



# When Mayors Deliver: Political Alignment and Well-being

Candelaria Garay<sup>1</sup> · Emilia Simison<sup>2</sup>

Accepted: 29 March 2022 / Published online: 24 May 2022

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## Abstract

While in recent decades developing countries have achieved significant improvements in well-being, disparities within countries persist. Focusing on municipalities in which health services are decentralized and patronage is prevalent, we argue that a little-studied factor, the alignment between mayors and governors, plays an important role in explaining differences in infant mortality rates. In the context of widespread clientelism, lack of alignment deprives mayors of substantial discretionary resources. This generates incentives for nonaligned mayors to focus on improving decentralized social services under their control to cultivate voter support, producing better welfare outcomes associated with these services. Employing an original dataset of metropolitan municipalities in Buenos Aires, Argentina, between 1991 and 2018, we find that mayoral alignment is associated with higher infant mortality, a critical metric of well-being, and with lower levels of health service provision. Local health services in turn reduce infant mortality rates in our data. These results are robust when we control for relevant socioeconomic and political factors, such as electoral competition, protest, and the presence of the state in slums, where health risks are higher.

**Keywords** Political Alignment · Welfare · Health Services · Subnational Politics · Mayors

## Introduction

Well-being may vary dramatically depending on where a person lives. While in recent decades developing countries have made significant progress in welfare outcomes, such as sustained reductions in infant mortality and growth in school

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✉ Candelaria Garay  
candelaria.garay@utdt.edu

Emilia Simison  
simison@mit.edu

<sup>1</sup> Universidad Torcuato Di Tella, Buenos Aires, Argentina

<sup>2</sup> MIT, Cambridge, MA, USA

enrollment rates, disparities within countries persist. These disparities are not only present across areas that are geographically, economically, or ethnically different from each other (see Otero-Bahamon 2019; Singh 2015), but exist as well among comparable and proximate districts in densely populated metropolitan areas. For example, in 2015, in the metropolitan area of Buenos Aires, Argentina, infant mortality in the municipalities of Esteban Echeverría and Presidente Perón was more than twice as high as in the adjacent municipality of San Vicente. Similar contrasts exist in other metropolitan areas in the Global South. What accounts for these differences in welfare outcomes? Answering this question is crucial because population health—a central component of human development and well-being<sup>1</sup>—is both a normatively important issue and a source of economic prosperity.

There is an influential body of scholarship on the determinants of welfare disparities. A key argument in this research is that democracy is central to explaining cross-national variations in welfare outcomes because competitive elections drive politicians to invest in welfare-enhancing policies to win and retain voter support (e.g., Lake and Baum 2001; McGuire 2010). Scholars have further argued that institutions of good governance, such as strong bureaucracies (Rothstein 2011), contribute to well-being by expanding public goods delivery and improving the quality of these public goods. In a similar vein, research on subnational variations in welfare has also emphasized electoral competition as a crucial factor for welfare services (see Alves 2015) and outcomes (Gamm and Kousser 2021). Recent studies have further found that capable local governments and institutions that foment citizen participation in policy implementation have welfare-enhancing effects (Touchton et al. 2017; Wampler et al. 2019). And research on multinational and/or ethnically divided contexts has identified the strength of shared subnational identities as key drivers of variations in welfare policies and outcomes (Singh 2015).

While most scholarship focuses on either the national, provincial, or local level to explain variations in welfare policies and outcomes, a growing body of research has shown that political alignments *across* levels of government (Fenwick 2015; Giraudy et al. 2019; Niedzwiecki 2018) may also help account for significant subnational disparities, especially in the context of weak institutions (Brinks et al. 2020). For instance, in her research on Argentina and Brazil, Niedzwiecki (2018) argues that governors who are not aligned with the national government obstruct the implementation of visible national programs, such as conditional cash transfers, when they expect voters to attribute responsibility for these benefits to national authorities and to reward them accordingly. Other studies have also found that aligned provinces receive more discretionary national transfers than nonaligned ones (Bonvecchi and Lodola 2011; Simison, 2015), which feeds subnational patronage politics and partisan machines (Borges 2011).

We build on this rich scholarship on multilevel politics and welfare disparities to examine an understudied question: whether the alignment between mayors and governors helps explain cross-district variations in welfare outcomes. We therefore

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<sup>1</sup> We follow Sen's (2000) view of human development as well-being, consisting of the possibility to choose the life one wants to live, or, as phrased by Deaton, a life worth living (Deaton 2013:7).

engage with the literature that emphasizes the importance of multilevel politics by shifting the focus from the relations between presidents and governors to those of mayors and governors, and from national policy to local welfare outcomes. We also speak to a substantial literature that highlights the importance of clientelism and patronage politics at the local level by examining the conditions under which some mayors in these contexts produce better welfare outcomes than others.

Drawing on recent studies that find that mayoral alignment diminishes the quality of national health programs on the ground (Callen et al. 2020) and depresses local service delivery (Garay and Maroto 2019), we expect that municipalities that are responsible for social services will display better welfare outcomes in the areas under their purview when mayors are not aligned with higher-level authorities. Lacking the endorsement and the discretionary resources that governors generally bestow on aligned mayors, nonaligned ones are likely to prioritize and enhance the delivery of services for which they are responsible in order to win voter support and continue in office. This strategy in turn is likely to improve the welfare outcomes affected by local services relative to districts where mayors are aligned.

According to this framework, in contexts in which clientelism is widespread, mayors work harder to increase social provision, and their policy choices produce better welfare outcomes, when they do not count on the support of higher-level authorities. While aligned mayors may also develop local services significantly, and nonaligned ones may also engage in patronage, we expect that, as part of a provincial-level coalition, aligned mayors will be less likely than nonaligned ones to prioritize strategies as complex as improving public goods provision in order to survive in office. In sum, nonalignment incentivizes mayors to make the most of social services to underwrite their continuity, while aligned mayors benefit from governors' political support and discretionary resources to win voter support.

We assess this argument quantitatively using a new longitudinal data set of political alignments and health services and outcomes in the densely populated metropolitan districts of Buenos Aires, Argentina, from 1991 through 2019. This is a good setting for our study because of these districts' widespread partisan clientelism, which has been the subject of an influential literature (Auyero 2001; Levitsky 2003; Szwarcberg 2015), and healthcare decentralization, which allows mayors to develop their own health services and access funds for these services that governors cannot manipulate. To measure health outcomes, we focus on the infant mortality rate, which is one of the most widely used indicators of human development (e.g., Singh 2015) and well-being (e.g., Touchton et al. 2017) in the literature.<sup>2</sup>

Our empirical analysis shows that mayoral alignment is associated with higher infant mortality rates independent of municipal wealth and other political and sociodemographic controls. We also find suggestive evidence of a negative relationship between alignment and health service provision. Between 1991 and 2019, across gubernatorial administrations of different parties, nonaligned mayors provided more services, on average, than aligned ones. In line with a substantial literature linking

<sup>2</sup> Health is a fundamental aspect of well-being (Deaton, 2013, p. 24), and infant mortality is a good measure of population health overall (McGuire, 2020).

health services and outcomes, we find a negative relationship between municipal health services and infant mortality (e.g., Cammett and Şaşmaz 2017; Gamm and Kousser 2021). This means that basic local health services, such as well-child visits, have a direct negative effect on infant mortality in our data.

Our study contributes to research on subnational variations in living conditions and inequalities in developing countries. Much of this literature has focused on elections, institutions of good governance, or the structure of health systems (see Otero-Bahamon 2019; Touchton et al. 2017). Our study reveals how alignment between local authorities and higher-level authorities, in this case governors, impacts local welfare outcomes in contexts characterized by decentralization and clientelism. This does not mean that other factors do not influence local welfare outcomes; in fact, our research shows that civil society mobilization and the presence of the state in poor neighborhoods are also associated with infant mortality. We simply demonstrate the effect of a little-studied factor, mayor–governor alignment, on health outcomes. We prioritize governors in our study because, in Argentina, all resources that mayors receive are transferred by provincial governments, and governor–mayor relations are on average the most critical multilevel political linkage for mayors. We nonetheless expect the argument to work in cases in which other higher-level authorities are involved as well.<sup>3</sup>

We also add to the literature on subnational politics and social policy by identifying the conditions under which lack of alignment may lead to increased service provision. While existing research has found that lack of alignment may lead governors to obstruct the implementation of welfare-enhancing policies, our study reveals that it may also lead mayors to expand their *own* welfare-enhancing policies with the goal of overcoming their political weakness. At the same time, by assessing the impact of local health provision on health outcomes, our study also speaks to an important empirical literature that has investigated the effect of service expansion on the quality of services in the context of weak institutions (Callen et al. 2020; Harding and Stasavage 2014). Finally, we make an important methodological and empirical contribution to existing scholarship on metropolitan areas and local politics by systematically examining the influence of key predictors on welfare outcomes, utilizing fine-grained longitudinal data of all metropolitan districts over decades. By providing a systematic analysis of mayors' choices and their welfare effects, we complement previous research, which often generalizes local political dynamics from a few districts or focuses on a larger number of units at specific points in time.<sup>4</sup>

<sup>3</sup> In Argentina, provincial constitutions establish the relations between provinces and municipalities. Buenos Aires, where one-third of the country's population resides, is more decentralized than the other provinces.

<sup>4</sup> This is especially the case of influential literature on clientelism in the region. See, for example, Auyero (2001) and Weitz-Shapiro (2012).

