

Government Spending and Voting Behaviour

Evidence from subsidized graduation trips

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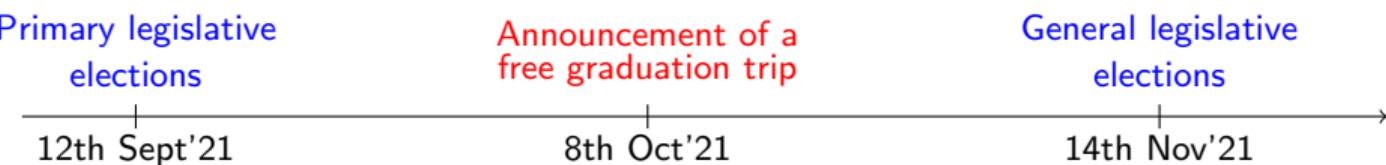
July 4, 2023

Motivation

- ▶ Targeted transfers are a widely used tool by incumbents to enhance their electoral chances
- ▶ Yet, the evidence is still mixed
 - ▶ Positive effects on pro-incumbent voting:
 - Levitt and Snyder (1997), Pop-Eleches and Pop-Eleches (2012), Labonne (2013)
 - Latin Am: Manacorda *et. al* (2011), Galiani *et. al* (2019), Conover *et. al* (2020), Zucco (2013)
 - ▶ No effect on voting behaviour:
 - Blattman *et. al* (2018), Levitt and Snyder (1997), Tobias *et. al* (2014)
 - Latin Am: Imai *et. al* (2020)
- ▶ Challenges to estimating the effects of govt policies on voting behaviour:
 1. Challenging to find plausibly exogenous variation
 2. Election results at the voting booth level are not always available to researchers
 3. Electoral registers at the individual level are often unavailable to researchers

This paper: How does govt spending affect voting decisions?

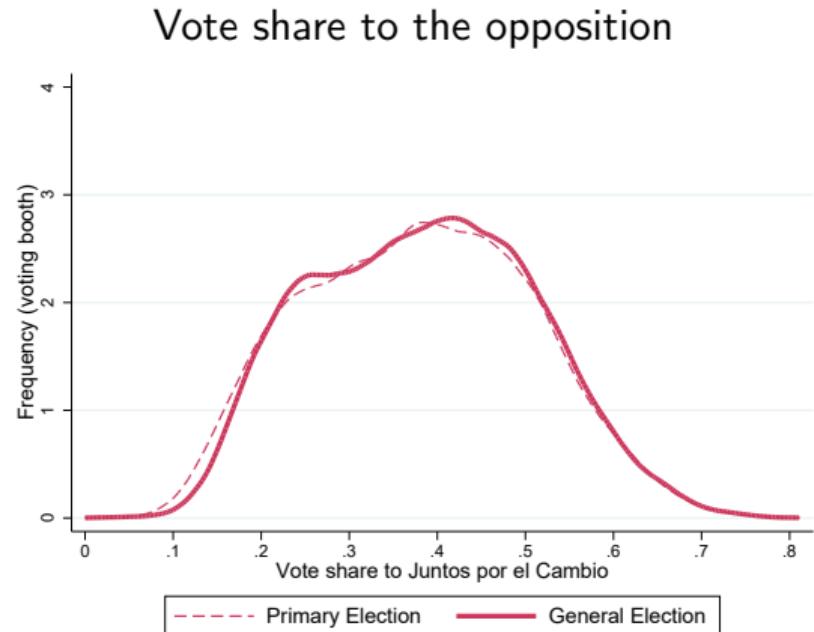
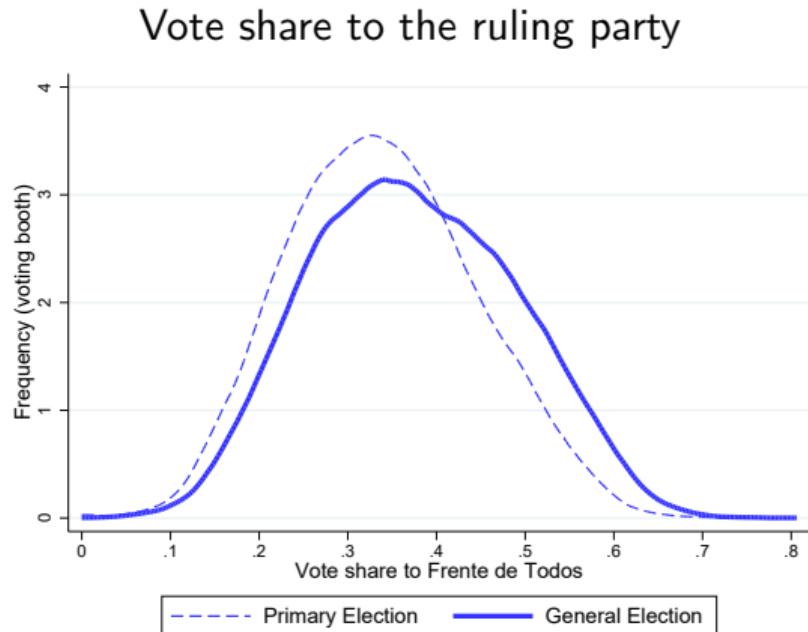
- ▶ I study the effect of a targeted subsidized trip on youth voting behavior
- ▶ I focus on Argentina which is well-suited to examine this issue
 1. Governor of Buenos Aires announced a free trip for high-school graduates btw 2 rounds of legislative elections in 2021; unanticipated



