World Development 195 (2025) 106999

Contents lists available at ScienceDirect

World Development

journal homepage: www.elsevier.com/locate/worlddev

# The origins of dual malapportionment: Long-run evidence from Argentina ☆

Victoria Paniagua [a,*,1], Joan Ricart-Huguet [b,1]

[a] Department of International Relations, London School of Economics and Political Science, Houghton St, London WC2A 2AE, UK
[b] Department of Political Science, Loyola University Maryland, 4501 N. Charles St., Baltimore, MD 21210-2699, USA

ARTICLE INFO

*Keywords:*
Malapportionment
Legislature
Cabinet
Political elites
State formation
Institutional complexity
Argentina

ABSTRACT

Legislative malapportionment often results from a credible commitment between elites from core urban regions and peripheral rural regions that favors the latter. Research shows that such agreements typically arise at critical junctures like the birth of federations, constitutional conventions, and transitions to democracy. But why do elites in core regions, often the most populous and prosperous, accept to be persistently underrepresented? Why do these elites not renege and try to reverse their fortunes in the legislature? We argue that core region(s) may become overrepresented in the executive cabinet as a compensation mechanism. We evaluate this argument leveraging a novel dataset of all ministers and legislators in Argentina (1860–2015). We confirm that *legislative malapportionment* has existed since the 1800s and has underrepresented large provinces, notably Buenos Aires. However, we show that existing literature has overlooked *cabinet malapportionment*—Buenos Aires has historically been overrepresented in the executive, balancing its legislative underrepresentation. We argue that "dual malapportionment" facilitated state formation by lowering the risk of interregional conflict in the 19th century. In the 20th, we provide evidence suggesting that Buenos Aires' demographic and economic dominance, as well as its dense elite networks, facilitated the persistence of its cabinet dominance. Our findings highlight the informal dynamics of inter-branch compensation mechanisms among elites, which may enable the emergence and maintenance of heterogeneous polities over time.

## 1. Introduction

Legislative malapportionment is a widely studied source of bias in political representation. It is defined as the discrepancy between the share of legislative seats held by electoral districts and their share of voters or population (Samuels & Snyder, 2001). Research examining its political and economic consequences shows that it favors rural, often more conservative constituencies (Beramendi, Boix, Guinjoan, & Rogers, 2022; Boone & Wahman, 2015), skews the allocation of government resources toward overrepresented districts (Ansolabehere & Snyder, 2008; Galiani, Torre, & Torrens, 2016; Gibson, 2004; Gibson & Falleti, 2004; Horiuchi & Saito, 2003), contributes to uneven regional development (e.g., Athias & Schneider, 2021; Bhavnani, 2021; Imai, 2022), and biases representation in favor of constituencies that support regressive taxation and lower fiscal capacity (Ardanaz & Scartacini, 2013). The resulting consensus is that legislative malapportionment distorts the democratic principle of "one person, one vote" (Dahl, 1956) because it is misalinged with the preferences of voters and legislators (Beramendi et al., 2022), making it a "pathology of democratic systems" (Shugart & Taagepera, 1989, pp. 14–15).

Some of these studies take malapportionment as exogenous while others consider it as endogenous to political conditions, particularly to the balance of power between groups that surfaces at critical junctures,

☆ For useful discussions and comments, we thank Ernesto Calvo, José Carlos Chiaramonte, Ana de la O, Alberto Díaz-Cayeros, Kent Eaton, Jean Paul Faguet, John Londregan, Juan Ignacio Máscolo, Didac Queralt, Diego Reynoso, Dan Smith and participants at the Descriptive Research Conference at the University of Massachusetts at Boston, the Institution for Social and Policy Studies summer seminar at Yale University, the European University Institute, the Santa Fe Institute, the WhoGov Workshop and the CIR seminar at the University of Oslo, as well as at the Annual Meetings of the American Political Science Association, European Political Science Association, and Midwest Political Science Association. We also thank Dylan Carlson, Sahshe Gerard, Sofía Masdeu, and Michelle Reilly for their dedicated research assistance.

* Corresponding author.
*E-mail addresses:* v.paniagua@lse.ac.uk (V. Paniagua), jricart-huguet@loyola.edu (J. Ricart-Huguet).

[1] Both authors contributed equally.

[2] This pattern mirrors the concessions made to smaller (and Southern, slave-holding) states during the 1787 U.S. Constitutional Convention such as the "three-fifths compromise", which allowed Southern states to count enslaved individuals as three-fifths of a person for the purposes of representation in the House of Representatives, and the decision that each state would have two senators regardless of population (Balinski & Young, 2010).

https://doi.org/10.1016/j.worlddev.2025.106999

Available online 27 June 2025

such as a constitutional convention, a transition to democracy, or during key electoral and political reforms. According to this second view, legislative malapportionment is a tool used by rural and conservative elites to preserve their economic and political interests (Acemoglu & Robinson, 2008; Albertus & Menaldo, 2018; Ardanaz & Scartacini, 2013; Balinski & Young, 2010; Bruhn, Gallego, & Onorato, 2010; Ticchi & Vindigni, 2010). Sparsely populated regions risk being marginalized by larger urban constituencies whenever representation is proportional to population, so larger provinces can use malapportionment as a concession to smaller provinces. This compromise favors the cooperation of smaller regions and increases their incentives to partake in the state during its formative years, especially in federal states, which tend to be more heterogeneous (Riker, 1964). In this way, legislative malapportionment is seen as the result of bargaining among regional elites with divergent socioeconomic interests. For instance, in Latin America, Samuels and Snyder (2001, p. 670) suggest that "overrepresentation of rural districts potentially served as a tool for incorporating rural elites into nation-building projects during the nineteenth and early twentieth century".[2]

Existing accounts raise an important puzzle: Why do the most populous regions accept to be persistently underrepresented? Why do they not renege and try to reverse their fortunes? These are particularly interesting questions in contexts where the largest region is also the most economically prosperous (e.g., Buenos Aires in Argentina, São Paulo in Brazil). One possible explanation is that a coalition of overrepresented regions may successfully block such changes in Congress.[3] Another one is that incumbent national elites may need the support of such rural, overrepresented regions to advance their policy agenda in favor of core (urban) regions in the legislature (Beramendi & Rogers, n.d.; Gibson & Calvo, 2000).

Both reasons are important, but we propose a complementary explanation thus far overlooked: Demographically and economically dominant regions may be powerful in the executive. The distribution of ministries can serve as a compensatory mechanism that facilitates territorial unity in the often turbulent early decades of state formation and beyond. Whereas legislative malapportionment amplifies the voices of typically smaller and rural regions, cabinet malapportionment in favor of large and economically dominant regions should allow them to steer public policy, protect their economic interests, and thus increase their willingness to remain in the union in spite of legislative malapportionment. We coin the term "dual malapportionment" to characterize the coexistence of legislative overrepresentation of some provinces and cabinet overrepresentation of others.

Overlooking the distribution of power in the cabinet seems particularly problematic in countries that combine high levels of legislative malapportionment with strong presidential systems, such as Argentina. Since the foundation of the federation, the Electoral College, Senate, and Chamber of Deputies have overrepresented smaller, rural, and poorer provinces to the detriment of Buenos Aires, the larger, more urban, and richer. Indeed, Argentina has been depicted as an archetypal example of legislative malapportionment (Gibson & Calvo, 2000; Gibson & Falleti, 2004; Samuels & Snyder, 2001; Snyder, 2000), the origins of which have been traced back to the Constitution of 1853 (Reynoso, 2012). At the same time, Argentina has been characterized as a case of hyperpresidentialism (Benton, 2003; Carmagnani, 1993; Rose-Ackerman & Desierto, 2011) because the executive has long played a central role in the political system. Since the creation of the union, the president has concentrated significant constitutional powers, including the authority to declare a state of siege, enact federal interventions, and initiate legislation (Mustapic, 2000).

In spite of this, nobody has examined the *provincial* composition of Argentina's cabinets to assess whether they extend or instead counterbalance the advantage of smaller provinces. This is puzzling given that presidents "delegate significant authority over policy formulation, enactment, and implementation to ministers" in many Latin American countries (Martínez-Gallardo & Schleiter, 2015, p.232) and that ministers matter for "who gets what" (Martínez-Gallardo, 2014) even though they do not formally represent a province or constituency.[4]

To address this gap, we leverage a bespoke dataset on Argentine political elites that spans from Argentina's foundation in 1860 to 2015. It compiles information on all Argentine deputies, including the province that they represent, and all ministers that served in national executive cabinets, including their province of birth. We combine these data with province-year population data from all historical censuses. We restrict our analysis of the legislative branch to the lower house, the Chamber of Deputies or *Cámara de Diputados*.[5] This is the harder case because the number of seats should in theory correspond to population size while, in the Senate, each province receives the same number of seats.[6]

We confirm existing findings that smaller provinces have been overrepresented and Buenos Aires underrepresented in the Chamber of Deputies (Cabrera, 1991, 1992; Calvo & Escolar, 2005; Gibson & Calvo, 2000; Reynoso, 2012). We note that Buenos Aires' underrepresentation in the 19th and early 20th century stemmed primarily from the Senate and the Electoral College. Its underrepresentation in the Chamber became more pronounced during the second half of the 20th century, as a result of the 1949 constitutional reform under Juan D. Perón's presidency and later the 1973 and 1983 electoral reforms under military regimes (Calvo & Escolar, 2005), likely designed to favor rural, conservative provinces in anticipation of return to civilian rule (Albertus & Menaldo, 2018).[7] When Argentina transitioned to democracy in 1983, 44% of the seats in the Chamber of Deputies were assigned to provinces that accounted for only 31% of the national population. This distribution of deputies remains in place to this day, with important distributive consequences (Ardanaz & Scartacini, 2013; Gibson & Calvo, 2000).

We show, for the first time, that smaller provinces have been underrepresented in the cabinet throughout Argentina's history, while Buenos Aires has been consistently overrepresented. The city and province of Buenos Aires have comprised an average of 44% of the population and 56% of the minister-years between 1860 and 2015.[8] Furthermore, the correlation between legislative and cabinet malapportionment is negative for most of Argentina's history because of its hegemon, Buenos Aires. Smaller provinces have decisively influenced the law-making process by controlling the legislature. Buenos Aires, for its part, has long dominated policy-making and its implementation via the cabinet.

We interpret this long-run trade-off as an equilibrium in which executive and legislative representation are substitutes. In other words, dual malapportionment operates as an inter-branch compensation mechanism. This helps explain why, despite numerous regime changes and significant institutional instability, the federation has remained intact for so long and why Buenos Aires has refrained from attempting to overturn legislative malapportionment.

[3] For example, constitutional amendments in the United States require a two thirds majority in both the House of Representatives and the Senate and three fourths of state legislatures. In Argentina, amendments require two thirds in each chamber.

[4] Similar findings emerge from works in Europe (Alexiadou, 2016) and Africa (Ricart-Huguet, 2021).

[5] Throughout the paper we will refer to this body as "Chamber" or the "legislature" unless otherwise specified.

[6] Upper houses are generally more malapportioned than lower houses (Samuels & Snyder, 2001) and upper houses are responsible for significantly distorting the preferences in the electorate in three fourths of democracies (Beramendi et al., 2022). In Argentina, the province of Buenos Aires (18 million inhabitants) has as many senators as Santa Cruz (300,000 inhabitants).

[7] We thank Kent Eaton for this point.

[8] Tallies always concern "minister-years", even if we may sometimes use the shorthand "ministers" for convenience.

We complement our quantitative description of dual malapportionment with a historical narrative to explore possible mechanisms driving this phenomenon. By combining biographical information from our dataset with secondary sources, we identify the two most plausible mechanisms underlying Buenos Aires' dominance in the cabinet. First, we propose a *structural incentives mechanism*. Buenos Aires has historically been the most populous and the most economically developed province in the country. We suggest that its demographic weight incentivized political parties to select presidential candidates from it, at least since the adoption of universal male suffrage in 1916. Its economic importance has long made it a hub for economic and political elite networks from which presidents have traditionally chosen their ministers.

Second, we advance a *political economy mechanism* behind Buenos Aires' dominance in cabinets. Our historical narrative traces the bargain between provincial elites and Buenos Aires to the time the latter joined the federation in 1860. The provinces were overrepresented in the Senate, the Electoral College, and later on in the Chamber of Deputies as well, but they tacitly allowed Buenos Aires to dominate the cabinet. This reduced incentives for civil conflict and secession during early state formation that laid the foundations for the long-run equilibrium we observe. Buenos Aires benefited from executive discretion via the constitutional powers conferred to the presidency (Carey & Shugart, 1998; Cox & Morgenstern, 2001) while legislative malapportionment granted smaller provinces access to federal fiscal transfers (Faletti, Calvo, & Gibson, 2004; Jones, 2001; Porto & Sanguinetti, 2001).

Our paper advances three research agendas. Until recently, to study cabinet composition meant to study the partisan composition of cabinets. Most famously, Gamson's Law is the empirical regularity that a party's share of ministries is proportional to its share of legislative seats in parliamentary coalitions (Browne & Franklin, 1973). Some recent studies show that ethnicity (Francois, Rainer, & Trebbi, 2015; Raleigh & Wigmore-Shepherd, 2020), cliques (Woldense, 2018), and gender (Nyrup, Yamagishi, & Bramwell, 2024) are also relevant dimensions. We study the *regional* or provincial composition of cabinets (Ricart-Huguet, 2021), which has been overlooked even though regional boundaries overlap with sectoral economic and political interests (Berkowitz & Clay, 2012; Boone, 2024).

