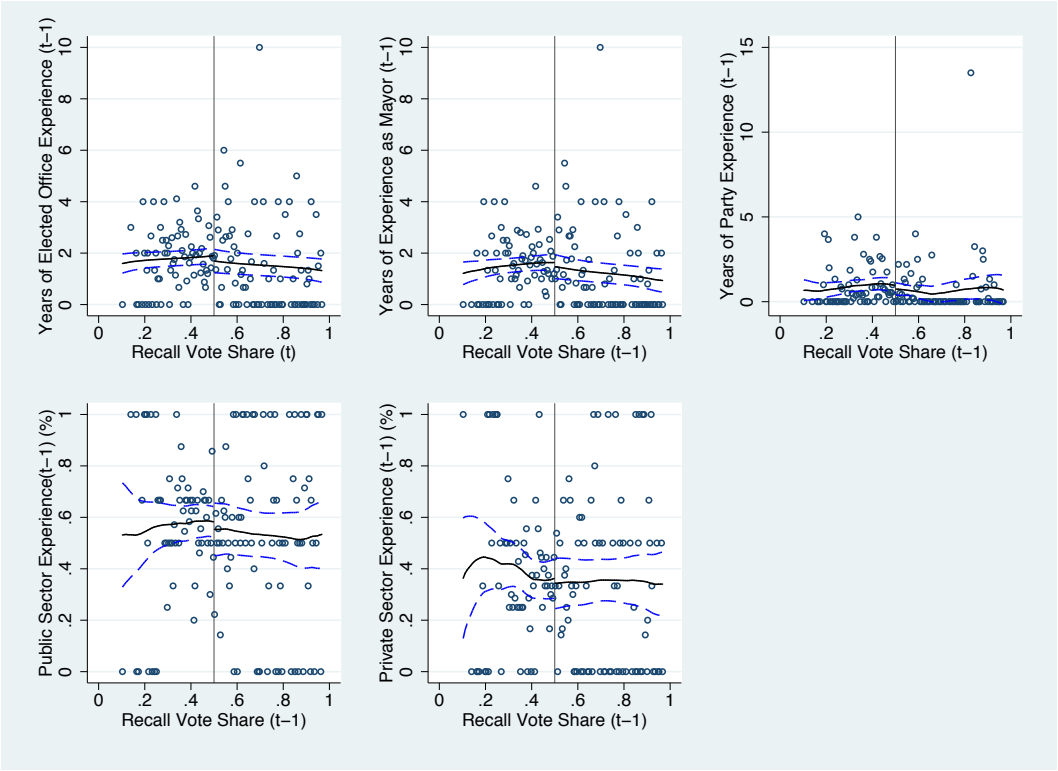
Source: Example extracted from Infogob.

FIGURE A.6: Continuity Test: Incumbent's Education



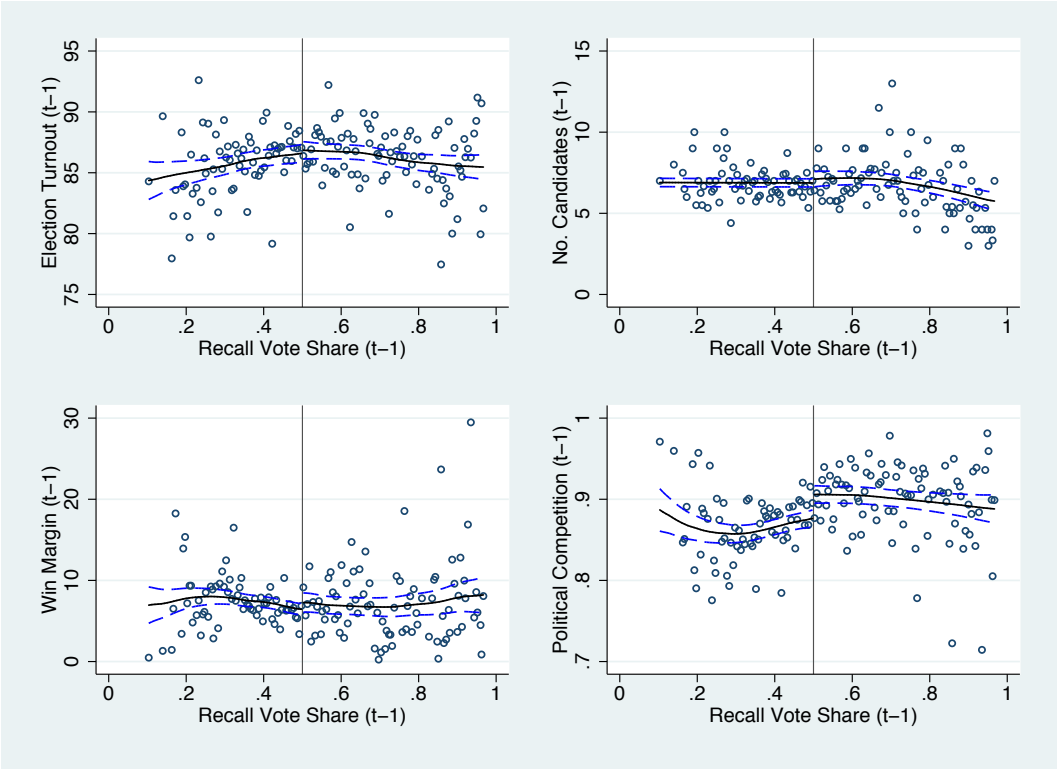
Note: The figures show the results from kernel-weighted local polynomial smoothing plots with epanechnikov kernels and the 95% confidence intervals for incumbents' education.