- 2. Quasi-random allocation of voters to booths (based on surnames)
- 3. Unique individual- and booth-level administrative data for 2019 and 2021
- ▶ I use an exposure DiD approach exploiting variation in the proportion of potential beneficiaries (young) across voting booths

Fact: The ruling party ↑ the vote share substantially btw the two elections

▶ Change in # votes



Preview of findings

1. The beneficiaries of the program increased their support to the incumbent govt btw primary and general elections
 - ▶ Positive relationship btw the change in the incumbent's vote share and the share of beneficiaries in 2021
 - ▶ A precise null effect on the 2019 legislative elections (2 years before the policy)
2. Ruling party is more likely to sway young voters in lower-income areas
3. The announcement impacted the electoral behavior of other groups of young voters. No effect was observed among the parents of direct beneficiaries.

Contribution

- ▶ My setting offers a compelling case and improves on identification and data limitations
 - I use quasi-random variation in pre-existing exposure to the policy (by chance, some booths have more young voters than others)
 - Great timing of the policy: happens between elections that were only 2-months apart
 - Granular setting: I link electoral registers with electoral results at the voting booth level
- ▶ Contribute to the literature that usually focuses on how the median voter reacts. Instead, I study the young

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Mechanisms

Conclusion and next steps

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Argentinian Electoral System

- ▶ Mandatory suffrage for 18 to 70-year old. Right to vote for 16- and 17-year old
 - Youth vote matters! In 2021 people aged 16–24 accounted for 20% of the electoral registry
- ▶ Assignment to voting booth is “as good as random” [▶ Map](#)
 - In alphabetical order based on surnames (up to 350 voters per booth)
- ▶ Argentina holds primary and general elections that are 2-3 months apart [▶ Elections](#)
- ▶ Voters in the province of Buenos Aires (PBA) are largely split between:
 - **Frente de Todos** (center-left populist coalition)
 - **Juntos por el Cambio** (center-right coalition)
- ▶ PBA is the largest district in terms of voters (37% of the country's total)

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The tradition

- ▶ Trip to the City of Bariloche (prov. of Rio Negro)
- ▶ Planning begins one year before the trip (e.g., fundraising)

2021: “Programa Bonaerense de Turismo Estudiantil”

In October the Governor of PBA announced a “free” end-of-school trip

- ▶ For all the students graduating from high school in PBA
- ▶ Destinations within PBA; to be used in 2022
- ▶ Covers up to AR\$ 30,000 (1.5 monthly min wage)
- ▶ Stated goal of the program: to boost tourism in PBA

The program was publicly announced and salient



El gobernador bonaerense estuvo acompañado de la candidata a diputada nacional del Frente de Todos, Victoria Tolosa Paz; el intendente de Villa Gesell, Gustavo Barrera y el ministro de Producción, Ciencia e Innovación Tecnológica, Augusto Costa



Axel Kicillof 
@Kicillofok

El segundo anuncio está destinado a los chicos y chicas de la provincia. Vamos a implementar un programa para que los egresados del secundario puedan hacer su viaje de fin de curso.

VIAJES DE EGRESADOS

La Provincia garantiza el **viaje de fin de curso** para todos los jóvenes del último año de secundaria en escuelas de gestión estatal y privada.



220 mil
jóvenes



Fomentando los
destinos de la Provincia

MINISTERIO DE PRODUCCIÓN,
CIENCIA E INNOVACIÓN
TECNOLÓGICA
CONSEJO DE LA PROVINCIA DE
BUENOS AIRES

4:56 PM · Oct 8, 2021 · Twitter Web App

It was covered on the front page of the main newspapers

October 9, 2021 (1 Day post announcement)



AVISO DE IMPRESIÓN : AVISO AL LECTOR: 1009-4177 | WWW.LANACION.COM.AR/CONFIENCE | CLUB.LANACION.COM.AR | RECORRIDO POR DENTRO DEL MUSEO 0311 CAPITAL 0800 414141

\$300

espectáculos

Las claves que hicieron de *El juego del calamar* un fenómeno global

La serie coreana encabeza el ranking de Netflix en más de 90 países.



