Mismatched Governance: Exploring the Relationship Between Rural and Urban Governance Forms and Urban Development in India

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Abstract

By conservative census estimates, roughly half of the settlements in India that are urban in nature are governed by rural governance forms instead of urban ones. This paper investigates whether this governance mismatch is associated with the development of settlements. I first empirically explore whether differences exist between rural-governed and urban-governed urban settlements on average, and on finding such differences, I explore the causal effect of urban governance forms, and find that they appear to be broadly associated with better levels of high spillover development indicators. The effect on low spillover development indicators is negative or mixed. The negative association with low spillover indicators need not, however, be indicative of a negative phenomenon for development overall. The results suggest that there is a case to convert rural governance forms in urban settlements to urban governance forms, and I conclude by exploring the political economy of such conversions.

Biographical Sketch

Komal Hiranandani is a second year MS candidate at Cornell University's Applied Economics & Management programme. She also has an LLB (General) from Mumbai University and graduated Magna cum Laude with Honours in Government (BA) from Georgetown University in Washington DC, where she won the Government Department Award and the Comparative Government Award. She placed second in the Pi Sigma Alpha National Political Honors Society's Best Undergraduate Thesis Competition in the United States for her dissertation, "Competing to Become Backwards: A Study of Demands for Scheduled Tribe Status in India." Her past professional experience includes working as Senior Associate at IDFC Institute and as Programme Officer at Asia Society India. She is from Mumbai, India.

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Contents

Introduction

In this paper, I study whether the governance of urban settlements[1] in India by rural governance forms instead of urban ones has implications for their development levels.

I consider 2 types of development indicators- high spillover and low spillover development indicators. Both development indicator categories shed light on the way in which governance forms tend to be associated with development to help understand the nature of development and better prepare as settlements urbanise and convert from rural to urban governance forms. Further, the relationship of governance forms with high spillover development indicators informs whether there is a case for converting rural-governed urban settlements to urban governance forms. Low spillover development indicators are less conducive to inform such a case because of theoretical issues related with how inequality in living standards within settlements may impact these indicators and because of statistical issues with how the data used in this study are collected.

In Part I, I explain the relevance of rural and urban governance forms for development and investigate whether differences exist on average between rural and urban-governed urban settlements. In Part II, I investigate whether differences between both types of urban settlements exist when controlling for urbanisation levels. In Part III, I address potential endogeneity by employing a measure for the strictness of criteria for urban governance status contained in state laws as an instrument for local governance form and by testing factors that influence a settlement's likelihood of conversion from rural to urban governance forms. In Part IV, I test the sensitivity of the inferences using a difference-in-differences analysis. In Part V, I discuss the political economy of conversions from rural to urban governance forms. This explores factors that may impede or facilitate the conversion of settlements and the potential arbitrariness and complexities surrounding assignment of rural or urban governance.

[1] A settlement here refers to the Indian census representation of a settlement, that is, a distinct village or town.

This study suggests that the relationship between urban governance forms and high spillover development indicators is broadly positive, while the relationship with low spillover development indicators is negative or mixed. Hence, there appears to be a case for converting rural governance forms in urban settlements to urban governance forms.

The results of this study are relevant for millions of urban Indians and can also inform broader governance debates. The United Nations estimates[2] that urban India will add 218 million people to its current base of 377 million urban inhabitants between 2011 and 2030, accounting for roughly 16% of global urban growth during this period[12]. This highlights the importance of ensuring that urban governance mechanisms in India are optimally conducive to development. Moreover, this study provides a framework through which to consider the implications of subjective classifications of areas for administrative purposes or for instituting differential levels or scales of governance[2, 20]. While the importance of classification systems may depend on the extent of misclassification and the particular differential policy ecosystems that make these categories salient, several other countries- such as Bangladesh, Belize, Cyprus, Malaysia, Pakistan, Sri Lanka, Turkey, and Uganda [20, 70]- include rural-urban differentiation in their local government systems with separate institutional frameworks for rural and urban areas, and the relevance of miscategorised areas in such places may be important to consider as well.

[2]This study employs official country definitions of urban, which are different for each country.

Part I

Differences between rural and urban-governed urban settlements in India

In this section, I explain the context of local governance in India to convey how India reached the state of having roughly half[3] of its urban settlements being governed as though they were rural and the salience of rural and urban governance forms. After this, I summarise the relevance of these governance forms for development. Finally, I test whether differences exist on average between rural and urban-governed urban settlements with respect to urbanisation and development indicators using 2011 census data.

1 Context of local governance in India

When India's Constitution came into force in 1950, it set up a two-tier system of governance comprising of a central government and state governments. The local governance of settlements was left for states to manage. There were wide variations across states with regard to how local governments in rural and urban areas were organised and how efficiently they were run. States had to address even basic issues with the presence of democratic principles, and whether and when these issues were addressed differed across states. For instance, in the state of West Bengal, universal adult franchise in local elections was introduced only in 1962, and relatively regular elections to local bodies began after 1981, before which local bodies such as Kamarhati and Khardah did not have elections for about 14 years[5]. Similarly, in the state of Rajasthan, from around the mid 1970s, the democratic process was stalled across most of the state with even major municipalities like the capital city of Jaipur not having elections for close to 20 years[60]. Hence, in 1989, 2 Constitutional Amendment

[3]Roughly half of India's urban settlements are governed as though they were rural even when applying the relatively conservative definition of urban used by the Indian census. This is further explained later in this section.

Bills were introduced in Parliament to mandate the existence and form of local governments. Proponents argued that this was necessary to ensure the existence of viable units of local self-government across the country and equal access to democratic mechanisms by citizens across states. Moreover, standard local governance structures would help to administer government programmes by enabling a uniform pathway and accountability structure to connect the central government with settlements. While these Bills were not passed, similar Bills were reintroduced in 1991 and passed in 1992, resulting in 73rd and 74th Constitutional Amendments[47]. These Amendments mandated that all settlements have either a rural local body (RLB) or an urban local body (ULB). This introduced Constitutional status and form for the third tier of government.

Hence, urbanisation may be thought of in 2 ways- whether an area is urban in nature, and whether an area is urban-governed, that is, whether it has a ULB. Throughout this paper, an "urban settlement" refers to an area that is urban in nature.

However, the Constitution did not specify rules for which settlements should have RLBs and which should have ULBs. States were entrusted to categorise settlements and make conversions when required. The 74th Amendment required all states to pass conformity legislation by 1994, and while such legislation contained guidelines for how to identify settlements for ULB governance in some states, categorisation has ultimately been a matter of state government discretion.

A substantial number of settlements in India are governed by inappropriate local governance structures, and the skew is almost completely in the direction of settlements that are urban in nature being governed as rural, that is, having RLBs. The reasons for this include the fact that the default categorisation of settlements other than capital cities and large trade centres has historically been rural, and past studies and media reports suggest that the inertia in converting RLBs to ULBs may be explained by widespread perceptions that more government funding is channeled to RLBs[121] and that RLBs tend to have lower taxes and more lenient regulations[114], based on statements made by local government leaders

and other stakeholders relevant in the local government categorisation process. RLB leaders may also fear that a different electoral process will cost them their power base, while state government leaders may resist conversion in places where different political parties enjoy local support to reduce the number of elected representatives from opposition strongholds[114]. State governments may also resist conversion because it is accompanied by aspects such as more tax collection and infrastructure spending by the local body, which results in devolution of power away from the state[72, 110]. There also seems to have been a rural leaning in post-Independence India among a significant and powerful group of policy makers, which may explain the rural tilt. For instance, the Constitution's Directive Principles of State Policy, which reflect non-binding ideals, says that the government should organise rural local bodies and enable them to function as units of self-government[3]. The fact that there is no corresponding provision for the governance of urban areas points to the importance that the Constitution's framers gave to rural areas. A similar sentiment was expressed by MK Gandhi, one of the most prominent leaders of India's independence movement, who said, "India lives in her villages, not in her cities"[73]. Gandhi also said, "I regard the growth of cities as an evil thing, unfortunate for mankind and the world, unfortunate for England and certainly unfortunate for India. The British have exploited India through its cities. The latter have exploited the villages. The blood of the villages is the cement with which the edifice of the cities is built"[119].

The categorisation of settlements is complicated by the fact that there is no globally accepted definition of urban, and some argue that discretion is necessary to categorise settlements. However, even the Indian census acknowledges that many urban settlements are governed as rural when it undertakes its count of urban population.

The Indian census[1] identifies 3 main types of urban areas. The first type is Statutory Towns (STs). These are settlements that have ULBs, and all settlements with ULBs, that is, all settlements that are governed as urban, are considered urban settlements by the census. The second type is Census Towns (CTs). These are settlements that have RLBs,

that is, these are all settlements that are governed as rural, but that the census considers urban. The census prescribes the following guidelines to identify CTs: population of at least 5,000, density of at least 400 people per square kilometre, and at least 75% of the male main[4] working population engaged in non-agricultural pursuits. However, these guidelines are discretionary, and a substantial number of settlements satisfy these criteria without being categorised as CTs and vice versa[109]. The third type is Outgrowths (OGs). These are areas contiguous to STs or CTs that possess urban features in terms of infrastructure and amenities, and form an integrated urban unit along with the respective adjoining ST or CT. Unlike STs and CTs, OGs do not correspond with administrative, that is RLB or ULB, boundaries. All OGs are governed by RLBs. The census measure of urbanisation is widely accepted as being strict by global standards, and hence is commonly accepted as an underestimate of the true urbanisation rate in India[59, 52].

Though India is rapidly urbanising, the corresponding conversion of RLBs to ULBs has not kept pace. Tandel et. al. (2016) finds that the share of urban population governed by RLBs increased between 2001 and 2011 from 8% to 16%[125], even when applying the relatively strict Indian census definition of urban[5]. Hence, if there is a development cost associated with governing urban areas through RLBs, it is reasonable to assume that this cost has been spreading.

Despite the lack of standardisation in categorising settlements and without consideration for whether such categorisation was being efficiently conducted, a large policy ecosystem developed based on this binary RLB-ULB categorisation. This began with the Constitution, which lays out significant differences between RLBs and ULBs. For instance, the prescribed structure of local bodies differs. For RLBs, it provides for a three-tier system of "Panchayats", that is, rural local governments, at the settlement, intermediate, and district levels. For ULBs, it mandates a single local body, with provisions for Ward Committees for lower levels

[4]Main workers are workers who worked for at least 6 months in the year preceding the date of enumeration.

[5]This calculation considered all of India except for the state of Jammu & Kashmir because the 1991 census was not carried out there.

of representation and Metropolitan Planning Committees for larger aggregations. Suggested functions listed for RLBs but not ULBs include providing for agriculture, fisheries, and minor irrigation projects. Corresponding functions listed for ULBs but not RLBs include urban planning, fire services, and slum improvement[3].

All states have corresponding laws further demarcating differences between RLBs and ULBs. For example, in the state of Odisha, the Chair of RLBs, called the Sarpanch, is selected through direct election[4], whereas the Chair of ULBs, called the Mayor, is selected through indirect election[7].

Moreover, many government programmes and allocations are available either only to RLBs or ULBs. For example, the 2016-2017 Union Budget provided over 5 billion USD for the National Rural Employment Guarantee Scheme, which only RLBs are eligible for, and provided over 1 billion USD for the Smart Cities and Atal Mission for Rejuvenation and Urban Transformation schemes[6][22], which only ULBs are eligible for.

Such a policy ecosystem has created many stakeholders in the decision of whether to govern settlements through RLBs or ULBs[125]. For example, several tax rates differ depending on whether they apply to RLBs or ULBs[101], so citizens may prefer the governance regime under which they are likely to be taxed less. Regulations such as building codes and waste disposal requirements tend to be stricter in ULBs[114], so businesses may oppose conversion to ULB status for a simpler regulatory environment. Substantial funds are earmarked separately for RLBs and ULBs through schemes or grants-in-aid, so politicians and citizens may advocate for RLB or ULB status depending on which they think has greater allocations for aspects they are interested in. Such an environment may also create moral hazards. For instance, the central government provides an employment guarantee only to residents of RLBs[7], so more citizens will be eligible for an employment guarantee in states that do a poor job of converting their RLBs to ULBs, creating an individual reward because of the state's

[6]Converted at Indian rupee to US dollar conversion rates prevalent between March 2016 and April 2017.

[7]The National Rural Employment Guarantee Scheme (NREGS) provides 100 days of unskilled manual work in a year to rural households.

nonconformity to policy ideals. The RLB-ULB system may also be conducive to category arbitrage. For example, in the state of Tamil Nadu in 2004, over 500 ULBs converted to RLB status, with the government justifying conversion as enabling settlements to access more government resources, but within 2 years, all these settlements reverted to ULB status with many complaining that the expected government funds were not forthcoming [87, 53, 51]. The 73rd and 74th Amendments did not intend to create a parallel policy environment that settlements could opt into depending on where they thought they would most benefit, but that is what seems to be occurring in some cases.

When framing the local governance context in India, it must also be noted that state governments still play a direct role in many aspects. This varies across cities and states, but to illustrate, in many major cities the state government appoints a Municipal Commissioner who enjoys executive power, while the elected Mayor of the city plays a largely ornamental role[34, 28]. State level organisations may also perform many development functions, such as contributing to the provision of roads and housing, causing overlapping jurisdictions between local bodies and the state government[8].

Another noteworthy aspect is that some regulations and allocations may blur rural-urban lines. For instance, Lyngdoh (2015) reports that the state government in Meghalaya categorised 10 RLB-governed urban settlements as "urban centres" to allow the Meghalaya Urban Development Authority to implement the Meghalaya building bylaws in those areas. The state's notification did not define an urban centre, and the move was expected to draw controversy because of its ambiguity[83]. Similarly, 2 central government schemes- the Provision of Urban Amenities to Rural Areas (PURA) and the National Rurban Mission- have allocated funding for urban facilities specifically in RLB-governed settlements.

[8]For instance, Pethe et. al. (2011) describes how the ULB in Mumbai faces such an overlap of city planning and development functions with state agencies. State level bodies performing such functions include the Mumbai Metropolitan Region Development Authority, which undertakes urban planning; the Maharashtra Housing and Area Development Authority, which provides affordable housing and slum rehabilitation; and the Maharashtra State Road Development Corporation, which develops roads, bridges, and flyovers. Central government organisations also play a role. For instance, the Port Trusts, Airport Authority of India, National Highway Authority of India, and Mumbai Railway Vikas Corporation are central government organisations operating outside the ULB's jurisdiction in Mumbai[108].

Hence, many have echoed concern about the lack of empowerment and relevance of local bodies in India[27]. Thus, this study investigates whether the differences between RLBs and ULBs that do exist on a national scale appear relevant for development.

Despite the potential social and economic impacts of the current governance system, which has created differentiated policy based on a binary system of rural and urban governance that even the Indian government's census acknowledges is flawed, there has been limited systematic study to explore whether there are observable differences between RLB and ULB-governed urban areas, and whether these governance forms are associated with settlements' prospects for development. Further, in 2016, the central government asked[9] states to convert RLBs in urban settlements to ULBs "for planned and coordinated infrastructure development, enhancement of revenues and efficient delivery of services to citizens leading to overall growth of economic activities"[21]. This study can inform what settlements should expect as they urbanise and convert to ULB governance, and the extent to which such policy encouraging conversions is warranted.

The only statistical study on this topic found was by Mukhopadhyay (2017), which employs 4 main exercises to argue that ULB-governed small towns do not appear to be definitively associated with better levels of basic services than RLB-governed ones. The services considered relate with water, toilet, banking, and vehicle access- measures that would be considered low spillover development indicators in this study. First, means and growth rates of means are compared for 3,919 small towns that had the same local governance structure between the 2001 and 2011 census rounds. Second, density plots and a comparison of means and growth rates of means are studied for another dataset of 3,802 ULB-governed urban settlements and 3,495 RLB-governed urban settlements that are divided into settlements proximate to ULB-governed ones and those not proximate to ULB-governed ones. Third, a regression analysis on 3,919 towns uses the change in levels of these services as dependent variables, and the independent variables are a lagged term for the dependent variable, ini-

[9]This directive was in the form of a recommendation or encouragement, as the central government does not have legal authority to require states to take this action.

tial population, population growth rate, dummy variables for proximate and non-proximate RLB-governed urban settlements, state fixed effects, and an interaction of the RLB-governed dummy variables with population and states. Fourth, means are compared across proximate and non-proximate RLB-governed urban settlements. Further analysis is done to consider whether the neighbourhoods of RLB-governed urban settlements are different from those of ULB-governed ones, and again, the study argues that the ULB governance structure does not appear to confer a distinct advantage[96].

This paper builds on such research by using different statistical techniques- finding similar results as Mukhopadhyay (2017) with regard to the indicators in that study, investigating causal links, and considering different types of development indicators, that is high and low spillover development indicators, for which governance forms may have differing effects for both theoretical and statistical reasons.

2 Relevance of rural and urban governance forms for development

As discussed earlier, the central government has encouraged conversions of RLB-governed urban settlements to ULB status because such conversion is thought to improve development levels, and, as will be illustrated in Part V, this sentiment has been echoed by government officials across states who have pursued or encouraged conversions. Hence, relevant sections of the government have indicated that they believe that the differences that exist at the national level between RLB and ULB governance forms have a causal impact on development. The veracity of this hypothesis is crucial for optimal development, and should influence whether conversions are pursued. By studying differences between RLB and ULB-governed urban settlements, this study investigates whether national level differences between these governance forms bear out the hypothesised association with development indicators.

There are several factors, both structural and perception-based, that can explain why the difference between an RLB and ULB may matter for development.

At the highest level, the clearest differences arise through the separate Constitutional

Amendments that govern RLBs and ULBs. As discussed earlier, the Amendments include differences in the structure of RLBs and ULBs, with differing numbers of levels in the organisational structure and differences in administrative units at which the different levels exist. Above the settlement-level RLB, there are aggregations of RLB representation at the intermediate and district levels[10]. ULBs, on the other hand, have provisions for Ward Committees at the sub-settlement level and Metropolitan Planning Committees for large urban settlements and their surrounding RLBs[11]. The Amendments also provide for District Planning Committees, which, if created by states, must have ULB representation and aggregated district RLB representation, but representation from all settlement RLBs is not mandated. Hence, RLB-governed settlements are structured as the first level of local governance, over which there is a direct funnel to higher levels of governance. ULBs are structured as more independent units. Ward Committees aggregate to the ULB, and administrative units at higher levels between the ULB and state government do not directly aggregate ULBs. Hence, the manner in which settlement interests are represented and dealt with differ prima facie, with ULBs forming a more stand-alone and direct governance unit for settlements.

Some differences set in the Constitution are not enforceable, but may yet influence perceptions and the functioning of local bodies. For instance, the 73rd and 74th Constitutional Amendments contain the Eleventh and Twelfth Schedules listing the powers, authority, and responsibilities of RLBs and ULBs respectively, though it is up to state governments to enforce these. The differences in contents and specificity of these lists directly point to how RLBs and ULBs are perceived to have different governance needs or expectations. RLBs are assigned simply "Drinking water", whereas ULBs are assigned "Water supply for domestic, industrial and commercial purposes." Items listed only for ULBs and not RLBs include town planning, slum improvement, public amenities including street lighting, parking lots, and bus stops, solid waste management, building regulations, and fire services. Hence, if RLBs and

[10]States with less than 2 million people may skip intermediate level RLB aggregations.

[11]ULBs with over 300,000 people are required to make such Ward Committees, and Metropolitan Planning Committees are to be made in areas with a population of over 1 million and that have been specified as metropolitan areas by respective state Governors.

ULBs develop along the distinctions laid out in the Constitution, the governance of urban settlements by RLBs may lead to unsafe environments and inadequate urban services[125]. The Constitution also enables states to provide for people who have special knowledge or experience in municipal administration to be represented in ULBs, albeit without voting rights, so there is an institutional framework through which municipalities can benefit from urban expertise. More subtle distinctions are also present. For instance, in the Amendments' Statements of Objects and Reasons, for RLBs, revenue is mentioned in the context of securing sound finance for RLBs through grants from the state government and assignment to or appropriation by RLBs of revenues from designated taxes, duties, tolls, and fees. For ULBs, revenue is mentioned in the context of putting the relationship between the state government and ULBs on a firmer footing with respect to arrangements for revenue sharing. Hence, while the RLB is framed as a unit in need of revenue assistance, the ULB is phrased as a more powerful entity with which the relationship of the state needs to be established, with two-way revenue sharing.

Further, the previous section described how large government fund allocations and schemes are available exclusively either only to RLBs or only to ULBs. Detailed data on the flow of funds and scheme benefits are not available in a way that allows definitive calculations about whether RLBs or ULBs gain more, but the amount of funds, the purposes of funds and schemes, and the efficiency of spending and implementation may lead to different outcomes along such separately earmarked channels.

There also appear to be capacity differences between RLBs and ULBs. It is hard to compare actual resources available since local bodies often do not maintain detailed financial accounts, but to illustrate, the share of total tax revenue raised by ULBs was estimated to be 8.5 times that of RLBs in 2007-2008[90], even though RLBs preside over roughly 3 times the number of people that ULB do[125]. The previous section illustrated that ULBs are also widely seen as being more active in terms of urban regulation and management. Elaborating on the limitations faced by RLBs in this regard, Jenkins et. al. (2012) reports an interview

with a former Principal Adviser to the Indian government's Planning Commission, who said, "The panchayat itself possesses no institution for getting any real development work done... That resides with the state government. Villages have some funds from the state, which they can use for cleaning, desilting, fixing tube wells, but when we are talking about places that have all the characteristics of an urban area, like census towns, then you get into trouble. All of that stuff is simply not within the competence of panchayat." The same article quotes the head of the Singhia Buzur RLB, who said, "The panchayats don't have a source of income... There are a lot of welfare programmes we'd like to do, but they cannot be done under the auspices of the panchayat... We are allowed to build a nallah *(storm drain)* and given funds for that, but we then cannot afford to get it cleaned. We can spend only under the headings we are allowed. In the state machine, there's no provision for the tasks we need"[72]. Hence, RLBs are in general more beholden to amounts and purposes of allocations from state governments, whereas ULBs generally have more independent capacity.

Simply being a ULB instead of an RLB may be associated with perceptions of providing for more urban amenities and higher development levels. This may impact both the actions and priorities of local body politicians and staff, and expectations and demands of citizens.

At a more general level, if one accepts the government's assumption that such differing levels of governance are necessary for rural and urban areas[12] and that such levels have been so created, then development would be compromised in an RLB-governed urban settlement because the needs of the settlement would not be optimally addressed by a governance form that has been designed by the central and state governments to cater to rural needs.

Hence, the distinction between RLBs and ULBs studied here represents a set of differences

[12]For instance, urban areas are often thought of as being more populous and dense and less agriculture-based, and these structural differences between rural and urban areas may make them conducive to different governance forms, as has been noted in Tandel et. al. (2016) [125]. For example, development requirements and the feasibility of providing services are different in dense and populous areas. The relatively high population and density may also create economies of scale in public service delivery and agglomeration effects that boost the economy[62]. On the other hand, agriculture tends to have decreasing or constant returns to scale[78, 36], potentially making rural economies fundamentally different from manufacturing or services based economies. This may justify different sizes and functions of government in rural and urban areas.

at the national level created by the different structures of government, the separate channels through which funds and schemes are allocated exclusively to RLBs or ULBs, the different levels of capacity and regulatory authority that generally prevail in RLBs and ULBs, and the different perceptions and expectations that may arise from being RLBs or ULBs as is echoed in the language of central laws and media reports.

3 Differences on average

So far, data have not been aggregated at the settlement level to compare average levels of indicators across all RLB and ULB-governed urban settlements in India. This section uses 2011 census data to test whether differences exist on average between both settlement types.

3.1 Identifying urban settlements

Such a comparison requires us to first identify a universe of settlements that are urban in nature. In this study, I employ the definition of urban used by the Registrar General of India for the Indian census, which categorises all settlements that it deems as urban in nature into 2 types: ULB-governed STs and RLB-governed CTs. As of the 2011 census, India has 4,041 STs[13] and 3,892 CTs[14]. This definition of urban is used not only because

[13]The 4,041 STs includes roughly 60 settlement units called Cantonment Boards, which are local bodies administered by the central government's Defence Ministry. While Cantonment Boards are technically not directly under the 74th Constitutional Amendment, the Indian census considers these settlements urban and includes them in their count of STs. Moreover, Cantonment Boards have been deemed to be ULBs for several purposes, such implementing central government social welfare schemes and taxation under the 1881 Municipal Taxation Act [8]. Hence, this study also considers Cantonment Boards STs, especially since the study investigates whether there is a development difference associated with the mismatch of urban settlements being governed by rural governance forms, and Cantonment Boards are not rural governance forms.

[14]In several data sources, OGs are counted along with their adjoining STs or CTs, and disaggregated figures are not provided for OGs. There are 981 OGs in the 2011 census[11] and they contain less than 1.1% of the total urban population. To allow integration of the dataset, indicators for OGs are added to their respective STs or CTs in all data sources. Hence, this process may count relatively small parts of RLB-governed areas as ULB-governed. However, since such areas are adjoining the concerned ST or CT and form an integrated urban unit, it is reasonable to assume spillover effects that should not undermine the comparison with stand-alone RLB-governed urban settlements. Counting OGs independently may also violate non-interference assumptions because the status of their adjoining settlements would likely have spillover effects on outcomes observed in the OGs since they form an integrated urban unit.

it has government recognition, but also because it is widely accepted as being strict and an underestimate of true urbanisation levels[59], providing a relatively undisputed universe of urban settlements. Other definitions are likely to identify a larger number of RLB-governed urban settlements and increase the difference levels found between both settlement types, since the census' definition under-identifies smaller urban settlements as urban. Hence, if differences are found even when employing this conservative urban definition, one may infer that differences are real and pronounced. Future research may test the results of this study by employing different urban definitions. Applying this definition also precludes the possibility of there being miscategorisation in the opposite direction, that is, using the census definition, there are no settlements that are rural in nature but ULB-governed, because all ULB-governed settlements are considered urban in nature by definition by the census.

3.2 Indicators

The only pan-India settlement level dataset is the Indian census, so the selection of variables is partly driven by census availability, and indicators with clear relevance for urbanisation or development levels were selected here.

I use 3 categories of indicators. The first category represents urban characteristics. The 6 indicators in this category are population, density, proportion of workforce engaged in agriculture or cultivation[15], distance in kilometres to the nearest city with a population of at least 500,000, distance in kilometres to the nearest city with a population of at least 100,000, and distance in kilometres to the nearest railway station[16].

[15]Population, density, and proportion of workforce engaged in agriculture or cultivation are widely accepted characteristics used to identify urban areas, and are also used by the census to aid in the identification of urban settlements. While the census only considers male main working population engaged in non-agricultural pursuits, this study considers the share of total workforce in agriculture or cultivation for a holistic sense of the economic profile of the settlement. There appears to be no strong reason to consider only the male workforce to depict urbanisation levels, beyond concerns that the feminisation of agriculture would cause considering the total workforce to underestimate urbanisation below the level that India's already-strict definition does, or that female workforce may be underestimated in some areas[41].

[16]Distance to large cities and a railway station indicates the degree to which the settlement is part of or accessible to a larger urban system and hence influenced by urban effects. Distance to a 500,000 plus population city and 100,000 plus population city are included because the association of urbanisation with development may differ depending on the extent of urbanisation and because the urban effect spillovers of

The second category represents high spillover development indicators. The 6 indicators in this category are length of roads per square kilometre, whether the settlement has a fire service, whether the settlement has open or closed drainage facilities, whether the settlement has a higher education institution[17], water storage capacity in kilolitres per capita, and number of hospital beds[18] per capita.

The third category represents low spillover development indicators. The 5 indicators in this category are proportion of literate population[19], proportion of households availing banking facilities, proportion of households with drinking water access within their premises[20], proportion of households with electricity access within their premises, and proportion of households with latrine access within their premises. All indicators are listed in Table 1.

Table 1: Variables

Variable name	**Variable description**
Category 1: Urban characteristics	
Population	population of settlement
Density	population/area in square km
Agricultural labour or cultivation workers	total workers in agricultural labour or cultivation/total workers
Distance to nearest 500,000+ city	distance in km to the nearest city with a population of at least 500,000

very large cities may be different. Moreover, studies such as Krishna and Bajpai (2011) and Sahoo and Dash (2009) have found a relationship between proximity to urban centres and development and between railways and development respectively in India[77, 113].

[17]Lower education institutions are not considered because these do seem to have pervaded most urban settlements. Of my dataset, only 17 urban settlements do not have a lower education institution. Higher education institutions are above the senior secondary school level. 15 institution types are aggregated, such as arts and sciences colleges, law colleges, and polytechnic institutes. The number of education institutions is not considered because without information on the student population of each institution, a comparison of the number of institutions may be misleading.

[18]Hospital beds considers both allopathic and alternative hospitals to facilitate the subsequent analyses with 2001 census data, which do not provide disaggregated figures for allopathic and alternative hospitals. This aggregation does not appear to substantively change the variable. Whether considering the number of allopathic hospital beds per 1,000 population or the number of allopathic and alternative hospital beds combined per 1,000 population, the 2011 mean value for both RLB-governed and ULB-governed urban settlements is the same. Alternative hospitals are those with practices such as Ayurveda and Homeopathy.

[19]The census considers a person literate if he or she is aged 7 years or above and can both read and write with understanding in any language.

[20]This combines all sources of drinking water, including tap water from treated and untreated sources, covered and uncovered wells, hand pumps, tube wells, boreholes and others.

Distance to nearest 100,000+ city	distance in km to the nearest city with a population of at least 100,000
Distance to nearest railway station	distance in km to the nearest railway station
Category 2: High spillover development indicators	
Road length	length of roads in km/area in square km
Fire service	1= fire fighting services available, 0 otherwise
Drainage	1= open and/or closed drainage available, 0 otherwise
Higher education institution	1= higher education institution present, 0 otherwise
Water storage capacity	total water storage capacity in kilolitres/population
Hospitals beds	number of hospital beds/population
Category 3: Low spillover development indicators	
Literate population	literate population/population 7 years of age and above
Households availing banking facilities	households availing banking facilities/total households
Households with drinking water access within premises	households with drinking water access within premises/total households
Households with electricity access within premises	households with electricity access within premises/total households
Households with latrine access within premises	households with latrine access within premises/total households

A relatively small proportion of settlements does not have data reported for certain variables. At most, 2011 data for less than 0.8% of settlements is missing for any variable, apart from distance to the nearest railway station, for which data is missing for 3.5% of settlements.

A limitation of these variables is that they do not reflect quality. For example, road length does not capture the width of roads and literacy does not capture education level. Another limitation is that data on governance status and development are from the same census year. Hence, if some indicators take more time to change in response to changes in governance forms, these indicators may not show differences if a substantive number of conversions occurred close to the date of census enumeration. Since data on the dates of declaration of RLB or ULB status were not accessible, the inferences of this study stand assuming no such concentration effects, or that differences exist despite the potentially limited time for changes

to manifest. Finally, this study does not separately consider settlement boundary changes. Accounting for these changes is a subjective exercise, given that they may have different effects across areas. Further, the development dynamics of peripheral RLBs incorporated into existing ULBs may be different. Future research may test whether the inferences of this study hold when analysing qualitative development aspects, longer term differential impacts, potential effects of boundary changes, and conversions to ULB status through existing ULB boundary expansions.

3.3 Theoretical and statistical differences between development indicators categories

I differentiate between high and low spillover development indicators[21] because the way in which urbanisation and governance forms are associated with these sets of variables may differ for both theoretical and statistical reasons.

High spillover development indicators are similar to quasi-public goods, representing amenities that are not purely non-excludable, but in general can be availed of by a significant proportion of inhabitants. The benefits of low spillover development indicators are more directly limited to the individual or household having the concerned attribute. For instance, a society in which everyone is in the formal banking system may form an attractive market that fosters future growth, but the direct benefits of a household having access to banking facilities are, in the short-term, more limited to that household. Hence, these high and low spillover development indicators may be understood as settlement level amenities and indicators of individual wellbeing respectively.

[21] Other studies have also differentiated between indicators depending on their degree of spillover. Bloch and Zenginobuz (2007) explains how the dynamics of provision of public goods differ depending on their degree of spillover[44]. For instance, Besley et. al. (2012) finds that factors that influence settlement level amenities can be different from factors that influence household level amenities because political or government actors are able to influence intra-settlement distribution of benefits in favour of their own social groups[40]. Similary, Besley et. al. (2004) finds that, in rural local governments in South India, residential proximity to elected representatives matters for high spillover public goods such as access roads and water storage tanks, and sharing the politician's group identity matters for low spillover public goods like a household receiving a toilet, private water connection, or electricity connection under a government scheme[39].

Low spillover development indicators may be sensitive to the degree of inequality in a settlement. If a settlement develops, it is likely to have more settlement level amenities such as roads and a fire station. However, depending on the nature of development, average levels of individual wellbeing, such as literacy and access to a toilet, may fall- either because growth is attracting poor migrants who lower average levels, because the growth process is driving inequality among existing residents, or because local bodies do not have the capacity to provide such services for large populations, manifesting in diseconomies of scale and negative relationships with ULB governance because these settlements tend to be more populous. According to 2011 census data, the 46 cities with over 1 million population, representing roughly the top 1% of the most populous ULB-governed urban settlements, have roughly 38% of India's slum population[46], illustrating that large urban centres house a disproportionately large share of slums. Such an influence is bound to impact average individual wellbeing measures negatively. Hence, the distribution of low spillover development indicators within settlements may be uneven, leading to substantially different expected levels for individuals at different parts of the distribution.

It must be emphasised that poorer levels of low spillover development indicators do not necessarily mean that the settlements concerned are less developed. Rather, this may be a sign of the nature of development, whether inevitable, positive, or negative. Glaesar and Joshi-Ghani (2013) notes that the great-growing cities of the developing world are attracting millions of poor rural migrants, making urban poverty inevitable[64]. However, Glaeser (2012) explains that this is not necessarily a sign of weakness because cities do not make people poor. Rather, they attract the poor because of the economic opportunities and services they provide[61].

Urbanisation may also relate with high and low spillover development indicators differently in this study because of the way in which the census collects data about slums. In the 2011 census, slums were only counted in STs, that is, in settlements with ULBs[22]. However,

[22]Three types of slums were counted in the census- notified slums are those notified as such by the state government; recognised slums are those recognised as such by the state government but not formally notified;

as Varma (2013) notes, slums also exist in RLB-governed urban settlements[128]. Slums constitute roughly 17% of the urban population according to the census. This may result in an overestimation of low spillover development indicators in RLB-governened urban settlements relative to ULB-governed ones, since the population in slums is very likely to be worse-off than average[23]. The last 2 measures of high spillover development indicators may also be impacted by the manner in which the census counts slums. Per capita water storage capacity and per capita hospital beds may be overestimated in RLB-governed settlements because the exclusion of slum population increases the per capita availability of resources. Hence, differences between RLB and ULB-governed settlements for these variables may be stifled by the fact that slums are not counted in RLBs, but if differences do exist wherein ULBs' development indicators are better, we may infer that these differences are large enough to be robust to this limitation.

3.4 Results

Table 2 shows results for the t test on the equality of means to compare averages of variables between RLB and ULB-governed urban settlements.

Table 2: Differences between RLB and ULB-governed urban settlements - 2011

	(1)	(2)	(3)	(4)
	RLB mean	ULB mean	difference	t
Population	13946.20	79891.70	-65945.49***	(-10.55)
Density	3638.60	4694.83	-1056.23***	(-7.63)
Agricultural labour or cultivation workers	0.13	0.21	-0.09***	(-24.25)
Distance to nearest 500,000+ city	100.07	121.90	-21.83***	(-8.62)
Distance to nearest 100,000+ city	39.83	56.70	-16.86***	(-13.47)
Distance to nearest railway station	14.96	21.49	-6.53***	(-6.42)
Road length	4.40	6.61	-2.22***	(-10.22)

and identified slums are compact areas with at least 300 people or about 60-70 households with poorly built congested tenements in unhygienic environments, usually with inadequate infrastructure and lacking proper sanitary and drinking water facilities[14].

[23]To illustrate, Kumar (2015) finds that households located in slums in India are highly deprived of basic amenities[80].

Fire service	0.08	0.53	-0.45***	(-49.46)
Drainage	0.92	0.99	-0.07***	(-15.53)
Higher education institution	0.28	0.69	-0.41***	(-40.27)
Water storage capacity	0.37	2.52	-2.16**	(-2.06)
Hospitals beds	0.001	0.002	-0.001	(-0.90)
Literate population	0.83	0.81	0.02***	(9.65)
Households availing banking facilities	0.64	0.62	0.01***	(3.22)
Households with drinking water access within premises	0.57	0.61	-0.04***	(-6.61)
Households with electricity access within premises	0.86	0.85	0.01**	(2.08)
Households with latrine access within premises	0.73	0.68	0.05***	(9.17)
Observations	3892	4041	7933	
$***p < 0.01, **p < 0.05, *p < 0.1$				

I first consider urban characteristics. ULB-governed urban settlements are, on average, more populous and dense than RLB-governed urban settlements. However, ULBs have a higher proportion of agriculture or cultivation workforce, on average. This dimension of urbanisation does not appear to be efficiently captured by the government's decision of which areas to govern as urban. Agriculture is a heated political topic in India and is the target of many government allowances and subsidies. For example, agricultural income has been virtually untaxed since India gained independence[129]. Hence, misidentifying this aspect of what makes a settlement rural or urban for the purpose of differentiated policies may be particularly salient. Further, ULB-governed urban settlements are, on average, further away from large cities and railway stations. Hence, state governments may have a tendency to convert settlements from RLB to ULB status if there is not already a large ULB in the area, or if the settlement is not as closely connected through railway networks. This may be because of a general tendency or desire to balance the spread of ULBs, because settlements with higher urbanisation levels tend to emerge with such a spatial spread, or because RLBs are deliberately kept rural-governed in the fringes of large urban centres or networks for political economy reasons such as being able to access preferential tax rates or

regulations[105, 51]. All differences in means within this category are significant at the 1% level.