FIGURE A.7: Continuity Test: Incumbent's Experience



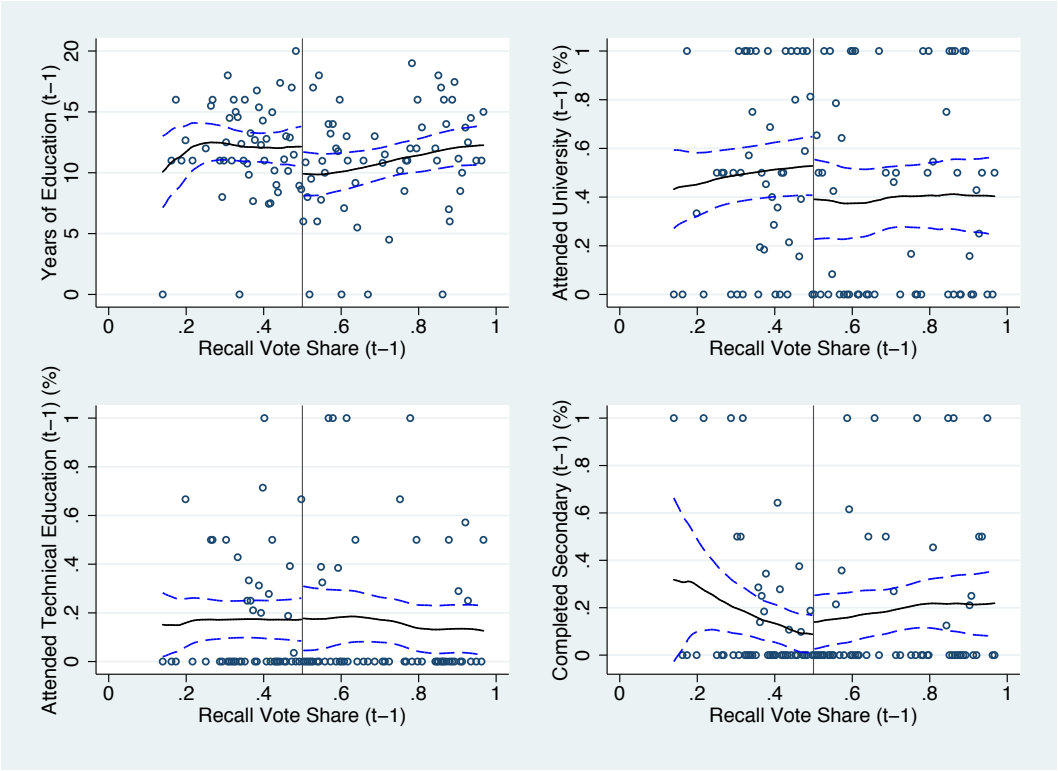
Note: The figures show the results from kernel-weighted local polynomial smoothing plots with epanechnikov kernels and the 95% confidence intervals for incumbents' experience.

