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Voting for no one. Subnational politics and invalid votes in Argentine presidential elections

Osvaldo Meloni

omeloni@herrera.unt.edu.ar

Universidad Nacional de Tucuman

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Voting for no one.
Subnational politics and invalid votes in Argentine presidential elections

Osvaldo Meloni
Facultad de Ciencias Económicas
Universidad Nacional de Tucumán.
ORCID: https://orcid.org/0000-0003-1416-405X.
omeloni@herrera.unt.edu.ar

Abstract

How do intergovernmental fiscal institutions shape the cost-benefit calculus of political participation? This paper shows that fiscal correspondence is a systematic determinant of deliberate invalid voting in Argentine presidential elections through a rational ignorance mechanism. Under compulsory voting, the extensive margin of participation is effectively closed by law; the operative margin is intensive. In provinces whose budgets are dominated by automatic transfers, the transmission chain from the presidential ballot to observable fiscal outcomes runs through a long, administratively opaque chain that rational voters do not invest in decoding given the near-zero expected private return on a single ballot. This fiscal opacity compresses the partisan differential attached to the presidential election, making deliberate valid voting individually irrational for a share of the electorate and generating blank ballot compliance under compulsion. Using a balanced panel of 23 Argentine provinces across nine presidential elections (1989–2023), I find that higher fiscal correspondence is associated with significantly fewer blank and invalid ballots. The effect is concentrated on blank ballots rather than null ballots, confirming that the mechanism operates on the deliberate disengagement margin through rational ignorance rather than through accidental ballot errors. Results are robust to instrumental variable estimation, exclusion of oil-producing provinces, and structural break tests around the 2001 crisis. The findings indicate that transfer dependency is not only a source of fiscal inefficiency and political distortion but also an independent institutional generator of rational ignorance at the intensive margin of democratic participation.

Key words: fiscal federalism, protest voting, fiscal correspondence, Argentina

JEL codes: D72, P16, H11, H77

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Disclosure statement

The author report there are no competing interests to declare.

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1. Motivation

Social scientists have long been committed to elucidating the paradoxical behavior of citizens who incur the expense of attending a polling place on election day to cast a ballot for "no one", thereby submitting a null or blank vote. The literature on invalid voting has made substantial progress in identifying the conditions under which this breakdown occurs. Three broad families of explanation dominate the research on invalid voting. The first emphasizes socioeconomic factors: low education, income, and urbanization reduce the informational resources voters have to cast a valid ballot (McAllister & Makkai 1993; Power & Garand 2007). The second centers on institutional design: compulsory voting, electoral disproportionality, ballot complexity, and high district magnitude shape the rate at which ballots are spoiled (Power & Roberts 1995; Reynolds & Steenbergen 2006; Singh 2019). The third interprets invalid ballots as protest, a deliberate signal of dissatisfaction with candidates, parties, or the political system (Uggla 2008; Driscoll & Nelson 2014; Cohen 2018).

Taken together, these three frameworks have produced a reasonably comprehensive picture of who casts invalid ballots and under what formal rules. Yet they share a common limitation: they treat the voter's relationship to the state as defined only at the national level, overlooking the fiscal relationship between citizens and the subnational governments through which most citizens actually experience public authority. This omission matters because in federal systems the experience of government is primarily subnational. Citizens interact with the state through schools, hospitals, roads, and social services managed by provincial and local authorities; it is at this level that the fiscal relationship between citizens and state is most directly experienced, or most evidently lacking.

When subnational governments finance their expenditures predominantly from central transfers rather than own-source taxation, the fiscal contract between citizen and state is weakened, generating a specific form of political disengagement in which the transmission chain from presidential ballot to observable fiscal consequence becomes too long and opaque for rational voters to decode. Both own provincial revenues and transfers respond to the national economic cycle shaped by presidential economic policy (Garrido & Sotes, 2014; Elosegui & Herrera Gómez 2025). But own revenues generate a short, directly observable link,

because the voter pays provincial taxes and observes the local service, while automatic transfers involve a long chain of intermediary steps: the generation of the national tax pool, the federal distributive formula, and the governor's budget allocation, whose complexity rational voters do not invest in understanding given the near-zero private benefit of a single ballot. This rational ignorance breaks the perceived relationship between voting participation and fiscal consequences. Under compulsory voting it cannot express itself as abstention. Instead, it manifests on the intensive margin: voters for whom the presidential-fiscal transmission chain is too opaque to decode rationally opt for a blank ballot over the deliberation required to cast a valid one.

This mechanism is an application of Downs's (1957) rational ignorance to the intensive margin of voting under compulsory voting. Fiscal non-correspondence is the institutional condition that makes rational ignorance operative at the intensive margin by raising the information cost of the presidential-fiscal attribution problem without raising the near-zero expected benefit of solving it. In this context, the attribution channel is therefore a variety of rational ignorance peculiar to the fiscal federalism setting.

The argument also connects to Brennan and Buchanan's (1980) analysis of fiscal discipline. In their framework, governments financed from non-salient revenue sources face weaker accountability because voters cannot monitor the true tax price of public goods. This paper extends the argument to the ballot itself: not only does transfer dependency weaken voters' incentives to monitor fiscal performance, but the opacity of the transfer mechanism makes it individually irrational to invest in the deliberation required to cast a valid vote, generating a demand-side withdrawal from deliberate electoral participation that Brennan and Buchanan's supply-side analysis does not reach.

This paper formalizes the argument in a model in which fiscal correspondence shapes the partisan differential voters attach to the presidential election, which in turn determines the share of voters who, under compulsory voting, cast invalid rather than valid ballots. The model predicts that higher fiscal correspondence reduces invalid and blank ballots, with the effect operating primarily through blank ballots rather than null ballots, which reflect targeted protest or accidental spoiling by a different type of voter. The prediction is tested on a province-level panel of Argentine presidential elections, for the period 1989-2023, exploiting variation in provincial fiscal structure across 23 districts and nine presidential elections.

The findings contribute to four literatures. First, to the public choice tradition on rational ignorance (Mueller 2003), by showing that fiscal non-correspondence is an institutional condition that activates rational ignorance on the intensive voting margin under compulsory voting, producing blank ballot compliance as the equilibrium response. Second, to invalid voting research, by introducing a fiscal-federalism mechanism showing that the structural fiscal relationship between citizens and subnational governments shapes deliberate ballot behavior independently of socioeconomic characteristics, institutional rules, and national political conditions. Third, to the fiscal federalism and accountability literature, by showing that weak fiscal correspondence affects not only incumbency advantage and spending distortions but also the expressive quality of citizen participation in national elections. Fourth, to Argentine political economy, by linking the country's transfer-dependent federal architecture to the quality of democratic participation across provinces and electoral cycles.

The paper is organized as follows. Section 2 reviews the related literature. Section 3 presents the formal model. Section 4 describes the Argentine electoral context. Section 5 describes the data and empirical strategy. Section 6 presents results. Section 7 concludes.

2. Related literature

The study of invalid voting traces back to Stiefbold (1965), who distinguished informational from expressive motivations for void ballots in West Germany. That early distinction anticipated the three broad theoretical traditions that have since organized the literature: socioeconomic, institutional, and protest. While these traditions have developed largely in parallel, recent work has begun to integrate them, and the emerging consensus is that invalid voting is a multi-causal phenomenon whose determinants vary systematically across electoral contexts.

The socioeconomic tradition treats invalid ballots as a consequence of political exclusion: citizens with limited education, income, and political information are more prone to unintentional errors and less likely to have formed partisan attachments that make a valid vote feel meaningful. This negative correlation between development and invalid voting has been documented in Western Europe (Zulfikarpasic 2001), Australia (McAllister & Makkai 1993), and Latin America (Power & Garand 2007). More recent work distinguishes education as a cognitive resource, reducing unintentional errors, from education as a political resource, increasing intentional protest (Driscoll & Nelson 2014; Superti 2014).

The institutional tradition emphasizes how formal rules shape the costs and benefits of voting responses. Compulsory voting is the most powerful institutional predictor of invalid balloting: when abstention carries a penalty, citizens who would otherwise exit are forced to the polls, and the invalid ballot substitutes for abstention (Power & Roberts 1995; Power & Garand 2007; Singh 2019; Kouba & Lysek 2016). Electoral system complexity, like high district magnitude, personalized voting, concurrent elections, complex ballots, raises invalid rates by multiplying cognitive demands (Reynolds & Steenbergen 2006; Lysek et al. 2020), while electoral disproportionality has been linked to invalid voting as systemic dissent (Cohen, 2018).