Second, we examine the relationship between representation in the legislature and in the cabinet. We are aware of only two similar studies. Hiroi and Neiva (2022) find that the most populous states in Brazil, though underrepresented in the legislature, control many of the most important federal offices, including the presidency, ministries, and the presidency of the Chamber. Their results are consistent with our argument that legislative and executive representation are substitutes. By contrast, Bhavnani (2015, 69) shows that legislative malapportionment "doubly penalizes" large electoral districts in state elections in India (i.e., they are underrepresented in both state legislatures and cabinets) because large parties "focus on winning relatively small constituencies". Legislative and executive representation are complements in his case.[9]

Finally, our argument and results are an example of institutional complexity (Faguet & Shami, 2022). Specifically, Argentina is a case of *instrumental mismatch* because the malapportionment in each branch (the mismatch) is not haphazard but instrumental—their goal is to allocate power in each branch. The resulting institutional arrangement is seemingly *incongruous* because the persisten dual malapportionment we uncover is large and arguably inefficient. Yet, we argue that it allowed smaller provinces to incorporate Buenos Aires into the federation—a necessary condition for their economic survival—while Buenos Aires maintained autonomy in policy making and implementation via the cabinet. Argentina is one of several cases in Latin America where incongruous institutions and a high "peace tax" (inefficient interregional transfers) facilitated state formation but impeded state building (Mazzuca, 2021, 8). In other words, the unity of the federation came at the cost of inefficient institutional and fiscal equilibria that have long hindered the structural transformation and development of most provinces.

## 2. Motivation and puzzle

Cabinets often have a representation dimension, even if informally. This is particularly true in regimes that are non-democratic or semi-democratic, where the legislature typically has limited powers, but also in democratic systems with political cleavages, such as multinational states and otherwise heterogeneous states (Arriola, 2009; Martínez-Gallardo, 2014). Scholars have examined cabinet representation through the lenses of ideology and policy-making strategies (Alemán & Tsebelis, 2011; Alexiadou, 2016; Neto, 2006; Neto & Samuels, 2010), economic incentives (Abramson, 2024; Hallerberg & Wehner, 2018), partisanship (Huber & Martinez-Gallardo, 2008; Martínez-Gallardo, 2014), gender (Arriola & Johnson, 2014; Nyrup et al., 2024), and ethnicity (Beiser-McGrath & Metternich, 2021; Vogt et al., 2015) but rarely through regional lenses (Ricart-Huguet, 2021).

Argentina satisfies both conditions: its tumultuous history includes extended non-democratic periods as well as a deep-rooted cleavage between a dominant region (Buenos Aires) and the rest. Many countries feature this core-periphery cleavage, from federations such as Brazil (São Paulo) and Canada (Ontario) to unitary countries such as the United Kingdom (the Greater London Region), Peru (Lima region), Uganda (Buganda), and Senegal (Dakar-Thiès region).[10]

Argentina is a particularly good case to test our main insight—that the legislative underrepresentation of its hegemon, Buenos Aires, may be compensated in the cabinet—for at least three reasons. It is seen as an archetypal case of malapportionment in the legislature that favors small, conservative provinces (e.g. Calvo & Medina, 2001; Calvo & Murillo, 2004; Gibson & Calvo, 2000; Gibson & Falleti, 2004). Second, the executive also matters greatly (Benton, 2003; Martínez-Gallardo, 2014). The Constitution grants significant powers to the president, including the power to veto laws passed by Congress, the authority to issue decrees with the force of law (subject to legislative review), and the ability to propose legislation, allowing the president to shape the legislative agenda. Argentina's presidentialism has been characterized as "limited centralism": While the president has substantial constitutional powers, the legislature retains the authority to block, review, and reject executive initiatives.[11] As a result, presidents require a minimum base of support in Congress to advance their agenda (Mustapic, 2000). Third, Argentina is a hard case insofar as the historical literature has widely portrayed Buenos Aires as the political loser of the power struggle that confronted it with the rest of the territories that historically comprised the *Virreinato del Río de la Plata* under Spanish rule (Reynoso, 2012).

The puzzle facing standard accounts is why Buenos Aires would accept to systematically be the political loser given that it was, and has always remained, the demographic and economic core of Argentina.

[9] In the conclusion, we conjecture that cabinets are more likely to compensate dominant regions in presidential systems, such as Argentina and Brazil, than in parliamentary ones, such as India, because cabinets emanate directly from the legislature in the latter.

[10] Large countries allow a wide divergence in the natural endowments and economic production profiles across regions, and therefore a variety of conflicting economic interests (Berkowitz & Clay, 2012; Paniagua & Vogler, 2022). Our argument may not be relevant for small homogeneous countries, such as Iceland.

[11] Congress makes laws, proposes and reviews constitutional amendments, and oversees and evaluates executive decrees.

## 3. Empirical expectations

We suggest that a possible solution to this puzzle is that Buenos Aires has been overrepresented in the cabinet, thus influencing policy design and implementation from the executive. The rationale is that underrepresented elites in Congress have incentives to seek representation in other institutional arenas. The cabinet, where appointments follow informal selection procedures rather than strict rules, is the most obvious arena.[12] Our main empirical expectation is thus descriptive, but we also propose two mechanisms that undergird dual malapportionment.

We call the first a *structural incentives mechanism*. Regions that are very economically and demographically powerful may be particularly successful in gaining the presidency and ministries because their economic and demographic power shapes political incentives. Demographic weight means political weight, at least under universal suffrage. Moreover, economic dominance usually leads to a concentration of social, economic and human capital, and therefore denser elite networks. These two factors make a hegemon such as Buenos Aires a prime target for political parties recruiting presidential candidates that are experienced, well-connected, and can carry votes from the hegemonic region. In addition, incumbent presidents have incentives to recruit cabinet members from the hegemonic region, where they can find well-connected and competent cadres to successfully implement policy and gain reelection. We consider these political incentives as structural because the distribution of population and economic activity in a country is mostly fixed in the short run.

Second, we advance a *political economy mechanism*. During the foundational decades of a state—its birth and early consolidation—strategic representation in the legislature and the executive may facilitate bringing territories together. We know that legislative malapportionment is a crucial institutional tool that serves as a "glue" for state formation and state building, particularly in heterogeneous states. Legislative malapportionment contributes to a sustainable (federal) pact (Riker, 1962) because it facilitates the collaboration of smaller units that may otherwise fear political control by larger units. Regional elites of smaller units can use legislative malapportionment as an instrument to preserve their interests (Acemoglu & Robinson, 2008; Bruhn et al., 2010; Faletti et al., 2004).[13] In particular, conservative elites have long used legislative malapportionment to secure their power. For instance, the 1787 Constitutional Convention in the US, favored Southern, conservative states such that three-fifths of the slave population would count for determining taxes and representation in the House of Representatives. This reform was interpreted by the Supreme Court at that time as "a matter of compromise and concession, confessedly unequal in its operation, which was indispensable to the union of States having a great diversity of interest, physical condition, and political institutions".[14] In Prussia, Ziblatt (2008) finds that the Chamber of Deputies during the 19th and 20th centuries was deliberately biased to overrepresent conservative landowners. In Latin America, autocratic elites have engaged in legislative malapportionment and other political reforms, such as decentralization to more conservative provinces, to cement their political power (Albertus & Menaldo, 2018; Eaton, 2006).

We augment these arguments by proposing that the largest units are less likely to contest such legislative malapportionment if they are overrepresented in the cabinet. In the foundational moments of the state, elites from smaller and typically poorer and more rural regions will implicitly acquiesce to the hegemon's dominance, including in the cabinet, as long as they can maintain the upper hand in the legislature. Thus, cabinet malapportionment can also serve as a "glue" to maintain territorial unity during the early period of state formation.[15]

This institutional equilibrium creates a lock-in, a structure of incentives among different regional elites that may be difficult to reverse even after the state has been consolidated and units can no longer credibly threat to secede. On the one hand, smaller regions reap benefits from legislative malapportionment (Galiani et al., 2016). The overrepresentation of smaller units leads to policy bias in their favor (Galiani et al., 2016). For instance, they benefit from "reallocative federalism" (Faletti et al., 2004), which gives them access to a particularly high proportion of central government funds (Jones, 2001; Porto & Sanguinetti, 2001).[16]

On the other hand, overrepresentation in the executive affords the hegemonic region some discretion over policy implementation and the ability to shape policies, including those passed by the legislature, to favor their interests (Bonvecchi & Scartascini, 2011). Further, the executive can use discretionary resources to build legislative and cabinet coalitions to advance its policy agenda (Neto, 2006) and deploy its constitutional powers for this purpose, including executive decree, veto and agenda-setting powers (Carey & Shugart, 1998). Overall, and unlike the US, presidents in Latin America tend to be "proactive" in imposing themselves against institutionally weaker, mostly "reactive" legislatures (Cox & Morgenstern, 2001).

In this way, "dual malapportionment", while initially serving the purpose of holding the country together, can become a long-run institutional equilibrium. This helps us understand why countries such as Argentina fail to address the negative consequences of legislative malapportionment, notably fiscal imbalances. Scholars examining the economic and distributive consequences of malapportionment have shown that distortions in the federal transfers system can lead to fiscal deficit and low economic performance (Ardanaz, Leiras, & Tommasi, 2014).[17] We suggest that these negative economic outcomes are difficult to change because dual malapportionment is an entrenched institutional equilibrium.

In a nutshell, then, the largest region(s) may be overrepresented in the cabinet to compensate their legislative underrepresentation.

## 4. Data

We compile two different databases of political elites to examine representation in the legislative and the executive, and in particular to determine whether and the extent to which Buenos Aires has been

[12] This is particularly the case in presidential systems, where the president has full discretion to appoint ministers.

[13] As Faletti et al. (2004, 2) put it, "Overrepresentation may well be beneficial to the stability and territorial integrity of federal systems, particularly those with significant economic and demographic asymmetries between their subnational units. Territorial overrepresentation can function as a compensatory mechanism between otherwise unequal units, providing political leverage to weak states or provinces that would otherwise be unavailable to them in the face of the economic or demographic clout of dominant states or provinces".

[14] Quote from Balinski and Young (2010, p. 7).

[15] In the context of forming a federation, smaller districts are unlikely to accept a fully proportional system of legislative representation, as it would subject them in the long run to the preferences of more populous districts. Conversely, larger districts may be more willing to tolerate underrepresentation in the legislature as part of a state-formation compromise, provided they can dominate the policymaking process through the executive branch. In turn, smaller districts have incentives to accept their subordinate position in the executive branch, as it helps enforce the commitment of larger and usually more economically prosperous districts to remain part of the union.

[16] Legislative malapportionment has been associated to the misallocation of public resources in Latin America (Ardanaz & Scartacini, 2013; Eaton, 2001; Faletti et al., 2004; Galiani et al., 2016; Gordin, 2010), the United States (Ansolabehere, Gerber, & Snyder, 2002), the European Union (Dragu & Rodden, 2011; Rodden, 2002), and Japan (Horiuchi & Saito, 2003).

[17] In line with this, some studies have shown incumbents at the province level use federal transfers for clientelistic purposes (Gervasoni, 2010, 2018; Giraudy, 2015); in addition, the national government uses federal transfers to promote the continuity of loyal subnational non-democratic governors (Edward, 2005; Gervasoni, 2010; Giraudy, 2010).

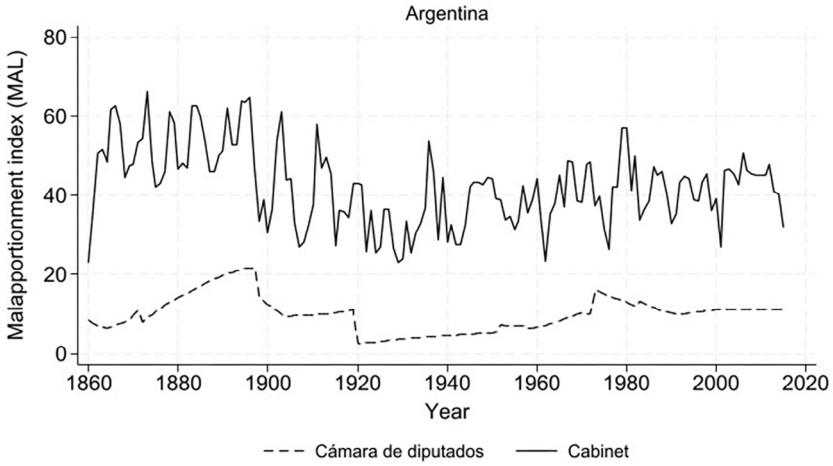


**Fig. 1.** Malapportionment in the cabinet and in the legislature (1860–2015).
Notes: The graph shows the yearly values of the malapportionment index for Argentina's Cámara de Diputados and cabinet. The units are provinces.

overrepresented in cabinets over time. The first consists of data on all members of the lower chamber (*Cámara de Diputados*) and upper chamber (*Senado*) of Argentina's Congress between 1860 and 2015. These data were retrieved from the Congress online repository for the post-1990 period and from the *Nómina Alfabética de Diputados de la Nación (1860–1991)* for the previous period. In both cases, we gather the names of all members of Congress, their party affiliation, and the period of their mandates.[18] Second, we gather Paniagua's (2018) Argentine elites dataset to construct a new database with biographical information of all individuals that served in cabinets between 1860 and 2015, namely presidents and ministers. The key variables to proxy for representation are the province for which deputies were elected and the ministers' province of birth.[19] We aggregate the legislative and executive datasets from the individual to the province level to obtain province-year level measures of representation, namely the percentage or share of deputies and ministers from each province by year and by historical period.

To determine over or underrepresentation, we combine these data with province-year population data from national censuses (1860, 1869, 1895, 1914, 1947, 1960, 1970, 1980, 1991, 2001, and 2010). We interpolate population by province linearly between censuses to obtain a province-year population panel that is balanced.

To the best of our knowledge, this is the first dataset to compile information on the provincial origins of Argentine cabinet members. We believe that coding birthplace of ministers is a strength. Where a minister grows up or develops their political career is endogenous and would likely contribute to inflate the share of ministers "from" Buenos Aires because the periphery to core migration flow among elites is higher than core to periphery. The main limitation in our dataset is that most sources did not distinguish whether someone was born in the federal district of Buenos Aires (later known as the Autonomous City of Buenos Aires) or in the Province of Buenos Aires. As a result, we were forced to combine these two categories.