FIGURE A.8: Continuity Test: Political Variables



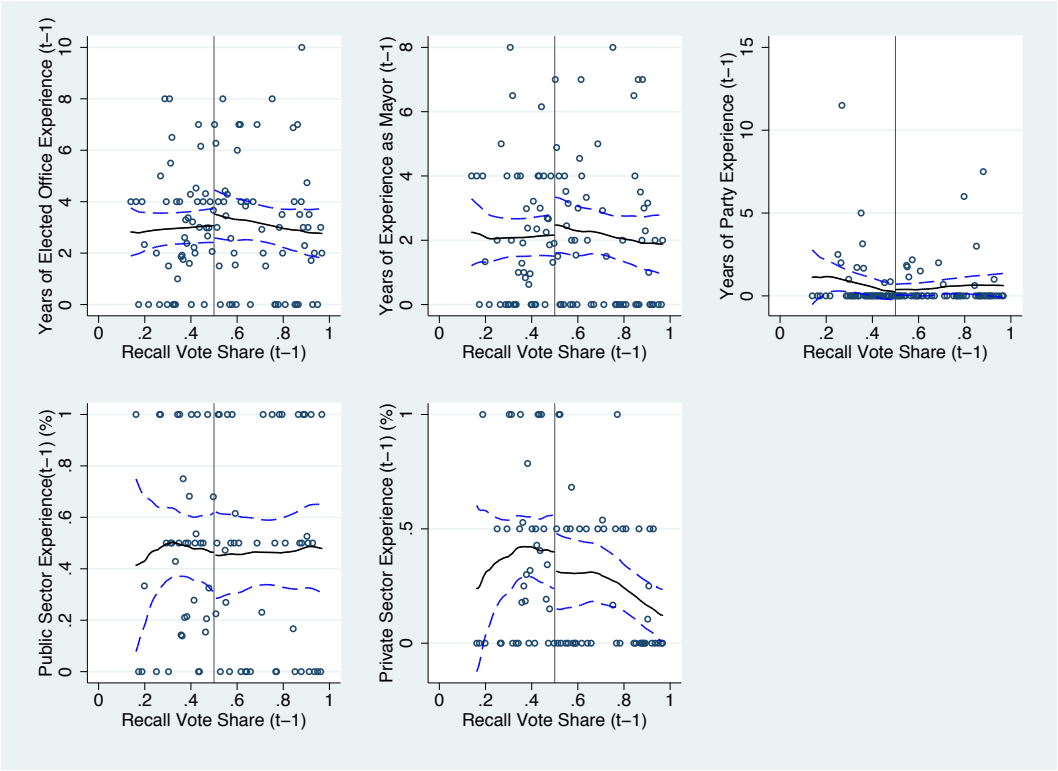
Note: The figures show the results from kernel-weighted local polynomial smoothing plots with epanechnikov kernels and the 95% confidence intervals for political variables.

FIGURE A.9: Continuity Test: Runners Up, Education



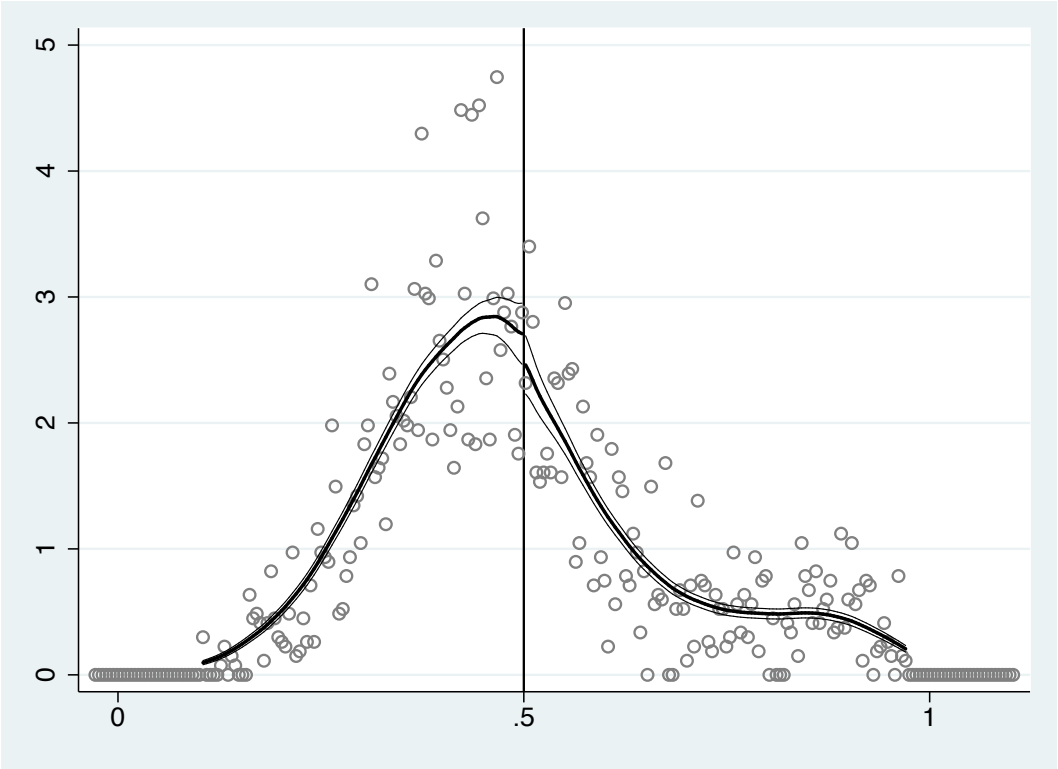
Note: The figures show the results from kernel-weighted local polynomial smoothing plots with epanechnikov kernels and the 95% confidence intervals for the education of candidates who finished second or third in the previous election.

FIGURE A.10: Continuity Test: Runners Up, Experience



Note: The figures show the results from kernel-weighted local polynomial smoothing plots with epanechnikov kernels and the 95% confidence intervals for the experience of candidates who finished second or third in the previous election.

FIGURE A.11: McCrary Density Test



Note: The figure shows the McCrary test for discontinuities in the density of the running variable (referendum vote share in favour of a recall of the mayor) at the 50% value (McCrary 2008). The estimated density is depicted by the thick black line.