The protest tradition treats blank and spoiled ballots as deliberate expressive acts. Drawing on Hirschman's (1970) exit-voice-loyalty framework, invalid balloting under compulsory voting becomes a form of voice available to voters who cannot exit and find no option worth supporting. Survey evidence shows that invalid-ballot casters are not uniformly disengaged but alienated: they follow politics yet reject all available options (Driscoll & Nelson 2014), and aggregate invalid voting tracks economic crises, corruption scandals, and democratic erosion (Power & Garand 2007; Cohen 2018; Lioy 2024).

None of these traditions examines subnational fiscal architecture as an independent determinant. The closest antecedent is the fiscal accountability literature: Besley & Persson (2009) argue that fiscal capacity is intrinsically linked to political accountability, since citizens who pay taxes demand accountability for how revenue is spent. That argument is broadly consistent with the attribution channel developed here, though the mechanisms differ: while Besley and Persson emphasize the supply-side institutional consequence of own-source taxation for state building, this paper emphasizes the demand-side informational consequence for voter behavior: citizens who pay own-source taxes experience a shorter and more observable fiscal transmission chain and therefore have stronger incentives to engage deliberately with the presidential ballot. The two mechanisms are complementary, and this paper's fiscal correspondence (FC) measure captures both fiscal transparency and fiscal capacity simultaneously, a point discussed further in Section 5. What this paper adds to the accountability literature is an application to the intensive margin of electoral participation under compulsory voting, in a setting where the attendance margin is closed and the behavioral response to fiscal disengagement manifests in ballot content rather than abstention.

The attribution channel is related to, but distinct from, the fiscal illusion tradition (Buchanan 1967, Oates, 1988). While fiscal illusion holds that voters underestimate the true tax price of transfer-financed public spending; attribution confusion holds that voters correctly perceive

spending but find the chain between presidential ballot and provincial fiscal outcome too long and opaque to decode at rational cost. The distinction matters empirically: fiscal illusion predicts voter support for high-spending transfer-dependent budgets, while the attribution channel predicts disengagement from the ballot itself. The institutional public choice literature on fiscal federalism (Brennan and Buchanan, 1980; Weingast, 1995) provides the supply-side backdrop, showing that transfer dependency undermines fiscal accountability; this paper adds the electoral accountability consequence at the intensive margin of participation. Powell & Whitten's (1993) clarity-of-responsibility framework offers the national-level analogue: voters sanction governments more effectively when institutions allow them to identify who is responsible for outcomes. Transfer dependency in Argentine federalism is the subnational version of the same problem, but it operates through rational disengagement from the ballot rather than through differential incumbent sanctioning.

Empirical evidence

The empirical literature on invalid voting has grown substantially over the past three decades, spanning single-country case studies and large comparative analyses across continents. The earliest comparative studies, such as those by McAllister & Makkai (1993) regarding Australia and Zulfikarpasic (2001) concerning France, exhibit a significant limitation: they focused on nations with voluntary voting, which hindered the recognition of the protest-substitution mechanism that is crucial in the context of compulsory voting.

Subsequent studies, like Martinez i Coma & Werner (2019), that covered 417 parliamentary elections across 73 countries between 1970 and 2011, found that mandatory compulsory voting and ethnic fragmentation are the two strongest predictors of invalid voting, while the role of corruption loses statistical significance when democracy and protest participation are accounted for. The compulsory voting result is particularly robust across model specifications and regional subsamples, confirming that the substitution of invalid ballots for abstention is general rather than regional. Singh (2019), using cross-national survey data, identifies the specific voter profile driving this effect: politically unengaged, distrusting, and disaffected individuals are disproportionately responsible for the higher invalid rates observed under mandatory voting, corroborating that the compulsory-voting mechanism affects voters whose disengagement would otherwise have taken the form of abstention.

Evidence from post-communist Europe provides a complementary perspective. Kouba & Lysek (2016) find that runoff systems, compulsory voting, and low electoral competitiveness

raise invalid voting across post-communist Europe and Latin America, but that effects are conditioned by broader political context. Their disenchantment model, viewing invalid votes as a response to poor institutional performance and weak competition, is conceptually close to the protest tradition but emphasizes structural political conditions rather than specific grievances.

Invalid voting in Latin America and Argentina

Latin America occupies a prominent place in this literature because compulsory voting, high inequality, and volatile party systems make it a demanding test of competing explanations. Power & Garand (2007), whose cross-sectional time-series design covers eighty legislative elections in eighteen democracies between 1980 and 2000, find that enforced compulsory voting, electoral disproportionality, and the combination of high district magnitude with personalized voting significantly raise invalid rates, while urbanization reduces them. Castro et al. (2025), analyzing Brazilian municipal elections, find that blank and null votes respond to different determinants, reinforcing the theoretical importance of disaggregating the two. The closest methodological precedent for the present paper is Carrión-Yaguana & Carroll (2024), who exploit municipal-level variation in Ecuador and show that invalid ballots respond to local political conditions rather than national ones alone, serving as a protest instrument where competition is suppressed and alternatives are absent.

The available literature on invalid voting in Argentina is notably sparse. Marto & Nallar (2018) provide the most direct empirical treatment of provincial variation, finding that blank and null votes in gubernatorial elections respond to different determinants: blank ballots are more closely associated with disengagement, null ballots with targeted protest. But they do not incorporate fiscal structure, and the provincial variation they document remains largely unexplained by standard socioeconomic and institutional variables.

The existing literature has not yet asked whether the fiscal framework of subnational governments serves as an independent and additional factor contributing to this disconnection, which is the gap this paper aims to tackle.

Subnational politics in Argentina

To understand why fiscal structure belongs in this picture requires situating Argentine invalid voting within the political economy of Argentine federalism. Saiegh & Tommasi (1999) and Tommasi et al. (2001) document that Argentina's intergovernmental fiscal system concentrates revenue-raising authority at the national level while allocating expenditure responsibilities to

the provinces, generating low fiscal correspondence and heavy reliance on central transfers for basic public services. This creates perverse incentives at every level: provinces spend without taxing, and the tax-expenditure link underpinning democratic accountability is systematically weakened. Jones et al. (2000) extend this to show that political institutions interact with fiscal arrangements to produce loose fiscal behavior at the provincial level, with electoral incentives consistently favoring spending over revenue effort.

The transfer mechanism itself is politically determined in ways that reinforce low fiscal correspondence. Porto & Sanguinetti (2001) show that the allocation of automatic transfers across Argentine provinces cannot be explained on purely normative grounds: political and electoral factors, including legislative representation and alignment with the national executive, significantly shape per-capita transfers, that is, fiscal dependency is not merely an economic condition but a political equilibrium. Jones et al. (2002) elaborate the legislative mechanism: Argentine legislators function as political brokers rather than policy specialists, because reelection rests in the hands of governors and party bosses rather than voters, reducing Congress to a transactional arena in which provincial bosses deliver legislative support to the national executive in exchange for transfers, bypassing the citizen-representative relationship that is supposed to connect electoral choices to fiscal outcomes. Jones et al. (2012) complete the picture, showing that voters in transfer-dependent provinces behave as fiscal liberals, supporting high spending while remaining inattentive to its costs, a pattern consistent with the attribution-confusion mechanism at the core of this paper's model.

The structural consequences for subnational democratic quality are documented by Gervasoni (2010), who shows that provinces receiving disproportionately large transfers tend to have significantly lower democratic competition and accountability. Diaz-Rioseco & Alberti (2024) further show that the influence of fiscal rents on incumbency advantage is contingent on provincial fiscal rules: when these institutions centralize rents at the provincial level, incumbency advantage is maximized and contestation minimized.

Most directly relevant is Meloni (2026), who shows that fiscal correspondence significantly affects turnout in Argentine presidential elections, establishing that the fiscal structure of Argentine federalism shapes whether citizens engage with the electoral process at all. This paper extends that finding to the intensive margin: given that the citizen is already at the polls under compulsory voting, does fiscal non-correspondence convert would-be valid voters into blank balloters? The two mechanisms are complementary but distinct and produce empirically

distinguishable prediction because the Downsian turnout effect operates on the decision to attend and the attribution channel operates on ballot content conditional on attendance.

3. A Model of fiscal correspondence and invalid voting

Consider a federation of districts $i = 1,\ldots,N$ observed over elections t. In each district voting is mandatory. Citizens have three options: cast a valid vote, cast an invalid ballot (blank or null), or abstain and pay a fine. Since the penalty for abstention exceeds the cost of showing up and submitting an invalid ballot, the operative margin is the intensive one: given attendance, citizens must decide whether to cast a valid ballot or an invalid one.