### 4.1. Malapportionment

We begin with a visual exploration of malapportionment in the legislature and the cabinet following the formula in Samuels and Snyder (2001, p. 655) : $MAL_{leg} = 1/2 \sum_i^n |dep_i - pop_i|$, where $dep_i$ is the percentage of all deputies allocated to district $i$, and $pop_i$ is the percentage of the overall population residing in district $i$. In the cabinet, $MAL_{exec} = 1/2 \sum_i^n |min_i - pop_i|$, where $min_i$ is the percentage of ministers born in district $i$.

The MAL index ranges between 0 and 100 such that, in a country with two constituencies, if one held all seats but no people and the other held everyone but no seats, $MAL = 1/2 * (|100 - 0| + |0 - 100|) = 200/2 = 100$. In reality, MAL in lower chambers is rarely above 15. A score of 10, for example, "means that 10 percent of the seats are allocated to districts that would not receive those seats if there were no malapportionment" (Samuels & Snyder, 2001, p. 656).

Fig. 1 plots the yearly levels of malapportionment in the Chamber (*Cámara de Diputados*) and in the cabinet from 1860 to 2015. Legislative malapportionment in Argentina is high, as has been documented, at 10.7 on average. We find that it is much higher in the cabinet, at 42.6 on average. It is also more volatile for several reasons. First, malapportionment in the Chamber changes slowly from one year to the next because population shares change slowly. We only observe somewhat sudden changes when seats are reapportioned, often following the Constitution's mandate that the number of seats per province be based on the latest national census. Second, cabinet seats are not allocated to provinces by law. Some of this variation is of course orthogonal to the minister's province of birth because the regional cleavage is only one of several criteria for political selection, others being partisanship, competence, loyalty, gender, etc. Third, the average cabinet size over the 1860–2015 period is only 13.6 members (president and ministers) compared to 162 deputies, which means that some provinces are not represented in the cabinet in a given year.[20]

Indeed, we find that multiple small provinces are in fact not represented in the cabinet for decades. Some have been represented by fewer

[18] We begin our analysis in 1860, when Buenos Aires joins the federation and we restrict it to the lower chamber because the upper chamber is malapportioned by design by giving the same number of senators to each province.

[19] We work under the assumption that ministers tend to advocate for the interests of their provinces of origin. Although we do not test this assumption in the paper, we think it is reasonable they do so to strengthen their political networks back home. A contemporary example is Alicia Kirchner, who served as Minister of Social Development under the presidencies of Néstor Kirchner and Cristina Fernández de Kirchner. During her tenure, she directed significant resources from her office to her home province, Santa Cruz. She allocated $371.5 pesos per capita to individuals living below the poverty line in the province compared to the national average of $209 per person. Subsequently, she successfully ran for office as Governor and Senator of Santa Cruz (Obvio: Santa Cruz, la más beneficiada, 2007).

[20] One reason for the slightly downward trend in $MAL_{exec}$ may be that, while the number of provinces has increased from 13 in 1860 to 24 since 1991, so has the number of cabinets members increased from 10 to 23.

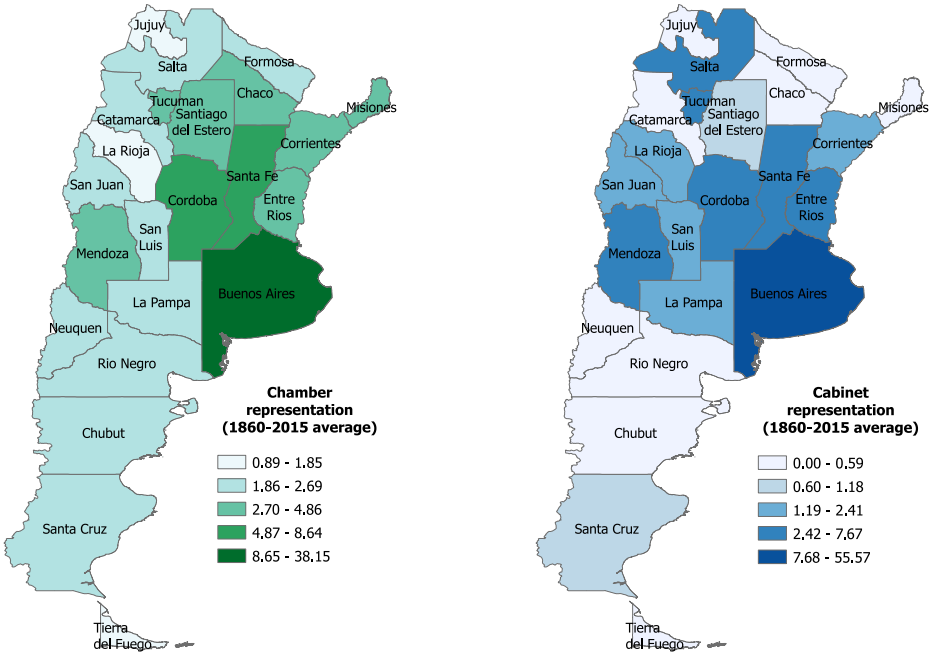


**Fig. 2.** Share of deputies (left) and share of ministers (right) by province in Argentina civilian governments (1860–2015).

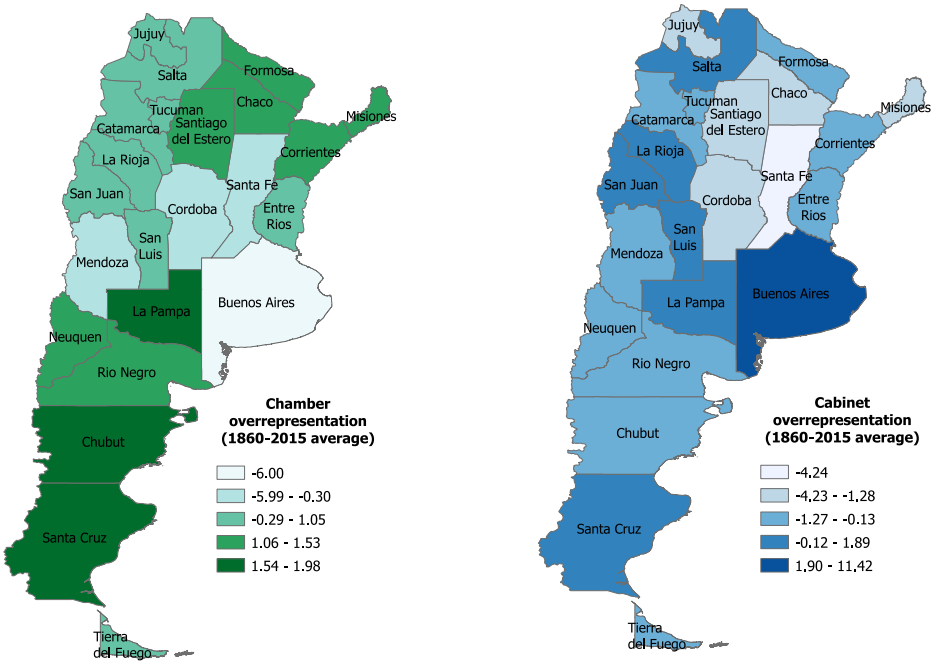


**Fig. 3.** Share of deputies (left) and share of cabinet ministers (right) by province in Argentina for all civilian governments net of population share (1860–2015).

than ten ministers since 1860 (Chaco, Chubut, Formosa, Misiones, Neuquen, Rio Negro) and one of the 13 founding provinces (Jujuy) has never been represented in the cabinet.[21] By contrast, eight ministers hail from Buenos Aires, on average. We examine these province-level patterns systematically in the next section.

[21] Neither has Tierra del Fuego, but it was only constituted as a province in 1991.

## 5. Long-run representation in the legislature and the executive

$MAL$ is a measure aggregated at the national level. To explore province-year patterns of over and underrepresentation in the *Cámara de Diputados* and the cabinet, we use the core component of $MAL$, such that $dep_i - pop_i > 0$ implies overrepresentation in the chamber and $min_i - pop_i > 0$ implies overrepresentation in the cabinet, whereas $dep_i - pop_i < 0$ and $min_i - pop_i < 0$ imply underrepresentation.

The maps in Fig. 2 show the average representation by province in the chamber ($dep_i$) and the cabinet ($min_i$) for all civilian governments in the 1860–2015 period. Buenos Aires (city and province) have the

most deputies (38.15%) and the most ministers (55.57%) while, at the other end, many provinces have fewer than 3% of deputies and fewer than 2% of ministers. We exclude years of military rule from our analysis because, during those periods, the country was governed by a small group of military leaders (a *junta* or *triunvirato*), and the legislative branch was either dissolved or functionally irrelevant as a political bargaining arena. Consequently, dual malapportionment held no significance during these times.

Whether these numbers are high or low depends on population shares, so the maps in Fig. 3 are analogous but show representation in the chamber net of population, i.e., $dep_i - pop_i$ and $min_i - pop_i$. Even the smallest province has received a floor of two deputies since 1853, four since 1973, and five since 1983, a major source of legislative malapportionment (Reynoso, 2012, 184). Buenos Aires has been clearly underrepresented (44% of Argentina's population but only 38% of its deputies, hence the -6%), as others have explained (Bidart-Campos, 1993; Cabrera, 1991; Gibson & Calvo, 2001). That is not so much the case for the two medium-sized provinces, Córdoba and Santa Fe (9% of the population and around 8.5% of the deputies in each case). Small provinces have benefited from malapportionment ($2 > dep_i - pop_i > 0$).[22] For example, Formosa obtains an average of 2.5% of deputies with 1% of the population.

The right map in Fig. 3 shows one plausible reason why Buenos Aires and its influential elites have not resisted their "fate" in the Chamber: 55.57% of ministers in Argentina's history (1860–2015) were *porteños* (from the port city) or *bonaerenses* (from the province), 11.5% more than its population share. All other provinces are either underrepresented or at most slightly overrepresented ($-4.24 < min_i - pop_i < 1.89$). The right map also reveals that the two medium-sized provinces, Córdoba (−1.3) and Santa Fe (−4.24), suffer from cabinet malapportionment in addition to legislative malapportionment, something we reexamine below. In sum, Buenos Aires is an outlier in both branches when we consider the over 150 year of Argentina's history. We next unpack representation in the two branches by period.

### 5.1. Legislative and executive representation: complements or substitutes?

We divide Argentina's history into three broad periods. The first, characterized by state formation and political instability, ranges from the moment Buenos Aires joined the federation in 1860 to right before the first elections under universal male suffrage (1915). The second goes from the first victory of the *Unión Cívica Radical* (UCR) in 1916 to the end of the last military regime in 1982. The last and current period starts in 1983 with the transition to democracy. We find that representation in the legislature and the cabinet are substitutes overall and for the second and third periods (Fig. 4). Only prior to 1915 does Buenos Aires not suffer from much legislative malapportionment in the lower Chamber and therefore the correlation is positive, arguably because it still maintained a credible threat to break up the federation (see Section 7).

Fig. 4 also reveals the extent to which Buenos Aires is a political outlier in addition to a demographic and economic outlier. We exclude it in Fig. 5 to show that (1) the negative correlation is entirely driven by Buenos Aires and that (2) the second and third largest provinces, Córdoba and Santa Fe, are "doubly penalized", as the maps suggested.[23] While our paper focuses on representation dynamics between Buenos Aires and the rest, we think these two descriptive findings are hypotheses-generating. As for (1), it is not obvious ex ante why a province that punches above its demographic weight in the legislature should also do in the cabinet. One possibility is that more legislative weight buys more political influence, not just to pass laws but more generally, including to marginally influence cabinet composition. As for (2), we emphasize that some nations comprise one region that is sufficiently hegemonic to influence cabinet composition. Such structural advantages may not extend to mid-sized provinces. In the remainder of this article, we examine whether the mechanisms advanced in Section 3 (*structural incentives* and *political economy incentives*) help explain Buenos Aires' overrepresentation in the cabinet, our main finding.[24]

## 6. Sources of Buenos Aires' cabinet overrepresentation

We reasoned that Buenos Aires' demographic and economic size should help explain its oversized role in the cabinet (*structural incentives*). Thus, we test whether years in which Buenos Aires grew more, relative to the rest of Argentina, are associated with increased cabinet shares. We measure demographic growth and economic growth, respectively, as the change in Buenos Aires' share of population and of nominal GDP between year $t-1$ and year $t$.[25] Thus, $\Delta pop_{BA,t} = \frac{pop_{BA,t}}{pop_{Arg,t}} * 100 - \frac{pop_{BA,t-1}}{pop_{Arg,t-1}} * 100$ is the percentage increase in population share and $\Delta GDP_{BA,t} \frac{GDP_{BA,t}}{GDP_{Arg,t}} * 100 - \frac{GDP_{BA,t-1}}{GDP_{Arg,t-1}} * 100$ is the percentage increase in GDP share. The outcomes are the increase in share of ministers from Buenos Aires: $\Delta min_{BA,t} = \frac{min_{BA,t}}{min_{Arg,t}} * 100 - \frac{min_{BA,t-1}}{min_{Arg,t-1}} * 100$. We present the results of this first-difference time-series regression in Table 1. Because economic or demographic changes in year $t$ may be reflected in the cabinet in year $t+1$, we include a lagged variable. The first six models concern demographic change and the last two economic change. Other than for the 1860–1915 period, an increase in population share or economic share of Buenos Aires is positively associated with an increased share of ministers from it. However, we note that only one coefficient is statistically significant, that we cannot claim causality, and that we only have province-level GDP data for the 1959–2001 period. Overall, these results are far from conclusive. They are only one piece of evidence mostly consistent with our first mechanism.

We also argued that structural incentives may be more directly political in two ways. First, parties may want to select presidential candidates from the hegemon because of its electoral importance, especially after Argentina adopted universal male suffrage in 1912. Second, presidents from Buenos Aires may disproportionately recruit cabinet members born in their home city or province, especially because *porteños* and *bonaerenses* feature prominently in Argentina's elite networks and party cadres.