C Appendix - Tables

TABLE A.1: Predicting Recall Elections

	Dependent Variable: Recall Referendum		
Political Variables			
Win Margin (%)	-0.0042***	-0.0043***	-0.0042***
	(0.0007)	(0.0007)	(0.0007)
Turnout (%)	0.0076**	0.0076**	0.0076**
	(0.0033)	(0.0033)	(0.0033)
Number of Candidates	-0.0081**	-0.0081**	-0.0082**
	(0.0033)	(0.0033)	(0.0033)
Incumbent's Characteristics			
University		0.0083	0.0105
		(0.0069)	(0.0072)
Technical		0.0078	0.0093
		(0.0076)	(0.0077)
Secondary		0.0076	0.0084
		(0.0066)	(0.0067)
Age			0.0002
			(0.0001)
Female			-0.0055
			(0.0038)
Public sector experience			-0.0028
			(0.0029)
Private sector experience			-0.0034
			(0.0027)
Num. years elected office			-0.0005
			(0.0015)
Num. years party experience			0.0001
			(0.0005)
Num. years as mayor			-0.0013
			(0.0018)
National party affiliation			0.0076***
			(0.0029)
Election FEs	Yes	Yes	Yes
District FEs	Yes	Yes	Yes
Observations	17517	17517	17517
Number Districts	1832	1832	1832
Number District×Election	3555	3555	3555

Note: The dependent variable takes value 1 if there was a recall referendum, and 0 otherwise. Clustered standard errors at the district*election level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

TABLE A.2: Predicting Recall Attempts

	Dependent Variable: Recall Attempt		
Political Variables			
Win Margin (%)	-0.0065***	-0.0065***	-0.0065***
	(0.0011)	(0.0011)	(0.0011)
Turnout (%)	0.0003	0.0003	0.0002
	(0.0040)	(0.0040)	(0.0040)
Number of Candidates	-0.0024	-0.0024	-0.0026
	(0.0051)	(0.0051)	(0.0051)
Incumbent's Characteristics			
University		0.0000	-0.0006
		(0.0083)	(0.0085)
Technical		0.0009	0.0007
		(0.0092)	(0.0093)
Secondary		0.0006	0.0001
		(0.0081)	(0.0081)
Age			-0.0001
			(0.0002)
Female			-0.0094*
			(0.0054)
Public sector experience			-0.0009
			(0.0038)
Private sector experience			0.0013
			(0.0036)
Num. years elected office			-0.0058***
			(0.0021)
Num. years party experience			-0.0000
			(0.0006)
Num. years as mayor			0.0052**
			(0.0025)
National party affiliation			0.0080**
			(0.0039)
Election FEs	Yes	Yes	Yes
District FEs	Yes	Yes	Yes
Observations	17517	17517	17517
Number Districts	1832	1832	1832
Number District×Election	3555	3555	3555

Note: The dependent variable takes value 1 if there was a recall attempt (the promoter buys a "recall kit"), and 0 otherwise. Clustered standard errors at the district*election level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

TABLE A.3: Overview of Incumbents and Reelection Probabilities

		Probability Running for Reelection	Probability Winning Reelection
Incumbent Recalled	Probability	48.4%	4.8%
	N	250	250
Incumbent survived Referendum	Probability	72.8%	18.6%
	N	644	644
Incumbent faced Recall Petition	Probability	79.7%	20.0%
	N	1806	1806
Incumbent without Recall Process	Probability	68.0%	22%
	N	2787	2787

Note: The table shows the probabilities of incumbents to re-run for election and to win such an election, conditional on various stages of the recall processes during the previous period. Row 1 shows the probabilities of incumbents who were recalled in the previous election term. Row 2 shows the probabilities of incumbents who survived a recall referendum during the previous election term. Row 3 shows the probabilities of incumbents against whom a recall process was initiated but no referendum took place during the previous election term. Row 4 then shows the probabilities for all other incumbents.