Fiscal correspondence and the attribution channel

Define fiscal correspondence (FC_{it}) in district i at time t as the share of own revenues relative to non-discretionary district revenues.

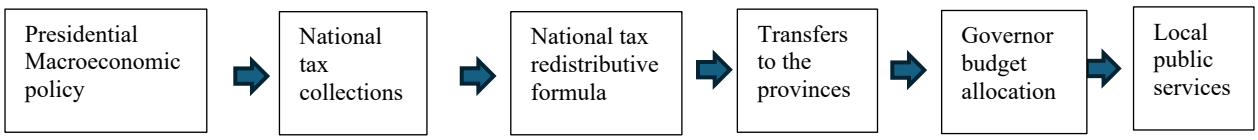
Define $\varphi_{it} \in [0,1]$ as the fiscal transparency of province i at time t, measuring the degree to which the presidential-fiscal transmission chain is short and observable enough for rational voters to decode at a cost worth bearing.

The attribution channel rests on the length and observability of the fiscal transmission chain from the national Executive's economic policy to the provision of local goods and services. In high-FC provinces, own revenues generate a short chain:



The voter experiences the first and last steps directly, and the intermediary steps are few and observable.

In low-FC provinces, automatic transfers generate a long chain:



The voter observes general economic conditions and local services, but the intermediary steps are administratively complex and unobservable. Decoding the link requires knowledge of federal resource formation, the redistributive formula, and the provincial budget process. This is information that rational voters do not acquire given the near-zero private return of a single ballot.

Belief formation

Voter j uses the observed fiscal structure of her province to form a belief about φ_{it}. Under the assumption that fiscal correspondence is observable from the accumulated experience of local taxation over the electoral cycle, she correctly infers $\hat{\varphi}_{it} = FC_{it}$. In low-FC provinces, this belief correctly reflects that the presidential-fiscal transmission chain is too opaque to decode at rational cost: $\hat{\varphi}_{it} \approx 0$. In high-FC provinces, it correctly reflects that the chain is short and directly observable: $\hat{\varphi}_{it} \approx 1$.

This attribution confusion differs from fiscal illusion in the Oates (1979) sense. Fiscal illusion refers to voters underestimating the cost of public spending financed by transfers. Attribution confusion means instead that voters correctly perceive that public spending is occurring but find the transmission chain between the presidential ballot and the provincial fiscal bundle too long and opaque to decode at individually rational cost.

Voter's decision problem

Let $\alpha_j > 0$ denote voter j's underlying preference intensity, that is, her valuation of a unit improvement in the fiscal policy bundle delivered by her preferred presidential candidate relative to the alternative. Let B_j represent the partisan differential, defined as the expected utility gain from casting a valid ballot for the preferred candidate rather than submitting an invalid ballot. B_j depends not only on α_j but also on voter j's assessment of how much the presidential election outcome changes the provincial fiscal environment she experiences. The expected fiscal gain from electing the preferred candidate over the alternative is:

$$B_j = \alpha_j \cdot \hat{\varphi}_{it} = \alpha_j \cdot FC_{it}$$

This multiplicative specification captures the joint necessity of preference intensity and fiscal transparency for deliberate electoral engagement. Rational ignorance in low-FC provinces operates by driving $\hat{\varphi}it$ toward zero, compressing Bj regardless of the voter's underlying preference intensity αj.

Citizen j faces three options with associated utilities (U):

- Casting a valid ballot yields: $U_j^V = B_j - c^V = \alpha_j \cdot FC_{it} - c^V$;
- Casting an invalid ballot yields: $U_j^I = -c^I$;
- Abstaining yields: $U_j^A = -\pi$,

where $c^V > 0$ is the cost of becoming sufficiently informed to cast a valid vote, $c^I > 0$ is the small cost of showing up without deliberating, and $\pi > 0$ is the legal penalty for abstention.

The key assumptions are:

- $c^V > c^I$, meaning casting a valid vote requires information acquisition and deliberation beyond the physical act of attending, so valid voting is always more costly than invalid voting conditional on showing up;
- $\pi > c^I$ meaning the penalty for abstention exceeds the cost of showing up and submitting an invalid ballot, so compliance with the compulsory voting mandate is individually rational for virtually all citizens.

Decision rules

There are two stages of decision for the citizen. In Stage 1 the decision is to attend or abstain. In Stage 2 the decision is to cast a valid or invalid ballot.

Stage 1: attend or abstain. Citizen j attends iff $\max(U_j^V, U_j^I) > U_j^A$

Since $U_j^I = -c^I > -\pi = U_j^A$ by assumption, attending weakly dominates abstaining for all citizens.

Let T_{it} denote the aggregate turnout rate in district i at election t, defined as the share of registered voters who cast a ballot. The attendance margin is effectively closed: $T_{it} \approx 1$ for all t, i.

Stage 2: conditional on attending, casting a valid or invalid ballot. Given attendance, citizen j casts a valid ballot iff $U_j^V > U_j^I$:

$\alpha j \cdot \mathrm{FC}_{it} - c^V > -c^I$, i.e. $\alpha_j \cdot \mathrm{FC}_{it} > c^V - c^I \equiv \Delta c$, i.e. $\alpha_j > \Delta c / \mathrm{FC}_{it} \equiv \alpha_{it}^*$

where $\Delta c > 0$ is the deliberation cost premium and α_{it}^* is the minimum preference intensity required to make deliberate valid voting worthwhile given the district's fiscal correspondence.

- Citizens with $\alpha_j < \alpha_{it}^*$ find that the partisan differential produced by the fiscal structure of their province is insufficient to justify the deliberation cost premium and rationally submit an invalid ballot;
- Citizens with $\alpha_j \geq \alpha_{it}^*$ find valid voting worthwhile and cast a deliberate ballot.

Notice that $\alpha_{it}^{*} = \Delta c/\mathrm{FC}_{it}$ is decreasing in FC_{it}: as fiscal correspondence rises, the threshold falls and a larger share of the electorate finds valid voting worthwhile. This is the core mechanism through which fiscal correspondence reduces invalid voting.

The model predicts that the attribution channel operates primarily through blank ballots although is not entirely absent from null voting. Null ballots are heterogeneous, combining a deliberate component with an accidental component governed by cognitive and informational constraints unrelated to fiscal transparency and therefore insensitive to FC.

Aggregate rates

Let α_j be distributed with density $f(\cdot)$ and CDF $F(\cdot)$ on $[\alpha, \bar{\alpha}]$. The aggregate blank rate is:

$$\mathrm{BLANK}_{it} = \Pr\left(\alpha_j < \alpha_{it}^{*}\right) = F\left(\frac{\Delta c}{\mathrm{FC}_{it}}\right)$$

Proposition. *Fiscal correspondence reduces blank and null voting, but in different magnitudes.*

Since $\frac{\partial BLANK}{\partial FC_{it}} = f\left(\frac{\Delta c}{FC_{it}}\right) \cdot \left(-\frac{\Delta c}{FC_{it}^{2}}\right) < 0$, higher FC unambiguously lowers blank voting.

Let $\lambda \in (0,1)$ denote the deliberate share of null ballots in province *i*; the aggregate null rate decomposes as:

$$\mathrm{NULL}_{it} = \lambda \cdot F\left(\frac{\Delta c}{\mathrm{FC}_{it}}\right) + (1-\lambda) \cdot \varepsilon_{it}$$

where ε_{it} captures the accidental component. Then $\partial \mathrm{NULL}_{it}/\partial \mathrm{FC}_{it}$ has the same sign as the blank effect but is attenuated by $\lambda < 1$, so $|\gamma_{\mathrm{null}}| < |\gamma_{\mathrm{blank}}|$, with the ratio $\frac{\gamma_{\mathrm{null}}}{\gamma_{\mathrm{blank}}} \approx \lambda$ reflecting the deliberate share of null voting.

4. Invalid ballots in Argentine presidential elections

Argentina is a federal republic of 23 provinces plus the autonomous city of Buenos Aires. The President, elected by universal suffrage, originally served a six-year term without immediate reelection under the 1853 Constitution; a 1994 amendment reduced the term to four years, allowed two consecutive terms, and introduced a two-round runoff (*ballotage*). Argentina's democratic trajectory was repeatedly interrupted by military coups; democracy was restored in 1983, and the country has since conducted ten consecutive presidential elections without interruption.