The second set of results reveals that ULB-governed urban settlements outperform their RLB-governed counterparts on all measures of high spillover development indicators, on average, but for hospital beds the difference is not significant. ULB-governed urban settlements have longer road lengths and greater water storage capacity, and a higher proportion of them have fire services, drainage, and a higher education institution. These differences are significant at the 1% level, except water storage capacity, which is significant at the 5% level. It may be noteworthy that the variable with the lower significance level and the variable with the insignificant difference are both the only ones measured in per capita terms, and hence may be compromised by the census' exclusion of the slum population in RLBs, thus relatively overestimating the RLB indicator. Further, the 1 amenity that is not significant, hospital beds per capita, is influenced by non-government provisions as well, and so may be less influenced by governance forms when compared with more government-dependent indicators like roads, water storage, fire services, and drainage. Whether areas that have better high spillover development indicators are given ULB status or ULB status leads to better indicators, there appears to be a difference in the urban amenities that urban citizens are able to access that is associated with the governance form of settlements.

The final set of results for low spillover development indicators yields a mixed picture. RLB-governed urban settlements actually outperform ULB-governed ones on literacy, banking access, electricity access, and latrine access, on average. These results are significant at the 1, 1, 5, and 1% levels respectively. This may indicate that RLB governance is conducive to better development levels for these indicators, but there is no strong intuitive or theoretical case for this, especially since the ULB governance form was designed to suit the needs of urban areas better. Alternatively, these results may occur because of the nature of the growth process, which may be accompanied by a proliferation of slums[63] and incoming poor migrants or by inequality among existing residents. There may also be diseconomies

of scale and poor local body capacity in general in large settlements across both RLBs and ULBs. Moreover, these results may occur if means are overestimated in RLBs because slums are not counted in RLBs. ULB-governed settlements on average have a higher proportion of households with drinking water access, significant at the 1% level.

These statistics provide insight, perhaps for the first time on a pan-India scale, into whether and what differences exist on average between RLB and ULB-governed urban settlements in India.

Part II

Controlling for urbanisation levels

Given the relevance of rural and urban governance forms for development and the differences between rural and urban-governed urban settlements on average explored in Part I, this section investigates the relationship between these local governance forms and development when controlling for urbanisation levels using 2011 census data. The motivation for this can be understood in 2 ways. First, separate rural and urban governance forms were created to better suit the development needs of rural and urban areas respectively, so such a procedure can reflect whether the current governance framework is facilitating development equally across all urban areas when holding urbanisation levels constant. Second, the different levels of development indicators found in ULBs in Part I may be because ULBs tend to be more highly urban with respect to population and density, and the higher urbanisation level itself, rather than the governance form, may lead to different development levels. Hence, this exercise compares outcomes after adding urbanisation covariates.

4 Functional form

The relationship between urbanisation and development has been widely studied. At the broadest level, the World Bank notes that no country has achieved high incomes or rapid growth without substantial urbanisation, that nearly all countries turn at least 50% urban before reaching middle income status, and that all high income countries are over 70% urban. It also provides a review of mechanisms through which urbanisation impacts economic growth, such as agglomeration economies. Reports from the World Bank[123] and other institutions such as the International Institute for Environment and Development[124] note the strong and persistent positive correlation between urbanisation and GDP per capita. According to the Asian Development Bank, rapid urbanisation has been the key driver of

Asia's growth and accompanying poverty reduction[9] and Sachs et. al. (2002) finds that 82% of the cross-state variation in growth in Indian states is explained by urbanisation[112]. In India, 2010-2011 state level GDP per capita and urbanisation rates have a correlation of 0.75, and total GDP and total urban population have a correlation of 0.97[24].

Other studies include Saker et. al. (2016), which finds a long run causal relationship between urban population and GDP growth in South Asia[115]; Lo (2010), which finds that urbanisation Granger-causes GDP per capita in developing countries[82]; Kasman and Duman (2014), which finds short run unidirectional panel causality running from urbanisation to GDP in new European Union member and candidate countries[74]; Hossain (2011), which finds short run unidirectional panel causality running from urbanisation to per capita GDP growth in newly industrialised countries[67]; Abdel-Rahman (2006), which finds that urbanisation growth rates influence per capita GDP growth rates in developing countries[25]; and Verma (1986), which finds that urbanisation rates have significant effects on manufacturing productivity in Indian states[130].

Given these influences of urbanisation on multiple aspects of development, I control for urbanisation when studying development indicators. Such an approach has been used in other research such as Sen (2015), which investigates the impact of governance on economic and social development in Asia. Sen controls for urbanisation levels when considering headcount poverty, child and maternal mortality, human development and gender inequality indices, years of schooling, sanitation access, and quality of ports, railroads, and electricity as dependent variables[117].

Prior research has also considered factors affecting some of the development indicators used in this study, and this further validates controlling for urbanisation levels. With respect to road length, Ingram and Liu (1999) finds that the size of the national road network is associated with population and population density[69], 2 measures of urbanisation used in

[24]This excludes the small union territories of Dadra and Nagar Haveli, Daman and Diu, and Lakshdweep, because GDP data is not available for these areas. This calculation uses data from state governments for Gross State Domestic Product at current prices, 2004-05 series, compiled by NITI Aayog, Government of India. Per capita and urbanisation rates are calculated using 2011 census data.

this study. Ingram and Liu (1997) finds that urban areas have about 15 more times road length per unit area than rural areas do[68]. Both these studies cover countries across a range of income levels. Turning to higher education, Newbold and Brown (2015) reviews literature finding that there are clear differences in the incidence of degree holders across the rural-urban hierarchy in favour of large urban areas, and that university attendance likely reflects relative location in the rural-urban hierarchy[102]. For banking access, the literature includes Beck and Brown (2011), which finds evidence of a rural-urban gap among households that hold a bank account or card in transitional economies[37], and Cámara and Tuesta (2015), which finds that rural residents are less likely to use the formal financial system in Peru[48]. Water access has been related in a similar way. For example, Soares et. al. (2002) finds that drinking water access is more restricted in rural areas in Latin America and the Caribbean[122]. Studies have found an analogous relationship with indicators relating to electricity use. For instance, O'Neill et. al. (2012) finds that urbanisation impacts energy use in India and China, and this is primarily due to an economic growth effect[103]. Parikh and Shukla (1995) finds a positive association between urbanisation and per capita electricity consumption in developing countries[106]. Magnani and Vaona (2016) finds a strong link between electricity access and share of urban population in developing countries[88]. Liu (2009) finds unidirectional Granger causality running from urbanisation to total energy consumption in China[81] and Wang et. al. (2016) finds that urbanisation increases energy consumption in China[132]. Similarly, Adom et. al. (2012) finds that urbanisation is a driving force behind aggregate domestic electricity demand in Ghana[26]. Moving to latrine access, Banerjee et. al. (2017) finds that urban households are also significantly more likely to have toilets than rural households in India[35]. More broadly, Kumar (2015) finds that households located in small and medium urban settlements in India are highly deprived of basic amenities[80], indicating that the size of urban population is relevant.

There may, of course, be other factors that also impact the development indicators studied here, illustrated with examples below. However, this study refrains from adding ad-

ditional explanatory variables that may have been found to be associated with particular development indicators in one or more studies. Instead, this paper takes an approach of a parsimonious general model that can be applied to all development indicators to understand and compare trends. There are 3 main reasons for this. First, multicollinearity and endogeneity issues arising from adding more closely related independent variables are avoided at the cost of potential omitted variable bias, but since this study uses the entire census of all urban settlements in India, rather than a sample, such a parsimonious specification is considered prudent for more precise estimation. Moreover, coefficients are interpreted on the governance variable, not on urbanisation variables, and the impact of potential omitted variable bias from excluding additional explanatory variables on the governance indicator is less of a concern, especially after partialling out the effect of urbanisation. Further, if omitted variables have time-invariant values and effects between 2001 and 2011, the sensitivity exercise in Part IV involving difference-in-differences with fixed effects will account for the impact of such omitted variables to gauge whether their inclusion impacts the nature of relationships inferred. Second, the additional explanatory variables may appear to have no systematic differences across RLB and ULB-governed urban settlements, or may not appear relevant to control for in the context of this paper. Third, granular data on these variables at the settlement level is generally not available, and given that state fixed effects will be controlled for, more proxy controls and controls aggregated above the settlement level may not be precise representations for the settlement and may confound estimations.

Studies that fall under the first justification include Ingram and Liu (1999), which finds that road length is associated with the size of the economy, geographical area, and income per capita, in addition to urbanisation variables[69]. This paper accounts for geographical area by calculating road length per square kilometre. Economic development levels are partly accounted for through state fixed effects. Including separate economic development indicators explicitly would likely cause endogeneity problems due to simultaneity, biasing the estimates of all coefficients. Omitted variable bias concerns may be mitigated because

this study interprets coefficients on the governance indicator, and the direction and degree of correlation between the governance form and development levels may be mixed across settlements depending on the development indicator chosen, as seen in the results of Part I where the sign of mean differences between development indicators in RLB and ULB-governed urban settlements is not uniform. Moreover, economic development indicators may constitute an intermediate outcome between governance forms and the development indicators used as dependent variables. Nevertheless, such economic data is not available at the settlement level, and future studies that obtain such data may test the inferences of this study after accounting for endogeneity. Determinants of literacy have also been widely studied. Some of these determinants may be closely related with literacy itself, and adding such determinants as explanatory variables may cause simultaneity issues. For instance, Verner (2005) explains that the main determinants of worldwide literacy are life expectancy at birth and 2 other education variables- enrollment rates and average years of schooling of adults[131]. Similarly, Kemmler (2007) finds that electricity access in India is associated with household characteristics and 2 other electricity variables- the degree of community electrification and the quality of electricity supply[75].

Studies that fall under the second justification include Montanari and Nelson (2013), which finds that both left and confessional government strength are negatively associated with the provision of hospital beds, but these effects are mitigated when parties are in intense electoral competition[94]. This study does not control for political parties because there is no clear way or justification to model the specification as such. There are many parties in power across states, so a dummy variable for government type or party is not feasible. Moreover, parties form coalitions of different strengths, parties change from positions of power during different times across states and local bodies, and different parties may be in power at the state and local body levels. There is also no clear association of particular parties with these development indicators[25]. Mulligan (1985) relates hospital bed supply

[25]Some performance indicators, such as those relating to the National Rural Employment Guarantee Scheme, may be studied by controlling for states ruled by the Congress party since this scheme is widely per-

with regulatory and operational factors within the local health care space in the United States[98], whereas Pan and Shallcross (2016) relates county level hospital bed density with county level savings and government revenue in China while controlling for urbanisation[104]. While future research may account for local health care environments more closely, this study relies on considering settlements within the same states and districts, which would result in both RLB and ULB-governed urban settlements having much of the same economic and regulatory conditions. Banking access has been linked with a number of macro and micro factors. For instance, banking access has been related with bank ownership structure, financial infrastructure, income, wealth, education, and social integration in Beck and Brown (2011)[37]; financial inclusion has been related with bank size, bank efficiency, interest rates, literacy, and age dependency in Uddin et. al. (2017)[127]; and women and young people have been found to be less likely to use the formal financial system in Cámara and Tuesta (2015)[48]. Similarly, Soares et. al. (2002) finds that drinking water access is associated with household characteristics such as household income, in addition to urbanisation[122]. Magnani and Vaona (2016) finds that electricity access is associated with human capital as measured by completion rates in lower secondary schools, in addition to urban population[88]. Banerjee et. al. (2017) finds that a household's latrine access is associated with having an educated woman[35]. Routray (2015) explains that behavioural aspects constrain the adoption and use of latrines, and these aspects vary with communities, gender, age, and castes[111]. Similarly, Kumar (2015) finds that households belonging to poor, Scheduled Tribe, Scheduled Caste, and wage labourer groups are highly deprived of basic amenities in India[80]. Averages for some of these factors can be compared across RLB and ULB-governed urban settlements using 2011 census data to show no large or seemingly systematic differences. The literacy rate is 83 and 81% in RLB and ULB-governed urban settlements respectively. Male literacy rates are 88 and 87% and female literacy rates are 77 and 74%. As a proxy for age profile, one can consider the share of the population that is 6 years of

ceived as a Congress party led initiative. However, such a clear association does not exist for the development indicators studied here.

age and below, which is 12% in both settlement types. The gender balance is comparable, with males comprising 51 and 52% of the population in RLB and ULB-governed urban settlements respectively. Community composition differences may be guaged by the share of the population that belongs to Scheduled Caste or Scheduled Tribe communities[26]. The mean share of Scheduled Caste population was 16% in RLB-governened urban settlements and 14% in ULB-governened urban settlements, and the mean share of Scheduled Tribe population was 5% in both settlement types.

Government initiatives may also impact development[27], but since both settlement types are dispersed across the same districts and states, the exposure of settlements to such policy is assumed to be random or accounted for by state fixed effects. This approach is practical given the plethora of central and state government schemes that are operational at varying times with varying levels of impact. Moreover, meaningful consideration of these initiatives would require more than the 2 years of census data that are available after the passage of the 74th Constitutional Amendment.

It must also be noted that the existence, magnitude, and direction of these relationships have been contested. For instance, Hofmann and Wan (2013) suggests that the causal impact of GDP growth on urbanisation may be large and positive[66], rather than finding that urbanisation causes economic growth. While there is considerable literature attesting to the validity of modeling urbanisation as an explanatory variable for development, this paper further tests the validity of its results by considering groups of dependent variables for consistency in trends and specifically addressing endogeneity through statistical exercises.

Following studies such as Mitra (2000), which finds a relationship between urbanisation and total factor productivity in India[92], I allow for a nonlinear relationship between ur-

[26]These are social groups that are recognised by the government as being disadvantaged because of historical injustices against them or because of their geographic isolation.

[27]For example, the central government's Sarva Shiksha Abhiyan scheme has channeled funding towards universal education since 2000, and may hence impact literacy rates. Similarly, the proportion of households with latrines may be impacted by the Integrated Housing & Slum Development Programme for urban areas and the Accredited Social Health Activist (ASHA) scheme for rural areas, both of which were launched in 2005.

banisation and development indicators by including squared terms of urbanisation measures. A similar approach has been used in other studies such as Das et. al. (2015), which finds that urbanisation and proximity to a large urban agglomeration are important in explaining differences in transitional growth rates and income levels across Indian districts[49]. Arouri et. al. (2014) also models outcomes such as GDP per capita, health, and education levels with linear and squared urbanisation regressors for African countries. This study found that urbanisation Granger-causes employment, government and global health expenditure, and human capital development, and that urbanisation is related with education enrollment, life expectancy, mortality rate, and GDP per capita [32]. Another application of such a model is in Sasaki et. al. (1997), which finds that unemployment rates in most developing countries have such a quadratic relationship with urbanisation levels[116]. Bhagat (2011) notes this relationship with respect to basic amenities in India. He finds that access to basic amenities such as drinking water and electricity varies in accordance with the level of urbanisation and the size class of towns, wherein large towns have better availability of basic services but lower access to toilet facilities because of the higher presence of slum households[43].

Hence, using settlement level data, I control for urbanisation levels when investigating the relationship between governance forms and development using the functional form below:

$$\begin{aligned} Y =& \alpha G + \beta P + \gamma D + \delta A + \zeta N + \eta M + \rho R + \iota P^2 + \kappa D^2 + \lambda A^2 + \phi N^2 + \upsilon M^2 + \chi R^2 + \\ & \theta F + c + \epsilon \end{aligned} \tag{1}$$

where Y is a development indicator, G is a dummy variable for whether the settlement has an RLB or ULB, P is population, D is population density, A is the proportion of workforce that is engaged in agriculture or cultivation, N and M are the distance of the settlement to the nearest city with a population of at least 500,000 and 100,000 respectively, R is the distance of the settlement to the nearest railway station, P^2, D^2, A^2, N^2, M^2, and R^2 are squared terms for the respective urbanisation indicators, F represents state fixed effects[28], c

[28]The 7 union territories of India are counted along with states. Union territories are administrative units

is the constant and ϵ is the error term.

This functional form allows for the theory that urbanisation is positively related with development up to a critical point, after which unmanaged over-urbanisation or other growth dynamics such as the attraction of poor migrants may be associated with lower average development levels, resulting in an inverted U-shape relationship.

The coefficient α on the governance variable will be of primary interest. Since the ULB governance form was specifically designed to manage urban settlements, having a ULB in an urban settlement instead of an RLB should have positive implications for development. Reasons that can explain why the local governance form is relevant for development have been reviewed in Part I. The null hypothesis is that local governance forms do not have a significant association with development. A negative or insignificant relationship may manifest if per capita high spillover development indicators and low spillover development indicators are overestimated in RLBs because of slums not being counted in RLBs. Thus, if positive relationships are found despite this, they may be considered strong enough to withstand such statistical underestimation. Low spillover development indicators may also relate negatively because of inequality that may accompany development. Moreover, negative relationships may occur if rural governance forms are more conducive to development or if diseconomies of scale exist in ULBs because of, or, despite development.

State fixed effects account for the fact that development levels and policy environments vary widely across states. States are responsible for devolving powers and responsibilities to local bodies, and the degree of decentralisation can be an important determinant of development indicators[38]. Moreover, urban development is still significantly influenced by the state government in India, as discussed in Part I.

The correlation matrix of all variables used together in a regression is in Appendix A. The absolute correlation value is below 0.5 for all pairs of variables, suggesting that multi-collinearity is not an issue.

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at the same level as states, but where the central government exercises more authority.

5 Modelling

Except in the case of dummy variables, log values of all variables + 0.01 are used to account for cases in which indicator values are 0. OLS regressions with robust standard errors are run. Since data on control variables for density and distance to the nearest railway station are missing for 63 and 278 observations respectively, each model is subsequently run without these 4 linear and quadratic covariates. Finally, the full model with all covariates is run with bootstrapped standard errors[29].

In the 3 cases where the dependent variable is binary indicating the presence of an amenity, in addition to the linear probability models, probit regressions are run after the full model with robust standard errors. Marginal effects for probit regressions are computed both at the means of covariates and as the average of marginal effects for each observation. Both linear probability models and probit regressions are used because the subsequent analyses involving instrumental variables and panel data are conducted with linear probability models, and the stability of results between both models in this exercise may further attest to the validity of using the linear probability model for the following sections. The advantage of using linear probability models here is that they impose fewer modelling assumptions, allowing for heteroskedasticity, and as Angrist and Pischke (2009) explains, given the link between the conditional expectation function and regressions, average causal effects with binary outcomes can be interpreted using linear probability models. The book further notes that imposing the additional assumptions required by nonlinear models may be problematic in itself[31]. Hence, the choice of a potentially arbitrary link function imposed by a probit or logit model only to restrict predicted probabilities between 0 and 1 is not considered superior over the linear probability model in this context.

[29]Throughout this paper, bootstrap procedures are conducted with 1,000 replications.

6 Results

Results showing the relationship between the governance form and development are in Tables 3 and 4, and tables of the full results are in Appendix B.

Table 3: Governance form and high spillover development indicators - 2011

VARS	(1) lnrds full model robust errors	(2) lnrds no density and rail robust errors	(3) lnrds full model bootstrap errors		
gov	0.905***	0.888***	0.905***		
	(0.0398)	(0.0451)	(0.0397)		
Obsvns	7,592	7,867	7,592		
R-Sq	0.371	0.222	0.371		
VARS	(4) fire full model robust errors	(5) fire full model probit dydx- at means	(6) fire full model probit dydx- avg	(7) fire no density and rail robust errors	(8) fire full model bootstrap errors
gov	0.295***	0.320***	0.203***	0.308***	0.295***
	(0.0135)	(0.0175)	(0.0106)	(0.0130)	(0.0143)
Obns	7,592	7,511	7,511	7,928	7,592
Ps R-Sq	0.476	0.4514	0.4514	0.470	0.476
VARS	(9) drainage full model robust errors	(10) drainage full model probit dydx- at means	(11) drainage full model probit dydx- avg	(12) drainage no density and rail robust errors	(13) drainage full model bootstrap errors
gov	0.0552***	0.0632***	0.101***	0.0611***	0.0552***
	(0.00723)	(0.0071)	(0.0111)	(0.00709)	(0.00743)
Obns	7,592	4,764	4,764	7,928	7,592
Ps R-Sq	0.145	0.2261	0.2261	0.143	0.145
VARS	(14) HigherEduD full model robust errors	(15) HigherEduD full model probit dydx- at means	(16) HigherEduD full model probit dydx- avg	(17) HigherEduD no density and rail robust errors	(18) HigherEduD full model bootstrap errors
gov	0.246***	0.290***	0.189***	0.270***	0.246***
	(0.0148)	(0.0207)	(0.0130)	(0.0145)	(0.0145)
Obns	7,592	7,586	7,586	7,928	7,592
Ps R-Sq	0.374	0.3373	0.3373	0.370	0.374
VARS	(19) lnwaterpax full model robust errors	(20) lnwaterpax no density and rail robust errors	(21) lnwaterpax full model bootstrap errors		
gov	0.823***	0.833***	0.823***		
	(0.0473)	(0.0465)	(0.0480)		

Obns	7,592	7,928	7,592
R-Sq	0.245	0.295	0.245

VARS	(22) lnhospbeds full model robust errors	(23) lnhospbeds no density and rail robust errors	(24) lnhospbeds full model bootstrap errors
gov	0.100***	0.106***	0.100***
	(0.00909)	(0.00886)	(0.00938)
Obns	7,592	7,928	7,592
R-Sq	0.192	0.180	0.192

Standard errors in parentheses
$***p < 0.01, **p < 0.05, *p < 0.1$

The results are consistent across all high spillover development indicators, as in Part I. ULB governance is associated with better development levels for all indicators tested, significant at the 1% level, across all models.

Table 4: Governance form and low spillover development indicators - 2011

VARS	(25) lnlit full model robust errors	(26) lnlit no density and rail robust errors	(27) lnlit full model bootstrap errors
gov	0.0179***	0.0209***	0.0179***
	(0.00316)	(0.00307)	(0.00317)
Obsvns	7,592	7,928	7,592
R-Sq	0.467	0.453	0.467

VARS	(28) lnHHbanking full model robust errors	(29) lnHHbanking no density and rail robust errors	(30) lnHHbanking full model bootstrap errors
gov	0.0289***	0.0377***	0.0289***
	(0.00925)	(0.00937)	(0.00905)
Obsvns	7,587	7,923	7,587
R-Sq	0.312	0.298	0.312

VARS	(31) lnHHwater full model robust errors	(32) lnHHwater no density and rail robust errors	(33) lnHHwater full model bootstrap errors
gov	0.125***	0.117***	0.125***
	(0.0193)	(0.0191)	(0.0195)
Obsvns	7,587	7,923	7,587
R-Sq	0.383	0.379	0.383

VARS	(34) lnHHelectr	(35) lnHHelectr	(36) lnHHelectr

	full model robust errors	no density and rail robust errors	full model bootstrap errors
gov	0.00272	0.0140	0.00272
	(0.0127)	(0.0125)	(0.0122)
Obsvns	7,587	7,923	7,587
R-Sq	0.484	0.476	0.484
	(37)	(38)	(39)
VARS	lnHHlatr	lnHHlatr	lnHHlatr
	full model robust errors	no density and rail robust errors	full model bootstrap errors
gov	0.0399***	0.0380***	0.0399***
	(0.0150)	(0.0146)	(0.0146)
Obsvns	7,587	7,923	7,587
R-Sq	0.438	0.426	0.438

Standard errors in parentheses
$***p < 0.01, **p < 0.05, *p < 0.1$

The results for low spillover development indicators now show a more consistent picture. After controlling for urbanisation levels, the higher average literacy, banking access, and latrine access found in RLB-governed urban settlements in Part I reverses. ULB governance is associated with higher levels of these measures. Like in Part I, ULB-governed settlements have a higher proportion of households with drinking water access. Electricity access is not significant, diluting the result of higher average electricity access in RLB-governed urban settlements found earlier. All significant differences are significant at the 1% level, and results are consistent across models.

Hence, despite the potential overestimation of low spillover development indicators in RLBs because of slums being counted only in ULBs, on controlling for urbanisation levels, all low spillover indicators that show a significant relationship with governance form show a positive relationship with ULB governance. Only electricity access remains insignificant. We can infer that this may be an aspect of development that is substantially lacking in slums, that RLBs and ULBs facilitate electricity access to the same degree, or that this variable is influenced by inequality or diseconomies of scale in large settlements.

To estimate the magnitude of the associations between ULB governance and development, I calculate bias-reduced estimates of the coefficient on the governance indicator in the 8 cases

where the dependent variable is log transformed. I use the estimator suggested by Kennedy (1981)[76] in Table 5, applied to the full models with robust standard errors.

Table 5: Bias-corrected coefficients- 2011

	lnrds	lnwaterpax	lnhospbeds		
gov	1.471***	1.275***	0.106***		
	(0.0983)	(0.108)	(0.0101)		
	lnlit	lnHHbanking	lnHHwater	lnHHelectr	lnHHlatr
gov	0.0180***	0.0293***	0.133***	0.00264	0.0406***
	(0.00322)	(0.00953)	(0.0218)	(0.0128)	(0.0156)

Standard errors in parentheses
$***p < 0.01, **p < 0.05, *p < 0.1$

According to the full model applied with robust standard errors, an urban settlement having an urban governance form rather than a rural governance form is approximately associated with a 147% increase in road length per square kilometre, a 30 percentage point increase in the probability of having a fire service, a 6 percentage point increase in the probability of having drainage, a 25 percentage point increase in the probability of having a higher education institution, a 128% increase in water storage capacity in kilolitres per capita, an 11% increase in hospital beds per capita, a 2% increase in literacy rate, a 3% increase in the proportion of households with banking access, a 13% increase in the proportion of households with drinking water access within their premises, and a 4% increase in the proportion of households with a latrine within their premises.

7 Sensitivity tests

This section tests the sensitivity of inferences to 2 alternative models that address potential limitations with the model used in the previous section. The first includes a vector of development covariates and the second allows for state level variation in the relationship between governance form and development.

7.1 Controlling for development covariates

A potential limitation of the model is that economic development indicators are not controlled for. As discussed earlier, including these indicators may cause endogeneity and data on indicators like per capita GDP and expenditure are not available at the settlement level across India. Yet, some may believe that excluding such covariates could cause omitted variable bias. Hence, the full model for each development indicator with robust standard errors is run again, adding all other development indicators as covariates, and this vector serves as a proxy measure for the level of economic development. While this model is not ideal both because of endogeneity issues and because the vector of development controls is an imperfect proxy for economic development, the vector does reflect general development levels on average, so the model can provide a sense of the stability of the estimates.

Table 6: Sensitivity to development covariates

VARS	lnrds	fire	drainage	HigherEduD	lnwaterpax	lnhospbeds
gov	0.753***	0.247***	0.0384***	0.185***	0.656***	0.0618***
	(0.0421)	(0.0141)	(0.00771)	(0.0159)	(0.0503)	(0.00790)
Obsvns	7,587	7,587	7,587	7,587	7,587	7,587
R-Sq	0.381	0.491	0.158	0.394	0.257	0.220
VARS	lnlit	lnHHbanking	lnHHwater	lnHHelectr	lnHHlatr	
gov	0.00446	-0.0235***	0.0919***	-0.0302***	0.000896	
	(0.00286)	(0.00823)	(0.0207)	(0.0109)	(0.0128)	
Obsvns	7,587	7,587	7,587	7,587	7,587	
R-Sq	0.666	0.547	0.517	0.583	0.607	

Robust standard errors in parentheses
$***p < 0.01, **p < 0.05, *p < 0.1$

Table 6 shows that the positive and significant relationship between ULB governance and high spillover development indicators remains at the 1% level. Low spillover development indicators are, however, sensitive to this specification. Literacy and latrine access are no longer significantly associated. Banking and electricity access are negatively associated and water access is positively associated, all at the 1% significance level.

Hence, the association between urban governance and high spillover development indicators remains generally stable from the first exercise using the t test on equality of means, to adding urbanisation controls, to adding a vector of development covariates. The association between urban governance and low spillover development indicators is sensitive to specifications, though holding urbanisation constant yields a positive and significant association for all indicators except electricity access.

7.2 Allowing state variation in associations

The second alternative model is motivated by the possibility that national level differences between RLBs and ULBs may have differing effects in different places for a variety of reasons including complex and opaque legal provisions, historical legacies, citizen expectations and powers, and leadership leanings and capacity at the local, district, or state levels that may change over time. Hence, the permutations of reasons that may cause differential effects of governance forms are many, and these reasons may vary across time and space. This study assumes that the spread of these differential effects is dissipated enough so as to allow the governance indicator to capture average effects across the dataset. Since the state is arguably the most obvious level at which differential associations with governance forms may be expected, I investigate the sensitivity of inferences to allowing for state variation in the impact of governance to test the assumption that differential effects are sufficiently spread. A limitation of this model is that the number of urban settlements is spread unevenly across states, and the proportion of urban settlements that is ULB-governed varies significantly across states. To illustrate, as of 2011, Tamil Nadu has 1,097 urban settlements but Himachal Pradesh has 59. 11% of urban settlements in Kerala are ULB-governed but 76% of urban settlements in Madhya Pradesh are ULB-governed.

To implement this model, I add interaction terms between the governance form and state dummies in the full model with robust standard errors. I add the coefficients on the governance indicator to the coefficients on each of the governance-state interactions

multiplied by the proportion of observations that belongs to each of the respective states.

Table 7: Sensitivity to state variation

VARIABLES	lnrds	fire	drainage	HigherEduD	lnwaterpax	lnhospbeds
Gov joint coef	1.058***	0.298***	0.0640***	0.283***	0.909***	0.124***
	(0.0465)	(0.0140)	(0.00680)	(0.0149)	(0.0607)	(0.0129)
Obsvns	7,592	7,592	7,592	7,592	7,592	7,592
R-Sq	0.421	0.530	0.180	0.386	0.266	0.231
VARIABLES	lnlit	lnHHbanking	lnHHwater	lnHHelectr	lnHHlatr	
Gov joint coef	0.0229***	0.0452***	0.139***	0.0117	0.0324**	
	(0.00316)	(0.00930)	(0.0196)	(0.0126)	(0.0145)	
Obsvns	7,592	7,587	7,587	7,587	7,587	
R-Sq	0.473	0.329	0.396	0.495	0.451	

Robust standard errors in parentheses
$***p < 0.01, **p < 0.05, *p < 0.1$

The inferences do not seem sensitive to accounting for state variation, as seen in Table 7. There is a positive and significant relationship between urban governance and all development indicators except for electricity access, for which the relationship is not significant. All other relationships are significant at the 1% level except latrine access, which is significant at the 5% level.

Part III

Addressing endogeneity

In this section, I investigate whether endogeneity of the governance variable is a concern for the inferences made in Part II. I apply an instrumental variable for the local governance form to test whether accounting for endogeneity impacts the inferences made using 2011 census data, and then test whether more developed settlements appear more likely to be converted from rural to urban governance forms between the 2001 and 2011 census rounds.

8 Instrumental variable

I explore the use of an indicator to measure the strictness of provisions contained in state laws regarding guidelines for categorising ULBs, interacted with the proportion of the state's urban population contained in the settlement, as an instrument for governance form.

8.1 Instrument

The 74th Constitutional Amendment specified that states had to bring their laws in conformity with the Amendment's provisions within a year from its commencement. Hence, all states have corresponding conformity legislation, and in many states this legislation includes criteria for which settlements should be ULB-governed. These criteria vary widely both in terms of strictness of thresholds and in terms of language indicating how binding such criteria are. A settlement's likelihood of being governed by an RLB or ULB can be expected to be influenced by the strictness of such state laws.

These differences in laws across states do not appear systematic. As noted in Sivaramakrishnan (2000), KC Sivaramakrishnan, a former Secretary of the Indian Ministry of Urban Development who was involved in drafting the 74th Constitutional Amendment, said that the fact that states passed conformity legislation "does not however mean that the conformity legislation was the product of serious analysis and thinking." He recalls that some states felt

that more time was needed to review such laws, and that the Urban Development Ministry expressed some sympathy for this view. Some also hoped that a model municipal law would be drafted that states could draw from. However, extending the deadline was considered inappropriate because this would have involved another Constitutional Amendment. Hence, in as many as 20 states, conformity legislation was put in place just before the expiry of the time limit. When discussing variations and changes to conformity legislation across states, Sivaramakrishnan says that these laws "indicate the continued ambivalence and confusion in the thinking of different States"[120].

Table 8 lists the value of the variable indicating strictness of criteria for ULB classification in each state, with higher scores indicating stricter criteria. Appendix C contains relevant provisions for each state. As can be seen, there do not appear to be systematic groupings wherein states from the same region or states with similar development levels have similar values. For instance, state groupings that tend to be analysed or categorised separately when studying development and policy in India are BIMAROU states, Hill states, and Southern states. BIMAROU states are Bihar, Madhya Pradesh, Rajasthan, Odisha, and Uttar Pradesh; and they have scores of 19, 1, 1, 8, and 1 respectively. Hill states are Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Sikkim, Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, and Tripura; and they have scores of 1, 4, 1, 13, 14, 1, 1, 1, 8, 3, and 6 respectively. Southern states are Andhra Pradesh, Karnataka, Kerala, and Tamil Nadu, and they have scores of 11, 16, 1, and 21 respectively.

Table 8: Score for strictness of criteria for ULB classification

State	ULB criteria score
Andaman & Nicobar Islands	1
Dadra & Nagar Haveli	1
Daman & Diu	1
Delhi	1
Pondicherry	1
Chandigarh	1
Chhattisgarh	1

Goa	1
Kerala	1
Madhya Pradesh	1
Assam	1
Jammu & Kashmir	1
Manipur	1
Meghalaya	1
Punjab	1
Rajasthan	1
Uttar Pradesh	1
Uttrakhand	1
Haryana	2
Nagaland	3
Himachal Pradesh	4
Tripura	6
Mizoram	8
Odisha	8
Gujarat	9
Andhra Pradesh	11
Sikkim	13
Arunachal Pradesh	14
Karnataka	16
Maharashtra	17
Jharkhand	18
Bihar	19
Tamil Nadu	21
West Bengal	23
Lakshdweep	25

It is likely that these criteria will affect settlements differentially based on their size, wherein settlements that are more populous by the state's standards are more likely to be given ULB status, and vice versa. Hence, for each settlement, I interact the state's ULB criteria score with the proportion of the state's urban population contained in that settlement. This also enables the practical advantage of allowing settlement level variation.

8.2 Modelling

I use two-stage least squares[30], even where the dependent variable is binary. As discussed earlier, linear probability models allow for more relaxed assumptions while estimating average treatment effect. Angrist and Pischke (2009) also cautions against backdoor identification from using nonlinear fitted values as instruments, while noting that instrumental variable methods capture local average treatment effects regardless of whether the dependent variable is binary or continuously distributed[31]. Angrist and Krueger (2001) elaborates that using probit or logit models to generate first-stage predicted values is not necessary and may even do some harm. In two-stage least squares, a linear probability model for first-stage estimates would produce consistent second-stage estimates even with a dummy endogenous variable. However, plugging in fitted values from nonlinear first-stage models into the second-stage will not generate consistent estimates unless the nonlinear model is exactly correct, increasing the dangers of misspecification. Interpretations of nonlinear second-stage estimates are also sensitive to specifying the correct functional form[30][31].

Like in Part II, two-stage least squares is run with robust standard errors, once with the full model and once without the 4 density and railway distance covariates, following which the full model is run with bootstrapped standard errors.

8.3 Results

The summary results are tabulated below, and the full results are in Appendix C.

As seen in Table 9, in the first stage state laws are negatively associated with ULB governance, significant at the 1% level, as expected.

Proceeding to the second stage, among high spillover development indicators, governance form appears to be endogenous consistently across models only for fire services. For

[30]When testing for sensitivity, convergence was not achieved in probit regressions of the first stage.

[31]Two-stage least squares has been used with dummy endogenous regressors and dependent variables in several studies including Angrist and Krueger (1994)[29], Calderon et. al.(2017)[45], Eide and Ronan (2001)[57], and Miguel et. al. (2004)[91].

Table 9: Governance form and state laws on ULB criteria - 2011

VARIABLES	gov full model robust errors	gov no density and rail robust errors	gov full model bootstrap errors
statelaweffect	-0.111***	-0.151***	-0.111***
	(0.0299)	(0.0355)	(0.0377)
Observations	7,592	7,928	7,592
R-squared	0.559	0.546	0.559

Standard errors in parentheses
$***p < 0.01, **p < 0.05, *p < 0.1$

drainage, governance form appears to be endogenous for 1 of the 3 models. As seen in Table 10, accounting for endogeneity continues to yield a positive relationship with fire services, significant at the 1% level for both models using robust standard errors, and at the 5% level when using bootstrapped standard errors. For drainage, in the 1 case where governance does appear to be endogenous when applying the full model with robust standard errors, accounting for endogeneity yields no significant relationship. Using results from the instrumental variable analysis for drainage is suspect because endogeneity is not found both when dropping covariates with a fair amount of missing data, and when using the full model with bootstrapped standard errors that do not rely on asymptotic properties. Moreover, the relationship switches from positive to negative between models, so the results for drainage may be too sensitive to model specifications to make inferences using this method.

Table 10: Governance form and high spillover development indicators with instrumental variable- 2011

VARIABLES	fire full model robust errors	fire no density and rail robust errors	fire full model bootstrap errors
gov	1.069***	0.825***	1.069**
	(0.264)	(0.167)	(0.428)
Obsvns	7,592	7,928	7,592
R-Sq	0.170	0.329	0.170
Underidentification test (KP)	8.46	12.69	18.087
p-value	0.0036	0.0004	0
Weak identification test (KP)	13.82	18.11	18.021

Endogeneity test	8.957	7.169	10.581
p-value	0.0028	0.0074	0.0011
VARIABLES	drainage	drainage	drainage
	full model	no density and rail	full model
	robust errors	robust errors	bootstrap errors
gov	-0.0537	0.00452	-0.0537
	(0.0572)	(0.0382)	(0.0790)
Obsvns	7,592	7,928	7,592
R-Sq	0.113	0.135	0.113
Underidentification test (KP)	8.46	12.69	18.087
p-value	0.0036	0.0004	0
Weak identification test (KP)	13.82	18.11	18.021
Endogeneity test	3.43	1.871	0.688
p-value	0.064	0.1713	0.4069

Standard errors in paranthesis
$***p < 0.01, **p < 0.05, *p < 0.1$
The instrument is statelaweffect

Turning to low spillover development indicators, governance form appears to be endogenous in all 3 models for banking access, and in 2 of the 3 models for water access. As seen in Table 11, banking access is negatively associated in all models, significant at the 1% level in both models using robust standard errors, and at the 10% level when using bootstrapped standard errors. Water access is negatively associated at the 10% significance level in the full model with robust standard errors, but insignificantly associated in the model without density and railway distance covariates.