DESPUÉS DE 19 MESES, VUELVE LA MARATÓN DE BUENOS AIRES

-sociedad

Una 35.000 personas participarán mañana en las carreras de 42K y 21K; los organizadores piden una distancia de 15 metros entre los runners. Página 30

FÚTBOL PROHIBIDO: "NO PODÉS JUGAR MÁS, SOS NENA"

-deportes

El caso de Emma Rodríguez, de 12 años, rebaja el voto legal: las mujeres no pueden ser fichadas para competir al no contar con una categoría mixta.

LA NACION

SÁBADO 9 DE OCTUBRE DE 2021 | LANACION.COM.AR

En campaña, Kicillof anunció viajes de egresados gratis para 220.000 estudiantes

VOTO JOVEN. La provincia pagará hasta \$30.000 por alumno, de escuelas públicas o privadas

Con intervención de cara pinta joventud, el gobernador de Buenos Aires, Axel Kicillof, anunció el viernes el lanzamiento de viajes de egresados de \$20.000 a alumnos del último año del secundario de escuelas públicas y privadas de la provincia.

La ayuda es de \$30.000 por persona, lo que podría costarle un costo fiscal superior a los 6000 millones de pesos.

"Acabamos de aprobar un acuerdo para que los alumnos que quieran organizar sus viajes de egresados puedan hacerlos en forma más fácil", señaló.

Además, el gobernador envió a la Legislatura una iniciativa para que las autoridades y administraciones no paguen el impuesto item efectivo. Página 30

Críticas de juristas al fallo que benefició a Cristina

AMIA. Cuestionan que se tomó la decisión sin haber pasado por el juzgado oral

La decisión del Tribunal Oral Federal N° 7 de sobreseer a la vicepresidenta Cristina Kirchner en el caso del atentado a la AMIA genera cuestionamientos de departamentales y especialistas, que apuntaron especialmente contra el método utilizado por el juez federal que dictó el sobreseimiento sin llegar al juicio oral. "Hay un claro direccionamiento para dar como ciertos todos los acus-

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Administrative data

1. 2019 and 2021 **Argentinian electoral registry**: the universe of voters with geographic location and corresponding **voting booth** identifier
2. 2019 and 2021 **electoral results from primary and general elections** aggregated at the **voting-booth level** ▶ Raw data
 - ▶ I focus on the Lower House
3. Share of formal wage earners and median labour income at the **voting-booth level**
4. **Family relationships database** that links family members in the same household
 - ▶ Allows testing voting spillover effects within households

Empirical Strategy: **Exposure DiD** approach

1. **Hypothesis to test:** Are voting booths with a higher share of beneficiaries more likely to support the incumbent party in the general elections, relative to the primary elections?
2. **Identification strategy:** Exploit variation in the proportion of potential beneficiaries across voting booths (range: 0 to 8%) ➔ Exposure
3. **Identifying assumption:** in the absence of the policy, booths with different intensities of treatment would have behaved similarly in the post-period (general elections)
4. This strategy will capture an **Intention-to-treat effect.**
 - ▶ Policy was announced btw the two elections, but trips took place 4-6 months later

Short-run effect of the program on the vote-share of the incumbent party

$$\Delta FdT_{bm,2021} = \alpha Benef_{bm} + X'_{bm}\zeta + \gamma_m + \varepsilon_{bm}$$

- ▶ $\Delta FdT_{bm,2021}$: vote share change for the ruling party in booth b and municipality m , btw 2021 general and primary elections
- ▶ $Benef_{bm}$: share of beneficiaries over the voting population at the voting booth level
- ▶ α : captures the differential impact of policy' treatment intensity on incumbent's vote share
- ▶ X_{bm} vector of controls at booth level: % of women, % of (formal) wage earners, log of median labour income, sd of median labour income
- ▶ Municipality fixed-effects, γ_m , control for time-invariant municipality heterogeneity
- ▶ Standard errors clustered at municipality level