Between 1860 and 2015, 44% of presidents are from Buenos Aires, only slightly above its average population share of 42%. However, this statistic masks important heterogeneity. Presidents were from Buenos Aires for fewer than 20% of years prior to universal male suffrage but for 60% of years since 1913 (Table 2). That is in spite of the Electoral College underrepresenting Buenos Aires until its abolition in 1994. This stark difference is consistent with parties selecting presidential candidates from Buenos Aires to carry the city and province in the elections. The two parties that have dominated Argentine politics in the 20th century, the Unión Cívica Radical (UCR) and the Partido Justicialista (PJ/Peronism) originated in Buenos Aires, so many of their cadres also hail from Buenos Aires even if the PJ drew much strength from coopting provincial elites.[26]

[22] The only exception is Mendoza, the fourth largest province, which is very slightly underrepresented.

[23] We take this term from Bhavnani (2015), who similarly finds that larger (single-member) constituencies in India are "doubly penalized" in state elections (i.e., they suffer from legislative malapportionment and are also unlikely to be included in the state's cabinet).

[24] In the appendix, we consider whether overrepresentation in the legislature leads to overrepresentation in the cabinet for the full sample and after excluding Buenos Aires using standard regression models.

[25] We thank Melissa Rogers for sharing the subnational GDP data in Rogers (2014).

[26] We thank Juan Ignacio Máscolo for this insight.

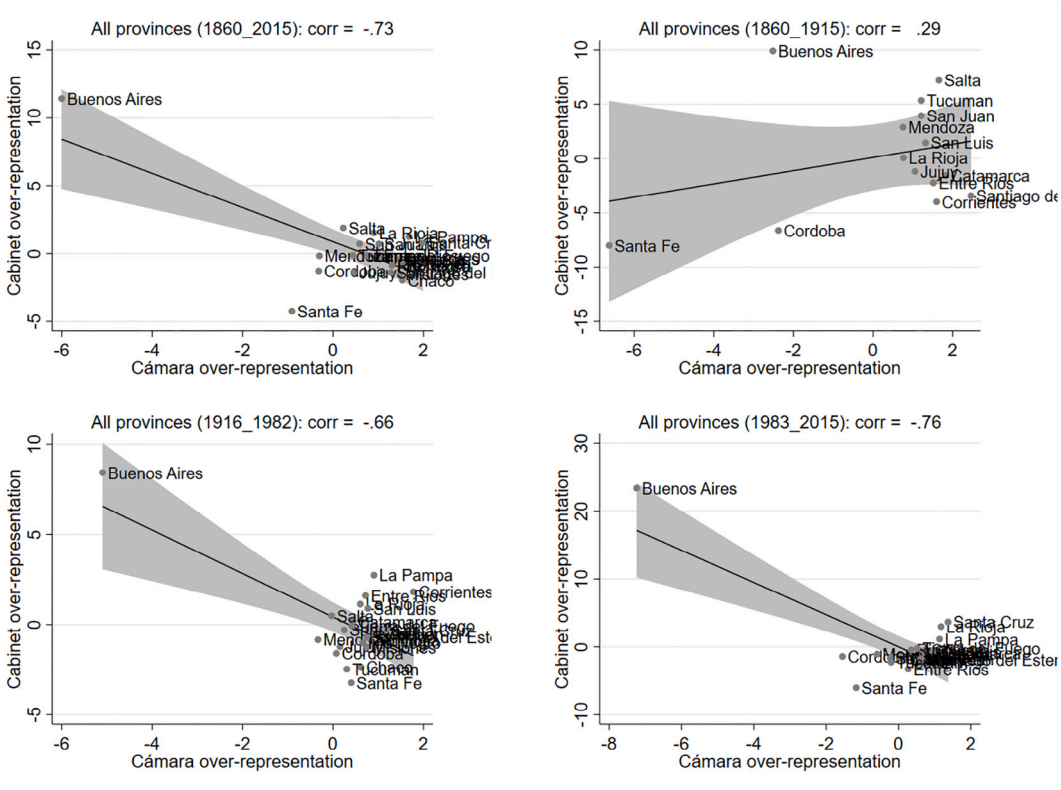


**Fig. 4.** Share of deputies and share of cabinet ministers by province in Argentina net of population share by period: all provinces.

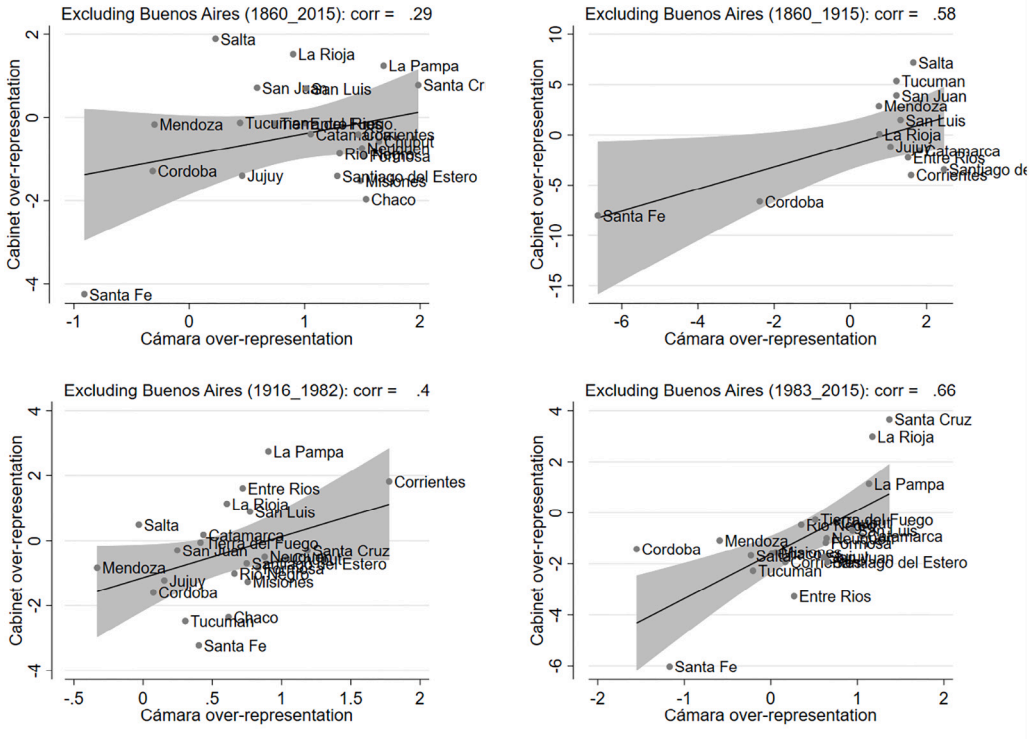


**Fig. 5.** Share of deputies and share of cabinet ministers by province in Argentina net of population share by period: excluding Buenos Aires.

**Table 1**
Change in the share of ministers from Buenos Aires as a function of demographic and economic change in Buenos Aires (first-differences).

| | 1860–1915 | | 1916–1982 | | 1983–2015 | | 1959–2001 | |
|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Change in population share (%) | −2.58 | | 17.60 | | 3.88† | | | |
| | (2.30) | | (12.94) | | (2.22) | | | |
| L.Change in population share (%) | | −2.77 | | 20.07 | | 3.40 | | |
| | | (2.29) | | (13.25) | | (2.13) | | |
| Change in GDP share (%) | | | | | | | 2.37 | |
| | | | | | | | (3.29) | |
| L.Change in GDP share (%) | | | | | | | | 3.42 |
| | | | | | | | | (3.18) |
| Buenos Aires-Years (N) | 56 | 55 | 43 | 42 | 33 | 32 | 27 | 27 |
| $R^2$ | 0.02 | 0.03 | 0.04 | 0.05 | 0.09 | 0.08 | 0.02 | 0.04 |

Notes: † p < 0.10, * p < 0.05, ** p < 0.01.The models only include Buenos Aires. The number of observations is smaller than the time interval in models 3, 4, 7, and 8 because we again exclude military regimes.

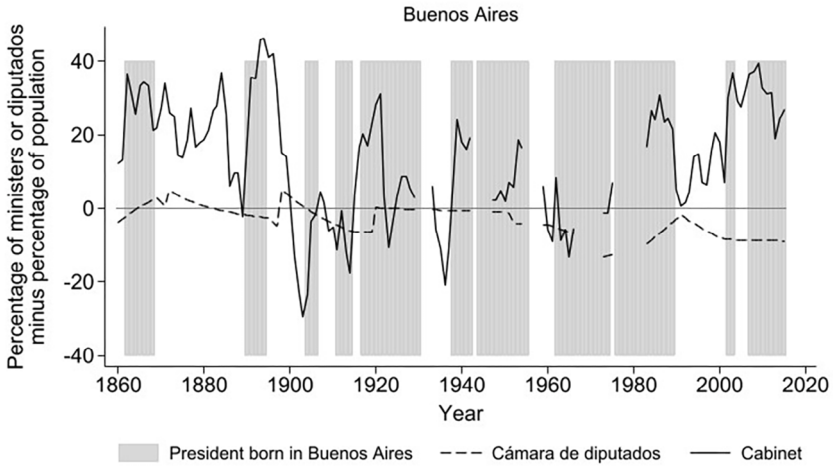


**Fig. 6.** Over and underrepresentation of Buenos Aires in the cabinet and in the legislature (1860–2015).
Notes: Values above 0 indicate overrepresentation ($dep_i - pop_i > 0$, $min_i - pop_i > 0$) and values below 0 underrepresentation. The shaded periods are those with a president born in Buenos Aires (city or province). The periods not plotted are years under military regimes. Buenos Aires was *even more* overrepresented in the cabinet under military regimes, but many military executives were composed of very few individuals, which makes $min_i - pop_i$ hard to interpret.

**Table 2**
Provincial origin of Argentina's presidents before and after universal male suffrage (years).

| | 1860–1912 | 1913–2015 |
|---|---|---|
| Buenos Aires | 18.75% (9) | 60% (45) |
| Other provinces | 81.25% (39) | 40% (30) |
| Years | 100% (48) | 100% (75) |

Further, we find that the average share of ministers from Buenos Aires is a very high 68.3% when the president is from Buenos Aires but "only" 49.4% when the president is not. Fig. 6 shows this pattern visually. The spikes in minister shares from Buenos Aires generally coincide with the start of mandates of presidents from Buenos Aires and they span the history of Argentina. They start with Bartolomé Mitre (1862–1868) at a time when ministerial posts were paramount to balance and adjudicate among competing provincial interests. With two brief exceptional periods (1901–1905 and 1909–1914), the spikes reappear in the 20th and 21st century under, for example, *bonaerenses* Juan Domingo Perón (1946–1955, 1973–1974) and Eduardo Duhalde (2002–2003), when 76% of ministers were born in Buenos Aires. This is consistent with the idea that presidents engage in regional favoritism.

To further unpack the sources of Buenos Aires' over-representation, we break down its share of ministers by cabinet portfolio (Table 3). We list the key ministries that have existed for most of Argentina's history (we exclude ministries such as "social development" or "commerce" that rarely existed before democratization in 1983). These are Foreign Affairs (*Relaciones Exteriores*), Finance (*Hacienda*, later *Economía*), Interior, Defense (*Guerra*, later *Defensa*), Justice (*Justicia*) and Agriculture (*Agricultura*).[27]

One possible concern is that Buenos Aires only received minor portfolios, which would undermine the idea that cabinet malapportionment is a compensation mechanism. If our argument is valid, elites from Buenos Aires should occupy these key ministries at least as frequently as they occupy all other ministries. The table shows that Buenos Aires's representation is above its overall average (55.6%) in four of the six key ministries, lower than that (but still near 50%) for Justice, and only very low in one (Interior). Thus, the first takeaway is that BA's over-representation is robust to examining the most important ministries. The second is that this variation is very interesting in itself and that future research should try to understand it. For example, we know that Buenos Aires' networks were much more international than those of any other province, and that might explain its near monopoly on the Ministry of Foreign Affairs. We also know that Presidents have long needed to negotiate fiscal transfers with provincial governors, a role usually taken by the Ministry of Interior. Appointing a non-Buenos Aires Interior minister, even when the President is from Buenos Aires,

[27] Agriculture is an important ministry in Argentina, and for the province of Buenos Aires in particular, because of agricultural exports such as beef.

**Table 3**
Share of ministers from Buenos Aires in key cabinet portfolios and share of population (1860–2015).

| Ministry | Share of ministers | Share of population |
|---|---|---|
| All ministries | 55.6% | |
| Foreign Affairs | 80.8% | |
| Agriculture | 60.7% | |
| Defense | 58.8% | 44.2% |
| Finance | 56.5% | |
| Justice | 48.7% | |
| Interior | 33.3% | |

may be a strategic move to facilitate such negotiations and governors' support the cabinet's agenda.

## 7. Historical narrative

*Dios está en todas partes pero gobierna desde Buenos Aires [God is everywhere, but he governs from Buenos Aires]*

[Proverb; Brisighelli and Antonio (2009, 17)]

Our historical narrative illustrates the two possible mechanisms behind long-run dual malapportionment outlined in Section 3. The previous section presented correlational evidence on the political effects of Buenos Aires' demographic and economic dominance that is consistent with our *structural incentives* mechanism. This section complements it with qualitative examples that illustrate how the dense elites networks of Buenos Aires make it an attractive region from which to recruit political cadres. Nonetheless, our interpretation is that structural incentives alone do not fully account for why Buenos Aires did not deploy its demographic and economic advantage reduce its underrepresentation in the Chamber, Senate, and Electoral College. Thus, our narrative also explores the *political economy* mechanism, which posits that the federation developed into a system where the provinces and Buenos Aires had incentives to trade power in the legislature and the executive.

We begin by tracing changes in representation during the formation and early consolidation of the federation in order to show the emergence of dual malapportionment. In Argentina, state formation did not clearly precede the development of lower-level political institutions, such as malapportionment; instead, they were "joint creations" (Mazzuca, 2021, 12). Legislative malapportionment has existed since the 1853 Constitution while cabinet malapportionment began after Buenos Aires joined the federation in 1860.