## The Empirical Setting: Metropolitan Districts in Argentina

Our study focuses on the thirty-three districts that constitute the metropolitan area of Buenos Aires, Argentina, where close to one quarter of the country's population resides, across seven mayoral terms, from 1991 through 2019, covering most of the period starting with the return of democracy in 1983. These districts are among the most-studied subjects by an influential literature on clientelism in Latin America (e.g., Auyero 2001; Levitsky 2003; Szwarcberg 2015). They are also responsible for providing decentralized healthcare services and show sharp contrasts in health indicators that do not map onto municipal wealth. Governors are the authorities that most directly affect the careers of Buenos Aires mayors. While presidents may seek to promote popular mayors, governors are more critical for their fates, because under the Argentine constitution all transfers that municipalities receive come from the provincial state. These districts thus offer a good case for studying the impact of governor–mayor relations on well-being in the context of clientelism and local health service decentralization, which characterizes many metropolises in the Global South.<sup>5</sup>

A vast scholarship has portrayed mayors in Buenos Aires as building power through clientelist relations. Research has shown that local authorities use municipal agencies or broker networks to distribute handouts to low-income voters in order to gain their support (Auyero 2001; Oliveros 2021; Szwarcberg 2015), contain discontent (Levitsky 2003), and govern in the face of hardship (Zarazaga 2014). Yet this scholarship has paid most attention to mayors of the Peronist or Justicialista Party (PJ), which elected 173 out of 224 mayors and 6 out of 7 governors between 1991 and 2018,<sup>6</sup> without problematizing the question of mayoral alignment. These studies have thus largely assumed mayor–governor alignment and have overlooked the political strategies pursued by nonaligned mayors—here meaning those that compete against the governor's candidates in regular elections even if they belong to the governor's party—to win voter support. During this period, 35 percent of mayors were nonaligned, and 51 percent of nonaligned mayors belonged to the PJ. In this study, we will show that a focus on mayors' political alignment not only helps us understand the drivers of heterogeneous welfare outcomes across districts, but also illuminates about the different strategies that mayors pursue to win votes, a subject that has remained surprisingly underexplored in the literature on local politics and clientelism in this area.<sup>7</sup>

As in many other metropolitan areas in Latin America, Buenos Aires mayors have crucial healthcare responsibilities. While in other Argentine provinces health services are under the jurisdiction of provincial governments, Buenos Aires mayors run public health centers, which were decentralized in 1994. Mayors receive

<sup>5</sup> See Garay, Palmer-Rubin, and Poertner (2020); Hilgers (2008); Szwarcberg (2015); Thachil (2016).

<sup>6</sup> The PJ is considered a nonideological patronage machine led by either more left-wing or conservative factions (see Levitsky and Roberts 2011). Other parties are on the center left and center right. See Calvo and Murillo (2019) on variation in nonpolicy politics across political parties.

<sup>7</sup> For an exception, see Szwarcberg (2015); Garay and Maroto (2019).

automatic revenue transfers for healthcare services; are allowed, but not required, to run their own hospitals; and have financial incentives to expand services. Decentralization reforms in the 1980s increased the share of provincial revenue transferred to municipalities from 9.27 in 1980 to 16.5 percent by 1989. More importantly, these reforms earmarked 37 percent of provincial revenue-sharing funds for local health care. These automatic health transfers are distributed across districts according to a formula that takes into account the volume of services mayors provide (e.g., number of medical consultations) and the medical resources they have (e.g., number of medical centers, hospital beds). Mayors who provide *more* services and have *more* healthcare infrastructure receive *bigger* transfers, which incentivizes provision. As noted by previous analyses, disparities in revenue-sharing allocations across districts are sharp in Buenos Aires (e.g., López Accotto et al. 2011), as mayors' commitment to local services also varies widely.

## Political Alignment and Well-being

A growing literature has begun to examine political factors other than competitive elections that may account for local variations in well-being. The connections between mayors and governors and the institutions governing their relationships are relevant factors that may influence welfare outcomes. We understand alignment as denoting not just whether politicians belong to the same party or party coalition, but also whether politicians endorse the same candidates in regular executive and/or legislative elections.<sup>8</sup> Nonaligned mayors are therefore those who do not belong to the governor's party or who, despite belonging to the same party or coalition, support alternative candidates to those endorsed by the governor in executive and/or legislative elections.<sup>9</sup>

### Alignment

Mayor–governor alignment is a key factor in local politics in environments in which patronage is prevalent and social programs or services are decentralized. Patronage is understood as the use of political office to appoint partisans, build a machine, and mobilize voter support through the selective allocation of discretionary public expenditures or programs (Calvo and Murillo 2004; Shefter 1993). As alignment is critical for mayors to access discretionary resources, it increases mayors' power vis-à-vis competitors, all else equal. Of course, aligned mayors' chances of remaining

<sup>8</sup> This is similar to the criteria used by Cherny et al. (2015) and Niedzwiecki (2016, 2018) to classify alignment between governors and the president.

<sup>9</sup> Note that we do not consider mayors who support alternative candidates to those of governors in *primary elections* to be “nonaligned.” An example of a nonaligned mayor is that of Jesus Cariglino of the PJ, who was mayor of Malvinas Argentinas from 1995 through 2015. Between 2003 and 2015, he was not aligned with the governor. As the PJ became increasingly divided, he supported executive and legislative lists that competed with those endorsed by the governor (see Table 8 in Appendix for a summary of the evolution of the percentage of aligned mayors across mayoral terms).

in office are affected by the governor's popularity; but their continuity in power also depends on their ability to build support and govern their districts effectively. In turn, the electoral fate of aligned mayors is crucial for governors to consolidate their grip on power, and thus they invest in these mayors' success to ensure their own continuity in office.

How do nonaligned mayors try to survive in office in an environment of patronage? We expect that mayors will exploit resources that are not mediated, or that are less constrained, by governors.<sup>10</sup> In decentralized contexts, such resources are generally associated with the provision of public services (e.g., health care and/or education). A focus on social services under their control is promising for nonaligned mayors: these services are valued by voters, their funding is generally not determined or easily manipulated by governors, and these services can help mayors capture additional resources (e.g., infrastructure investments, contracts with private insurance, donations). While aligned mayors may also pursue this programmatic strategy to some extent, we expect it to be stronger among nonaligned mayors, given that aligned ones are more likely to have access to discretionary resources to secure their continuity in office. Nonaligned mayors' focus on the public services under their control (e.g., health services) will likely improve related metrics of well-being (e.g., infant mortality) relative to aligned mayors'. Focusing on Buenos Aires mayors, we expect that:

**Hypothesis 1.** Municipalities in which mayors are nonaligned display lower infant mortality rates than aligned ones.

Mayors' involvement in the provision of social services in developing countries has grown since the 1980s, accompanying a wave of decentralization that swept the developing world (Eaton 2004; Falleti 2010). Social spending has also grown in recent decades (Garay 2016; Huber and Stephens 2012), providing local authorities with increased resources. Mayors' ability to determine how these transfers are spent may vary, but if they can use them to increase and improve services that citizens value and expect the government to provide,<sup>11</sup> they can claim credit for them (see Pierson 1994), which helps mayors gain and retain support. Citizens may value public health services as consumers of these services or because they expect mayors to invest public resources in public goods rather than handouts or political clientelism (see Weitz-Shapiro 2012). Qualitative evidence supports this claim. For instance, a top official in a nonaligned district of Buenos Aires reported in an interview that political authorities in his district believed that voters valued public health

<sup>10</sup> See Bonvecchi and Lodola (2011) on subnational units' preference for discretionary vis-à-vis programmatic federal transfers, and Eaton (2006) and Garay and Maroto (2019) on mayors' use of revenue-sharing transfers in weakly institutionalized environments.

<sup>11</sup> For example, 88.5% of respondents to a survey in the metropolitan area of Buenos Aires in 2003 reported that ensuring access to health services should be a responsibility of the government (survey data from Collier and Handlin 2009).



investments and that the inauguration of a new and much larger general hospital building had “benefited [the incumbent mayor] in two elections.”<sup>12</sup>

Of course, a focus on public services is costly. Implementation is complex and requires professionalized bureaucracies, which may constrain mayors’ decisions. Expenses and accountability may also grow if citizens are well-informed users of health services.<sup>13</sup> By contrast, if they are not clearly informed about these services, citizens may not attribute credit to the mayor for their delivery (Harding and Stasavage 2014; Niedzwiecki 2018). Given these concerns, service provision may be a last-resort strategy, as mayors may decide that the potential risks outweigh the benefits (Garay and Maroto 2019). Thus, we expect that service provision will be higher among nonaligned mayors, who lack the discretionary support that aligned mayors enjoy.

**Hypothesis 2.** Nonaligned mayors provide more health services than aligned mayors.

It is mainly in contexts where there is some level of decentralization that mayors can access transfers that are unconstrained by governors. In centralized environments where patronage is widespread, nonaligned mayors pursue other strategies to remain in office. For example, they may join the governor’s coalition, becoming aligned in order to survive. This strategy is more likely to be adopted by nonaligned mayors in districts where the power of governors looms large and access to resources largely depends on their whims (see Gibson 2005). Mayors may also be able to raise local taxes to improve their administrations, but taxes are more divisive than local services and may undermine support for mayors among taxpayers (see Fairfield 2015). A different, less costly strategy that mayors may employ in poorer districts is the nonenforcement of the law regarding activities such as squatting and street vending, which may provide poor voters with informal welfare (Holland 2015). This strategy, however, serves mayors in poorer districts only, as it is generally divisive in other districts. Thus, social services are a good choice for mayors to cultivate broad support by showcasing a responsive administration.

## Health Services and Infant Mortality

While the empirical relationship between health services and health outcomes is not straightforward in the literature, influential research has shown that higher levels of healthcare spending (Lake and Baum 2001; Przeworski et al. 2000) or services (McGuire 2006) improve health outcomes (Gamm and Kousser 2021) and do so especially in developing countries (Gupta et al. 1999). At the same time, some research has found no association between healthcare spending and services on healthcare outcomes (Barlow and Vissandjée 1999), and other studies contend that

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<sup>12</sup> Interview, May 18, 2017.