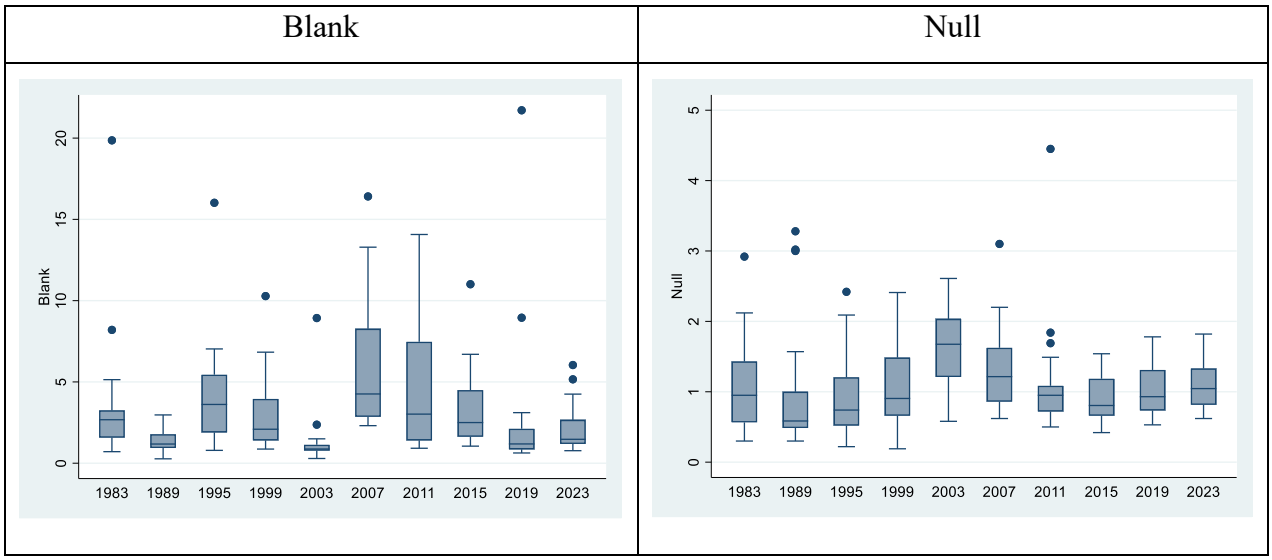
Voting is compulsory for citizens between 18 and 70 years old. All citizens are automatically registered but must cast their ballot in the formal residence district. Since absentee and early voting are not permitted, turnout is primarily affected by citizens residing outside their registered district on election day.

Argentina's provinces possess constitutional autonomy over electoral logistics even in national elections. The provinces oversee the actual voting process and may schedule local elections concurrently with national ones, adopting different voting systems for local offices, such as the Double Simultaneous Vote System that can introduce complexity to the ballot.

Aggregate trends in invalid voting

Figure 1 displays the distribution of blank and null ballot rates across the 23 provincial districts for each of the ten presidential elections from 1983 to 2023.

Figure 1. **Blank and Null rates in each presidential election, 1983-2023**



Source: own calculations based on Dirección Nacional Electoral.

Note: Blank and null are expressed as percentage of total votes cast in each presidential election. The descriptive analysis covers 1983–2023; the panel regression covers 1989–2023 due to data availability on fiscal and socioeconomic controls.

Blank ballot rates are moderate and relatively stable for most of the sample period, with a notable spike in 2007 and somewhat elevated rates in the early democratic period of 1983–1989, reflecting the disruption of the military interregnum and the novelty of electoral participation after seven years of dictatorship. Null ballot rates follow a broadly similar pattern but with a tighter interquartile range throughout.

The national aggregate conceals the political significance of invalid voting. Table 1 ranks invalid, blank, and null ballots against the field of competing presidential tickets in each election. In 1983, aggregate invalid ballots ranked third among twelve competing parties. In five of the nine subsequent elections they ranked fourth, ahead of all but three parties. In 2003, the most fragmented election, they ranked sixth among eighteen parties. Across the full sample, invalid ballots consistently outperformed the majority of competing presidential tickets.

Table 1. **Rank of invalid ballots rate in each presidential election, 1983-2023.**

Year	Number of Parties	Rank		
		Blank	Null	Invalid (Blank plus Null)
1983	12	4th	6th	3rd
1989	11	7th	8th	5th
1995	14	4th	6th	4th
1999	10	4th	5th	4th
2003	18	10th	7th	6th
2007	14	5th	9th	4th
2011	7	6th	9th	6th
2015	6	5th	8th	4th
2019	6	6th	8th	4th
2023	5	6th	7th	5th

Source: own calculations based on Dirección Nacional Electoral.

Notice that blank ballots rank higher than null ballots in every election except 2003, consistent with the theoretical distinction between attribution-driven disengagement and the more heterogeneous behaviors captured by null voting that motivates the blank-null decomposition in this paper.

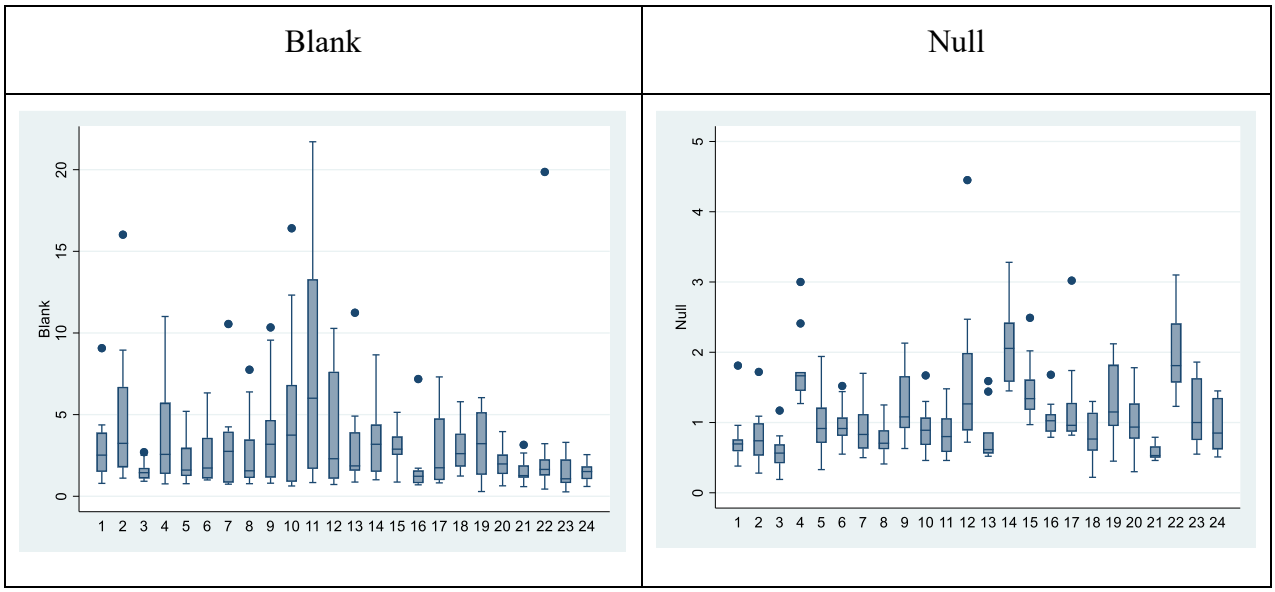
The subnational dimension

The aggregate national picture becomes considerably more interesting once subnational districts enter the scene. Figure 2 displays the distribution of blank and null ballot rates for each of the 24 subnational districts across the ten presidential elections. Cross-provincial variation is substantial: some provinces exhibit high variability relative to their own mean, with wide interquartile ranges and multiple outliers, suggesting that electoral conditions fluctuate substantially across presidential cycles, producing large swings in invalid voting.

The null ballot panel tells a different story. The cross-provincial distribution of null rates is considerably more compressed than the blank distribution: the sample standard deviation of null rates (0.61) is less than one-fifth of the standard deviation of blank rates (3.24), reflecting

the more bounded nature of null voting: while blank voting can surge under extreme fiscal disengagement and political hegemony, null voting remains relatively contained across the full range of provincial conditions.

