Is Basic Democracy Enough?

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Abstract

In many contexts, elections only partially determine political authority. I examine the impacts of increasing electoral representation in Pakistan's 1960s local councils known as the "Basic Democracies." Councils were comprised of members either popularly elected or directly appointed by the military-led government. A formulaic quirk in the establishing law caused their relative proportion of elected members to fluctuate in an alternating pattern as a function of council size. I use this pattern to show that councils with more elected members causally raised less revenue and provided fewer public services. Convergence is slow in this setting and gaps in both public goods and measures of economic activity persist over a 50-year period to 2020. I provide evidence that the primary mechanism is diminished activity within the council, reflecting either less ability or willingness to provide public goods. Higher levels of government do not contribute to the effect as differences in public goods provided by them are tightly estimated around zero. My results notably diverge from positive effects found in research studying comprehensive democratic transitions. They can thus inform our understanding of when elections are effective, particularly in institutions that mix democratic and nondemocratic elements.

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1 Introduction

The use of elections to determine political power is a distinguishing feature between democratic and nondemocratic governments. Research in political economy often regards elections positively, finding that transitions to democracy increase public goods provision and economic growth (Acemoglu et al. 2019). However, many institutions are best thought of as "hybrid" systems that do not fall neatly into binary categories of democratic or nondemocratic (Diamond 2002). In these contexts, elections may determine a portion of political authority with the remainder determined non-electorally. A common example is a legislative body where some members are elected but others are appointed in a non-democratic process. Partially electoral systems have been used in many historical and modern contexts, but less is known about the factors that shape their performance. In particular, whether the extent of electoral representation affects their provision of public goods or economic development remains unclear.

It is theoretically and empirically challenging to determine whether the degree of electoral representation matters in partially electoral systems. On the margin, increased representation might offer benefits like those of full democratic transitions, though to a lesser extent. Alternatively, elections in primarily non-democratic contexts could be compromised and produce few changes in the identities or actions of politicians. Finally, the divergent backgrounds and incentives of elected and unelected politicians might lead to conflict or deadlock, either within the body itself or from misalignment with the central government. In democratic contexts, such misalignment can have adverse local effects (Asher and Novosad 2017). Many non-random factors determine the extent to which nondemocratic governments permit elections, making it difficult to establish a causal relationship.

In this paper, I study the effects of expanding the role of elections within a partially electoral setting. My context is 1960s Pakistan where several thousand local councils called the "Basic Democracies" were established under the military government of General Ayub Khan. Each council featured a mix of elected members chosen by popular vote and unelected members chosen by the central government. The councils had significant responsibility for local economic development and played a crucial role in the expansion of public services in rural areas during this period. For these issues, contemporary observers largely regarded the elections as fair despite the undemocratic national environment. Aside from variation in the composition of their members, the roles and governing structures of the councils were uniform and comparable to systems in nearby countries such as India's *panchayat raj*. The Basic Democracies system lasted until 1969 when Ayub Khan was replaced as premier.

A formulaic quirk in the law structuring the councils led to essentially random shifts in

the share of elected members. The number of elected members was first set as a function of council population. Then, the number of appointed members was set at half the elected size, rounded down. Councils happened to get an even number of elected members therefore always had a 2:1 elected to appointed ratio. Councils with an odd number always had strictly more elections, with their ratio being 11% higher on average. The extent of electoral representation thus varied in an alternating, odd/even pattern based on (elected) member size. Given that this pattern is unlikely to be replicated by an omitted variable, I use it as a plausibly random source of variation to study the marginal effects of electoral representation.

I find that more electoral representation reduced public goods provision, notably contrasting with the positive effects found in recent literature examining categorical differences between democracy and non-democracy. "Odd" councils with more elections receive fewer schools, fewer health facilities, and less electrification. In a combined index that aggregates across categories, the loss averages 0.04 standard deviations. On their own terms, these effects were economically meaningful, being equivalent to 5.8% of the net school construction and 18% of electrification that occurred in the 1960s. The estimates reflect changes from the marginal member, meaning the total effect of electoral representation was likely larger.

The reduced level of public goods in this period remained persistent in future decades, showing limited convergence into the modern day. The effects listed above are measured ten years after the councils were created, reflecting medium-run duration. Approximately 96% of the public goods effect persists fifty years late to 2020. This result cannot reflect persistence via the councils themselves, which had been dissolved long ago. Instead, it reflects a slow process of convergence in public goods provision over a half-century period. This long-lasting reduction in public goods negatively affected long-run economic development in turn. In 2020, villages in odd councils score lower on a range of economic indicators measuring financial access, agricultural production, and industrialization. The material stakes of institutional performance were thus important and long-lasting.

A variety of balance, placebo, and robustness tests support a causal interpretation of my results. Using a large set of pre-treatment village characteristics, I conduct roughly a thousand placebo regressions across a number of specifications; the odd/even difference is significant in essentially the number that would be predicted by random chance. Estimated effects on indexes of the main public goods prior to council creation are tightly estimated around 0. Finally, post-treatment estimates are largely insensitive to the inclusion or exclusion of a wide range of administrative fixed effects, pre-treatment village-level controls, and flexible controls for council size.

These analyses required the collection, digitization, and linking of a range of administrative datasets that comprehensively cover the nation of Pakistan for most of its independent history. For population and public goods provision, I rely on Pakistan's 1951, 1961, 1972, and 2020 censuses at the village level. I supplement these sources with other official documents that detail the Basic Democracy councils' structure, composition, and tax imposition. Each source individually covers most or all of Pakistan's 40,000 villages. Using a mixture of manual and automated fuzzy matching, I link a majority of these villages into a single dataset, yielding a detailed view of their economic and political characteristics. To the best of my knowledge, this project is the first to comprehensively use the community-level data from these sources.

Turning to mechanisms, I show that the marginal election reduced council activity. Administrative data show that odd councils raised less revenue and spent less than their even counterparts. While a detailed welfare estimate is beyond the scope of this paper, I provide evidence that the reduced public services are inconsistent with a simple story of efficient underprovision. The largest reductions in public goods come from more populous villages where the benefits would have been the largest. The reduction in economic activity also suggests that public investment in this era was important for long-run growth. Finally, in an analysis of a subset of councils that published project-level data, I show that the fraction of local and central sources of funding was not affected by the odd/even distinction. Instead, odd councils spent less from both their own resources and a standardized grant from the central government. Together, these results indicate elections decreased councils' ability or desire to provide public goods.

I provide evidence against several alternative mechanisms. Most critically, I find no evidence that higher levels of government reduced their support to more democratic councils. Focusing on a set of public goods provided only by those governments, I find tightly estimated null effects individually and on a combined index. I also find no evidence that the human capital of councilors explains this effect. Using both a simple interaction design and a regression discontinuity design around population thresholds that determined the distribution of representatives within a council, I find negative or null effects from the selection of elected members from highly educated areas. The presence of non-null effects itself also rejects several theories that were plausible ex-ante. Hypothetically, the elections could have been perfunctory and led to little change in the identities of actions of politicians. Elected and unelected councilors could also have voted in uniform blocs, meaning marginal effects would only be important in cases where they determined the majority group. In my setting, elected members were always a strict majority. Both these theories would have predicted null effects from changes in council composition, contrary to my findings.

While care is required in considering the implication of these results for other contexts, they suggest that the benefits of electoral democracy may not be monotonic. Complete democratic transitions typically bundle the use of elections with supporting institutions. Politicians in these systems also face similar incentives, potentially increasing their ability to reach consensus. Absent these benefits, marginally increasing electoral representation may have counterintuitive effects.

This project connects to a range of political economy research on elections and democracy and their relationship to economic development. The most related literature has focused on the effect of democracy on public goods provision and economic growth, with recent papers in economics mostly finding positive effects on institutional or governance outcomes (Besley and Kudamatsu 2006; Martinez-Bravo 2014; Burgess et al. 2015; Martinez-Bravo, Mukherjee and Stegmann 2017; Acemoglu et al. 2019; Martinez-Bravo et al. 2022; Arora et al. 2023). Exogenous shifts toward democracy, even brief ones, can often be self-sustaining and increase support for democracy long-term (Jones and Olken 2009; Martinez, Jessen and Xu 2023). Other results have been more fixed (Foster and Rosenzweig 2022), including research in political science (Cleary 2007; Deacon 2009; Touchton, Sugiyama and Wampler 2017) and cross-country comparisons in economics (Przeworski and Limongi 1993; Barro 1996). These bodies of work have largely considered binary comparisons of democratic and non-democratic systems, often utilizing panel data to make before/after comparisons over time. This paper contributes to this research area by studying how increases in the relative importance of elections can affect institutional performance within a fixed system. Since institutions in many contexts are only partly democratic, they do not easily fall into binary categories. This variation is relevant for evaluating political trends in those settings, particularly steps towards or away from complete democratization. The negative result also provides support for theories that predict complex or non-monotonic effects from increasing the inclusiveness of institutions, even when the ideal institutions are quite inclusive (Acemoglu and Robinson 2023). This study is also one of the first within economics to empirically examine partially electoral legislatures that explicitly mix elected and unelected members within a single body, using a natural experiment to overcome the deeply endogenous process that determines when elections are held in non-democratic settings (Egorov and Sonin 2021).

A second area of work has examined the impacts of increasing the quality of democracy. This includes topics of expanding suffrage and participation (Miller 2008; Cascio and Washington 2014; Hinnerich and Pettersson-Lidbom 2014); increasing competitiveness in elections (Fergusson, Larreguy and Riaño 2022); improving voter information (Snyder Jr and Strömberg 2010; Campante and Do 2014; Horacio, John et al. 2020); or properly delimiting political boundaries (Burgess et al. 2012; Bazzi and Gudgeon 2021). Broadly, this literature has found that the quality of democracy improves institutional performance, at least on some key metrics. Relatedly, other research has discussed the problem of elite capture wherein powerful groups can limit political competition and thereby advance their own interests at the expense of the broader public. These dynamics may occur in both democracies (Bardhan and Mookherjee 2005; Cole 2009; Bardhan and Mookherjee 2012; Munshi and Rosenzweig 2015) and non-democracies (Francois, Trebbi and Xiao 2023). This paper contributes to this literature by exploring the parallel topic of expanding the role of elections within a fixed institutional setup.

A third area considers the question of politicians' identities, exploring both the selection of people into becoming politicians (Dal Bó et al. 2017; Gulzar and Khan 2023) and the effects of politician identity on governance. The latter topic includes research on "reservations" of legislative seats for particular groups (Pande 2003; Chattopadhyay and Duflo 2004) and the (usually negative) impacts of powerful "dynasties" of political families (Cheema, Javid and Naseer 2013; George and Ponattu 2019). This paper contributes to this work by offering a natural setting in which to compare the identities of politicians chosen via democratic and nondemocratic means within a fixed setting. Previous work has focused on either comparing politicians to non-politicians in a particular context or focused on the differences in politicians over different periods of time. Here, the simultaneous choice of elected and unelected legislators within the same councils allows for an apples-to-apples comparison.

Finally, this paper has important contextual, measurement, and methodological similarities to work in a range of fields. Within political science, there are important efforts to quantify the extent of democracy on a continuous spectrum rather than a binary category (Gerring et al. 2015). Other work has used odd/even or other regularly alternating comparisons to examine causal identification (Angrist and Krueger 1991; Alston and Smith 2022) or as empirical regularity generally (Ensminger and Leder-Luis 2022). This paper is also one of the first in economics to explore the Basic Democracies period in Pakistan, adding to a growing body of work on local government and political economy in the country (Cheema, Khwaja and Qadir 2006; Acemoglu et al. 2020; Cheema et al. 2023). The Basic Democracy system was applied across all of modern Pakistan and in similar form in Bangladesh. The size of both nations makes this context an important one to study on its own terms as a matter of economic history and its connection to development.

This paper proceeds as follows. Section 2 discusses the historical background and political structure of the Basic Democracies councils. Sections 3-4 discuss the data and details of my empirical strategy. Section 5 provides the main results on the effect of public goods provision. Section 6 discusses the main mechanisms of council efficacy. Section 7 provides evidence against alternative mechanisms and Section 8 concludes.

2 Historical Background

This study focuses on the Basic Democracy system as practiced in "West Pakistan" (modern Pakistan) and its first-round councils. Although the system was also present in "East Pakistan" (Bangladesh), it functioned under different rules. Consequently, the remainder of this paper discusses background and data only related to present-day Pakistan. As such, the variation, data, and analyses in this project cover about 2.5% of global population.¹

2.1 Ayub Khan's "Basic Democracies"

General Ayub Khan took power in Pakistan in a 1958 coup and was consequently eager to boost his government's democratic credentials. In 1959, his administration created the system of "Basic Democracies," dividing the country into around 4000 "union councils"² of several thousand people each. Councilors served dual roles as administrators and as the electors for the president. In selecting the president, Pakistan's institutions became a form of indirect democracy comparable to the American electoral college. As local administrators, the councilors' powers were wide-ranging, having responsibility for education, health, agriculture, and some forms of taxation (Inayatullah 1964). Each council also internally elected a "chairman" as a preeminent member. Two rounds of Basic Democrats were instated for five-year terms until Ayub Khan was replaced as president in 1969. No policy or law explicitly reused the council boundaries or structures and, indeed, local governments were essentially dissolved under the civilian rule of Zulfikar Ali Bhutto (1971-1979).