<sup>13</sup> Interviews with local public officials conducted in 2017 corroborated these fears and concerns.



health improvements related to health service delivery are not as significant as those associated with higher socioeconomic resources (Kim and Moody 1992; McGuire 2010).

Concern in the literature about the impact of public goods on social development outcomes extends to the quality of health services and to other policy domains. Regarding quality of services, Callen et al. (2020) find that an increase in the number of medical facilities comes with greater absenteeism by doctors in Pakistan, which restricts access. Harding and Stasavage (2014), in turn, find that more access to education through the elimination of school fees did not result in better educational outcomes in Africa. Testing the impact of service provision on health outcomes, rather than assuming its effect, is therefore critical. Another important point is the need to measure not just any health spending or services but those that are relevant to the outcomes we seek to explain (McGuire 2006). As discussed below, we employ metrics of local service provision that encompass services for pregnant women and infants. We expect that:

**Hypothesis 3.** A larger amount of municipal health service delivery is associated with lower infant mortality rates.

## Variables and Data

To assess the connection between alignment and welfare outcomes, we focus on the infant mortality rate—which measures the number of deaths before the first year of age per 1,000 live births and is one of the most widely used indicators of well-being in the literature—in each of the thirty-three municipalities under study between 1991 and 2018 (the final year for which these data are currently available). In some of the models, we use mayoral administrations as the unit of observation and measure the infant mortality rate of the final year of each administration. We assume that if a mayor has prioritized public goods and/or has invested in those areas, then that strategy should materialize in social well-being improvements by the end of their term. In other models, we use annual observations instead and the results remain largely the same.

Between 1991 and 2018, the average infant mortality rate in the thirty-three municipalities decreased significantly, from 24.5 in 1991 to 9.19 in 2018. While there is an overall downward trend, there are marked variations across districts, as well as improvements and reversals (see Fig. 1). For example, José C. Paz had one of the highest rates of infant mortality in 1995, when it was created, and San Isidro one of the lowest. In 2015, for the first time, José C. Paz became nonaligned and San Isidro aligned, and they displayed their lowest and highest rankings in infant mortality, respectively, in 2018.

## Alignment

Our main explanatory variable is the political alignment between the mayor and governor. As mentioned, we understand mayors as aligned when they belong to the same party as the governor *and* support the candidates endorsed by the governor in open executive and legislative elections. Mayors who belong to other parties or campaign *against* the governors' candidates in open legislative or executive elections are nonaligned. This captures political alignment in both institutionalized party systems, where mayors and governors who belong to the same party tend to also support the same candidates, and less institutionalized ones, where parties are fragmented or fluid, and alignment may be independent of party affiliation.<sup>14</sup> Although informal connections between mayors and governors may be important as well, they are hard to capture systematically across place and time, while our metric of alignment can be clearly observed and measured. We code alignment through a systematic analysis of newspaper articles, electoral data, and academic and journalistic literatures. In our data, 35 percent of mayors are politically nonaligned with the governor, with a maximum of 60 percent of mayors nonaligned in administrations that started in 2015 and a minimum of 12 percent nonaligned in 1995 (see Appendix Table 8).

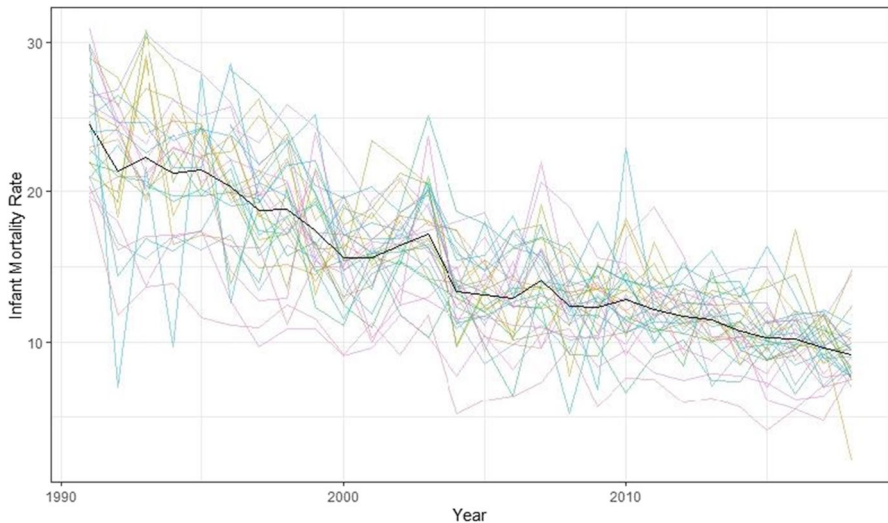
## Health Services

In our models, we assess whether municipal health services are associated with alignment and with infant mortality. To measure municipal health services, we use the annual district-level number of municipal medical consultations per user of the public health system. We use the number of residents that lack social security health insurance as a proxy for the users of the public health system. We call these uninsured residents “outsiders.” Because the share of outsiders varies significantly across districts in our data, ranging from 21% to over 70%, using total population to estimate the local production of services would be problematic.<sup>15</sup> Consultations are a good metric for capturing local health service provision. They are the main service at local health centers, and they are also an important component of municipal hospital outpatient/ambulatory services. When mayors place more emphasis on medical services, they likely start by increasing the number of consultations, as it is relatively easy to do so. Changes in infrastructure may also occur, but it is consultations that change most quickly and consistently when mayors improve (or neglect) health services.<sup>16</sup> Moreover, consultations are a good metric of local health services that affect infant mortality, as they comprise pre-natal check-ups and well-child visits. In

<sup>14</sup> See Mainwaring (2018) on party institutionalization.

<sup>15</sup> While people with health insurance may use public healthcare services as well, they constitute a much smaller share of users than outsiders and are not significant in our *consultations* metric. Based on our interview data, in districts with large municipal hospitals, public officials estimate users with health insurance to be a small share of total users during the period studied.

<sup>16</sup> Interviews with local authorities in a district that provides large numbers of consultations confirmed that, in order to contain costs, they space out medical appointments (thus reducing the number of consultations). Interviews with secretary of social assistance and with top official of a nonaligned district. May 10, 2017.

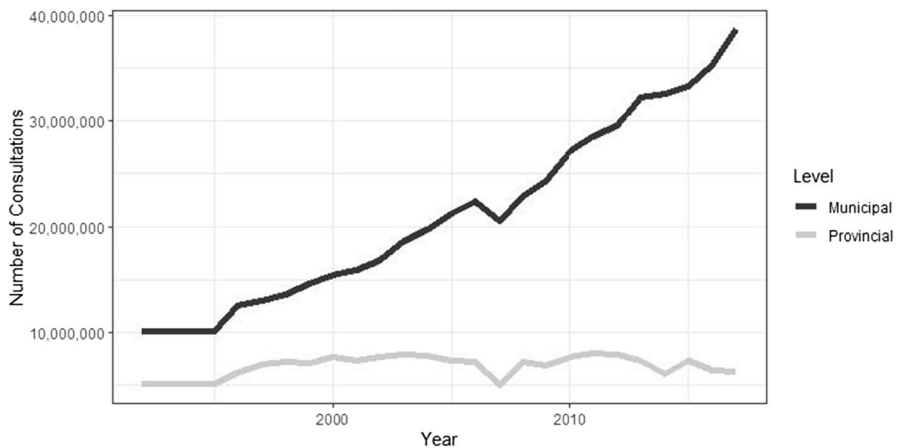


**Fig. 1** Infant Mortality Rate by Municipality and Overall Average, 1991–2018 Source: Data from Dirección Provincial de Estadística, Buenos Aires Province

order to check for changes in infrastructure, we run robustness checks using the number of hospital beds per outsider resident instead of the number of consultations.

As McGuire (2006) demonstrates, medical services that reach mothers and children have a more direct effect than health spending on infant mortality (see also Ross 2006). While our data are not disaggregated by type of consultation at the municipal level, we expect well-child visits to represent a large share of local consultations, as pediatric consultations are the most prevalent type in Argentina’s public health system (DEIS 2013). Provincial-level consultations, that is, those provided by hospitals run by the provincial government, by contrast, include other types of interventions, aside from basic services that emphasize child and maternal health. Given that provincial-level consultations are fewer on average than municipal consultations (see Fig. 2) and address a larger universe of medical conditions, we expect their impact on infant mortality to be negative but modest.

As shown in Fig. 2, the number of municipal consultations increased steadily between 1991 and 2018, while the number of provincial consultations remained almost constant. Municipal consultations grew initially due to the municipalization of provincial health centers in 1994, which gave mayors control over an important area of primary care services. The changes in the revenue-sharing system in effect beginning in the early 1990s further incentivized provision by making bigger automatic payments on the basis of service delivery (see López Accotto et al. 2011). Mayors could take advantage of these opportunities to expand services, and some chose to do it. As a result, although the average number of consultations increased over time, there is significant variation across municipalities. As shown in Fig. 3, this variation ranges from an average of a single consultation per year per uninsured resident in Almirante Brown to an average of more than fourteen in San Isidro (see



**Fig. 2** Healthcare Service Delivery by Jurisdiction 1991–2018 Source: Data from Dirección Provincial de Estadística, Buenos Aires Province

Table 1). The map further shows that provision is not clustered geographically, meaning that proximate districts do not provide similar numbers of consultations.