Figure 2. **Blank and Null rates by district, 1983-2023**



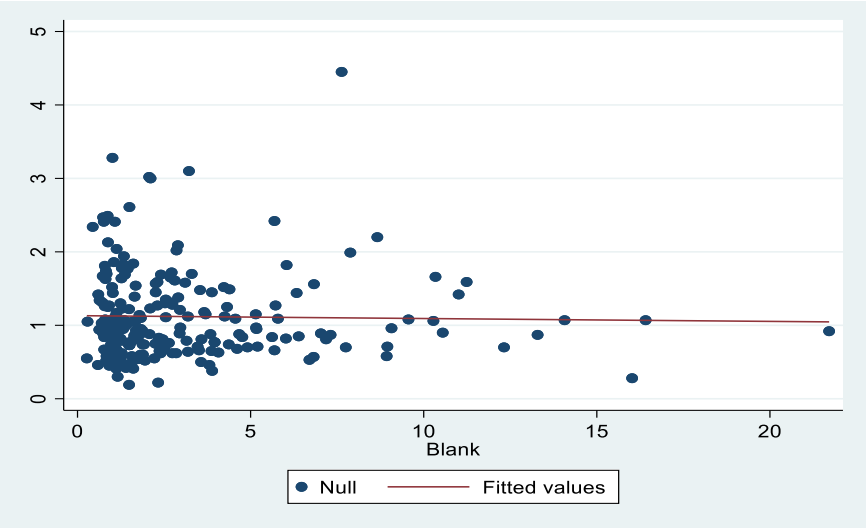
Source: own calculations based on Dirección Nacional Electoral.

Note: (x-axis) 1. Buenos Aires, 2. Catamarca, 3. Chaco, 4. Chubut, 5. Córdoba, 6. Corrientes. 7. Entre Ríos, 8. Formosa, 9. Jujuy, 10. La Pampa, 11. La Rioja, 12. Mendoza, 13. Misiones, 14. Neuquén, 15. Rio Negro, 16. Salta, 17. San Juan, 18. San Luis, 19. Santa Cruz, 20. Santa Fe, 21. Santiago del Estero, 22. Tierra del Fuego, 23. Tucumán, 24. CABA.

The correlation between blank and null votes

A key empirical question for the analytical framework of this paper is whether blank and null ballots are driven by the same or different underlying processes. A scatter of blank against null ballot rates across all 207 province-election observations, with a fitted regression line, answers this directly: there is no evident positive correlation between blank and null ballot rates in the Argentine provincial panel. The two types are not driven by the same underlying process and cannot be treated as interchangeable. They respond to different determinants and reflect distinct voter types: the structurally disengaged citizen who deposits an empty ballot as a deliberate but low-cost response to attribution confusion, and a more heterogeneous population of null voters that includes both deliberately alienated citizens who spoil their ballot as targeted protest and citizens who submit an accidentally invalid ballot due to error or unfamiliarity with the ballot format.

Figure 3. **Correlation of Blank and Null ballots across provinces, 1989-2023**



Source: own calculations based on Dirección Nacional Electoral.

5. Data and empirical strategy

The analysis uses a balanced panel of 23 of 24 Argentine districts across nine presidential elections, 1989–2023 (207 province-election observations). Electoral, fiscal and socioeconomic data come from official sources, the *Dirección Nacional Electoral*, *Dirección de Asuntos Provinciales* and the Argentine Bureau of Statistics (INDEC), respectively. Río Negro and the 1983 election are excluded due to missing socioeconomic data.

The three dependent variables: Blank, Null, and Invalid = Blank + Null are expressed as a percentage of total ballots cast. Estimating them separately is theoretically motivated: blank and null votes reflect different mechanisms, and the attribution channel predicts a stronger effect on blank ballots.

The key explanatory variable, Fiscal Correspondence (FC_{it}), is the ratio of own revenues (own taxes plus non-tax fees, duties, and fines) to non-discretionary provincial revenues (own revenues plus automatic transfers under the Federal Tax-sharing Agreement plus natural-resource royalties):

FC_{it} = Own $Revenues_{it}$ / (Own $Revenues_{it}$ + Automatic $Transfers_{it}$ + $Royalties_{it}$)

FC_{it}= 1 indicates full fiscal correspondence; FC_{it}= 0 indicates pure transfer dependency. Discretionary transfers are excluded from both numerator and denominator because their variation reflects political bargaining between governor and national executive (Jones et al.

2002), which would otherwise introduce endogeneity. The model predicts $\gamma < 0$ concentrated in blank rather than null ballots, $|\gamma_{blank}| \gg |\gamma_{null}|$.

One interpretive limitation is worth remarking: FC simultaneously proxies fiscal transparency (the attribution channel) and fiscal capacity in the Besley & Persson (2009) sense, since high own-revenue shares also reflect institutional ability to tax. The paper cannot fully separate the two channels with available data; the robustness check using provincial public employment as a state-capacity proxy partially addresses but does not eliminate this concern.

Table 2 reports descriptive statistics of all variables included in the econometric analysis.

Socioeconomic controls. The model includes two variables capturing the informational and demographic structure of the provincial electorate. *Education* is defined as the ratio of the percentage of the provincial population that has achieved college-level education to the percentage of the population with incomplete elementary schooling; higher values indicate a more educated electorate relative to the most educationally excluded segment. The expected sign on invalid voting is ambiguous: more educated electorates make fewer unintentional errors, which would reduce null voting, but more educated voters may also be more likely to cast a deliberate blank ballot as a protest when no candidate is deemed satisfactory, consistent with the distinction between education as a cognitive resource and education as a political resource.

Population is defined as the percentage of the provincial population aged 70 or older at election *t*. Citizens over 70 who choose to vote do so voluntarily, making them a self-selected group of engaged voters; but their engagement does not necessarily translate into valid voting, for at least two reasons. First, cognitive and physical constraints: elderly voters may face greater difficulty navigating the ballot, particularly in elections with complex concurrent contests, multiple factions under the Double Simultaneous Voting System, or long candidate lists, increasing the probability of unintentional errors that produce invalid ballots (Bercoff et al. 2026). Second, in provinces dominated by political machines, clientelistic networks may mobilize elderly citizens to vote even after they are legally exempt, through the same patronage mechanisms that mobilize the rest of the captive electorate (Stokes 2005); these mobilized-but-disengaged elderly voters may be more likely to cast blank ballots precisely because they are participating without a meaningful electoral preference. Both socioeconomic controls are constructed from the Household Survey (EPH-INDEC).

Institutional controls. The institutional tradition is represented by five variables.

Reelection is a dummy taking value 1 if the incumbent governor of province *i* seeks reelection on the same date as the presidential election. Its expected sign on invalid and blank ballots is theoretically ambiguous and depends on which of two opposing mechanisms dominates: a concurrent gubernatorial reelection bid raises the political salience of election day, potentially mobilizing voters who hold strong preferences about the gubernatorial contest into casting a deliberate valid ballot, while voters who oppose the incumbent governor but perceive no viable alternative may express dissent through a blank ballot precisely because the contest makes the stakes more visible. For null ballots the prediction is clearer: heightened salience is expected to reduce voter inattention and ballot-completion errors, implying a negative coefficient.

DSVS is a dummy taking value 1 if the gubernatorial election in province *i* is held under the Double Simultaneous Vote System concurrently with the presidential election; it is expected to be positively associated with invalid voting because it increases ballot complexity and the cognitive demands placed on voters, raising the deliberation cost premium Δc for all voters.

Fatigue is defined as the number of elections held in province *i* in the same calendar year as the presidential election but prior to it, including gubernatorial contests and the mandatory primaries introduced for national elections in 2009 and also adopted in some districts before local elections.

Margin is the percentage difference between the vote share of the winning party and the runner-up in the provincial presidential contest, capturing local electoral competitiveness.

Turnout is total ballots cast as a percentage of registered voters; under compulsory voting, variations in turnout across provinces and elections reflect differences in enforcement intensity, fine levels, and administrative compliance ease rather than voluntary participation decisions, and turnout and invalid voting may share a common upstream determinant: the attribution confusion about the fiscal consequences of the election, which motivates the instrumentation strategy described below.

Protest controls. The protest literature is represented by three variables capturing economic and political conditions that generate voter dissatisfaction with available electoral alternatives.

Unemployment is the provincial unemployment rate measured in the quarter immediately preceding presidential election *t*. Higher unemployment is expected to generate economic grievances that translate into protest voting and higher invalid ballot rates, operating primarily through the null ballot margin.

GDPpc is real GDP per capita in province *i* in the year preceding presidential election *t*, expressed in constant pesos. Lower provincial income is expected to be associated with higher invalid voting both through the socioeconomic exclusion mechanism, reducing the cognitive resources available for valid ballot completion, and through the generation of economic grievances that produce protest behavior.