Our analysis suggests that the formation and consolidation of the federation in the 19th century was partially possible due to strategic political concessions made by both Buenos Aires and the provinces. Smaller provinces dominated most political institutions early on (the Electoral College, the Senate, and eventually the Chamber) while Buenos Aires agreed to a centralized federation in exchange for maintaining commercial and economic prerogatives and, as we document, dominating the executive. Our analysis then shifts to 20th-century political reforms that reinforced dual malapportionment, offering insight into why it persists into the 21st century.

### *7.1. The creation of the federation and the emergence of dual malapportionment*

The 1810–1853 period, following the independence of the Viceroyalty of the *Río de la Plata* from the Spanish Crown, was marked by constant conflict between Buenos Aires and the rest of the provinces. The United Provinces of the *Río de la Plata* (1810–1831) were anything but united. Buenos Aires' administrative and political infrastructure was superior already in the colonial period because of its strategic location in the estuary of the *Río de la Plata*. Its natural harbors allowed for the easy transport of export goods (including silver from Potosíin Bolivia, cattle, and timber) and granted access to both regional and global markets (Queralt, 2022). Buenos Aires' control over customs and ports provided it with revenue from commerce and the ability to levy taxes on provinces seeking to engage in trade through its river and harbor. Furthermore, most international trade routes needed passage through Buenos Aires. Consequently, all provinces, whether located in the far reaches of the territory or closer to Buenos Aires, had a vested interest in establishing a union that would incorporate Buenos Aires (Botana, 1993).

Two main camps emerged: *unitarios* were led by Buenos Aires and advocated for a centralized form of government dominated by it, while *federales* were predominant in peripheral provinces, defended regional autonomy and thus pushed for a more decentralized union. Military conflict between them peaked in 1831 when, after the victory of the federalist forces, Buenos Aires and the provinces signed a Federal Pact.[28] This Pact was a victory for the federalist provinces because it established a decentralized confederation (*Confederación Argentina*) in which each province retained its sovereignty while some powers were delegated to the a national-level body (*Comisión Representativa*). However, the decentralized confederation failed to shield the economically disadvantaged provinces from Buenos Aires' dominance. Buenos Aires refused to give control over trade rents or institutionalize a system of fiscal transfers (*coparticipación*) that would diminish its discretionary power over the rest of the provinces (Gibson & Falleti, 2004). Further, Buenos Aires managed to eliminate the *Comisión Representativa* in 1853, showing its dominance in the decentralized confederation. As a response, and in contrast to pre-1831, the provinces increasingly advocated for a federation with a strong central power that would prevent Buenos Aires or any other province to subjugate the rest.

After decades of armed confrontation, such an institutional arrangement was achieved in 1852. All provinces except for Buenos Aires signed an agreement, the *Acuerdo de San Nicolás*, which established a sovereign state to rule above the hitherto sovereign provinces. Buenos Aires refused to accept the agreement and therefore did not sign the 1853 Constitution. It only joined the federation, signed the Constitution, and resumed sending representatives to the national Congress in 1860, after its military defeat in the *Batalla de Cepeda*.[29]

However, military tensions continued until 1861, when the army of Buenos Aires, led by its Governor Bartolomé Mitre, finally defeated the confederal forces led by Justo José de Urquiza at the *Batalla de Pavón*. This episode was a "true critical juncture" (Mazzuca, 2021, 185) because it marked the incorporation of Buenos Aires to the union and the start of the Argentine federation.[30] President Santiago Derqui and Mitre replaced him, becoming the first President of the Federation (1862–1868). Mitre was the "final victor of the post-Pavón negotiations" because it served his own ambition to rule not just Buenos Aires but all of Argentina (Mazzuca, 2021, 199).

This was a critical juncture to renegotiate provincial representation rules, particularly in Congress and the Electoral College, because Buenos Aires joined the federation "from a position of supremacy" (Gibson & Falleti, 2004, p. 176). Buenos Aires' ensured that its budget would remain untouched for five years and that the city would not be converted into a federal district without the consent of its provincial legislature. In addition, the provinces conceded to a series of constitutional amendments in 1860 that "revised the Constitution

[28] Although *unitarios* were mainly present in Buenos Aires and *federales* were stronger in peripheral provinces, was both regional as well as urban-rural within each province (Gibson & Falleti, 2004, p. 183).

[29] On November 11, 1859 the *Confederación Argentina* and Buenos Aires signed a new pact, *Pacto de San José de Flores*, after the latter was defeated at the *Batalla de Cepeda*. Through this pact, Buenos Aires agreed to join the federation and sign the 1853 Constitution.

[30] For a rich and definitive account of state formation in this period, and of the strategic and self-interested roles of the two key players, Mitre and Urquiza, see Mazzuca (2021, Chapter 6).

with the objective of protecting provincial autonomy" and particularly the economic autonomy of Buenos Aires, presumably hoping that these amendments would defuse violent conflict (Buenos Aires Ciudad, 2024).

However, Buenos Aires accepted to nationalize customs and to send monthly transfers to the other provinces of the union.[31] Further, Buenos Aires tacitly accepted to be slightly underrepresented in the Chamber; more so in the Senate, where each province had two senators regardless of population; and in the Electoral College, which selected both the president and vice president by simple majority rule. This outcome is in line with (Mazzuca, 2021, 225)'s interpretation that Mitre "sacrificed Buenos Aires' power and wealth forever" by "letting the federal formula survive".[32]

Our political economy mechanism brings these two ideas together: Buenos Aires joined the federation by making concessions that relinquished its ambitions for political independence. However, it did so from a position of strength, enabling it to preserve a significant degree of economic autonomy—more than it would have retained had the balance of power at that point favored the provinces.

We find echoes of this supremacy in the composition of cabinets under Mitre (1862–1868), during which 53.5% of minister-years were born in Buenos Aires even though it comprised only about 25% of the country's population. This pattern was a bit less extreme in the two decades following Mitre because most presidents were not from Buenos Aires, but it reached its highest levels during Presidents Carlos Pellegrini (1890–92) and Luis Sáenz Peña (1892–95), both from Buenos Aires, with 67% and 77% of minister-years from Buenos Aires, respectively.[33] Buenos Aires was dominant in the cabinet even before universal suffrage (Fig. 6, Table A.1) because the threat of secession was real, we argue, as Uruguay on the other side of the river demonstrated.

Most of Mitre's cabinet appointments were trusted individuals, as is common, but also highly educated members of the city and province's elite networks. One such network were Freemasons, including Mitre and some of his ministers, notably Minister of War Juan Andrés Gelly y Obes, a high-ranking military officer. Others were prominent lawyers educated at the University of Buenos Aires (UBA), such as Minister of Justice and Public Instruction, Eduardo Costa, and Minister of Foreign Affairs Rufino de Elizalde. Marcelino T. Ugarte, his successor in the Ministry of Foreign Affairs, hailed from an aristocratic family in Buenos Aires that included former governors and individuals with noble titles, and was a professor of civil law at the UBA. He was also one of the founders of *El Club del Progreso*, a social club that gathered members of the *porteño* aristocracy.

We interpret early malapportionment in the legislature and executive as the result of an implicit commitment between Buenos Aires and the provinces. As we saw above, the imposed amendments to the 1853 Constitution and maintained control of the executive while the latter maintained control in the legislature (especially the Senate) and thus political protection from the demographic and economic hegemon.[34]

Disentangling the origins of a federation is complex, but our analysis suggests that cabinet malapportionment was a foundational feature of the federation. This institutional arrangement may have contributed to the federation's formation and its early stability in a similar way to malapportionment in Congress and the Electoral College. Historical accounts tend to highlight the extent to which Buenos Aires was punished in Congress and in the Electoral College but overlook the composition of the cabinet. This is puzzling given that Argentina has been a case of hyperpresidentialism for much of its history (Benton, 2003). As Botana, Mustapic, Nohlen, and de Riz (1991, p. 79) put it, "Argentine federalism has always had a powerful counterpart in the presidential institution. The recreation of federalism as a republican principle went through phases of more or less personalism, but nothing prevented the role of the president from becoming the center of our institutional constellation". Early presidents were also aware of the relevance of the executive, as shown in a letter by President Santiago Derqui (1860–1861) to future President Mitre in 1860 where he expressed "the need to change Congress *and cabinet* [emphasis added]".[35] Thus, we make the point that its composition is an equally important but overlooked dimension of the credible commitment between Buenos Aires and the provinces that made the federation possible.

Indeed, both Buenos Aires and the provinces were aware that the executive was the most strategic institution. It had the capacity to intervene provinces and to distribute resources discretionarily. Two parallel developments reveal the importance of the executive power following Mitre's presidency. First, the provinces came together in 1868 to undermine the executive power of Buenos Aires. They formed a coalition in Congress exclusive of Buenos Aires to pass legislation and, most importantly, in the Electoral College to select presidential candidates.[36] The success of this coalition, named *Liga de gobernadores* (League of Governors), was facilitated by their overrepresentation in both institutions: "The Constitution of 1853 had given strong powers to the presidency. However, it also created important national arenas for the representation of provincial interests [...]. The Senate, the Electoral College, which selected the president, and the informal networks of alliances between governors ended up favoring the power of provincial coalitions. They could also decide the presidential succession" (Gibson & Falleti, 2004, p. 194). The *Liga de Gobernadores* was successful since 1868, when the Electoral College selected presidential candidate Domingo F. Sarmiento (from San Juan), a firm advocate of centralizing the federation to contain Buenos Aires' strength. After 1874, the *Liga de Gobernadores* became institutionalized in the *Partido Autonomista Nacional* (PAN), which ruled between 1874 and 1916. Between then and 1910 they selected presidents from Córdoba, Salta, Catamarca, Jujuy, La Rioja, San Luis, Santa Fe, and Santiago del Estero. Only three presidents hailed from Buenos Aires during that period (Luis Sáenz Peña, Manuel Quintana, and Roque Sáenz Peña).[37]

The second development is that, PAN rule notwithstanding, Buenos Aires remained overrepresented in the cabinets—even in the long stretch without a president hailing from Buenos Aires (1868–1890). This is also in spite of the fact that some presidents, realizing the importance of the center-periphery cleavage, gave many ministries to the provinces: "[President Domingo Sarmiento (1868–1874), from San

[31] We thank José Carlos Chiaramonte for this point (interview with the authors, October 13, 2023).

[32] Mazzuca (2021) argues that a counterfactual independent Buenos Aires might have looked like Uruguay, institutionally stable and economically prosperous.

[33] The only exceptions to this rule were the second presidencies of Julio A. Roca, Manuel Quintana and Roque Sáenz Peña. In these three cases, Buenos Aires obtained fairly the same proportion of members of cabinet as its population, but never less.

[34] In the case of Argentina, malapportionment in the Senate and the electoral college were established in the 1852 Constitution, even before Buenos Aires joined the federation. Cabinet malapportionment emerges later, once Buenos Aires joins the federation, as a response to its losses in the other arenas. In other cases of state formation malapportionment in both branches of government could emerge simultaneously at the outset.

[35] Quote from Velázquez (1953, pp. 449–462).

[36] The Constitution established that the President and Vice President would be elected indirectly through an Electoral College. This College would be composed of twice the combined number of legislators of each province in the lower and upper chambers of Congress (Article 78, National Constitution). This rule remained unchanged until 1994 when the College was abolished.

[37] The selection of presidents was characterized by "the politics of agreement" in this period, like Hertz (1998, pp. 31–33) explains in his biography of Carlos Pellegrini: "[Carlos] Pellegrini [was also from Buenos Aires but] gave the power to doctor Luis Sáenz Peña, whose candidacy was the fruit of 'the politics of agreement' mastered by Roca and Mitre". His first cabinet reflected the agreement reached by Roca and General Mitre".

Juan,] tried to give his cabinet a nationalist structure where different opinions would be represented, especially the men from the provinces [“the provinces” excludes Buenos Aires]. He entrusted the Interior Ministry to Dr. Dalmacio Velez Sarsfield, from Córdoba (…) The Ministry of Finance to Dr. José Benjamín Gorostiaga, from Santiago del Estero (…) For Justice and Public Instruction he trusted Dr. Nicolás Avellaneda from Tucumán” (Bucich Escobar, 1927, p. 143). However, even under Sarmiento, nearly 50% of ministers came from Buenos Aires, despite it representing only about 25% of Argentina’s population.

Why was roughly half of the cabinet from Buenos Aires during the period of PAN rule (1874–1916)? Regional favoritism cannot be the answer in this period because most presidents were not from Buenos Aires. Further, two of the four presidents from Buenos Aires selected fewer ministers from it than the period’s average.[38] We argue that our political economy mechanism (e.g., credible commitment between Buenos Aires and the provinces) and structural incentives mechanism (e.g., the elite networks that result from Buenos Aires’ economic and demographic dominance) are necessary to make sense of Buenos Aires’ continued cabinet prominence, especially when the president does not hail from it,[39] and help explain why Buenos Aires does not attempt to reverse its underrepresentation in Congress and the Electoral College.

### *7.2. Dual malapportionment as a stable equilibrium in the 20th and 21st centuries*

Legislative and cabinet malapportionment did not disappear in the 20th and 21st centuries (Fig. 1). On the contrary, Buenos Aires’ underrepresentation in the Chamber has become more pronounced since the mid-20th century and so has its overrepresentation in the cabinet, particularly after the transition to democracy in 1983 (Fig. 6). This section tries to explain why Buenos Aires has remained dominant in the executive even though it could no longer credibly threaten secession in the 20th century. The passage of universal male suffrage in 1912 is a momentous event that, we argue, helps understand the long-term persistence of dual malapportionment. The demographic weight of Buenos Aires’ finally corresponded to its voting weight, and with it a strong political incentive for parties to select presidential candidates and appoint ministers from Buenos Aires (Fig. 6, Table 2).