Table A.4: Descriptive Statistics

		Full Sample	RD Sample	Full Sample	RD Sample
		Winners' Characteristics		Candidates' Characteristics	
Primary or less	Mean	0.051	0.059	0.055	0.070
	N	6076	424	37854	2801
Secondary	Mean	0.290	0.317	0.291	0.342
	N	6076	479	37854	3394
Technical	Mean	0.183	0.204	0.186	0.191
	N	6076	597	37854	2962
University	Mean	0.476	0.417	0.468	0.388
	N	6076	593	37854	3698
Years of education	Mean	14.181	13.833	14.068	13.511
	N	6076	706	37854	3390
Num. years elected office	Mean	2.501	1.937	1.548	1.329
	N	6521	572	41115	2502
Num. years party exp.	Mean	0.908	0.667	0.760	0.618
	N	6521	818	41115	3849
Num. years as mayor	Mean	1.966	1.683	0.999	0.897
	N	6521	588	41115	2902
National party affiliation	Mean	0.410	0.375	0.433	0.394
	N	6578	435	42557	3047
Public sector experience	Mean	0.630	0.605	0.588	0.566
	N	5056	522	33818	2093
Private sector experience	Mean	0.417	0.404	0.445	0.427
	N	5056	670	33818	2703
Age	Mean	43.993	44.258	45.629	45.984
	N	6578	539	42557	3058
Female	Mean	0.030	0.050	0.064	0.075
	N	6578	661	42557	4865
At least one native surname	Mean	0.301	0.334	0.301	0.331
	N	6572	605	41641	2028
Two native surnames	Mean	0.080	0.074	0.079	0.062
	N	6572	541	41641	2478
		District Characteristics			
Number of Candidates	Mean	7.415	6.820		
	N	7316	748		
Win Margin (%)	Mean	8.983	8.784		
	N	7250	476		
Eff. Number of candidates	Mean	4.658	4.447		
	N	7243	833		
Turnout (%)	Mean	84.565	86.040		
	N	7315	527		
Ln(Revenues in N. Soles)	Mean	16.502	16.259		
	N	6542	421		
Ln(Expenditures in N. Soles)	Mean	16.252	15.964		
	N	6542	491		
Native mother tongue (%)	Mean	28.792	23.710		
	N	7300	560		

Note: Information on incumbent's characteristics is taken from the CV data of political candidates in Peruvian municipal elections provided by government sources, as described in the data section (3.1). The source for the district characteristics is the Peruvian national electoral office (ONPE). The four columns present the number of observations and the mean values for the main dependent and control variables. Columns 1 and 2 show the characteristics of elected mayors for (i) the full sample and (ii) the RD sample. Columns 3 and 4 show the characteristics of candidates running for mayor (i) in the full sample and (ii) the RD sample. At the bottom of the table, district characteristics are presented for the (i) full sample and (ii) the RD sample. In each case, the RD sample is based on the optimal bandwidth proposed by Imbens and Kalyanaraman (2012).

TABLE A.5: Accountability and Candidates' Education - Correlation

	Dependent Variable:			
	Years Edu	University	Technical	Secondary
	PANEL A: Recalled Incumbent			
Recalled Incumbent in t-1	-0.8955***	-0.1102***	0.0061	0.0739***
	(0.0883)	(0.0126)	(0.0090)	(0.0132)
Observations	37371	37371	37371	37371
Mean Dep.	14.072	0.468	0.185	0.292
	PANEL B: Recall Referendum			
Recall Referendum in t-1	-0.5721***	-0.0754***	0.0194***	0.0379***
	(0.0651)	(0.0087)	(0.0065)	(0.0086)
Observations	37371	37371	37371	37371
Mean Dep.	14.072	0.468	0.185	0.292

Note: OLS estimates. All regressions control for the previous election's turnout, win margin and number of candidates running for mayor. Clustered standard errors at the district*election level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

TABLE A.6: Accountability and Candidates' Education - Specification Checks

	Dependent Variable:			
	Years Edu	University	Technical	Secondary
	PANEL A: Cubic Polynomial Regression			
Recalled Incumbent in t-1	-0.4090	-0.0777	0.0050	0.0417
	(0.3469)	(0.0479)	(0.0405)	(0.0548)
Cubic Polynomial	Yes	Yes	Yes	Yes
Observations	3390	3698	2962	3394
Mean Dep.	13.511	0.388	0.191	0.342
	PANEL B: Quartic Polynomial Regression			
Recalled Incumbent in t-1	-0.4087	-0.0818*	0.0015	0.0447
	(0.3469)	(0.0481)	(0.0410)	(0.0559)
Quartic Polynomial	Yes	Yes	Yes	Yes
Observations	3390	3698	2962	3394
Number District×Election	611	679	538	612
Mean Dep.	13.511	0.388	0.191	0.342

Note: Regression equations follow Equation (1) in the paper. In each regression, the sample considered is based on the optimal bandwidth, following Imbens and Kalyanaraman (2012). * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Clustered standard errors at the district*election level.

TABLE A.7: Accountability and Candidates' Education - Calonico et al. (2014)

	Dependent Variable:			
	Years Edu	University	Technical	Secondary
	PANEL A: Bias-Corrected RD Estimates			
Recalled Incumbent in t-1	-0.5231	-0.1176*	0.0610	0.0510
	(0.3953)	(0.0631)	(0.0527)	(0.0635)
Triangle Kernel	Yes	Yes	Yes	Yes
Observations	3417	3143	2637	3568
Mean Dep.	13.519	0.393	0.192	0.344
	PANEL B: Linear Polynomial Regression			
Recalled Incumbent in t-1	-0.5449**	-0.0740*	-0.0100	0.0712*
	(0.2636)	(0.0400)	(0.0322)	(0.0392)
Linear Polynomial	Yes	Yes	Yes	Yes
Observations	3417	3143	2637	3568
Mean Dep.	13.519	0.393	0.192	0.344
	PANEL C: Quadratic Polynomial Regression			
Recalled Incumbent in t-1	-0.5415**	-0.0736*	-0.0139	0.0740*
	(0.2657)	(0.0407)	(0.0326)	(0.0402)
Quadratic Polynomial	Yes	Yes	Yes	Yes
Observations	3417	3143	2637	3568
Number District×Election	617	567	486	654
Mean Dep.	13.519	0.393	0.192	0.344

Note: Regression equations follow Equation (1) in the paper. In each regression, the sample considered is based on the optimal bandwidth, following Calonico et al. (2014). * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Clustered standard errors at the district*election level.