Table 11: Governance form and low spillover development indicators with instrumental variable- 2011

VARIABLES	lnHHbanking	lnHHbanking	lnHHbanking
	full model	no density and rail	full model
	robust errors	robust errors	bootstrap errors
gov	-0.484***	-0.348***	-0.484*
	(0.148)	(0.0827)	(0.248)
Obsvns	7,587	7,923	7,587
R-Sq	-0.001	0.121	-0.001
Underidentification test (KP)	8.43	12.67	18.025
p-value	0.0037	0.0004	0

Weak identification test (KP)	13.79	18.08	17.958
Endogeneity test	16.105	17.356	8.222
p-value	0.0001	0	0.0041
VARIABLES	lnHHwater full model robust errors	lnHHwater no density and rail robust errors	lnHHwater full model bootstrap errors
gov	-0.479*	-0.273	-0.479
	(0.275)	(0.179)	(0.411)
Obsvns	7,587	7,923	7,587
R-Sq	0.294	0.343	0.294
Underidentification test (KP)	8.43	12.67	18.025
p-value	0.0037	0.0004	0
Weak identification test (KP)	13.79	18.08	17.958
Endogeneity test	6.195	4.787	2.598
p-value	0.0128	0.0287	0.107

Standard errors in paranthesis
$***p < 0.01, **p < 0.05, *p < 0.1$
The instrument is statelaweffect

In all cases where governance appears to be endogenous, the Kleibergen-Paap rk Wald F statistic is above 10, suggesting that the weak IV problem is not an issue, and the Kleibergen-Paap rk LM statistic suggests that the instrument is relevant.

Hence, the instrumental variable approach suggests that where the governance form is endogenous, the relationship between ULB governance and high spillover development indicators is generally positive, and the relationship with ULB governance and low spillover development indicators is negative or mixed.

Refining the estimates of Part II, according to the full model applied with robust standard errors, an urban settlement having an urban governance form rather than a rural one is approximately associated with a 107 percentage point increase in the probability that the settlement has a fire service, much higher than the 30 percentage point increase estimated previously; and contrary to the positive associations estimated previously, a 48% decrease in both the proportion of households with banking access and the proportion of households with drinking water access within their premises. Given the arbitrariness surrounding assignment

of ULB status discussed further in Part V, these estimates may be interpreted as average effects assuming that ULB effect heterogeneity is uncorrelated with assignment of ULB status.

Since the assignment of ULB criteria scores is arguably a subjective exercise, I test these results with an alternative scoring scale from 1 to 6, identifying groups of states with similar levels of strictness so that differences between criteria that are assigned different scores are more pronounced. The scores and results of this exercise are in Appendix C. All results with respect to endogeneity and significance of relationships with the governance form remain the same, except the relationship with water access, which is insignificant in both cases where endogeneity appears. Hence, while this alternative specification allows less variability in scores, it is in line with the broad positive relationship with high spillover development indicators and negative or mixed relationship with low spillover development indicators.

9 Factors affecting change in governance forms

Endogeneity concerns may also rise if more developed settlements are systematically more likely to be given ULB status. If this is not the case, one may more plausibly assume the independence of being assigned a particular governance form with potential development outcomes, and thus interpret the coefficient on the governance variable as the causal impact. Hence, I analyse urban settlements that converted from RLB to ULB governance between 2001 and 2011 to test whether urbanisation levels influence the likelihood of conversion, as they are meant to, or whether development indicators appear to systematically do so.

9.1 2001 dataset and caveats

In this exercise, I study the RLB-governed urban settlements in 2001 that can be matched in the dataset to settlements in 2011. 1,193 such settlements across 30 states were identified.

Since 2 census rounds have been conducted since the 73rd and 74th Constitutional Amendments institutionalised the third tier of governance, we may study urban settlements

having differing local governance forms in 2001 and 2011. While 2001 census data are a valuable addition to the dataset, they have several issues.

First, data are not available in a comparable manner for distance to the nearest city with a population of at least 500,000[32], drainage, and banking access. Second, the settlement identification process may miss matching a few settlements[33]. Third, slums were counted more inconsistently in 2001[34]. Fourth, the census identification of RLB-governed urban settlements in 2001 was poor, and this may further dilute differences between both settlement types. To illustrate, Pradhan (2017) found that 1,793 of the 2,553 new RLB-governed urban settlements identified in 2011 satisfied the criteria for identification in 2001[109][35]. Hence, the comparison pool of RLB-governed urban settlements is smaller in 2001, and one can expect that it was the smaller settlements with lower development levels that were not identified as urban. Since the panel dataset[36] is likely systematically unbalanced with smaller urban settlements not identified in 2001, a straightforward panel data analysis is not pursued.

[32]Distance to the nearest city with a population of at least 100,000 is still controlled for.

[33]Since settlement names and codes are not consistent across years, when matching settlements between 2011 and 2001 I referenced the 2011 Town Directory, which includes 2001 population values. In a few cases the settlement population did not match between the 2001 and 2011 Town Directories, but the settlements were still matched for the panel dataset if their names were the same or similar, and they were the only unmatched settlements in the state with comparably similar names. Unmatched settlements were checked with the Census MDDS Code Directory, and if settlements were still unmatched, they were checked against Thomas Brinkhoff's Citypopulation.de database. The MDDS Code Directory was not checked as the first source because of errors present in that dataset[109].

[34]First, slums were identified "particularly" in settlements that had a population of 50,000 or more in the 1991 census. Subsequently, slums were also identified in towns with a population of 20,000 to 49,999 in 2001 and in ULBs with a population under 50,000 in 1991 but over 50,000 in 2001[14]. In "stray cases" slums were counted in RLBs as well. Some towns not meeting the population criteria for counting slums were subsequently counted for slums because these settlements satisfied the criteria when counted along with their urban agglomerations[1].

[35]The guidelines to identify such settlements remained the same in 2001 and 2011.

[36]The 2001-2011 panel dataset is unbalanced with 13,092 observations. 8,151 distinct settlements are identified. 4,941 are identified for both 2001 and 2011, 2,990 are identified only for 2011 and 220 are identified only for 2001. The natural increase in urbanisation between 2001 and 2011 and the under-identification of urban settlements in 2001 may account for the 2011 settlements not identified in 2001. 2001 settlements not identified in 2011 may have dissipated or merged into other settlements.

9.2 Baselines differences

I first investigate whether the 2001 RLB-governed urban settlements that converted to ULB governance appear systematically different from those that did not convert to begin with. I conduct a t test on the equality of means, checking for differences in both urbanisation levels and development indicators. The results are shown in Table 12.

Table 12: Differences between 2001 RLB-governed urban settlements that did not convert to ULB governance in 2011 and those that did

	(1)	(2)	(3)	(4)
	not converted	converted	difference	t
Population	15331.51	18938.57	-3607.06	(-1.30)
Density	4098.67	2685.02	1413.65*	(1.69)
Agricultural labour or cultivation workers	0.07	0.08	-0.01	(-1.01)
Distance to nearest 100,000+ city	50.55	216.00	-165.45***	(-13.89)
Distance to nearest railway station	14.37	36.72	-22.35***	(-2.82)
Road length	8.21	2.86	5.35	(0.64)
Fire service	0.14	0.47	-0.33***	(-6.96)
Higher education institution	0.25	0.57	-0.32***	(-5.46)
Water storage capacity	4.76	33.80	-29.03***	(-5.13)
Hospitals beds	0.002	0.003	-0.001	(-1.33)
Literate population	0.79	0.79	0.01	(0.56)
Households with drinking water access within premises	0.54	0.53	0.01	(0.21)
Households with electricity access within premises	0.81	0.87	-0.06**	(-2.47)
Households with latrine access within premises	0.66	0.70	-0.05	(-1.56)
Observations	1135	58	1193	

Among the urbanisation variables, population and agriculture or cultivation workforce are not statistically significantly different, and density is lower for converted settlements, significant at the 10% level, so converted settlements were not necessarily more urban to begin with. Converted settlements were significantly further away from large cities and

railway stations, significant at the 1% level, and this may be because governments tend to spread the presence of ULBs, because large urban centres tend to emerge naturally with such a spread, because of political economy reasons discussed earlier, or because settlements close to large urban centres tend to be incorporated into existing ULBs. Among the 5 high spillover development indicators, 3 are significantly different and 2 are not. A higher proportion of converted settlements had fire services and a higher education institution, and they had greater water storage capacity, significant at the 1% level. The differences in road length and hospital beds is not significant. Among low spillover development indicators, only electricity access is significantly different, and settlements that converted had a higher level, at the 5% level. The direction of differences is also varied within each category of indicators. Among the urbanisation measures, converted settlements had a higher population but lower density, and again the contradictory relationship of having a higher proportion of agriculture or cultivation workforce appears. Among high spillover development indicators, the difference between fire, higher education, water storage, and hospital beds is negative, and the difference between road length is positive, with converted settlements having less road length on average. Among low spillover development indicators, the difference between electricity and latrine access is negative, and the difference between literacy and water access is slightly positive with converted settlements having lower literacy and water access.

Hence, RLB-governed urban settlements that converted to ULB governance do not appear to be definitively more urban or developed than those that remained RLB-governed overall.

9.3 Modelling

For reasons discussed in Part II, I run both probit and linear probability models. For the probit models, marginal effects are computed both at the means of covariates and as the average of marginal effects for each observation.

The dependent variable is specified as a dummy to indicate settlements that converted to ULB governance, where settlements that converted are assigned the value 1. First, I run

a probit model and only control for urbanisation indicators- population, density, proportion of workers in agriculture or cultivation, distance to the nearest city with a population of at least 100,000, and distance to the nearest railway station, along with state fixed effects. This model accounts for the fact that urbanisation levels are meant to influence the likelihood of conversion according to the government's policy. In the second round, I add the development indicators- road length, presence of a fire service, presence of a higher education institution, water storage capacity, hospital beds, literate population, households with water, households with electricity, and households with a latrine. Since data for more than 1 observation is missing for density, railway distance, road length, water capacity, and hospital beds, a probit is also run without these covariates. Finally, linear probability models with robust and bootstrapped standard errors are run with all covariates[37].

9.4 Results

Summary results are listed in Table 13 and full results are in Appendix D. In the probit models, when marginal effects are calculated at the means of covariates, no variable is significant. The figures discussed relating to probit models refer to average marginal effects.

Table 13: Factors affecting likelihood of conversion of 2001 RLB-governed urban settlements to being ULB-governed by 2011

VARIABLES	probit- urban covariates		probit- full model	
	dy/dx- at means	dy/dx- avg	dy/dx- at means	dy/dx- avg
lnpop	0.0112	0.0805***	0.00212	0.0743***
	(0.0363)	(0.0156)	(0.00337)	(0.0181)
lndensity	0.00191	0.0137	0.000824	0.0288*
	(0.00641)	(0.0124)	(0.00137)	(0.0155)
lnpropagrocult	0.00165	0.0119	0.000515	0.0180*
	(0.00549)	(0.00926)	(0.000860)	(0.0104)
ln1lakhcity	0.00571	0.0412***	0.00126	0.0441***
	(0.0185)	(0.00931)	(0.00198)	(0.0109)
lnrlydist	-0.000797	-0.00575**	-0.000148	-0.00518**
	(0.00261)	(0.00223)	(0.000242)	(0.00238)
lnrds			-0.000302	-0.0105

[37]The probit models did not work with bootstrapped standard errors, because 1 or more parameters could not be estimated in over 900 of the 1000 replications.

			(0.000539)	(0.00899)
fire			0.000227	0.00794
			(0.000692)	(0.0208)
HigherEduD			0.00200	0.0700***
			(0.00314)	(0.0235)
lnwaterpax			9.43e-05	0.00330
			(0.000203)	(0.00484)
lnhospbeds			-0.00102	-0.0357
			(0.00212)	(0.0489)
lnlit			-0.000729	-0.0255
			(0.00302)	(0.101)
lnHHwater			-0.000915	-0.0320*
			(0.00153)	(0.0171)
lnHHelectr			0.00228	0.0797
			(0.00403)	(0.0703)
lnHHlatr			0.000998	0.0349
			(0.00188)	(0.0373)
State fixed effects	included	included	included	included
Observations	679	679	600	600
R/Pseudo R-squared	0.4428	0.4428	0.5136	0.5136

VARIABLES	probit- without select covariates		LPM- full model	
	dy/dx- at means	dy/dx- avg	robust errors	bootstrap errors
lnpop	0.00559	0.0806***	0.0330***	0.0330**
	(0.0192)	(0.0166)	(0.0126)	(0.0132)
lndensity			0.0128	0.0128
			(0.00924)	(0.00935)
lnpropagrocult	0.000807	0.0116	0.0128	0.0128*
	(0.00283)	(0.00880)	(0.00802)	(0.00762)
ln1lakhcity	0.00259	0.0374***	0.0190***	0.0190***
	(0.00891)	(0.00918)	(0.00432)	(0.00439)
lnrlydist			-0.00438	-0.00438
			(0.00290)	(0.00295)
lnrds			-0.00645	-0.00645
			(0.00517)	(0.00576)
fire	9.75e-05	0.00141	0.0201	0.0201
	(0.00128)	(0.0178)	(0.0228)	(0.0238)
HigherEduD	0.00418	0.0603***	0.0434***	0.0434***
	(0.0144)	(0.0206)	(0.0143)	(0.0154)
lnwaterpax			0.00215	0.00215
			(0.00402)	(0.00396)
lnhospbeds			-0.0199	-0.0199
			(0.0263)	(0.0270)
lnlit	-0.00436	-0.0629	-0.00562	-0.00562
	(0.0161)	(0.0879)	(0.0635)	(0.0683)

lnHHwater	-0.00195	-0.0282*	-0.0191**	-0.0191**
	(0.00681)	(0.0157)	(0.00837)	(0.00785)
lnHHelectr	0.00801	0.116*	0.0246**	0.0246**
	(0.0277)	(0.0625)	(0.0118)	(0.0124)
lnHHlatr	0.00227	0.0327	0.0218	0.0218
	(0.00809)	(0.0318)	(0.0170)	(0.0174)
State fixed effects	included	included	included	included
Observations	679	679	887	887
R/Pseudo R-squared	0.4782	0.4782	0.458	0.458

Standard errors in parentheses
$***p < 0.01, **p < 0.05, *p < 0.1$

I first consider urban characteristics. Population is positively associated in all models, significant at the 1% level, except the linear probability model with bootstrapped standard errors, where it is significant at the 5% level. Density is positively associated in the full probit model, significant at the 10% level. Agriculture or cultivation workforce is also positively associated in the full probit model and the linear probability model with bootstrapped standard errors, significant at the 10% level, reflecting the earlier contradictory relationships found between this indicator and ULB governance. Distance to a 100,000 plus population city is positively associated in all models, significant at the 1% level, again reflecting earlier relationships found between ULB governance and this indicator. Distance to a railway station, however, is negatively associated in both probit models, significant at the 5% level. Hence, while the previous exercises found that 2011 ULB-governed urban settlements are further away from railway stations than RLB-governed ones on average and that 2001 RLB-governed urban settlements that converted appear to be further away from railway stations on average, being closer to a railway station appears to be associated with greater likelihood of conversion in this model.

Among the development indicators, the presence of a higher education institution is positively associated in all models, significant at the 1% level. Water access is negatively associated in all models, significant at the 10, 10, 5, and 5% levels respectively. Electricity access is positively associated in the probit model without select covariates and in both linear

probability models, significant at the 10, 5, and 5% levels respectively.

Hence, urbanisation in general appears to be associated with the likelihood of conversion, but development indicators do not appear to be systematically associated. Only higher education shows a consistent positive relationship, and relationships with development indicators vary in direction. This suggests fair application of the policy overall- it is not necessarily the more developed settlements that are given ULB status. Thus, the endogeneity concerns of development indicators driving governance forms may be allayed and the independence of governance forms with potential development outcomes may be more plausibly inferred.

Part IV

Sensitivity test through difference-in-differences

Bearing in mind the limitations of 2001 census data discussed in Part III- in particular, the concern that the poorer identification of rural-governed urban settlements by the census is likely to stifle differences in development levels attributable to governance forms- I conduct a difference-in-differences analysis to compare rural-governed urban settlements in 2001 that switched to urban governance by 2011 with those that remained under rural governance. Because of data limitations, this exercise serves as a sensitivity test to gauge whether the direction of trends among indicators is consistent with inferences made through Part II and the refinements made through addressing endogeneity in Part III.

10 Modelling

Limiting the dataset to matched RLB-governed urban settlements in 2001 and their counterparts in 2011 yields 2,386 observations across 30 states.

I use the functional form below:

$$\begin{aligned} Y =& \mu DiD + \pi S + \nu T + \beta P + \gamma D + \delta A + \eta M + \rho R + \iota P^2 + \kappa D^2 + \lambda A^2 + \upsilon M^2 + \chi R^2 \\ &+ \theta F + c + \epsilon \end{aligned} \tag{2}$$

These variables correspond to equation (1) in Part II. The additional variables are S, the dummy variable for settlements that converted governance forms with converted settlements assigned the value 1; T, the year dummy variable with 2011 observations assigned the value 1; and DiD, the interaction of S and T.

As explained in Part II, I run linear probability models even in the 2 cases where the dependent variable is binary. In the panel data setting, further issues arise when using nonlinear models to account for unobserved effects, and difference-in-differences models suffer

additional complications with nonlinear models including the change in the interpretation of the interacted DiD coefficient and the common trends assumption being compromised.[38]

Using panel data with fixed effects appears theoretically appropriate because of the likelihood of there being time-invariant development determinants in settlements. Robust[39] and bootstrapped standard errors are used. The approach of Abadie et. al. (2017) is considered for clustering standard errors, wherein clustering is deemed appropriate as an experimental design issue when clusters of units, rather than units, are assigned to a treatment[24]. The assignment of RLB or ULB status is not assigned to clusters. Yet, some may be concerned about the sensitivity of inferences to state clustering because further differences between RLBs and ULBs may be set at the state level, which may result in RLB or ULB status being more or less attractive in different states. However, this dataset limits the application of state level clustered standard errors because there are only 35 Indian states and union territories and the size of clusters varies widely in this dataset. For instance, 3 states have only 2 observations[40]. The low number of time periods is, however, helpful in limiting the potential bias of OLS estimates of standard errors due to serial correlation. Hence, I apply several specifications to illustrate sensitivity. I run the model with fixed effects and robust standard errors, bootstrapped standard errors, and standard errors clustered at the state level. Then, I run these 3 models without density and railway distance covariates. Finally, I run the 3 versions of the full model with random effects to test sensitivity, since both fixed and random effects estimators would be the same in a properly specified model[99].

[38]Linear probability models have been used for difference-in-differences estimations in several studies including Arulampalam et al. (2004)[33], Falck et al. (2010)[58], Lynne-Landsman et al. (2013)[84], Monheit et. al. (2011)[93], and Weinick et al. (2000)[133].

[39]Robusts standard errors cluster at the settlement level in this panel data setting.

[40]Because of varying cluster sizes, using wild bootstrapped standard errors also does not seem appropriate[86, 85].

11 Results

Summary results are listed below and full results are in Appendix E. Beginning with high spillover development indicators, as seen in Table 14, road length is positively associated, significant at the 1 or 5% levels, in all models except the fixed effects clustered model without density and railway distance covariates, which is not significant. Fire service access is positively associated in all models, significant at the 1 or 5% levels. Water storage capacity of the settlement is positively associated in the full fixed effects model and the fixed effects model without density and railway distance covariates with robust and bootstrapped standard errors, significant at the 1% level. Higher education and hospital beds are not significantly associated in any model.

Table 14: Difference-in-differences- high spillover development indicators

VARS	lnrds	lnrds	lnrds	lnrds	lnrds	lnrds
		full model		no density and rail		
	fe- robust	fe- bootstrap	fe- cluster	fe- robust	fe- bootstrap	fe- cluster
DID	0.796***	0.796***	0.796**	0.507**	0.507**	0.507
	(0.234)	(0.234)	(0.301)	(0.243)	(0.249)	(0.309)
Obsvns	2,297	2,297	2,297	2,361	2,361	2,361
W R-Sq	0.049	0.049	0.049	0.008	0.008	0.008
VARS	lnrds	lnrds	lnrds	fire	fire	fire
		full model			full model	
	re- robust	re- bootstrap	re- cluster	fe- robust	fe- bootstrap	fe- cluster
DID	0.841***	0.841***	0.841**	0.281***	0.281***	0.281**
	(0.201)	(0.188)	(0.342)	(0.0805)	(0.0831)	(0.102)
Obsvns	2,297	2,297	2,297	2,297	2,297	2,297
W R-Sq	0.0382	0.0382	0.0382	0.056	0.056	0.056
VARS	fire	fire	fire	fire	fire	fire
		no density and rail			full model	
	fe- robust	fe- bootstrap	fe- cluster	re- robust	re- bootstrap	re- cluster
DID	0.200***	0.200***	0.200**	0.285***	0.285***	0.285***
	(0.0562)	(0.0578)	(0.0881)	(0.0798)	(0.0845)	(0.108)
Obsvns	2,385	2,385	2,385	2,297	2,297	2,297
W R-Sq	0.045	0.045	0.045	0.0379	0.0379	0.0379
VARS	HigherEduD	HigherEduD	HigherEduD	HigherEduD	HigherEduD	HigherEduD

	full model			no density and rail		
	fe- robust	fe- bootstrap	fe- cluster	fe- robust	fe- bootstrap	fe- cluster
DID	0.0659	0.0659	0.0659	-0.00902	-0.00902	-0.00902
	(0.0629)	(0.0626)	(0.0716)	(0.0617)	(0.0616)	(0.0758)
Obsvns	2,297	2,297	2,297	2,385	2,385	2,385
W R-Sq	0.027	0.027	0.027	0.018	0.018	0.018
VARS	HigherEduD	HigherEduD	HigherEduD	lnwaterpax	lnwaterpax	lnwaterpax
		full model			full model	
	re- robust	re- bootstrap	re- cluster	fe- robust	fe- bootstrap	fe- cluster
DID	0.0193	0.0193	0.0193	1.311***	1.311***	1.311
	(0.0587)	(0.0546)	(0.0660)	(0.380)	(0.387)	(1.120)
Obsvns	2,297	2,297	2,297	2,255	2,255	2,255
W R-Sq	0.0183	0.0183	0.0183	0.084	0.084	0.084
VARS	lnwaterpax	lnwaterpax	lnwaterpax	lnwaterpax	lnwaterpax	lnwaterpax
		no density and rail			full model	
	fe- robust	fe- bootstrap	fe- cluster	re- robust	re- bootstrap	re- cluster
DID	1.082***	1.082***	1.082	0.410	0.410	0.410
	(0.324)	(0.330)	(0.882)	(0.354)	(0.353)	(0.884)
Obsvns	2,339	2,339	2,339	2,255	2,255	2,255
W R-Sq	0.080	0.080	0.080	0.0213	0.0213	0.0213
VARS	lnhospbeds	lnhospbeds	lnhospbeds	lnhospbeds	lnhospbeds	lnhospbeds
		full model			no density and rail	
	fe- robust	fe- bootstrap	fe- cluster	fe- robust	fe- bootstrap	fe- cluster
DID	-0.0385	-0.0385	-0.0385	-0.0232	-0.0232	-0.0232
	(0.0444)	(0.0457)	(0.0456)	(0.0356)	(0.0363)	(0.0316)
Obsvns	2,025	2,025	2,025	2,102	2,102	2,102
W R-Sq	0.024	0.024	0.024	0.023	0.023	0.023
VARS	lnhospbeds	lnhospbeds	lnhospbeds			
		full model				
	re- robust	re- bootstrap	re- cluster			
DID	-0.0141	-0.0141	-0.0141			
	(0.0380)	(0.0394)	(0.0385)			
Obsvns	2,025	2,025	2,025			
W R-Sq	0.0123	0.0123	0.0123			

Standard errors in parentheses
$***p < 0.01, **p < 0.05, *p < 0.1$

Among low spillover development indicators, as seen in Table 15, literacy is negatively associated in all models, significant at the 5 or 10% levels. Electricity access is negatively as-

sociated, significant at the 1, 5, or 10% levels, in all models except the random effects model with clustered standard errors, which is not significant. Latrine access is negatively associated in all fixed effects models without density and railway distance covariates, significant at the 1 or 10% levels. Households with water access is not significantly associated.

Table 15: Difference-in-differences- low spillover development indicators

VARS	lnlit	lnlit	lnlit	lnlit	lnlit	lnlit
		full model		no density and rail		
	fe- robust	fe- bootstrap	fe- cluster	fe- robust	fe- bootstrap	fe- cluster
DID	-0.0187*	-0.0187*	-0.0187*	-0.0184**	-0.0184**	-0.0184*
	(0.0103)	(0.0108)	(0.0101)	(0.00792)	(0.00791)	(0.00915)
Obsvns	2,297	2,297	2,297	2,385	2,385	2,385
W R-Sq	0.559	0.559	0.559	0.560	0.560	0.560
VARS	lnlit	lnlit	lnlit	lnHHwater	lnHHwater	lnHHwater
		full model			full model	
	re- robust	re- bootstrap	re- cluster	fe- robust	fe- bootstrap	fe- cluster
DID	-0.0192*	-0.0192*	-0.0192*	-0.110	-0.110	-0.110
	(0.0105)	(0.0108)	(0.0112)	(0.0708)	(0.0713)	(0.0815)
Obsvns	2,297	2,297	2,297	2,294	2,294	2,294
W R-Sq	0.553	0.553	0.553	0.126	0.126	0.126
VARS	lnHHwater	lnHHwater	lnHHwater	lnHHwater	lnHHwater	lnHHwater
		no density and rail			full model	
	fe- robust	fe- bootstrap	fe- cluster	re- robust	re- bootstrap	re- cluster
DID	-0.0568	-0.0568	-0.0568	-0.0646	-0.0646	-0.0646
	(0.0472)	(0.0502)	(0.0670)	(0.0572)	(0.0585)	(0.0698)
Obsvns	2,382	2,382	2,382	2,294	2,294	2,294
W R-Sq	0.132	0.132	0.132	0.1161	0.1161	0.1161
VARS	lnHHelectr	lnHHelectr	lnHHelectr	lnHHelectr	lnHHelectr	lnHHelectr
		full model			no density and rail	
	fe- robust	fe- bootstrap	fe- cluster	fe- robust	fe- bootstrap	fe- cluster
DID	-0.0613**	-0.0613**	-0.0613*	-0.0764***	-0.0764***	-0.0764*
	(0.0253)	(0.0257)	(0.0337)	(0.0231)	(0.0239)	(0.0439)
Obsvns	2,294	2,294	2,294	2,382	2,382	2,382
W R-Sq	0.239	0.239	0.239	0.242	0.242	0.242
VARS	lnHHelectr	lnHHelectr	lnHHelectr	lnHHlatr	lnHHlatr	lnHHlatr
		full model			full model	
	re- robust	re- bootstrap	re- cluster	fe- robust	fe- bootstrap	fe- cluster
DID	-0.0700***	-0.0700***	-0.0700	-0.0624	-0.0624	-0.0624

	(0.0217)	(0.0202)	(0.0451)	(0.0429)	(0.0417)	(0.0543)
Obsvns	2,294	2,294	2,294	2,294	2,294	2,294
W R-Sq	0.2092	0.2092	0.2092	0.350	0.350	0.350
VARS	lnHHlatr	lnHHlatr	lnHHlatr	lnHHlatr	lnHHlatr	lnHHlatr
	no density and rail			full model		
	fe- robust	fe- bootstrap	fe- cluster	re- robust	re- bootstrap	re- cluster
DID	-0.0904***	-0.0904***	-0.0904*	-0.0313	-0.0313	-0.0313
	(0.0308)	(0.0316)	(0.0447)	(0.0389)	(0.0390)	(0.0412)
Obsvns	2,382	2,382	2,382	2,294	2,294	2,294
W R-Sq	0.353	0.353	0.353	0.3424	0.3424	0.3424

Standard errors in parentheses
$***p < 0.01, **p < 0.05, *p < 0.1$

Hence, the broad direction of trends conforms with that of the instrumental variable analysis in Part III. Despite data limitations that are likely to stifle differences between RLB and ULB-governed urban settlements, where significant differences exist, a general positive association with high spillover development indicators and negative association with low spillover development indicators is seen.

The estimated effect of changing from RLB to ULB status is shown in Table 16, using the same bias correction method as in Part II, applying Kennedy (1981)[76] to the full fixed effects model with robust standard errors. Converting from rural to urban governance forms is approximately associated with a 116% increase in road length per square kilometre, a 28 percentage point increase in the probability of having a fire service, a 245% increase in water storage capacity in kilolitres per capita, a 1.9% decrease in literacy rate, an 11% decrease in the proportion of households with drinking water access within their premises, and a 6% decrease in the proportion of households with electricity access within their premises.

Table 16: Bias-corrected coefficients- difference-in-differences

	lnrds	lnwaterpax	lnhospbeds	
DID	1.158**	2.451*	-0.0387	
	(0.506)	(1.313)	(0.0427)	
	lnlit	lnHHwater	lnHHelectr	lnHHlatr
DID	-0.0186*	-0.107*	-0.0598**	-0.0613

	(0.0101)	(0.0632)	(0.0238)	(0.0403)

Standard errors in parentheses
$***p < 0.01, **p < 0.05, *p < 0.1$

12 Addressing common trends

The common trends assumption required for these inferences cannot be tested with prior data because only 2 census rounds have been conducted since the 73rd and 74th Constitutional Amendments increased the salience of RLB-ULB classification. However, this exercise compares units that were and were not subject to a policy change within the same geographical unit that determines relevant policy. Settlements that converted from rural to urban governance and those that did not are within the same country and spread across states and districts that contain both settlement types. Hence, it is reasonable to assume that both settlement types were subject to a similar policy environment and similar external forces, making them subject to common trends.

Moreover, the results in Part III suggest that rural-governed urban settlements that were subject to conversion were not necessarily more or less developed than those that did not convert at the baseline. Hence, the difference-in-differences coefficients can more plausibly be interpreted as the impact of converting from rural to urban status on development indicators.

To investigate the reliance on covariates to comply with the common trends assumption, I compare coefficients of the difference-in-differences indicators in the full fixed effects model with robust standard errors with coefficients on the same model run with only DiD, S, and T as covariates. As seen in Table 17, the direction of the relationship is consistent across both models. The coefficient changes from 0.796 to 0.598 for roads, 0.281 to 0.221 for fire services, 1.311 to 0.555 for water capacity, -0.0187 to -0.0171 for literacy, -0.0613 to -0.0582 for electricity access, latrine access is insignificantly related in the full model but significantly related at a close magnitude without additional covariates from -0.0624 to -0.0674, and it is insignificant in both models for higher education, hospital beds, and households with

water access. Hence, the inferences for water capacity appear more subject to correct model specification, and the difference between coefficients for the other indicators are reasonably similar so as to plausibly infer that the full model accounts for other differences in trends, if any.

Table 17: Differences-in-differences- without additional covariates

VARIABLES	lnrds	fire	HigherEduD	lnwaterpax	lnhospbeds
DID	0.598***	0.221***	0.00234	0.555*	-0.0195
	(0.216)	(0.0578)	(0.0584)	(0.310)	(0.0338)
Observations	2,361	2,385	2,385	2,339	2,102
Within R-squared	0.006	0.025	0.012	0.017	0.014
VARIABLES	lnlit	lnHHwater	lnHHelectr	lnHHlatr	
DID	-0.0171**	-0.0222	-0.0582***	-0.0674**	
	(0.00860)	(0.0421)	(0.0164)	(0.0284)	
Observations	2,386	2,382	2,382	2,382	
Within R-squared	0.534	0.083	0.229	0.320	

Standard errors in parentheses
$***p < 0.01, **p < 0.05, *p < 0.1$

Part V

Political economy of conversions

Given that the prior empirical exercises suggest that there appears to be a relevant association between local body governance forms and development levels, this section considers the political economy of converting from RLB to ULB status. This also sheds light on the potential arbitrariness and vagaries of mechanisms by which RLB or ULB status is assigned.

A review of prior research and news media suggests that conversions appear to be driven by perceptions about the costs and benefits of RLBs and ULBs, socioeconomic environments, and perhaps most importantly, local politics. While views held by those other than the social, economic, and political elite may not be relevant for conversions in practice, they are reviewed here to provide a broad picture of these dynamics, especially since it is not feasible to definitively determine the extent to which different views are relevant through the data of this study.

An empirical exercise studying conversions reveals that a substantial proportion of settlements that converted are close to large cities, so there may be momentum from large ULB-governed areas that spills over geographically, or the benefits of ULB status may be visible to areas in close proximity, thereby driving more conversions. Beyond this, there is no prima facie link seen here between conversions and state development levels, geographic factors, or political party affiliations.

Through a fieldwork study, Mukhopadhyay et. al. (2015) finds that aspirations for ULB status are not uniform, and that perceptions about the trade-offs of converting RLBs to ULBs are influenced by regional configurations, social settings, and local power structures. The conversion process is intricately connected with political power dynamics and support for conversion varies even across citizen groups within settlements[97].

Perhaps the most widely cited reason against conversion is that higher taxes and fees accompany conversion. For instance, Mukhopadhyay et. al. (2015) explains that many

citizens of RLB-governed Erein resisted incorporation into a ULB because residents, shop owners, and rice mill owners feared higher taxes[97]. Taxation concerns have been commonly echoed, as, for instance, they were in RLBs resisting incorporation into the Kolhapur ULB, as reported by Patil (2015)[107]. Similarly, New Indian Express (2013) reports that RLB-governed areas resisted incorporation into the Hyderabad ULB because they feared higher property taxes, trade licence fees, and building permission fees[13]. However, Mukhopadhyay et. al. (2015) also discusses RLB-governed Gopalpur, where RLB leaders believed that people were ready to pay higher taxes in exchange for better urban services[97].

Conversion decisions are also driven by considerations of access to government allocations and schemes. For instance, Mukhopadhyay et. al. (2015) explains how poorer areas in RLB-governed Erein resisted conversion to retain access to schemes benefiting the poor that were only available to RLBs, but wealthier areas did not tend to share this concern[97]. Gupta (2014) reports an interview with an urbanisation expert saying that the Chief Minister of the state of Bihar said that converted RLBs approach the state government appealing to remain RLBs because large sums of money are available to RLBs through rural development schemes[65]. Times of India (2016) reports that a ULB politician from Aurangabad wanted his area of the city to be split from the ULB and instead merged with a surrounding RLB because the government was allocating more money to RLBs[19]. Similarly, the decision to convert RLBs to ULBs has been challenged in court partly because the citizens of these settlements would be denied an employment guarantee, which only RLB citizens are eligible for, as was seen in RLBs resisting incorporation into the Thiruvananthapuram and Kozhikode ULBs[10, 125]. However, champions of conversion have also argued that ULB status will facilitate the inflow of resources. Prasad-Aleyamma (2017) describes the state of Arunachal Pradesh, which had no ULBs in 2001, but conversion of RLBs to ULB status was necessary to secure funds from the central government's Jawaharlal Nehru National Urban Renewal Mission (JNNURM), which was only available to ULBs[100]. Gurgaon's ULB also reportedly expanded its boundaries to access more funding under JNNURM [18, 125]. Deshmukh

(May 2014) reports that the state government in Maharashtra proposed converting 29 RLB-governed settlements in part because funds were flowing to ULBs from global banks and the central government[55]. Times of India (2014) reports that 4 RLB-governed areas supported a merger with the Brahmawar ULB because this would result in more fund allocations and a greater ability to access urban expertise. For instance, the government would provide a separate engineer for the ULB, whereas 4 to 5 RLBs shared 1 engineer[16].

Conversion is often championed for access to better amenities and capacity to execute urban development. For instance, Mukhopadhyay et. al. (2015) explains that RLB leaders in Bishnugarh, Cherra, and Gopalpur believed that ULB status would lead to better services and job opportunities, but some leaders in North Behat believed that RLBs provide for better development[97]. Roche et. al. (2013) reports that RLB leadership in Othakadai believed that the area's developmental successes, including providing covered drainage, waste segregation, and all weather cement-concrete roads, have been because the settlement resisted incorporation into the Madurai ULB. This was echoed by RLB leadership in Silaiman, who believed that longer procedures and corruption in ULBs hampered development[110]. On the other hand, Jenkins et. al. (2012) reports that locals in RLB-governed Boisar advocated conversion for better amenities like waste management, drainage, and roads[72]. Deshmukh (2016) and Deshmukh (November 2014) report that officials from the Kolhapur district collectorate were working towards the conversion of RLBs because RLBs were ill-equipped to handle the areas' development needs- they had a maximum staff of 6 people, most of whom were equipped to handle revenue and hygiene issues rather than broader urban needs. ULBs, they said, would bring in efficiency and a greater understanding of urban amenities[56, 54].

Conversion has reportedly also been resisted for a more relaxed regulatory environment. For instance, in a study of RLB-governed urban settlements in the state of West Bengal, Samanta (2014) explains that rules for the construction of buildings in RLBs are almost non-existent[114]. Similarly, More (2013) reports that RLBs opposed incorporation into the Pimpri-Chinchwad ULB because they would face more stringent building norms[95].