The union councils had a substantial role in what proved to be a transformative period. Public goods provision expanded substantially for Pakistan's rural villages in the 1960s, with the fraction having a school going from 23.1% to 28.5% to 47.5% in the censuses of 1951, 1961, and 1972. Much this change was organized the Rural Works Programme which was funded through a mix of US government aid and resources from the union councils themselves. Given a (typically fixed) allocation, funding decisions were decentralized with union councils designing and implementing projects for about 70% of this spending. The remainder was spent on large-scale projects by district-level councils. See Inayatullah and Burki (1966) and Appendix Section B.1.

Councils were partially electoral and had both popularly elected members and members appointed by Khan's military-led government. In Pakistan's first nationwide vote, elected

¹This figure is based on the population of modern Pakistan. Both a higher figure (that includes Bangladesh) or a lower one (excluding villages that fail to link to outcome data) are reasonable.

²In larger, urbanized areas, the councils could variously be called "town councils," "union committees," or "municipal councils." With slight variations, the functions of their setup was similar, so I use "union councils" for simplicity.

members were chosen based on an adult franchise of both men and women. According to Ashford (1967), "[t]here were few reports of injustices in the elections, and available reports indicate that the elections transpired in an orderly fashion," with turnout at about 75%. Meanwhile, appointed members "were to be selected by the district [administrative area] officer, often with the recommendation of police, education, and other officials." As such, there was a meaningful democratic component to these elections. Voters ultimately selected politicians different from Khan's appointees, with the latter "generally representing wealthier, more influential local interests." However, the autocratic nature of Khan's military government did limit political discourse around sensitive issues and discouraged party organization. Election standards thus clearly fell short of those in full democracies, but voters were rarely limited over non-sensitive questions of local development.³ Overall, Sayeed (1961) agrees that "one cannot dismiss scenes of... *haris* [peasants]... winning elections against their own landlords, as things of no consequence."

The typical councilor was a landowning farmer well-known in their community, but not necessarily outside it. The Basic Democracies significantly increased the number of political offices by devolving power to the local level, so mechanically only a minority had prior political experience (Ashford 1967). Importantly, even among the appointed members, all councilors were local and very few were directly part of the military. Elected and appointed members were thus drawn from the same pool of people, though it is an empirical question whether electoral and non-electoral mechanisms selected similar politicians from that group. On average, council members were modestly affluent, but not in the upper wealth echelons nationally. Around 31% of councilors were illiterate, though this compared favorably to a national rate of 84% (Government of Pakistan 1960b).

The historical literature indicates that non-elected members tended to be higher status and more educated (Ashford 1967). Government of Pakistan (1960*a*) agrees "that by and large, educated persons were appointed [i.e., unelected]." Note that these differences reflected the divergent priorities of voters and the military-led government.⁴ That is, nothing mechanically constrained either group to choosing members with higher or lower socioeconomic status. Within the council, there were no formal distinctions between elected and appointed members. In particular, their votes counted equally and either type of member could become the chairman.

³Sayeed (1961), for example, describes "a heated [council] debate" with one member "in favor of raising new taxes and undertaking new schemes of social welfare" and the other resistant to "the imposition of what he termed 'unbearable taxes"'

⁴Additionally, the government attempted to avoid simply appointing losing candidates to seats (Khan 1963).

2.2 Electoral Formula and Delimitation

The average council in this setting had 10 elected and 5 appointed members, but the exact figures were determined formulaically. The number of elected members was first computed based on the 1951 census population: one for every 800 people. Then, the number of appointed members was determined by dividing the number of elected members by two and rounding down (Government of Pakistan 1959). This formulaic quirk meant that councils with an odd number of elected members were more democratic. For example, councils with either 4 or 5 elected members would both have 2 militarily appointed members. However, the latter council would have 2.5 elected members for every appointed one while the former would have just a 2:1 ratio.

A consequence of this formula was that councils with 1, 3, 5 ... elected members always had a higher elected/appointed ratio than the 2:1 value for those with 2, 4, 6... electeds. This paper leverages this alternating pattern as a source of quasi-random variation in a council's electoral representation as described in Section 4. Figure 1 plots the distribution of council sizes by village and shows it has a smooth, roughly normal distribution.





Notes: distribution of council sizes for the main sample of 1972 villages by number of elected members. x-axis is restricted for visual clarity. Normal density curve plotted as a line. See Section 3.1 for sample definition.

Councils were created on the basis of preexisting administrative divisions, limiting the scope for manipulation. By default, the law structuring council creation stated that councils were to be formed from low-level administrative divisions (*patwar circles*) within the next largest unit (the *qanungo halqa*).⁵ The council delimitation was also completed in a nar-

 $^{^{5}}Patwar\ circles$ are the lowest level of the administrative hierarchy of land taxation divisions in Pakistan and consist of several villages. *Qanungo halqas* or *circles* are the next level up. Both are below the *tehsil* and *district* division.

row window of time in November 1959,⁶ leaving less scope for a sophisticated procedure in drawing council boundaries.

Councils themselves were further subdivided into "wards" that had one or more elected representatives. While representation at the ward level was based on population, the constraint that wards have a whole number of representatives led to substantial rounding and thus variation in effective political representation per person across wards within a single council.

2.3 Partial Electoral Systems in Other Contexts

Legislatures that mixed elected and unelected members have been a political institution in many settings. Membership in early European parliaments, including in England and Iceland, could be obtained via election, royal appointment, or inherited noble status. Within South Asia, colonial-era councils mixed members chosen via limited elections with those chosen directly by the British. Other historical and modern examples are listed in Appendix Table A.2. The fraction of elected members varies substantially across contexts and over time within settings, mirroring the variation I study in this paper. For broader theory about when elections occur non-democracies, see Egorov and Sonin (2021).

3 Data

In this section, I give a brief overview of my data sources and construction; more details are given in Appendix Section A. Data on council structure and members comes from *The Gazette of West Pakistan*, a government publication. Data on population and public goods are drawn from the 1951, 1961, 1972, and 2020 censuses.

3.1 Unit of Observation, Sample Construction, and Linking

The unit of observation in my sample is a community, typically a village,⁷ within a council according to the table describing a council structure. By default, I include all communities that have outcome and control data in my analyses. In cases where a community appears

⁶The West Pakistan Basic Democracies Election Rules governing delimitation were published on November 13, 1959 and the official council structures were published November 16-18, 1959. In practice, bureaucrats may have had advance notice of the rules and had slightly longer than the 3-day gap implied here. However, the timeline was short by any calculation. The Basic Democracies Order announcing the outlines of the system was published in October 27, 1959.

⁷Less commonly, it could be a town or a portion of a larger city.

multiple times,⁸ I keep only the first instance determined by the printing order in the council document.

For village-level data, I link to other sources such as census data using a mix of fuzzy string matching and manual review. This is not a straightforward process as villages are often transliterated to English inconsistently or because of errors in the underlying sources; see Section A.12 for more details. Appendix Table A.3 shows that linkage rates are not observably imbalanced across odd/even councils for any years across several specifications.

One feature of most census data across all periods is that they primarily record the existence of different public goods or community features only as binary indicators. For example, in all four censuses, the existence or absence of primary schools is noted, but their total number is not recorded. Since the typical village in this sample is under 1000 people, the 0/1 margin is likely the relevant one in most cases.

Given the range of available outcomes, I often summarize groups of related public goods as a sum of binary categories or similarly constructed score. For example, I add together the binary indicators for different types of schools. See below and Appendix Section A.9. While these scores aim to approximate the extent of a certain type of feature, note that they cannot be taken as equal to the total number of features given the underlying binary data. By default, I rescale indexes to be mean 0 and standard deviation 1 in the even (fewer election) councils and therefore interpret effect sizes in standard deviations.

3.2 Public Goods Index (1972)

Because the censuses offer a large number of public goods in 1972, I frequently combine them into an aggregate index by averaging their z-scores. In general, I consider the indices to be more comprehensive than their underlying components and emphasize them as the primary results. I use this categorization as the basis for similar indexes in other years.

3.2.1 Local

For a holistic understanding of public services under the purview of the union councils, I turn to Inayatullah and Burki (1966) and its description of the Rural Works Programme (RWP). Beginning in 1963, the RWP governed the public works of the union councils and offers comparable statistics on their focus.

⁸This primarily occurs in cases where a community, typically a large city, is split into multiple parts in the council structure data. Large cities like Lahore, for example, could be divided into neighborhoods. However, these smaller units were not recorded individually in the census. Communities could also be duplicated due to errors in the source documents or linking procedure.

Figure 2: Villages and Schools in 1961 Census



Notes: visualization of 1961 census villages colored by the existence of a school. Villages are geocoded via a fuzzy string match to the *World Gazetteer*. Regional boundaries are marked in black; village-level data for areas including Kashmir, Gilgit-Baltistan, and parts of the "tribal areas" (FATA) were not recorded in the 1961 census.

In the census, I observe public goods that cover about 75% of council public works spending: education, health, and agriculture/irrigation. Respectively, the census records schools, health clinics, and rural electrification.⁹ However, earlier censuses lacks good data on roads and bridges which accounted for the remainder. Overall, census data reflects most, although not all, council spending on public works. Section B.2 is able to estimate effects on this category for 2020 where the data are available.

My index of locally provided goods averages three variables in accordance with the above discussion: schools, health clinics, and electricity. The latter two category are binary variables. For schools, the 1972 census records four types: primary, middle, high, and college. I add all four together to create a "summed" index that ranges from 0 to 4.

3.2.2 Central

For some results, I consider a counterpart index of public goods that were primarily the responsibility of central, rather than local, government authorities. I specifically consider

⁹While councils did not directly provide electricity, they did construct tubewells that were the target of rural electrification (Government of Pakistan 1965, pg. 305). As such, I consider rural electrification to indirectly represent agricultural and irrigation improvement. Tubewell data are directly available in the censuses 1951 and 1961, but not in the post-treatment year of 1972. Tubewell and other irrigation forms part of the agricultural index analyzed in Table 4. For this calculation, I consider the construction of the council's meeting hall as an administrative cost.

post offices, telegraph stations, police stations, railways, and hospitals in this category. As discussed in Section 3.2.1, union councils did not provide these services. Instead, because they served and connected areas much larger than clusters of villages.

3.3 Taxes and Fees

Union councils could raise revenue through taxes and fees on their constituents, all of which were publicly announced. Councils could choose from a fixed (though extensive) set of activities to tax, though they had the flexibility to choose their own rates. Common examples included a sales tax and fees for registering a marriage or the birth of a son. Further details are given in Appendix Section A.3.

3.4 Council Spending Data

I use data from two districts¹⁰ (Sialkot, Lyallpur/Faisalabad) that contain project-level information on council-directed spending under the Rural Works Programme (RWP) 1963-64. The data contain information and the type, cost, and location of the project and the latter district contains an additional breakdown of costs between "local" sources (i.e., the council) and "central" sources (i.e., higher levels of government). Beginning that year, the RWP was the primary vehicle for public works in the Basic Democracies system. Conveniently, union councils controlled a large majority (68%) of this spending and, within a district, were typically given access to equal amounts of funding (Inayatullah and Burki 1966). More details are discussed in Appendix Section B.1. The data covered herein only detail locally-directed spending.

3.5 Mauza Census 2020

The 2020 mauza (village) census contains data on public goods similar to those in the 1951-1972 censuses as well as a range of economic indicators. See Appendix Section A.8 for a complete list. Note this census intentionally did not collect population information which is thus missing for this year. It additionally contains indicators of economic activity that I combine into indexes by category as described in Section A.9. I also analyze an aggregated index across all categories which is again re-scaled to be mean 0 and standard deviation 1 in the even-council sample.

 $^{^{10}{\}rm These}$ data were published at the district level rather than centrally and are thus only available for a minority of the sample.

3.6 Summary Statistics

Table 1 displays census summary statistics for the main sample of villages linked to the 1972 census.¹¹ I successfully link a large portion of Pakistan's approximately 40,000 villages in this sample, though an important minority is not included. The communities are fairly small, with a majority below a thousand people in all years.

Reflecting its low income per person, public services were historically quite limited in Pakistan. In 1961, only 29% of sample villages had primary schools and just 2.4% had electricity. The Basic Democracies period, however, witnessed a substantial expansion. By 1972, 58% had primary schools and 2.4% were electrified. As discussed in Section 2.1, this overall increase likely reflected Ayub Khan and the union councils' focus on rural development, including through initiatives like the Rural Works Programme. Further advances, particularly in rural electrification, are apparent by 2020.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Number	School	School	Clinia	Police	Post	Flootnicity	Population
	Villages	(primary)	(advanced)	Chine	Station	Office	Electricity	(median)
1951	$26,\!622$.22	.04	.004	.01	.07	0	550
1961	$28,\!158$.29	.05	.016	.01	.1	.02	628
1972	$28,\!158$.58	.12	.05	.02	.15	.11	883
2020	$25,\!830$.89	.43	.13	.1	.17	.61	

Table 1: Summary Statistics, Main Sample Villages

Notes: This table presents summary statistics for the main sample of villages. For years 1972 and earlier, the data cover villages linked in the census to 1972. 2020 data are for the main sample of 2020 villages; see Section 3.1. "Advanced" schools in column (3) codes the existence of any school other than a primary school (middle school, high school, college). Note that there are no population data in the 2020 source.