TABLE A.8: Accountability and Candidates' Education - Arbitrary Bandwidth

	Dependent Variable:			
	Years Edu	University	Technical	Secondary
	PANEL A: Linear Polynomial Regression			
Recalled Incumbent in t-1	-0.5415	-0.1556*	0.0532	0.1065
	(0.5074)	(0.0801)	(0.0640)	(0.0847)
Linear Polynomial	Yes	Yes	Yes	Yes
Observations	792	792	792	792
Mean Dep.	13.451	0.383	0.186	0.366
	PANEL B: Quadratic Polynomial Regression			
Recalled Incumbent in t-1	-0.5599	-0.1495*	0.0447	0.1107
	(0.5034)	(0.0804)	(0.0644)	(0.0852)
Quadratic Polynomial	Yes	Yes	Yes	Yes
Observations	792	792	792	792
Mean Dep.	13.451	0.383	0.186	0.366
	PANEL C: Cubic Polynomial Regression			
Recalled Incumbent in t-1	-0.4218	-0.1940*	0.0632	0.1526
	(0.6156)	(0.1040)	(0.0883)	(0.1090)
Cubic Polynomial	Yes	Yes	Yes	Yes
Observations	792	792	792	792
Number District×Election	137	137	137	137
Mean Dep.	13.451	0.383	0.186	0.366

Note: Regression equations follow Equation (1) in the paper. In each regression, the sample considered is based on an arbitrary bandwidth of 3 percentage points above and below the threshold. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Clustered standard errors at the district*election level.

TABLE A.9: Mayor Characteristics and Policy Outcomes

	Dependent Variable:			
	Ln(Expenditures)		Ln(Revenues)	
Years of Education		0.008***		0.008***
		(0.002)		(0.003)
Secondary	0.038		0.045	
	(0.034)		(0.036)	
Technical	0.057		0.056	
	(0.036)		(0.038)	
University	0.078**		0.086**	
	(0.034)		(0.037)	
Num. years elected office	0.005	0.005	0.009**	0.009**
	(0.004)	(0.004)	(0.004)	(0.004)
Num. years party experience	0.006***	0.006***	0.007***	0.007***
	(0.002)	(0.002)	(0.002)	(0.002)
Num. years as mayor	-0.005	-0.005	-0.008	-0.008
	(0.004)	(0.004)	(0.005)	(0.005)
National party affiliation	-0.004	-0.003	0.005	0.006
	(0.013)	(0.013)	(0.015)	(0.015)
Public sector experience	0.053***	0.049***	0.055***	0.049***
	(0.014)	(0.014)	(0.015)	(0.015)
Private sector experience	0.015	0.016	0.017	0.018
	(0.013)	(0.013)	(0.015)	(0.015)
Age	-0.004***	-0.004***	-0.003***	-0.003***
	(0.001)	(0.001)	(0.001)	(0.001)
Female	-0.002	-0.006	0.015	0.012
	(0.037)	(0.036)	(0.040)	(0.040)
Election FEs	Yes	Yes	Yes	Yes
District FEs	Yes	Yes	Yes	Yes
Observations	4770	4770	4770	4770
Number Districts	1831	1831	1831	1831

Note: In columns (1) and (2), the dependent variable is the log of the budget executed during the last three years of the mayor's term. In columns (3) and (4), the dependent variable is the log of the total revenues received during the last three years of the mayor's term. The information is provided by the Peruvian Ministry of Economy and Finance. All regressions include district and election fixed effects .* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Robust to heterogeneous and serially correlated standard errors.