Further, conversion has been resisted on the grounds of increased costs. For instance, Mukhopadhyay et. al. (2015) notes that local leaders in RLB-governed Erein feared the increased costs of elections in ULBs that would accompany conversion[97]. Deshmukh (May 2014) reports that 3 RLB-governed settlements in the state of Maharashtra opposed the state's decision to convert the settlements to ULB status because it would be costly for recently-elected RLB representatives to contend with elections again, and because the conversion process was tedious and lengthy[55]. Samanta (2014) explains that the cost of constituting and maintaining a ULB is borne by the state government in West Bengal[114], and this may influence conversions in states that are reluctant or unable to incur such expenditure.

Social chasms may also play a role. To illustrate, Mukhopadhyay et. al. (2015) describes the case of RLB-governed Erein, where urbanisation was accompanied by large displacement and increased social disparities between the middle class and the poorest inhabitants, who were concentrated in tribal, Dalit[41], and Muslim areas. The residents of these areas were reportedly concerned that ULB status would exacerbate their exclusion. Similarly, in RLB-governed Satghara, a resident said that conversion would only benefit 3 castes- the Suris, Sonars, and Marwaris, while the poor benefited from schemes and allocations available through the RLB framework. This was echoed by an RLB leader in Benipatti, who said that the rich support conversion because it benefits the commercial and landed class[97]. Denis et. al. (2012) references a study by Oindrilla Sengupta who found that RLBs resisted incorporation into the Malegaon ULB because Malegaon had a large Muslim population while the RLBs were predominantly Hindu[51].

The desire to preserve rural identities or ways of life also causes resistance to conversion. For instance, Mukhopadhyay et. al. (2015) discusses how this occurred in RLB-governed Erein[97]. Patil (2015) reports that RLBs resisted incorporation into the Kolhapur ULB because they feared that their farm land would be taken over to develop public infrastructure[107]. New Indian Express (2013) reports that the incorporation of RLB-

[41]Dalits are a social group that has been traditionally oppressed through India's caste system.

governed settlements into the Hyderabad ULB was opposed because some feared that incorporation would wipe out the agricultural sector, and the settlements were seen as primarily agricultural areas[13].

Local political agendas play a significant part, given the ability of actors from this sphere to influence conversions. In a study of the state of West Bengal, Samanta (2014) explains that the process of creating a ULB is a political decision, wherein the state government makes the final decision and actors in the relevant political parties and ministries often exercise significant influence. The demand for conversion sometimes does not come from the settlement itself. Rather, conversion is decided at the state ministerial level and followed by mobilisation of local political centres[114].

Such political agendas may originate from either the state or the settlement. At the state level, for instance, Samanta (2014) describes the case of RLB-governed Singur, where locals demanded a ULB as early as 1981. However, the political parties that were in power at the state level did not wield strong support in Singur, and so those parties were reluctant to convert the settlement because they could not be sure that they would control the ULB.[114]. Jenkins et. al. (2012) reports that locals in RLB-governed Boisar believed that conversion was not implemented by the state because it would involve devolution of authority from the state government in Maharashtra to the local body, and the RLB leadership said that its attempts to achieve conversion were stuck in a political mire. Other RLBs in the area were also reportedly opposing Boisar's conversion efforts, according to Boisar's RLB leadership[72]. Bhagat (2005) explains that the state of Tamil Nadu generously granted ULB status to settlements between 1991 and 2001 and this may have been bolstered by the impression that becoming India's most urbanised state would help attract investments to overcome previous fears of an urbanisation slowdown[42]. Tomar (2015) reports that the state government in Madhya Pradesh promised to convert RLB-governed Rajnagar to appease and rehabilitate residents displaced by industrial development, though about a decade later conversion was not implemented and residents were staging protests[126].

Demonstrating political agendas at the settlement level, Pandey (2003) explains the case of RLB-governed Akluj, where conversion reportedly did not occur because the Mohile Patils- a group of sugar barons who enjoyed clout as power brokers, and one of whom was a state cabinet minister- divided the area into 7 villages, so each could be headed by a member of that extended family[105]. Denis et. al. (2012) explains that an RLB-governed outgrowth of Sikandarabad was reportedly orchestrated by a village leader who owned houses, a cinema, and a marriage hall in the area. To avoid taxes and maintain power, he built a coalition against ULB governance in that area[51]. New Indian Express (2013) reports that some believed that the incorporation of RLB-governed settlements into the Hyderabad ULB was being clandestinely pursued to benefit political leaders and builders who purchased land in these settlements[13]. Mukhopadhyay et. al. (2015) explains how residents from a settlement near RLB-governed Satghara feared the conversion of Satghara into a ULB and the inclusion of that settlement into the Satghara ULB because the ULB leader would likely be from Satghara, rather than from the settlement[97].

Political balances may also be influenced by local laws. For instance, Denis et. al. (2012) considers that it may not be a coincidence that Kerala and West Bengal have a large number of RLB-governed urban areas and they arguably also have the most empowered RLBs[51]. Though the level of empowerment is a subjective and complex aspect to quantify, it could be an important consideration.

A former politician's account from Satghara told by Mukhopadhyay et. al. (2015) further demonstrates the multi-level political process through which conversions navigate. There, a Member of the Legislative Assembly in the Bihar state government raised the issue of conversion in the assembly at the request of block level political friends. However, no progress was made because the conversion reportedly could not move forward without either a No Objection Certificate from the concerned RLBs or a declaration in favour of conversion by the state assembly. However, there was no consensus on conversion among RLB leaders for fear of losing political clout, among other reasons[97]. Another example is seen in ULB-governed

Hyderabad, where Mahesh (2013) reports that the Andhra Pradesh state government hurriedly issued orders to incorporate 36 surrounding RLBs into the city, and ULB officers were criticised for going to take over records of the RLBs within a day of the orders. Residents of the RLBs protested the failure to follow due procedure for conversion, and the incorporation was halted[89]. On the other hand, Times of India (2017) reports that the state government in Goa did not decide on the conversion of RLB-governed urban settlements saying that the issue was for the RLBs to initiate. After the RLBs adopted a resolution and sent it to the state government, the state would make a decision[23]. Patil (2015) reports that the state government in Maharashtra rejected the Kolhapur ULB's proposal to incorporate surrounding RLBs despite the district administration's approval for such a merger, reportedly because of agitations against the merger in the RLBs. To convince the RLBs to support incorporation, Kolhapur planned to give tax exemptions to residents of RLBs that agreed to be incorporated into the ULB[107].

Given the large role that state governments play in the development of settlements, conversion demands may also be influenced by the existence of and support for state government bodies, which may be perceived as alternative institutions to provide urban development, instead of converting to ULB status. For instance, The Herald (2015) reports that some local leaders in RLB-governed Calangute and Candolim supported the state's Planning and Development Authority's involvement to take major planning decisions that RLBs had not. However, other leaders were satisfied with their development levels, feared the further urbanisation that would accompany the authority's involvement, or believed that the move was meant to appease the builder lobby[17]. Dave (2014) reports that some in RLB-governed settlements around ULB-governed Ahmedabad favoured state involvement over conversion. A senior urban development official said that the services provided by the state's Ahmedabad Urban Development Authority and Gandhinagar Urban Development Authority allowed the settlements to access urban development institutions while preserving their rights as statutory villages[50].

RLB-governed Benipatti illustrates the opacity of the conversion process, as explained by Mukhopadhyay et. al. (2015). A proposal to convert Benipatti along with its surrounding areas to ULB status was submitted to the district magistrate by a Member of the Legislative Assembly in the Bihar state government. Three RLBs reportedly vetoed the proposal, but this was contradicted by others from political circles, who said that an official declaration on the RLBs' position would be made before state elections[97]. Similarly, Prasad-Aleyamma (2017) describes ULB-governed Pasighat, where local maps showed an area excluded from the ULB. On researching that area, the author found that the land belonged to a former Arunachal Pradesh state minister, and was told that there was a court case pending to exclude the area from the ULB. The owner of the land died and the land now belonged to his sons, and the family refused to speak with the author when they were told the subject of his research[100].

Demonstrating how the importance of these factors is contested even within settlements, Samanta (2014) conducted focus groups with different stakeholders in RLB-governed Singur to understand varying perspectives. Middle class residents were in favour of conversion for better urban amenities, real estate developers and land transaction agents were against conversion because they preferred the more lenient regulations that RLBs had, and shop owners thought conversion would not impact their businesses but would increase their tax burden. Local political leaders felt that conversion would not help development, and were more concerned about losing control over the area after conversion[114]. Denis et. al. (2012) explains how settlements may undertake optimisation exercises between the freedom to develop land more easily by having an RLB, and better services and consequent increase in value of developed land by converting to a ULB[51]. However, such cost-benefit analyses by settlements themselves may be flawed, given the paucity and opacity of information about how funds move and regulations play out. The case of the state of Tamil Nadu was discussed earlier, where over 500 ULBs converted to RLB status in 2004, justified by the government as enabling the settlements to access more government resources through rural

status, but within 2 years all settlements converted back to ULB status with complaints that the expected funding did not come through[87, 53, 51].

The cost-benefit analysis of conversion may also vary depending on whether the settlement is converting into a stand-alone ULB or is being incorporated into an existing ULB. While an existing ULB has advantages of functioning systems and incorporation allows an integrated urban unit to be managed by common leadership for better coordination, peripheral areas may experience integration, identity, and development differently through incorporation. For instance, Jadhav (2012) reports that a ULB official from Pune supported the incorporation of surrounding RLBs into Pune because its ULB would be able to develop infrastructure and curb illegal constructions in these fringe areas[71]. Kulkarni (2016) adds that residents of the surrounding RLBs also supported the merger with Pune's ULB because they lacked sufficient water supply, efficient garbage disposal, and adequate education and medical facilities[79]. However, The Herald (2013) reports that many residents in RLB-governed Raia opposed incorporation into Margao's ULB because they believed that locals would suffer following such a move[15]. Roche et. al. (2013) reports that a businessman in Kannaendal regretted the incorporation of his formerly RLB-governed area into the Madurai ULB, because earlier they had direct access to the centre of power, but after incorporation their elected municipal councillor said that he did not have the power to address their complaints[110]. New Indian Express (2013) reports that RLB-governed settlements resisted incorporation into the Hyderabad ULB because they felt that previously merged areas were not provided basic infrastructure by the ULB[13].

For a better understanding of the landscape of conversions from RLB to ULB status, I create a database of all new 2011 ULB-governed settlements.

It must be noted that this exercise does not include conversions through incorporating RLBs into existing ULBs. While substantial growth of ULB areas may be occurring by expansion of ULBs, given the large growth of independent viable urban settlements recognised by the census through CTs, this section considers which independent settlements were

converted to independent ULBs, especially since the large urban growth in India cannot be accommodated by expansion alone, and the development of peripheral areas that are incorporated into existing ULBs may have different dynamics altogether.

The first observation is that the number of new ULBs is strikingly low. Between 2001 and 2011, the census showed an increase of 241 in the number of ULB-governed settlements, but an increase of 2,531 in the number of RLB-governed urban settlements[42]. Hence, while urbanisation is increasing sharply, the number of new ULBs is relatively small.

All settlements cannot be matched between the 2001 and 2011 census rounds through information currently available. As in the previous exercises, settlements are matched through the Town Directory and MDDS Code Directory, and if matches are still missing, the database in Citypopulation.de is referenced. To ensure that the subsequent calculations consider only new ULBs, 2011 ULBs that can be matched to 2001 settlements are considered. This yields 58 settlements that converted from CT to ULB status, and 170 settlements that converted from village to ULB status, for a total of 228 new ULBs across 21 states.

There is no apparent concentration of development level, region, or political party affiliation associated with these states. Similarly, states without any new ULBs identified do not appear systematically similar. However, most large states have at least 1 new ULB. Moreover, only 2 of the 7 union territories have a new ULB identified, and this may be because union territories are smaller geographical units where urban growth is either limited, not acknowledged, or accommodated by merging areas into existing ULBs. The 14 states and union territories without new ULBs found are Andaman & Nicobar Islands, Chandigarh, Daman & Diu, Delhi, Goa, Himachal Pradesh, Kerala, Lakshadweep, Manipur, Meghalaya, Odisha, Sikkim, Tamil Nadu, and Uttarakhand. It must be noted that some of the 13 unmatched new ULBs may belong to some of these 14 states. In the remaining 21 states and

[42]This is according to the number of settlements found in this study, verified by government sources. However, even government sources differ slightly with respect to the number of urban settlements, so studies sometimes show figures that differ by a few settlements, usually not more than 3. For instance, Provisional Population Totals (2011) says the number of 2001 Statutory Towns is 3,799, but eCensus India (2001) says this number is 3,800[11, 6].

union territories, between 1 and 72 new ULBs were identified, listed in Table 18 along with urbanisation growth rates between 2001 and 2011. New ULBs do not appear to correspond with increases in urbanisation levels, and the correlation between the number of new ULBs identified and increase in urbanisation is in fact negative, at -0.1, possibly because states had different degrees of efficiency in governing urban settlements by ULBs to begin with.

Table 18: States with new ULBs identified

State	Number of new ULBs identified	Percent urbanisation increase
Andhra Pradesh	15	35.6
Arunachal Pradesh	26	39.3
Assam	5	27.9
Bihar	6	35.4
Chhattisgarh	72	41.8
Dadra & Nagar Haveli	1	218.2
Gujarat	30	36.0
Haryana	2	44.6
Jammu & Kashmir	6	36.4
Jharkhand	1	32.4
Karnataka	4	31.5
Madhya Pradesh	22	25.7
Maharashtra	7	23.6
Mizoram	1	29.7
Nagaland	11	66.6
Puducherry	1	31.5
Punjab	7	25.9
Rajasthan	1	29.0
Tripura	3	76.2
Uttar Pradesh	3	28.8
West Bengal	4	29.7

Pradhan (2017) finds that over 60% of the settlements that the census newly identified as urban between 2001 and 2011 lie beyond the buffer zone of towns with at least 100,000 people, where the buffer zone is between 10 and 25 kilometres depending on the size of the town [109]. Since this exercise does not consider areas converting to ULB status by merging into existing ULBs, I consider a larger buffer zone within which stand-alone urban settlements may exist. To provide an illustrative sense of proximity of new ULBs to large urban centres,

I consider distances of 50 kilometres and 80 kilometres, since several independent urban settlements that arose around Mumbai, India's financial capital, such as Mira-Bhayander, Kalyan-Dombivali, Bhiwandi, and Vasai-Virar, lie within this range of distance from the state government's administrative headquarters in Mumbai, and the Mumbai ULB's area itself extends beyond 80 kilometres in length. According to 2011 census data, around 41% of new ULBs lie within 50 kilometres from towns with at least 100,000 people, and around 58% of them lie within 80 kilometres.

A more direct investigation of the political economy of conversions may be done by considering the 2001 RLB-governed urban settlements that switched to ULB status by 2011. This would consider settlements that previously did not switch to ULB status despite being urban, but switched recently, and hence, political economy factors may be more relevant in such places. Earlier, 58 such settlements were found using the census' identification of RLB-governed urban settlements. However, since the census' identification is itself discretionary[109], the census' guidelines are considered to identify other RLB-governed urban settlements that switched to ULB status by 2011. After matching new 2011 ULBs to 2001 villages, in order to limit the dataset to urban settlements that converted, only the 2001 villages with a population of at least 5,000, density of at least 400 people per square kilometre, and at least 75% of workers not in agriculture or cultivation are retained. This exercise adds only 37 more matched RLB-governed urban settlements that converted to ULB governance by 2011, for a total of 95 such settlements across 18 states. The 3 states with new ULBs found earlier but without new ULBs that were also urban by this definition in 2001 are Jammu & Kashmir, Mizoram, and Jharkhand. 133 settlements that converted did not fulfill the adapted census guidelines to identify urban areas.

Proximity to large cities follows the same pattern when considering these settlements. Around 42% of new ULBs that were urban in 2001 lie within 50 kilometres from towns with at least 100,000 people, and around 60% of them lie within 80 kilometres.

Though settlements with at least 100,000 people constitute only about 6% of all urban

settlements in 2011, a substantial share- between 41 and 58%- of new ULBs lie within reasonably close proximity to such settlements, wherein residents within this proximity may form a part of the same labour market. If one also considers RLB areas that converted to ULB status through mergers with existing ULBs, the converted area close to large urban centres would likely increase substantially.

While these results will be sensitive to the particular buffer zones chosen, it appears that, while new urban settlements may not necessarily be concentrated near existing large urban settlements, those that convert to ULB status have substantial concentration around existing large urban settlements.

A direct comparison of the urban settlements that converted with those that did not is not feasible using this dataset, because applying this expanded definition of urban- wherein settlements identified as rural by the census but that fulfill the population, density, and workforce profile discussed earlier in this section are considered urban- would likely yield many more 2001 RLB-governed urban settlements that did not convert to ULB status by 2011, which would need to be considered.

Limiting this study to the official and conservative census definition of urban, the previous exercise on the likelihood of conversions in Part III showed that 2001 RLB-governed urban settlements that converted to ULB status by 2011 were significantly more likely to have a higher population, while relationships with density and proportion of agriculture or cultivation workforce were more sensitive to model specifications. However, settlements that were further away from a 100,000 plus population city were more likely to be converted, and proximity to a railway station seemed to be associated with greater conversion likelihood. Higher development overall did not seem to increase conversion likelihood. As discussed earlier, this suggests that conversions are occurring in line with policy intentions overall, wherein more urban areas, as measured by population, tend to be converted. Though proximity to urban centres tends to decrease the likelihood of conversion, this may be because this data do not consider settlements that converted to ULB governance by merging with

existing ULBs. Less than 4% of the urban settlements with at least 100,000 population identified by the census in 2011 had RLBs, so proximity to urban centres with at least 100,000 population defacto means proximity to large ULBs.

Settlements near the Vasai-Virar ULB illustrate the dynamics of how RLB-governed urban settlements near ULBs may be more likely to switch to ULB governance. Nair (2015) reports that the state government in Maharashtra moved to incorporate 53 RLB-governed settlements into the Vasai-Virar ULB, and this led to protests by villagers reportedly afraid of losing land and autonomy. About half of the settlements opposed the incorporation in court, and finally some of the settlements were incorporated, while others were not. However, local elections reportedly illustrated that the opposition to ULB status was losing momentum, given the poor performance of parties opposing incorporation. This was attributed to better roads, garbage collection, water supply, and transport services visible in areas that switched to ULB governance, while the increased taxes and widespread concretisation that were feared were not seen[101]. Urban centres may also deepen the urban nature of nearby settlements, and this may further influence their likelihood of conversion. For instance, in the Vasai-Virar ULB neighbourhood, economic opportunities offered by the nearby urban centres were allowing people to move away from farming. Moreover, economic forces can lead to the spreading of urban areas into surrounding settlements, as occurred in the case of Vasai-Virar because of rising real estate prices that drove people to move to peripheral locations[101].

Hence, while it is clear that not all settlements that are highly urban or close to large urban centres switch to ULB status, the political economy of conversions appears to work in an environment where these factors are conducive to facilitating conversions. Hence, actual conversions are likely more probable when political economy factors align with settlements having large populations and being relatively closer to existing large urban centres.

Conclusion

This paper investigates the association between rural and urban governance forms and development levels in urban settlements in India.

First, I establish that there are significant differences between average development levels in rural and urban-governed urban settlements. Urban-governed settlements are more populous and dense, but also have a higher proportion of their workforce in agriculture or cultivation. Since farming has been the subject of substantial preferential policy, misidentifying this aspect of being urban for differentiated policy may be particularly salient. Urban-governed settlements have better high spillover development indicators, with all but 1 of the differences significant. Low spillover development indicators, however, show a mixed picture.

When controlling for urbanisation levels, the overall direction of differences is more consistent. Urban-governed settlements still have better high spillover development indicators, and all low spillover development indicators that are significant show that urban-governed settlements also have better levels of low spillover development indicators. Only electricity access remains insignificant. These inferences are robust to allowing state variation in the association with governance form, but the association with low spillover development indicators is sensitive to adding a vector of settlement development covariates.

When controlling for endogeneity using an instrumental variable, consistency in the direction of relationships with high and low spillover development indicators is seen again. Where the governance form appears endogenous, parsing out exogenous variation yields a general positive relationship with high spillover development indicators and a negative one with low spillover development indicators. Endogeneity may also be a concern if more developed settlements are more likely to be urban-governed. However, when investigating factors affecting the likelihood of conversion from rural to urban governance forms, urbanisation levels appear to be the driving indicators, as the policy intends, not development levels.

A difference-in-differences sensitivity analysis comparing rural-governed urban settle-

ments that switched to urban governance with those that did not switch reveals the same direction of broad trends found in the instrumental variable study with respect to high and low spillover development indicators.

Hence, this study finds evidence that, when holding urbanisation levels constant, urban-governed urban settlements tend to have better development indicators. However, when refining the study to address endogeneity and compare differences among settlements that converted from rural to urban governance forms and those that did not, urban governance seems to broadly have a causal relationship with better high spillover development indicators, but mixed or poorer low spillover development indicators.

The general positive association with high spillover development indicators provides impetus for conversion of rural-governed urban settlements to urban governance forms. The general negative or mixed association with low spillover development indicators may be reflective of statistical issues or the nature of the urbanisation process in India. Since it is unlikely that ULBs are generally worse equipped than RLBs are to facilitate literacy, banking access, and water, electricity, and latrine access, these results may manifest for 3 other reasons. First, the absence of slums in RLB census data may overestimate these indicators in RLBs. Second, the nature of the growth process in these larger urban centres may be accompanied by inequality, which, as discussed earlier, may be a neutral, positive, or negative phenomenon. Third, local bodies in general may be poor at providing citizen level services to larger populations and may experience diseconomies of scale after a certain threshold, and since ULBs tend to be larger, this may cause their average levels to drop. These results may be instructive for policy makers to prepare for such a potential drop in low spillover development indicators as urban areas grow and convert to ULB status.

This, of course, does not mean that conversion of rural-governed urban settlements to urban governance is sufficient for greater development of high spillover development indicators[43]. However, it does suggest that conversion has been a significant enabler for greater

[43]The problem of lack of capacity among ULBs to deliver services has been widely noted. For instance, see Sharma (2012)[118].

development. This may be because conversion in general provides the tools and governance structure conducive to such development, or because it affects resources available through central and state transfers and own revenue raised, the regulatory environment, priorities of government officials, and demands of citizens.

References

[1] Census of India 2001 (Provisional) Slum Population - Explanatory Note. Technical report, Registrar General & Census Commissioner, Ministry of Home Affairs, Government of India.

[2] *Commonwealth Local Government Handbook 2015/16*. Publications UK Ltd., London, UK.

[3] Constitution of India, 1950, January 1950.

[4] Orissa Grama Panchayats Act, 1964.

[5] *Municipal Governance in West Bengal: People's Perception and Participation*. Number 9 in ISS Manuscript Report. Institute of Social Sciences, New Delhi, 1996.

[6] eCENSUSIndia. Technical report, Office of the Registrar General & Census Commissioner, Ministry of Home Affairs, Government of India, 2001.

[7] Odisha Municipal Corporation Act, 2003.

[8] The Cantonments Act, 2006, September 2006.

[9] Managing Asian Cities. Technical report, Asian Development Bank, Manila, June 2008.

[10] Sreekala K. v State of Kerala, July 2010.

[11] Provisional Population Totals. Technical report, Office of the Registrar General & Census Commissioner, Ministry of Home Affairs, Government of India, 2011.

[12] World Urbanization Prospects: The 2011 Revision. Technical report, United Nations, Department of Economic and Social Affairs, Population Division, New York, 2012.

[13] City Expansion at the Cost of Development? *New Indian Express*, September 2013.

[14] Primary Census Abstract for Slum. Technical report, Office of the Registrar General & Census Commissioner, Ministry of Home Affairs, Government of India, September 2013.

[15] Raia to Elicit People's Opinion on Bifurcation. *The Herald*, November 2013.

[16] 4 Gram Panchayats Pass Resolution to Merge with Brahmawar. *Times of India*, July 2014.

[17] Disorder in Development. *The Herald*, February 2015.

[18] MCG Begins Transfer of Villages. *Times of India*, June 2015.

[19] Corporator Demands Gram Panchayat Status for Ward. *Times of India*, March 2016.

[20] Local and Regional Governments in Europe: Structures and Competences. Technical report, Council of European Municipalities and Regions, April 2016.

[21] States Asked to Convert 3,784 Urban Areas into Statutory Urban Local Bodies. Technical report, Ministry of Urban Development, Press Information Bureau, Government of India, May 2016.

[22] Union Budget 2016-17: Expenditure Budget. Technical Report Volume 1, Ministry of Finance, Government of India, 2016.

[23] Dy CM: 'Census Towns' can be Elevated to Municipalities. *Times of India*, March 2017.

[24] Alberto Abadie, Susan Athey, Guido Imbens, and Jeffrey Wooldridge. When Should You Adjust Standard Errors for Clustering? *arXiv:1710.02926 [math, stat]*, October 2017.

[25] Ahmad N. Abdel-Rahman, Mohammad R. Safarzadeh, and Michael Bruce Bottomley. Economic growth and Urbanization: A Cross-Section and Time-Series Analysis of Thirty-Five Developing Countries. *The International Review of Economics - Journal of Civil Economy*, 53(3):334–348, September 2006.

[26] Philip Kofi Adom, William Bekoe, and Sesi Kutri Komla Akoena. Modelling Aggregate Domestic Electricity Demand in Ghana: An Autoregressive Distributed Lag Bounds Cointegration Approach. *Energy Policy*, 42:530–537, March 2012.

[27] Isher Judge Ahluwalia. Urban Governance in India. *Journal of Urban Affairs*, pages 1–20, February 2017.

[28] Isher Judge Ahluwalia, Nasser Munjee, Nachiket Mor, M. Vijayanunni, Sudhir Mankad, Rajiv Lall, Hari Sankaran, Ramesh Ramanathan, Om Prakash Mathur, and P.K. Srivastava. Report on Indian Infrastructure and Services. Technical report, The High Powered Expert Committee (HPEC) for Estimating the Investment Requirements for Urban Infrastructure Services, March 2011.

[29] Joshua Angrist and Alan B. Krueger. Why Do World War II Veterans Earn More than Nonveterans? *Journal of Labor Economics*, 12(1):74–97, 1994.

[30] Joshua D. Angrist and Alan B. Krueger. Instrumental Variables and the Search for Identification: From Supply and Demand to Natural Experiments. *The Journal of Economic Perspectives; Nashville*, 15(4):69–85, 2001.

[31] Joshua D. Angrist and Jörn-Steffen Pischke. *Mostly Harmless Econometrics: An Empiricist's Companion*. Princeton University Press, 1 edition, January 2009.

[32] Mohamed El Hedi Arouri, Adel Ben Youssef, Nguyen-Viet Cuong, and Soucat Agnes. Effects of Urbanization on Economic Growth and Human Capital Formation in Africa. *Harvard University: Program on the Global Demography of Aging Working Paper Series*, 119, September 2014.

[33] Wiji Arulampalam, Alison L. Booth, and Mark L. Bryan. Training and the New Minimum Wage. *The Economic Journal*, 114(494):C87–C94, March 2004.

[34] Mukhopadhyay Asok. Politics and Bureaucracy in Urban Governance: The Indian Experience. In O.P. Mathur, editor, *India: The Challenge of Urban Governance*, pages 107–128. National Institute of Public Finance & Policy, New Delhi, 1999.

[35] Anurag N. Banerjee, Nilanjan Banik, and Ashvika Dalmia. Demand for Household Sanitation in India Using NFHS-3 Data. *Empirical Economics*, 53(1):307–327, August 2017.

[36] Pranab K. Bardhan. Size, Productivity, and Returns to Scale: An Analysis of Farm-Level Data in Indian Agriculture. *The Journal of Political Economy*, 81(6):1370–1386, December 1973.

[37] Thorsten Beck and Martin Brown. Which Households Use Banks? Evidence from the Transition Economies. Working Paper Series 1295, European Central Bank, February

2011.

[38] Timothy Besley and Stephen Coate. Centralized Versus Decentralized Provision of Local Public Goods: A Political Economy Approach. *Journal of Public Economics*, 87:2611 – 2637, 2003.

[39] Timothy Besley, Rohini Pande, Lupin Rahman, and Vijayendra Rao. The Politics of Public Good Provision: Evidence from Indian Local Governments. *Journal of the European Economic Association*, 2(2/3):416–426, 2004.

[40] Timothy Besley, Rohini Pande, and Vijayendra Rao. Just Rewards? Local Politics and Public Resource Allocation in South India. *World Bank Economic Review*, 26(2):191–216, June 2012.

[41] R. B. Bhagat. Challenges of Rural-Urban Classification for Decentralised Governance. *Economic and Political Weekly*, 37(25):2413–2416, 2002.

[42] R. B. Bhagat. Rural-Urban Classification and Municipal Governance in India. *Singapore Journal of Tropical Geography*, 26(1):61–73, March 2005.

[43] R. B. Bhagat. Urbanisation and Access to Basic Amenities in India. *Urban India*, 31(1):1–14, January 2011.

[44] Francis Bloch and Unal Zenginobuz. The Effect of Spillovers on the Provision of Local Public Goods. *Review of Economic Design*, 11(3):199–216, November 2007.

[45] Gabriela Calderon, Leonardo Iacovone, and Laura Juarez. Opportunity versus Necessity: Understanding the Heterogeneity of Female Micro-Entrepreneurs. *The World Bank Economic Review*, 30(Supplement_1):S86–S96, March 2017.

[46] C. Chandramouli. Housing Stock, Amenities & Census Assets in Slums- Census 2011. Technical report, Office of the Registrar General & Census Commissioner, Ministry of Home Affairs, Government of India, New Delhi, 2013.

[47] Ranjit Chavan, Jatin Modi, and Sneha Palnitkar. *Research Study on Assessment of the Impact of the 74th Constitutional Amendment Act (CAA), 1992 on the Working of Urban Local Bodies*. All India Institute of Local Self-Government, Mumbai, 2004.

[48] Noelia Cámara and David Tuesta. Factors that Matter for Financial Inclusion: Evidence from Peru. *Aestimatio*, (10):10–31, 2015.

[49] Samarjit Das, Chetan Ghate, and Peter E. Robertson. Remoteness, Urbanization, and India's Unbalanced Growth. *World Development*, 66:572–587, February 2015.

[50] Kapil Dave. Towns Remain Villages: Who Benefits? *Times of India*, August 2014.

[51] Eric Denis, Partha Mukhopadhyay, and Marie-Hélène Zérah. Subaltern Urbanisation in India. *Economic & Political Weekly*, 47(30):52–62, July 2012.

[52] Eric Denis and Marie-Helene Zerah, editors. *Subaltern Urbanisation in India: An Introduction to the Dynamics of Ordinary Towns*. Exploring Urban Change in South Asia. Springer, India, 1 edition, 2017.

[53] Municipal Administration and Water Supply (Election) Department, July 2006.

[54] Nikhil Deshmukh. 7 Gram Panchayats Await Govt Nod for Municipal Council Status. *Times of India*, November 2014.

[55] Nikhil Deshmukh. Plan to Convert 7 Panchayats to Municipal Councils Draws Flak. *Times of India*, May 2014.

[56] Nikhil Deshmukh. Conversion Plan Pending for 2 Years. *Times of India*, February 2016.

[57] Eric R. Eide and Nick Ronan. Is Participation in High School Athletics an Investment

or a Consumption Good?: Evidence from High School and Beyond. *Economics of Education Review*, 20(5):431–442, October 2001.

[58] Oliver Falck, Stephan Heblich, and Stefan Kipar. Industrial Innovation: Direct Evidence from a Cluster-Oriented Policy. *Regional Science and Urban Economics*, 40(6):574–582, November 2010.

[59] Sukumar Ganapati and Chang Woo Nam. The Paradox of Shrinking Cities in India. In Harry W. Richardson, editor, *Shrinking Cities: A Global Perspective*, volume Regions and Cities. 71 edition, 2014.

[60] Archana Ghosh. *Municipal Governance in Rajasthan: Impact of the Constitution (Seventy-Fourth Amendment) Act, 1992*. Number 12 in ISS Manuscript Report. Institute of Social Sciences, New Delhi, 1999.

[61] Edward Glaeser. Viewpoint: Triumph of the City. *The Journal of Transport and Land Use*, 5(2):1–4, 2012.

[62] Edward L. Glaeser. *Agglomeration Economics*. The University of Chicago Press, Chicago, 2010.

[63] Edward L. Glaeser. *Triumph of the City*. Penguin Press, New York, 2011.

[64] Edward L. Glaeser and Abha Joshi-Ghani. Rethinking Cities: Toward Shared Prosperity. Technical report, The World Bank, October 2013.

[65] Shekhar Gupta. Express Adda with Prithviraj Chavan: 'Building New Magnet Cities Around a Larger City is the Way Ahead'. *Indian Express*, August 2014.

[66] Anett Hofmann and Guanghua Wan. Determinants of Urbanization. *Asian Development Bank*, 355, July 2013.

[67] Sharif Hossain. Panel Estimation for CO2 Emissions, Energy Consumption, Economic Growth, Trade Openness and Urbanization of Newly Industrialized Countries. *Energy Policy*, 39(11):6991–6999, November 2011.

[68] Gregory K. Ingram and Zhi Liu. Motorization and the Provision of Roads in Countries and Cities. Policy Research Working Paper 1842, The World Bank, November 1997.

[69] Gregory K. Ingram and Zhi Liu. Determinants of Motorization and Road Provision. Policy Research Working Paper 2042, The World Bank, January 1999.

[70] Stjepan Ivanisevic, Ivan Kopric, Jasna Omejec, and Jure Simovic. Local Government in Croatia. In Emilia Kandeva, editor, *Stabilization of Local Governments*, Local Government and Public Service Reform Initiative. Open Society Institute, Budapest, Hungary, May 2001.

[71] Radheshyam Jadhav. City to Expand with Merger of 28 Villages. *Times of India*, October 2012.

[72] Cordelia Jenkins, Makarand Gadgil, and Shamsheer Yousaf. India's Census Towns Face a Governance Deficit. *Mint*, October 2012.

[73] Divya Joshi. *Gandhiji on Villages*. Mani Bhavan Gandhi Sangrahalaya, Mumbai, 1 edition, 2002.

[74] Adnan Kasman and Yavuz Selman Duman. CO2 Emissions, Economic Growth, Energy Consumption, Trade and Urbanization in New EU Member and Candidate Countries: A Panel Data Analysis. *Economic Modelling*, 44:97–103, January 2015.

[75] Andreas Kemmler. Factors Influencing Household Access to Electricity in India. *Energy for Sustainable Development*, 11(4):13–20, December 2007.

[76] Peter E. Kennedy. Estimation with Correctly Interpreted Dummy Variables in Semilog-

arithmic Equations. *The American Economic Review*, 71(4):801–801, 1981.

[77] Anirudh Krishna and Devendra Bajpai. Lineal Spread and Radial Dissipation: Experiencing Growth in Rural India, 1993-2005. *Economic & Political Weekly*, 46(38):44–51, September 2011.

[78] Paul Krugman. Increasing Returns and Economic Geography. *The Journal of Political Economy*, 99(3):483–499, June 1991.

[79] Prasad Kulkarni. Demand for Merger of Villages in Municipal Limits. *Times of India*, February 2016.

[80] Arjun Kumar. Indian Urban Households' Access to Basic Amenities: Deprivations, Disparities and Determinants. *Margin: The Journal of Applied Economic Research*, 9(3):278–305, August 2015.

[81] Yaobin Liu. Exploring the Relationship between Urbanization and Energy Consumption in China using ARDL (Autoregressive Distributed Lag) and FDM (Factor Decomposition Model). *Energy*, 34(11):1846–1854, November 2009.

[82] Daniel Yet Fhang Lo. Urbanization and Economic Growth: Testing for Causality. Wellington, New Zealand, January 2010.

[83] Rining Lyngdoh. Shillong Gets Urban Centres. *The Telegraph*, August 2015.

[84] Sarah D. Lynne-Landsman, Melvin D. Livingston, and Alexander C. Wagenaar. Effects of State Medical Marijuana Laws on Adolescent Marijuana Use. *American Journal of Public Health; Washington*, 103(8):1500–6, August 2013.

[85] James G. MacKinnon and Matthew D. Webb. Randomization Inference for Difference-in-Differences with Few Treated Clusters. *Queen's Economics Department Working Paper*, 1355, June 2016.

[86] James G. Mackinnon and Matthew D. Webb. Wild Bootstrap Inference for Wildly Different Cluster Sizes. *Journal of Applied Econometrics*, 32(2):233–254, March 2017.

[87] Karthik Madhavan. Special Village Panchayats Resist Government Move. *The Hindu*, January 2006.

[88] Natalia Magnani and Andrea Vaona. Access to Electricity and Socio-Economic Characteristics: Panel Data Evidence at the Country Level. *Energy*, 103:447–455, May 2016.

[89] Koride Mahesh. Proposal to Merge Panchayats Withdrawn. *Times of India*, November 2013.

[90] Om Prakash Mathur. India Municipal Finance Report. Technical report, National Institute of Public Finance and Policy, New Delhi, August 2011.

[91] Edward Miguel, Shanker Satyanath, and Ernest Sergenti. Economic Shocks and Civil Conflict: An Instrumental Variables Approach. *Journal of Political Economy*, 112(4):725–753, 2004.

[92] Arup Mitra. Total Factor Productivity Growth and Urbanization Economies: A Case of Indian Industries. *Review of Urban and Regional Development Studies*, 12(2):97–108, July 2000.

[93] Alan C. Monheit, Joel C. Cantor, Derek DeLia, and Dina Belloff. How Have State Policies to Expand Dependent Coverage Affected the Health Insurance Status of Young Adults? *Health Services Research*, 46(1p2):251–267, February 2011.

[94] Ingalill Montanari and Kenneth Nelson. Health Care Determinants in Comparative Perspective: The Role of Partisan Politics for Health Care Provision. *International*

Journal of Comparative Sociology, 54(5-6):445–466, October 2013.

[95] Manoj More. 19 of 20 Villages Oppose PCMC Merger Plan. *Indian Express*, September 2013.

[96] Partha Mukhopadhyay. Does Administrative Status Matter for Small Towns in India? In Eric Denis and Safayet Karim, editors, *Subaltern Urbanisation in India: An Introduction to the Dynamics of Ordinary Towns*, Exploring Urban Change in South Asia. Springer, India, 1 edition, 2017.