As a sanity check, I compute the pairwise correlation coefficients of the composite indexes. The results are given in Appendix Table A.4 and provide basic validation for the informativeness of the measures. As expected, the indexes show substantial positive correlation with each other and the degree of correlation increases the closer they are in time. These facts specifically hold true for the 2020 aggregate measure of economic activity which is positively correlated with both contemporaneous and historical public goods measures.

¹¹Described above in Section 3.1. See also Section A.12 for details on linking. Mechanically, my linkage procedure requires a linkage to 1961 to have 1972 data but a link to 1951 is optional.

4 Econometric Strategy

4.1 Even/Odd Variation and First Stage

This paper leverages the odd/even difference in a council's elected members as a source of quasi-random variation in electoral representation. Intuitively, it is unlikely that any omitted variable would match the highly non-linear pattern induced by the odd/even variation in size. While sophisticated administrators could have induced such a pattern by manipulating council boundaries, they were constrained by needing to form councils from lower-level administrative units and by the short time frame involved in creating the system (see Section 2.2). I empirically verify these assertions below by showing statistical balance across "odd" and "even" councils across a wide range of pre-treatment characteristics.

Figure 3 depicts the non-linear odd/even pattern in electoral representation, measured by the ratio of elected to appointed members. Even councils always have a 2:1 ratio while odd members have relatively more elected members, averaging 2.23 empirically. The variation is thus appropriate for detecting changes in electoral representation on the margin with odd councils having 11% more electoral representation by this metric. Very few councils have under six or more than seventeen elected members so the figure groups these together with others with the same odd/even status.



Figure 3: Elected/Appointed Ratio and Council Size

Notes: This figure depicts union councils' ratio of elected to appointed members as a function of (elected member) council size. Circle sizes reflect the number of villages in each bin.

Unlike party-based parliamentary systems, appointed members would not have needed to achieve a council majority to have influence. Instead, this project relies on variation that could shift each council's median vote. Qualitatively, members of both groups commonly became the chairman and Ashford (1967) describes the higher-status appointed members as punching above their voting weight in influence. This contrasts with a party-based systems where members vote in blocs and small majorities are pivotal.

Formally, for villages v in councils c, I estimate regressions of the form

$$y_{v,c} = \alpha [\text{Odd}]_c + f(N_c) + X_{v,c}\beta + \varepsilon_{v,c}$$
(1)

where α represents the main coefficient of interest. f is a flexible function (linear spline) of N_c , the number of elected members in the council; $[Odd]_c$ is a binary variable for whether N_c is odd; $X_{v,c}$ are controls that typically include district fixed effects; $\varepsilon_{v,c}$ is an error term clustered at the council level where treatment status (even/odd) is determined.

Some variables (e.g., council taxes) can only be defined at the council level. In these cases, I run regressions of the form

$$y_c = \alpha [\text{Odd}]_c + f(N_c) + X_c \beta + \varepsilon_c \tag{2}$$

and use heteroskedastic-robust standard errors.

4.2 Balance

To validate my identification strategy, I run placebo regressions of equation (1) on pretreatment variables from the 1951 and 1961 censuses. Although the council boundaries were drawn in late 1959, councilors did not take their seats until March 1960,¹² approximately when public goods information for the 1961 census was being collected. I thus view the 1961 census as reflecting data contemporaneous with council creation.

Figure 4 finds primarily insignificant results on placebo checks using variables drawn from the 1951-61 censuses. For each variable, I run at least twenty regressions based on the choice of including or excluding district fixed effects; using the whole sample or the fully linked one analyzed in Section 5; and using 1-5 knots for the spline. The 1961 variables additionally can include or exclude 1951 controls.¹³ and graphs a CDF of the resulting p-values from estimates of equation (1). The distribution is largely uniform, with 10.0% and 10.8% of regressions significant at the 10% level in 1951 and 1961 respectively; see Snyder and Zhuo (2024) for a discussion of the distribution of such tests. Further placebo checks are conducted in Table A.3 (linkage rates) and Tables A.6-A.7 (pre-1972 indices).

Given the results in Figure 4, I conclude the odd/even variation was assigned essentially

¹²Government of Pakistan (1960*a*) also wrote that for the whole of 1960, almost all funds were absorbed in establishing the councils and "practically no funds are left to undertake works of public utility."

 $^{^{13}2\}times2\times5=20$ for 1951 and $2\times2\times5\times2=40$ for 1961. In total, there are 320 regressions for 1951 and 760 for 1961.



Notes: placebo regressions of equation (1) on pre-treatment 1951 and 1961 census variables. See Appendix Sections A.2-A.6 for lists of variables and aggregates. Binary variables with means of less than 0.5% are excluded. For each variable, I consider multiple specifications as described in Section 4 and graph the CDF of p-values above. The 5% and 10% thresholds of conventional significance are circled.

at random at the time of council creation. Any imbalance due to the statistical properties of council size or manipulation by officials would somehow have had to leave a large set of pre-defined variables statistically balanced. In the next section, I use the odd/even variation to estimate causal effects of electoral representation on post-treatment outcomes.

4.3 Secondary Strategy: Regression Discontinuity

To elucidate mechanisms, at some points in the paper I take advantage of the populationbased thresholds that determined the number of elected members. Each council was subdivided into constituencies known as "wards." While most wards were represented by a single elected member, larger ones had multiple representatives based on the one member per 800 people rule. This figure was rounded, leading to cutoffs at 1200, 2000, and 2800 people which I use in a regression discontinuity framework. I define the running variable as the difference between a ward's 1951 population and the nearest threshold.¹⁴ Using Calonico, Cattaneo and Titiunik (2014), I implement the RD according to the following equation

$$y_{v,w} = \alpha [\text{Above}]_w + f(p_w) + X_{v,w} + \varepsilon_{v,w}$$
(3)

where for village v in ward w, [Above] denotes a binary variable for being above the threshold; p_w denotes the running variable of ward population relative to the threshold; f is a local linear function; $X_{v,w}$ are controls. Standard errors are clustered at the ward level. Appendix

 $^{^{14}}$ e.g., 1100 people gives -100 while 1300 people gives 100. For visual clarity in the RD graphs, I restrict the values to be between -400 and +400; this does not affect any observations within the bandwidth.

Figure A.1 shows a strong first stage for this equation, implying substantial if not complete fidelity to the rule.

This strategy can be adapted to study the effects of selecting politicians from more educated areas. For wards with literacy rates above the council average, I keep the running variable as above. For wards with lower rates of literacy, I multiply the running variable by -1. The RD thus effectively captures the effect of adding a councilor from a highly educated area. Appendix Figure A.2 shows the relevance of this variation for electing councilors from more educated areas.

5 Main Results

In this section, I use the odd/even variation to test whether increases in electoral representation increase or decrease public goods provision and measures of economic development.

5.1 Public Goods: Medium Run (1972)

My main result is that increased electoral representation in union councils decreased their provision of public goods. This section focuses on 1972 outcome data, representing around a decade after the first-round councils were elected and seven years after their five-year term ended. I consider this a medium-run outcome that reflects the full efforts of the council over its term, plus a number of intervening years.

Table 2 presents estimates of my village-level equation (1). Columns (1)-(4) analyze individual public goods and (5)-(8) analyze the aggregated index. The effects on both the index and its components are negative and statistically significant. Because these data capture most public goods under the councils' purview, I interpret these effects as a general reduction of public services and not a decision to focus on some kinds of goods at the expense of others.¹⁵

The size of the reduction is economically meaningful, both on its own terms and especially when keeping in mind it represents the marginal rather than total effect of electoral representation. During Ayub Khan's tenure, public services were substantially expanded in Pakistan's rural areas, often in conjunction with the union councils; see Section 2. The results here indicate that shifts in council composition significantly impacted the operation of these programs. For example, the effect on primary schools (1.7pp) represents 5.8% of the total net school construction from 1961 to 1972. The effects on health clinics and electrifi-

¹⁵With the exception of road projects; see Section 3.2.1. I estimate long-run effects on roads in Section B.2 where the effects are tightly estimated around 0, suggesting no substitution into this category.

cation also represent 15% and 18% of their 1961-72 expansions respectively. Given the 1972 date, these differences were also fairly durable over at least seven years.

		Individual	Public Goods			Index (z-scores)	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	School	School	Dispensary	Electricity	Index	Index	Index	Index
	(primary)	(all)	Dispensary	Electricity	maon	maan	maon	maon
Odd	-0.017^{***}	-0.016^{*}	-0.0052^{**}	-0.015^{***}	-0.038^{*}	-0.043***	-0.045^{***}	-0.046***
	(0.0060)	(0.0080)	(0.0024)	(0.0056)	(0.020)	(0.017)	(0.014)	(0.012)
Ν	$28,\!158$	$28,\!158$	28,158	28,158	$28,\!158$	28,158	$28,\!158$	28,158
SEs / Clusters	Council	Council	Council	Council	Council	Council	Council	Council
N (clusters)	2975	2975	2975	2975	2975	2975	2975	2975
61 District FEs	Υ	Υ	Υ	Υ		Υ	Υ	Υ
51 Controls	Y	Υ	Υ	Υ			Υ	Υ
61 Controls	Y	Υ	Y	Y				Υ
$\mathbb{E}[y T=0]$.59	.72	.053	.11	0	0	0	0

 Table 2: Public Goods Provision (1972)

Notes: this table tests for effects on public goods in 1972 using regressions of equation (1). Columns (1)-(4) are respectively primary school, sum of all secular schools [primary + middle + high + college], rural dispensary/health clinic, and electricity. Columns (1), (3), (4) are binary variables; column (2) is the sum of four binary variables. Columns (5)-(8) use an index that averages the z-scores of (2)-(4). 1951 and 1961 controls are listed in Section A.11.

While my design is focused on estimating the impact of the marginal elected council member, the total effect of the elected members would likely have been larger. Appendix Table A.5 makes this point quantitatively by treating the elected/appointed member ratio as the independent variable and using the odd/even status as an instrument. Taken at face value, these estimates suggest that transitioning from a purely appointed council to one with an even ratio of members would lower the public goods index by 0.21 standard deviations. Some caution is warranted in interpreting this result as it requires additional assumptions on functional form that a binary instrument cannot reveal. However, unless the specific range I study was the sole case where the marginal election decreased public goods, then the cumulative impact of the elected members must have exceeded the effects from a single member as shown in Table 2.

These results are robust to a number of different specifications, controls, and placebo checks. Table 2's columns (5)-(8) sequentially add district fixed effects and village-level 1951/1961 data as controls. The main result is significant without any controls and grows more precise as more are added. This is consistent with the statistical balance on preperiod characteristics described in Section 4.2. Separately, Appendix Tables A.6 and A.7 conduct equivalent analyses¹⁶ for 1951 and 1961 data as placebos and find tightly estimated

¹⁶These tables necessarily include fewer columns than Table 2 because there are fewer years from which

null effects. Table A.8 uses an aggregate index from principal component analysis (PCA) and finds essentially equivalent estimates on size and significance. Further specification robustness checks are discussed in Section 7.1.



Figure 5: Local Public Goods (1972) and Council Size

Notes: This figure depicts average residuals of the 1972 locally provided public goods index, adjusted for district fixed effects, 1951/61 controls, and council elected member size. Values are averaged in bins of council size. Circle sizes reflect the number of villages in each bin. Lines reflect 90% and 95% confidence intervals, adjusted for clustering at the council level. For the index, see Section 3.2.1. 1951 and 1961 controls are listed in Section A.11.

Figure 5 provides visual intuition for the results. The y-axis averages my public goods index residualized on my full control set of column (8) and grouped by council size in elected members. The alternating high/low/high/low... pattern of public goods is present here with odd bins having fewer public goods than adjacent even bins.

These results notably contrast with much of the recent literature on complete democratic transitions. As discussed in Section 7.1, recent literature in this area has primarily found that democratization increases public goods provision overall or at least in some areas. In this context, marginal increases in electoral representation instead reduce the activity and public goods provision of local governments. In Section 6, I study the mechanisms behind this change.

5.2 Public Goods: Targeting

Given the result that electoral representation lowered public goods provision, a natural question is whether this reduction was, in fact, undesirable. While literacy rates were low and public goods were uncommon in villages at the start of the councils' terms (see Table

to draw pre-period controls. The 1961 data control for 1951 characteristics and both tables control for administrative fixed effects.

1), income levels were also low. If the costs involved meant that union councils typically overprovided public goods, that would have very different implications for the interpretation of Section 5.1 relative to the case where public goods were "good."

In this section, I propose and conduct a population-based heuristic test for overprovision. If the even councils were overproviding public goods, then the largest changes should occur in the smallest villages that had the least need for them. While a formal welfare analysis is beyond the scope of this paper, this test relies on the plausible assumption that placing public goods in larger communities had greater benefits for more people.



Figure 6: Public Goods (1972) and Village Size (1961)

Notes: The relationship between the 1972 public goods index and population size in 1961. Both panels use the main linked sample villages from Table 2. (a) presents average values for all sample villages (b) presents estimates of the odd/even difference equation (1) within particular ranges of population. Each regression sample is chosen so that log(population) is within 1 of a particular value 0, 1, 2, ... and the average log(population) value of that sample is displayed on the x-axis. The final datapoint covers all villages of 2000 or more in population. 90% (thick) and 95% (thin) confidence intervals for the regression estimates are displayed. Circle size reflects the number of villages in the bin.