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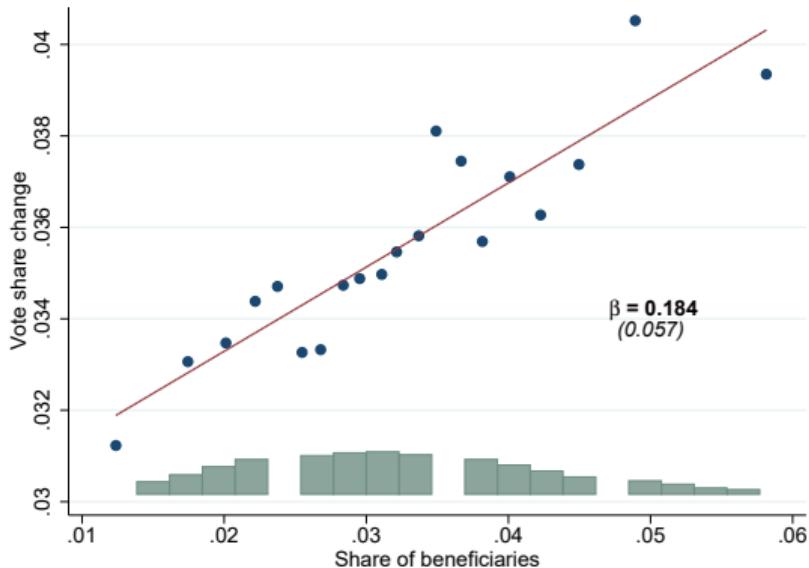
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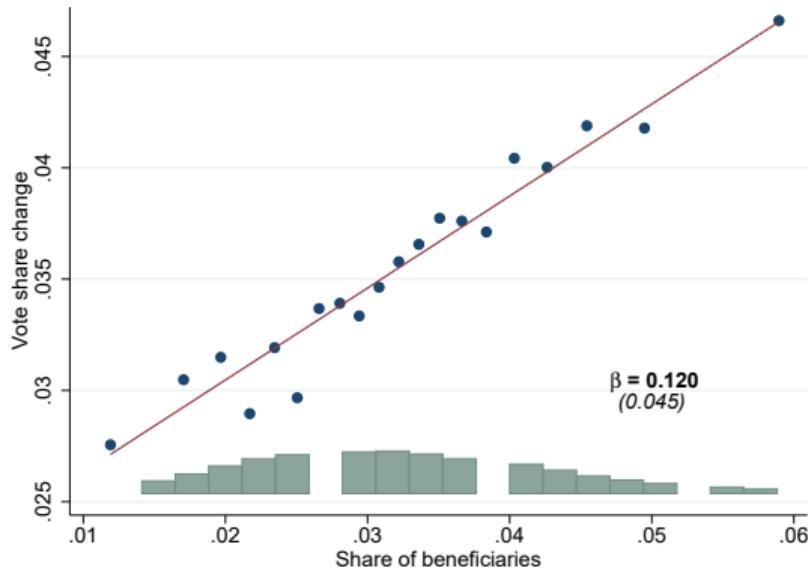
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2021: vote share change for Frente de Todos

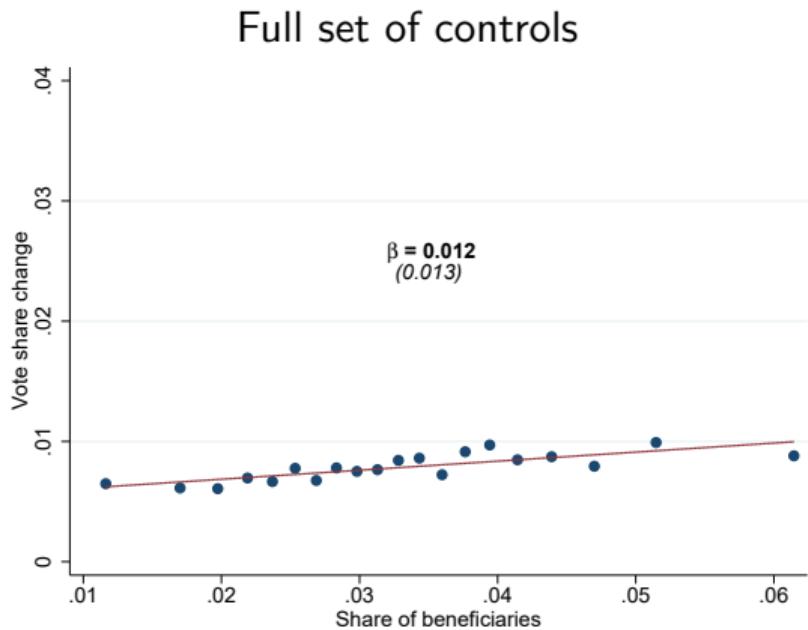
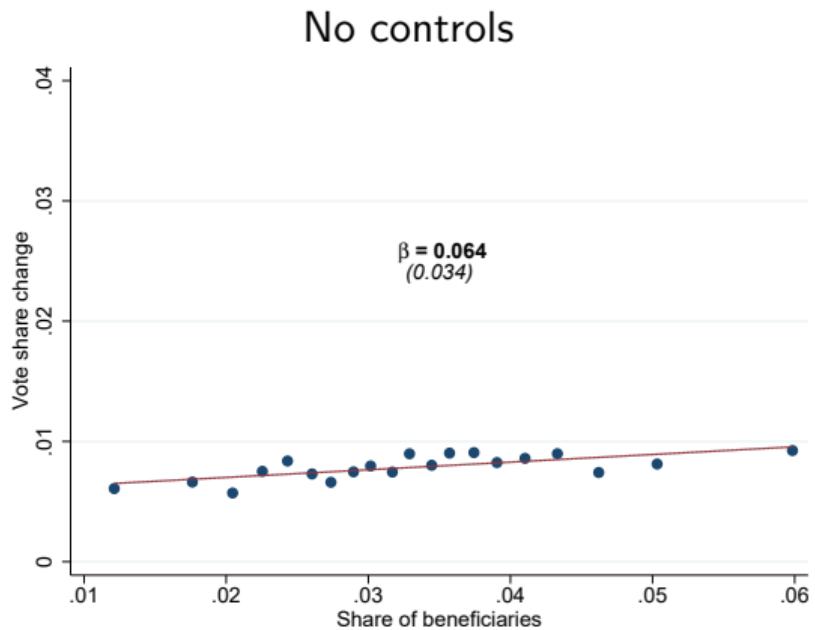
No controls