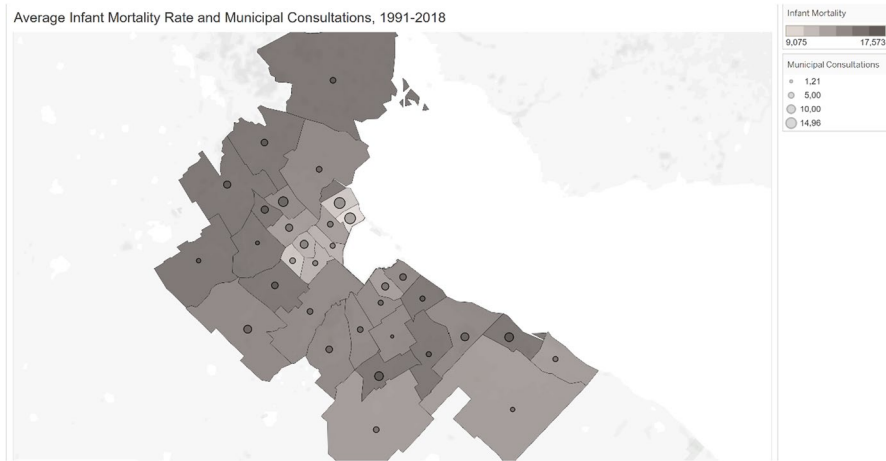
## Controls

### State Presence

When mayors seek to enhance health services, we expect these services and their welfare impact to be affected by the reach of the state in their districts.<sup>17</sup> We thus conceive of state presence as an important control for the effect of our main predictors on health outcomes. Greater state reach may improve welfare outcomes by extending social services and infrastructure, increasing trust in the state (Bustikova and Corduneanu-Huci 2017), and spreading information that enhances well-being throughout the territory (Wigley and Akkoyunlu-Wigley 2011). Measuring *state presence* is not easy and access to district-level data across place and time poses a huge challenge. With data from the Public Registry of Slums and Informal Settlements (RPPVAP) we were able to estimate a good proxy of *state presence*: the percentage of informal settlements and slums per municipality in which the state has carried out land titling procedures or developed housing projects and/or sanitation works.<sup>18</sup> This proxy captures state presence in hard-to-reach areas and should be an effective indicator of state reach in the district more generally. We also believe that this variable is apt for our study because it captures state initiatives that may impact health outcomes but that do not overlap with the local health services we are trying

<sup>17</sup> State capacity, or the state's ability to get things done (Centeno et al. 2017; Soifer 2015), entails the *means* and *reach* to achieve state goals throughout a given territory (see also, Touchton et al. 2017; Ziblatt 2008).

<sup>18</sup> We estimated the values of this variable for previous years using systematic data on the creation of each of these neighborhoods.



**Fig. 3** Average Infant Mortality Rate and Municipal Consultations in the Metropolitan Area of Buenos Aires, Provincial Districts 1991–2018 Source: Data from Dirección Provincial de Estadística, Buenos Aires Province and INDEC

**Table 1** Descriptive Statistics by Mayoral Administration

Variable	Description	Mean	SD	Min	Max
Infant Mortality Rate	Number of deaths of children under one year of age per 1000 live births	14.35	4.97	2.11	27.94
Political Alignment	Mayor–governor alignment	0.65	0.48	0	1
Municipal Consultations	Municipal medical consultations per uninsured resident	6.15	5.36	0.71	35.66
State Presence	Share of slums with state presence	0.28	0.23	0	0.84
Provincial Consultations	Provincial consultations per uninsured resident	1.75	1.86	0	8.35
Municipal Wealth	Municipal GGP per capita (in 2003 constant \$)	10,460	7664.47	1158	45,544
Reelected Mayor	Mayor in second (or more) consecutive term	0.58	0.49	0	1
Electoral Margin	Vote margin, winner and the runner-up	23.39	15.27	0.1	67.19
Protest	Number of protests	4.4	13.39	0	102
Informal Settlements	Number of informal settlements/slums	31.01	24.31	0	128
Peronist Mayor	Mayor belongs to the Peronist party	0.77	0.42	0	1

Data sources and annual descriptive statistics can be found in Appendix (Table 1)

to account for. This metric is also useful because it does not only measure interventions that depend on the incumbent mayor, but also those that are led by federal or provincial governments.<sup>19</sup>

As displayed in Table 1, there is wide variation in state presence in slums or informal settlements across municipalities; some districts have none, while others have state presence in as much as 80 percent of slums. The average number of slums per district per year is 31, with a minimum of zero and a maximum of 128, adding up to a total of 1,218 slums in 2015, 385 of which had state presence. In recent years these slums held about 9 percent of all the households in the districts under analysis, and close to one million people.<sup>20</sup> We expect mayors in districts with more state presence in slums to have better infant mortality rates than those with less presence, all else equal.

### Political controls

We further analyze a set of political variables that the literature associates with infant mortality or welfare services. Previous studies have connected *electoral competition* to lower infant mortality (McGuire 2010) and social policy expansion at the national level (Garay 2016). However, evidence that higher levels of competition promote better welfare services and outcomes at the subnational level is mixed. While some authors have found that subnational party competition improves health services (Alves 2015), students of well-being have not found electoral competition to influence infant mortality at the local level (Touchton et al. 2017). The expectation here is that mayors who assume office following highly competitive elections are more likely to expand local health services in order to increase and retain voter support, which improves welfare outcomes. To measure electoral competition, we use the margin of victory between the winner and the runner-up candidate in mayoral elections. We also consider the impact of *reelection* on mayors' welfare outcomes. Reelection may increase mayors' incentives to invest in health services instead of focusing on short-term provisions to mobilize voter support. Yet, reelection may reduce incentives to invest in welfare-enhancing policies if mayors stay in power for several terms. Mayors could be reelected indefinitely in Buenos Aires during this period, potentially mitigating the welfare-enhancing effect of reelection. We also control for whether the mayor belongs to the Peronist Party (PJ), given the party's electoral relevance in the area and its association in the literature both with lower-class voting and with patronage politics (Levitsky 2003; Calvo and Murillo 2013).

<sup>19</sup> It should be noted that in 2015 there was very little variability across municipalities in the presence of health facilities close to slums. Data from RPPVAP.

<sup>20</sup> Estimated with data from RPPVAP, available here: <http://www.sstuv.gba.gov.ar/idehab/>

## Socioeconomic controls

Some studies have found that wealthier countries have better health indicators (e.g., McGuire 2010; Pritchett and Summers 1996). We test the “wealthier-is-healthier” hypothesis using the geographic gross product (GGP) per capita as a measure of *district wealth*. Given the absence of official annual GGP data at the municipal level for some years, we calculate the missing data from the percentage of provincial GGP that each municipality represents.<sup>21</sup>

While our study focuses on the impact of mayoral alignment and local social services on welfare outcomes, social organizations and movements may also improve social well-being by promoting better services through societal accountability (Smulovitz and Peruzzotti 2000), mobilizing for policy expansion (Garay 2016), or engaging in community-based service provision (Collier and Handlin 2009). Since the late 1990s, movements of low-income unemployed and informal workers have been active in the area (Garay 2007; Svampa and Pereyra 2003). These groups have resorted to contention to demand expansion of national social programs and jobs. Because these movements have directed their claims at the national government, we do not expect protests to have a strong effect on mayors’ policy decisions. However, we do expect protests to be indicative of stronger local communities, which may increase the use of health services and develop community-based services, improving well-being. We measure *protest* as the sum of protest events in each municipal administration or year, depending on the model. The dispersion in protest counts across districts is pronounced (Table 1). Given that protests are more intense in districts connected to the City of Buenos Aires through major transit routes, we control for the travel time, or *distance*, to the City of Buenos Aires as a sensitivity test.

## Empirical Analysis

Figure 4 shows the simple correlation between the infant mortality rate and consultations per uninsured resident by mayoral term, distinguishing mayors who are aligned with the governor and those who are not aligned. In both cases, the relationship is inverse, with higher numbers of consultations associated with lower infant mortality rates, although the effect is more pronounced for terms in which the mayor is not aligned with the governor. The figure also shows significant variation in infant mortality rates in observed cases that have similar rates of municipal consultations.

We test our expectations on the association between alignment, infant mortality, and health services with a series of models in which our main units of analysis are each mayoral administration in each of the thirty-three municipalities

<sup>21</sup> To address inflation, we converted all data to 2003 constant prices. We also estimated the models using the existing data for the years for which these data are not available, and the results remain unchanged.



between 1991 and 2019. Our data include seven consecutive administrations for each municipality, except for a few that were created during the 1990s, for which we include six consecutive administrations. This gives us a total of 224 observations in a “time series–cross section” structure, in which repeated observations are taken on fixed (nonsampled) units, where the units are of interest in themselves (Beck 2001). We also run our main models using annual observations as unit of analysis. In this case, the number of observations reaches a maximum of 863.

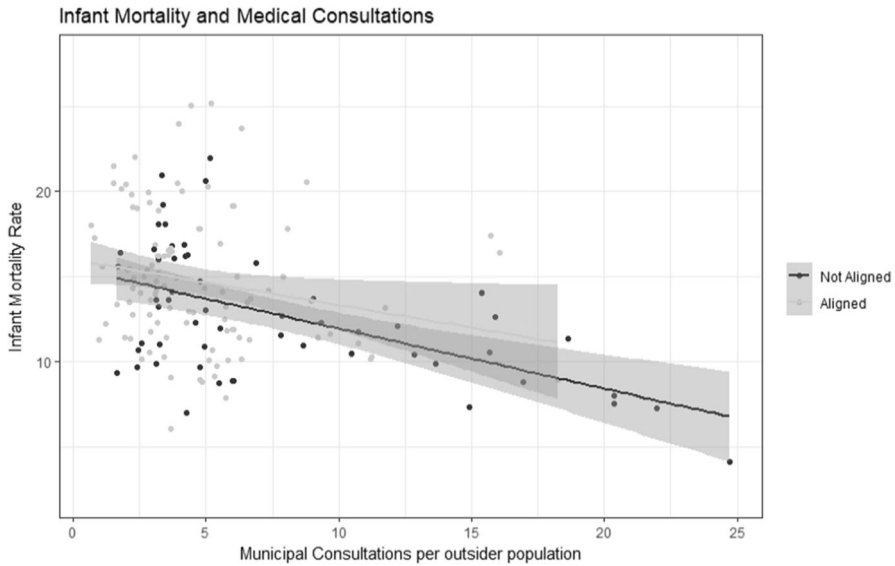
Given the high sensitivity of panel data analysis to estimation choices, we check the robustness of the results by using both fixed effects and random effects estimators. We include here only the results of the models with fixed effects, which are a harder test of our hypotheses, and report any differences that arise when the models are estimated with random effects. These models can be found in Appendix (Tables 9 and 10). Moreover, because the fixed effects estimator relies on within-case variance, it does not allow us to fully assess the effects of variables with little or no time variation. Thus, we run complementary random effects models including this type of variables.