Figure 6 charts the relationship between public goods and village size. The overall relationship between the 1972 index and size is shown in panel (a). Unsurprisingly, and consistent with the previous discussion, there is a strong, positive correlation between size and public goods. (b) presents regression estimates of the odd/even effect on different subsamples of villages based on population size. Increased electoral representation primarily leads to lower provision in larger rather than smaller communities.¹⁷

While the results here do not constitute a formal welfare analysis, they are not consistent with a simple overprovision story. To efficiently reduce public goods, odd councils would

 $^{^{17}}$ Section 7.3 explores similar analyses in regression form and finds results consistent with this figure, though statistical significance depends on the population measure used.

most likely have foregone projects in less populous areas where the benefits were lowest. The results here show that the opposite occurred, with the biggest reductions taking place in the largest communities. The pattern thus provides some evidence against a strategically targeted reduction in public goods.

5.3 Public Goods: Long Run (2020)

A second test for the importance of the public investments made by the Basic Democracies is how rapidly convergence occurred since 1972, if at all. If the gaps between odd and even councils lasted for a long time, the 1972 effects would understate the full impact of the investments. In addition, the rate of convergence in an interesting question even on its own terms. Both this section and the subsequent one use data from the 2020 *mauza* census, covering roughly a 60-year timeline from when the Basic Democracies councils began their terms. This section studies the effects on public goods, essentially measuring persistence and attenuation. The subsequent section studies a range of economic indicators, estimating the long-run impacts from the historical reduction in public goods.

Table 3 shows that the reduction in 1972 public goods did persist through 2020, though it experienced notable attenuation since then. These analyses replicate those in Table 2 on a smaller sample of villages that link through to 2020. The coefficients are once again consistently negative across the studied public goods and the combined index. However, statistical significance is varied among the index components. The effect on the aggregate index is statistically significant, but smaller at about 96% of the 1972 value in an equivalent sample. For comparability across years, the 1972 values are scaled according to the 2020 means and standard deviations.¹⁸

Several things are notable about these results. First, villages that causally missed out on the expansion of public goods in 1972 had fewer over a long duration. Second, there has been only limited catch-up over the last half-century, depending on how this is measured. Measured on the same scale, 96% of the 1972 effect still exists in 2020 and is statistically detectable. Even if the 1972 values are instead scaled based on the 1972 standard deviation, the estimate in the linked sample is -0.046 standard deviations which would still imply 65% of the effect remained in 2020. The effect's long duration makes it plausible that villages that lost out on public goods also experienced reductions in economic development over this

¹⁸Specifically, the 1972 public good indexes (e.g., electricity) are converted into z-scores based on the 2020 distribution. Then, they are averaged as before into a combined index. The aggregated 1972 index is scaled according to the mean and standard deviation values of the aggregate 2020 index, so its units are in 2020 standard deviations. For consistency, column (8) also includes a small number of observations (63) where public goods were not reported for 1972. For these, all public goods values are set to 0. Dropping these villages has little effect on the regression.

		Individual	Public Goods	5	In	dex (z-scor	es)	Index (1972)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	School (primary)	School (all)	Dispensary	Electricity	Index	Index	Index	Index
Odd	-0.0069	-0.013	-0.013***	-0.0046	-0.029	-0.029*	-0.030**	-0.031***
	(0.0045)	(0.013)	(0.0045)	(0.0090)	(0.018)	(0.015)	(0.014)	(0.0084)
Ν	$25,\!830$	25,830	25,830	$25,\!830$	25,830	25,830	25,830	25,830
SEs / Clusters	Council	Council	Council	Council	Council	Council	Council	Council
N (clusters)	2939	2939	2939	2939	2939	2939	2939	2939
61 District FEs	Υ	Υ	Υ	Y	Υ	Υ	Υ	Υ
51 Controls	Υ	Υ	Υ	Y		Υ	Υ	Υ
61 Controls	Y	Υ	Υ	Y			Υ	Υ
$\mathbb{E}[y T=0]$.9	1.6	.14	.62	0	0	0	-1.1

Table 3: Public Goods Provision (2020)

Notes: this table tests for effects on public goods in 2020 using regressions of equation (1). Columns (1)-(4) are respectively primary school, sum of all secular schools [primary + middle + high + college], rural dispensary/health clinic, and electricity. Columns (1), (3), (4) are binary variables; column (2) is the sum of four binary variables. Columns (5)-(7) use an index that averages the z-scores of (2)-(4). Column (8) uses 1972 data for comparison, using the column (7) sample and replicating the analysis in Table 2. 1951 and 1961 controls are listed in Section A.11.

period, a topic to which I turn in Section 5.4.

5.4 Economic Development: Long Run (2020)

This section studies the impact of historical local elections on long-run development. In doing so, it aims to make two contributions to this study. First, due to data availability, it provides the primary set of outcomes measuring economic development generally; the 1972 census primarily recorded public goods. Second, it supplements Section 5.2 by providing more evidence about the importance of the historical public goods reduction. If villages in odd councils experienced equivalent or better growth than those in even councils, the investments of the union councils might have been simply cosmetic or not worth the cost of taxation.

This section also highlights the benefits of this setting's cross-sectional variation. To use panel variation to study outcomes over a period of this duration would have required consistent measurement of outcomes across this period, thus limiting outcomes to those recorded in both 2020 and in 1960; most of the outcomes studied here could not have been analyzed given that restriction. The assumption of parallel trends over longer time periods is also stronger than over short durations.

Table 4 estimates that historical exposure to more local elections decreased a range of economic indicators measured in 2020. As described in Section A.9, I first categorize

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Ag.	Finance	Markets	Industry	Jobs	Media	Housing	Combined
Odd	-0.040**	-0.057^{**}	-0.013	-0.032^{*}	-0.0100	-0.024	0.0067	-0.050**
	(0.020)	(0.024)	(0.016)	(0.019)	(0.022)	(0.022)	(0.020)	(0.020)
Ν	$25,\!830$	$25,\!830$	$25,\!830$	$25,\!830$	$25,\!830$	$25,\!830$	$25,\!830$	25,830
SEs / Clusters	Council	Council	Council	Council	Council	Council	Council	Council
N (clusters)	2939	2939	2939	2939	2939	2939	2939	2939
61 District FEs	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
51 Controls	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
61 Controls	Y	Υ	Υ	Υ	Υ	Υ	Υ	Υ
$\mathbb{E}[y T=0]$	0	0	0	0	0	0	0	0

Table 4: Economic Indexes (2020)

Notes: this table tests for effects on economic indicators in 2020 using regressions of equation (1). Appendix Section A.9 lists the underlying components of each index for (1)-(6). (7) combines the indexes of (1)-(6) into a combined value by taking a simple average. 1951 and 1961 controls are listed in Section A.11.

underlying indicators into categories, averaging z-scores within them.¹⁹ Across almost all individual categories, increased electoral representation historically leads to lower measures of economic activity. Combined into a single index, the average score decreases by 0.05 standard deviations and is statistically significant. Figure 7 provides visual intuition for the results, showing a primarily alternating pattern of the economic indicator as a function of council size.

Figure 7: Economic Indicators (2020) and Council Size



Notes: This figure depicts average residuals of the 2020 economic index, adjusted for district fixed effects, 1951/61 controls, and council elected member size. Values are averaged in bins of council size. Circle sizes reflect the number of villages in each bin. Lines reflect 90% and 95% confidence intervals, adjusted for clustering at the council level. For the index, see Table 4. 1951 and 1961 controls are listed in Section A.11.

¹⁹The measures cover a range of areas including the extent of agricultural production, banks, industrial capacity, employment types, media and information access (e.g., television), and housing quality. Appendix Section A.9 describes the full list.

These results highlight the importance of local political institutions for both public goods provision and long-run economic development. While the total odd/even difference was not dramatic in absolute terms, it shaped the development of most of Pakistan's communities for around half a century. As noted earlier, the estimates here by design only represent the marginal effect of electoral representation in the union councils; the total importance of the institutional structure was likely much greater. The results here additionally connect councils' provision of public goods to development. Had these schools and other projects been unimportant for growth or, worse, existed only on paper, we would have expected to find null results in this section.

Given the long duration of the effects, it is important to consider possible mechanisms for the result. Based on the historical background discussed in Section 2, one explanation that can be immediately ruled out is persistence through local government structure itself. After Ayub Khan was replaced as president in 1969, the Basic Democracies system was dissolved. Local government in general was essentially non-existent during the (democratic) period under Zulfikar Ali Bhutto starting in 1971. While General Zia-ul-Haq once again created local bodies under martial law in 1979,²⁰ their structure did not directly copy that of 1959. The lack of any legal mechanism for persistence of council structure and their long period of dormancy under Bhutto make this an unlikely channel. More plausibly, the investments made in the 1960s had substantial periods of persistence and directly shaped economic outcomes. I turn to other aspects of mechanisms in the next two sections.

6 Main Mechanism – Internal Activity

In this section I test whether councils' own activities can account for the different provision of public goods shown in Section 5. I specifically consider outcomes of publicly announced taxes and the extent of spending by councils under the Rural Works Programme (see Sections 3.4, A.3).

6.1 Qualitative Evidence

The historical background also suggests that disengagement and inactivity among councils was a first order issue. As such, it provides plausible context for the reduced council activity levels shown earlier. Inayatullah and Burki (1966) note that many councils had significant amounts of unspent money in their budgets, indicating they did not use it effectively.

²⁰Broadly, non-democratic central governments in Pakistan have been more favorable to local governments as they perceived rural populations as more supportive of them. For a history of local government in Pakistan, see Cheema, Khwaja and Qadir (2006).

Increased activity on taxation could both expand a council's budget and indicate that it was was generally more active in providing for its constituents. Ashford (1967) provides some support for "numerous conflicts between the elected and appointed members" with the elected ones "act[ing] like 'dummies' in the presence of the [appointed] members." These conflicts centered around the tension between elected members' superior numbers and appointed members' more influential status in their communities. Increasing the portion of elected members could plausibly have exacerbated these conflicts.

6.2 Evidence from Council Taxes and Fees

Table 5 uses the council-level equation (2) to test whether an increased electoral representation affected council revenue generation. Columns (1)-(4) test for the presence of several common taxes and fees; column (5) examines for the total number of remaining uncategorized taxes. Columns (6) and (7) consider two different aggregations of all the taxes. (5)adopts the standard approach of averaging the z-scores. (7) predicts the 1972 public goods index using the full set of taxes and the main controls from Table 2. All estimated coefficients are negative with the aggregate measures statistically significant at the 1% level and (6) has a similar magnitude to the reduction in the index of public goods. The estimates on individual tax categories are all negative, although they are less precise with only the aggregated total of other taxes separately significant.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Uconth	Dontion	Vendera	Home	Misc.	Tax Index	Public Goods 72
	Hearth	ratues	vendors	Construction	(total)	(z-score)	(predicted z-score)
Odd	-0.0067	-0.0059**	-0.0094^{***}	-0.0080	-0.044***	-0.063***	-0.0035***
	(0.0078)	(0.0026)	(0.0026)	(0.0071)	(0.015)	(0.024)	(0.0013)
N	3,846	$3,\!846$	3,846	3,846	3,846	3,846	$28,\!158$
SEs / Clusters	Robust	Robust	Robust	Robust	Robust	Robust	Council
61 District FEs	Υ	Υ	Υ	Υ	Υ	Υ	Y
51 Controls	Υ	Υ	Υ	Y	Υ	Υ	Υ
61 Controls	Υ	Υ	Υ	Υ	Υ	Υ	Y
$\mathbb{E}[y T=0]$.1	.0085	.011	.078	.13	0	02

Table 5: Union Council Taxes/Fees

Notes: this table tests for effects on union council taxation using regressions of equation (2). Columns (1)-(4) code binary variables for taxes on each family ["hearth"], visible celebrations [e.g., with loudspeakers or dancing], fees on vendors ["pheri"], and home construction. Column (5) records the sum total of all other uncategorized tax types; see Section A.3. Column (6) uses a z-score index averaged across all categories. Column (7) predicts the 1972 public goods index using the full set of taxes and the main controls from Table 2. 1951 and 1961 controls are listed in Section A.11.

Table 5 provides direct evidence of gridlock and reduced activity. On the margin, electoral representation reduced their revenue generation which would have mechanically limited their

ability to conduct the projects studied in Section 5. Using budgetary data from a subset of the sample, I indeed find a decrease in locally raised revenue in Section 7.2.2. More generally, taxes represent one metric for activity in the council generally. Given that odd councils were less active in this capacity, they would likely have been less active in project spending and implementation more generally.

7 Alternative Mechanisms

7.1 Further Econometric Robustness

The main results are robust to several other specifications. Above, Table 2 showed that the results were largely unaffected by the inclusion of district fixed effects and a large set of controls from the 1951 and 1961 characteristics. Table A.9 explores robustness to functional form for N_c , the number of elected members per council. Using 1-5 knots in a linear spline or using fixed effects for each pair of council sizes leaves the main results essentially unchanged. Table A.10 also explores using different administrative area fixed effects and again the results are essentially unchanged.²¹ Table A.11 explores alternative ways of calculating the standard errors, including clustering at higher levels of administrative divisions and even at the level of the number of elected members, allowing for correlations across councils of the same size. These calculations are largely similar and so I continue to treat the council as the unit where treatment status is defined.