Full set of controls

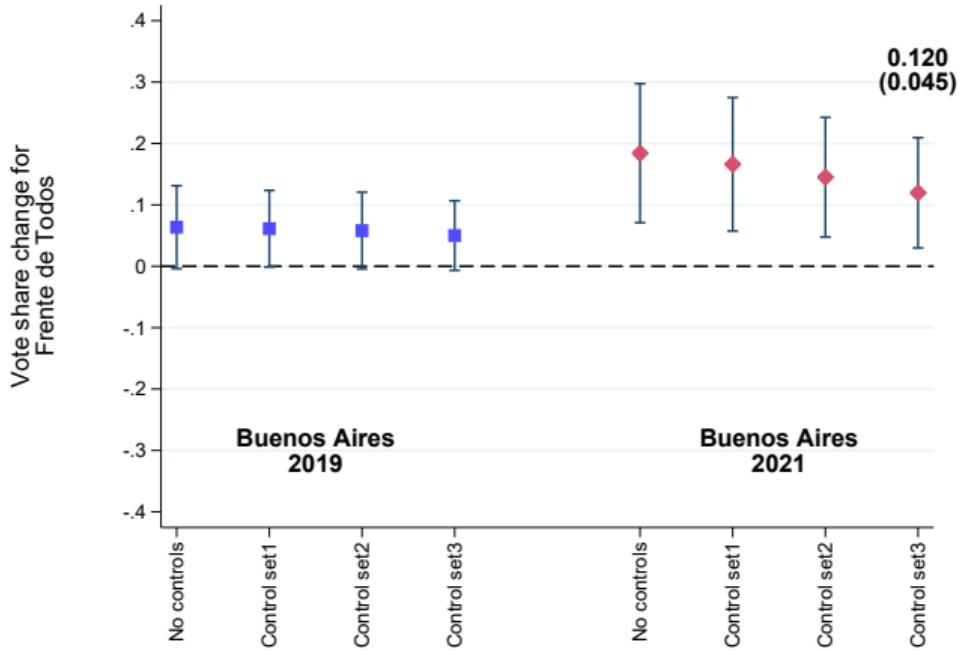


2019: vote share change for Frente de Todos



Summary of results in 2019 and 2021

► Table



Notes: This figure summarizes the estimated coefficient which represents the vote share change for FdT when the share of beneficiaries ↑ in 1 p.p.. Control set: 1): female (%) at the booth level; 2) female and wage earners (%) at the booth level; 3) female and wage earners (%) and log of median labour income at the booth level; 4) control set 3 + sd of median labour income at the booth level. All the estimations include FE at the municipality level.

Making sense of the magnitudes

	Buenos Aires 2021	
	(1)	(2)
Beneficiaries (%)	0.184*** (0.057)	0.120*** (0.045)
Observations	33,783	33,783
FdT Vote share-primary- (mean)	33.86%	33.86%
FdT Vote share -general- (mean)	37.42%	37.42%
Controls		✓
FE (municipality)	✓	✓

- ▶ 10 p.p. ↑ in the % of beneficiaries leads to 1.84 p.p. ↑ in FdT's vote share in the General Election
- ▶ For the average booth (3.2% of benef), the announcement of the program ↑ FdT's vote share by ~0.6 p.p.
- ▶ It corresponds to ~17% of the Δ in FdT's performance btw the primary and general elections: from 33.9% to 37.4%.

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The effect is stronger in voting booths with low median income

	(1)	(2)
Beneficiaries (%)	0.023 (0.054)	0.006 (0.052)
Low income areas	0.018*** (0.005)	0.016*** (0.005)
Medium income areas	0.013*** (0.004)	0.012*** (0.004)
High income areas	<i>reference</i>	<i>reference</i>
Benef(%)*Low Income	0.195** (0.081)	0.197** (0.079)
Benef(%)*Medium Income	0.096 (0.060)	0.094 (0.060)
Benef(%)*High Income	<i>reference</i>	<i>reference</i>
Constant	0.024*** (0.003)	0.051*** (0.006)
Observations	33,887	33,887
R-squared	0.218	0.219
Controls		✓
FE (municipality)	✓	✓

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Why is the policy effective?