Tables 2 and 3 show the results for the main specifications of our models by mayoral term. Political alignment has a statistically significant and positive effect on infant mortality (hypothesis 1) while health services have the expected negative and significant effect on infant mortality (hypothesis 3). The coefficients for both variables are statistically significant after controlling for other factors that can affect well-being. This suggests that the administrations of nonaligned mayors on average produce better welfare outcomes than those of aligned mayors and that local service provision, which in this case captures services that are connected to mother and child welfare, reduces infant mortality. In Models 4 and 5, where health services are the outcome variable, the coefficient for the effect of political alignment on the number of municipal consultations is, as expected, negative, though it does not attain statistical significance at conventional levels when the models are estimated with fixed effects (hypothesis 2).

Political factors such as electoral competition and mayoral reelection are not associated with infant mortality in our data. The same occurs with municipal wealth; its coefficient is negative but not significant (Model 3). The coefficient for wealth in Models 4 and 5, where the outcome variable is local health services, is positive and statistically significant. This implies that wealth influences the amount of service provision but does not seem to shape health outcomes directly.

State presence is a key control which we expect to affect infant mortality both directly and through mayors' actions (see Table 3). We find that a higher proportion of informal settlements with state presence is negatively associated with the infant mortality rate, even after controlling for the overall number of informal settlements in the municipality. The interaction effect of political alignment and state presence (Model 3), by contrast, does not reach statistical significance in any specification.

The coefficient for alignment remains positive and statistically significant when we include a control for Peronist mayor (see Table 3, Column 1), which is important given that most governors and mayors in our data belong to the PJ. When we control



**Fig. 4** Infant Mortality Rate and Municipal Consultations by Mayoral Administration and Political Alignment Source: Data from Dirección Provincial de Estadística, Buenos Aires Province and INDEC

**Table 2** Models by Mayoral Term with Controls and Fixed Effects, I

	Infant Mortality Rate			Municipal Consultations	
	(1)	(2)	(3)	(4)	(5)
<i>Political Alignment</i>	3.41*** (0.68)		2.66*** (0.64)	-1.21 (0.85)	-1.11 (0.81)
<i>Municipal Consultations</i>		-0.60*** (0.11)	-0.54*** (0.11)		
<i>Provincial Consultations</i>			0.30 (0.67)		-0.29 (0.52)
<i>Municipal Wealth</i>			-0.0001 (0.0002)		0.001** (0.0002)
<i>Reelected Mayor</i>			0.19 (0.63)		0.26 (0.31)
<i>Electoral Competition</i>			-0.001 (1.09)		0.004 (0.02)
<i>Observations</i>	224	223	223	223	223

\* $p < 0.1$ ; \*\* $p < 0.05$ ; \*\*\* $p < 0.01$ , Fixed Effects and Cluster Robust SEs

for the number of protests (Model 4), the effect of political alignment on the infant mortality rate also remains robust, though the effect is weaker. The coefficient for protests is statistically significant and negative, suggesting that districts with more

**Table 3** Models by Mayoral Term with Controls and Fixed Effects, II

	Infant Mortality Rate			
	(1)	(2)	(3)	(4)
<i>Political Alignment</i>	2.56*** (0.72)	1.66*** (0.59)	2.00* (1.13)	1.25* (0.73)
<i>Municipal Consultations</i>	-0.53*** (0.11)	-0.32*** (0.08)	-0.32*** (0.08)	-0.40*** (0.09)
<i>Provincial Consultations</i>	0.28 (0.67)	0.21 (0.56)	0.21 (0.56)	-0.06 (0.48)
<i>Municipal Wealth</i>	-0.0001 (0.0002)	-0.0000 (0.0002)	-0.0000 (0.0002)	-0.001 (0.0001)
<i>Reelected Mayor</i>	0.14 (0.69)	0.30 (0.59)	0.31 (0.59)	0.33 (0.55)
<i>Electoral Competition</i>	-0.004 (0.003)	0.02 (0.02)	0.02 (0.02)	-0.004 (0.03)
<i>Peronist Mayor</i>	0.46 (1.09)			
<i>State Presence</i>		-16.40*** (4.30)	-15.68*** (5.12)	-14.93*** (4.57)
<i>Informal Settlements</i>		-0.24*** (0.05)	-0.24*** (0.05)	-0.24*** (0.06)
<i>Protest</i>				-0.04** (0.02)
<i>State Presence*Alignment</i>			-1.14 (2.16)	
<i>Observations</i>	223	223	223	191

\* $p < 0.1$ ; \*\* $p < 0.05$ ; \*\*\* $p < 0.01$ , Fixed Effects and Cluster Robust SEs

contention by groups representing low-income citizens show better welfare outcomes. Substantively speaking, however, the effect is very small.<sup>22</sup> Finally, provincial consultations show the expected sign but are not associated with well-being.

Tables 4 and 5 show the results for the same set of models using annual observations instead of observations by mayoral term. The results remain mostly unchanged. The coefficients for the effect of political alignment and municipal consultations on the infant mortality rate continue to be statistically significant in all specifications and of the expected sign. The coefficient for the effect of political alignment on the number of municipal consultations is negative, and it is also statistically significant in all our models. Finally, the share of informal settlements with state presence and

<sup>22</sup> Our protest data goes from 1996 through 2011, reducing the number of observations in these models (see Appendix, Table 1).

**Table 4** Annual Models with Controls and Fixed Effects, I

	Infant Mortality Rate		Municipal Consultations	
	(1)	(2)	(3)	(4)
<i>Political Alignment</i>	3.39*** (0.52)		2.73*** (0.45)	-1.28* (0.73)
<i>Municipal Consultations</i>		-0.59*** (0.09)	-0.51*** (0.10)	-1.23* (0.68)
<i>Provincial Consultations</i>			-0.19 (0.75)	-0.40 (0.51)
<i>Municipal Wealth</i>			-0.0001 (0.0002)	0.0005*** (0.0002)
<i>Reelected Mayor</i>			-0.63 (0.53)	0.18 (0.32)
<i>Electoral Competition</i>			-0.01 (0.01)	0.01 (0.02)
<i>Observations</i>	863	849	846	849

\* $p < 0.1$ ; \*\* $p < 0.05$ ; \*\*\* $p < 0.01$ , Fixed Effects and Cluster Robust SEs

**Table 5** Annual Models with Controls and Fixed Effects, II

	Infant Mortality Rate			
	(1)	(2)	(3)	(4)
<i>Political Alignment</i>	2.49*** (0.51)	1.76*** (0.34)	2.37*** (0.59)	0.94*** (0.37)
<i>Municipal Consultations</i>	-0.51*** (0.11)	-0.26*** (0.07)	-0.24*** (0.07)	-0.24*** (0.07)
<i>Provincial Consultations</i>	-0.27 (0.74)	-0.14 (0.61)	-0.14 (0.60)	0.09 (0.76)
<i>Municipal Wealth</i>	-0.0001 (0.0002)	-0.0001 (0.0001)	-0.0001 (0.0001)	-0.0001 (0.0001)
<i>Reelected Mayor</i>	-0.70 (0.57)	-0.40 (0.42)	-0.39 (0.43)	-0.18 (0.34)
<i>Electoral Competition</i>	-0.02 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)
<i>Peronist Mayor</i>	1.02 (0.94)			
<i>State Presence</i>		-18.54*** (3.47)	-17.23*** (3.77)	-16.49*** (3.28)
<i>Informal Settlements</i>		-0.26*** (0.05)	-0.26*** (0.05)	-0.22*** (0.05)
<i>Protest</i>				-0.06*** (0.02)
<i>State Presence*Alignment</i>			-2.02 (1.42)	
<i>Observations</i>	846	846	846	643

\* $p < 0.1$ ; \*\* $p < 0.05$ ; \*\*\* $p < 0.01$ , Fixed Effects and Cluster Robust SEs

the number of protests continue to be the only control variables that have statistically significant effects on the infant mortality rate.

Overall, our models show that mayoral alignment has a robust positive association with the infant mortality rate. The effect is not trivial in substantive terms: an aligned mayor is associated with average increases of between 1 and 3.4 child deaths per thousand live births. This represents between 0.7 and 23 percent of the average infant mortality rate throughout the almost three decades under study. The amount of service provision by municipal governments also has an important effect on infant mortality: an additional consultation per outsider resident is associated with an average reduction in the infant mortality rate of between 0.24 and 0.5 points. This is substantively relevant considering that aligned mayors provided on average fewer consultations than nonaligned ones between 1991 and 2019. While nonaligned mayors delivered on average 7.54 annual consultations per outsider resident, aligned mayors provided only 4.62.