Buenos Aires’ population (city and province combined) had significantly increased in the late 19th and early 20th centuries and comprised 45% of the population by 1912, when the *Ley Sáenz Peña*—so named because President Roque Sáenz Peña led the effort—granted universal male suffrage. The conservative PAN elite was opposed to extending the franchise because it risked the patronage-based regime that had served them well for decades. However, several factors were working against them. The demographic increase of Buenos Aires was mostly the result of immigrant workers who, prior to 1912, were excluded from the political system. Integrating them was a way to defuse pressure from radical unions. Liberal urban elites, many of them in the UCR and from Buenos Aires, were agitating for a more democratic system. Relatedly, a highly restrictive franchise was less palatable in the 1900s given the franchise extensions elsewhere in the Americas and Europe. The median voter for the Chamber and the Senate remained in smaller and medium-sized provinces even after 1912, but the median voter for the presidency “moved” to Buenos Aires since the adoption of universal male suffrage (Calvo & Escolar, 2005).

Interestingly, however, this franchise expansion was accompanied by an electoral reform that featured an “incomplete list rule” whereby the party receiving the majority of votes in a district secured two-thirds of the seats, while the runner-up received the remaining one-third. This mechanism aimed to mitigate lingering inter-regional tensions by ensuring power-sharing between the conservative PAN, which had stronger support in peripheral provinces, and the UCR, which was more popular in urban provinces, particularly Buenos Aires.[40]

The ensuing years of UCR rule (1916–1928) are ones during which Buenos Aires remains strong in the cabinet and (unusually) is not underrepresented in the Chamber. It did not last long. The 1949 constitutional reform, enacted by Juan Domingo Perón, guaranteed a minimum of two deputies per province regardless of population size. This led to a jump in malapportionment since its implementation in 1952. Gibson and Calvo (2001, p. 207) characterize the 1949 reform as “the first time proportional representation was directly violated” and a political strategy of Perón, himself from Buenos Aires, to obtain the support of elites from peripheral provinces in his conflict against metropolitan elites. Later, the 1973 and 1983 reforms raised the floor to three and five deputies per province, respectively, deepening malapportionment. However, both reforms were enacted by military regimes, likely as mechanisms to increase the political influence of conservative elites from small provinces in anticipation of future democratic governments taking power (Albertus & Menaldo, 2018).[41] In sum, the 1949, 1973 and 1983 reforms contributed to long-term legislative malapportionment driven by incentives to favor provincial elites.[42]

While Buenos Aires’ losses in the legislature became irreversible, it managed to strengthen its hold on the cabinet over time, going from 46% of minister-years (1860–1915) to 54% (1916–1982) and 68% (1983–2015).[43] Buenos Aires may have dominated the executive in the 19th century as part of an implicit agreement with the provinces to maintain the union. In the 20th century, political parties had clear incentives to recruit from Buenos Aires’ political cadres to win the two “vote baskets” (the city and the province).

The Sáenz Peña Law (1912) increased the weight of Buenos Aires because voters, though they elected presidents indirectly through the Electoral College until 1994, its members were directly elected. This helps explain why eight out of the twelve democratically elected presidents since 1916 have been from Buenos Aires (Table 2). There is a concomitant increase in minister-years from Buenos Aires from an average of 39% in 1900–1915 to 57% in 1916–1930 (cf. Tables A.1 and A.2). The confounding factor is that the adoption of universal male suffrage in 1912 also meant that the UCR (strongest in Buenos Aires) defeated the PAN (strongest in the provinces) in the 1916 presidential

[38] Luis Sáenz Peña (1892–1895) nominated 77% of minister-years from Buenos Aires, most of them UBA lawyers from Buenos Aires like him). They include: Juan José Romero (Ministry of Economy), Mariano Demaría (Ministry of Economy), Tomás Severino de Anchorena (Ministry of Foreign Affairs, and later on of Internal Affairs), Amancio Alcorta Palacio (Ministry of Foreign Affairs), Eduardo Costa (Ministry of Foreign Affairs), Benjamín Victorica (Ministry of War), Aristóbulo del Valle (Ministry of War), and Enrique Quintana (Ministry of Justice).

[39] For example, the cabinet of President José Figueroa Alcorta (1914–16), originally from Córdoba, included 41% of minister-years from Buenos Aires, all of them lawyers or university professors, suggesting the strength of human capital networks for cadre recruitment. They occupied some of the most relevant ministries: the Ministry of Agriculture (Horacio Calderón), Foreign Affairs (José Luis Muratore), Economy (Francisco José Oliver), Public Works (Manuel Moyano) and Justice (Carlos Saavedra Lamas).

[40] We thank Ernesto Calvo for this insight.

[41] We thank Kent Eaton for this insight. It is important to note that our argument on dual malapportionment does not hold during authoritarian periods where the legislature does not play an institutional role. Therefore, these changes to legislative malapportionment passed during military rule (1973 and 1983) respond to a different logic, as pointed out by Albertus and Menaldo (2018).

[42] Notably, in his comprehensive analysis of the 1994 constitutional reform, Negretto (2013) does not highlight malapportionment as a central issue in the reform debates. This is indicative that Buenos Aires’ elites did not prioritize or advocate for legislative reapportionment, even when the opportunity to do so was available. Furthermore, in his account of the 1949 constitutional reform, there is no evidence of Buenos Aires elites opposing the two-deputy minimum rule, which contributed to increased malapportionment.

[43] See also Tables A.2 and A.3, and Fig. 6.

election. Thus, it is difficult to separate the effect of universal suffrage from that of partisanship because the former facilitated political turnover and because UCR cadres were composed of elites from Buenos Aires with both political experience and the capacity to attract votes from the most populous city and province in the country. What seems clear is that the combined effect of universal suffrage and regime change strengthened Buenos Aires.

#### 7.2.1. Cabinet composition under Perón

An analysis of the profiles of ministers from Buenos Aires recruited by two different administrations further illustrates the role of structural incentives. The case of Juan D. Perón is particularly interesting. He overrepresented smaller provinces in the legislature by passing the 1949 reform, but he also gave some of the most important ministries to cadres from Buenos Aires, many of them with much professional and political experience.

Among those representing urban labor interests were Ángel Borlenghi (Minister of Interior and Justice), the second most powerful man in government, who was a prominent labor union leader and early Peronist party supporter. Juan Atilio Bramuglia (Minister of Foreign Affairs) was another successful trade unionist from the railway workers' union. Their union ties led Borlenghi to introduce Bramuglia to Perón. Bramuglia served for Perón before he became president in the Secretariat of Work and Social Prevision (*Secretaría de Trabajo y Previsión Social*) and as an auditor (*interventor*) in the province of Buenos Aires. Both of these figures were relevant in the design and passage of some of Perón's most important labor reforms, including collective bargaining and the pension system.

On the business side, two figures stand out, both from Buenos Aires. One is Juan Carlos Elordy (Minister of Agriculture), a prominent landowner and member of the *Sociedad Rural Argentina*, who also had a experience working in several firms in the industrial sector. Another is Carlos Emery, his successor at the Ministry of Agriculture and a professor of agricultural engineering from the UBA. He possessed vast experience in the private sector, where he had worked for a prominent firm in the dairy sector and served as the leader of a business association in the sector.

#### 7.2.2. Cabinet composition under democracy (1983-)

The dominance of Buenos Aires in cabinets increased during the second half of the 20th century and the beginning of the twenty-first (Table A.3), especially under presidents from Buenos Aires (Fig. 6). These include Raúl Alfonsín and Eduardo Duhalde, both from and with electoral bases in Buenos Aires, who appointed 67% and 76% of minister-years from Buenos Aires. But the upward trend in the last decades applies even under presidents not from Buenos Aires. Carlos Menem was born in La Rioja, a small province in the north-east of the country, where he developed a successful political career. Although he relied on a "peripheral" coalition with smaller provinces to build electoral majorities, at the same time he constructed a "metropolitan" coalition for policy purposes (Gibson, 1997). We find evidence of the latter strategy in the composition of his cabinets. As a president, 52% of his cabinet members were from Buenos Aires, all of them with vast experience in politics. The list included former union leaders such as Jorge Triaca, the son of a trade union leader in the plastics sector who had followed his father's footsteps. He was a prominent figure among the labor movement, having served as the general secretary of the Central Confederation of Workers (*Confederación General de los Trabajadores*) and also as a national deputy for the *Partido Justicialista* (PJ/Peronist Party) representing Buenos Aires prior to Menem appointing him as Minister of Labor in 1989. Another example is Carlos Ruckauf (Ministry of Interior during his first mandate and vice-president during his second), who was a prominent politician and cadre with a long trajectory in the Peronist party. He had also started his career at a young age as a union leader, then was appointed Ministry of Labor during Maria Estela Martinez de Peron's government. In his case, he was elected governor of Buenos Aires in 1999 after his time as minister and later became Minister of Foreign Affairs under Eduardo Duhalde. Also from Buenos Aires, Carlos Corach (General Secretary and Minister of Interior) was a cadre with a long trajectory in politics in this province, but no labor union background. His political career started at a young age as a legislator of the City of Buenos Aires affiliated to the *Unión Cívica Radical Intransigente*. He was educated at the prestigious *Colegio Nacional de Buenos Aires* and studied law at the UBA, where he also taught and participated in university politics. While at university, he affiliated to the Peronist party and from then onwards occupied several posts within the party until becoming part of Menem's cabinet.[44]

These examples show that, legislative malapportionment notwithstanding, presidents since 1983 have disproportionately recruited from Buenos Aires, and we argue that its demographic and economic might helps explain why.[45] Ministers from Buenos Aires often stand out because of their influence, socioeconomic status, education, and valuable political experience in the very large province. We interpret this as another piece of suggestive evidence in favor of the idea that Buenos Aires' economic dominance and networks made it a fertile ground from which to recruit political cadres.

## 8. Conclusion

Why would a hegemonic region like Buenos Aires in Argentina accept to suffer from legislative malapportionment? We argued that the hegemonic region may dominate the cabinet, which serves informally as a compensation mechanism. Buenos Aires has been underrepresented in Congress and the Electoral College since joining the federation in 1860. And yet, we find that presidents from diverse provinces have disproportionately favored Buenos Aires, so much so that a majority of ministers (56%) in Argentina's history have been born in Buenos Aires. Thus, Argentina suffers not only from legislative malapportionment but also from cabinet or executive malapportionment. We label this finding "dual malapportionment".

We provide two mechanisms that contribute to explain the origins and persistence of dual malapportionment. We argue that it emerged as an institutional equilibrium that helped maintain the union between Buenos Aires and the provinces during the 19th and early 20th centuries. Provinces leveraged their stronger position in the legislature to build successful coalitions that secured access to national government resources. Buenos Aires, for its part, capitalized on its dominant position in the executive, using its discretion to politically intervene in the provinces, distribute funds, and steer public policy. This arrangement created a structure of incentives that, along with a set of 20th century reforms, locked-in dual malapportionment in the long run. Additionally, dual malapportionment was reinforced by Buenos Aires' historical structural advantages—its economic and demographic hegemony—that made it the hub of elite networks from which parties recruited cadres.

Beyond Argentina, we hope that this paper encourages scholars to examine the regional composition of legislatures and cabinets jointly. Our idea of cabinet malapportionment as a compensation mechanism may apply wherever less populated regions are overrepresented in the legislature, as is the case of other Latin American countries such as Brazil and Mexico (Samuels & Snyder, 2001). In Brazil, Minas Gerais

[44] The list of ministers from Buenos Aires that served under Menem is long and also included other relevant figures, such as: Guido Di Tella (Foreign Affairs), León Arslanian (Ministry of Justice and Security), Oscar Camilion (Ministry of Defense), Rodolfo Barra (Ministry of Justice and Security), Roberto Dromi (Ministry of Public Works and Services), Jorge Domínguez (Ministry of Defense), Gustavo Beliz (Ministry of Interior), and Susana Decibe (Ministry of Education).

[45] As per the examples above, periods of higher or lower centralization, indicating changes in the balance of power between Buenos Aires and the provinces, do not seem to affect Buenos Aires' elites dominance in cabinet.

and São Paulo were two of the most populated and most economically prosperous states during the First Republic (1889–1930). The political influence of their economic elites became known as the "política do café com leite" because São Paulo was the main producer of coffee and Minas Gerais of milk.[46] Indeed, seven of 11 civilian presidents were born in one of these two states (four in Minas Gerais, three in São Paulo).

More broadly, dual malapportionment is more likely to be a compensation mechanism in presidential systems because, unlike parliamentary regimes, cabinets do not emanate from the legislature and have more discretionary power over a broad array of policy domains. We also expect dual malapportionment to be more common in regimes with a strong center-periphery cleavage. This cleavage is common not only in federations but also in heterogeneous unitary regimes (e.g., Italy, Spain, Peru, Uganda, and South Africa).

We conclude by identifying several areas that deserve further study. First, we underscored only two possible mechanisms driving dual malapportionment. Future work should further investigate other possible drivers of cabinet malapportionment and of its coexistence with legislative malapportionment in Argentina and beyond. Second, future studies could place greater emphasis on the mechanisms that reproduce or alter early institutional arrangements, such as "apportionment revolutions" (McLean & Mortimore, 1992). Third, this article defined dual malapportionment and investigated its potential causes; future work should examine its consequences for policy-making and development. Previous studies have shown that legislative malapportionment can result in policy biases (e.g. Ansolabehere & Snyder, 2008; Ardanaz & Scartacini, 2013; Boone & Wahman, 2015), but we lack a clear understanding of the extent to which overrepresented regions in the cabinet leverage their advantage to advance their own interests. Fourth, and relatedly, new research should investigate whether dual malapportionment is an inefficient compromise that contributed to long-run macroeconomic instability and underdevelopment in Argentina. So far, legislative malapportionment has been associated with the misallocation of national funds that contribute to fiscal imbalances, one of the root causes of Argentina's history of macroeconomic instability (Ardanaz et al., 2014; Wibbels, 2005). Dual malapportionment may be an important reason why Argentina "succeeded at *state formation* but failed at *state building*" (Mazzuca, 2021, 2).

## Credit authorship contribution statement

**Victoria Paniagua**: Writing – review & editing, Writing – original draft, Methodology, Investigation, Data curation. **Joan Ricart-Huguet**: Writing – review & editing, Writing – original draft, Methodology, Investigation, Data curation.

## Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

## Acknowledgment

The authors would like to thank the Program on Ethics, Politics, & Economics at Yale University for research funding support.

## Appendix A. Executive cabinets over time

See Tables A.1–A.5 and Fig. A.1.

[46] We thank Juan Ignacio Máscolo for this insight.

**Table A.1**
Proportion of ministers from Buenos Aires and other provinces by presidential administration (1860–1916).

| President | Origin | % Ministers from BA | % Ministers from the Rest |
|---|---|---|---|
| Santiago Derqui (1860–1861) | Córdoba | 40 | 60 |
| Bartolomé Mitre (1861–1868) | Buenos Aires | 53.33 | 46.67 |
| Domingo F. Sarmiento (1868–1874) | San Juan | 47.17 | 52.83 |
| Nicolás Avellaneda (1874–1880) | Tucumán | 46.48 | 53.52 |
| Julio Argentino Roca (1880–1886) | Tucumán | 52 | 48 |
| Miguel Juárez Celman (1886–1890) | Córdoba | 41.38 | 58.62 |
| Carlos Pellegrini (1890–1892) | Buenos Aires | 66.67 | 33.33 |
| Luis Sáenz Peña (1892–1895) | Buenos Aires | 77.42 | 22.58 |
| José Evaristo Uriburu (1895–1898) | Salta | 63.64 | 36.36 |
| Julio Argentino Roca (1898–1904) | Tucumán | 24 | 76 |
| Manuel Quintana (1904–1906) | Buenos Aires | 37.5 | 62.5 |
| José Figueroa Alcorta (1906–1910) | Córdoba | 41.43 | 58.57 |
| Roque Sáenz Peña (1910–1914) | Buenos Aires | 33.33 | 66.67 |
| Victorino de la Plaza (1914–1916) | Salta | 58.62 | 41.38 |

## Appendix B. Panel data results

We consider whether overrepresentation in the legislature affects overrepresentation in the cabinet, for the full sample and after excluding Buenos Aires, using the following two-way fixed effects (FE) models:

$$min_{it} - pop_{it} = \beta_0 + \beta_1(dep_{it} - pop_{it}) + \eta_i + \gamma_t + \epsilon_{it} \quad (1)$$

where the outcome is the percentage of ministers held by province $i$ in year $t$ minus the percentage of population, the predictor is the percentage of deputies minus the percentage of population by province $i$ in year $t$, and $\eta$ and $\gamma$ are province and year fixed effects. While other variables (e.g., economic events and presidential elections) likely impact the distribution of cabinet seats, time-invariant provincial characteristics and province-invariant yearly changes partial out much of the variation. Models exclude years under military rule because Congress played mostly an insignificant role in those periods (1930–32, 1944–46, 1955–58, 1966–71,1976–1982).

The measurement of our outcome variable merits some discussion. Bhavnani (2015) uses an indicator outcome that equals one if a legislator from a given (single member) constituency in a state is also in that state's cabinet. However, provinces elect multiple deputies and may have multiple ministers in a cabinet, so an indicator would be a rough proxy in our case. The obvious alternative would be to use the raw share of ministers in each province-year. This approach violates two assumptions: normality and independence of observations. As many as 79% of province-years do not have any ministers, making the distribution of the variable highly skewed even if we log it ($log(y+1)$). Second, observations within each year are not independent and identically distributed (i.i.d.). When we know $N-1$ shares of ministers for a country, we know that the last share of ministers equals $100 - \sum min_{i=1}^{N-1}$. The problem is common in geology (e.g. soil composition), among other fields, and is known as compositional data because a number of finite parts or shares compose the whole (Egozcue & Pawlowsky-Glahn, 2011; Katz & King, 1999; Ricart-Huguet, 2021). Transforming the outcome variable makes it much more likely to satisfy the i.i.d. assumption. We plot the two variables in Fig. A.1 to illustrate the difference.

The main results in Table A.4 are overall consistent with the aggregate correlations in Fig. 4. We find that $\beta_1$ is positive when Buenos Aires barely suffers from legislative malapportionment (1860–1915 period) but negative after 1983 (the main difference is that, once we demean year and province with fixed effects, $\beta_1 \approx 0$ for 1916–1982 rather than negative). Specifically, a 1% increase in legislative overrepresentation ($dep_i - pop_i$) is associated with a 0.88% increase in cabinet

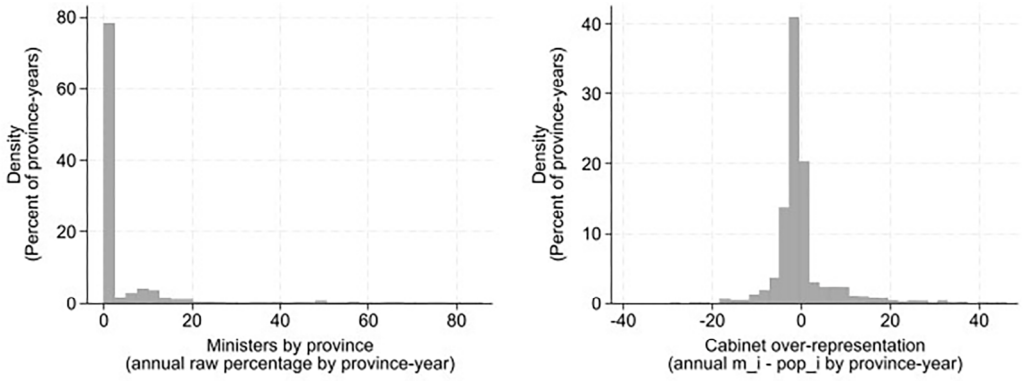


**Fig. A.1.** Distribution of shares of ministers (left) vs. adjusted by share of population (right) by province-year.

**Table A.2**
Proportion of ministers from Buenos Aires and other provinces by presidential administration (1916–1982).

| President | Origin | % Ministers from BA | % Ministers from the Rest |
|---|---|---|---|
| Hipolito Yrigoyen (1916–1922) | Buenos Aires | 64.29 | 35.71 |
| Marcelo Torcuato de Alvear (1922–1928) | Buenos Aires | 49.30 | 50.70 |
| Hipolito Yrigoyen (1928–1930) | Buenos Aires | 58.82 | 41.18 |
| Jose Felix Uriburu (1930–1932) | Salta | 73.33 | 26.67 |
| Agustin Pedro Justo (1932–1938) | Entre Ríos | 42.17 | 57.83 |
| Roberto Marcelino Ortiz (1938–1942) | Buenos Aires | 63.64 | 36.36 |
| Ramon S Castillo (1942–1943) | Catamarca | 66.67 | 33.33 |
| Pedro Pedro Ramirez (1943–1944) | Entre Ríos | 57.14 | 42.86 |
| Edelmiro Julian Farrell (1944–1946) | Buenos Aires | 59.02 | 40.98 |
| Juan Domingo Perón (1946–1955) | Buenos Aires | 58.67 | 41.33 |
| Pedro Eugenio Aramburu (1955–1958) | Córdoba | 85.71 | 14.29 |
| Arturo Frondizi (1958–1962) | Corrientes | 55.56 | 44.44 |
| Jose Maria Guido (1962–1963) | Buenos Aires | 50.00 | 50.00 |
| Arturo Emberto Illia (1963–1966) | Buenos Aires | 41.18 | 58.82 |
| Juan Carlos Ongania (1966–1970) | Buenos Aires | 63.64 | 36.36 |
| Roberto Marcelo Levingston (1970–1971) | San Luis | 57.14 | 42.86 |
| Alejandro Agustin Lanusse (1971–1973) | Buenos Aires | 52.17 | 47.83 |
| Juan Domingo Perón (1973–1974) | Buenos Aires | 50.00 | 50.00 |
| Maria Estela Martinez de Peron (1974–1976) | La Rioja | 57.89 | 42.11 |
| Jorge Rafael Videla (1976–1981) | Buenos Aires | 45.45 | 54.55 |
| Reynaldo Bignone (1982–1983) | Buenos Aires | 68.75 | 31.25 |

**Table A.3**
Proportion of ministers from Buenos Aires and other provinces by presidential administration (1983–2015).

| President | Origin | % Ministers from BA | % Ministers from the rest |
|---|---|---|---|
| Raúl Alfonsín (1983–1989) | Buenos Aires | 67.39 | 32.61 |
| Carlos Menem (1989–1999) | La Rioja | 52.45 | 47.55 |
| Fernando de la Rua (1999–2001) | Córdoba | 56.36 | 43.64 |
| Eduardo Duhalde (2002–2003) | Buenos Aires | 76.19 | 23.81 |
| Néstor Kirchner (2003–2007) | Santa Cruz | 79.44 | 20.56 |
| Cristina Fernández de Kirchner (2007–2015) | Buenos Aires | 76.04 | 23.96 |

overrepresentation in the years 1860–1915 but to a 3.2% decrease since 1983.

The exclusion of Buenos Aires (Table A.5) should make the results more positive (less negative) because we saw that cabinet and legislative representation are complements upon excluding it.[47] That is the case because the first coefficient was already positive and remains so, while the third one becomes less negative. In short, the regression results are consistent with legislative and executive representation no longer being substitutes upon excluding Buenos Aires. However, the coefficients are not positive either: after excluding Buenos Aires, we do not find positive evidence that the average province can translate more deputies into more ministers even if the period-by-period correlations are clearly positive (Fig. 5).

[47] In both tables, we include one-year lags because cabinet composition might track Chamber composition, although that is more plausible for parliamentary regimes, where the cabinet emanates from the legislature. The results barely change because there are relatively few discrete changes in the number of deputies per province and because population shares change slowly.

## Data availability

Data will be made available on request.

**Table A.4**
Cabinet overrepresentation (% ministers – % population) as a function of *Cámara de Diputados* overrepresentation (% deputies – % population) by province.

| | 1860–1915 | | 1916–1982 | | 1983–2015 | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Diputados | 0.88** | | −0.01 | | −3.20** | |
| | (0.19) | | (0.30) | | (0.55) | |
| L.Diputados | | 0.72** | | −0.19 | | −3.59** |
| | | (0.22) | | (0.24) | | (0.66) |
| Province FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Year FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Provinces (N) | 784 | 770 | 728 | 705 | 759 | 736 |
| Within $R^2$ | 0.04 | 0.02 | 0.00 | 0.01 | 0.16 | 0.20 |
| Between $R^2$ | 0.08 | 0.09 | 0.06 | 0.02 | 0.54 | 0.52 |
| Overall $R^2$ | 0.05 | 0.05 | 0.00 | 0.01 | 0.38 | 0.39 |

Notes: † p < 0.10, * p < 0.05, ** p < 0.01. Clustered standard errors by province in parentheses.

**Table A.5**
Excluding Buenos Aires: Cabinet overrepresentation (% ministers – % population) as a function of *Cámara de Diputados* overrepresentation (% deputies – % population) by province.

| | 1860–1915 | | 1916–1982 | | 1983–2015 | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Diputados | 0.83** | | −0.80 | | −1.09 | |
| | (0.18) | | (1.06) | | (2.17) | |
| L.Diputados | | 0.77** | | −0.38 | | −0.64 |
| | | (0.17) | | (0.83) | | (2.30) |
| Province FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Year FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Provinces (N) | 728 | 715 | 685 | 663 | 726 | 704 |
| Within $R^2$ | 0.10 | 0.09 | 0.03 | 0.03 | 0.03 | 0.02 |
| Between $R^2$ | 0.28 | 0.29 | 0.25 | 0.20 | 0.32 | 0.34 |
| Overall $R^2$ | 0.16 | 0.15 | 0.01 | 0.01 | 0.03 | 0.01 |

Notes: † p < 0.10, * p < 0.05, ** p < 0.01. Clustered standard errors by province in parentheses.

## References


Abramson, Scott F. (2024). The economic effects of leaders' economic interests: Evidence from election by lot in the Florentine Republic. *Journal of Politics*, *86*(2).

Acemoglu, Daron, & Robinson, James A. (2008). Persistence of power, elites, and institutions. *American Economic Review*, *98*(1), 267–293.

Albertus, Michael, & Menaldo, Victor (2018). *Authoritarianism and the elite origins of democracy*. Cambridge University Press.

Alemán, Eduardo, & Tsebelis, George (2011). Political parties and government coalitions in the Americas. *Journal of Politics in Latin America*, *3*(1), 3–28.

Alexiadou, Despina (2016). *Ideologues, partisans, and loyalists: Ministers and policymaking in parliamentary cabinets*. Oxford University Press.

Ansolabehere, Stephen, Gerber, Alan, & Snyder, Jim (2002). Equal votes, equal money: Court-ordered redistricting and public expenditures in the American states. *American Political Science Review*, *96*(4), 767–777.

Ansolabehere, Stephen, & Snyder, James M. (2008). *The End of Inequality: One Person, One Vote and the Transformation of American Politics*. W. W. Norton.

Ardanaz, Martín, Leiras, Marcelo, & Tommasi, Mariano (2014). The politics of federalism in Argentina and its implications for governance and accountability. *World Development*, *53*, 26–45.

Ardanaz, Martín, & Scartacini, Carlos (2013). Inequality and personal income taxation: The origins and effects of legislative malapportionment. *Comparative Political Studies*, *46*(12), 1636–1663.

Arriola, Leonardo R. (2009). Patronage and political stability in Africa. *Comparative Political Studies*, *42*(10), 1339–1362.

Arriola, Leonardo R., & Johnson, Martha C. (2014). Ethnic politics and women's empowerment in Africa: Ministerial appointments to executive cabinets. *American Journal of Political Science*, *58*(2), 495–510.

Athias, Diloá, & Schneider, Rodrigo (2021). The impact of political representation on the provision of public goods and services. *Fiscal Studies*, *42*(2), 367–381.

Balinski, Michel L., & Young, H. Peyton (2010). *Fair representation: meeting the ideal of one man, one vote*. Rowman & Littlefield.

Beiser-McGrath, Janina, & Metternich, Nils W. (2021). Ethnic coalitions and the logic of political survival in authoritarian regimes. *Comparative Political Studies*, *54*(1), 144–178.