Hegemony is the number of consecutive presidential election victories of the candidate supported by the provincial governor, capturing the degree of political hegemony at the subnational level. Provinces where the same national-provincial coalition has dominated presidential elections across multiple consecutive cycles are expected to exhibit higher invalid vote rates, as voters who oppose the hegemonic coalition face a choice set that feels structurally foreclosed, raising the effective reflection cost premium for deliberate valid voting beyond what fiscal correspondence alone would predict.

Table 2. Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Invalid	207	4.2394	3.2914	0.82	22.63
Blank	207	3.1382	3.2411	0.27	21.71
Null	207	1.1015	0.6123	0.19	4.45
FC (avg t-1 to t-4)	207	25.6560	17.2562	5.1	92.5
Unemployment (t-1)	207	7.7261	4.3742	0.5	21
GDP pc (t-1)	207	12981.8	9128.3	3625.6	40869.6
Hegemony (t-1)	207	1.6039	1.9946	0	8
Turnout Rep (t-2)	206	75.9992	5.6189	51.82	89.83
Margin Rep (t-2)	206	1.5142	20.7497	-53.02	62.97
Reelection	207	0.1449	0.3529	0	1
DSVS	207	1.6232	8.6391	0	76
Invalid Rep (t-2)	205	7.1781	6.3968	0.38	41.82
Blank Rep (t-2)	205	4.4226	4.4340	0.19	30.38
Null Rep (t-2)	205	2.7556	3.6590	0.08	24.47
Fatigue	207	0.5411	0.6588	0	2
Education (t-1)	203	0.4688	0.4483	0.06	3.85
Population	207	5.8531	2.4044	0.8	14.1

Source: own calculations. Electoral data from DNE; fiscal data from *Dirección de Asuntos Provinciales* and socioeconomic data from INDEC.

Empirical strategy

The baseline empirical model is a two-way fixed effects estimator of the form:

$$Y_{it} = \alpha_i + \lambda_t + \gamma \cdot \bar{FC}_{it} + X'_{it}\,\delta + u_{it}$$

where Y_{it} is one of the three dependent variables (Blank, Null, or Invalid) in province i at presidential election t; $\bar{FC}_{it}$ is the fiscal correspondence measure; X_{it} is the vector of socioeconomic, institutional, and protest controls; α_i are province fixed effects absorbing all time-invariant provincial characteristics such as geography, historical settlement patterns, institutional legacies, and structural economic features that could jointly determine fiscal structure and invalid voting; λ_t are election fixed effects absorbing all shocks common to all provinces in a given electoral cycle, including national economic conditions, the quality of the presidential candidate field, and aggregate fluctuations in national tax revenue that drive automatic transfer flows; and u_{it} is the idiosyncratic error term. The parameter of central interest is γ, for which the theoretical model predicts $\gamma < 0$: higher fiscal correspondence is associated with fewer blank and invalid ballots, with the effect predicted to be stronger for blank than for null ballots.

The key explanatory variable in the baseline specification is the three-year average over the presidential period preceding election t:

$$\overline{FC}_{it} = \frac{1}{3}\sum_{k=1}^{3} FC_{i,t-k}$$

where $t - k$ indexes the three fiscal years preceding the presidential election year[1]. This construction serves two complementary purposes. First, $\bar{FC}_{it}$ is the operationalization of the model's core construct: the attribution confusion mechanism operates through the accumulated fiscal experience of voters over the electoral cycle rather than through any single-year fiscal observation. A voter's attribution confusion about the fiscal consequences of the presidential election is produced by sustained fiscal non-correspondence over the years during which the incumbent administration governs, not by the fiscal position in any particular year. Second, averaging over the three pre-election years removes the election-year observation from the measure, addressing the concern that contemporaneous FC could be deflated by end-of-electoral-cycle discretionary spending surges that temporarily reduce the own-revenue share, or inflated by pre-electoral tax relief, both of which would introduce simultaneity bias into the estimate of γ.

The three-year pre-election average construction of $\bar{FC}_{it}$ also attenuates the concern that province-level economic shocks could jointly reduce own tax revenues and raise political discontent, which may end up increasing blank voting. A single-year shock to own revenue

[1] Before the 1994 constitutional amendment, the presidential period was six year, so FC was compted as a five-year average.

collection would move the three-year average by only one third of its magnitude, requiring implausibly large and sustained economic deterioration to generate the estimated coefficient through this channel. Furthermore, all socioeconomic controls capture the economic conditions preceding the election rather than contemporaneous shocks. To the extent that fiscal structures respond slowly to economic conditions, as the institutional literature suggests, the three-year average of FC represents a structural characteristic of the province rather than a cyclical response to short-run economic fluctuations, further reducing the plausibility of an omitted-variable interpretation.

A related identification concern is reverse causality: provinces with higher blank voting rates may attract greater political attention from the national executive, who responds by increasing discretionary transfers, which would generate a negative coefficient on FC even in the absence of any causal effect of fiscal correspondence on ballot behavior. The construction of FC directly addresses this concern by excluding discretionary transfers from both numerator and denominator, eliminating the channel through which reverse causality would operate. The three-year pre-election average further insulates the measure from any election-cycle adjustment in discretionary transfers timed to provincial political conditions.

To ensure all regressors are predetermined with respect to the dependent variable, all explanatory variables, except for *Margin* and *Turnout*, were lagged one period. *Margin* and *Turnout* were instrumented using data from the congressional election held two years prior to presidential election t in province i. Conditions in midterm elections are plausibly exogenous to the presidential invalid vote rate because they are determined two years earlier under a distinct electoral calendar involving different offices and candidate sets.

A potential specification concern is that *Turnout* may partially mediate the effect of FC on invalid voting: if low fiscal correspondence produces attribution confusion that simultaneously reduces turnout and raises invalid vote rates through the intensive-margin mechanism, controlling for *Turnout* on the right-hand side absorbs part of the causal pathway from FC to invalid ballots. To evaluate how sensitive the results are to this concern, estimates both including and excluding *Turnout* from the baseline specification are reported; the stability of the coefficient on FC across the two specifications confirms that mediation through turnout does not materially affect inference on the parameter of central interest.

The exclusion restriction requires that the congressional margin affects presidential blank and invalid voting only through its effect on the presidential margin, with no independent direct

effect on presidential ballot content. This restriction is plausible on two grounds. First, Argentine congressional elections are conducted under a closed-list proportional representation system in which voters choose party lists rather than individual candidates and usually only the top of each list is publicly known; congressional elections therefore primarily reveal provincial partisan balance and structural political competitiveness rather than candidate-specific information that could independently shape presidential ballot decisions. Second, the congressional election is held two years before the presidential election, and any direct impact from the congressional result would need to persist across two years of intervening political activity before manifesting in presidential ballot content. It is implausible that such a direct channel operates independently of the updated information about presidential competitiveness that the congressional margin provides; the congressional margin is therefore best understood as an institutional signal of provincial partisan balance whose only operative channel into presidential blank and invalid voting runs through its predictive power for the presidential margin.

6. Discussion of results

Baseline estimates

Table 3 presents the baseline estimates from the two-way fixed effects specification with time effects and standard errors clustered at the province level. The dependent variable is the share of invalid ballots in columns I and II, blank ballots in columns III and IV, and null ballots in columns V and VI. Odd-numbered columns include the lagged congressional counterpart of each dependent variable and congressional turnout as additional controls; even-numbered columns drop these variables, which are jointly insignificant and whose exclusion leaves all other coefficients essentially unchanged.

The within-province R-squared of 0.43–0.45 for blank ballots indicates strong explanatory power on the margin the specification actually estimates. The low between-province R-squared reflects the fact that province fixed effects absorb large cross-provincial differences in fiscal structure, leaving identification to within-province changes in FC over the electoral cycle. Election-year fixed effects absorb national cycles that would otherwise confound the estimate. A one within-province standard deviation movement in FC (4.24 percentage points, about 25% of the overall standard deviation) is associated with a change of 0.49 percentage points in blank voting, roughly 16% of the sample mean, a modest but politically meaningful effect.