## Robustness Checks

We run multiple tests to check the robustness of our results and the potential biases in our measures and estimation choices. As already mentioned, we rerun all the main specifications of our models using random effects instead of fixed effects. These results, which can be found in Tables 9 and 10 of Appendix, show virtually no differences with the fixed effects estimations. The only difference is that the negative coefficient for the effect of political alignment on the number of municipal consultations attains statistical significance in all specifications with random effects. We also run two other specifications with random effects, including two time-invariant control variables. The first one is the distance from each municipality to the City of Buenos Aires (CABA). We use this variable to assess whether *proximity* to the city affects infant mortality. Those who live close to CABA may prefer to use the city's extensive hospital network, which is free of charge, as opposed to using health services in their districts, resulting in a broader choice of services and lower infant mortality. However, we do not expect the impact of proximity to be large. The second one is a dummy variable of *outsider* municipalities, defined as those in which more than 50 percent of the population relies exclusively on publicly provided health services. We expect *outsider* municipalities to have higher infant mortality rates because these municipalities have poorer populations, as lack of formal employment is associated with reduced individual income. Low-income groups not only depend on public health services at higher rates than wealthier residents but also need health services more intensely. Outsider municipalities represent 26 percent of total district-year observations.

We find that *outsider district* is associated with higher infant mortality. By contrast, the distance from CABA is not strongly correlated with the infant mortality rate. When we include this variable, the coefficient for the number of protests continues to be negative and statistically significant, indicating that the association between protest activity and infant mortality is not merely a function of higher levels of protest in districts surrounding the city of Buenos Aires, as previously discussed, but is likely connected to the welfare-enhancing effect of the civil society organizations and movements that engage in protest.

In terms of control variables, we ran three further specifications of our main models (see Tables 11 and 12 in Appendix). First, we include a one-year lag of the infant mortality rate, which turns out to be positively and significantly associated with the infant mortality rate. Second, we include an index of unmet basic household needs, which includes metrics of housing conditions and education, as a proxy for poverty, and find a statistically significant positive relationship with the infant mortality rate. In all these models, the coefficient for political alignment remains positive, although it is not always statistically significant at the conventional levels in models by mayoral administration. The coefficient for municipal consultations remains negative and statistically significant. Third, we run different models using the number of municipal and provincial hospital beds instead of consultations. The relationship of these variables with infant mortality

mirrors the one between consultations and infant mortality: the coefficient for municipal hospital beds is negative and statistically significant in the specification by mayoral term, while the coefficient for provincial beds does not show a significant effect.

Lastly, as a placebo test, we run our main specifications using a different welfare outcome, school enrollment by school-age children,<sup>23</sup> which we do not theoretically expect to be affected by the political alignment between the mayor and the governor. Unlike health services, education in Argentina is run by governors and mayors do not have the authority or the resources to affect school attendance directly, nor the opportunity to claim credit for educational outcomes. As expected, the coefficient for mayoral alignment is not systematically related to school enrollment (see Table 13 in Appendix). In contrast, the coefficients for variables generally associated with better educational outcomes, such as municipal wealth and state presence, are positive and statistically significant, while the household poverty index exhibits a negative and statistically significant effect on school enrollment. These results strengthen the claim that it is the mayoral strategy we have identified that accounts for why nonaligned districts have better health outcomes rather than another variable.

## Mayoral Alignment, Health Services, and Infant Mortality

While developing countries have seen improvements in health outcomes in recent decades,<sup>24</sup> variations within countries remain puzzling. With the goal of understanding these differences, in this article we advance a novel argument about the impact of alignment between mayors and governors on welfare outcomes and assess this argument with a new data set of mayoral administrations in the metropolitan area of Buenos Aires, Argentina, across three decades. We argue that in contexts characterized by clientelism and social service decentralization, lack of alignment motivates mayors facing fierce competition from the governor's machine to work harder to provide local services in order to gain voter support. This strategy improves their districts' welfare outcomes relative to those of aligned districts and helps explain considerable cross-district welfare disparities.

Our argument makes at least two theoretical contributions to our understanding of subnational politics and social policy that are of relevance to scholars and policymakers alike. Our main contribution is to highlight the importance of mayor–governor alignment, an underacknowledged aspect of multilevel politics, on welfare outcomes. While influential research has either pointed to the relevance of *president*–governor alignment for national policy implementation (Fenwick 2015; Niedzwiecki 2018), or emphasized factors such as elections to account for subnational

<sup>23</sup> Operationalized as the share of children between 5 and 18 who attend school. Schooling is compulsory from preschool through high school.

<sup>24</sup> See, for instance, Deaton (2013).



social policy disparities (see Alves 2015; Gamm and Kousser 2021), we extend this literature by highlighting the connection between *mayor–governor* alignment with welfare *outcomes*.

Our findings furthermore reveal that lack of alignment does not necessarily lead mayors to obstruct broad-reaching policies or maintain the status quo, undermining or preventing improvements in well-being. By contrast, when they have access to decentralized revenues, nonalignment incentivizes mayors to make the most of the local services funded with those revenues in order to win voter support and retain office. Therefore, far from reinforcing the status quo, these nonaligned mayors often provide *more* social services under their jurisdiction in order to underwrite their continuity, and generate *better positive welfare outcomes* than aligned mayors.

These findings should inform policy initiatives that aim to mitigate welfare disparities and improve well-being. Decentralized services, which many expect to increase government responsiveness, are affected by mayors' opportunities to build support and survive in office. In many cities and metropolitan areas in the Global South, where patronage is widespread and services are decentralized, we expect nonaligned mayors to pursue a strategy of improving social provision in areas for which they can claim credit (e.g., health care), while aligned mayors rely on discretionary resources and the support of higher-level authorities to win voter support. This dynamic may become more prevalent in developing countries in the future if lack of alignment between mayors and governors grows as a result of increasing party weakness (Mainwaring 2018) and if decentralization continues to gain ground. In these settings, the opportunities and policy choices of aligned and nonaligned mayors should be examined and considered in the design of policies and revenue-sharing rules that seek to improve well-being.

## Appendix for When Mayors Deliver

### Contents

#### Descriptive Statistics.

**Table 6** Sources and Descriptive Statistics by Year

Variable	Description	Sources	Mean	SD	Min	Max	Years
<i>Infant Mortality Rate</i>	The number of deaths of children under one year of age per 1,000 live births	Dirección Provincial de Estadística (Buenos Aires Province)	15.02	5.23	2.11	30.85	1991–2018
<i>Political Alignment</i>	Mayor-governor alignment	Newspaper articles, electoral data and academic and journalistic literature	0.66	0.48	0	1	1992–2018
<i>Municipal Consultations</i>	Municipal consultations per uninsured resident	Dirección Provincial de Estadística (Buenos Aires Province) and Censo Nacional de Población (INDEC)	5.63	4.76	0.67	35.66	1992–2018
<i>State Presence</i>	Share of slums with state presence.	Registro Publico Provincial de Villas y Asentamientos Precarios (2015).	0.28	0.23	0	0.84	1992–2018
<i>Provincial Consultations</i>	Provincial consultations per uninsured resident	Dirección Provincial de Estadística, Buenos Aires Province, and Censo Nacional de Población (INDEC)	1.73	1.85	0	8.88	1992–2018
<i>Municipal Wealth</i>	Municipal GGP per capita (in constant \$)	Dirección Provincial de Estadística (Buenos Aires Province), Lodola, Brigo and Morra (2010), INDEC, and Buenos Aires City	10,309	7332.58	1020	45,544	1992–2018
<i>Reelected Mayor</i>	Mayor in second (or more) consecutive term.	Junta Electoral de la Provincia de Buenos Aires	0.59	0.48	0	1	1992–2018
<i>Electoral Competition</i>	Vote margin, winner and the runner-up	Junta Electoral de la Provincia de Buenos Aires	23.73	15.32	0.1	67.19	1992–2018
<i>Protest</i>	Number of protests	Garay (2016) Data Set of Protest, Argentina 1996–2011	1.3	4.33	0	46	1996–2011

**Table 6** (continued)

Variable	Description	Sources	Mean	SD	Min	Max	Years
<i>Informal Settlements</i>	Total number of informal settlements	Registro Publico Provincial de Villas y Asentamientos Precarios (2015).	30.83	24.04	0	128	1992–2018
<i>Peronist Mayor</i>	Mayor belongs to the Peronist party	Own coding	0.78	0.41	0	1	1992–2018
<i>NBI</i>	Percentage of household with unmet basic needs	Censo Nacional de Población (INDEC, 1991, 2001, and 2010)	13.23	5.53	2.4	28	1991–2018
<i>Municipal Beds</i>	Municipal hospital beds per uninsured resident	Dirección Provincial de Estadística, Buenos Aires Province, and Censo Nacional de Población (INDEC)	0.001	0.002	0	0.01	2000–2016
<i>Provincial Beds</i>	Provincial hospital beds per uninsured resident	Dirección Provincial de Estadística, Buenos Aires Province, and Censo Nacional de Población (INDEC)	0.002	0.003	0	0.01	2000–2016

**Table 7** Descriptive Statistics by Mayoral Administration, Further Control Variables

Variable	Description	Sources	Mean	SD	Min	Max	Years
<i>NBI</i>	Percentage of household with unmet basic needs	Censo Nacional de Población (INDEC, 1991, 2001, and 2010)	13.54	5.7	2.43	28	1991–2018
<i>Municipal Beds</i>	Municipal hospital beds per uninsured resident	Dirección Provincial de Estadística, Buenos Aires Province, and Censo Nacional de Población (INDEC)	0.001	0.002	0	0.01	1995–2015
<i>Provincial Beds</i>	Provincial hospital beds per uninsured resident	Dirección Provincial de Estadística, Buenos Aires Province, and Censo Nacional de Población (INDEC)	0.002	0.003	0	0.01	1995–2015
<i>Distance</i>	Distance from the City of Buenos Aires	<a href="http://www.distanciasentre.com">www.distanciasentre.com</a>	37.57	15.38	7.4	63	1991–2018
<i>Outsider Municipality</i>	Residents without health insurance constitute at least 51 percent of the population	Censo Nacional de Población (INDEC, 1991, 2001, and 2010)	0.26	0.44	0	1	1991–2018
<i>School Attendance</i>	% children 6–17 attending school	Censo Nacional de Población (INDEC, 2001, and 2010); Ministry of Education Province of Buenos Aires (2017)	95.2	1.24	92.57	98.2	1995–2018