TABLE A.10: Continuity Tests: Incumbent's Education and Experience

	PANEL A			
	Dependent Variable:			
	Years Edu	University	Technical	Secondary
Recalled Incumbent	-0.3745	-0.0240	0.0229	-0.0436
	(0.5922)	(0.1054)	(0.1050)	(0.0845)
Triangle Kernel	Yes	Yes	Yes	Yes
Observations	552	401	340	552
Number Districts	458	350	302	458
Mean Dep.	13.763	0.379	0.179	0.368
	PANEL B			
	Dependent Variable:			
	Num. years elected office	Num. years as mayor	Num. years party experience	National Party Affiliation
Recalled Incumbent	0.2110	0.1949	-0.1317	-0.1521
	(0.7045)	(0.5710)	(0.3648)	(0.1250)
Triangle Kernel	Yes	Yes	Yes	Yes
Observations	447	423	484	339
Number Districts	378	362	403	299
Mean Dep.	1.949	1.704	0.808	0.490
	PANEL C			
	Dependent Variable:			
	Public Sector Experience	Private Sector Experience	Age	Female
Recalled Incumbent	-0.0709	0.0309	-2.1327	-0.0164
	(0.1026)	(0.1141)	(1.7533)	(0.0537)
Triangle Kernel	Yes	Yes	Yes	Yes
Observations	420	355	400	458
Number Districts	379	326	346	387
Mean Dep.	0.576	0.346	46.002	0.059

Note: In each regression, the sample considered is based on the optimal bandwidth, following Imbens and Kalyanaraman (2012). Local linear non-parametric regressions. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Robust to heterogeneous and serially correlated standard errors.

TABLE A.11: Robustness - Mechanisms: Performance in Office

	Dependent Variable:			
	Years Edu	University	Technical	Secondary
	PANEL A: Performance prior Recall – Revenues			
Recalled Incumbent in t-1	-0.4393*	-0.0739**	-0.0181	0.0848**
	(0.2525)	(0.0354)	(0.0297)	(0.0415)
Recalled in t-1 * Ln(Revenues)	0.0803	-0.0132	0.0077	0.0131
	(0.1157)	(0.0186)	(0.0136)	(0.0184)
Linear Polynomial	Yes	Yes	Yes	Yes
Observations	3184	3450	2777	3188
Number District×Election	559	617	491	560
Mean Dep.	13.543	0.390	0.191	0.341
	PANEL B: Performance prior Recall – Expenditures			
Recalled Incumbent in t-1	-0.4556*	-0.0763**	-0.0185	0.0878**
	(0.2531)	(0.0356)	(0.0297)	(0.0415)
Recalled in t-1 * Ln(Expenditures)	0.0470	-0.0156	0.0065	0.0172
	(0.1202)	(0.0192)	(0.0138)	(0.0192)
Linear Polynomial	Yes	Yes	Yes	Yes
Observations	3184	3450	2777	3188
Number District×Election	559	617	491	560
Mean Dep.	13.543	0.390	0.191	0.341

Note: Regression equations follow Equation (1) in the paper. In each regression, the sample considered is based on the optimal bandwidth, following Imbens and Kalyanaraman (2012). Linear polynomial regressions. In panels A and B, ln(revenues) and ln(expenditures) refer to the demeaned version of the variables. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Clustered standard errors at the district*election level.

TABLE A.12: Accountability and Candidates' Education - Recalled Neighbours

	Dependent Variable:			
	Years Edu	University	Technical	Secondary
	PANEL A: Linear Polynomial Regression			
Recalled Neighbour Incumbent in t-1	-0.8695***	-0.1257***	-0.0076	0.1152***
	(0.2306)	(0.0361)	(0.0156)	(0.0296)
Linear Polynomial	Yes	Yes	Yes	Yes
Observations	6225	5902	10003	5591
Mean Dep.	14.289	0.498	0.185	0.270
	PANEL B: Quadratic Polynomial Regression			
Recalled Neighbour Incumbent in t-1	-0.7925***	-0.1094***	-0.0071	0.1033***
	(0.2362)	(0.0364)	(0.0159)	(0.0300)
Quadratic Polynomial	Yes	Yes	Yes	Yes
Observations	6225	5902	10003	5591
Number District×Election	1018	958	1704	895
Mean Dep.	14.289	0.498	0.185	0.270

Note: In each regression, the sample considered is based on the optimal bandwidth, following Imbens and Kalyanaraman (2012). * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Clustered standard errors at the district*election level.

TABLE A.13: Accountability and Candidates' Education - Robustness for Recalled Neighbours

	Dependent Variable:			
	Years Edu	University	Technical	Secondary
	PANEL A: Local Linear Regression			
Recalled Neighbour Incumbent in t-1	-1.0810***	-0.1625***	-0.0109	0.1726***
	(0.2743)	(0.0423)	(0.0202)	(0.0346)
Triangle Kernel	Yes	Yes	Yes	Yes
Observations	6147	6364	8388	5618
Mean Dep.	14.395	0.514	0.184	0.257
	PANEL B: Linear Polynomial Regression			
Recalled Neighbour Incumbent in t-1	-0.8391***	-0.1329***	-0.0210	0.1620***
	(0.2405)	(0.0353)	(0.0173)	(0.0306)
Linear Polynomial	Yes	Yes	Yes	Yes
Observations	6147	6364	8388	5618
Mean Dep.	14.395	0.514	0.184	0.257
	PANEL C: Quadratic Polynomial Regression			
Recalled Neighbour Incumbent in t-1	-0.9536***	-0.1394***	-0.0295*	0.1708***
	(0.2627)	(0.0390)	(0.0176)	(0.0337)
Quadratic Polynomial	Yes	Yes	Yes	Yes
Observations	6147	6364	8388	5618
Number District×Election	1042	1090	1449	929
Mean Dep.	14.395	0.514	0.184	0.257

Note: In each regression, the sample considered is based on the optimal bandwidth, following Imbens and Kalyanaraman (2012). Districts that received conflicting signals (more than one neighbour district with recall referendum in $t-1$, resulting in one recalled incumbent and one non-recalled incumbent) are excluded from the sample. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Clustered standard errors at the district*election level.