- ▶ **Direct beneficiaries:** Is it because of the announcement (provision) of the trip?
- ▶ **Indirect beneficiaries:**
 - **Signal:** Is this a pro-young government? Does the government raise its popularity among young people?
 - **Spillover in the Home:** Are there upward spillover effects on the parents of beneficiaries?

Mechanisms

	Benchmark (1)	Other young (2)	Parents (3)	Parents (4)
Beneficiaries (%)	0.120*** (0.045)		0.077* (0.040)	0.100* (0.059)
16yo & Benef (%)		0.107*** (0.041)		
19 & 20yo (%)			0.172*** (0.041)	
Parent (%)				0.049 (0.058)
Observations	33,783	33,783	33,783	33,783
R-squared	0.237	0.237	0.238	0.237
FE (municipality)	✓	✓	✓	✓
Controls	✓	✓	✓	✓

Note: Controls: female (%), wage earners (%), log of median labour income, and sd of median labour income at the booth level. Clustered se at the municipality level.

Placebo analysis

Single individuals, without children, aged 50yo or more

	(1)	(2)
Placebo (%)	0.025 (0.033)	0.039 (0.031)
Beneficiaries (%)		0.122*** (0.045)
Constant	0.312*** (0.049)	0.296*** (0.046)
Observations	33,783	33,783
R-squared	0.236	0.237
Controls	✓	✓
FE (municipality)	✓	✓

Controls: female (%), wage earners (%), log of median labour income, and sd of median labour income at the booth level. Clustered se at the municipality level.

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Conclusion

- ▶ I study the effect of a public spending program on the voting behaviour of young people
- ▶ The results show that **voting booths with a higher % of young people increased their support for the incumbent candidate between the two elections**
- ▶ Targeted spending does seem to sway voters—especially low-income voters

Next steps

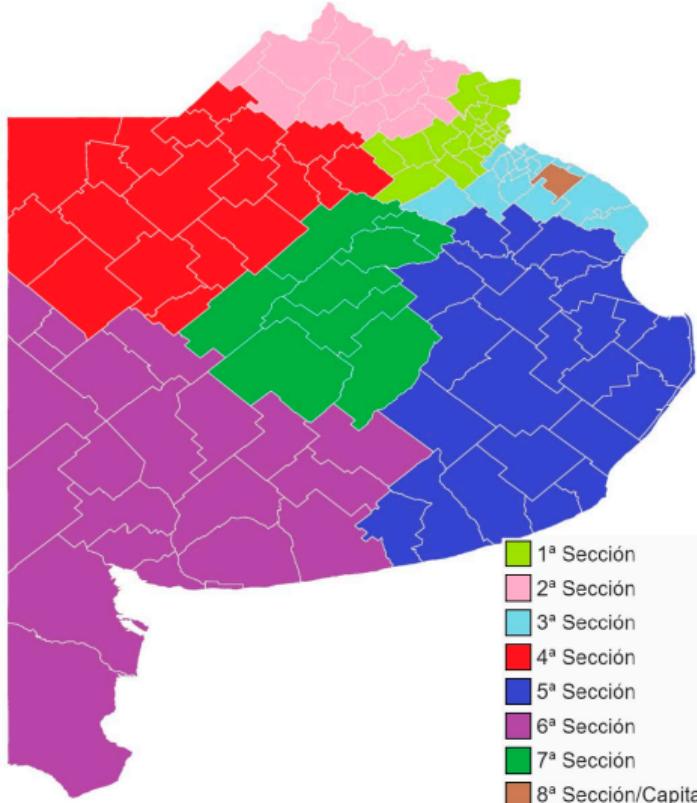
1. Analyse the effect on voting turnout
2. Voting Intention polls & surveys
3. Cost-benefit analysis (bang for the buck)

Thank you!

Appendix

Geographical units for electoral purposes

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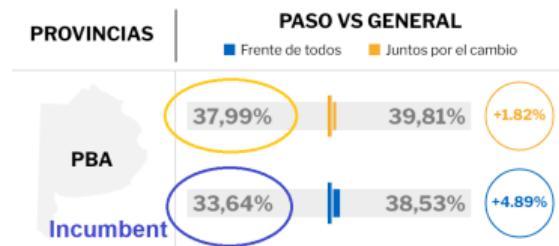
- ▶ PBA is divided into small sub-unit (**municipalities**): 135 for PBA
- ▶ PBA has a total of 33,783 voting booths

Primary Elections purposes

Back

The Primary Elections serve 3 purposes:

1. Determine which parties are entitled to stand for general elections
 - ▶ In 2021 in PBA, 24 parties stand in the primary elections; only 6 in the general elections
2. Determine which candidate of each party will stand in the general elections
3. Informal referendum about the electoral support to different political parties