**Table 8** Political Variables by Mayoral Term

	Mayoral Term	Political Alignment	Reelected Mayor	Electoral Competition
	1991	0.85	0.46	17.31
	1995	0.88	0.48	30.96
	1999	0.64	0.73	18.79
	2003	0.42	0.55	25.93
	2007	0.76	0.7	18.74
	2011	0.64	0.7	35.89
	2015	0.39	0.45	14.82

**Robustness Checks**

## Models with Random Effects

**Table 9** Main Models with Random Effects, I

	Infant Mortality Rate			Municipal Consultations	
	(1)	(2)	(3)	(4)	(5)
<i>Political Alignment</i>	3.20*** (0.59)		2.29*** (0.58)	-1.76*** (0.66)	-1.46* (0.77)
<i>Municipal Consultations</i>		-0.42*** (0.05)	-0.42*** (0.06)		
<i>Provincial Consultations</i>			-0.30 (0.23)		-0.60** (0.26)
<i>Municipal Wealth</i>			0.0000 (0.0000)		0.0003** (0.0001)
<i>Reelected Mayor</i>			0.33 (0.63)		0.37 (0.35)
<i>Electoral Competition</i>			0.01 (0.03)		0.01 (0.02)
<i>Constant</i>	12.27*** (0.43)	16.91*** (0.54)	15.30*** (0.76)	7.34*** (0.77)	4.19*** (1.57)
<i>Observations</i>	224	223	223	223	223

\* $p < 0.1$ ; \*\* $p < 0.05$ ; \*\*\* $p < 0.01$ , Random Effects and Cluster Robust SEs

**Table 10** Main Models with Random Effects, II

	Infant Mortality Rate			
	(1)	(2)	(3)	(4)
<i>Political Alignment</i>	2.07*** (0.71)	1.92*** (0.59)	2.07* (1.11)	1.48** (0.73)
<i>Municipal Consultations</i>	-0.40*** (0.06)	-0.43*** (0.07)	-0.43*** (0.07)	-0.48*** (0.08)
<i>Provincial Consultations</i>	-0.31 (0.23)	-0.20 (0.20)	-0.20 (0.20)	-0.27 (0.23)
<i>Municipal Wealth</i>	0.0000 (0.0000)	-0.0000 (0.0000)	-0.0000 (0.0000)	-0.0000 (0.0000)
<i>Reelected Mayor</i>	0.27 (0.68)	0.17 (0.59)	0.18 (0.59)	-0.09 (0.57)
<i>Electoral Competition</i>	0.01 (0.02)	0.01 (0.03)	0.01 (0.03)	-0.02 (0.03)
<i>Peronist Mayor</i>	0.70 (0.99)			
<i>State Presence</i>		-5.18*** (1.61)	-4.90*** (1.62)	-5.28*** (1.51)
<i>Informal Settlements</i>		-0.06*** (0.01)	-0.07*** (0.01)	-0.06*** (0.01)
<i>Protest</i>				-0.01 (0.02)
<i>State Presence*Alignment</i>			-0.52 (2.57)	
<i>Constant</i>	14.85*** (1.00)	19.15*** (1.12)	19.11*** (1.13)	21.49*** (1.14)
<i>Observations</i>	223	223	223	191

\* $p < 0.1$ ; \*\* $p < 0.05$ ; \*\*\* $p < 0.01$ , Random Effects and Cluster Robust SEs

**Table 11** Model with Outsider Municipality and Distance from CABA

	Infant Mortality Rate	
<i>Political Alignment</i>	1.38** (0.65)	1.60*** (0.53)
<i>Municipal Consultations</i>	-0.46*** (0.06)	-0.31*** (0.04)
<i>Distance</i>	0.04 (0.03)	
<i>Protest</i>	-0.03** (0.02)	
<i>Outsider Municipality</i>		3.91*** (0.77)
<i>Constant</i>	15.43*** (1.23)	14.00*** (0.57)
<i>Observations</i>	191	217

\* $p < 0.1$ ; \*\* $p < 0.05$ ; \*\*\* $p < 0.01$ , Random Effects and Cluster Robust SEs



## Further Specifications

**Table 12** Models with Lagged IMR, NBI, and Hospital Beds

	Infant Mortality Rate					
	By Mayoral Term			By Year		
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Political Alignment</i>	0.86 (0.69)	0.74 (0.50)	0.60 (0.79)	1.05*** (0.29)	1.15*** (0.26)	0.44 (0.34)
<i>Municipal Consultations</i>	-0.26*** (0.07)	-0.09** (0.04)		-0.12** (0.05)	-0.05 (0.04)	
<i>Provincial Consultations</i>	0.86* (0.45)	0.15 (0.31)		-0.13 (0.38)	0.02 (0.42)	
<i>Municipal Wealth</i>	-0.0001 (0.0001)	0.0000 (0.0001)	-0.00001 (0.0001)	-0.0001 (0.0001)	-0.0000 (0.0001)	-0.0001 (0.0001)
<i>Reelected Mayor</i>	0.94* (0.54)	0.51 (0.41)	0.70 (0.54)	-0.01 (0.29)	-0.04 (0.24)	0.30 (0.33)
<i>Electoral Competition</i>	0.02 (0.02)	0.02 (0.02)	0.01 (0.03)	0.004 (0.01)	0.003 (0.01)	-0.01 (0.01)
<i>State Presence</i>		-3.42 (2.80)	-17.55*** (4.82)	-10.89*** (2.62)	-6.38*** (2.26)	-15.53*** (2.68)
<i>Informal Settlements</i>		-0.06*** (0.02)	-0.23*** (0.06)	-0.15*** (0.04)	-0.09*** (0.01)	-0.17*** (0.03)
<i>Lagged Infant Mortality</i>	0.35*** (0.08)			0.41*** (0.09)		
<i>NBI</i>		1.01*** (0.09)			0.91*** (0.08)	
<i>Municipal Beds</i>			-1056.77*** (354.26)			-689.78 (439.40)
<i>Provincial Beds</i>			23.43 (829.88)			-339.43 (238.27)
<i>Observations</i>	191	223	165	840	846	526

Note: \* $p < 0.1$ ; \*\* $p < 0.05$ ; \*\*\* $p < 0.01$ , Fixed Effects and Cluster Robust SEs

**Table 13** School Attendance as Dependent Variable

	School Attendance						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Political Alignment</i>	0.03 (0.06)	0.03 (0.06)	-0.05 (0.07)	0.09 (0.05)	0.12 (0.09)	0.09 (0.05)	0.05 (0.04)
<i>Municipal Wealth</i>		0.0000*** (0.0000)	0.0000*** (0.0000)	0.0000 (0.0000)	0.0000 (0.0000)	0.0000 (0.0000)	-0.0000 (0.0000)
<i>Reelected Mayor</i>		0.07 (0.05)	0.06 (0.05)	0.06 (0.05)	0.06 (0.05)	0.06 (0.05)	0.02 (0.04)
<i>Electoral Competition</i>		-0.001 (0.002)	-0.002 (0.002)	-0.0004 (0.002)	-0.001 (0.002)	-0.0003 (0.002)	0.001 (0.002)
<i>Peronist Mayor</i>			0.19* (0.10)				
<i>State Presence</i>				1.51*** (0.54)	1.59*** (0.55)	1.51*** (0.54)	0.64 (0.55)
<i>Informal Settlements</i>				0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	-0.002 (0.01)
<i>Protest</i>						0.001 (0.002)	
<i>NBI</i>							-0.07*** (0.02)
<i>State Presence*Alignment</i>					-0.16 (0.22)		
<i>Observations</i>	132	131	131	131	131	131	131

\* $p < 0.1$ ; \*\* $p < 0.05$ ; \*\*\* $p < 0.01$ , Fixed Effects and Cluster Robust SEs

**Acknowledgements** We would like to thank the participants at the MIT Quantitative Works-in-Progress Working Group, the participants at the GTAL workshop, especially Kent Eaton and Agustina Giraudy, and Santiago Anria for their comments. We are also grateful to two anonymous reviewers and the Editor of SCID for their comments and suggestions. Sofia Elverdin and Martin Maximino carried out research assistance for this project and Maria Gould and Camila Perez Leiros provided editorial assistance for this paper. Data collection was funded by the Weatherhead Center for International Affairs at Harvard University.