TABLE A.14: Robustness Checks

	Dependent Variable:			
	Years Edu	University	Technical	Secondary
	PANEL A			
	Controlling for Incumbent's Characteristics			
Recalled Incumbent in t-1	-0.4308	-0.0646*	-0.0058	0.0595
	(0.2649)	(0.0382)	(0.0346)	(0.0452)
Triangle Kernel	Yes	Yes	Yes	Yes
Incumbent's Characteristics	Yes	Yes	Yes	Yes
Observations	3377	3685	2949	3381
Number District×Election	610	678	537	611
Mean Dep.	13.497	0.386	0.192	0.343
	PANEL B			
	Controlling for Political Situation in t-1			
Recalled Incumbent in t-1	-0.4443*	-0.0735*	-0.0055	0.0728
	(0.2563)	(0.0376)	(0.0352)	(0.0451)
Triangle Kernel	Yes	Yes	Yes	Yes
Political Controls	Yes	Yes	Yes	Yes
Observations	3372	3677	2944	3376
Number District×Election	608	675	535	609
Mean Dep.	13.512	0.388	0.190	0.341

Note: Regression equations follow Equation (1) in the paper. In each regression, the sample considered is based on the optimal bandwidth, following Imbens and Kalyanaraman (2012). Both panels present local linear non-parametric regression with triangle kernels. Panel A controls for the incumbent's education, experience (political and work experience) and other characteristics (age, gender). Panel B controls for the previous election's turnout, win margin and number of candidates running for mayor, as well as the municipality's population. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Clustered standard errors at the district*election level.

TABLE A.15: Robustness Checks

	Dependent Variable:			
	Years Edu	University	Technical	Secondary
	PANEL A			
	Dropping re-running Incumbents			
Recalled Incumbent in t-1	-0.4733	-0.0775*	-0.0130	0.0818*
	(0.2906)	(0.0400)	(0.0349)	(0.0476)
Triangle Kernel	Yes	Yes	Yes	Yes
Re-running Incumbents	No	No	No	No
Observations	3063	3460	2939	3060
Number District×Election	609	711	584	608
Mean Dep.	13.488	0.384	0.195	0.348
	PANEL B			
	Controlling for Characteristics of Runners-up			
Recalled Incumbent in t-1	-0.4622	-0.0837**	-0.0121	0.0878*
	(0.2884)	(0.0411)	(0.0342)	(0.0510)
Triangle Kernel	Yes	Yes	Yes	Yes
Runners Up Characteristics	Yes	Yes	Yes	Yes
Observations	2382	2573	2086	2382
Number District×Election	351	384	309	351
Mean Dep.	13.453	0.381	0.183	0.346

Note: Regression equations follow Equation (1) in the paper. In each regression, the sample considered is based on the optimal bandwidth, following Imbens and Kalyanaraman (2012). Both panels present local linear non-parametric regression with triangle kernels. Panel A drops incumbents who return for election from the sample. Panel B controls for the education, experience (political and work experience) and other characteristics (age, gender) of the two runners up in the preceding election. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Clustered standard errors at the district*election level.

TABLE A.16: Accountability and Winners' Characteristics

	PANEL A Dependent Variable:			
	Num. years elected office	Num. years as mayor	Num. years party experience	National Party Affiliation
Recalled Incumbent in t-1	-0.2253	-0.4170	-0.2209	0.0225
	(0.6352)	(0.4208)	(0.3455)	(0.1034)
Triangle Kernel	Yes	Yes	Yes	Yes
Observations	572	818	588	435
Number Districts	455	607	466	362
Mean Dep.	1.937	1.683	0.667	0.375
	PANEL B Dependent Variable:			
	Public Sector Experience.	Private Sector Experience	Age	Female
Recalled Incumbent in t-1	-0.0403	-0.0985	-1.0264	0.0560*
	(0.0772)	(0.0663)	(1.4998)	(0.0318)
Triangle Kernel	Yes	Yes	Yes	Yes
Observations	522	670	539	661
Number Districts	430	526	432	516
Mean Dep.	0.605	0.404	44.258	0.050

Note: Regression equations follow Equation (1) in the paper. In each regression, the sample considered is based on the optimal bandwidth, following Imbens and Kalyanaraman (2012). * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Robust to heterogeneous and serially correlated standard errors.

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