Raw Data

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02- DISTRITO BUENOS AIRES			
 Correo Argentino TELEGRAMA (art. 180 GEN) ELECCIONES GENERALES- 14 DE NOVIEMBRE DE 2021 Destinatario: JUNTA ELECTORAL NACIONAL Con copia a DIRECCION NACIONAL ELECTORAL		 0206300097X0101 SECCION ELECTORAL 63 LA PLATA CIRCUITO MESA 475 00097/4	
NO INTRODUCIR EN LA URNA SEÑOR PRESIDENTE: NO INTRODUCIR EN LA URNA - ENTREGAR AL EMPLEADO DEL CORREO.		EN N° EN LETRAS	
Cantidad de electores que han votado Cantidad de sobres utilizados en la urna Diferencia		277 doscientos setenta y siete 277 los setenta y siete 0 cero	
Nº	AGRUPACIONES POLITICAS	DIPUTADOS NACIONALES	LEGISLADORES PROVINCIALES CONCEJALES Y COMISARIOS ESCOLARES
501	AZA. + VALORES	001	NO USAR NO USAR
503	AZA. AVANZA LIBERTAD	020	021 020
504	FTE. DE IZQUIERDA Y DE TRAB.- UNIDAD	015	016 016
506	AZA. JUNTOS	148	146 146
507	FRENTE DE TODOS	077	080 080
508	FRENTE VAMOS CON VOS	009	008 009
TOTAL VOTOS AGRUPACIONES POLITICAS		270	273 273
VOTOS NULOS		004	004 004
VOTOS RECURRIDOS QUE SE REMITEN EN SOBRE Nro.3		-	- -
VOTOS DE IDENTIDAD IMPUGNADA QUE SE REMITEN EN SOBRE Nro.3		-	- -
VOTOS DEL COMANDO ELECTORAL QUE SE REMITEN EN EL BOLSIN		-	- -
VOTOS EN BLANCO		003	002 002
TOTAL POR COLUMNAS (*)		277	277 277
(*) LA SUMA DE LOS TOTALES POR COLUMNA DEBERA COINCIDIR CON LA CANTIDAD DE SOBRES UTILIZADOS EN LA URNA			
INFORMACION INDISPENSABLE PARA EL COBRO DE LA COMPENSACION - ART 72 - CODIGO ELECTORAL NACIONAL RECLAME AL PERSONAL DE CORREO EL FORMULARIO CON SUCURSAL DE PAGO - (POR FAVOR COMPLETAR CON LETRA IMPRESA)			

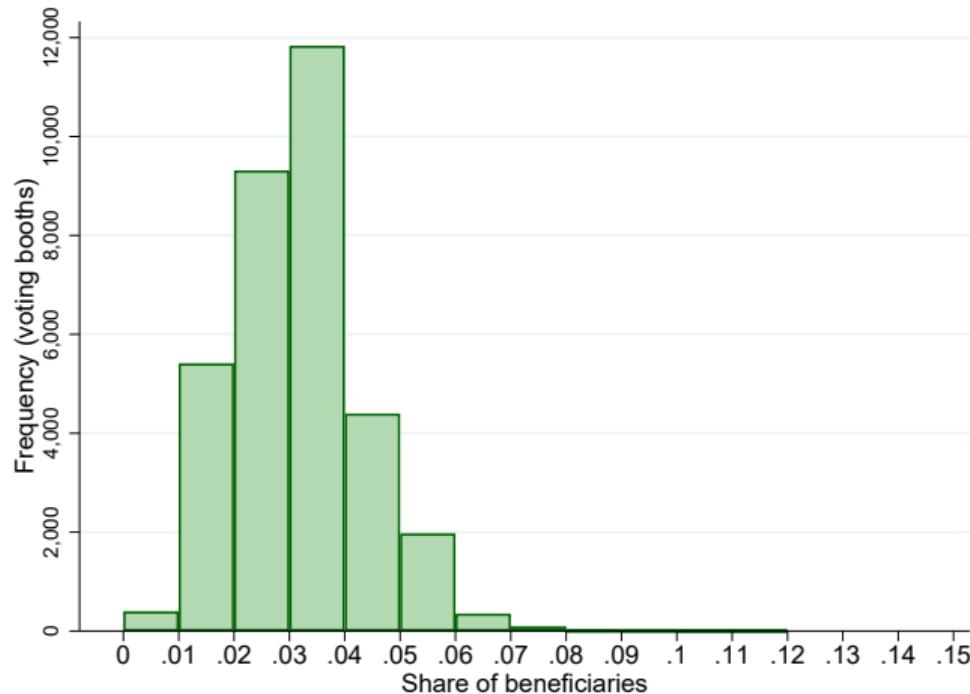
- In orange, 02 - DISTRITO BUENOS AIRES makes references to the Province
- In orange: MESA = **voting booth**.
- In light-blue: LA PLATA = **municipality**.
- Green column: DIPUTADOS NACIONALES = Votes for Chamber of Deputies (Lower House) votes.
- In yellow: 507 - Frente de Todos = **number of votes to the ruling party**.