Table 3. Two-Way Fixed Effects Estimation

Variables	Invalid (I)	Invalid (II)	Blank (I)	Blank (II)	Null (I)	Null (II)
FC	-0.1331***	-0.1305***	-0.1150***	-0.1131***	-0.0161*	-0.0162*
	(0.0389)	(0.0378)	(0.0388)	(0.0379)	(0.0079)	(0.0079)
Unemployment (t-1)	-0.0635	-0.0624	-0.0962	-0.0951	0.0312*	0.0318**
	(0.0731)	(0.0728)	(0.0632)	(0.0649)	(0.0152)	(0.0145)
GDP pc (t-1)	-0.0002***	-0.0002***	-0.0002***	-0.0002***	0.0000	0.0000
	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0000)	(0.0000)
Hegemony (t-1)	0.4511*	0.4617**	0.4354*	0.4493**	0.0132	0.0126
	(0.2231)	(0.2065)	(0.2145)	(0.1984)	(0.0249)	(0.0222)
Margin Rep (t-2)	-0.0170*	-0.0174*	-0.0169*	-0.0168*	-0.0011	-0.0011
	(0.0090)	(0.0092)	(0.0089)	(0.0091)	(0.0018)	(0.0018)
Turnout Rep (t-2)	-0.0125		-0.0123		-0.0013	
	(0.0420)		(0.0369)		(0.0122)	
Reelection	1.7163**	1.5984**	2.0985**	1.9674**	-0.3458***	-0.3464***
	(0.7899)	(0.7679)	(0.7763)	(0.7573)	(0.1010)	(0.1003)
DSVS	-0.0303	-0.0279	-0.0330*	-0.0309*	0.0031	0.0032
	(0.0177)	(0.0166)	(0.0162)	(0.0153)	(0.0031)	(0.0030)
Fatigue	-1.4124**	-1.4037**	-1.3517**	-1.3635**	-0.0289	-0.0276
	(0.5217)	(0.5360)	(0.5132)	(0.5240)	(0.0541)	(0.0540)
Invalid Rep (t-2)	-0.0176					
	(0.0281)					
Blank Rep (t-2)			-0.0075			
			(0.0375)			
Null Rep (t-2)					0.0284**	0.0285**
					(0.0118)	(0.0116)
Education (t-1)	1.3669*	1.3682*	1.3854**	1.3873**	-0.0183	-0.0159
	(0.7201)	(0.7139)	(0.6478)	(0.6363)	(0.1885)	(0.1870)
Population	0.2630	0.2615	0.2591	0.2660	-0.0197	-0.0196
	(0.1709)	(0.1748)	(0.1653)	(0.1664)	(0.0278)	(0.0276)
Constant	7.0273**	5.8154***	5.4132*	4.3309**	1.4827	1.3891***
	(3.3041)	(2.0510)	(2.8773)	(1.9474)	(0.9364)	(0.3919)
R-squared within	0.4347	0.4305	0.4493	0.4452	0.3253	0.3252
R-squared between	0.0080	0.0088	0.0603	0.0606	0.0173	0.0170
R-squared overall	0.1135	0.1166	0.1797	0.1789	0.1197	0.1195

Note: Standard errors in parentheses below coefficients. *** Significant at 1%; ** Significant at 5%; * Significant at 10%. Province and election-year fixed effects included; standard errors clustered at the province level.

The main finding holds across all specifications: FC exerts a negative and statistically significant effect on Invalid, Blank, and Null votes. The FC coefficient is significant at the 1% level for Invalid and Blank ballots, and at the 10% level for Null ballots. These results survive the inclusion and exclusion of the congressional controls without meaningful change in magnitude or precision. The negative sign is consistent with the attribution channel grounded

in rational ignorance: fiscally autonomous provinces generate lower rates of blank and invalid voting because the partisan differential is sufficiently large to justify deliberate valid participation for a larger share of the electorate.

Among the remaining controls, GDP per capita lagged one period enters negatively and significantly at the 1% level for both Invalid and Blank outcomes. Higher income reduces the relative cost of information acquisition and raises the material stake in the electoral outcome; FC and GDP per capita therefore compress the partisan differential through related but distinct channels. The former through the attribution-confusion mechanism at the provincial budget level, and the latter through the voter-level value of getting the electoral choice right.

The *Hegemony* variable, measuring the degree of historical single-party dominance in the province, enters positively and significantly at the 5 to 10% level for Invalid and Blank. When the fiscal outcome is determined by the governor's relationship with the center rather than by the presidential ballot, attribution confusion deepens and the effective electoral choice set narrows simultaneously. The *Hegemony* coefficient therefore captures the additional compression of the partisan differential that political dominance produces beyond what FC alone predicts.

The margin of victory in the preceding congressional election enters negatively and significantly at the 10% level for Invalid and Blank: settled provincial electoral alignments reduce the incentive for blank protest voting, possibly because strong party organization in less competitive provinces more effectively converts potential blank balloters into valid ballot casters.

Reelection is positive and significant at the 5% level for Invalid and Blank. *Fatigue* enters negatively and significantly at the 5% level for Invalid and Blank, interpreted as a mobilization effect: repeated electoral exposure raises voters' ability to connect electoral choices to policy outcomes, reducing attribution confusion. *Education* enters positively and significantly at the 5 to 10% level for Invalid and Blank, supporting the political resource interpretation: in the Argentine context, education raises the probability of deliberate blank protest rather than reducing ballot-completion errors. *Unemployment* lagged one period is not significant for Invalid or Blank.

Decomposition of blank and null ballots

A distinguishing feature of the results is the asymmetry between blank and null ballots, both in the magnitude of the FC effect and in the behavior of several other regressors. This asymmetry

confirms the prediction that the attribution channel operates primarily through the deliberate disengagement margin. The ratio of blank to null estimated coefficients is approximately 7:1, consistent with the theoretical proposition.

The decomposition also reveals a striking sign reversal in the *Reelection* variable. For Invalid and Blank, *Reelection* enters positively and significantly: incumbent reelection contests are associated with approximately 1.6 to 2.1 additional percentage points of blank and invalid voting. For Null ballots, the coefficient is negative and significant at the 1% level, approximately -0.35 percentage points. One interpretation is that reelection elections mobilize protest: voters who oppose the incumbent but perceive no viable alternative express dissent deliberately through a blank ballot, while higher salience simultaneously reduces accidental null voting by inducing greater attention to ballot mechanics.

The dynamic term for *Null Rep* is positive and significant at the 5% level, while the analogous terms for *Invalid Rep* and *Blank Rep* are insignificant. Persistent null voting may reflect stable province-level factors such as voter unfamiliarity with ballot procedures, whereas blank voting responds more readily to the contemporaneous fiscal and political environment. *Unemployment* enters positively and significantly for Null but is not significant for Blank, adding further support to the interpretation that null ballots capture a distinct behavioral phenomenon from the attribution-driven blank protest voting that is the model's primary prediction.

Magnitude of the effects

The FC effect is not only statistically significant but economically large. Taking the preferred OLS estimate of −0.131 for total Invalid ballots, a one standard-deviation increase in FC is associated with a reduction of 2.3 percentage points, approximately 54% of the sample mean of 4.2%. For Blank ballots the analogous calculation yields a reduction of 2.0 percentage points against a sample mean of 3.1%, a proportional reduction of roughly 63%. For Null ballots the effect is substantially smaller: 0.28 percentage points relative to a mean of 1.1%, roughly 25%. Moving a province from the sample mean to one standard deviation above is associated with a reduction in blank voting of roughly two-thirds of its average level, confirming that subnational fiscal architecture is a first-order determinant of invalid ballot behavior.

To contextualize this magnitude, Martinez i Coma & Werner (2019) find that enforced compulsory voting raises invalid vote rates by approximately 3 to 5 percentage points, a proportional effect of 60 to 100% of the cross-national mean in 73 countries. The FC effect on blank voting in this paper is comparable in proportional terms to this single largest institutional

predictor. For Latin America, Power & Garand (2007) find that enforced compulsory voting raises invalid rates by 2 to 4 percentage points; the FC effect on blank voting substantially exceeds this regional benchmark. One caveat applies: the FC effect is identified from within-province variation over time, and within-unit estimates typically provide a conservative lower bound on the true structural relationship.

Robustness checks

Five robustness checks support the baseline findings.

Endogeneity of *Margin* and *Turnout*. Table 4 presents the instrumentation of both with their congressional counterparts. The Kleibergen-Paap LM statistic rejects under-identification well below 1% in every column, and Kleibergen-Paap Wald F statistics comfortably exceed Stock-Yogo critical values, ruling out weak instruments. Endogeneity test p-values fail to reject exogeneity throughout, supporting OLS as the preferred estimator. The IV estimate of the FC coefficient for Invalid is close to the OLS baseline; Blank and Null results are similarly stable.

Oil-producing provinces. Excluding Neuquén, Chubut, and Santa Cruz leaves the FC coefficient negative and significant at 5% for Invalid and Blank on the reduced 20-province sample, ruling out natural-resource heterogeneity as a driver.

Structural stability across the 2001 crisis[2]. Interacting FC with a post-2001 indicator yields an insignificant interaction term in every specification, indicating the FC–invalid voting relationship is a stable structural feature of Argentine fiscal federalism rather than a crisis-driven artifact; the post-2001 indicator itself is negative and significant, capturing a common level shift unrelated to within-province FC variation.