I also show robustness to different ways of defining the council size control in Table A.12. Treating size as the total number of members (elected+appointed) has little effect. Similarly, including a control for whether the total member size is odd has little effect. Note also that the odd/even status of the elected members is not collinear with the odd/even status of the total size meaning collinearity is not an issue here. In theory, councils with an even number of total members could have had more gridlock due to the probability of tied votes, but in practice this variable does not predict changes in public goods.

7.2 Central Government Alignment

Conditional on accepting the main results as causal, a key alternative to my story is the role of government bodies above the union councils. Since the central government itself conducted public works projects and because a significant portion of union council funding

 $^{^{21}}$ I prefer 1961 district fixed effects for two reasons. First, my judgment is that the data quality is higher in the 1961 census compared to the 1951. Second, while most tehsils have many union councils, a small number have just several and are essentially dropped from regressions with tehsil fixed effects.

came from the central government, any increase in public goods could have been attributable to its actions rather than the union councils per se. In other contexts, this dynamic has been shown to be important (Asher and Novosad 2017). Ayub Khan's military government and the civil service, after all, did not gain their positions via election. More directly, Khan's government chose the appointed councilors with few limitations. If these connections led the central government to direct resources toward more aligned union councils, it would provide an entirely different explanation for my main effects.

7.2.1 Central Government Projects

Table 6 tests the alignment hypothesis using a set of goods primarily provided by the central government (see Section 3.2.2). These public goods typically served or connected areas much larger than a union council and were consequently outside their purview. Across the listed goods and an aggregate index, all coefficients are close to zero, statistically insignificant, and tightly estimated. The aggregate index effect is estimated at .005, roughly an order of magnitude below the effects on council-provided goods analyzed in Table 2. As such, it does not appear that the central government was prioritizing public works in the even councils.

	(1)	(2)	(3)	(4)	(5)	(6)
	Post Office	Telegraph	Police Station	Railway	Hospital	Index
Odd	-0.00080	0.00063	0.00055	-0.0011	0.0022	$\frac{(2-score)}{0.0050}$
	(0.0035)	(0.0011)	(0.0016)	(0.0014)	(0.0019)	(0.010)
N	28,158	28,158	28,158	28,158	28,158	28,158
SEs / Clusters	Council	Council	Council	Council	Council	Council
N (clusters)	2975	2975	2975	2975	2975	2975
61 District FEs	Υ	Υ	Υ	Υ	Υ	Υ
51 Controls	Υ	Υ	Υ	Υ	Υ	Υ
61 Controls	Υ	Υ	Υ	Υ	Υ	Υ
$\mathbb{E}[y T=0]$.15	.0084	.021	.021	.026	0

 Table 6: Centrally Provided Public Goods (1972)

Notes: this table tests for effects on public goods in 1972 using regressions of equation (1). Columns (1)-(5) are respectively the presence of a post office, telegraph office, police station, railway, and hospital. Column (6) uses an index that averages the z-scores of (1)-(5). 1951 and 1961 controls are listed in Section A.11.

7.2.2 Local Spending

Although the previous section showed tight null effects on centrally provided public goods, the central government could have shown its favor by directing funding for local public goods to areas with more unelected members. To address this, I turn to spending data for two districts in the "Rural Works Programme" (RWP), the primary vehicle for local public works in this era. Two features are relevant here: first, union councils themselves designed and implemented RWP projects. Second, much of the funding was provided either by the US government or the councils themselves and routed through district councils. Union councils were then allocated either a fixed portion or a portion based on population and the availability of their ability to match funds.²² As such, the scope for manipulation was limited, though I test for it empirically below.

			All Villages			Villages	s w/Project
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	# Projects	$\log(\text{Spending})$	$\log(\text{Spending})$	$\log(\text{Spending})$	Any Spending?	% Spending	Any Spending?
	# Flojects	[total]	[central]	[local]	[local]	[center]	[local]
Odd	-0.099*	-0.34*	-0.31*	-0.37***	-0.11***	0.029	-0.12**
	(0.053)	(0.19)	(0.18)	(0.14)	(0.037)	(0.023)	(0.058)
Ν	1,314	1,314	1,314	1,314	1,314	624	624
SEs / Clusters	Council	Council	Council	Council	Council	Council	Council
N (clusters)	217	217	217	217	217	213	213
61 District FEs	Υ	Υ	Υ	Υ	Υ	Υ	Υ
51 Controls	Υ	Υ	Υ	Υ	Υ	Υ	Υ
61 Controls	Υ	Υ	Υ	Υ	Υ	Υ	Υ
$\mathbb{E}[y T=0]$.62	6.3	6.2	5.4	.4	.75	.8

 Table 7: RWP Council-Directed Spending

Notes: this table tests for effects on funding in the Rural Works Programme (RWP) 63-64 in Lyallpur (Faisalabad) District. For RWP background, see Section B.1. Columns (1)-(5) respectively examine the number of passed projects, the log of total spending, the log of centrally sourced spending, the log of local spending, and a binary indicating if the village received any local spending. Columns (6)-(7) restrict the sample only to villages that received projects and respectively examine the fraction of funding from central sources and whether the village received any local funding.

Table 7 shows the effects on local council spending from the marginal elected member. Columns (1)-(2) show that this shift led to fewer projects and less total spending in councils' constituent villages, mirroring the decrease in public goods seen in the full sample. Columns (3)-(5) break down this effect into the funding sources from both central²³ and local funds, both of which decrease. The reduced local spending is especially clear statistically, mirroring the lower tax and fee collection seen in the broader sample. Column (5) shows that this operates on the extensive margin specifically, with fewer projects receiving any local funding. The results in this sample, then, directly show how a reduction in spending by odd councils

²²Procedures varied by district, see Appendix Section B.1 for details and Section 3.4 for a data description. US government funding was provided through the PL 480 program and districts received their share based on a formula weighting both population and land area.

 $^{^{23}}$ Unfortunately, the data only report spending and not revenue. One limitation of this analysis is that I cannot quantitatively verify the contention of the historical documents that available central funds were provided in a neutral fashion in this particular program. See Section 7.2.1 for analysis supporting this contention more generally.

plausibly resulted in fewer public goods. Some caution is, of course, warranted given the smaller sample and the fact that some estimates are only significant at the 10% level. However, the results here are broadly consistent with the larger, more precise estimates shown earlier in the paper.

Table 7 also demonstrates that central funding was not biased toward the even-numbered councils with more appointed members. Column (6) studies the fraction of project funding from central sources. If anything, this fraction is slightly higher in odd-numbered councils. (7) shows that more villages in odd councils are funded only through central sources,²⁴ so this, too, operates on the extensive margin.

Overall, the results are consistent with a story where less activity from local councils drove the lower rates of public goods provision. Complementing the lack of changes in central public goods, the fraction of funding from the center either stayed fixed or increased whereas locally sourced funding notably fell. The reduced spending from the center notably suggests that councils were less able, rather than less willing, to execute projects. However, this interpretation relies on qualitative sources to establish that such funding was equally provided and consequently a preference-based story for reduced government activity remains plausible.

7.3 Electoral Incentives

Another explanation for my results is that odd councils did not reduce public goods provision universally but rather targeted different areas, perhaps in line with electoral incentives. While elections ideally improve the incentives to provide for constituents, this theory need not be universally true. Electoral incentives could have led cuncilors could to prioritize larger villages with more voting power. In that case, unweighted regressions of equation (1) could be somewhat misleading given villages' varied sizes. In other words, more elected councilors might have led to a different distribution of public goods rather than a universally more limited one.

In Table 8 below, I take several approaches to testing whether villages with more electoral power were favored in odd councils. The table presents estimates of equation (1) with interactions of [Odd] with measures of village size or electoral power.²⁵ Columns (1)-(4) use direct measures of population in either 1951 or 1961. Column (5) uses a dummy for the village being reported as the council headquarters in 1961. Finally, column (6) uses the subset of councils for which ward-level representation is available. As discussed in Section 2.2,

²⁴All projects in the sample receive some central funding, meaning this margin is never shifts.

 $^{^{25}}$ [Odd] and the measure itself are also included in the regression

different wards within a council could vary widely in effective representation. I define voting power as a ward's fraction of elected members times a village's fraction of ward population, essentially the fraction of the council's elected votes controlled by the village. In all cases, the outcome is the aggregated public goods index from 1972 studied in Table 2.

	(1)	(2)	(3)	(4)	(5)	(6)
	Log(pop)	Log(pop)	Pop [51]	Biggest	UC	Voting
	[51]	[61]	(% UC)	Village [51]	Head	Power $[51]$
$Odd \times term$	-0.0041	-0.0064	-0.17	-0.091**	-0.13**	-0.16
	(0.0070)	(0.0062)	(0.15)	(0.044)	(0.064)	(0.15)
Ν	26,622	28,158	$25,\!972$	28,158	$28,\!158$	24,699
SEs / Clusters	Council	Council	Council	Council	Council	Council
N (clusters)	2952	2975	2951	2975	2975	2825
61 District FEs	Υ	Υ	Υ	Υ	Υ	Υ
51 Controls	Υ	Υ	Υ	Υ	Υ	Υ
61 Controls	Υ	Υ	Υ	Υ	Υ	Y
$\mathbb{E}[y T=0]$.019	0	.033	0	0	.027

Table 8: Heterogeneity: Village Size and Voting Power

Notes: this table tests for heterogeneous effects on 1972 village public goods using regressions of equation (1). The outcome is the index of public goods studied in Table 2. The interaction of odd/even status and the term listed in the colum name are both included in each regression. The interactions considered are log(population) for 1951; log(population) in 1961; the fraction of the council's recorded population in 1961 among all linked villages; a dummy for being the largest village (or tied) in 1961; a dummy for whether the 1961 census lists the village as the union council headquarters; and voting power. Voting power is defined as the village's fraction of its council ward's 1961 population times the fraction of the council's seats in that ward. 1951 and 1961 controls are listed in Section A.11.

The results show that, if anything, larger villages are actually less favored when electoral representation increases. All of the individual interactions are negative and usually either significant (two cases) or close to significant (three cases). Thus, it does not appear that electoral representation led councils to favor larger villages at the expense of smaller ones. In general, villages of all sorts received fewer public goods and the councils do not seem to have steered spending in a strategic way.

7.4 Councilors' Human Capital

The historical evidence describes appointed councilors as having higher status and education. If elected members' lower levels of education or human capital interfered with their productivity as politicians, that could explain lower levels of council activity. Although both my preferred "internal coordination" mechanism and this explanation have similar implications for mixed system political bodies, it is important to explore separately as well. I provide two sets of results to test for a human capital mechanism. First, I consider a heterogeneity analysis to test whether the marginal election has more positive effects in areas with higher literacy. Second, I use the population thresholds and RD design described in Section 4.3 to directly measure the effect of adding an additional councilor from a higheducation versus low-education area.

7.4.1 Heterogeneity Evidence

Appendix Table A.13 studies the odd/even difference based on the literacy rates of villages within the council. While some areas might have struggled to find candidates with sufficient education to run for office, this constraint should have been relaxed in better-educated areas. However, the opposite appears to be true: the areas at the 90th percentile of literacy have negative and significant reductions from the marginal elected member. The point estimates for these areas are, in fact, more negative than the full-sample counterparts from Table 2, largely because the interaction between literacy and the "odd" dummy is negative. This fact holds true whether literacy is measured at the village level, the ward level (which an elected councilor represents), or the entire council. While the significance of the interaction term varies, each model continues to estimate negative and significant effects for highly-educated areas in the 90th percentile of literacy. The interaction test thus suggests that the public goods provision effects from the marginal election are larger, not smaller, in highly-educated areas.

7.4.2 RD Evidence

While the previous section provided evidence against a human capital story, its method of using heterogeneous treatment effects has limitations. In particular, the heterogeneity could be the result of a variable correlated with literacy rather than literacy itself. While I am not concerned with the effect of literacy per se, theoretically the effect through councilors' human capital could have been positive but biased by a variable correlated with literacy that led a negative effect from the marginal election. It would be preferable, instead, to find a separate source of variation for elected councilors' human capital.

For identification, I turn to the RD design described in Section 4.3. Using populationbased thresholds for the number of elected representatives at the constituency level within a council, I can study the effect of having an extra councilor from a high-education ward relative to a low-education one. Appendix Figure A.2 confirms the relevance of this variation. Under the assumption that high-education wards are more likely to elect educated politicians, this would increase the human capital within the elected members of the council. To test for the effects on public goods provision, I study the 1972 public goods index using the preferred specification in Table 2 for every village in the ward's council.



Figure 8: Councilors from High-Education Wards and Public Goods

Notes: this graph visualizes the results of RD equation (3) with the running variable constructed at the ward level to increase representation from high-education wards within a council; see Section 4.3 and Appendix Figure A.2. Each ward is paired with all villages in its council and the outcome is the village's 1972 index of local public goods. As in the main specification in Table 2, it controls for village-level 1951 data, 1961 data, and district fixed effects. RD Estimate: -0.02 (z = -0.59), bandwidth = 128.4

Figure 8 shows the results of this analysis visually. The point estimate of -0.02 (z = -0.59) actually suggests that more councilors from high-education areas slightly decreases public goods provision, though this change is not statistically significant. Given the similarity of this result to the interaction effects in the previous section, it is unlikely that elected councilors' human capital played a major role in this story.