[97] Partha Mukhopadhyay, Marie-Helene Zerah, and Augustin Maria. India - Understanding India's Urban Frontier: What is Behind the Emergence of Census Towns in India? Working Paper AUS7449, The World Bank, Washington, D.C., August 2015.

[98] James G. Mulligan. The Stochastic Determinants of Hospital-Bed Supply. *Journal of Health Economics*, 4(2):177–181, June 1985.

[99] Yair Mundlak. On the Pooling of Time Series and Cross Section Data. *Econometrica (pre-1986); Evanston*, 46(1):69–85, January 1978.

[100] Prasad-Aleyamma Mythri. Territorial Legends: Politics of Indigeneity, Migration and Urban Citizenship in Pasighat. In Eric Denis and Marie-Helene Zerah, editors, *Subaltern Urbanisation in India: An Introduction to the Dynamics of Ordinary Towns*, Exploring Urban Change in South Asia. Springer, India, 1 edition, 2017.

[101] Sandhya Nair. In Vasai's Villages, Lengthy Battle against Urban Tag Loses Steam. *Times of India*, July 2015.

[102] K. Bruce Newbold and W. Mark Brown. The Urban-Rural Gap in University Attendance: Determinants of University Participation Among Canadian Youth. *Journal of Regional Science*, 55(4):585–608, September 2015.

[103] Brian C. O'Neill, Xiaolin Ren, Leiwen Jiang, and Michael Dalton. The Effect of Urbanization on Energy Use in India and China in the iPETS Model. *Energy Economics*, 34:S339–S345, December 2012.

[104] Jay Pan and David Shallcross. Geographic Distribution of Hospital Beds throughout China: A County-Level Econometric Analysis. *International Journal for Equity in Health*, 15(1), December 2016.

[105] Vikash N. Pandey. Re-presenting Rural: From Definition to Discourse. *Sociological Bulletin*, 52(1):32–52, 2003.

[106] Jyoti Parikh and Vibhooti Shukla. Urbanization, Energy Use and Greenhouse Effects in Economic Development. *Global Environmental Change*, 5(2):87–103, May 1995.

[107] Abhijeet Patil. Tax Exemption Likely for Villages Merging with Kolhapur. *Times of India*, March 2015.

[108] Abhay Pethe, Sahil Gandhi, and Vaidehi Tandel. Assessing the Mumbai Metropolitan Region: A Governance Perspective. *Economic & Political Weekly*, 46(26-27):187–195, June 2011.

[109] K. C. Pradhan. Unacknowledged Urbanisation: The New Census Towns in India. In Eric Denis and Marie-Helene Zerah, editors, *Subaltern Urbanisation in India: An Introduction to the Dynamics of Ordinary Towns*, Exploring Urban Change in South Asia. Springer, India, 1 edition, 2017.

[110] Elizabeth Roche, Liz Mathew, and Shamsheer Yousaf. Panchayati Raj: Failing the Urbanization Test. *Mint*, April 2013.

[111] Parimita Routray, Wolf-Peter Schmidt, Sophie Boisson, Thomas Clasen, and Mar-

ion W. Jenkins. Socio-Cultural and Behavioural Factors Constraining Latrine Adoption in Rural Coastal Odisha: An Exploratory Qualitative Study. *BMC Public Health*, 15(880):1–19, September 2015.

[112] Jeffrey D. Sachs, Nirupam Bajpai, and Ananthi Ramiah. Understanding Regional Economic Growth in India. *Asian Economic Papers*, 1(3):32–62, 2002.

[113] Pravakar Sahoo and Ranjan Kumar Dash. Infrastructure Development and Economic Growth in India. *Journal of the Asia Pacific Economy*, 14(4):351–365, September 2009.

[114] Gopa Samanta. The Politics of Classification and the Complexity of Governance in Census Towns. *Economic & Political Weekly*, 49(22):55–62, May 2014.

[115] Sandip Sarker, Arifuzzaman Khan, and Mehdad Mamur Mannan. Urban Population and Economic Growth: South Asia Perspective. *European Journal of Government and Economics*, 5(1):64–75, 2016.

[116] Komei Sasaki, Taku Ito, Sotaro Kunihisa, and Michihiro Kaiyama. Urbanization, Urban Concentration and Economic Development. *Review of Urban & Regional Development Studies*, 9(1):55–79, March 1997.

[117] Kunal Sen. Governance and Development Outcomes in Asia. In *Governance in Developing Asia: Public Service Delivery and Empowerment*, Asian Development Bank. Edward Elgar Publishing, 2015.

[118] Kalpana Sharma. Rejuvenating India's Small Towns. *Economic & Political Weekly*, 47(30):63–68, July 2012.

[119] Sita Ram Sharma. *Panchayati Raj and Education*, volume 2. Mittal Publications, New Delhi, 1 edition, 1994.

[120] K. C. Sivaramakrishnan. *Power to the People?: The Politics and Progress of Decentralisation*. Konark Publishers, Delhi, 2000.

[121] K. C. Sivaramakrishnan. Turning Urban, Staying Rural. *The Hindu*, February 2002.

[122] Luiz Carlos Rangel Soares, Marilena O. Griesinger, J. Norberto W. Dachs, Marta A. Bittner, and Sonia Tavares. Inequities in Access to and use of Drinking Water Services in Latin America and the Caribbean. *Revista Panamericana de Salud Pública*, 11(5-6):386–396, June 2002.

[123] Michael Spence, Patricia Clarke Annez, and Robert M. Buckley. *Urbanization and Growth*. World Bank: Commission on Growth and Development, Washington, DC, 2009.

[124] Cecilia Tacoli, Gordon McGranahan, and David Satterthwaite. Urbanisation, Rural–Urban Migration and Urban Poverty. Working Paper, International Institute for Environment and Development, London, March 2015.

[125] Vaidehi Tandel, Komal Hiranandani, and Mudit Kapoor. What's in a Definition?: A Study on Implications and Suitability of Urban Definitions in India through its Employment Guarantee Programme. *IDFC Institute Working Paper Series*, (1), April 2016.

[126] Shruti Tomar. 30k in MP's Rajnagar Breathe a Sigh of Relief as Land Lease to SECL Ends. *Hindustan Times*, December 2015.

[127] Ajim Uddin, Mohammad Ashraful Ferdous Chowdhury, and Md Nazrul Islam. Determinants of Financial Inclusion in Bangladesh: Dynamic GMM & Quantile Regression Approach. *The Journal of Developing Areas; Nashville*, 51(2):221–237, 2017.

[128] Subodh Varma. Census 2011 Missed 5 Crore Slum Dwellers. *Times of India*, October 2013.

[129] Ashutosh Varshney, editor. *Beyond Urban Bias*. Routledge, February 2014.

[130] Satyendra Verma. Urbanization and Productivity in Indian States. In *Studies in Indian Urban Development*. Published for the World Bank [by] Oxford University Press, Washington, D.C., 1986.

[131] Dorte Verner. What Factors Influence World Literacy? Is Africa different? World Bank Policy Research Working Paper 3496, The World Bank, Washington, D.C., January 2005.

[132] Qiang Wang, Shi-dai Wu, Yue-e Zeng, and Bo-wei Wu. Exploring the Relationship between Urbanization, Energy Consumption, and CO2 Emissions in Different Provinces of China. *Renewable and Sustainable Energy Reviews*, 54:1563–1579, February 2016.

[133] Robin M. Weinick, Samuel H. Zuvekas, and Joel W. Cohen. Racial and Ethnic Differences in Access to and Use of Health Care Services, 1977 to 1996. *Medical Care Research and Review*, 57(1_suppl):36–54, November 2000.

Appendix A- Correlation table

Table 19: Correlation- 2011 Variables

	gov	lnpop	lndensity	lnpropagrocult	ln1lakhcity	ln5lakhcity	lnrlydist
gov	1						
lnpop	0.4471	1					
lndensity	0.0936	0.4335	1				
lnpropagrocult	0.2023	-0.1954	-0.3085	1			
ln1lakhcity	0.0862	-0.2442	-0.2232	0.2336	1		
ln5lakhcity	0.1482	-0.1422	-0.1541	0.2112	0.3881	1	
lnrlydist	-0.1988	-0.3893	-0.2112	0.1446	0.1557	0.0511	1
lnrds	0.2494	0.2168	0.3794	-0.107	-0.0184	0.0453	-0.0902
fire	0.4813	0.4606	0.1407	-0.0567	0.0159	0.1348	-0.2309
drainage	0.1639	0.1438	0.0155	0.0299	-0.0158	-0.0109	-0.0596
HigherEduD	0.4055	0.4548	0.097	-0.0201	0.039	0.0943	-0.2112
lnwaterpax	0.2483	0.0061	-0.1	-0.0039	0.0608	0.0879	-0.0146
lnhospbeds	0.1981	0.041	0.007	-0.0826	0.0755	0.1015	-0.0288
lnlit	-0.1119	0.0702	-0.0191	-0.4194	-0.0779	-0.0474	-0.0338
lnHHbanking	-0.0186	0.0825	0.0187	-0.3093	-0.0051	-0.0547	-0.0856
lnHHwater	0.1041	0.2454	0.1674	-0.2164	-0.0321	-0.0313	-0.1682
lnHHelectr	-0.0445	0.1296	-0.0403	-0.3142	-0.0917	-0.1154	-0.0422
lnHHlatr	-0.0734	0.246	0.2881	-0.4472	-0.1543	-0.1083	-0.1233

Appendix B- Controlling for urbanisation

Table 20: Governance and high spillover development indicators

VARIABLES	lnrds full model robust errors	lnrds no density and rail robust errors	lnrds full model bootstrap errors
gov	0.905***	0.888***	0.905***
	(0.0398)	(0.0451)	(0.0397)
lnpop	-1.265***	-0.141	-1.265***
	(0.149)	(0.155)	(0.157)
lndensity	0.691***		0.691***
	(0.112)		(0.113)
lnpropagrocult	-0.0648	-0.338***	-0.0648
	(0.0660)	(0.0776)	(0.0673)
ln5lakhcity	0.0106	0.0469*	0.0106
	(0.0210)	(0.0275)	(0.0210)
ln1lakhcity	-0.0220*	-0.0292**	-0.0220*
	(0.0124)	(0.0146)	(0.0121)
lnrlydist	0.0120**		0.0120**
	(0.00577)		(0.00568)
lnpopsq	0.0475***	0.00902	0.0475***
	(0.00717)	(0.00745)	(0.00760)
lndensitysq	0.0108		0.0108
	(0.00749)		(0.00754)
lnpropagrocultsq	-0.00632	-0.0179	-0.00632
	(0.0153)	(0.0176)	(0.0156)
ln5lakhcitysq	0.00352	0.00139	0.00352
	(0.00371)	(0.00454)	(0.00378)
ln1lakhcitysq	0.00214	-0.00382	0.00214
	(0.00327)	(0.00361)	(0.00329)
lnrlydistsq	0.00872***		0.00872***
	(0.00278)		(0.00278)
_Istate_2	0.484***	0.499***	0.484***
	(0.126)	(0.148)	(0.123)
_Istate_3	0.321***	0.0969	0.321***
	(0.104)	(0.128)	(0.112)
_Istate_4	0.0968	1.109***	0.0968
	(0.391)	(0.326)	(0.426)
_Istate_5	-0.186	-0.156	-0.186
	(0.197)	(0.213)	(0.197)
_Istate_6	0.438***	0.389***	0.438***
	(0.105)	(0.133)	(0.114)
_Istate_7	0.176	0.584***	0.176
	(0.152)	(0.170)	(0.158)
_Istate_8	0.620***	0.233*	0.620***
	(0.103)	(0.128)	(0.109)
_Istate_9	0.494***	0.888***	0.494***
	(0.0941)	(0.117)	(0.0990)
_Istate_10	0.437***	0.810***	0.437***
	(0.110)	(0.140)	(0.116)
_Istate_11	-1.279***	-0.566*	-1.279***
	(0.260)	(0.291)	(0.279)
o._Istate_12	-	-	-
o._Istate_13	-	-	-
_Istate_14	0.432***	1.090***	0.432***
	(0.150)	(0.175)	(0.154)
_Istate_15	2.001***	1.116***	2.001***
	(0.201)	(0.285)	(0.210)
_Istate_16	1.497***	1.182***	1.497***
	(0.162)	(0.177)	(0.168)
_Istate_17	0.532***	0.424*	0.532***
	(0.153)	(0.223)	(0.161)
_Istate_18	1.115***	1.143***	1.115***
	(0.109)	(0.134)	(0.115)
_Istate_19	-0.896***	-0.838***	-0.896***
	(0.146)	(0.150)	(0.148)
_Istate_20	0.959***	0.920***	0.959***

	(0.105)	(0.132)	(0.111)
_Istate_21	1.584***	0.914***	1.584***
	(0.110)	(0.150)	(0.113)
_Istate_22	0.588***	0.117	0.588***
	(0.101)	(0.125)	(0.103)
_Istate_23	0.116	-0.0106	0.116
	(0.109)	(0.134)	(0.110)
_Istate_24	0.771***	0.318**	0.771***
	(0.0993)	(0.125)	(0.104)
_Istate_25	0.547***	0.256	0.547***
	(0.174)	(0.246)	(0.187)
_Istate_26	1.482***	1.310***	1.482***
	(0.266)	(0.282)	(0.295)
_Istate_27	0.673***	0.595***	0.673***
	(0.0969)	(0.123)	(0.103)
_Istate_28	0.885***	0.620***	0.885***
	(0.103)	(0.129)	(0.110)
_Istate_29	0.222	0.0686	0.222
	(0.154)	(0.178)	(0.158)
_Istate_30	1.832***	1.004***	1.832***
	(0.151)	(0.177)	(0.160)
_Istate_31	1.458***	1.381***	1.458***
	(0.159)	(0.189)	(0.167)
_Istate_32	2.130***	1.488***	2.130***
	(0.0979)	(0.120)	(0.106)
_Istate_33	0.872***	0.541***	0.872***
	(0.0910)	(0.114)	(0.0973)
_Istate_34	0.554***	0.374*	0.554***
	(0.195)	(0.194)	(0.204)
_Istate_35	-0.747	-0.849	-0.747
	(1.069)	(1.184)	(1.222)
Constant	1.286*	-0.201	1.286
	(0.773)	(0.788)	(0.801)
Observations	7,592	7,867	7,592
R-squared	0.371	0.222	0.371

VARIABLES	fire full model robust errors	fire full model probit dydx- at means	fire full model probit dydx- avg	fire no density and rail robust errors	fire full model bootstrap errors
gov	0.295***	0.320***	0.203***	0.308***	0.295***
	(0.0135)	(0.0175)	(0.0106)	(0.0130)	(0.0143)
lnpop	-0.103**	-0.307***	-0.194***	-0.106**	-0.103**
	(0.0482)	(0.0727)	(0.0452)	(0.0451)	(0.0503)
lndensity	-0.0423	0.00341	0.00215		-0.0423
	(0.0360)	(0.0510)	(0.0322)		(0.0376)
lnpropagrocult	-0.124***	-0.0937***	-0.0593***	-0.132***	-0.124***
	(0.0198)	(0.0288)	(0.0181)	(0.0191)	(0.0205)
ln5lakhcity	0.0250***	0.0224	0.0141	0.0229***	0.0250***
	(0.00510)	(0.0211)	(0.0133)	(0.00518)	(0.00538)
ln1lakhcity	0.00480	0.00899	0.00569	0.00604**	0.00480
	(0.00293)	(0.00587)	(0.00371)	(0.00296)	(0.00295)
lnrlydist	-0.00126	0.000671	0.000424		-0.00126
	(0.00187)	(0.00251)	(0.00159)		(0.00191)
lnpopsq	0.0108***	0.0242***	0.0153***	0.0113***	0.0108***
	(0.00233)	(0.00374)	(0.00230)	(0.00220)	(0.00244)
lndensitysq	0.00303	-7.71e-05	-4.88e-05		0.00303
	(0.00230)	(0.00325)	(0.00205)		(0.00240)
lnpropagrocultsq	-0.0179***	-0.00844	-0.00534	-0.0195***	-0.0179***
	(0.00418)	(0.00612)	(0.00386)	(0.00404)	(0.00428)
ln5lakhcitysq	0.000637	0.00345	0.00218	0.00122	0.000637
	(0.000916)	(0.00275)	(0.00173)	(0.000914)	(0.000952)
ln1lakhcitysq	0.00311***	0.00511***	0.00323***	0.00408***	0.00311***
	(0.000878)	(0.00133)	(0.000836)	(0.000852)	(0.000869)
lnrlydistsq	0.00483***	0.00605***	0.00383***		0.00483***
	(0.000769)	(0.00109)	(0.000687)		(0.000796)
_Istate_2	-0.839***			-0.837***	-0.839***
	(0.0366)			(0.0354)	(0.0372)
_Istate_3	-0.600***	-0.745***	-0.471***	-0.589***	-0.600***
	(0.0392)	(0.0606)	(0.0369)	(0.0379)	(0.0393)
_Istate_4	-0.489***	-0.860	-0.544	-0.449***	-0.489***
	(0.0451)	(0.802)	(0.508)	(0.0369)	(0.0481)
_Istate_5	-0.449***	-0.528***	-0.334***	-0.444***	-0.449***

	(0.0490)	(0.0631)	(0.0392)	(0.0486)	(0.0507)
_Istate_6	-0.340***	-0.392***	-0.248***	-0.331***	-0.340***
	(0.0421)	(0.0620)	(0.0387)	(0.0414)	(0.0432)
_Istate_7	-0.489***	-0.672***	-0.425***	-0.492***	-0.489***
	(0.0408)	(0.0875)	(0.0546)	(0.0397)	(0.0428)
_Istate_8	-0.526***	-0.672***	-0.425***	-0.518***	-0.526***
	(0.0379)	(0.0558)	(0.0339)	(0.0368)	(0.0383)
_Istate_9	-0.527***	-0.597***	-0.377***	-0.535***	-0.527***
	(0.0339)	(0.0495)	(0.0300)	(0.0328)	(0.0353)
_Istate_10	-0.526***	-0.681***	-0.430***	-0.525***	-0.526***
	(0.0417)	(0.0606)	(0.0369)	(0.0402)	(0.0436)
_Istate_11	-0.285**	-0.432***	-0.273***	-0.254*	-0.285**
	(0.133)	(0.158)	(0.0999)	(0.132)	(0.144)
o._Istate_12	-	-	-		-
o._Istate_13	-	-	-		-
_Istate_14	-0.651***	-0.804***	-0.508***	-0.488***	-0.651***
	(0.0604)	(0.101)	(0.0627)	(0.0632)	(0.0623)
_Istate_15	0.116**			0.170***	0.116**
	(0.0527)			(0.0505)	(0.0566)
_Istate_16	-0.00360	-0.0499	-0.0315	-0.0200	-0.00360
	(0.0735)	(0.0904)	(0.0571)	(0.0695)	(0.0741)
_Istate_17	-0.303***	-0.375***	-0.237***	-0.245***	-0.303***
	(0.0805)	(0.113)	(0.0711)	(0.0767)	(0.0839)
_Istate_18	-0.107**	-0.134**	-0.0847**	-0.109**	-0.107**
	(0.0445)	(0.0561)	(0.0354)	(0.0436)	(0.0465)
_Istate_19	-0.459***	-0.702***	-0.444***	-0.486***	-0.459***
	(0.0331)	(0.0569)	(0.0356)	(0.0317)	(0.0350)
_Istate_20	-0.466***	-0.627***	-0.396***	-0.474***	-0.466***
	(0.0360)	(0.0640)	(0.0397)	(0.0350)	(0.0378)
_Istate_21	-0.162***	-0.185***	-0.117***	-0.166***	-0.162***
	(0.0422)	(0.0575)	(0.0362)	(0.0392)	(0.0450)
_Istate_22	-0.620***	-0.710***	-0.449***	-0.620***	-0.620***
	(0.0401)	(0.0600)	(0.0365)	(0.0393)	(0.0417)
_Istate_23	-0.0894***	-0.120**	-0.0761**	-0.0868***	-0.0894**
	(0.0343)	(0.0508)	(0.0321)	(0.0334)	(0.0370)
_Istate_24	-0.321***	-0.371***	-0.234***	-0.314***	-0.321***
	(0.0377)	(0.0528)	(0.0328)	(0.0366)	(0.0392)
_Istate_25	-0.212	-0.301*	-0.190*	-0.250*	-0.212
	(0.140)	(0.166)	(0.105)	(0.137)	(0.148)
_Istate_26	-0.528***	-0.702**	-0.444**	-0.554***	-0.528***
	(0.0725)	(0.281)	(0.177)	(0.0691)	(0.0810)
_Istate_27	-0.416***	-0.507***	-0.321***	-0.414***	-0.416***
	(0.0346)	(0.0513)	(0.0316)	(0.0336)	(0.0365)
_Istate_28	-0.295***	-0.347***	-0.220***	-0.294***	-0.295***
	(0.0369)	(0.0545)	(0.0339)	(0.0360)	(0.0382)
_Istate_29	-0.317***	-0.392***	-0.248***	-0.314***	-0.317***
	(0.0366)	(0.0523)	(0.0325)	(0.0356)	(0.0386)
_Istate_30	-0.562***	-0.735***	-0.464***	-0.599***	-0.562***
	(0.0453)	(0.0906)	(0.0564)	(0.0442)	(0.0459)
_Istate_31	-0.566***	-0.739***	-0.467***	-0.480***	-0.566***
	(0.150)	(0.206)	(0.130)	(0.149)	(0.166)
_Istate_32	-0.500***	-0.608***	-0.385***	-0.519***	-0.500***
	(0.0348)	(0.0545)	(0.0332)	(0.0336)	(0.0376)
_Istate_33	-0.510***	-0.585***	-0.370***	-0.522***	-0.510***
	(0.0326)	(0.0486)	(0.0295)	(0.0316)	(0.0341)
_Istate_34	-0.284**	-0.354**	-0.224**	-0.313***	-0.284**
	(0.119)	(0.164)	(0.104)	(0.118)	(0.129)
_Istate_35	-0.236	-0.328	-0.207	-0.0756	-0.236
	(0.236)	(0.241)	(0.152)	(0.237)	(0.273)
o._Istate_2		-	-		
o._Istate_15		-	-		
_Istate_12				-0.520***	
				(0.0893)	
_Istate_13				-0.322***	
				(0.0845)	
Constant	0.298			0.148	0.298
	(0.255)			(0.229)	(0.263)
Observations	7,592	7,511	7,511	7,928	7,592

R-squared	0.476	0.4514	0.4514	0.470	0.476
VARIABLES	drainage full model robust errors	drainage full model probit dydx- at means	drainage full model probit dydx- avg	drainage no density and rail robust errors	drainage full model bootstrap errors
gov	0.0552***	0.0632***	0.101***	0.0611***	0.0552***
	(0.00723)	(0.00710)	(0.0111)	(0.00709)	(0.00743)
lnpop	0.0955***	0.0355	0.0567	0.0878***	0.0955***
	(0.0299)	(0.0246)	(0.0385)	(0.0329)	(0.0295)
lndensity	0.00345	0.00661	0.0106		0.00345
	(0.0171)	(0.0236)	(0.0377)		(0.0175)
lnpropagrocult	0.00172	-0.0127	-0.0202	0.00299	0.00172
	(0.0110)	(0.0101)	(0.0161)	(0.0107)	(0.0110)
ln5lakhcity	-0.00270	-0.00215	-0.00343	-0.00197	-0.00270
	(0.00189)	(0.00694)	(0.0111)	(0.00196)	(0.00197)
ln1lakhcity	-0.00315***	-0.000971	-0.00155	-0.00486***	-0.00315***
	(0.00118)	(0.00247)	(0.00393)	(0.00115)	(0.00120)
lnrlydist	-0.000387	-0.00156	-0.00249		-0.000387
	(0.000933)	(0.00101)	(0.00162)		(0.000931)
lnpopsq	-0.00451***	-0.00146	-0.00233	-0.00417***	-0.00451***
	(0.00138)	(0.00130)	(0.00205)	(0.00153)	(0.00135)
lndensitysq	-0.000240	-0.000290	-0.000464		-0.000240
	(0.00108)	(0.00151)	(0.00242)		(0.00110)
lnpropagrocultsq	0.00169	-0.00221	-0.00353	0.00183	0.00169
	(0.00234)	(0.00206)	(0.00330)	(0.00232)	(0.00231)
ln5lakhcitysq	1.91e-05	-8.63e-06	-1.38e-05	-0.000460	1.91e-05
	(0.000492)	(0.000897)	(0.00143)	(0.000500)	(0.000496)
ln1lakhcitysq	-0.00107**	-0.00103**	-0.00164**	-0.000858*	-0.00107**
	(0.000475)	(0.000504)	(0.000806)	(0.000453)	(0.000475)
lnrlydistsq	0.000243	0.000179	0.000287		0.000243
	(0.000459)	(0.000355)	(0.000568)		(0.000461)
_Istate_2	0.0912***	0.0554*	0.0885*	0.0933***	0.0912***
	(0.0321)	(0.0320)	(0.0510)	(0.0319)	(0.0326)
_Istate_3	0.0984***			0.100***	0.0984***
	(0.0273)			(0.0271)	(0.0280)
_Istate_4	0.107***			0.107***	0.107***
	(0.0286)			(0.0282)	(0.0295)
_Istate_5	0.0398	0.0183	0.0292	0.0424	0.0398
	(0.0358)	(0.0166)	(0.0264)	(0.0357)	(0.0359)
_Istate_6	0.104***			0.108***	0.104***
	(0.0278)			(0.0277)	(0.0283)
_Istate_7	0.111***			0.109***	0.111***
	(0.0286)			(0.0288)	(0.0295)
_Istate_8	0.112***			0.118***	0.112***
	(0.0283)			(0.0281)	(0.0290)
_Istate_9	0.0856***	0.0523***	0.0836***	0.0859***	0.0856***
	(0.0277)	(0.0138)	(0.0219)	(0.0277)	(0.0283)
_Istate_10	0.106***			0.111***	0.106***
	(0.0286)			(0.0284)	(0.0291)
_Istate_11	0.110***			0.121***	0.110***
	(0.0317)			(0.0311)	(0.0321)
o._Istate_12	-	-	-		-
o._Istate_13	-	-	-		-
_Istate_14	0.106***			0.125***	0.106***
	(0.0325)			(0.0300)	(0.0326)
_Istate_15	0.116***			0.120***	0.116***
	(0.0305)			(0.0291)	(0.0312)
_Istate_16	0.130***			0.141***	0.130***
	(0.0303)			(0.0303)	(0.0305)
_Istate_17	0.0585	0.0270	0.0431	0.0639	0.0585
	(0.0541)	(0.0319)	(0.0509)	(0.0533)	(0.0551)
_Istate_18	-0.0552	-0.00671	-0.0107	-0.0478	-0.0552
	(0.0384)	(0.0136)	(0.0217)	(0.0382)	(0.0389)
_Istate_19	-0.0725**	-0.00699	-0.0112	-0.0620**	-0.0725**
	(0.0317)	(0.0122)	(0.0194)	(0.0306)	(0.0321)
_Istate_20	0.132***			0.135***	0.132***
	(0.0281)			(0.0281)	(0.0288)
_Istate_21	0.127***			0.131***	0.127***
	(0.0284)			(0.0282)	(0.0290)
_Istate_22	0.0338	0.000501	0.000801	0.0368	0.0338
	(0.0330)	(0.0148)	(0.0237)	(0.0330)	(0.0333)

_Istate_23	0.0909***	0.0667***	0.107***	0.0936***	0.0909***
	(0.0283)	(0.0159)	(0.0258)	(0.0282)	(0.0288)
_Istate_24	0.0743**	0.0374***	0.0597***	0.0782***	0.0743**
	(0.0296)	(0.0145)	(0.0227)	(0.0295)	(0.0306)
_Istate_25	-0.626***	-0.112***	-0.179***	-0.620***	-0.626***
	(0.147)	(0.0383)	(0.0586)	(0.146)	(0.158)
_Istate_26	0.139***			0.146***	0.139***
	(0.0303)			(0.0304)	(0.0312)
_Istate_27	0.0896***	0.0540***	0.0863***	0.0929***	0.0896***
	(0.0288)	(0.0141)	(0.0220)	(0.0287)	(0.0298)
_Istate_28	0.120***			0.125***	0.120***
	(0.0287)			(0.0286)	(0.0295)
_Istate_29	0.104***			0.106***	0.104***
	(0.0276)			(0.0275)	(0.0283)
_Istate_30	0.153***			0.165***	0.153***
	(0.0308)			(0.0308)	(0.0314)
_Istate_31	-0.849***			-0.834***	-0.849***
	(0.0374)			(0.0344)	(0.0374)
_Istate_32	0.126***			0.131***	0.126***
	(0.0285)			(0.0284)	(0.0293)
_Istate_33	0.0516*	0.0228*	0.0365*	0.0525*	0.0516*
	(0.0281)	(0.0122)	(0.0194)	(0.0280)	(0.0284)
_Istate_34	0.0922***			0.0966***	0.0922***
	(0.0296)			(0.0299)	(0.0304)
_Istate_35	0.133***			0.158***	0.133***
	(0.0425)			(0.0354)	(0.0433)
o._Istate_15		-	-		
_Istate_12				0.142***	
				(0.0312)	
_Istate_13				0.125***	
				(0.0296)	
o._Istate_3		-	-		
Constant	0.378**			0.439**	0.378**
	(0.190)			(0.170)	(0.188)
Observations	7,592	4,764	4,764	7,928	7,592
R/Ps R-squared	0.145	0.2261	0.2261	0.143	0.145

VARIABLES	HigherEduD full model robust errors	HigherEduD full model probit dydx- at means	HigherEduD full model probit dydx- avg	HigherEduD no density and rail robust errors	HigherEduD full model bootstrap errors
gov	0.246***	0.290***	0.189***	0.270***	0.246***
	(0.0148)	(0.0207)	(0.0130)	(0.0145)	(0.0145)
lnpop	0.314***	-0.363***	-0.237***	0.263***	0.314***
	(0.0557)	(0.103)	(0.0675)	(0.0625)	(0.0557)
lndensity	-0.0976**	0.0228	0.0149		-0.0976**
	(0.0460)	(0.0593)	(0.0387)		(0.0464)
lnpropagrocult	-0.214***	-0.280***	-0.183***	-0.204***	-0.214***
	(0.0229)	(0.0332)	(0.0214)	(0.0220)	(0.0223)
ln5lakhcity	0.0202***	0.0641**	0.0418**	0.0194***	0.0202***
	(0.00440)	(0.0254)	(0.0166)	(0.00464)	(0.00438)
ln1lakhcity	0.00428**	0.00553	0.00361	0.00523**	0.00428**
	(0.00210)	(0.0100)	(0.00654)	(0.00220)	(0.00211)
lnrlydist	0.00446**	0.00366	0.00239		0.00446**
	(0.00200)	(0.00302)	(0.00197)		(0.00197)
lnpopsq	-0.00841***	0.0318***	0.0208***	-0.00599**	-0.00841***
	(0.00259)	(0.00542)	(0.00353)	(0.00293)	(0.00260)
lndensitysq	0.00532*	-0.00287	-0.00187		0.00532*
	(0.00289)	(0.00382)	(0.00249)		(0.00291)
lnpropagrocultsq	-0.0430***	-0.0592***	-0.0386***	-0.0423***	-0.0430***
	(0.00476)	(0.00704)	(0.00453)	(0.00458)	(0.00471)
ln5lakhcitysq	-0.00315***	-0.00752**	-0.00491**	-0.00266***	-0.00315***
	(0.000915)	(0.00336)	(0.00219)	(0.000918)	(0.000917)
ln1lakhcitysq	0.00372***	0.00513***	0.00335***	0.00531***	0.00372***
	(0.000874)	(0.00191)	(0.00124)	(0.000842)	(0.000901)
lnrlydistsq	0.00668***	0.00802***	0.00523***		0.00668***
	(0.000891)	(0.00122)	(0.000791)		(0.000898)
_Istate_2	0.214***	0.238***	0.155***	0.212***	0.214***
	(0.0707)	(0.0881)	(0.0574)	(0.0696)	(0.0695)
_Istate_3	0.0791	0.0796	0.0519	0.0718	0.0791
	(0.0493)	(0.0652)	(0.0426)	(0.0483)	(0.0506)

_Istate_4	-0.137**	-0.657	-0.429	-0.126**	-0.137**
	(0.0539)	(1.027)	(0.670)	(0.0497)	(0.0579)
_Istate_5	-0.00962	-0.0272	-0.0177	-0.00805	-0.00962
	(0.0545)	(0.0733)	(0.0478)	(0.0548)	(0.0551)
_Istate_6	0.0836*	0.0707	0.0462	0.0814*	0.0836*
	(0.0492)	(0.0725)	(0.0473)	(0.0489)	(0.0489)
_Istate_7	-0.0693	-0.121	-0.0790	-0.0816	-0.0693
	(0.0569)	(0.0821)	(0.0536)	(0.0560)	(0.0571)
_Istate_8	0.217***	0.299***	0.195***	0.221***	0.217***
	(0.0448)	(0.0656)	(0.0427)	(0.0441)	(0.0446)
_Istate_9	-0.119***	-0.201***	-0.131***	-0.153***	-0.119***
	(0.0424)	(0.0557)	(0.0363)	(0.0415)	(0.0435)
_Istate_10	0.0870*	0.0314	0.0205	0.0563	0.0870*
	(0.0494)	(0.0696)	(0.0455)	(0.0485)	(0.0496)
_Istate_11	-0.0326	-0.0127	-0.00827	0.00603	-0.0326
	(0.170)	(0.188)	(0.123)	(0.169)	(0.180)
o._Istate_12	-	-	-		-
o._Istate_13	-	-	-		-
_Istate_14	-0.138*	-0.171	-0.112	0.0386	-0.138*
	(0.0781)	(0.108)	(0.0703)	(0.0753)	(0.0797)
_Istate_15	0.00604	0.0314	0.0205	0.0872	0.00604
	(0.0897)	(0.135)	(0.0880)	(0.0904)	(0.0911)
_Istate_16	-0.0139	-0.0282	-0.0184	-0.0491	-0.0139
	(0.0782)	(0.108)	(0.0705)	(0.0761)	(0.0772)
_Istate_17	0.155*	0.210	0.137	0.258***	0.155*
	(0.0884)	(0.140)	(0.0912)	(0.0860)	(0.0877)
_Istate_18	0.270***	0.352***	0.230***	0.248***	0.270***
	(0.0480)	(0.0668)	(0.0433)	(0.0474)	(0.0480)
_Istate_19	-0.0500	-0.129**	-0.0840**	-0.0900**	-0.0500
	(0.0419)	(0.0595)	(0.0388)	(0.0406)	(0.0430)
_Istate_20	0.0605	0.0671	0.0438	0.0413	0.0605
	(0.0473)	(0.0654)	(0.0427)	(0.0466)	(0.0486)
_Istate_21	0.206***	0.288***	0.188***	0.213***	0.206***
	(0.0474)	(0.0691)	(0.0450)	(0.0457)	(0.0484)
_Istate_22	0.127**	0.144**	0.0939**	0.131***	0.127**
	(0.0509)	(0.0662)	(0.0432)	(0.0506)	(0.0535)
_Istate_23	0.0515	0.0363	0.0237	0.0481	0.0515
	(0.0435)	(0.0580)	(0.0379)	(0.0430)	(0.0443)
_Istate_24	0.0833*	0.0640	0.0418	0.0833*	0.0833*
	(0.0451)	(0.0617)	(0.0402)	(0.0443)	(0.0453)
_Istate_25	-0.215**	-0.381	-0.249	-0.262***	-0.215**
	(0.0961)	(0.269)	(0.175)	(0.0961)	(0.102)
_Istate_26	-0.400***			-0.426***	-0.400***
	(0.0934)			(0.0970)	(0.104)
_Istate_27	0.218***	0.289***	0.188***	0.213***	0.218***
	(0.0430)	(0.0586)	(0.0381)	(0.0425)	(0.0432)
_Istate_28	0.195***	0.237***	0.155***	0.193***	0.195***
	(0.0457)	(0.0633)	(0.0412)	(0.0451)	(0.0469)
_Istate_29	0.333***	0.537***	0.350***	0.334***	0.333***
	(0.0432)	(0.0649)	(0.0419)	(0.0429)	(0.0436)
_Istate_30	-0.0709	-0.0890	-0.0581	-0.103*	-0.0709
	(0.0622)	(0.0936)	(0.0611)	(0.0611)	(0.0613)
_Istate_31	0.210	0.301	0.197	0.349*	0.210
	(0.209)	(0.219)	(0.143)	(0.206)	(0.232)
_Istate_32	0.0771*	0.0535	0.0349	0.0653	0.0771*
	(0.0455)	(0.0593)	(0.0387)	(0.0448)	(0.0461)
_Istate_33	-0.0615	-0.0993*	-0.0648*	-0.0802*	-0.0615
	(0.0418)	(0.0543)	(0.0354)	(0.0412)	(0.0428)
_Istate_34	0.247**	0.301	0.197	0.208*	0.247**
	(0.110)	(0.227)	(0.148)	(0.108)	(0.110)
_Istate_35	-0.105	-0.0401	-0.0262	0.162	-0.105
	(0.224)	(0.306)	(0.199)	(0.220)	(0.253)
o._Istate_2					
o._Istate_15					
_Istate_12				-0.306***	
				(0.0896)	
_Istate_13				0.107	
				(0.0864)	
o._Istate_3					

Constant	-1.890***			-1.999***	-1.890***	
	(0.346)			(0.319)	(0.348)	
Observations	7,592	7,586	7,586	7,928	7,592	
R/Ps R-squared	0.374	0.3373	0.3373	0.370	0.374	