State capacity. Adding provincial public employment per 10,000 inhabitants as a control, the *Employment* coefficient is statistically indistinguishable from zero for all three dependent variables while the *FC* coefficient is essentially unchanged. The simple correlation between *Employment* and FC is -0.34 meaning transfer-dependent provinces have *larger*, not smaller, public bureaucracies, consistent with a patronage interpretation that makes a pure state-capacity confound implausible on its own terms, though both channels remain embedded in the FC.

[2] The 2001 crisis was deemed as one of the most severe in the period under study (Cerro & Meloni, 2013).

Unemployment and GDPpc. Replacing the one-period lags of *Unemployment* and *GDPpc* with three-year pre-election averages leaves the FC coefficient unchanged in magnitude and significance throughout.

Table 4. Instrumental Variable Estimation with Fixed Effects and Robust Standard Errors

Variables	Invalid (I)	Invalid (II)	Blank (I)	Blank (II)	Null (I)	Null (II)
FC	-0.1454***	-0.1465***	-0.1278***	-0.1286***	-0.0167*	-0.0171*
	(0.0457)	(0.0470)	(0.0443)	(0.0455)	(0.0091)	(0.0090)
Unemployment (t-1)	-0.1092	-0.0915	-0.1383	-0.1232	0.0280**	0.0298**
	(0.1137)	(0.0807)	(0.1108)	(0.0798)	(0.0136)	(0.0123)
GDP pc (t-1)	-0.0002**	-0.0002**	-0.0002**	-0.0002**	0.0000	0.0000
	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0000)	(0.0000)
Hegemony (t-1)	0.3970	0.3924**	0.3852	0.3824**	0.0098	0.0075
	(0.2503)	(0.1988)	(0.2467)	(0.1946)	(0.0234)	(0.0205)
Margin Rep	-0.0392*	-0.0392*	-0.0379*	-0.0378*	-0.0026	-0.0026
	(0.0222)	(0.0225)	(0.0207)	(0.0215)	(0.0038)	(0.0039)
Turnout Rep	-0.0813		-0.0704		-0.0059	
	(0.2165)		(0.2084)		(0.0247)	
Reelection	1.7818**	1.5717**	2.1514***	1.9417***	-0.3380***	-0.3415***
	(0.7359)	(0.6968)	(0.7230)	(0.6896)	(0.0926)	(0.0936)
DSVS	-0.0217	-0.0201	-0.0252	-0.0234	0.0037	0.0037
	(0.0186)	(0.0183)	(0.0184)	(0.0181)	(0.0029)	(0.0029)
Fatigue	-1.7694***	-1.6549***	-1.7061***	-1.6060***	-0.0518	-0.0412
	(0.4860)	(0.4970)	(0.4817)	(0.4895)	(0.0754)	(0.0604)
Invalid Rep	-0.0076					
	(0.0306)					
Blank Rep			-0.0146			
			(0.0411)			
Null Rep					0.0333**	0.0335**
					(0.0138)	(0.0137)
Education (t-1)	1.0218	1.0913	1.0644	1.1201	-0.0406	-0.0337
	(0.8181)	(0.8120)	(0.7397)	(0.7414)	(0.1668)	(0.1602)
Population	0.3123	0.3191	0.3115	0.3217	-0.0185	-0.0183
	(0.2150)	(0.2134)	(0.2087)	(0.2091)	(0.0300)	(0.0299)
Underid. test (Kleibergen-Paap rk)	16.343	13.889	16.446	13.889	14.918	12.866
Weak id. Test: Cragg-Donald Wald F	20.429	43.866	21.718	43.866	19.210	38.676
Weak id. Test: Kleibergen-Paap rk Wald F	14.181	25.504	14.681	25.504	13.210	23.247
Endogeneity test (Chi-sq, p-value)	0.2716	0.0966	0.3033	0.1137	0.3987	0.3930

Note: Standard errors in parentheses below coefficients. *** Significant at 1%; ** Significant at 5%; * Significant at 10%. Margin and Turnout instrumented by their congressional-election counterparts measured two years prior. Province and election-year fixed effects included.
Note: these models are exactly identified (one endogenous variable and one instrument) so the overidentification test (Hansen J statistic) has zero degrees of freedom and is not informative.

A final note concerns the causal interpretation of the estimated coefficients. The two-way fixed effects specification with lagged controls and instrumental variables represents a rigorous observational design, but it does not fully establish causality in the strict experimental sense. The design addresses reverse causality, common national shocks, time-invariant provincial characteristics, and short-run economic shocks, but cannot rule out all time-varying confounders. In particular, within-province changes in FC may partly reflect fiscal reform efforts by governors who simultaneously raise own revenues and run more accountable administrations, producing a negative FC-blank correlation through an accountability channel observationally equivalent to the fiscal transparency channel. The empirical contribution is therefore best understood as establishing a robust and theoretically motivated association between fiscal correspondence and blank voting rather than a clean causal effect.

7. Conclusions

This paper asks a question the invalid-voting literature has not previously posed: does the fiscal architecture of subnational government shape the rate at which compelled citizens cast invalid ballots? The central finding is that higher fiscal correspondence is associated with significantly lower invalid and blank ballot rates in Argentine presidential elections, consistent with an attribution channel grounded in rational ignorance: when provincial budgets are dominated by automatic transfers, the transmission chain from presidential choice to observable fiscal outcome runs through the long and opaque automatic-transfers chain that is not worth decoding at individual cost given the near-zero private benefit of a single ballot. The partisan differential is compressed toward zero by attribution confusion, and the deliberation cost premium becomes prohibitive for a share of the electorate.

The blank–null decomposition is another contribution. The FC effect operates overwhelmingly through blank ballots, exactly as the model predicts: blank voting requires a conscious decision and should therefore visibly reflect the compression of the partisan differential induced by low FC, while null ballots combine an accidental component governed by cognitive constraints unrelated to fiscal transparency with a smaller deliberate component that is akin to blank voting. Disaggregating invalid ballots into blanks and nulls, which prior studies have not done, recovers both the fiscal and subnational political dimensions of invalid voting that aggregation obscures.

Two further findings extend the argument beyond fiscal structure itself. *Hegemony* confirms that entrenched political dominance raises the deliberation cost premium independently of fiscal correspondence: in districts where the same coalition has won several presidential elections in a row, opposition voters face a choice set that feels structurally foreclosed. *Reelection* reveals a sign reversal suggesting that the greater visibility of a local election mobilizes engaged voters toward intentional blank protests, while at the same time lowering the incidence of accidental null voting among more attentive citizens. Together, *FC*, *Hegemony*, and *Reelection* identify mechanisms that are conceptually different but empirically complementary, jointly accounting for a substantial share of the cross-provincial, cross-election variation in blank voting that standard national-level determinants leave unexplained.

This paper connects two strands of Argentine political economy that have developed largely in parallel. The fiscal federalism literature has shown that transfer dependency distorts incentives throughout the federal system, sustaining patronage, weakening accountability, and producing hegemony. The invalid-voting literature has shown that blank and null rates vary systematically across provinces in ways existing controls only partly explain. This paper shows that the unexplained variation in the latter is partly accounted for by the mechanisms documented in the former: the same fiscal architecture that distorts legislative incentives and feeds clientelistic networks also generates attribution confusion among provincial citizens, severing the link between participation and perceived fiscal consequence.

The citizen who casts a blank ballot in a low-fiscal-correspondence, hegemony-dominated province is not choosing randomly or out of ignorance: she is responding, in the only way compulsory voting permits, to a subnational political economy that has systematically removed the conditions under which a valid vote feels either fiscally meaningful or politically consequential. Her partisan differential has been compressed to near zero by the opacity of the automatic-transfers mechanism, and rational voters do not invest in information that cannot raise a negligible expected payoff. The public choice implication is direct: transfer dependency is not merely a fiscal inefficiency in the Brennan-Buchanan (1980) sense, nor merely a distortion of legislative incentives in the Jones et al. (2002) sense. It is also a generator of rational ignorance at the intensive margin of democratic participation, converting compulsorily present but fiscally disconnected citizens into blank balloters. Reforms that increase own-revenue financing at the subnational level would not only improve fiscal accountability in the intergovernmental system but also raise the quality of deliberate electoral participation among citizens who currently face a partisan differential too small to justify valid voting. The fiscal

federalism reform question and the democratic quality question are, in this framework, the same question.

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