7.5 Regional Dynamics

Another alternative explanation is that the results reflect or were shaped by Pakistan's interregional politics. Pakistan's four major regions are quite heterogeneous in terms of their density, ethnolinguistic groups, and political representation in the central government.²⁶

Table A.14 tests for regional heterogeneity in the results by replicating the main results of Table 2 and estimating an interaction effect for each province separately. For three out of four provinces (Punjab, Balochistan, and NWFP) both the baseline and total effect are negative, though the interaction is at most marginally significant. The effects in Sindh by

²⁶The four provinces in my sample are Punjab, Sindh, Balochistan, and the Northwest Frontier Province (NWFP) known today as Khyber Pakhtunkhwa (KPK). Punjab, with a majority of the population, is considered to be politically dominant. Balochistan and NWFP are home to active insurgent groups that oppose the central government. See Ahmed (1996) for a more detailed overview. I refer to the NWFP using its contemporary name.

itself have a positive point estimate, though the confidence interval includes negative values. Given these results and the noise induced by multiple hypothesis testing, I conclude that the main effects apply generally within Pakistan rather than being limited to a particular region. While the fact that the results are more muted in Sindh is an interesting result, I lack sufficient power to conclude that the odd/even differences there were non-negative per se and overall this question is not a primary aim of this paper. I consequently continue to include Sindh in all my regressions.

8 Conclusion

In many contexts, transitions to and from electoral democracy do not occur suddenly but instead as an accumulation of many small changes. This project has studied the marginal effects of one such change: the partial expansion of elections. For causal identification, it made use of a formulaic quirk in the structure of Pakistan's Basic Democracies that led to an alternating pattern of electoral representation in the councils. I confirm the essentially random nature of this pattern using a variety of placebo and robustness tests.

In contrast to a large body of literature examining discrete transitions, in my context marginal increases in electoral representation decreased public goods provision, revenue generation, and spending from local councils. Differences across councils persisted through the medium run (5-10 years) and even over the longer run (50-60 years). Councils that received fewer public goods in turn score lower on a range of economic measures in 2020, implying that the reduced public investment negatively impacted local development. While care is necessary in extrapolating these results, it is unlikely the effects were limited only to the margin close to the 2:1 elected/appointed ratio. More plausibly, there were effects along a range of ratios and this result represents just part of the total effect.

On its own terms, the foregone public goods were economically meaningful, with the medium-run primary school change representing 5.8% of the total net school construction, 15% of net health clinic construction, and 18% of electrification from 1961 to 1972. Consistent with the negative effects on long-run economic development, I find little evidence that the reductions were effectively targeted: the largest effects occur in the most populous communities where the benefits would have been the greatest. I also find little evidence that differential investment by the central government drove the result. An index of public goods provided centrally shows statistically insignificant effects tightly estimated around 0. Using both an interaction design and a population-based RD, I fail to find evidence for a human capital story. Instead, increased electoral representation appears to reduce councils' efficacy through internal divisions or divergent incentives across its members.

Broadly, the analysis suggests that the benefits of electoral democracy may not be monotonic and elections may not be effective in partial measure. Previous work has found that elected representatives at the local level provide more public goods even in the presence of a nondemocratic central government. The quality of local elections in the Basic Democracies era was certainly not perfect, but they were regarded as having significant democratic content by contemporary observers. The analysis in this papers instead points to the need for democracy to be provided as a complete package. Basic, or minimal amounts, may not always be enough.

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A Data Sources and Processing

A.1 Council Delimitation

Names of union councils, their constituent villages, their delimitation into wards, number of elected, and number of appointed members were reported in *The Gazette of West Pakistan*²⁷ in an "extraordinary" edition in November, 1959. These publications covered delimitation in West Pakistan (i.e., modern Pakistan) with a very small number of exceptions.²⁸

I digitized these entries and manually reviewed them for consistency and for corrections published in the same document. A small number of councils have missing member totals due to unreadable sections of the document.

A.2 Population and Public Goods

I use several sources for village-level public goods and population. The population censuses of 1951, 1961, and 1972 contain both pieces of information. The "mauza census" of 2020 records public goods and economic information, but without population. In select results, I supplement these sources with project-level information from the Rural Works Programme of 1963-64.

Below, I document the list of variables that each provides as well as the aggregates I construct from them.

A.3 Council Taxation

Union council tax and fee initiatives were individually announced in *The Gazette of West Pakistan*. Announcements typically record the council identity, the type of tax or fee (e.g., marriage, birth, sales), and the relevant rate. I digitize and link these announcements from the 1962 *Gazette* to obtain a holistic measure of each council's initiative.

List of observed taxes: hearth [household poll tax]; home construction; animal slaughter; marriage; birth [of a son]; "feast" [large celebration with food]; entertainment [e.g., cinema or performance]; *pheri* [on shops or small businesses]; commercial grain sales; "community" [adult poll tax, usually in the form of one or more days of labor]; recreation [e.g., dance or music]; animal sales/purchases; *dharat* [import duties on goods sold in urban areas]; utilities [electricity or water]; administrative fees [e.g., for certificates, permits, or other forms]; other

²⁷This gazette essentially continued the regional government gazette for Punjab in this era.

²⁸The modern capital of Islamabad had not yet been founded. The city of Karachi, the contemporary capital, was also not delimited in the gazette.

sales taxes; other miscellaneous taxes/fees [e.g., on land taxes, *hijras*, assessments of personal property like boats or homes]

A.4 Member Identities and Outcomes

Lists of elected members, appointed members, and council chairmen were reported in *The Gazette of West Pakistan* in January-March 1959 editions. For each council, the members names by ward are listed. Most announcements list notable professions and parentage (father). Some announcements also list the village origin or other small biographical details.

A.5 1951 Variable List

Raw variables coded: population, area, primary school, middle school, high school, girls school, dispensary, rural dispensary,²⁹ subsidized dispensary, hospital, post office, telegraph office, police station, railway, tubewell, sanitary committee [administrative designation], no-tified area committee [recognized urban area], levy post, dak/bungalow, rest house, land taxation headquarters.

Aggregates: any school [primary, middle, high, girls], any health [dispensary, rural dispensary, subsidized dispensary, hospital], any security [police station, levy post], any public good [all of the raw variables except sanitary committee, notified area committee]

A.6 1961 Variable List

Raw variables coded: population, literate population (ages 10+), area, primary school, middle school, high school, college, railway, post office, telegraph office, union council headquarters designation, dispensary, hospital, electricity, tubewell, historical monument, steamer ghat, police station, dak/bungalow

Aggregates: any school [primary, middle, high, college], any health [dispensary, hospital], any security [police station], any public good [all of the raw variables except steamer ghat, historical monument]

 $^{^{29}}$ Since the "dispensary" variable is frequently present in rural areas, the distinction between this variable and the previous one is not clear to us.

A.7 1972 Variable List

Raw variables coded: population, literate population (ages 10+), primary school, middle school, high school, college, madrasa [religious school], railway, post office, telegraph office, union council headquarters designation, dispensary, hospital, electricity, historical monument, bank, police station *Aggregates*: any school [max(primary, middle, high, college)],³⁰

summed schools [sum(primary, middle, high, college)], any health [dispensary, hospital], any security [police station], any public good [all of the raw variables except steamer bank, madrasa]

A.7.1 Missing Public Goods Areas

Several areas in 1972 accounting for 10% of all communities did not report public goods information and instead only reported population and literate population. These include all recognized urban areas (typically communities with 14000 or more population), the districts/agencies of Bajaur, Chitral, Khyber, Mohmand, North Waziristan, South Waziristan, Swat, and recognized "tribal areas" in the Northwest Frontier Province [modern Khyber Pakhtunkhwa]. They additionally include the tehsils of Nushki [Chagai district], the Deexcluded Area [Dera Ghazi Khan district], "tribal areas" [adjoining Hazara district], Kurram agency, Barkhan [Loralai district], Sibi/Sui Pata/Shahrig [Sibi district].

A.8 2020 Variable List

A note on codes and scores: some variables describe indicators in qualitative language. By default, I interpret "all" as 100%, "mostly" as 75%, "some" as 25%, and "none" as 0%. For example, a village that is coded as having "some" electricity access receives a value of 0.25. The variable thus becomes categorical, though slightly more detailed than a 0/1 binary. In cases of distinct categories with a quality gradient, I typically create a score with ascending integer weights. That is: 1 point for the lowest quality category, 2 for the second lowest quality, etc.

Raw variables coded (public goods): primary school, middle school, high school, college, madrasa [religious school], irrigation sources [8 sub-types, e.g., canal or river], the use of any modern technology in irrigation, dispensary, hospital, solid waste facility, home or open toilet, veterinary clinic, electricity [coded to 1 for "all" and 0 otherwise to create a binary

 $^{^{30}\}mathrm{I}$ exclude madrasas from this aggregate as they are typically provided by private rather than public entities.

variable consistent with previous censuses], NGO presence, post office, police station

Raw variables coded (economic): crops [8 binary indicators, e.g., wheat, cotton], house material [mud, brick/mud, brick, other], street material [dirt, brick, concrete, metaled], road material [dirt, brick, concrete, metaled], banks [9 types, e.g., agricultural or microfinance], industrial capacity [cottage, small, medium, large], market/bazaar, cold storage, media [radio, TV, cable, newspaper], employment [none/some/mostly for male and female separately in 7 categories, e.g., agriculture or services]

A.9 2020 Variable Indexes

For 2020, I construct the following indexes of economic activity. In each case, the index averages the z-scores of the constituent components. Table 4 combines these into a single index by averaging each categorical index.

Agriculture: total crops produced [sum of binaries for growing all listed crops]; total types of irrigation infrastructure [canal, well/tubewell, and unspecified]; percentage of village land growing crops

Financial Access: total bank types [sum of binaries for having all listed types of banks]

Markets and Related Infrastructure: has a market [0/1 binary]; cold storage facilities [0/1 binary]

Housing Quality: houses have bricks [0/1 binary]; houses have toilets [0/1 binary]

Employment/Job Quality: services; trade; industry; business; overseas

As noted in Section A.8, employment variables are scored 0-1 based on "none," "some," ... "all" ratings. The omitted categories of employment are agriculture and labor are associated with lower incomes.

Industrial Capacity: the sum of the binary variables for having, respectively, the following types of industry: cottage; small; medium; large

Media & Information Access: the sum of the binary variables for having, respectively, the following types of media/information access: radio; TV; cable; newspaper

A.10 2020 Other Scores

Street/Road Quality: street and road quality [1 for dirt, 2 for brick, 3 for concrete, 4 for metal]

A.11 Main Control List (villages)

A.11.1 Village-level Analyses

1951 (base): post office; primary school; middle school; high school; clinic/dispensary; rural dispensary; subsidized dispensary; hospital; dak/bungalow; rest house; tubewell; railway; police station; numbered chak; numbered deh;³¹ population below 100 [binary]; average household size [1 if households are missing]; link to 1951

1951 (aggregates): any public good; any school; any health facility [clinic/dispenary of any sort, hospital]; any security facility [police station, militia levy post]

1961 (base): post office; primary school; middle school; high school; clinic/dispensary; hospital; dak/bungalow; tubewell; police station; railway; literacy rate [literate population/total popultion or 0 if missing]; dummy for missing literacy rate; numbered chak; numbered deh; log area; population below 100; log population [or 0 if uninhabited]; 51/61 population growth in log points; dummy for missing growth rate; household size [1 if households are missing]; union council headquarters

1961 (aggregates): any public good; any school; any health facility; any security facility [police station only]

Missing control data: the linkage procedure (see Section A.12) requires a link to 1961, so none of these data are missing. For 1951, a link is optional, although most villages successfully link. For those that do not, I impute a fixed value for each control variable (equal to the lowest observed value, usually 0). However, note that because I control for linkage to 1951, the exact imputed value does not affect the regression.

Linkage rates to 1951 and other years are not observably different across odd/even councils; see again Section A.12.

³¹Numbered chaks and dehs refer to villages without a formal name that are instead listed as numbers. For example; "Deh 12" or "Chak 126 G.B." The latter category date from British frontier settlement of the Punjab region; see Ali (1979). This delineation is largely although not wholly consistent across censuses.

A.11.2 Council-level Analyses

For council-level regressions of equation (2), I average all non-missing values of the villagelevel controls listed above. Also as above, I impute missing values to avoid dropping observations. The exact (constant) value does not shift regressions as I again include a control for the necessity of imputation. Here, imputation is only required in the case where no villages are linked to the relevant census, which I add as a control.

Additional controls: average linkage rate to 1961; any linkage to 1951; any linkage to 1961

A.12 Data Source Linking

A.12.1 Censuses

The multiple years of census data I use in this project required a multi-stage linking process. In particular, links within censuses are higher quality than links into the census because a large portion of villages are given identifications numbers termed "hadbast" or "revenue" numbers. These numbers are not present in the delimitation information.

I first link the delimitation data to the 1951 and 1961 censuses separately using a fuzzy string match within a tehsil with manual review and correction. Because council wards are usually formed within a particular *qanungo halqa* [sub-tehsil administrative division], I upweight matches whose *qanungo halqa* matches that of other villages within the same or nearby wards. In most cases, I accept the 1951 match. In case there was no high-quality match in 1951 or I manually determined that the village was not clearly listed in that census, I treat the direct match to 1961 as preferred.