VARIABLES	lnwaterpax full model robust errors	lnwaterpax no density and rail robust errors	lnwaterpax full model bootstrap errors	lnhospbeds full model robust errors	lnhospbeds no density and rail robust errors	lnhospbeds full model bootstrap errors
gov	0.823***	0.833***	0.823***	0.100***	0.106***	0.100***
	(0.0473)	(0.0465)	(0.0480)	(0.00909)	(0.00886)	(0.00938)
lnpop	-1.116***	-1.135***	-1.116***	-0.0430	-0.0270	-0.0430
	(0.223)	(0.235)	(0.217)	(0.0301)	(0.0313)	(0.0307)
lndensity	0.0468		0.0468	0.0639***		0.0639***
	(0.157)		(0.162)	(0.0197)		(0.0201)
lnpropagrocult	-0.0675	-0.0361	-0.0675	-0.0426***	-0.0503***	-0.0426***
	(0.0712)	(0.0690)	(0.0725)	(0.0112)	(0.0106)	(0.0113)
ln5lakhcity	-0.0245	-0.0132	-0.0245	0.000234	-0.000502	0.000234
	(0.0217)	(0.0218)	(0.0226)	(0.00233)	(0.00239)	(0.00237)
ln1lakhcity	0.00681	-0.00580	0.00681	-0.00455***	-0.00256*	-0.00455***
	(0.0113)	(0.0121)	(0.0108)	(0.00128)	(0.00132)	(0.00126)
lnrlydist	-0.000821		-0.000821	0.00378***		0.00378***
	(0.00622)		(0.00625)	(0.00103)		(0.00104)
lnpopsq	0.0451***	0.0450***	0.0451***	0.000940	0.000272	0.000940
	(0.0105)	(0.0111)	(0.0101)	(0.00135)	(0.00141)	(0.00137)
lndensitysq	-0.00728		-0.00728	-0.00386***		-0.00386***
	(0.00990)		(0.0102)	(0.00122)		(0.00124)
lnpropagrocultsq	0.0166	0.0202	0.0166	-0.00334	-0.00533**	-0.00334
	(0.0155)	(0.0151)	(0.0155)	(0.00273)	(0.00255)	(0.00279)
ln5lakhcitysq	0.00592*	0.00377	0.00592*	0.000682	0.00113**	0.000682
	(0.00345)	(0.00343)	(0.00359)	(0.000457)	(0.000454)	(0.000468)
ln1lakhcitysq	0.00100	0.00289	0.00100	0.00282***	0.00291***	0.00282***
	(0.00308)	(0.00307)	(0.00301)	(0.000435)	(0.000445)	(0.000453)
lnrlydistsq	-0.000124		-0.000124	0.00266***		0.00266***
	(0.00281)		(0.00279)	(0.000470)		(0.000461)
_Istate_2	0.0168	0.0290	0.0168	0.403***	0.408***	0.403***
	(0.195)	(0.195)	(0.197)	(0.0626)	(0.0628)	(0.0617)
_Istate_3	0.227	0.180	0.227	-0.0490**	-0.0594***	-0.0490**
	(0.224)	(0.221)	(0.224)	(0.0215)	(0.0211)	(0.0211)
_Istate_4	-1.107**	-1.213***	-1.107**	-0.0529	-0.0589	-0.0529
	(0.450)	(0.467)	(0.492)	(0.0388)	(0.0394)	(0.0426)
_Istate_5	-0.603***	-0.609***	-0.603***	-0.0368	-0.0406	-0.0368
	(0.184)	(0.184)	(0.181)	(0.0262)	(0.0267)	(0.0263)
_Istate_6	-0.576***	-0.576***	-0.576***	-0.0488**	-0.0593***	-0.0488**
	(0.189)	(0.189)	(0.188)	(0.0206)	(0.0205)	(0.0204)
_Istate_7	-0.962***	-1.030***	-0.962***	-0.0179	-0.0327	-0.0179
	(0.217)	(0.215)	(0.214)	(0.0260)	(0.0253)	(0.0258)
_Istate_8	-0.380**	-0.346**	-0.380**	0.0874***	0.0761***	0.0874***
	(0.161)	(0.160)	(0.159)	(0.0229)	(0.0226)	(0.0222)
_Istate_9	-0.313*	-0.352**	-0.313*	-0.0620***	-0.0783***	-0.0620***
	(0.165)	(0.163)	(0.163)	(0.0203)	(0.0199)	(0.0203)
_Istate_10	-1.375***	-1.407***	-1.375***	-0.0653***	-0.0831***	-0.0653***
	(0.173)	(0.171)	(0.172)	(0.0221)	(0.0216)	(0.0217)
_Istate_11	0.0349	0.00574	0.0349	0.101	0.122	0.101
	(0.263)	(0.273)	(0.278)	(0.162)	(0.163)	(0.177)
o._Istate_12	-		-	-		-
o._Istate_13	-		-	-		-
_Istate_14	1.209***	1.161***	1.209***	-0.180***	-0.0844**	-0.180***
	(0.364)	(0.337)	(0.374)	(0.0259)	(0.0353)	(0.0263)
_Istate_15	-0.348	-0.279	-0.348	-0.193***	-0.174***	-0.193***
	(0.637)	(0.609)	(0.645)	(0.0264)	(0.0238)	(0.0266)
_Istate_16	0.787***	0.693***	0.787***	-0.0471	-0.0666**	-0.0471
	(0.210)	(0.221)	(0.212)	(0.0316)	(0.0310)	(0.0320)
_Istate_17	-1.421***	-1.426***	-1.421***	-0.0554	-0.0167	-0.0554
	(0.184)	(0.177)	(0.182)	(0.0421)	(0.0404)	(0.0422)
_Istate_18	0.0404	0.0462	0.0404	-0.0323	-0.0458**	-0.0323
	(0.162)	(0.159)	(0.162)	(0.0228)	(0.0224)	(0.0222)
_Istate_19	-1.040***	-1.089***	-1.040***	-0.0187	-0.0404*	-0.0187
	(0.173)	(0.166)	(0.172)	(0.0245)	(0.0222)	(0.0241)
_Istate_20	-0.187	-0.182	-0.187	0.00785	-0.00516	0.00785
	(0.182)	(0.181)	(0.183)	(0.0255)	(0.0250)	(0.0255)

_Istate_21	-0.656***	-0.657***	-0.656***	0.0122	-0.00209	0.0122
	(0.218)	(0.205)	(0.216)	(0.0251)	(0.0236)	(0.0250)
_Istate_22	-0.599***	-0.560***	-0.599***	0.00716	-0.000560	0.00716
	(0.191)	(0.190)	(0.188)	(0.0241)	(0.0239)	(0.0242)
_Istate_23	-0.602***	-0.599***	-0.602***	-0.129***	-0.138***	-0.129***
	(0.164)	(0.163)	(0.160)	(0.0202)	(0.0200)	(0.0200)
_Istate_24	0.324*	0.357**	0.324*	-0.0310	-0.0456**	-0.0310
	(0.170)	(0.168)	(0.168)	(0.0222)	(0.0217)	(0.0219)
_Istate_25	-0.129	-0.110	-0.129	-0.0914**	-0.109***	-0.0914**
	(0.451)	(0.451)	(0.468)	(0.0397)	(0.0394)	(0.0420)
_Istate_26	-1.225***	-1.203***	-1.225***	-0.109***	-0.120***	-0.109***
	(0.220)	(0.223)	(0.235)	(0.0316)	(0.0298)	(0.0336)
_Istate_27	-0.0602	-0.0570	-0.0602	-0.0210	-0.0304	-0.0210
	(0.161)	(0.160)	(0.157)	(0.0204)	(0.0203)	(0.0206)
_Istate_28	0.841***	0.855***	0.841***	-0.0496**	-0.0596***	-0.0496**
	(0.161)	(0.159)	(0.157)	(0.0217)	(0.0215)	(0.0219)
_Istate_29	0.550***	0.556***	0.550***	0.0356	0.0293	0.0356
	(0.160)	(0.159)	(0.159)	(0.0226)	(0.0225)	(0.0227)
_Istate_30	0.757***	0.842***	0.757***	-0.113**	-0.141***	-0.113**
	(0.188)	(0.185)	(0.191)	(0.0499)	(0.0492)	(0.0485)
_Istate_31	-1.709***	-1.681***	-1.709***	-0.199***	-0.125*	-0.199***
	(0.310)	(0.301)	(0.334)	(0.0674)	(0.0658)	(0.0744)
_Istate_32	-0.616***	-0.568***	-0.616***	-0.0108	-0.0257	-0.0108
	(0.164)	(0.162)	(0.161)	(0.0241)	(0.0239)	(0.0249)
_Istate_33	-0.174	-0.157	-0.174	-0.0941***	-0.109***	-0.0941***
	(0.158)	(0.156)	(0.156)	(0.0196)	(0.0193)	(0.0193)
_Istate_34	-0.440**	-0.437**	-0.440**	0.0750	0.0524	0.0750
	(0.208)	(0.208)	(0.210)	(0.0600)	(0.0603)	(0.0622)
_Istate_35	2.130	2.187	2.130	-0.118	-0.0102	-0.118
	(1.822)	(1.831)	(2.081)	(0.0966)	(0.0975)	(0.111)
_Istate_12		5.378***			0.0534	
		(0.244)			(0.0554)	
_Istate_13		-1.291***			0.0235	
		(0.393)			(0.0818)	
o._Istate_3						
Constant	3.181**	3.334***	3.181**	-4.590***	-4.402***	-4.590***
	(1.425)	(1.206)	(1.395)	(0.156)	(0.166)	(0.164)
Observations	7,592	7,928	7,592	7,592	7,928	7,592
R-squared	0.245	0.295	0.245	0.192	0.180	0.192

Standard errors in parentheses
$***p < 0.01, **p < 0.05, *p < 0.1$

Table 21: Governance and low spillover development indicators

VARIABLES	lnlit full model robust errors	lnlit no density and rail robust errors	lnlit full model bootstrap errors	lnHHbanking full model robust errors	lnHHbanking no density and rail robust errors	lnHHbanking full model bootstrap errors
gov	0.0179***	0.0209***	0.0179***	0.0289***	0.0377***	0.0289***
	(0.00316)	(0.00307)	(0.00317)	(0.00925)	(0.00937)	(0.00905)
lnpop	-0.0363***	-0.0260**	-0.0363***	0.0604	0.0629	0.0604
	(0.0118)	(0.0121)	(0.0126)	(0.0420)	(0.0498)	(0.0419)
lndensity	0.0407***		0.0407***	0.0907***		0.0907***
	(0.0130)		(0.0134)	(0.0308)		(0.0324)
lnpropagrocult	-0.109***	-0.111***	-0.109***	-0.161***	-0.160***	-0.161***
	(0.00617)	(0.00585)	(0.00604)	(0.0154)	(0.0152)	(0.0160)
ln5lakhcity	-7.14e-05	0.000252	-7.14e-05	-0.00816**	-0.00761**	-0.00816**
	(0.00122)	(0.00121)	(0.00124)	(0.00329)	(0.00341)	(0.00323)
ln1lakhcity	-0.00294***	-0.00323***	-0.00294***	-0.00704***	-0.00998***	-0.00704***
	(0.000577)	(0.000556)	(0.000572)	(0.00184)	(0.00181)	(0.00184)
lnrlydist	-0.000615		-0.000615	-0.00177		-0.00177
	(0.000479)		(0.000493)	(0.00123)		(0.00121)
lnpopsq	0.00138**	0.000993*	0.00138**	-0.00337*	-0.00376	-0.00337*
	(0.000546)	(0.000563)	(0.000579)	(0.00195)	(0.00232)	(0.00194)
lndensitysq	-0.00261***		-0.00261***	-0.00762***		-0.00762***
	(0.000819)		(0.000847)	(0.00195)		(0.00204)
lnpropagrocultsq	-0.0145***	-0.0151***	-0.0145***	-0.0147***	-0.0154***	-0.0147***
	(0.00127)	(0.00121)	(0.00124)	(0.00325)	(0.00317)	(0.00331)
ln5lakhcitysq	-0.000810***	-0.000982***	-0.000810***	0.00107	0.000872	0.00107*

	(0.000248)	(0.000247)	(0.000250)	(0.000656)	(0.000659)	(0.000651)
ln1lakhcitysq	0.000280	0.000476**	0.000280	0.00197***	0.00284***	0.00197***
	(0.000216)	(0.000197)	(0.000213)	(0.000633)	(0.000606)	(0.000625)
lnrlydistsq	0.000714***		0.000714***	0.00132**		0.00132**
	(0.000221)		(0.000216)	(0.000539)		(0.000544)
_Istate_2	0.129***	0.134***	0.129***	0.0570***	0.0645***	0.0570***
	(0.0116)	(0.0117)	(0.0117)	(0.0201)	(0.0201)	(0.0206)
_Istate_3	0.0310***	0.0335***	0.0310***	-0.164***	-0.152***	-0.164***
	(0.0114)	(0.0114)	(0.0113)	(0.0201)	(0.0197)	(0.0202)
_Istate_4	0.0340	0.0323	0.0340	-0.148*	-0.193**	-0.148
	(0.0291)	(0.0288)	(0.0322)	(0.0859)	(0.0884)	(0.0954)
_Istate_5	0.0635***	0.0639***	0.0635***	-0.0198	-0.0245	-0.0198
	(0.0142)	(0.0145)	(0.0142)	(0.0215)	(0.0217)	(0.0206)
_Istate_6	0.0358***	0.0378***	0.0358***	-0.130***	-0.124***	-0.130***
	(0.0119)	(0.0120)	(0.0116)	(0.0227)	(0.0227)	(0.0213)
_Istate_7	0.0542***	0.0461***	0.0542***	-0.0958***	-0.135***	-0.0958***
	(0.0139)	(0.0139)	(0.0145)	(0.0270)	(0.0276)	(0.0272)
_Istate_8	0.00193	0.00502	0.00193	-0.193***	-0.174***	-0.193***
	(0.0115)	(0.0115)	(0.0118)	(0.0213)	(0.0209)	(0.0212)
_Istate_9	-0.0621***	-0.0649***	-0.0621***	-0.158***	-0.176***	-0.158***
	(0.0116)	(0.0116)	(0.0114)	(0.0183)	(0.0179)	(0.0172)
_Istate_10	-0.0126	-0.0121	-0.0126	-0.251***	-0.261***	-0.251***
	(0.0124)	(0.0123)	(0.0125)	(0.0258)	(0.0251)	(0.0255)
_Istate_11	0.1000***	0.108***	0.1000***	-0.168***	-0.184***	-0.168***
	(0.0148)	(0.0149)	(0.0150)	(0.0480)	(0.0495)	(0.0523)
o._Istate_12	-		-	-		-
o._Istate_13	-		-	-		-
_Istate_14	0.101***	0.125***	0.101***	-1.033***	-0.922***	-1.033***
	(0.0163)	(0.0154)	(0.0161)	(0.0749)	(0.0775)	(0.0758)
_Istate_15	0.309***	0.307***	0.309***	-0.102*	-0.118	-0.102
	(0.0144)	(0.0142)	(0.0151)	(0.0609)	(0.0733)	(0.0632)
_Istate_16	0.195***	0.198***	0.195***	0.0562*	0.0610**	0.0562*
	(0.0131)	(0.0131)	(0.0132)	(0.0305)	(0.0300)	(0.0313)
_Istate_17	0.133***	0.140***	0.133***	-0.285***	-0.275***	-0.285***
	(0.0154)	(0.0149)	(0.0155)	(0.0453)	(0.0408)	(0.0465)
_Istate_18	0.0893***	0.0941***	0.0893***	-0.218***	-0.213***	-0.218***
	(0.0124)	(0.0124)	(0.0126)	(0.0265)	(0.0262)	(0.0258)
_Istate_19	0.0271**	0.0258**	0.0271**	-0.443***	-0.452***	-0.443***
	(0.0113)	(0.0111)	(0.0113)	(0.0223)	(0.0208)	(0.0221)
_Istate_20	0.00418	0.00460	0.00418	-0.136***	-0.134***	-0.136***
	(0.0129)	(0.0130)	(0.0127)	(0.0217)	(0.0216)	(0.0217)
_Istate_21	0.0632***	0.0598***	0.0632***	-0.321***	-0.304***	-0.321***
	(0.0133)	(0.0129)	(0.0131)	(0.0244)	(0.0231)	(0.0236)
_Istate_22	0.0821***	0.0826***	0.0821***	-0.386***	-0.368***	-0.386***
	(0.0112)	(0.0113)	(0.0114)	(0.0245)	(0.0244)	(0.0250)
_Istate_23	0.0606***	0.0601***	0.0606***	-0.265***	-0.262***	-0.265***
	(0.0107)	(0.0109)	(0.0107)	(0.0188)	(0.0186)	(0.0187)
_Istate_24	0.0799***	0.0817***	0.0799***	-0.237***	-0.219***	-0.237***
	(0.0114)	(0.0114)	(0.0114)	(0.0223)	(0.0218)	(0.0215)
_Istate_25	0.112***	0.110***	0.112***	-0.299***	-0.301***	-0.299***
	(0.0139)	(0.0137)	(0.0148)	(0.0781)	(0.0782)	(0.0868)
_Istate_26	0.118***	0.118***	0.118***	-0.243***	-0.242***	-0.243***
	(0.0153)	(0.0144)	(0.0161)	(0.0604)	(0.0597)	(0.0657)
_Istate_27	0.132***	0.132***	0.132***	-0.153***	-0.150***	-0.153***
	(0.0107)	(0.0109)	(0.0108)	(0.0199)	(0.0198)	(0.0194)
_Istate_28	0.0155	0.0165	0.0155	-0.322***	-0.312***	-0.322***
	(0.0113)	(0.0114)	(0.0113)	(0.0216)	(0.0215)	(0.0209)
_Istate_29	0.0739***	0.0738***	0.0739***	-0.218***	-0.215***	-0.218***
	(0.0109)	(0.0110)	(0.0110)	(0.0210)	(0.0212)	(0.0206)
_Istate_30	0.136***	0.137***	0.136***	-0.00295	0.0174	-0.00295
	(0.0122)	(0.0119)	(0.0121)	(0.0230)	(0.0222)	(0.0224)
_Istate_31	0.145***	0.167***	0.145***	-0.122***	-0.0832***	-0.122***
	(0.0164)	(0.0159)	(0.0176)	(0.0338)	(0.0310)	(0.0336)
_Istate_32	0.196***	0.195***	0.196***	-0.0851***	-0.0668***	-0.0851***
	(0.0107)	(0.0107)	(0.0108)	(0.0190)	(0.0189)	(0.0182)
_Istate_33	0.0892***	0.0874***	0.0892***	-0.364***	-0.358***	-0.364***
	(0.0106)	(0.0106)	(0.0107)	(0.0180)	(0.0178)	(0.0175)
_Istate_34	0.118***	0.114***	0.118***	-0.225***	-0.233***	-0.225***
	(0.0163)	(0.0163)	(0.0168)	(0.0522)	(0.0503)	(0.0539)
_Istate_35	0.0930***	0.124***	0.0930***	-0.0325	0.0263	-0.0325
	(0.0243)	(0.0231)	(0.0264)	(0.0389)	(0.0386)	(0.0394)
_Istate_12		0.0462***			-0.0851**	

		(0.0167)			(0.0340)	
_Istate_13		0.180***			-0.301***	
		(0.0152)			(0.0539)	
Constant	-0.340***	-0.241***	-0.340***	-1.025***	-0.763***	-1.025***
	(0.0802)	(0.0635)	(0.0838)	(0.262)	(0.254)	(0.261)
Observations	7,592	7,928	7,592	7,587	7,923	7,587
R-squared	0.467	0.453	0.467	0.312	0.298	0.312

VARIABLES	lnHHwater full model robust errors	lnHHwater no density and rail robust errors	lnHHwater full model bootstrap errors	lnHHelectr full model robust errors	lnHHelectr no density and rail robust errors	lnHHelectr full model bootstrap errors
gov	0.125***	0.117***	0.125***	0.00272	0.0140	0.00272
	(0.0193)	(0.0191)	(0.0195)	(0.0127)	(0.0125)	(0.0122)
lnpop	0.413***	0.497***	0.413***	0.0936	0.0771	0.0936
	(0.114)	(0.123)	(0.111)	(0.129)	(0.128)	(0.122)
lndensity	0.0796		0.0796	-0.0569**		-0.0569**
	(0.0679)		(0.0686)	(0.0232)		(0.0248)
lnpropagrocult	-0.306***	-0.305***	-0.306***	-0.245***	-0.242***	-0.245***
	(0.0319)	(0.0314)	(0.0319)	(0.0158)	(0.0155)	(0.0160)
ln5lakhcity	-0.0139**	-0.0111	-0.0139**	-0.00179	0.000458	-0.00179
	(0.00693)	(0.00717)	(0.00685)	(0.00536)	(0.00533)	(0.00533)
ln1lakhcity	-0.0170***	-0.0221***	-0.0170***	-0.00348**	-0.00591***	-0.00348**
	(0.00393)	(0.00409)	(0.00390)	(0.00154)	(0.00151)	(0.00148)
lnrlydist	-0.00596**		-0.00596**	-0.00211*		-0.00211*
	(0.00250)		(0.00253)	(0.00108)		(0.00108)
lnpopsq	-0.0180***	-0.0212***	-0.0180***	-0.00395	-0.00302	-0.00395
	(0.00529)	(0.00574)	(0.00516)	(0.00598)	(0.00595)	(0.00567)
lndensitysq	-0.00339		-0.00339	0.00368**		0.00368**
	(0.00430)		(0.00430)	(0.00154)		(0.00164)
lnpropagrocultsq	-0.0411***	-0.0370***	-0.0411***	-0.0389***	-0.0377***	-0.0389***
	(0.00681)	(0.00670)	(0.00676)	(0.00315)	(0.00306)	(0.00320)
ln5lakhcitysq	0.00492***	0.00587***	0.00492***	-0.00322***	-0.00386***	-0.00322***
	(0.00134)	(0.00136)	(0.00131)	(0.000925)	(0.000903)	(0.000910)
ln1lakhcitysq	-0.00206	-0.00326**	-0.00206	-0.00184***	-0.00166***	-0.00184***
	(0.00128)	(0.00128)	(0.00126)	(0.000540)	(0.000508)	(0.000548)
lnrlydistsq	-0.00192*		-0.00192*	0.000709		0.000709
	(0.00114)		(0.00114)	(0.000500)		(0.000507)
_Istate_2	0.226***	0.224***	0.226***	0.0415**	0.0411**	0.0415**
	(0.0555)	(0.0572)	(0.0551)	(0.0198)	(0.0203)	(0.0195)
_Istate_3	0.242***	0.245***	0.242***	-0.0478***	-0.0432***	-0.0478***
	(0.0442)	(0.0452)	(0.0457)	(0.0135)	(0.0128)	(0.0135)
_Istate_4	0.206***	0.223***	0.206***	-0.124***	-0.111***	-0.124***
	(0.0720)	(0.0754)	(0.0767)	(0.0152)	(0.0137)	(0.0181)
_Istate_5	0.205***	0.198***	0.205***	-0.0451***	-0.0404***	-0.0451***
	(0.0472)	(0.0484)	(0.0478)	(0.0120)	(0.0119)	(0.0125)
_Istate_6	0.0911*	0.0936*	0.0911	-0.0609***	-0.0531***	-0.0609***
	(0.0545)	(0.0551)	(0.0563)	(0.0164)	(0.0159)	(0.0164)
_Istate_7	-0.146**	-0.147**	-0.146**	-0.110***	-0.108***	-0.110***
	(0.0699)	(0.0711)	(0.0713)	(0.0195)	(0.0203)	(0.0190)
_Istate_8	-0.0265	-0.0314	-0.0265	-0.0683***	-0.0554***	-0.0683***
	(0.0507)	(0.0514)	(0.0510)	(0.0178)	(0.0168)	(0.0173)
_Istate_9	0.00700	0.0348	0.00700	-0.452***	-0.449***	-0.452***
	(0.0452)	(0.0461)	(0.0472)	(0.0180)	(0.0176)	(0.0177)
_Istate_10	0.0522	0.0776	0.0522	-0.733***	-0.721***	-0.733***
	(0.0498)	(0.0504)	(0.0521)	(0.0501)	(0.0489)	(0.0511)
_Istate_11	0.0305	-0.00964	0.0305	0.0729***	0.0852***	0.0729***
	(0.0811)	(0.0817)	(0.0815)	(0.0202)	(0.0199)	(0.0215)
o._Istate_12	-		-	-		-
o._Istate_13	-		-	-		-
_Istate_14	-1.553***	-1.506***	-1.553***	-0.0807**	-0.0493	-0.0807**
	(0.165)	(0.151)	(0.170)	(0.0329)	(0.0304)	(0.0318)
_Istate_15	-0.458***	-0.533***	-0.458***	0.213***	0.221***	0.213***
	(0.134)	(0.125)	(0.141)	(0.0252)	(0.0265)	(0.0260)
_Istate_16	-0.262***	-0.299***	-0.262***	-0.0517*	-0.0426	-0.0517*
	(0.0781)	(0.0759)	(0.0766)	(0.0278)	(0.0267)	(0.0276)
_Istate_17	-0.779***	-0.856***	-0.779***	-0.0589***	-0.0529***	-0.0589***
	(0.169)	(0.168)	(0.175)	(0.0218)	(0.0204)	(0.0217)
_Istate_18	0.00381	0.00737	0.00381	-0.279***	-0.269***	-0.279***

	(0.0527)	(0.0539)	(0.0530)	(0.0221)	(0.0216)	(0.0219)
_Istate_19	-0.865***	-0.860***	-0.865***	-0.358***	-0.354***	-0.358***
	(0.0598)	(0.0570)	(0.0607)	(0.0173)	(0.0160)	(0.0175)
_Istate_20	-0.415***	-0.405***	-0.415***	-0.210***	-0.204***	-0.210***
	(0.0575)	(0.0588)	(0.0578)	(0.0240)	(0.0237)	(0.0244)
_Istate_21	-0.492***	-0.520***	-0.492***	-0.270***	-0.255***	-0.270***
	(0.0579)	(0.0564)	(0.0553)	(0.0183)	(0.0171)	(0.0178)
_Istate_22	-0.422***	-0.437***	-0.422***	0.0253*	0.0313**	0.0253*
	(0.0513)	(0.0523)	(0.0539)	(0.0146)	(0.0142)	(0.0143)
_Istate_23	-0.393***	-0.394***	-0.393***	-0.0542***	-0.0465***	-0.0542***
	(0.0493)	(0.0504)	(0.0507)	(0.0160)	(0.0157)	(0.0160)
_Istate_24	0.0880*	0.0848*	0.0880*	-0.0509**	-0.0410**	-0.0509**
	(0.0501)	(0.0507)	(0.0511)	(0.0208)	(0.0198)	(0.0204)
_Istate_25	0.0708	0.0516	0.0708	0.00552	0.00264	0.00552
	(0.0618)	(0.0633)	(0.0645)	(0.0212)	(0.0194)	(0.0215)
_Istate_26	0.0196	0.0109	0.0196	-0.0115	-0.00849	-0.0115
	(0.0626)	(0.0650)	(0.0678)	(0.0206)	(0.0206)	(0.0208)
_Istate_27	0.0511	0.0529	0.0511	-0.0525***	-0.0460***	-0.0525***
	(0.0470)	(0.0480)	(0.0483)	(0.0148)	(0.0145)	(0.0146)
_Istate_28	-0.342***	-0.349***	-0.342***	-0.00494	0.00311	-0.00494
	(0.0560)	(0.0567)	(0.0577)	(0.0206)	(0.0197)	(0.0200)
_Istate_29	-0.203***	-0.209***	-0.203***	-0.0511***	-0.0466***	-0.0511***
	(0.0487)	(0.0496)	(0.0509)	(0.0146)	(0.0144)	(0.0145)
_Istate_30	0.208***	0.178***	0.208***	0.0471**	0.0616***	0.0471**
	(0.0569)	(0.0576)	(0.0573)	(0.0204)	(0.0187)	(0.0205)
_Istate_31	0.347***	0.247**	0.347***	0.131***	0.143***	0.131***
	(0.116)	(0.111)	(0.125)	(0.0250)	(0.0221)	(0.0254)
_Istate_32	0.185***	0.168***	0.185***	-0.0645***	-0.0622***	-0.0645***
	(0.0483)	(0.0491)	(0.0504)	(0.0224)	(0.0210)	(0.0218)
_Istate_33	-0.649***	-0.653***	-0.649***	-0.0283**	-0.0275**	-0.0283**
	(0.0481)	(0.0491)	(0.0510)	(0.0144)	(0.0137)	(0.0144)
_Istate_34	-0.000589	-0.0261	-0.000589	-0.0454*	-0.0487**	-0.0454*
	(0.0611)	(0.0637)	(0.0644)	(0.0232)	(0.0228)	(0.0243)
_Istate_35	0.110	-0.0547	0.110	0.0243	0.0556	0.0243
	(0.0919)	(0.0774)	(0.0946)	(0.0441)	(0.0361)	(0.0497)
_Istate_12		0.0250			0.1000***	
		(0.0676)			(0.0231)	
_Istate_13		-0.616***			0.100***	
		(0.170)			(0.0255)	
Constant	-3.544***	-3.679***	-3.544***	-0.547	-0.690	-0.547
	(0.726)	(0.629)	(0.706)	(0.688)	(0.650)	(0.661)
Observations	7,587	7,923	7,587	7,587	7,923	7,587
R-squared	0.383	0.379	0.383	0.484	0.476	0.484

VARIABLES	lnHHlatr full model robust errors	lnHHlatr no density and rail robust errors	lnHHlatr full model bootstrap errors
gov	0.0399***	0.0380***	0.0399***
	(0.0150)	(0.0146)	(0.0146)
lnpop	0.184	0.259**	0.184
	(0.122)	(0.121)	(0.116)
lndensity	0.104**		0.104**
	(0.0478)		(0.0481)
lnpropagrocult	-0.460***	-0.475***	-0.460***
	(0.0216)	(0.0207)	(0.0225)
ln5lakhcity	-0.00244	-0.00110	-0.00244
	(0.00558)	(0.00553)	(0.00553)
ln1lakhcity	-0.00277	-0.00276	-0.00277
	(0.00179)	(0.00175)	(0.00177)
lnrlydist	0.000902		0.000902
	(0.00160)		(0.00163)
lnpopsq	-0.00713	-0.00976*	-0.00713
	(0.00565)	(0.00563)	(0.00539)
lndensitysq	-0.00327		-0.00327
	(0.00301)		(0.00303)
lnpropagrocultsq	-0.0717***	-0.0726***	-0.0717***
	(0.00438)	(0.00418)	(0.00462)
ln5lakhcitysq	-0.00284***	-0.00309***	-0.00284***
	(0.000983)	(0.000962)	(0.000987)
ln1lakhcitysq	-0.00218***	-0.00227***	-0.00218***

	(0.000757)	(0.000703)	(0.000726)
lnrlydistsq	0.000887		0.000887
	(0.000714)		(0.000722)
_Istate_2	0.201***	0.207***	0.201***
	(0.0412)	(0.0426)	(0.0413)
_Istate_3	0.0916**	0.0805**	0.0916**
	(0.0357)	(0.0357)	(0.0357)
_Istate_4	0.0212	0.0786	0.0212
	(0.0530)	(0.0570)	(0.0559)
_Istate_5	0.165***	0.168***	0.165***
	(0.0359)	(0.0360)	(0.0353)
_Istate_6	0.0714*	0.0702*	0.0714*
	(0.0372)	(0.0372)	(0.0369)
_Istate_7	-0.00541	0.0136	-0.00541
	(0.0484)	(0.0487)	(0.0490)
_Istate_8	-0.0677	-0.0908**	-0.0677*
	(0.0414)	(0.0411)	(0.0408)
_Istate_9	-0.126***	-0.104***	-0.126***
	(0.0357)	(0.0361)	(0.0358)
_Istate_10	-0.220***	-0.198***	-0.220***
	(0.0432)	(0.0433)	(0.0424)
_Istate_11	0.212***	0.264***	0.212***
	(0.0678)	(0.0596)	(0.0727)
o._Istate_12	-		-
o._Istate_13	-		-
_Istate_14	0.424***	0.482***	0.424***
	(0.0516)	(0.0462)	(0.0513)
_Istate_15	0.785***	0.717***	0.785***
	(0.0597)	(0.0578)	(0.0593)
_Istate_16	0.377***	0.357***	0.377***
	(0.0448)	(0.0438)	(0.0438)
_Istate_17	0.228***	0.228***	0.228***
	(0.0564)	(0.0506)	(0.0592)
_Istate_18	0.211***	0.218***	0.211***
	(0.0360)	(0.0361)	(0.0360)
_Istate_19	-0.0766**	-0.0592	-0.0766**
	(0.0368)	(0.0363)	(0.0362)
_Istate_20	-0.436***	-0.438***	-0.436***
	(0.0466)	(0.0472)	(0.0451)
_Istate_21	-0.359***	-0.401***	-0.359***
	(0.0482)	(0.0452)	(0.0480)
_Istate_22	-0.321***	-0.351***	-0.321***
	(0.0385)	(0.0389)	(0.0388)
_Istate_23	-0.153***	-0.163***	-0.153***
	(0.0372)	(0.0374)	(0.0368)
_Istate_24	0.0344	0.00582	0.0344
	(0.0410)	(0.0406)	(0.0394)
_Istate_25	0.0868**	0.0731*	0.0868**
	(0.0408)	(0.0417)	(0.0417)
_Istate_26	0.00561	-0.00201	0.00561
	(0.0469)	(0.0453)	(0.0491)
_Istate_27	-0.0868**	-0.0923**	-0.0868**
	(0.0373)	(0.0374)	(0.0381)
_Istate_28	0.0234	0.00755	0.0234
	(0.0396)	(0.0394)	(0.0385)
_Istate_29	-0.0865**	-0.0958**	-0.0865**
	(0.0399)	(0.0398)	(0.0390)
_Istate_30	0.220***	0.169***	0.220***
	(0.0429)	(0.0422)	(0.0433)
_Istate_31	0.436***	0.449***	0.436***
	(0.0514)	(0.0467)	(0.0523)
_Istate_32	0.232***	0.195***	0.232***
	(0.0386)	(0.0379)	(0.0379)
_Istate_33	-0.221***	-0.242***	-0.221***
	(0.0361)	(0.0362)	(0.0353)
_Istate_34	-0.0949	-0.101*	-0.0949
	(0.0586)	(0.0571)	(0.0636)
_Istate_35	0.0887	0.106	0.0887
	(0.0710)	(0.0706)	(0.0769)
_Istate_12		0.292***	
		(0.0469)	
_Istate_13		0.401***	

		(0.0519)	
Constant	-2.573***	-2.447***	-2.573***
	(0.706)	(0.617)	(0.683)
Observations	7,587	7,923	7,587
R-squared	0.438	0.426	0.438

Standard errors in parentheses
$***p < 0.01, **p < 0.05, *p < 0.1$

Table 22: Sensitivity to development covariates

VARIABLES	lnrds	fire	drainage	HigherEduD	lnwaterpax	lnhospbeds
gov	0.753***	0.247***	0.0384***	0.185***	0.656***	0.0618***
	(0.0421)	(0.0141)	(0.00771)	(0.0159)	(0.0503)	(0.00790)
lnpop	-1.205***	-0.0820	0.108***	0.344***	-1.101***	-0.0365
	(0.144)	(0.0538)	(0.0306)	(0.0587)	(0.235)	(0.0301)
lndensity	0.694***	-0.0602	-0.00704	-0.130***	-0.0299	0.0604***
	(0.108)	(0.0376)	(0.0168)	(0.0482)	(0.161)	(0.0202)
lnpropagrocult	-0.0357	-0.0716***	0.0197	-0.137***	0.0560	-0.00782
	(0.0737)	(0.0207)	(0.0124)	(0.0241)	(0.0755)	(0.0121)
ln5lakhcity	0.0106	0.0236***	-0.00222	0.0189***	-0.0260	-0.00133
	(0.0210)	(0.00501)	(0.00188)	(0.00427)	(0.0219)	(0.00241)
ln1lakhcity	-0.0189	0.00601**	-0.00225*	0.00627***	0.0120	-0.00444***
	(0.0123)	(0.00290)	(0.00115)	(0.00207)	(0.0112)	(0.00130)
lnrlydist	0.0131**	-0.00219	-0.000419	0.00418**	-0.00249	0.00372***
	(0.00572)	(0.00185)	(0.000918)	(0.00197)	(0.00615)	(0.000996)
lnpopsq	0.0446***	0.00989***	-0.00487***	-0.00990***	0.0445***	0.000217
	(0.00691)	(0.00257)	(0.00140)	(0.00271)	(0.0110)	(0.00135)
lndensitysq	0.0119	0.00365	-4.13e-05	0.00728**	-0.00595	-0.00372***
	(0.00729)	(0.00239)	(0.00105)	(0.00301)	(0.0101)	(0.00124)
lnpropagrcultsq	-0.00697	-0.0105**	0.00387	-0.0336***	0.0338**	0.00160
	(0.0162)	(0.00425)	(0.00252)	(0.00488)	(0.0160)	(0.00282)
ln5lakhcitysq	0.00265	0.00108	-1.72e-06	-0.00312***	0.00557	0.000851*
	(0.00362)	(0.000929)	(0.000482)	(0.000916)	(0.00346)	(0.000451)
ln1lakhcitysq	0.000962	0.00234***	-0.00113**	0.00278***	-0.000644	0.00249***
	(0.00328)	(0.000879)	(0.000480)	(0.000871)	(0.00308)	(0.000430)
lnrlydistsq	0.00715***	0.00362***	5.51e-05	0.00544***	-0.00276	0.00199***
	(0.00276)	(0.000762)	(0.000456)	(0.000882)	(0.00281)	(0.000461)
_Istate_2	0.538***	-0.949***	0.0556*	0.157**	-0.178	0.417***
	(0.144)	(0.0398)	(0.0327)	(0.0700)	(0.209)	(0.0618)
_Istate_3	0.421***	-0.596***	0.0893***	0.134***	0.266	-0.0277
	(0.115)	(0.0390)	(0.0275)	(0.0496)	(0.225)	(0.0210)
_Istate_4	0.258	-0.457***	0.111***	-0.0809*	-1.052**	-0.0155
	(0.362)	(0.0491)	(0.0300)	(0.0470)	(0.423)	(0.0340)
_Istate_5	-0.0499	-0.441***	0.0390	0.0156	-0.564***	-0.0162
	(0.197)	(0.0485)	(0.0359)	(0.0547)	(0.183)	(0.0252)
_Istate_6	0.537***	-0.337***	0.102***	0.118**	-0.572***	-0.0356*
	(0.112)	(0.0424)	(0.0278)	(0.0489)	(0.189)	(0.0202)
_Istate_7	0.312*	-0.481***	0.114***	-0.0292	-0.924***	0.0109
	(0.159)	(0.0405)	(0.0290)	(0.0564)	(0.217)	(0.0260)
_Istate_8	0.706***	-0.552***	0.104***	0.259***	-0.417***	0.108***
	(0.113)	(0.0380)	(0.0283)	(0.0448)	(0.162)	(0.0223)
_Istate_9	0.654***	-0.470***	0.100***	-0.0295	-0.242	-0.0197
	(0.107)	(0.0351)	(0.0282)	(0.0432)	(0.169)	(0.0205)
_Istate_10	0.689***	-0.464***	0.133***	0.179***	-1.295***	-0.0229
	(0.132)	(0.0440)	(0.0302)	(0.0514)	(0.182)	(0.0246)
_Istate_11	-1.236***	-0.304**	0.111***	-0.0533	0.0830	0.106
	(0.258)	(0.137)	(0.0317)	(0.190)	(0.250)	(0.166)
o._Istate_12	-	-	-	-	-	-
o._Istate_13	-	-	-	-	-	-
_Istate_14	0.807***	-0.655***	0.126***	-0.0339	1.495***	-0.160***
	(0.202)	(0.0645)	(0.0420)	(0.0813)	(0.376)	(0.0417)
_Istate_15	2.125***	0.0476	0.0927**	-0.0821	-0.436	-0.247***
	(0.238)	(0.0565)	(0.0363)	(0.0940)	(0.645)	(0.0326)
_Istate_16	1.460***	-0.0549	0.108***	-0.0909	0.672***	-0.0888***
	(0.172)	(0.0747)	(0.0314)	(0.0776)	(0.214)	(0.0309)
_Istate_17	0.791***	-0.333***	0.0686	0.174**	-1.367***	-0.0507
	(0.171)	(0.0785)	(0.0557)	(0.0863)	(0.193)	(0.0438)