Benton, A. L. (2003). Strong presidents, powerful provinces: The case of Argentina. *Politica y Gobierno*, *10*(1), 103–137.

Beramendi, Pablo, Boix, Carles, Guinjoan, Marc, & Rogers, Melissa 2022. Distorted Democracies, Working paper.

Beramendi, Pablo, & Rogers, Melissa The Curse of Malapportionment, Working paper.

Berkowitz, Daniel, & Clay, Karen B. (2012). *The evolution of a nation: How geography and law shaped the American states*. Princeton University Press.

Bhavnani, Rikhil R. (2021). The effects of malapportionment on economic development. *Plos One*, *16*(12).

Bhavnani, R. (2015). The effects of malapportionment on cabinet inclusion: Subnational evidence from India. *British Journal of Political Science*, *48*, 69–89.

Bidart-Campos, J. (1993). El federalismo argentino desde 1930 hasta la actualidad. In Marcello Carmagnani (Ed.), *Federalismos latinoamericanos: México, Brasil y Argentina* (pp. 363–396). Fondo de Cultura Económica.

Bonvecchi, Alejandro, & Scartascini, Carlos (2011). *The presidency and the executive branch in Latin America: What we know and what we need to know*. Inter-American Development Bank.

Boone, Catherine (2024). *Inequality and political cleavage in Africa. Regionalism by design*. Cambridge University Press.

Boone, Catherine, & Wahman, Michael (2015). Rural bias in African electoral systems: Legacies of unequal representation in African democracies. *Electoral Studies*, *40*, 335–346.

Botana, Natalio (1993). El federalismo liberal en Argentina (1852-1930). *Fondo de Cultura Económica*.

Botana, Natalio, Mustapic, Ana María, Nohlen, Diether, & de Riz, Liliana (1991). *Reforma institucional y cambio político*. LEGASA/CEDES.

Brisighelli, Héctor Ramón Piñeyro, & Antonio, Enrique (2009). *Corrientes y Juan Pujol - en su tiempo - y los olvidos de la historia nacional*. Universidad Nacional de Rosario.

Browne, Eric C., & Franklin, Mark N. (1973). Aspects of coalition payoffs in European parliamentary democracies. *The American Political Science Review*, *67*(2), 453–469.

Bruhn, Miriam, Gallego, Francisco A., & Onorato, Massimiliano Gaetano (2010). Legislative malapportionment and institutional persistence. World Bank Policy Research Working Paper no. 5467.

Bucich Escobar, Ismael (1927). *Historia de los presidentes argentinos*. Editorial El Ateneo.

Buenos Aires Ciudad (2024). Sala rosas y la confederación. URL: https://buenosaires.gob.ar/exposicion-permanente/sala-rosas-y-la-confederacion.

Cabrera, Ernesto (1991). Proporcionalidad y desproporcionalidad, en la elección de diputados nacionales: la ley electoral y un análisis de las elecciones legislativas nacionales de 1983 1985, 1987 y 1989. *Desarrollo Económico*, 279–290.

Cabrera, Ernesto (1992). La cuestión de la proporcionalidad y las elecciones legislativas en la República Argentina. *Revista Mexicana de Sociología*, 153–182.

Calvo, Ernesto, & Escolar, Marcelo (2005). *La nueva política de partidos en la Argentina: crisis política, realineamientos partidarios y reforma electoral*. Prometeo.

Calvo, Ernesto, & Medina, Juan Manuel Abal (Eds.), (2001). *El federalismo electoral Argentino: sobrerrepresentación, reforma política y gobierno dividido en la Argentina*. Subsecretaría de Gestión Pública, Jefatura de Gabinete de Ministros.

Calvo, Ernesto, & Murillo, Maria Victoria (2004). Who delivers? Partisan clients in the Argentine electoral market. *American Journal of Political Science*, *48*(4), 742–757.

Carey, John M., & Shugart, Matthew S. (1998). Institutional design and executive decree. *Executive Decree Authority*, 274–298.

Carmagnani, Marcello (1993). *Federalismos latinoamericanos: México, Brasil, Argentina*. Fondo de Cultura Económica.

Cox, Gary W., & Morgenstern, Scott (2001). Latin America's reactive assemblies and proactive presidents. *Comparative Politics*, 171–189.

Dahl, Robert A. (1956). *A preface to democratic theory*: *Vol. 10*, University of Chicago Press.

Dragu, Tiberiu, & Rodden, Jonathan (2011). Representation and redistribution in federations. *Proceedings of the National Academy of Sciences*, *108*(21), 8601–8604.

Eaton, Kent (2001). Decentralisation, democratisation and liberalisation: the history of revenue sharing in argentina, 1934–1999. *Journal of Latin American Studies*, *33*(1), 1–28.

Eaton, Kent (2006). Decentralization's nondemocratic roots: Authoritarianism and subnational reform in Latin America. *Latin American Politics and Society*, *48*(1), 1–26.

Edward, Gibson (2005). Boundary control: Subnational authoritarianism in democratic countries. *World Politics*, *58*(1), 101–132.

Egozcue, Juan José, & Pawlowsky-Glahn, Vera (2011). Basic concepts and procedures. In Vera Pawlowsky-Glahn, & Antonealla Buccianti (Eds.), *Vol. 2, Compositional data analysis. theory and applications* (p. 378). John Wiley & Sons, Ltd.

Faguet, Jean-Paul, & Shami, Mahvish (2022). The incoherence of institutional reform: Decentralization as a structural solution to immediate political needs. *Studies in Comparative International Development*, *57*(1), 85–112.

Faletti, Tulia, Calvo, Ernesto, & Gibson, Edward (2004). Reallocative federalism: Legislative overrepresentation and public spending in the western hemisphere. In *Federalism and democracy in Latin America*. Johns Hopkins University Press.

Francois, Patrick, Rainer, Ilia, & Trebbi, Francesco (2015). How is power shared in Africa? *Econometrica*, *83*(2), 465–503.

Galiani, Sebastian, Torre, Iván, & Torrens, Gustavo (2016). Fiscal federalism and legislative malapportionment: Causal evidence from independent but related natural experiments. *Economics & Politics*, *28*(1), 133–159.

Gervasoni, Carlos (2010). A rentier theory of subnational regimes: Fiscal federalism, democracy, and authoritarianism in the Argentine provinces. *World Politics*, *62*(2), 302–340.
Gervasoni, Carlos (2018). *Hybrid regimes within democracies: Fiscal federalism and subnational rentier states*. Cambridge University Press.
Gibson, Edward L. (1997). The populist road to market reform: Policy and electoral coalitions in Mexico and Argentina. *World Politics*, *49*(3), 339–370.
Gibson, Edward L. (2004). *Federalism and democracy in Latin America*. John Hopkins University Press.
Gibson, Edward L, & Calvo, Ernesto (2000). Federalism and low-maintenance constituencies: Territorial dimensions of economic reform in Argentina. *Studies in Comparative International Development*, *35*(3), 32–55.
Gibson, Edward, & Calvo, Ernesto (2001). Federalismo y sobrerrepresentación: la dimensión territorial de la reforma económica en la Argentina. *El Federalismo Electoral Argentino*, 179–204.
Gibson, Edward L., & Falleti, Tulia G. (2004). Unity by the stick. *Federalism and Democracy in Latin America*, 226–254.
Giraudy, Agustina (2010). The politics of subnational undemocratic regime reproduction in Argentina and Mexico. *Journal of Politics in Latin America*, *2*(2), 53–84.
Giraudy, Agustina (2015). *Democrats and autocrats: Pathways of subnational undemocratic regime continuity within democratic countries*. Oxford University Press.
Gordin, Jorge P. (2010). Patronage-preserving federalism?: Legislative malapportionment and subnational fiscal policies. In J. Erk, & W. Swenden (Eds.), *New Directions in Federalism Studies* (pp. 68–82). Routledge.
Hallerberg, Mark, & Wehner, Joachim (2018). When do you get economists as policy makers? *British Journal of Political Science*, *50*(3), 1193–1205.
Hertz, Enrique Germán (1998). *Carlos Pellegrini, Legislador y hombre de Estado*. Círculo de Legisladores de la Nación Argentina.
Hiroi, Taeko, & Neiva, Pablo 2022. Explaining Ministerial Appointments in Brazil: Regions, Career Trajectories, and Loyalty, Working paper.
Horiuchi, Yusaku, & Saito, Jun (2003). Reapportionment and redistribution: Consequences of electoral reform in Japan. *American Journal of Political Science*, *47*(4), 669–682.
Huber, John D., & Martinez-Gallardo, Cecilia (2008). Replacing cabinet ministers: Patterns of ministerial stability in parliamentary democracies. *American Political Science Review*, *102*(2), 169–180.
Imai, Masami (2022). Local economic impacts of legislative malapportionment. *Journal of Urban Economics*, *131*.
Jones, Mark (2001). Political institutions and public policy in Argentina: an overview of the formation and execution of the national budget. *Presidents, Parliaments, and Policy*, 149–182.
Katz, Jonathan N., & King, Gary (1999). A statistical model for multiparty electoral data. *The American Political Science Review*, *93*(1), 15–32.
Martínez-Gallardo, Cecilia (2014). Designing cabinets: Presidential politics and ministerial instability. *Journal of Politics in Latin America*, *6*(2), 3–38.
Martínez-Gallardo, Cecilia, & Schleiter, Petra (2015). Choosing whom to trust: Agency risks and cabinet partisanship in presidential democracies. *Comparative Political Studies*, *48*(2), 231–264.
Mazzuca, Sebastián (2021). *Latecomer state formation. Political geography & capacity failure in Latin America*. Yale University Press.
McLean, Iain, & Mortimore, Roger (1992). Apportionment and the boundary commission for England. *Electoral Studies*, *11*(4), 293–309.
Mustapic, Ana María (2000). Oficialistas y diputados: las relaciones ejecutivo-legislativo en la Argentina. *Desarrollo Económico*, 571–595.
Negretto, Gabriel L. (2013). *Making constitutions: presidents, parties, and institutional choice in Latin America*. Cambridge University Press.
Neto, Octavio Amorim (2006). The presidential calculus: Executive policy making and cabinet formation in the Americas. *Comparative Political Studies*, *39*(4), 415–440.
Neto, Octavio Amorim, & Samuels, David (2010). Democratic regimes and cabinet politics: a global perspective. *Revista Ibero-Americana de Estudos Legislativos*, *1*(1), 10–23.
Nyrup, Jacob, Yamagishi, Hikaru, & Bramwell, Stuart (2024). Consolidating progress: The selection of female ministers in autocracies and democracies. *American Political Science Review*, *118*(2), 724–743.
Obvio: Santa Cruz, la más beneficiada (2007). https://www.lapoliticaonline.com/nota/nota-30259/.
Paniagua, Victoria 2018. Protecting Capital: The Political Economy of Asset Portfolio Diversification. PhD Dissertation, Duke University.
Paniagua, Victoria, & Vogler, Jan P. (2022). Economic elites and the constitutional design of sharing political power. *Constitutional Political Economy*, *33*(1), 25–52.
Porto, Alberto, & Sanguinetti, Pablo (2001). Political determinants of intergovernmental grants: Evidence from Argentina. *Economics & Politics*, *13*(3), 237–256.
Queralt, Didac (2022). *Pawned states. state building in the eraof international finance*. Princeton University Press.
Raleigh, Clionadh, & Wigmore-Shepherd, Daniel (2020). Elite coalitions and power balance across African regimes: Introducing the African cabinet and political elite data project. *Ethnopolitics*, 1–26.
Reynoso, Diego (2012). El reparto de la representación. Antecedentes y distorsiones de la asignación de diputados a las provincias. *Revista POSTData: Revista de Reflexión y Análisis Político*, *17*, 153–192.
Ricart-Huguet, Joan (2021). Colonial education, political elites, and regional political inequality in Africa. *Comparative Political Studies*, *54*(14), 2546–2580.
Riker, William H. (1962). *The theory of political coalitions*. Yale University Press.
Riker, William H. (1964). Federalism: Origin, operation, significance. Little, Brown.
Rodden, Jonathan (2002). Strength in numbers? Representation and redistribution in the European union. *European Union Politics*, *3*(2), 151–175.
Rogers, Melissa Ziegler (2014). Taxing with dictators and democrats: Regime effects, transfers and revenue in Argentina's provinces. *Journal of Politics in Latin America*, *6*(1), 3–44.
Rose-Ackerman, Susan, & Desierto, Diane A. (2011). Hyper-presidentialism: Separation of powers without checks and balances in Argentina and Philippines. *Berkeley J. Int'l L.*, *29*(246).
Samuels, David, & Snyder, Richard (2001). The value of a vote: malapportionment in comparative perspective. *British Journal of Political Science*, *31*(4), 651–671.
Shugart, Matthew S., & Taagepera, Rein (1989). *Votes from seats: the effects and determinants of electoral systems*. Yale University Press.
Snyder, Jack (2000). *From voting to violence: democratization and nationalist conflict*. W.W. Norton & Company.
Ticchi, Davide, & Vindigni, Andrea (2010). Endogenous constitutions. *The Economic Journal*, *120*(543), 1–39.
Velázquez, Luis Horacio (1953). Vida de un héroe: Biografía del brigadier general juan esteban pedernera. Editorial Losada.
Vogt, Manuel, Bormann, Nils-Christian, Rüegger, Seraina, Cederman, Lars-Erik, Hunziker, Philipp, & Girardin, Luc (2015). Integrating data on ethnicity, geography, and conflict: The ethnic power relations data set family. *Journal of Conflict Resolution*, *59*(7), 1327–1342.
Wibbels, Erik (2005). *Federalism and the market: Intergovernmental conflict and economic reform in the developing world*. Cambridge University Press.
Woldense, Josef (2018). The ruler's game of musical chairs: Shuffling during the reign of Ethiopia's last emperor. *Social Networks*, *52*, 154–166.
Ziblatt, Daniel (2008). Does landholding inequality block democratization?: A test of the bread and democracy thesis and the case of prussia. *World Politics*, *60*(4), 610–641.