## References

- Alves JA. (Un?)Healthy Politics: The Political Determinants of Subnational Health Systems in Brazil. *Lat Am Polit Soc*. 2015;57(4):119–42.
- Auyero J. *Poor people's politics: peronist survival networks and the legacy of Evita*. Durham, NC: Duke University Press Books; 2001.
- Barlow R, Vissandjée B. Determinants of National Life Expectancy. *Can J Dev Stud / Revue Canadienne D'études Du Développement*. 1999;20(1):9–29.
- Beck N. Time-Series-Cross-Section Data: What have we learned in the past few years? *Annu Rev Polit Sci*. 2001;4:271–193.
- Bonvecchi A, Lodola G. The Dual Logic of Intergovernmental Transfers: Presidents, Governors, and the Politics of Coalition-Building in Argentina. *Publius: JFederalism*. 2011;41(2):179–206.
- Borges A. The political consequences of center-led redistribution in brazilian federalism: the fall of sub-national party machines. *Latin American Research Review* 2011;46(3):21–45. <http://www.jstor.org/stable/41413312>.
- Brinks DM, Levitsky S, Murillo MV, editors. *The politics of institutional weakness in Latin America*. New York, NY: Cambridge University Press; 2020.
- Bustikova L, Corduneanu-Huci C. Patronage, Trust, and State Capacity: The Historical Trajectories of Clientelism. *World Politics*. 2017;69(2):277–326.
- Callen M, Gulzar S, Rezaee A. Can Political Alignment Be Costly? *J Politics*. 2020;82(2):612–26.
- Calvo E, Murillo MV. Who Delivers? Partisan Clients in the Argentine Electoral Market. *Am J Polit Sci*. 2004;48(4):742–57.
- Calvo E, Murillo MV. When parties meet voters: assessing political linkages through partisan networks and distributive expectations in Argentina and Chile. *Comp Pol Stud*. 2013;46(7):851–82. <https://doi.org/10.1177/0010414012463882>.
- Calvo E, Murillo MV. *Non-policy politics: richer voters, poorer voters, and the diversification of electoral strategies*. Cambridge; New York, NY: Cambridge University Press; 2019.
- Cammett M, Şaşmaz A. Political Context, Organizational Mission, and the Quality of Social Services: Insights from the Health Sector in Lebanon. *World Dev*. 2017;98:120–32.
- Centeno MA, Kohli A, Yashar DJ, editors. *States in the developing world*. Cambridge, UK: Cambridge University Press; 2017.
- Cherny N, Freytes C, Niedzwiecki S, Scherlis G. *Base de datos de alineación política subnacional, Argentina 2003–2015*. Instituto de Investigaciones Gino Germani: Universidad de Buenos Aires; 2015.
- Collier RB, Handlin S, editors. *Reorganizing popular politics: participation and the new interest regime in Latin America*. Penn State University Press: University Park, PA; 2009.
- Deaton A. *The great escape: health, wealth, and the origins of inequality*. The Great Escape. Princeton, NJ: Princeton University Press; 2013.
- DEIS, D. de E. e I. de S. *Consultas Ambulatorias en Establecimientos Oficiales*. Ministerio de Salud; 2013.
- Eaton K. *Politics beyond the capital: the design of subnational institutions in South America*. Stanford, CA: Stanford University Press; 2004.
- Eaton K. The Downside of Decentralization: Armed Clientelism in Colombia. *Secur Stud*. 2006;15(4):533–62.
- Fairfield T. *Private wealth and public revenue*. New York, NY: Cambridge University Press; 2015.
- Falletti TG. *Decentralization and subnational politics in Latin America*. New York, NY: Cambridge University Press; 2010.

- Fenwick TB. Avoiding governors: federalism, democracy, and poverty alleviation in Brazil and Argentina. Notre Dame, IN: University of Notre Dame Press; 2015.
- Gamm G, Kousser T. Life, Literacy, and the Pursuit of Prosperity: Party Competition and Policy Outcomes in 50 States. *Am Polit Sci Rev.* 2021;115(4):1442–63. <https://doi.org/10.1017/S0003055421000617>.
- Garay C. Social Policy and Collective Action: Unemployed Workers, Community Associations, and Protest in Argentina. *Polit Soc.* 2007;35(2):301–28.
- Garay C. Social policy expansion in Latin America. New York, NY: Cambridge University Press; 2016.
- Garay C, Maroto MM. Local Health Care Provision as a Territorial Power-Building Strategy: Non-Aligned Mayors in Argentina. *Comp Polit.* 2019;52(1):105–25.
- Garay C, Palmer-Rubin B, Poertner M. Organizational and partisan brokerage of social benefits: Social policy linkages in Mexico. *World Dev.* 2020;136:105103. <https://doi.org/10.1016/j.worlddev.2020.105103>.
- Gibson EL. Boundary Control: Subnational Authoritarianism in Democratic Countries. *World Politics.* 2005;58:101.
- Giraudy A, Moncada E, Snyder R, editors. Inside countries: subnational research in comparative politics. New York, NY: Cambridge University Press; 2019.
- Gupta S, Verhoeven M, Tiongson ER. Does Higher Government Spending Buy Better Results in Education and Health Care? (SSRN Scholarly Paper ID 880548). *Soc Sci Res Netw*; 1999. <https://papers.ssrn.com/abstract=880548>
- Harding R, Stasavage D. What Democracy Does (and Doesn't Do) for Basic Services: School Fees, School Inputs, and African Elections. *J Polit.* 2014;76(1):229–45.
- Hilgers T. Causes and Consequences of Political Clientelism: Mexico's PRD in Comparative Perspective. *Lat Am Polit Soc.* 2008;50(4):123–53.
- Holland AC. The Distributive Politics of Enforcement. *Am J Polit Sci.* 2015;59(2):357–71.
- Huber E, Stephens JD. Democracy and the left: social policy and inequality in Latin America. Chicago, IL: University of Chicago Press; 2012.
- Kim K, Moody PM. More resources better health? A cross-national perspective. *Soc Sci Med.* 1992;34(8):837–42.
- Lake DA, Baum MA. The Invisible Hand of Democracy: Political Control and the Provision of Public Services. *Comp Pol Stud.* 2001;34(6):587–621.
- Levitsky S. Transforming labor-based parties in Latin America: Argentine peronism in comparative perspective. New York, NY: Cambridge University Press; 2003.
- Levitsky S, Roberts KM, editors. The resurgence of the Latin American left. Baltimore, MD: Johns Hopkins University Press; 2011.
- López Accotto A, Martínez CR, Grinberg I, Mangas M. La provincia de Buenos Aires y sus municipios: los laberintos de una distribución anacrónica de recursos. Colección Cuestiones metropolitanas. Los Polvorines, Argentina: Universidad Nacional de General Sarmiento.
- Mainwaring S, editor. Party systems in Latin America: institutionalization, decay, and collapse. Cambridge, MA: Cambridge University Press; 2018.
- McGuire JW. Basic health care provision and under-5 mortality: A Cross-National study of developing Countries. *World Dev.* 2006;34(3):405–25.
- McGuire JW. Wealth, health, and democracy in East Asia and Latin America. New York, NY: Cambridge University Press; 2010.
- McGuire JW. Democracy and population health. Elements in the politics of development. Cambridge, UK: Cambridge University Press; 2020.
- Niedzwiecki S. Social Policies, Attribution of Responsibility, and Political Alignments: A Subnational Analysis of Argentina and Brazil. *Comp Pol Stud.* 2016;49(4):457–98. <https://doi.org/10.1177/0010414015612392>.
- Niedzwiecki S. Uneven social policies: the politics of subnational variation in Latin America. Cambridge, MA: Cambridge University Press; 2018.
- Oliveros V. Patronage at work: public jobs and political services in Argentina. Cambridge: UK; Cambridge University Press; 2021.
- Otero-Bahamon S. Subnational Inequality in Latin America: Empirical and Theoretical Implications of Moving beyond Interpersonal Inequality. *Stud Comp Int Dev.* 2019;54(2):185–209.
- Pierson P. Dismantling the welfare state?: Reagan, thatcher and the politics of retrenchment. Cambridge-studies in comparative politics. New York, NY: Cambridge University Press; 1994.
- Pritchett L, Summers LH. Wealthier is Healthier. *J Human Resour.* 1996;31(4):841–868. JSTOR.

- Przeworski A, Alvarez ME, Cheibub JA, Limongi F. Democracy and development: political institutions and well-being in the world, 1950–1990. Cambridge: Cambridge University Press; 2000.
- Public Registry of Slums and Informal Settlements (RPPVAP). Data available at: <http://www.sstuv.gba.gov.ar/idehab/>.
- Ross M Is Democracy Good for the Poor? *Am J Polit Sci*. 2006;50(4), 860–874. JSTOR
- Rothstein B. The quality of government: corruption, social trust, and inequality in international perspective. Chicago, IL: University of Chicago Press; 2011.
- Sen A. Development as freedom (Reprint edition). New York, NY: Anchor; 2000.
- Shefter M. Political parties and the state. Princeton, NJ: Princeton University Press; 1993.
- Simison E. Distribuyendo transferencias discrecionales: Argentina entre la centralización fiscal y la desnacionalización del sistema de partidos. *Revista SAAP*. 2015;9(1):93–118.
- Singh P. Subnationalism and Social Development: A Comparative Analysis of Indian States. *World Politics*. 2015;67(3):506–62.
- Smulovitz C, Peruzzotti E. Societal Accountability in Latin America. *J Democr*. 2000;11(4):147–58. <https://doi.org/10.1353/jod.2000.0087>.
- Soifer HD. State building in Latin America. Cambridge, MA: Cambridge University Press; 2015.
- Svampa M, Pereyra S. Entre la ruta y el barrio: la experiencia de las organizaciones piqueteras. Buenos Aires, Argentina: Editorial Biblos; 2003.
- Szwarcberg M. Mobilizing poor voters: machine politics, clientelism, and social networks in Argentina. Cambridge, MA: Cambridge University Press; 2015.
- Touchton M, Sugiyama NB, Wampler B. Democracy at Work: Moving Beyond Elections to Improve Well-Being. *Am Polit Sci Rev*. 2017;111(1):68–82.
- Wampler B, Sugiyama NB, Touchton M. Democracy at work: pathways to well-being in Brazil. New York, NY: Cambridge University Press; 2019.
- Weitz-Shapiro R. What Wins Votes: Why Some Politicians Opt Out of Clientelism. *Am J Polit Sci*. 2012;56(3):568–83.
- Wigley S, Akkoyunlu-Wigley A. The Impact of Regime Type on Health: Does Redistribution Explain Everything? *World Polit*. 2011;63(4), 647–677. JSTOR.
- Zarazaga R. Brokers Beyond Clientelism: A New Perspective Through the Argentine Case. *Latin Am Polit Soc*. 2014;56(3):23–45.

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