_Istate_18	1.275***	-0.131***	-0.0582	0.263***	0.0123	-0.0463**
	(0.125)	(0.0454)	(0.0382)	(0.0482)	(0.166)	(0.0224)
_Istate_19	-0.548***	-0.433***	-0.0363	0.0286	-0.799***	0.0241
	(0.160)	(0.0354)	(0.0331)	(0.0432)	(0.183)	(0.0257)
_Istate_20	0.967***	-0.474***	0.129***	0.116**	-0.173	0.0304
	(0.113)	(0.0366)	(0.0281)	(0.0476)	(0.184)	(0.0252)
_Istate_21	1.631***	-0.192***	0.124***	0.229***	-0.683***	0.0122
	(0.123)	(0.0424)	(0.0291)	(0.0483)	(0.225)	(0.0259)
_Istate_22	0.725***	-0.657***	0.0253	0.188***	-0.498**	0.0359
	(0.117)	(0.0413)	(0.0335)	(0.0516)	(0.197)	(0.0246)
_Istate_23	0.182	-0.0816**	0.1000***	0.0885**	-0.496***	-0.125***
	(0.119)	(0.0351)	(0.0284)	(0.0436)	(0.167)	(0.0212)
_Istate_24	0.824***	-0.340***	0.0612**	0.0987**	0.329*	-0.0296
	(0.111)	(0.0381)	(0.0296)	(0.0455)	(0.172)	(0.0217)
_Istate_25	0.939***	-0.224	-0.633***	-0.194**	0.0884	-0.0618*
	(0.215)	(0.139)	(0.146)	(0.0949)	(0.474)	(0.0346)
_Istate_26	1.651***	-0.513***	0.126***	-0.353***	-1.188***	-0.0713**
	(0.283)	(0.0749)	(0.0313)	(0.107)	(0.218)	(0.0311)
_Istate_27	0.708***	-0.454***	0.0732**	0.223***	-0.0584	-0.0227
	(0.110)	(0.0353)	(0.0287)	(0.0439)	(0.166)	(0.0203)
_Istate_28	0.909***	-0.320***	0.112***	0.234***	0.853***	-0.0535**
	(0.115)	(0.0373)	(0.0292)	(0.0453)	(0.161)	(0.0217)
_Istate_29	0.214	-0.361***	0.0952***	0.339***	0.554***	0.0258
	(0.159)	(0.0366)	(0.0274)	(0.0436)	(0.163)	(0.0227)
_Istate_30	1.840***	-0.587***	0.119***	-0.0646	0.682***	-0.115**
	(0.158)	(0.0475)	(0.0312)	(0.0616)	(0.194)	(0.0489)
_Istate_31	2.125***	-0.601***	-0.865***	0.263	-1.540***	-0.158**
	(0.208)	(0.155)	(0.0389)	(0.213)	(0.316)	(0.0659)
_Istate_32	2.250***	-0.553***	0.0953***	0.0562	-0.738***	-0.0132
	(0.117)	(0.0366)	(0.0301)	(0.0476)	(0.174)	(0.0250)
_Istate_33	1.003***	-0.525***	0.0477	-0.000719	-0.0472	-0.0714***
	(0.109)	(0.0342)	(0.0295)	(0.0431)	(0.165)	(0.0211)
_Istate_34	0.593***	-0.334***	0.0793***	0.236**	-0.471**	0.0716
	(0.195)	(0.113)	(0.0301)	(0.110)	(0.218)	(0.0577)
_Istate_35	-0.892	-0.226	0.124***	-0.111	2.206	-0.134
	(1.206)	(0.237)	(0.0443)	(0.220)	(1.894)	(0.113)
fire	0.170***		-0.00820	0.0833***	0.0756*	0.0507***
	(0.0359)		(0.00595)	(0.0139)	(0.0431)	(0.00644)
drainage	0.435***	-0.0265		0.00941	0.226***	0.0290***
	(0.135)	(0.0192)		(0.0225)	(0.0597)	(0.0111)
HigherEduD	0.0194	0.0605***	0.00211		0.0800**	0.0394***
	(0.0352)	(0.0100)	(0.00505)		(0.0363)	(0.00593)
lnwaterpax	0.0679***	0.00581*	0.00538***	0.00847**		0.00932***
	(0.0122)	(0.00333)	(0.00141)	(0.00385)		(0.00339)
lnhospbeds	0.117	0.171***	0.0302***	0.183***	0.408***	
	(0.124)	(0.0293)	(0.0101)	(0.0327)	(0.144)	
lnlit	0.121	0.213***	0.0661*	0.327***	-0.0819	0.108***
	(0.211)	(0.0523)	(0.0385)	(0.0613)	(0.205)	(0.0305)
lnHHbanking	0.207**	0.00813	0.00904	0.0638***	0.161**	0.0176
	(0.0954)	(0.0167)	(0.0158)	(0.0207)	(0.0697)	(0.0156)
lnHHwater	0.0398	-0.0178**	0.0131	0.00402	0.0415	-0.00384
	(0.0499)	(0.00730)	(0.00851)	(0.00956)	(0.0305)	(0.00843)
lnHHelectr	0.150*	0.0644***	0.0354**	0.00231	0.0205	0.00370
	(0.0806)	(0.0235)	(0.0144)	(0.0248)	(0.0682)	(0.0108)
lnHHlatr	-0.229***	-0.00575	-0.0103	0.0234	0.0776	0.0108
	(0.0583)	(0.0147)	(0.0115)	(0.0178)	(0.0517)	(0.0108)
lnrds		0.0121***	0.00953***	0.00189	0.0626***	0.00246
		(0.00252)	(0.00296)	(0.00344)	(0.0114)	(0.00243)
Constant	1.284	1.215***	0.567***	-0.857**	5.484***	-4.506***
	(0.900)	(0.319)	(0.190)	(0.396)	(1.694)	(0.164)
Observations	7,587	7,587	7,587	7,587	7,587	7,587
R-squared	0.381	0.491	0.158	0.394	0.257	0.220

VARIABLES	lnlit	lnHHbanking	lnHHwater	lnHHelectr	lnHHlatr
gov	0.00446	-0.0235***	0.0919***	-0.0302***	0.000896
	(0.00286)	(0.00823)	(0.0207)	(0.0109)	(0.0128)
lnpop	-0.0633***	0.0475	0.253	0.0960	0.0996
	(0.0188)	(0.0387)	(0.165)	(0.118)	(0.111)
lndensity	0.0278**	0.0307	-0.00748	-0.104***	0.0616
	(0.0119)	(0.0290)	(0.0756)	(0.0250)	(0.0482)
lnpropagrocult	-0.0351***	0.0509***	0.00452	-0.108***	-0.247***
	(0.00622)	(0.0149)	(0.0359)	(0.0177)	(0.0209)

ln5lakhcity	0.000766	-0.00680**	-0.00729	-0.00128	0.00171
	(0.00111)	(0.00274)	(0.00745)	(0.00471)	(0.00490)
ln1lakhcity	-0.00163***	-0.00153	-0.0127***	-0.000389	0.00414***
	(0.000450)	(0.00150)	(0.00338)	(0.00137)	(0.00157)
lnrlydist	-0.000420	-0.000627	-0.00577***	-0.00158	0.00314**
	(0.000388)	(0.00100)	(0.00218)	(0.00101)	(0.00132)
lnpopsq	0.00249***	-0.00269	-0.0110	-0.00405	-0.00332
	(0.000860)	(0.00179)	(0.00762)	(0.00541)	(0.00515)
lndensitysq	-0.00172**	-0.00450**	0.000827	0.00623***	-1.92e-05
	(0.000737)	(0.00183)	(0.00477)	(0.00163)	(0.00307)
lnpropagrcultsq	-0.00434***	0.0150***	0.00330	-0.0201***	-0.0429***
	(0.00116)	(0.00293)	(0.00690)	(0.00321)	(0.00392)
ln5lakhcitysq	-0.000425*	0.00198***	0.00590***	-0.00255***	-0.00267***
	(0.000228)	(0.000542)	(0.00148)	(0.000889)	(0.000909)
ln1lakhcitysq	0.000177	0.00202***	-0.00127	-0.00199***	-0.00206***
	(0.000168)	(0.000517)	(0.00116)	(0.000483)	(0.000656)
lnrlydistsq	0.000196	0.000350	-0.00268***	-9.01e-05	0.000367
	(0.000178)	(0.000445)	(0.00101)	(0.000451)	(0.000608)
_Istate_2	0.106***	-0.141***	0.105*	-0.0613***	0.0327
	(0.0118)	(0.0210)	(0.0573)	(0.0192)	(0.0424)
_Istate_3	0.0603***	-0.227***	0.251***	-0.0606***	0.0554
	(0.0118)	(0.0190)	(0.0457)	(0.0172)	(0.0392)
_Istate_4	0.0742***	-0.189***	0.270***	-0.134***	0.00553
	(0.0197)	(0.0618)	(0.0671)	(0.0256)	(0.0537)
_Istate_5	0.0681***	-0.114***	0.134***	-0.0958***	0.0873**
	(0.0132)	(0.0187)	(0.0459)	(0.0162)	(0.0390)
_Istate_6	0.0586***	-0.179***	0.112**	-0.0821***	0.0625
	(0.0118)	(0.0198)	(0.0561)	(0.0181)	(0.0397)
_Istate_7	0.0821***	-0.128***	-0.0852	-0.132***	0.0191
	(0.0135)	(0.0219)	(0.0624)	(0.0233)	(0.0460)
_Istate_8	0.0394***	-0.189***	0.0852*	-0.0448**	-0.0216
	(0.0116)	(0.0198)	(0.0503)	(0.0188)	(0.0425)
_Istate_9	0.0174	-0.0423**	0.133***	-0.380***	0.0335
	(0.0121)	(0.0186)	(0.0480)	(0.0181)	(0.0400)
_Istate_10	0.111***	-0.165***	0.325***	-0.679***	-0.0446
	(0.0139)	(0.0246)	(0.0626)	(0.0451)	(0.0495)
_Istate_11	0.106***	-0.300***	0.0197	0.00120	0.122**
	(0.0154)	(0.0484)	(0.0795)	(0.0269)	(0.0619)
o._Istate_12	-	-	-	-	-
o._Istate_13	-	-	-	-	-
_Istate_14	0.224***	-1.028***	-1.288***	-0.0924*	0.800***
	(0.0184)	(0.0649)	(0.162)	(0.0489)	(0.0822)
_Istate_15	0.252***	-0.489***	-0.761***	-0.0746**	0.634***
	(0.0144)	(0.0584)	(0.141)	(0.0332)	(0.0740)
_Istate_16	0.166***	-0.174***	-0.444***	-0.233***	0.291***
	(0.0133)	(0.0292)	(0.0802)	(0.0341)	(0.0482)
_Istate_17	0.159***	-0.372***	-0.720***	-0.140***	0.331***
	(0.0158)	(0.0476)	(0.168)	(0.0304)	(0.0715)
_Istate_18	0.133***	-0.323***	0.0387	-0.345***	0.227***
	(0.0120)	(0.0225)	(0.0554)	(0.0228)	(0.0415)
_Istate_19	0.125***	-0.345***	-0.565***	-0.311***	0.183***
	(0.0120)	(0.0219)	(0.0579)	(0.0220)	(0.0407)
_Istate_20	0.0672***	-0.0566***	-0.109**	-0.156***	-0.293***
	(0.0119)	(0.0209)	(0.0537)	(0.0226)	(0.0448)
_Istate_21	0.147***	-0.306***	-0.0997*	-0.258***	-0.205***
	(0.0131)	(0.0253)	(0.0569)	(0.0192)	(0.0472)
_Istate_22	0.153***	-0.415***	-0.0353	0.0417**	-0.251***
	(0.0119)	(0.0240)	(0.0538)	(0.0198)	(0.0425)
_Istate_23	0.109***	-0.275***	-0.154***	-0.0593***	-0.0727*
	(0.0112)	(0.0185)	(0.0487)	(0.0174)	(0.0396)
_Istate_24	0.119***	-0.339***	0.198***	-0.0924***	0.00300
	(0.0119)	(0.0210)	(0.0512)	(0.0218)	(0.0414)
_Istate_25	0.163***	-0.427***	0.259***	-0.0322	0.0205
	(0.0138)	(0.0691)	(0.0789)	(0.0288)	(0.0518)
_Istate_26	0.163***	-0.369***	0.158**	-0.0746***	-0.0281
	(0.0124)	(0.0527)	(0.0679)	(0.0262)	(0.0474)
_Istate_27	0.165***	-0.300***	0.212***	-0.122***	-0.165***
	(0.0111)	(0.0194)	(0.0482)	(0.0173)	(0.0401)
_Istate_28	0.0565***	-0.320***	-0.224***	0.00685	0.128***
	(0.0121)	(0.0205)	(0.0576)	(0.0245)	(0.0420)
_Istate_29	0.110***	-0.281***	-0.0343	-0.0746***	-0.0707*
	(0.0111)	(0.0195)	(0.0472)	(0.0175)	(0.0412)

_Istate_30	0.129***	-0.206***	0.0889	-0.0699***	0.0851*
	(0.0120)	(0.0223)	(0.0576)	(0.0235)	(0.0447)
_Istate_31	0.144***	-0.351***	0.258**	0.0360	0.251***
	(0.0164)	(0.0389)	(0.127)	(0.0334)	(0.0563)
_Istate_32	0.205***	-0.344***	0.147***	-0.219***	0.0902**
	(0.0117)	(0.0210)	(0.0546)	(0.0272)	(0.0429)
_Istate_33	0.156***	-0.382***	-0.328***	-0.0289	-0.101**
	(0.0114)	(0.0186)	(0.0513)	(0.0196)	(0.0407)
_Istate_34	0.157***	-0.352***	0.204***	-0.101***	-0.145**
	(0.0127)	(0.0452)	(0.0654)	(0.0280)	(0.0576)
_Istate_35	0.0981***	-0.159***	0.0838	-0.0459	-0.0171
	(0.0228)	(0.0462)	(0.0943)	(0.0368)	(0.0722)
fire	0.0104***	0.00311	-0.0354**	0.0224***	-0.00373
	(0.00252)	(0.00637)	(0.0145)	(0.00736)	(0.00956)
drainage	0.0104*	0.0112	0.0845	0.0397***	-0.0216
	(0.00604)	(0.0195)	(0.0549)	(0.0153)	(0.0242)
HigherEduD	0.0116***	0.0177***	0.00581	0.000583	0.0110
	(0.00216)	(0.00582)	(0.0138)	(0.00624)	(0.00836)
lnwaterpax	-0.000307	0.00472**	0.00634	0.000549	0.00387
	(0.000768)	(0.00204)	(0.00464)	(0.00182)	(0.00262)
lnhospbeds	0.0178***	0.0226	-0.0257	0.00433	0.0236
	(0.00395)	(0.0221)	(0.0541)	(0.0130)	(0.0217)
lnlit		1.109***	-0.450***	0.684***	0.790***
		(0.0462)	(0.111)	(0.0645)	(0.0829)
lnHHbanking	0.142***		0.490***	0.0682***	0.137***
	(0.00718)		(0.0416)	(0.0166)	(0.0265)
lnHHwater	-0.0110***	0.0942***		0.0121	0.190***
	(0.00273)	(0.00833)		(0.0113)	(0.0124)
lnHHelectr	0.0960***	0.0750***	0.0691		0.178***
	(0.0123)	(0.0178)	(0.0672)		(0.0488)
lnHHlatr	0.0594***	0.0806***	0.583***	0.0951***	
	(0.00572)	(0.0152)	(0.0329)	(0.0294)	
lnrds	0.000418	0.00561**	0.00561	0.00368*	-0.0105***
	(0.000729)	(0.00263)	(0.00705)	(0.00193)	(0.00268)
Constant	0.0727	0.0392	-1.810*	0.0327	-1.257*
	(0.104)	(0.254)	(1.020)	(0.583)	(0.674)
Observations	7,587	7,587	7,587	7,587	7,587
R-squared	0.666	0.547	0.517	0.583	0.607

Robust standard errors in parentheses
$***p < 0.01, **p < 0.05, *p < 0.1$

Table 23: Sensitivity to state interactions

VARIABLES	lnrds	fire	drainage	HigherEduD	lnwaterpax	lnhospbeds
gov	0.120	0.789***	0.202***	0.317***	2.181***	0.230***
	(0.175)	(0.0616)	(0.0742)	(0.0811)	(0.330)	(0.0297)
lnpop	-1.287***	-0.0810*	0.0783***	0.307***	-1.168***	-0.0370
	(0.145)	(0.0491)	(0.0296)	(0.0559)	(0.225)	(0.0303)
lndensity	0.731***	-0.0331	0.0129	-0.0942**	0.0461	0.0597***
	(0.109)	(0.0342)	(0.0165)	(0.0466)	(0.149)	(0.0187)
lnpropagrocult	-0.0777	-0.110***	-0.00326	-0.204***	-0.0275	-0.0424***
	(0.0636)	(0.0190)	(0.0109)	(0.0230)	(0.0706)	(0.0110)
ln5lakhcity	0.00862	0.0275***	-0.00171	0.0220***	-0.0292	0.000945
	(0.0195)	(0.00587)	(0.00159)	(0.00440)	(0.0216)	(0.00239)
ln1lakhcity	0.00594	0.00876***	0.000323	0.00724***	0.00709	-0.00189
	(0.0111)	(0.00304)	(0.00108)	(0.00218)	(0.0117)	(0.00149)
lnrlydist	-0.000178	-0.00205	-0.000848	0.00368*	-0.00258	0.00367***
	(0.00557)	(0.00180)	(0.000913)	(0.00199)	(0.00615)	(0.00101)
lnpopsq	0.0478***	0.00976***	-0.00345**	-0.00814***	0.0471***	0.000727
	(0.00701)	(0.00240)	(0.00136)	(0.00260)	(0.0105)	(0.00135)
lndensitysq	0.00705	0.00211	-0.000772	0.00542*	-0.00640	-0.00370***
	(0.00724)	(0.00219)	(0.00105)	(0.00294)	(0.00944)	(0.00116)
lnpropagrcultsq	-0.00828	-0.0143***	7.95e-05	-0.0428***	0.0196	-0.00357
	(0.0146)	(0.00400)	(0.00233)	(0.00477)	(0.0153)	(0.00263)
ln5lakhcitysq	0.00122	0.000506	-8.12e-05	-0.00316***	0.00544	0.000613
	(0.00351)	(0.000968)	(0.000472)	(0.000917)	(0.00344)	(0.000458)
ln1lakhcitysq	-0.00241	0.00351***	-0.00174***	0.00321***	0.00115	0.00226***
	(0.00311)	(0.000844)	(0.000472)	(0.000881)	(0.00315)	(0.000474)
lnrlydistsq	0.00557**	0.00449***	0.000102	0.00622***	3.59e-05	0.00258***
	(0.00274)	(0.000734)	(0.000449)	(0.000896)	(0.00280)	(0.000472)

_Istate_2	-0.241	-0.190**	-0.0599	0.134	1.116***	0.231
	(0.477)	(0.0859)	(0.280)	(0.345)	(0.372)	(0.143)
_Istate_3	-0.132	-0.0400	0.237***	0.159*	1.070***	0.0547**
	(0.186)	(0.0659)	(0.0702)	(0.0838)	(0.384)	(0.0229)
_Istate_4	-0.774**	-0.112	0.213***	-0.111	-0.616**	0.00463
	(0.376)	(0.0682)	(0.0705)	(0.0723)	(0.299)	(0.0190)
_Istate_5	-1.968***	0.0165	0.0667	-0.0589	0.187	0.0665
	(0.445)	(0.0823)	(0.0918)	(0.0854)	(0.326)	(0.0407)
_Istate_6	-0.0712	-0.0207	0.232***	0.0759	0.282	0.0535***
	(0.169)	(0.0683)	(0.0702)	(0.0798)	(0.335)	(0.0184)
_Istate_7	-0.444**	-0.133**	0.212***	-0.0226	-0.0165	0.0639***
	(0.188)	(0.0634)	(0.0702)	(0.0774)	(0.325)	(0.0219)
_Istate_8	0.172	-0.190***	0.251***	0.290***	0.537*	0.242***
	(0.176)	(0.0599)	(0.0708)	(0.0798)	(0.291)	(0.0279)
_Istate_9	0.165	0.0798	0.201***	-0.0162	0.286	0.0712***
	(0.158)	(0.0631)	(0.0712)	(0.0692)	(0.305)	(0.0191)
_Istate_10	0.447**	-0.0913	0.249***	0.118	-0.533*	0.0446*
	(0.178)	(0.0629)	(0.0709)	(0.0848)	(0.291)	(0.0247)
_Istate_11	-0.434**	-0.251***	0.272***	0.782***	1.017***	-0.0817***
	(0.169)	(0.0619)	(0.0722)	(0.0683)	(0.286)	(0.0184)
o._Istate_12	-	-	-	-	-	-
o._Istate_13	-	-	-	-	-	-
_Istate_14	0.582***	-0.238***	0.237***	-0.0702	2.923***	-0.0838***
	(0.192)	(0.0666)	(0.0731)	(0.108)	(0.647)	(0.0248)
_Istate_15	2.331***	-0.0441	0.0784***	-0.0149	-0.761	-0.233***
	(0.205)	(0.0465)	(0.0262)	(0.0949)	(0.643)	(0.0310)
_Istate_16	1.192***	0.339***	0.249***	-0.0292	1.702***	-0.00754
	(0.225)	(0.118)	(0.0716)	(0.103)	(0.322)	(0.0205)
_Istate_17	0.254	-0.172*	0.225***	0.134	-0.127	-0.0514***
	(0.221)	(0.0987)	(0.0713)	(0.150)	(0.297)	(0.0190)
_Istate_18	0.902***	0.317***	-0.0353	0.252***	0.944***	0.0506**
	(0.163)	(0.0734)	(0.0816)	(0.0783)	(0.291)	(0.0226)
_Istate_19	-1.645***	-0.0915	0.00948	-0.0296	-0.172	0.0625***
	(0.194)	(0.0595)	(0.0723)	(0.0672)	(0.295)	(0.0215)
_Istate_20	0.474***	-0.124**	0.243***	0.0696	0.797***	0.106***
	(0.160)	(0.0604)	(0.0704)	(0.0722)	(0.306)	(0.0250)
_Istate_21	0.853***	0.0978	0.262***	0.189**	0.00602	0.109***
	(0.180)	(0.0741)	(0.0709)	(0.0800)	(0.328)	(0.0279)
_Istate_22	0.0168	0.0661	0.246***	-0.0172	0.666	0.125*
	(0.260)	(0.133)	(0.0708)	(0.114)	(0.535)	(0.0671)
_Istate_23	-0.878***	-0.138**	0.195***	0.0122	0.190	0.00815
	(0.254)	(0.0610)	(0.0736)	(0.0755)	(0.321)	(0.0195)
_Istate_24	0.434***	-0.0202	0.207***	0.0853	1.328***	0.0910***
	(0.165)	(0.0653)	(0.0718)	(0.0747)	(0.303)	(0.0230)
_Istate_25	0.00668	0.0499	-0.755***	-0.206***	1.007*	-0.0411**
	(0.243)	(0.182)	(0.0710)	(0.0705)	(0.580)	(0.0191)
_Istate_26	1.140***	-0.260***	0.251***	-0.258***	-0.284	-0.0419**
	(0.244)	(0.0598)	(0.0708)	(0.0687)	(0.335)	(0.0201)
_Istate_27	-0.00212	-0.137**	0.206***	0.257***	0.931***	0.0623***
	(0.162)	(0.0597)	(0.0711)	(0.0716)	(0.290)	(0.0175)
_Istate_28	0.341**	-0.0113	0.239***	0.264***	1.968***	0.0558***
	(0.161)	(0.0639)	(0.0705)	(0.0732)	(0.287)	(0.0187)
_Istate_29	-1.849***	-0.0739	0.239***	0.497***	1.933***	0.00482
	(0.331)	(0.0627)	(0.0703)	(0.0777)	(0.290)	(0.0166)
_Istate_30	1.490***	-0.294***	0.273***	-0.0523	1.875***	-0.00627
	(0.195)	(0.0625)	(0.0719)	(0.0836)	(0.306)	(0.0589)
_Istate_31	1.059***	-0.250	-0.725***	0.291	-0.690*	-0.0979
	(0.200)	(0.156)	(0.0745)	(0.215)	(0.386)	(0.0663)
_Istate_32	1.608***	-0.195***	0.231***	0.110	0.372	0.0431**
	(0.154)	(0.0602)	(0.0703)	(0.0701)	(0.290)	(0.0192)
_Istate_33	0.514***	-0.0812	0.103	0.0849	1.121***	0.0103
	(0.154)	(0.0604)	(0.0724)	(0.0697)	(0.290)	(0.0163)
_Istate_34	-0.285	0.0305	0.220***	0.260	0.617*	0.0250
	(0.266)	(0.210)	(0.0706)	(0.250)	(0.325)	(0.0194)
_Istate_35	-1.415	0.224	0.254***	-0.00850	3.715	-0.0417
	(1.379)	(0.287)	(0.0785)	(0.299)	(2.346)	(0.124)
1b.state#co.gov	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)
2.state#c.gov	0.984**	-0.819***	0.124	0.0690	-1.495***	0.149
	(0.492)	(0.0896)	(0.281)	(0.353)	(0.426)	(0.158)
3.state#c.gov	0.572***	-0.819***	-0.210***	-0.118	-1.174**	-0.153***
	(0.215)	(0.0746)	(0.0743)	(0.103)	(0.464)	(0.0356)

4.state#c.gov	2.497***	-0.577***	-0.193**	0.0973	1.414***	0.0792**
	(0.405)	(0.0817)	(0.0759)	(0.0924)	(0.363)	(0.0351)
5.state#c.gov	2.714***	-0.680***	-0.0279	0.0879	-1.077***	-0.147***
	(0.460)	(0.0981)	(0.0955)	(0.111)	(0.388)	(0.0524)
6.state#c.gov	0.660***	-0.429***	-0.208***	0.0313	-1.168***	-0.157***
	(0.203)	(0.0824)	(0.0742)	(0.0995)	(0.396)	(0.0317)
7.state#c.gov	2.466***	-0.325	-0.180**	0.233**	-0.748	0.211
	(0.440)	(0.222)	(0.0791)	(0.113)	(1.112)	(0.265)
8.state#c.gov	0.607***	-0.485***	-0.216***	-0.113	-1.282***	-0.235***
	(0.201)	(0.0703)	(0.0744)	(0.0942)	(0.338)	(0.0381)
9.state#c.gov	0.446**	-0.855***	-0.174**	-0.160*	-0.879**	-0.192***
	(0.183)	(0.0669)	(0.0752)	(0.0857)	(0.351)	(0.0313)
10.state#c.gov	-0.0144	-0.618***	-0.217***	-0.0648	-1.222***	-0.160***
	(0.205)	(0.0747)	(0.0748)	(0.102)	(0.350)	(0.0362)
11.state#c.gov	-0.648**	-0.146	-0.207***	-0.925***	-1.348***	0.184
	(0.262)	(0.152)	(0.0748)	(0.174)	(0.403)	(0.180)
14.state#c.gov	-0.0900	-0.577***	-0.190**	-0.102	-2.572***	-0.136***
	(0.199)	(0.0941)	(0.0746)	(0.143)	(0.754)	(0.0376)
15o.state#co.gov	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)
16.state#c.gov	0.244	-0.489***	-0.199***	0.0977	-1.159***	0.00940
	(0.258)	(0.121)	(0.0742)	(0.160)	(0.442)	(0.0614)
17.state#c.gov	0.439	6.57e-05	-0.276**	0.114	-2.039***	0.0667
	(0.269)	(0.110)	(0.121)	(0.163)	(0.343)	(0.0709)
18.state#c.gov	-0.0489	-0.693***	0.0541	0.0895	-1.189***	-0.107***
	(0.196)	(0.0864)	(0.0859)	(0.0931)	(0.336)	(0.0368)
19.state#c.gov	2.347***	-0.641***	0.0232	0.160*	-0.558	-0.0382
	(0.311)	(0.0826)	(0.0763)	(0.0910)	(0.452)	(0.0638)
20.state#c.gov	0.244	-0.470***	-0.212***	0.148	-1.493***	-0.176***
	(0.206)	(0.0960)	(0.0745)	(0.0906)	(0.385)	(0.0403)
21.state#c.gov	1.201***	-0.317***	-0.217***	0.0769	-0.685	-0.147***
	(0.207)	(0.0805)	(0.0746)	(0.0938)	(0.450)	(0.0413)
22.state#c.gov	0.813***	-0.870***	-0.267***	0.133	-1.698***	-0.162**
	(0.278)	(0.136)	(0.0769)	(0.128)	(0.571)	(0.0731)
23.state#c.gov	1.389***	0.0214	-0.151*	0.0393	-1.152***	-0.191***
	(0.273)	(0.0649)	(0.0773)	(0.0918)	(0.365)	(0.0319)
24.state#c.gov	0.335*	-0.417***	-0.210***	0.0115	-1.434***	-0.190***
	(0.193)	(0.0738)	(0.0768)	(0.0919)	(0.355)	(0.0358)
25.state#c.gov	0.724***	-0.228	0.790***	0.125	-1.882**	0.0374
	(0.256)	(0.183)	(0.0747)	(0.328)	(0.897)	(0.0898)
26.state#c.gov	-0.403	-0.0690	-0.213***	-0.610***	-1.068***	0.0135
	(0.258)	(0.0625)	(0.0745)	(0.0834)	(0.373)	(0.0315)
27.state#c.gov	1.019***	-0.351***	-0.188**	-0.0578	-1.430***	-0.119***
	(0.188)	(0.0683)	(0.0755)	(0.0875)	(0.339)	(0.0316)
28.state#c.gov	0.811***	-0.306***	-0.207***	-0.132	-1.834***	-0.174***
	(0.190)	(0.0698)	(0.0742)	(0.0878)	(0.333)	(0.0313)
29.state#c.gov	3.191***	-0.328***	-0.204***	-0.252***	-2.020***	0.0610*
	(0.344)	(0.0712)	(0.0742)	(0.0922)	(0.338)	(0.0340)
30.state#c.gov	-0.169	-0.202	-0.215***	0.111	-1.916***	-0.205***
	(0.257)	(0.126)	(0.0745)	(0.138)	(0.381)	(0.0719)
31o.state#co.gov	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)
32.state#c.gov	0.243	-0.135*	-0.207***	0.0933	-1.419***	0.168***
	(0.183)	(0.0775)	(0.0742)	(0.0855)	(0.348)	(0.0596)
33.state#c.gov	0.456**	-0.619***	-0.0739	-0.223***	-1.870***	-0.154***
	(0.179)	(0.0647)	(0.0763)	(0.0860)	(0.334)	(0.0299)
34.state#c.gov	1.288***	-0.427*	-0.207***	-0.0152	-1.471***	0.0988
	(0.342)	(0.249)	(0.0746)	(0.259)	(0.407)	(0.0790)
35.state#c.gov	2.313*	-0.948***	-0.164**	-0.132	-3.592	-0.0435
	(1.376)	(0.287)	(0.0780)	(0.300)	(2.351)	(0.126)
Constant	2.002***	-0.190	0.299	-1.908***	2.590*	-4.695***
	(0.763)	(0.258)	(0.199)	(0.352)	(1.446)	(0.153)
Observations	7,592	7,592	7,592	7,592	7,592	7,592
R-squared	0.421	0.530	0.180	0.386	0.266	0.231
Gov joint coef	1.058	0.298	0.0640	0.283	0.909	0.124
Gov joint std error	0.0465	0.0140	0.00680	0.0149	0.0607	0.0129
Gov joint t-stat	22.73	21.24	9.414	18.98	14.99	9.605
Gov joint p-val	0	0	0	0	0	0

VARIABLES	lnlit	lnHHbanking	lnHHwater	lnHHelectr	lnHHlatr	

gov	0.0107	0.0814**	0.317***	0.0217	0.0652
	(0.0234)	(0.0406)	(0.118)	(0.0214)	(0.0858)
lnpop	-0.0421***	0.0502	0.398***	0.0758	0.173
	(0.0123)	(0.0416)	(0.116)	(0.132)	(0.124)
lndensity	0.0418***	0.0966***	0.0886	-0.0558**	0.0967**
	(0.0135)	(0.0309)	(0.0688)	(0.0235)	(0.0483)
lnpropagrocult	-0.110***	-0.168***	-0.319***	-0.247***	-0.459***
	(0.00621)	(0.0155)	(0.0319)	(0.0158)	(0.0215)
ln5lakhcity	0.000428	-0.00872***	-0.0141**	-0.000714	-0.00232
	(0.00123)	(0.00299)	(0.00683)	(0.00533)	(0.00560)
ln1lakhcity	-0.00182***	-0.00313*	-0.0111***	-9.66e-05	-0.00315*
	(0.000562)	(0.00173)	(0.00390)	(0.00148)	(0.00181)
lnrlydist	-0.000801*	-0.00224*	-0.00635**	-0.00249**	0.00131
	(0.000481)	(0.00123)	(0.00252)	(0.00109)	(0.00162)
lnpopsq	0.00165***	-0.00281	-0.0171***	-0.00299	-0.00664
	(0.000567)	(0.00193)	(0.00537)	(0.00611)	(0.00575)
lndensitysq	-0.00262***	-0.00784***	-0.00362	0.00363**	-0.00240
	(0.000848)	(0.00196)	(0.00435)	(0.00157)	(0.00304)
lnpropagrcultsq	-0.0148***	-0.0167***	-0.0438***	-0.0396***	-0.0720***
	(0.00128)	(0.00326)	(0.00679)	(0.00315)	(0.00436)
ln5lakhcitysq	-0.000834***	0.00124**	0.00525***	-0.00318***	-0.00275***
	(0.000250)	(0.000631)	(0.00135)	(0.000930)	(0.000989)
ln1lakhcitysq	7.09e-05	0.00138**	-0.00315**	-0.00243***	-0.00223***
	(0.000220)	(0.000632)	(0.00128)	(0.000529)	(0.000752)
lnrlydistsq	0.000685***	0.00107**	-0.00170	0.000406	0.00134*
	(0.000224)	(0.000542)	(0.00114)	(0.000508)	(0.000723)
_Istate_2	0.164***	0.224***	0.628***	0.135***	0.420***
	(0.0235)	(0.0410)	(0.121)	(0.0352)	(0.102)
_Istate_3	0.0615***	-0.101**	0.480***	-0.0378*	0.0947
	(0.0218)	(0.0466)	(0.112)	(0.0201)	(0.0832)
_Istate_4	0.0214	-0.139	0.368***	-0.113***	0.0523
	(0.0378)	(0.103)	(0.124)	(0.0226)	(0.0899)
_Istate_5	0.0459*	0.00549	0.389***	-0.0504**	0.167**
	(0.0276)	(0.0521)	(0.113)	(0.0226)	(0.0816)
_Istate_6	0.0311	-0.0858*	0.245*	-0.0454**	0.124
	(0.0229)	(0.0473)	(0.127)	(0.0231)	(0.0825)
_Istate_7	0.0482**	-0.0599	-0.0163	-0.0948***	0.0144
	(0.0224)	(0.0435)	(0.123)	(0.0237)	(0.0858)
_Istate_8	0.00501	-0.0798*	0.107	-0.0279	-0.0870
	(0.0228)	(0.0473)	(0.123)	(0.0238)	(0.0939)
_Istate_9	-0.0569**	-0.101**	0.162	-0.356***	-0.175**
	(0.0229)	(0.0429)	(0.114)	(0.0271)	(0.0830)
_Istate_10	-0.0288	-0.210***	0.215*	-0.722***	-0.209**
	(0.0257)	(0.0585)	(0.122)	(0.0993)	(0.103)
_Istate_11	0.144***	-0.117***	0.504***	0.115***	0.474***
	(0.0207)	(0.0410)	(0.118)	(0.0219)	(0.0823)
o._Istate_12	-	-	-	-	-
o._Istate_13	-	-	-	-	-
_Istate_14	0.121***	-0.728***	-1.058***	0.0312	0.295***
	(0.0238)	(0.0986)	(0.276)	(0.0294)	(0.0929)
_Istate_15	0.313***	-0.111*	-0.506***	0.210***	0.775***
	(0.0156)	(0.0603)	(0.131)	(0.0262)	(0.0587)
_Istate_16	0.190***	0.109**	-0.130	-0.0772**	0.447***
	(0.0230)	(0.0513)	(0.138)	(0.0355)	(0.0852)
_Istate_17	0.121***	-0.204***	-0.914***	-0.0598**	0.185**
	(0.0244)	(0.0684)	(0.269)	(0.0236)	(0.0932)
_Istate_18	0.0689***	-0.227***	0.168	-0.334***	0.258***
	(0.0230)	(0.0507)	(0.119)	(0.0335)	(0.0806)
_Istate_19	0.0151	-0.435***	-0.770***	-0.362***	-0.0624
	(0.0209)	(0.0416)	(0.119)	(0.0230)	(0.0800)
_Istate_20	-0.00958	-0.0943**	-0.289**	-0.189***	-0.444***
	(0.0222)	(0.0416)	(0.119)	(0.0299)	(0.0871)
_Istate_21	0.0461*	-0.310***	-0.362***	-0.306***	-0.415***
	(0.0248)	(0.0489)	(0.127)	(0.0277)	(0.0979)
_Istate_22	0.0617**	-0.277***	-0.0665	-0.0254	-0.137
	(0.0246)	(0.0955)	(0.141)	(0.0320)	(0.106)
_Istate_23	0.0586***	-0.226***	-0.190	-0.0428**	-0.0991
	(0.0218)	(0.0461)	(0.125)	(0.0212)	(0.0853)
_Istate_24	0.0882***	-0.189***	0.242**	-0.0182	0.0210
	(0.0216)	(0.0455)	(0.116)	(0.0217)	(0.0855)
_Istate_25	0.0977***	-0.337***	0.216*	0.0116	0.129
	(0.0222)	(0.0890)	(0.122)	(0.0239)	(0.0814)