Share of votes to the ruling party: 77 over 273
 (270 -votes to parties- + 3 -Blank votes-)

Treatment exposure in the province of Buenos Aires

▶ Back

Promising identifying variation in the share of beneficiaries across voting booths in PBA.

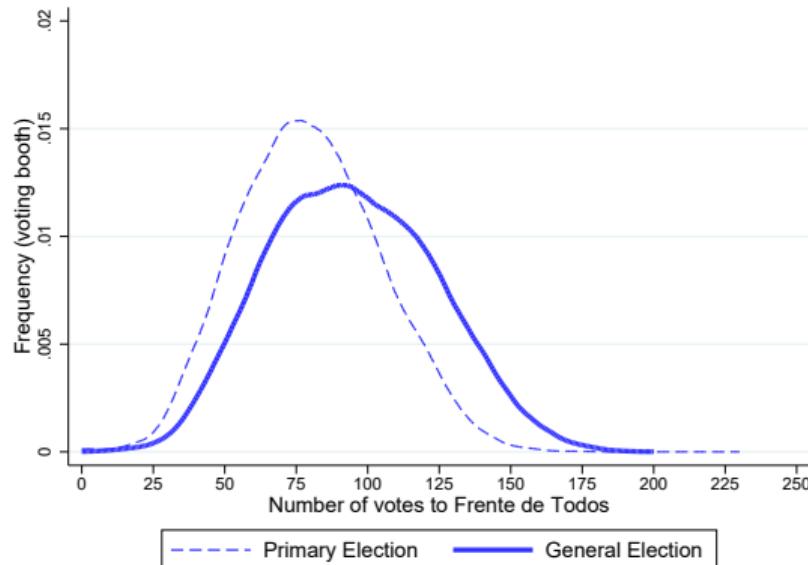


Note: The figure shows the share of beneficiaries, at the voting booth level for PBA.

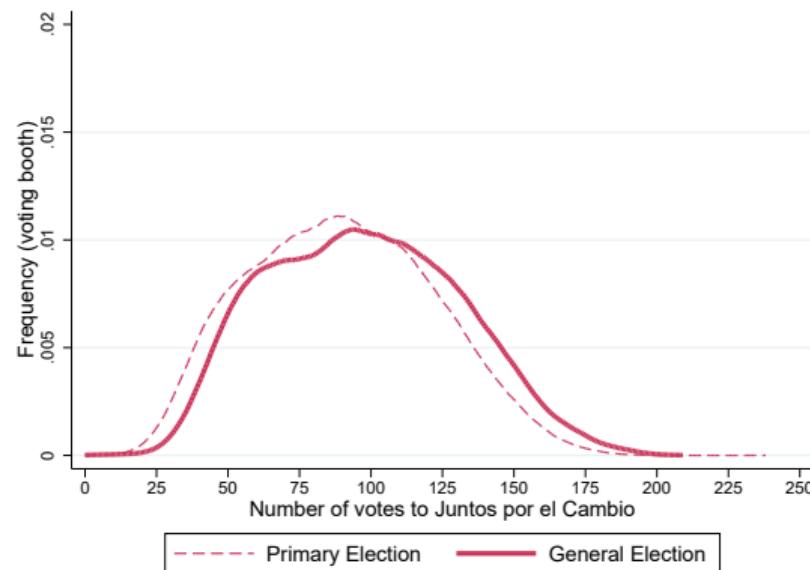
Change in votes between primary and general elections (N)

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Number of votes to Frente de Todos



Number of Votes to Juntos por el Cambio



Notes: These figures compare the change in votes between the primary and the general legislative elections in PBA in 2021 for the ruling party and the opposition, by plotting the distribution, at the voting booth level, of the number of votes received by both political parties in the two consecutive elections.

Main results

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	Buenos Aires 2019		Buenos Aires 2021	
	(1)	(2)	(3)	(4)
Beneficiaries (%)	0.064 (0.034)	0.050 (0.029)	0.184*** (0.057)	0.120*** (0.045)
Female(%)		-0.006 (0.008)		-0.053*** (0.012)
Wage earners (%)		-0.014** (0.006)		-0.082*** (0.020)
Log med-income		-0.004 (0.002)		-0.022*** (0.004)
sd med-income		-0.000 (0.000)		-0.000 (0.000)
Constant	0.006*** (0.001)	0.051** (0.024)	0.030*** (0.002)	0.297*** (0.046)
Observations	35,005	35,005	33,783	33,783
R-squared	0.143	0.144	0.228	0.237
Vote share FdT -primary- (mean)	48.82%	48.82%	33.86%	33.86%
FE (municipality)	✓	✓	✓	✓

Note: Each coefficient represents the vote share change for Frente de Todos when the share of beneficiaries ↑ by 1 p.p.. Controls are at booth level. Clustered standard errors, at the municipality level, in parentheses.