Within censuses, I use a similar fuzzy string match procedure with upweighting for consistency within a *qanungo halqa*. In addition, I highly prefer matches whose revenue numbers match or are within 1 of each other in areas where these values are used. These numbers are typically consistent across census years, making them quite informative. This procedure yields links across sequential censuses (1951/61, 1961/72, 1972/2020).

To assemble the final data, I use take the council data, derive its 1951 village directly from the linkage above. I derive the 1961 village based on the 1951 village and the sequential linkage (51/61) or from the direct linkage to 1961 (where preferred). I derive the 1972 and 2020 villages only from the sequential linkage (61/72, 72/2020).

Out of 39,136 observations, 35,749 (91.3%) link to 1951, 34,533 (88.2%) link to 1961, 30,056 (76.8%) link to 1972, and 28,070 (71.7%) link to 2020. Earlier years have higher linkage rates due to the sequential methodology. Not all linked observations are included in the regressions, either due to duplicated entries or missing outcome data. See sample

construction details in Section 3.1.

B Further Institutional Details and Results

B.1 Rural Works Programme

Upon its inception in 1963, the Rural Works Programme (RWP) became the primary investment vehicle for development projects in the villages of "West" Pakistan.³² The program aimed to decentralize decision-making with a stated goal that the Basic Democracy councils control around 75% of spending with the remainder controlled by district-level councils. Money from the central government was routed through districts via a formula that mixed population and area, effectively providing more funds per capita to sparsely populated areas (Inayatullah and Burki 1966). To discuss the details of this program, I quote from several administrative volumes published by individual districts that discuss their procedures for allocating the funds.

B.1.1 Underutilization of Funds

In summarizing nationwide issues, Inayatullah and Burki (1966) describes a "shortfall in utilisation" with about 18% of funds being unspent. A US peace corps volunteer similarly wrote that while the overall situation was positive, the councils "were not taking enough interest in the work" or "not putting forth enough initiative" Hyderabad District Council (1964). This contributed to the fact that "only about 35% of all construction was completed [by the end of the fiscal year]." Similarly, the district commission of Lyallpur District noted that "a lot will depend on the integrity, initiative and good sense of the Chairman in getting [projects] executed within the target date. It must be understood that if a Union Council fails to properly utilize its allocation within [the] time limit, funds will be diverted elsehwhere" (Lyallpur District Council 1964).

B.1.2 Balance of Funding Across Union Councils

One contextual advantage of this setting is that most of the provision and distribution of funds were done by bodies unconnected to those appointing the unelected councilors. Most non-local funding for the RWP was in fact provided by the United States under the PL 480 program.³³ As noted above, distributions were managed by district-level councils

³²The program had an earlier start date in "East" Pakistan (Bangladesh)

³³In this era, the program exported "surplus" food to developing countries and used the proceeds as economic aid to fund development projects.

rather than the bureaucratic position of district commissioner who had originally chosen the appointed members. These features reduced the incentives for manipulation by higher levels of government.

The administrative volumes also confirm that districts based their choices of project on standardized criteria. Given the directive that 75% of funds be spent on projects designed and implemented by the Basic Democracies councils, districts adopted different procedures. In the simplest cases, funds were distributed "equally" across the councils (Quetta District Council 1964; Loralai District Council 1964; Project Director RWP Sialkot 1964). In other cases, "the allocation of money to each council [was] made on [a] population basis" (Lyallpur District Council 1964). However, there were no institutional methods to balance local contributions. One assistant commissioner noted that his sub-district received an equal amount of funding as the neighboring one but ultimately spent more, "explained by a local contribution... to show [the councils'] active participation" (Hyderabad District Council 1964).

B.1.3 Logarithms

Spending data in the RWP are fat-tailed but contain zeros, complicated the standard approach of taking the logarithm. For log-based results, I take the approach of bottom-coding the raw spending data at 50 Pakistani rupees, half the size of the smallest non-zero project at 100 rupees. This choice means the effect of going from no project to the smallest observed project is equivalent to doubling spending from that level. Bottom coding spending at lower levels would weight the extensive margin more heavily, making results less interpretable as percentage changes. This method corresponds to the Chen and Roth (2023) suggestion of manually justifying the magnitude of the extensive margin.

B.2 Roads and Streets

One shortcoming of the 1972 results is that they do not study the important category of roads and streets; these data are not present in the 1972 census. If odd councils channeled their resources into this category at the expense of others, it would paint a fundamentally different picture than that described in Section 5.1.

Table A.1 studies 2020 data on roads and streets and finds tightly estimated zero effects. These data record the quality of village streets (internal roads) and roads (external connections), noting whether they are primarily, dirt, brick, concrete, or metaled in ascending order of quality. I convert these into scores as described in Section A.8-A.9. For both roads and streets, the top quality category, the bottom quality category, and the score show little movement in response to the historical exposure to elections. Column (7) examines a z-score

index combining the road and street scores and again finds a small, statistically insignificant estimate.

		Roads			Streets		Combined
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Dirt	Metal	Score	Dirt	Metal	Score	Index
Odd	-0.0071	0.0015	0.0082	-0.0052	0.0012	0.0087	0.012
	(0.0067)	(0.0078)	(0.023)	(0.0079)	(0.0086)	(0.021)	(0.019)
Ν	$25,\!825$	$25,\!825$	$25,\!825$	$25,\!824$	$25,\!824$	$25,\!824$	$25,\!830$
SEs / Clusters	Council						
N (clusters)	2939	2939	2939	2939	2939	2939	2939
61 District FEs	Υ	Υ	Υ	Υ	Y	Υ	Υ
51 Controls	Υ	Υ	Υ	Υ	Υ	Υ	Y
61 Controls	Υ	Υ	Υ	Υ	Υ	Υ	Y
$\mathbb{E}[y T=0]$.15	.77	3.4	.35	.23	2.2	0

Table A.1: Roads and Streets (2020)

Notes: this table tests for effects on the quality of roads and streets in 2020 using regressions of equation (1). (1)-(3) cover roads and (4)-(6) cover streets. Respectively, they examine a binary indicator for being composed of dirt (lowest quality), an indicator for metaled (highest quality), and a score that summarizes all materials as described in Section A.10. Column (7) is the average z-score of (3) and (6). 1951 and 1961 controls are listed in Section A.11.

These results indicate that odd councils did not expand roads and streets at the expense of other public goods, though some caution is warranted given the long interval between the councils' activities and the observation period. While Table 3 showed that the public goods reduction had important, if only partial, persistence up to 2020, it is of course possible that any differences in roads attenuated more rapidly. Still, based on the analyses in Tables 2-A.1, the marginal effect of electoral representation generally reduced public goods provision.

C Appendix Figures and Tables



Figure A.1: RD for Increased Ward Representation

Notes: this graph visualizes the first stage results of RD equation (3) with the outcome as the number of members per ward. The running variable is set as the difference between ward population and the nearest threshold among the set 1200, 2000, 2800. For visual clarity, the running variable is fixed to be within -400 and +400. Ward population is defined as the total 1951 population of villages within it and wards with missing population figures are excluded. See Section 4.3. <u>RD Estimate</u>: +0.41 (z = 6.25)***, bandwidth = 107.8



Figure A.2: Increasing Representation for Educated Areas

Notes: this graph visualizes the results of RD equation (3) with the outcome as the average council literacy rate, weighted by the number of representatives in a ward. This weighting then reflects whether elected council members come from more or less educated areas. See Section 4.3 for a description of how the running variable is constructed as a function of population thresholds. <u>RD Estimate</u>: +0.21pp (z = 4.88)***, bandwidth = 158.1

Country	Starting Year	System Description	Source
England	1265	The "Great Parliament" was the first to include elected representatives (with a limited franchise) alongside unelected nobility, presaging today's fully elected House of Commons	Ambler (2015)
Iceland	1845	The parliament transitioned from fully appointed to a mix of 20 elected members and 6 appointed by the monarch	Secretariat of Althingi (2004)
Colonial India	1909	Legislative regional and central councils where the colonial British non-democratically "nominated" many members	Daniels, Trebilcock and Carson (2011)
Colonial Nigeria	1913	Largely advisory until 1946 and unelected members retained a consistent majority	Daniels, Trebilcock and Carson (2011)
Colonial Myanmar	1923	Initially unelected, but eventually a majority of seats were chosen in election	Daniels, Trebilcock and Carson (2011)
Thailand	1932	Until 1942, half of the National Assembly was elected, half appointed by the king. Later constitutions fluctuated between fully elected, fully non-elected, or mixed systems.	Murashima (1991)
Colonial Singapore	1947	6/13 members elected; seats reserved by race	Daniels, Trebilcock and Carson (2011)
India	1950	12 of (up to) 250 members of parliament are appointed by the president, the remainder are elected; system in place today	Indian Constitution, Article 80
Libya	1951	A bicameral legislature, with half of the upper house appointed by the king	Metz (1989)
Malaysia	1957	44/70 upper house seats appointed by the monarch, remainder indirectly elected; system in place today	Malaysian Constitution 1957, Article 45
Colonial Botswana	1961	Partially elected legislative council, with seats reserved on an ethnic basis (including for Europeans)	Daniels, Trebilcock and Carson (2011)
Indonesia	1969	Parliament with 360 elected, 100 appointed members under Suharto military dictatorship	Suryadinata (1987)
Libya	1972	In the Gaddafi era, local councils were half elected, half appointed	Metz (1989)
Guinea- Bissau	1976	Regional councils with $2/3$ seats elected, $1/3$ reserved for the ruling party (PAIGC)	Galli and Jones (1987)
Syria	1990	Two thirds of parliamentary seats were allocated to the ruling National Progressive Front (NPF) coalition; the remainder for nominally "independent" elected candidates; system in place today	Perthes (1992)
Hong Kong (UK/PRC)	1991	An initially mixed system under British rule became fully elected in 1995. In 2023, it was announced 80% of seats would be appointed; system in place today	Hung (2016)
Chicago Schools (USA)	2024	Under current legislation, ten elected members will serve alongside eleven appointed by the mayor; system in place until 2027 when the members will be fully elected	Masterson (2021)

Table A.2: Other Partially Electoral Legislatures

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Timle E1	Linle 61	Link 79	Main	Main	Main	T :]- 90	Main
	THIR 91	LIIIK 01	LIIIK (Z	1972	1972	1972	LIIIK 20	2020
Odd	-0.0011	-0.011	-0.017	-0.016	-0.0056	0.0022	-0.018	-0.015
	(0.0080)	(0.0100)	(0.013)	(0.014)	(0.0099)	(0.0062)	(0.014)	(0.014)
N	$39,\!128$	$39,\!128$	39,128	39,128	$39,\!128$	$34,\!532$	$39,\!128$	$39,\!128$
SEs / Clusters	Council	Council	Council	Council	Council	Council	Council	Council
N (clusters)	3846	3846	3846	3846	3846	3744	3846	3846
61 District FEs					Υ	Υ		
51 Controls						Υ		
61 Controls						Υ		
$\mathbb{E}[y T=0]$.91	.89	.78	.73	.73	.82	.73	.67

Table A.3: Balance on Sample Linkage

Notes: this table tests for imbalanced linking rates across odd/even councils using regressions of equation (1). Columns (1)-(3) use a binary variable of a community being successfully linked to the 1951, 1961, and 1972 censuses respectively. Columns (4)-(6) use the main 1972 census sample with public goods information, described in Section 3.1, as the outcome. Column (6) controls for the 1951 and 1961 variables described in Section A.11. The sample is thus restricted to cases where links to 1961 are successful. Column (7) uses successful linking to the 2020 census. Column (8) uses the main 2020 sample which requires both a link and non-missing data for key variables, see A.8.

	P. Goods (51)	P. Goods (61)	P. Goods (72)	P. Goods (20)	Econ. Dev. (20)
P. Goods (51)	1.00				
P. Goods (61)	0.40^{***}	1.00			
P. Goods (72)	0.33^{***}	0.52^{***}	1.00		
P. Goods (20)	0.25^{***}	0.29^{***}	0.39^{***}	1.00	
Econ. Dev. (20)	0.15^{***}	0.21^{***}	0.24^{***}	0.39***	1.00

Table A.4: Correlation Matrix of Public Goods and Economic Indexes

Notes: correlation matrix of \mathbb{R}^2 values across aggregate public goods indexes in 1951, 1961, 1972, 2020 and the aggregate economic index in 2020.

		Individual Public Goods				Index (z-scores)			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
	School (primary)	School (all)	Dispensary	Electricity	Index	Index	Index	Index	
Elected/Appted	-0.077***	-0.071^{*}	-0.024**	-0.069***	-0.17^{*}	-0.20***	-0.20***	-0.21^{***}	
	(0.027)	(0.036)	(0.011)	(0.025)	(0.091)	(0.075)	(0.063)	(0.055)	
Ν	$28,\!158$	28,158	28,158	28,158	28,158	28,158	28,158	$28,\!158$	
SEs / Clusters	Council	Council	Council	Council	Council	Council	Council	Council	
N (clusters)	2975	2975	2975	2975	2975	2975	2975	2975	
F stat	10,260	10,260	10,260	10,260	7,395	10,098	10,227	10,260	
61 District FEs	Υ	Υ	Υ	Y		Υ	Υ	Υ	
51 Controls	Υ	Υ	Υ	Υ			Υ	Υ	
61 Controls	Y	Υ	Υ	Y				Υ	
$\mathbb{E}[y T=0]$.59	.72	.053	.11	0	0	0	0	

Table A.5: Public Goods Provision, IV (1972)

Notes: this table replicates Table 2 in an instrumental variables (IV) specification. In each case, the independent variable is the ratio of elected to appointed council members and the instrument is the odd/even status of the council.

		Individual	Index (z-scores)				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	School (primary)	School (all)	Dispensary	Electricity	Index	Index	Index
Odd	-0.00042	0.0053	-0.000056	-0.0044	-0.011	-0.0068	-0.0098
	(0.0058)	(0.0067)	(0.0013)	(0.0032)	(0.019)	(0.016)	(0.014)
N	28,158	$28,\!158$	$28,\!158$	28,158	28,158	$28,\!158$	28,158
SEs / Clusters	Council	Council	Council	Council	Council	Council	Council
N (clusters)	2975	2975	2975	2975	2975	2975	2975
61 District FEs	Υ	Υ	Υ	Υ		Υ	Υ
51 Controls	Υ	Υ	Υ	Υ			Υ
$\mathbb{E}[y T=0]$.29	.34	.017	.027	0	0	0

Table A.6: Public Goods Provision (1961) [Placebo]

Notes: this table tests for effects on public goods in 1961 using regressions of equation (1). Columns (1)-(4) are respectively primary school, sum of all secular schools [primary + middle + high], rural dispensary/health clinic, and electricity. Columns (1), (3), (4) are binary variables; column (2) is the sum of four binary variables. Columns (5)-(7) use an index that averages the z-scores of (2)-(4). 1951 controls are listed in Section A.11.

		Index (z-scores)				
	(1)	(2)	(3)	(4)	(5)	(6)
	School (primary)	School (all)	Dispensary	Electricity	Index	Index
Odd	-0.00035	0.0013	0.000064	0	0.00049	0.0027
	(0.0069)	(0.0077)	(0.00079)	(.)	(0.018)	(0.015)
Ν	26,622	26,622	26,622	26,622	26,622	26,622
SEs / Clusters	Council	Council	Council	Council	Council	Council
N (clusters)	2952	2952	2952	2952	2952	2952
51 District FEs	Υ	Υ	Υ	Υ		Υ
$\mathbb{E}[y T=0]$.22	.26	.0039	0	0	0

Table A.7: Public Goods Provision (1951) [Placebo]

Notes: this table tests for effects on public goods in 1951 using regressions of equation (1). Columns (1)-(4) are respectively primary school, sum of all secular schools [primary + middle + high], rural dispensary/health clinic, and electricity. Electricity was rare and not reported in 1951; the column is displayed here for consistency with other tables. Columns (1), (3), (4) are binary variables; column (2) is the sum of four binary variables. Columns (5)-(6) use an index that averages the z-scores of (2)-(4).

		Individual Public Goods				Index (z-scores)			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
	School (primary)	School (all)	Dispensary	Electricity	Index	Index	Index	Index	
Odd	-0.017^{***}	-0.016^{*}	-0.0052^{**}	-0.015***	-0.037^{*}	-0.042^{**}	-0.043***	-0.044***	
	(0.0060)	(0.0080)	(0.0024)	(0.0056)	(0.020)	(0.017)	(0.014)	(0.012)	
Ν	$28,\!158$	28,158	28,158	$28,\!158$	28,158	28,158	$28,\!158$	$28,\!158$	
SEs / Clusters	Council	Council	Council	Council	Council	Council	Council	Council	
N (clusters)	2975	2975	2975	2975	2975	2975	2975	2975	
61 District FEs	Y	Υ	Υ	Υ		Υ	Υ	Y	
51 Controls	Y	Υ	Υ	Υ			Υ	Y	
61 Controls	Y	Υ	Υ	Υ				Υ	
$\mathbb{E}[y T=0]$.59	.72	.053	.11	0	0	0	0	

Table A.8: Public Goods Provision, PCA Index (1972)

Notes: this table tests for effects on public goods in 1972 using regressions of equation (1). Columns (1)-(4) are respectively primary school, sum of all secular schools [primary + middle + high + college], rural dispensary/health clinic, and electricity. Columns (1), (3), (4) are binary variables; column (2) is the sum of four binary variables. Columns (5)-(8) uses the first principal component of columns (2)-(4) as an aggregate index. For comparisons with Table 2, this index is re-scaled to have mean 0 and standard deviation 1 within the even councils. 1951 and 1961 controls are listed in Section A.11.

	(1)	(2)	(3)	(4)	(5)	(6)
	$1 \mathrm{knot}$	2 knots	3 knots	4 knots	5 knots	Pair FEs
Odd	-0.046***	-0.046***	-0.044***	-0.046***	-0.053***	-0.046***
	(0.012)	(0.012)	(0.012)	(0.013)	(0.013)	(0.012)
N	$28,\!158$	$28,\!158$	28,158	28,158	$28,\!158$	$28,\!158$
SEs / Clusters	Council	Council	Council	Council	Council	Council
N (clusters)	2975	2975	2975	2975	2975	2975
61 District FEs	Υ	Υ	Υ	Υ	Υ	Υ
51 Controls	Υ	Υ	Υ	Υ	Υ	Υ
61 Controls	Υ	Υ	Υ	Υ	Υ	Υ
N_c Pair FEs						Υ
$\mathbb{E}[y T=0]$	0	0	0	0	0	0

Table A.9: Public Goods Index (1972) and Elected Member Controls

Notes: this table tests for effects on public goods in 1972 and ways of controlling for N_c , the number of elected council members using regressions of equation (1). All columns use the index of 1972 public goods from Table 2. Columns (1)-(5) vary the number of knots used for the linear spline of N_c . Column (6) uses one fixed effect per pair of council sizes, i.e., [2 and 3], [4 and 5], [6 and 7]... Column (7) adds a control for whether the total number of council members is odd. Column (8) uses controls for size based on total members (elected + appointed) rather than just a function of elected members. 1951 and 1961 controls are listed in Section A.11.

	General		1	961 Definition	ns	1951 Definitions		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	None	Province	District	Tehsil (grouped)	Tehsil	District	Tehsil (grouped)	Tehsil
Odd	-0.040***	-0.041^{***}	-0.046***	-0.042^{***}	-0.039***	-0.045***	-0.040***	-0.039***
	(0.013)	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)
Ν	28,158	$28,\!158$	28,158	28,158	$28,\!158$	$28,\!158$	$28,\!158$	28,158
SEs / Clusters	Council	Council	Council	Council	Council	Council	Council	Council
N (clusters)	2975	2975	2975	2975	2975	2975	2975	2975
Province		Υ	Υ	Υ	Υ	Υ	Υ	Υ
District			Y	Υ	Υ	Υ	Υ	Υ
Tehsil (grouped)				Υ	Y		Υ	Υ
Tehsil					Υ			Υ
51 Controls	Y	Υ	Y	Υ	Υ	Υ	Υ	Υ
61 Controls	Y	Υ	Y	Υ	Υ	Υ	Υ	Υ
$\mathbb{E}[y T=0]$	0	0	0	0	0	0	0	0

Table A.10: Public Goods (1972) and Administrative Fixed Effects

Notes: this table tests for effects on public goods in 1972 and different administrative area fixed effects. Respectively, the fixed effects in (1)-(8) are none, province, district [1961], tehsil groups [1961], tehsils [1961], district [1951], tehsil groups [1951], tehsil[1951]. Grouped tehsil fixed effects are defined by grouping together any tehsils in the same district with 10 or fewer union councils. Villages in the main sample without a 1951 link have their district and tehsil based on the tehsil listed in the council delimitation data. 1951 and 1961 controls are listed in Section A.11.

	(1)	(2)	(3)	(4)	(5)	(6)
	Council (baseline)	Robust	Qanungo	Tehsil	District	# Elected
Odd	-0.046***	-0.046***	-0.046***	-0.046***	-0.046***	-0.046***
	(0.012)	(0.0091)	(0.012)	(0.013)	(0.013)	(0.011)
Ν	28,158	28,158	$28,\!158$	$28,\!158$	$28,\!158$	28,158
SEs / Clusters	Council	Robust	Qanungo	Tehsil	District	# Elected
N (clusters)	2975	N/A	794	189	43	16
61 District FEs	Y	Y	Y	Y	Y	Υ
51 Controls	Y	Υ	Υ	Υ	Υ	Υ
61 Controls	Υ	Υ	Υ	Υ	Υ	Υ
$\mathbb{E}[y T=0]$	0	0	0	0	0	0

Table A.11: Public Goods Index (1972) and Standard Errors

Notes: this table tests for effects on public goods in 1972 and alternative ways of calculating standard errors in equation (1). All columns use the index of 1972 public goods from Table 2. Respectively, the columns cluster at the council [baseline], village [i.e., robust], qanungo, tehsil, district, and number of elected member levels. Qanungos, tehsils, and districts are increasingly large administrative subdivisions and the 1961 delimitations are used here. Councils are always formed within tehsils and districts and usually, though not always, within qanungos. 1951 and 1961 controls are listed in Section A.11.

	(1)	(2)	(3)
	Deceline	Total Cine	Total Size
	Dasenne	Total Size	(even/odd)
Odd	-0.046***	-0.046***	-0.046***
	(0.012)	(0.012)	(0.012)
Size (total)		-0.0010	
		(0.0015)	
Odd (total)			-0.0093
			(0.012)
Ν	$28,\!158$	28,158	28,158
SEs / Clusters	Council	Council	Council
N (clusters)	2975	2975	2975
61 District FEs	Υ	Υ	Υ
51 Controls	Υ	Υ	Υ
61 Controls	Υ	Υ	Υ
$\mathbb{E}[y T=0]$	0	0	0

Table A.12: Public Goods Index (1972) and Standard Errors

Notes: this table tests for effects on public goods in 1972 and alternative definitions of council size as a control in equation (1). All columns use the index of 1972 public goods from Table 2. In (1)-(2), the size control N_c is the number of elected members [baseline] and the total number of members [elected + appointed]. In (3), I use the baseline result with the additional control of a dummy variable for whether the total council size [elected + appointed] is odd. Note that this variable is not strongly correlated with whether the elected size is odd, i.e., the primary variation of this paper. 1951 and 1961 controls are listed in Section A.11.

	(1)	(2)	(3)
	Village	Ward	Council
Odd, [90 th pctile literacy]	-0.077***	-0.082***	-0.056**
	(0.021)	(0.022)	(0.023)
$Odd \times Literacy$	-0.34**	-0.42^{**}	-0.12
	(0.16)	(0.20)	(0.29)
N	28,158	28,099	$28,\!157$
SEs / Clusters	Council	Council	Council
N (clusters)	2975	2974	2974
61 District FEs	Υ	Υ	Υ
51 Controls	Υ	Υ	Υ
61 Controls	Y	Υ	Y
$\mathbb{E}[y T=0]$	0	.00048	0

Table A.13: Public Goods (1972) and Literacy Rates

Notes: this table tests for effects on public goods in 1972 and interactions with a community's literacy. Each regression matches the primary specification in Table 2 with the aggregate public goods index as the outcome. This table additionally adds an interaction between the measure of literacy and the odd/even status of the council; the measure itself is necessarily included as a control. In each case, the literacy term is shifted by a constant to be 0 at the 90^{th} percentile of the sample. The odd/even dummy variable thus measures the estimated effect at the 90^{th} percentile of literacy. The measures of literacy are drawn from the 1961 census with the columns respectively using (1) village literacy (2) the average literacy of villages in a council's ward (3) the average literacy of all villages in the council. 1951 and 1961 controls are listed in Section A.11.

	(1)	(2)	(3)	(4)	(5)
	Punjab	Sindh	Sindh (only)	Balochistan	NWFP/KPK
Odd	-0.033	-0.056***	0.026	-0.042***	-0.044***
	(0.025)	(0.013)	(0.027)	(0.012)	(0.012)
$Odd \times province$	-0.018	0.074^{**}		-0.10^{*}	-0.021
	(0.028)	(0.030)		(0.053)	(0.057)
Ν	$28,\!158$	$28,\!158$	4,047	$28,\!158$	28,158
SEs / Clusters	Council	Council	Council	Council	Council
N (clusters)	2975	2975	500	2975	2975
61 District FEs	Υ	Υ	Υ	Υ	Υ
51 Controls	Υ	Υ	Υ	Υ	Υ
61 Controls	Υ	Υ	Υ	Υ	Υ
$\mathbb{E}[y T=0]$	0	0	.11	0	0

Table A.14: Heterogeneity: Major Provinces

Notes: this table tests for heterogeneous effects on 1972 village public goods using regressions of equation (1). The outcome is the index of public goods studied in Table 2. The interaction of odd/even status and the term listed in the colum name are both included in each regression. The interactions considered are based on the 1961 province. Columns (1)-(2), (4)-(5) respectively consider Punjab, Sindh, Balochistan, and the Northwest Frontier Province (NWFP) — modern Khyber Pakhtunkhwa (KPK). Column (3) runs the regression only in Sindh. 1951 and 1961 controls are listed in Section A.11.