_Istate_26	0.109***	-0.250***	0.183	0.00517	0.0392
	(0.0239)	(0.0654)	(0.117)	(0.0238)	(0.0864)
_Istate_27	0.126***	-0.130***	0.207*	-0.0469**	-0.0131
	(0.0208)	(0.0427)	(0.114)	(0.0211)	(0.0822)
_Istate_28	0.01000	-0.279***	-0.182	0.0163	0.0475
	(0.0212)	(0.0424)	(0.120)	(0.0246)	(0.0824)
_Istate_29	0.0859***	-0.0817*	0.138	-0.0439**	0.130
	(0.0211)	(0.0444)	(0.116)	(0.0192)	(0.0841)
_Istate_30	0.132***	0.0414	0.378***	0.0626**	0.257***
	(0.0215)	(0.0423)	(0.118)	(0.0245)	(0.0844)
_Istate_31	0.144***	-0.0651	0.493***	0.160***	0.451***
	(0.0238)	(0.0484)	(0.155)	(0.0276)	(0.0897)
_Istate_32	0.193***	-0.0490	0.334***	-0.0518**	0.269***
	(0.0205)	(0.0392)	(0.112)	(0.0258)	(0.0805)
_Istate_33	0.0728***	-0.382***	-0.686***	-0.0487**	-0.232***
	(0.0208)	(0.0427)	(0.120)	(0.0207)	(0.0830)
_Istate_34	0.108***	-0.151**	0.197	-0.0291	-0.118
	(0.0276)	(0.0597)	(0.125)	(0.0308)	(0.0982)
_Istate_35	0.0807**	0.0385	0.219	0.0184	0.0736
	(0.0326)	(0.0498)	(0.142)	(0.0417)	(0.109)
1b.state#co.gov	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)
2.state#c.gov	-0.0352	-0.189***	-0.474***	-0.103**	-0.237**
	(0.0268)	(0.0448)	(0.130)	(0.0403)	(0.110)
3.state#c.gov	-0.0491*	-0.0982**	-0.362***	-0.0184	-0.00106
	(0.0252)	(0.0501)	(0.119)	(0.0243)	(0.0904)
4.state#c.gov	0.0434	0.107	-0.421***	-0.00668	-0.155
	(0.0402)	(0.106)	(0.138)	(0.0538)	(0.105)
5.state#c.gov	0.0263	-0.0346	-0.273**	0.00977	-0.00187
	(0.0324)	(0.0557)	(0.122)	(0.0285)	(0.0903)
6.state#c.gov	0.00398	-0.0753	-0.247*	-0.0314	-0.0961
	(0.0262)	(0.0514)	(0.132)	(0.0255)	(0.0890)
7.state#c.gov	0.0453	-0.0327	-0.134	-0.0785	-0.186
	(0.0287)	(0.0889)	(0.164)	(0.0989)	(0.132)
8.state#c.gov	-0.00713	-0.182***	-0.203	-0.0687***	0.0345
	(0.0258)	(0.0497)	(0.129)	(0.0240)	(0.0984)
9.state#c.gov	-0.00925	-0.0895**	-0.231*	-0.142***	0.0650
	(0.0261)	(0.0454)	(0.120)	(0.0315)	(0.0894)
10.state#c.gov	0.0208	-0.0689	-0.249*	-0.0237	-0.0223
	(0.0287)	(0.0623)	(0.128)	(0.112)	(0.109)
11.state#c.gov	-0.0485*	-0.0675	-0.586***	-0.0506*	-0.311***
	(0.0251)	(0.0637)	(0.128)	(0.0278)	(0.103)
14.state#c.gov	-0.0339	-0.481***	-0.791**	-0.174***	0.184*
	(0.0299)	(0.130)	(0.329)	(0.0465)	(0.0992)
15o.state#co.gov	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)
16.state#c.gov	0.00666	-0.111**	-0.207	0.0758**	-0.170*
	(0.0266)	(0.0557)	(0.163)	(0.0322)	(0.0932)
17.state#c.gov	0.0265	-0.133	0.400	0.0262	0.0938
	(0.0315)	(0.0901)	(0.306)	(0.0329)	(0.118)
18.state#c.gov	0.0427	0.0550	-0.276**	0.143***	-0.0930
	(0.0261)	(0.0533)	(0.126)	(0.0372)	(0.0874)
19.state#c.gov	0.0639**	0.180***	0.148	0.124***	0.0134
	(0.0254)	(0.0492)	(0.140)	(0.0296)	(0.0885)
20.state#c.gov	0.0531**	-0.0962**	-0.156	-0.0802*	0.132
	(0.0269)	(0.0475)	(0.129)	(0.0434)	(0.0992)
21.state#c.gov	0.0341	0.00400	-0.180	0.0854**	0.140
	(0.0283)	(0.0524)	(0.136)	(0.0349)	(0.105)
22.state#c.gov	0.0237	-0.132	-0.431***	0.0476	-0.204*
	(0.0276)	(0.0980)	(0.148)	(0.0339)	(0.111)
23.state#c.gov	0.00331	-0.0570	-0.283**	-0.0179	-0.0745
	(0.0248)	(0.0485)	(0.131)	(0.0243)	(0.0912)
24.state#c.gov	-0.0181	-0.0767	-0.236*	-0.0605**	0.0339
	(0.0253)	(0.0501)	(0.125)	(0.0270)	(0.0934)
25.state#c.gov	0.0458*	0.252***	-0.236*	0.00745	-0.0986
	(0.0253)	(0.0906)	(0.127)	(0.0266)	(0.0857)
26.state#c.gov	0.0322	0.187***	-0.400***	-0.0546**	-0.106
	(0.0265)	(0.0665)	(0.121)	(0.0212)	(0.0907)
27.state#c.gov	0.00861	-0.0323	-0.251**	-0.0106	-0.144
	(0.0240)	(0.0457)	(0.120)	(0.0220)	(0.0885)
28.state#c.gov	0.00867	-0.0773*	-0.276**	-0.0473**	-0.0456
	(0.0245)	(0.0453)	(0.130)	(0.0219)	(0.0877)
29.state#c.gov	-0.0198	-0.212***	-0.523***	-0.0113	-0.340***
	(0.0245)	(0.0491)	(0.124)	(0.0234)	(0.0936)

30.state#c.gov	0.00530	-0.0914**	-0.369***	-0.0401*	-0.0871
	(0.0245)	(0.0435)	(0.121)	(0.0222)	(0.0907)
31o.state#co.gov	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)
32.state#c.gov	-0.0132	-0.0731*	-0.352***	-0.0419*	-0.143*
	(0.0237)	(0.0435)	(0.118)	(0.0217)	(0.0857)
33.state#c.gov	0.0241	0.0285	0.0679	0.0287	0.0222
	(0.0239)	(0.0453)	(0.127)	(0.0213)	(0.0889)
34.state#c.gov	0.0118	-0.126	-0.323**	-0.0373	0.0412
	(0.0339)	(0.0942)	(0.136)	(0.0308)	(0.120)
35.state#c.gov	0.0473	-0.133***	-0.134	0.107**	0.0358
	(0.0338)	(0.0462)	(0.131)	(0.0422)	(0.106)
Constant	-0.314***	-1.051***	-3.696***	-0.488	-2.535***
	(0.0841)	(0.263)	(0.743)	(0.704)	(0.720)
Observations	7,592	7,587	7,587	7,587	7,587
R-squared	0.473	0.329	0.396	0.495	0.451
Gov joint coef	0.0229	0.0452	0.139	0.0117	0.0324
Gov joint std error	0.00316	0.00930	0.0196	0.0126	0.0145
Gov joint t-stat	7.252	4.866	7.061	0.928	2.239
Gov joint p-val	0	0.00	0	0.354	0.0252

Robust standard errors in parentheses
$***p < 0.01, **p < 0.05, *p < 0.1$

Appendix C. Instrumental variable

Table 24: State laws and sources

State	ULB specifications	Legislation	Source
Andaman & Nicobar Islands	provisions to alter corporation/council without criteria in small UTs	Andaman and Nicobar (Municipal) Regulation, 1994	"Andaman and Nicobar Islands- Development and Decentralisation", R. V. R. Murthy, New Delhi : Mittal Publications, 2005
Andhra Pradesh	subject to rules	Andhra Pradesh Municipalities Act, 1965	Manupatra
Arunachal Pradesh	less than 25,000 population, 85%+ non-agricultural population	Arunachal Pradesh Municipal Act, 2007	Government website
Assam	none	Assam Municipal Act, 1956.	"Municipal Administration in India", A. Avasthi, Agra: Lakshmi Narain Agarwal, 1972
Bihar	12,000+ population, 75%+ non-agricultural population	Bihar Municipal Act, 2007	Manupatra
Chandigarh	provisions to alter corporation/council without criteria in small UTs	Punjab Municipal Corporation Law (Extension to Chandigarh) Act, 1994	Government website
Chhattisgarh	none	Chhattisgarh Municipalities Act, 1961	Manupatra
Dadra & Nagar Haveli	provisions to alter corporation/council without criteria in small UTs	Dadra and Nagar Haveli Municipal Regulation, 2004	Government website
Daman & Diu	provisions to alter corporation/council without criteria in small UTs	Daman and Diu Muninicipality Regulation, 1994	Manupatra
Delhi	provisions to alter corporation/council without criteria in small UTs	Delhi Municipal Corporation Act, 1957; New Delhi Municipal Council Act, 1994	Government website
Goa	none	Goa Municipalities Act, 1968	Government website
Gujarat	25,000+ population (non-binding)	The Gujarat Municipalities Act, 1963	Manupatra
Haryana	less than 50,000 population	Haryana Municipal Act, 1973	Government website
Himachal Pradesh	2,000+ population, 5 lakh annual revenue for local administration generated	Himachal Pradesh Municipal Act, 1994	Government website
Jammu & Kashmir	none	Jammu and Kashmir Municipal Act, 2000	Manupatra
Jharkhand	12,000+ population	Jharkhand Municipal Act, 2000	Government website
Karnataka	10,000+ population but may be less if Taluk HQ is in the area, 50%+ non-agricultural population, 400+ people per sq km	Karnataka Municipalities Act, 1964	Government website
Kerala	none	Kerala Municipalities Act, 1994	Manupatra
Lakshdweep	no provision to set up ULB	No urban laws	Government website
Madhya Pradesh	none	Madhya Pradesh Municipalities Act, 1961	Government website

Maharashtra	10,000+ population, less than 20km from a Municipal Corporation or A Class Council and 25%+ non-agricultural population / more than 20km from a Municipal Corporation or A Class Council and 50%+ non-agricultural population, or any district or taluka HQ	Maharashtra Municipal Councils, Nagar Panchayats and Industrial Townships Act, 1965	Government website
Manipur	none	Manipur Municipalities Act, 1994	Government website
Meghalaya	none	Meghalaya Municipal Act, 1973	Government website
Mizoram	10,000+ population (non-binding)	Mizoram Municipalities Act, 2007	Government website
Nagaland	1,000+ population	Nagaland Municipal Act, 2001	Other institutional website: International Environmental Law Research Centre
Odisha	10,000+ population (non-binding)	Orissa Municipal Act, 1950	Manupatra
Pondicherry	provisions to alter corporation/council without criteria in small UTs	Puducherry Municipalities Act, 1973	Government website
Punjab	none	Punjab Municipal Act, 1911	Government website
Rajasthan	none	Rajasthan Municipalities Act, 2009	Government website
Sikkim	less than 5,000 pop, 50%+ non-agricultural population	Sikkim Municipalities Act, 2007	Government website
Tamil Nadu	30,000+ population	Tamil Nadu District Municipalities Act, 1920	Government website
Tripura	less than 50,000, 500+ people per sq km, 50%+ non-agricultural population (non-binding)	Tripura Municipal Act, 1994	Government website
Uttar Pradesh	none	Uttar Pradesh Municipalities Act, 1916	Manupatra
Uttrakhand	none	The Uttaranchal (Uttar Pradesh Municipalities Act, 1916) Amendment Act, 2002	Other institutional website: PRS Legislative Research
West Bengal	30,000+ population, 750+ people per sq km, 50%+ non-agricultural population	West Bengal Municipal Act, 1993	Government website

Table 25: ULB criteria scoring

State	**ULB Criteria**	**ULB Criteria Score**	**Rationale**	**Alternative Score**
Andaman & Nicobar Islands	provisions to add to corporation/council without criteria in small UTs	1	no restrictions	1
Dadra & Nagar Haveli	provisions to add to corporation/council without criteria in small UTs	1	no restrictions	1
Daman & Diu	provisions to add to corporation/council without criteria in small UTs	1	no restrictions	1
Delhi	provisions to add to corporation/council without criteria in small UTs	1	no restrictions	1

Pondicherry	provisions to add to corporation/council without criteria in small UTs	1	no restrictions	1
Chandigarh	provisions to add to corporation/council without criteria in small UTs	1	no restrictions	1
Chhattisgarh	none	1	no restrictions	1
Goa	none	1	no restrictions	1
Kerala	none	1	no restrictions	1
Madhya Pradesh	none	1	no restrictions	1
Assam	none	1	no restrictions	1
Jammu & Kashmir	none	1	no restrictions	1
Manipur	none	1	no restrictions	1
Meghalaya	none	1	no restrictions	1
Punjab	none	1	no restrictions	1
Rajasthan	none	1	no restrictions	1
Uttar Pradesh	none	1	no restrictions	1
Uttranchal	none	1	no restrictions	1
Haryana	less than 50,000 population	2	marker but not criteria	1
Nagaland	1,000+ population	3	lenient criteria	1
Himachal Pradesh	2,000+ population, 5 lakh annual revenue for local administration generated	4	lenient criteria	1
Tripura	less than 50,000, 500+ people per sq km, 50%+ non-agricultural population (non-binding)	6	marker for criteria	2
Mizoram	10,000+ population (non-binding)	8	marker for criteria	2
Orissa	10,000+ population (non-binding)	8	marker for criteria	2
Gujarat	25,000+ population (non-binding)	9	marker for criteria	2
Andhra Pradesh	subject to rules	11	rules subject to change, less binding but more changeable	3
Sikkim	less than 5,000 pop, 50%+ non-agricultural population	13	binding criteria but no minimum population	4
Arunachal Pradesh	less than 25,000 population, 85%+ non-agricultural population	14	binding criteria but no minimum population	4
Karnataka	10,000+ population but may be less if Taluk HQ is in the area, 50%+ non-agricultural population, 400+ people per sq km	16	binding criteria - high population limit but may be less under certain conditions	5

Maharashtra	10,000+ population, less than 20km from a Municipal Corporation or A Class Council and 25%+ non-agricultural population / more than 20km from a Municipal Corporation or A Class Council and 50%+ non-agricultural population, or any district or taluka HQ	17	binding criteria - high population limit but may be less under certain conditions	5
Jharkhand	12,000+ population	18	binding criteria - high population limit	5
Bihar	12,000+ population, 75%+ non-agricultural population	19	binding criteria - high population limit and other criteria added	5
Tamil Nadu	30,000+ population	21	binding criteria - higher population limit	6
West Bengal	30,000+ population, 750+ people per sq km, 50%+ non-agricultural population	23	binding criteria - higher population limit and high density limit	6
Lakshdweep	no provision to set up ULB	25	no ULB provision	6

Table 26: First stage- governance and state laws on ULB criteria

VARIABLES	gov full model robust errors	gov no density and rail robust errors	gov full model bootstrap errors
statelaweffectpropurb	-0.111***	-0.151***	-0.111***
	(0.0299)	(0.0355)	(0.0377)
lnpop	0.330***	0.266*	0.330***
	(0.119)	(0.137)	(0.122)
lndensity	-0.148**		-0.148**
	(0.0578)		(0.0581)
lnpropagrocult	0.470***	0.491***	0.470***
	(0.0182)	(0.0171)	(0.0187)
ln5lakhcity	0.0402***	0.0446***	0.0402***
	(0.00674)	(0.00732)	(0.00676)
ln1lakhcity	0.0133***	0.0122***	0.0133***
	(0.00278)	(0.00266)	(0.00277)
lnrlydist	0.00333*		0.00333*
	(0.00181)		(0.00190)
lnpopsq	-0.00438	-0.000240	-0.00438
	(0.00570)	(0.00663)	(0.00586)
lndensitysq	0.00883**		0.00883**
	(0.00364)		(0.00366)
lnpropagrcultsq	0.0860***	0.0887***	0.0860***
	(0.00412)	(0.00393)	(0.00423)
ln5lakhcitysq	-0.00120	-0.00107	-0.00120
	(0.00103)	(0.00107)	(0.00102)
ln1lakhcitysq	0.00510***	0.00822***	0.00510***
	(0.000815)	(0.000786)	(0.000816)
lnrlydistsq	0.0109***		0.0109***
	(0.000771)		(0.000804)
_Istate_2	0.320***	0.336***	0.320***
	(0.0648)	(0.0630)	(0.0644)
_Istate_3	-0.106**	-0.106**	-0.106**
	(0.0501)	(0.0496)	(0.0502)
_Istate_4	-0.538***	-0.514***	-0.538***
	(0.0882)	(0.0690)	(0.0933)
_Istate_5	-0.0887	-0.0879	-0.0887
	(0.0581)	(0.0610)	(0.0594)
_Istate_6	-0.289***	-0.298***	-0.289***
	(0.0511)	(0.0509)	(0.0507)

_Istate_7	-0.685***	-0.731***	-0.685***
	(0.0518)	(0.0523)	(0.0526)
_Istate_8	-0.337***	-0.339***	-0.337***
	(0.0495)	(0.0488)	(0.0491)
_Istate_9	-0.0988**	-0.148***	-0.0988**
	(0.0454)	(0.0447)	(0.0452)
_Istate_10	-0.313***	-0.356***	-0.313***
	(0.0490)	(0.0483)	(0.0481)
_Istate_11	0.226*	0.362***	0.226
	(0.135)	(0.139)	(0.144)
o._Istate_12	-		-
o._Istate_13	-		-
_Istate_14	-0.364***	-0.240***	-0.364***
	(0.0693)	(0.0689)	(0.0721)
_Istate_15	-0.210***	-0.0467	-0.210***
	(0.0624)	(0.0573)	(0.0645)
_Istate_16	-0.362***	-0.394***	-0.362***
	(0.0823)	(0.0811)	(0.0853)
_Istate_17	-0.506***	-0.370***	-0.506***
	(0.0879)	(0.0855)	(0.0890)
_Istate_18	-0.273***	-0.307***	-0.273***
	(0.0509)	(0.0506)	(0.0509)
_Istate_19	-0.450***	-0.508***	-0.450***
	(0.0442)	(0.0431)	(0.0442)
_Istate_20	-0.488***	-0.533***	-0.488***
	(0.0473)	(0.0463)	(0.0490)
_Istate_21	-0.359***	-0.345***	-0.359***
	(0.0516)	(0.0490)	(0.0508)
_Istate_22	-0.0264	-0.0219	-0.0264
	(0.0486)	(0.0475)	(0.0492)
_Istate_23	-0.175***	-0.185***	-0.175***
	(0.0462)	(0.0456)	(0.0464)
_Istate_24	-0.281***	-0.288***	-0.281***
	(0.0503)	(0.0497)	(0.0515)
_Istate_25	-0.563***	-0.667***	-0.563***
	(0.130)	(0.132)	(0.136)
_Istate_26	-0.570***	-0.638***	-0.570***
	(0.0967)	(0.0954)	(0.107)
_Istate_27	-0.393***	-0.415***	-0.393***
	(0.0461)	(0.0453)	(0.0469)
_Istate_28	-0.568***	-0.598***	-0.568***
	(0.0475)	(0.0465)	(0.0478)
_Istate_29	-0.215***	-0.223***	-0.215***
	(0.0469)	(0.0463)	(0.0469)
_Istate_30	-0.502***	-0.580***	-0.502***
	(0.0619)	(0.0607)	(0.0597)
_Istate_31	-0.760***	-0.416**	-0.760***
	(0.141)	(0.164)	(0.174)
_Istate_32	-0.611***	-0.668***	-0.611***
	(0.0461)	(0.0451)	(0.0466)
_Istate_33	-0.122***	-0.160***	-0.122***
	(0.0452)	(0.0445)	(0.0449)
_Istate_34	-0.280**	-0.364***	-0.280**
	(0.116)	(0.115)	(0.120)
_Istate_35	-1.030***	-0.633***	-1.030***
	(0.0886)	(0.0746)	(0.0969)
_Istate_12		0.162**	
		(0.0690)	
_Istate_13		-0.191**	
		(0.0764)	
Constant	-1.231*	-1.502**	-1.231*
	(0.704)	(0.689)	(0.713)
Observations	7,592	7,928	7,592
R-squared	0.559	0.546	0.559

Standard errors in parentheses
$***p < 0.01, **p < 0.05, *p < 0.1$

Table 27: Governance and high spillover development indicators with instrumental variable

VARIABLES	lnrds full model robust errors	lnrds no density and rail robust errors	lnrds full model bootstrap errors	fire full model robust errors	fire no density and rail robust errors	fire full model bootstrap errors
gov	1.657**	1.369**	1.657*	1.069***	0.825***	1.069**
	(0.740)	(0.663)	(0.949)	(0.264)	(0.167)	(0.428)
lnpop	-1.548***	-0.301	-1.548***	-0.395**	-0.273**	-0.395
	(0.360)	(0.305)	(0.517)	(0.172)	(0.115)	(0.300)
lndensity	0.808***		0.808***	0.0784		0.0784
	(0.160)		(0.182)	(0.0617)		(0.0766)
lnpropagrocult	-0.417	-0.574*	-0.417	-0.487***	-0.385***	-0.487**
	(0.354)	(0.333)	(0.455)	(0.126)	(0.0838)	(0.204)
ln5lakhcity	-0.0221	0.0233	-0.0221	-0.00864	-0.00256	-0.00864
	(0.0379)	(0.0409)	(0.0436)	(0.0113)	(0.00870)	(0.0154)
ln1lakhcity	-0.0319**	-0.0350**	-0.0319*	-0.00539	-8.05e-05	-0.00539
	(0.0158)	(0.0165)	(0.0175)	(0.00474)	(0.00364)	(0.00647)
lnrlydist	0.00964		0.00964	-0.00366		-0.00366
	(0.00626)		(0.00676)	(0.00234)		(0.00289)
lnpopsq	0.0527***	0.0109	0.0527***	0.0162***	0.0131***	0.0162
	(0.0110)	(0.00941)	(0.0161)	(0.00579)	(0.00412)	(0.00991)
lndensitysq	0.00379		0.00379	-0.00420		-0.00420
	(0.0102)		(0.0115)	(0.00386)		(0.00470)
lnpropagrcultsq	-0.0709	-0.0606	-0.0709	-0.0844***	-0.0654***	-0.0844**
	(0.0658)	(0.0614)	(0.0842)	(0.0233)	(0.0154)	(0.0376)
ln5lakhcitysq	0.00474	0.00219	0.00474	0.00189*	0.00206**	0.00189
	(0.00394)	(0.00463)	(0.00413)	(0.00111)	(0.000969)	(0.00126)
ln1lakhcitysq	-0.00173	-0.00785	-0.00173	-0.000878	-0.000225	-0.000878
	(0.00509)	(0.00667)	(0.00597)	(0.00182)	(0.00173)	(0.00258)
lnrlydistsq	0.000457		0.000457	-0.00368		-0.00368
	(0.00855)		(0.0107)	(0.00301)		(0.00468)
_Istate_2	0.248	0.342	0.248	-1.081***	-1.005***	-1.081***
	(0.275)	(0.269)	(0.344)	(0.0973)	(0.0679)	(0.158)
_Istate_3	0.400***	0.147	0.400**	-0.518***	-0.536***	-0.518***
	(0.138)	(0.146)	(0.173)	(0.0546)	(0.0432)	(0.0810)
_Istate_4	0.511	1.364***	0.511	-0.0617	-0.176*	-0.0617
	(0.563)	(0.482)	(0.693)	(0.148)	(0.0921)	(0.247)
_Istate_5	-0.119	-0.114	-0.119	-0.380***	-0.399***	-0.380***
	(0.203)	(0.217)	(0.222)	(0.0659)	(0.0564)	(0.0877)
_Istate_6	0.654***	0.532**	0.654**	-0.117	-0.178***	-0.117
	(0.239)	(0.233)	(0.306)	(0.0882)	(0.0627)	(0.144)
_Istate_7	0.687	0.933*	0.687	0.0377	-0.118	0.0377
	(0.522)	(0.506)	(0.672)	(0.184)	(0.128)	(0.307)
_Istate_8	0.871***	0.395	0.871**	-0.267***	-0.344***	-0.267*
	(0.269)	(0.254)	(0.347)	(0.0987)	(0.0665)	(0.161)
_Istate_9	0.567***	0.958***	0.567***	-0.453***	-0.461***	-0.453***
	(0.126)	(0.151)	(0.159)	(0.0434)	(0.0382)	(0.0666)
_Istate_10	0.677**	0.986***	0.677**	-0.278***	-0.337***	-0.278*
	(0.263)	(0.277)	(0.345)	(0.0980)	(0.0737)	(0.161)
_Istate_11	-1.329***	-0.637**	-1.329***	-0.337**	-0.330**	-0.337*
	(0.316)	(0.308)	(0.391)	(0.162)	(0.142)	(0.204)
o._Istate_12	-	-		-		
o._Istate_13	-	-		-		
_Istate_14	0.706**	1.168***	0.706*	-0.369***	-0.363***	-0.369**
	(0.315)	(0.211)	(0.403)	(0.121)	(0.0854)	(0.184)
_Istate_15	2.188***	1.162***	2.188***	0.309***	0.220***	0.309***
	(0.246)	(0.280)	(0.299)	(0.0724)	(0.0367)	(0.117)
_Istate_16	1.780***	1.381***	1.780***	0.288**	0.194*	0.288
	(0.327)	(0.323)	(0.414)	(0.135)	(0.103)	(0.202)
_Istate_17	0.916**	0.606*	0.916*	0.0931	-0.0503	0.0931
	(0.417)	(0.345)	(0.525)	(0.150)	(0.0868)	(0.239)
_Istate_18	1.321***	1.292***	1.321***	0.105	0.0500	0.105
	(0.233)	(0.243)	(0.296)	(0.0880)	(0.0672)	(0.138)
_Istate_19	-0.556	-0.592	-0.556	-0.109	-0.222**	-0.109
	(0.365)	(0.366)	(0.458)	(0.124)	(0.0894)	(0.205)
_Istate_20	1.332***	1.182***	1.332***	-0.0822	-0.194**	-0.0822
	(0.380)	(0.379)	(0.496)	(0.136)	(0.0960)	(0.227)
_Istate_21	1.857***	1.082***	1.857***	0.119	0.0142	0.119
	(0.287)	(0.272)	(0.363)	(0.104)	(0.0683)	(0.166)
_Istate_22	0.607***	0.127	0.607***	-0.600***	-0.610***	-0.600***
	(0.113)	(0.128)	(0.132)	(0.0441)	(0.0388)	(0.0569)
_Istate_23	0.247	0.0774	0.247	0.0453	0.00738	0.0453
	(0.171)	(0.178)	(0.213)	(0.0568)	(0.0414)	(0.0968)

_Istate_24	0.982***	0.456**	0.982***	-0.103	-0.166***	-0.103
	(0.233)	(0.225)	(0.303)	(0.0865)	(0.0593)	(0.146)
_Istate_25	0.981**	0.588	0.981	0.235	0.106	0.235
	(0.480)	(0.530)	(0.611)	(0.231)	(0.195)	(0.312)
_Istate_26	1.924***	1.630***	1.924***	-0.0721	-0.211*	-0.0721
	(0.527)	(0.526)	(0.665)	(0.162)	(0.118)	(0.279)
_Istate_27	0.969***	0.795***	0.969**	-0.111	-0.200***	-0.111
	(0.305)	(0.296)	(0.396)	(0.110)	(0.0752)	(0.183)
_Istate_28	1.311***	0.907**	1.311**	0.144	0.0134	0.144
	(0.430)	(0.411)	(0.561)	(0.156)	(0.105)	(0.261)
_Istate_29	0.386*	0.177	0.386	-0.148**	-0.198***	-0.148
	(0.224)	(0.229)	(0.270)	(0.0689)	(0.0497)	(0.114)
_Istate_30	2.211***	1.285***	2.211***	-0.171	-0.297***	-0.171
	(0.405)	(0.425)	(0.511)	(0.143)	(0.106)	(0.232)
_Istate_31	2.380***	1.887***	2.380**	0.384	0.0633	0.384
	(0.922)	(0.721)	(1.194)	(0.345)	(0.217)	(0.550)
_Istate_32	2.589***	1.810***	2.589***	-0.0272	-0.174	-0.0272
	(0.462)	(0.455)	(0.603)	(0.169)	(0.117)	(0.281)
_Istate_33	0.965***	0.619***	0.965***	-0.414***	-0.439***	-0.414***
	(0.135)	(0.156)	(0.171)	(0.0473)	(0.0392)	(0.0772)
_Istate_34	0.767***	0.552*	0.767**	-0.0641	-0.122	-0.0641
	(0.278)	(0.316)	(0.343)	(0.168)	(0.148)	(0.210)
_Istate_35	0.0437	-0.530	0.0437	0.579*	0.267	0.579
	(1.379)	(1.303)	(1.634)	(0.349)	(0.239)	(0.517)
_Istate_12					-0.564***	
					(0.104)	
_Istate_13					-0.216**	
					(0.0962)	
Constant	2.352	0.677	2.352	1.397	1.065*	1.397
	(1.639)	(1.621)	(2.409)	(0.879)	(0.601)	(1.491)
Observations	7,592	7,867	7,592	7,592	7,928	7,592
R-squared	0.346	0.213	0.346	0.170	0.329	0.170
Underidentification test (KP)	8.46	10.45	18.087	8.46	12.69	18.087
p-value	0.0036	0.0012	0	0.0036	0.0004	0
Weak identification test (KP)	13.82	15.54	18.021	13.82	18.11	18.021
Endogeneity test	1.04	0.499	0.715	8.957	7.169	10.581
p-value	0.3078	0.4801	0.3979	0.0028	0.0074	0.0011

VARIABLES	drainage full model robust errors	drainage no density and rail robust errors	drainage full model bootstrap errors	HigherEduD full model robust errors	HigherEduD no density and rail robust errors	HigherEduD full model bootstrap errors
gov	-0.0537	0.00452	-0.0537	0.519***	0.474***	0.519**
	(0.0572)	(0.0382)	(0.0790)	(0.190)	(0.146)	(0.240)
lnpop	0.136***	0.106***	0.136**	0.212**	0.197***	0.212*
	(0.0417)	(0.0373)	(0.0531)	(0.0832)	(0.0656)	(0.118)
lndensity	-0.0135		-0.0135	-0.0551		-0.0551
	(0.0159)		(0.0181)	(0.0533)		(0.0584)
lnpropagrocult	0.0528*	0.0307	0.0528	-0.342***	-0.304***	-0.342***
	(0.0289)	(0.0210)	(0.0382)	(0.0920)	(0.0746)	(0.116)
ln5lakhcity	0.00204	0.000810	0.00204	0.00831	0.00941	0.00831
	(0.00240)	(0.00194)	(0.00306)	(0.00908)	(0.00807)	(0.0109)
ln1lakhcity	-0.00172	-0.00419***	-0.00172	0.000687	0.00282	0.000687
	(0.00138)	(0.00119)	(0.00161)	(0.00331)	(0.00281)	(0.00389)
lnrlydist	-4.89e-05		-4.89e-05	0.00361*		0.00361*
	(0.000965)		(0.00102)	(0.00210)		(0.00216)
lnpopsq	-0.00527***	-0.00436***	-0.00527***	-0.00652***	-0.00528***	-0.00652*
	(0.00148)	(0.00143)	(0.00177)	(0.00226)	(0.00205)	(0.00336)
lndensitysq	0.000777		0.000777	0.00278		0.00278
	(0.000986)		(0.00110)	(0.00329)		(0.00360)
lnpropagrcultsq	0.0110**	0.00686*	0.0110	-0.0665***	-0.0604***	-0.0665***
	(0.00546)	(0.00403)	(0.00714)	(0.0171)	(0.0137)	(0.0214)
ln5lakhcitysq	-0.000157	-0.000552	-0.000157	-0.00270***	-0.00233**	-0.00270***
	(0.000483)	(0.000485)	(0.000487)	(0.000945)	(0.000906)	(0.00101)
ln1lakhcitysq	-0.000514	-0.000386	-0.000514	0.00231*	0.00361**	0.00231
	(0.000577)	(0.000575)	(0.000633)	(0.00133)	(0.00149)	(0.00154)
lnrlydistsq	0.00144*		0.00144	0.00369		0.00369
	(0.000779)		(0.000997)	(0.00229)		(0.00280)
_Istate_2	0.125***	0.112***	0.125***	0.128	0.146*	0.128
	(0.0394)	(0.0355)	(0.0440)	(0.0901)	(0.0827)	(0.104)
_Istate_3	0.0870***	0.0944***	0.0870***	0.108**	0.0928*	0.108*
	(0.0293)	(0.0280)	(0.0316)	(0.0532)	(0.0506)	(0.0592)
_Istate_4	0.0465	0.0768**	0.0465	0.0138	-0.0183	0.0138
	(0.0440)	(0.0347)	(0.0547)	(0.119)	(0.0938)	(0.151)

_Istate_5	0.0301	0.0375	0.0301	0.0147	0.00986	0.0147
	(0.0381)	(0.0367)	(0.0394)	(0.0568)	(0.0554)	(0.0602)
_Istate_6	0.0731**	0.0915***	0.0731*	0.162**	0.141**	0.162*
	(0.0334)	(0.0302)	(0.0384)	(0.0730)	(0.0644)	(0.0872)
_Istate_7	0.0368	0.0682*	0.0368	0.116	0.0658	0.116
	(0.0488)	(0.0401)	(0.0626)	(0.141)	(0.119)	(0.174)
_Istate_8	0.0751**	0.0993***	0.0751*	0.308***	0.289***	0.308***
	(0.0354)	(0.0313)	(0.0413)	(0.0777)	(0.0656)	(0.0937)
_Istate_9	0.0751**	0.0777***	0.0751**	-0.0923**	-0.123***	-0.0923*
	(0.0297)	(0.0288)	(0.0315)	(0.0460)	(0.0464)	(0.0514)
_Istate_10	0.0714**	0.0903***	0.0714*	0.174**	0.130*	0.174*
	(0.0351)	(0.0319)	(0.0403)	(0.0793)	(0.0725)	(0.0943)
_Istate_11	0.117***	0.129***	0.117***	-0.0509	-0.0237	-0.0509
	(0.0357)	(0.0326)	(0.0396)	(0.188)	(0.181)	(0.217)
o._Istate_12	-			-		
o._Istate_13	-			-		
_Istate_14	0.0659*	0.111***	0.0659	-0.0384	0.0877	-0.0384
	(0.0400)	(0.0316)	(0.0463)	(0.105)	(0.0853)	(0.121)
_Istate_15	0.0888**	0.114***	0.0888**	0.0740	0.107	0.0740
	(0.0352)	(0.0301)	(0.0392)	(0.111)	(0.0961)	(0.120)
_Istate_16	0.0886**	0.117***	0.0886*	0.0887	0.0351	0.0887
	(0.0385)	(0.0345)	(0.0457)	(0.106)	(0.0976)	(0.123)
_Istate_17	0.00277	0.0426	0.00277	0.295**	0.335***	0.295**
	(0.0607)	(0.0541)	(0.0684)	(0.131)	(0.102)	(0.150)
_Istate_18	-0.0850**	-0.0652	-0.0850*	0.344***	0.311***	0.344***
	(0.0430)	(0.0405)	(0.0468)	(0.0710)	(0.0651)	(0.0829)
_Istate_19	-0.122***	-0.0909**	-0.122**	0.0733	0.0141	0.0733
	(0.0418)	(0.0365)	(0.0498)	(0.0956)	(0.0848)	(0.118)
_Istate_20	0.0776*	0.105***	0.0776	0.196*	0.152	0.196
	(0.0406)	(0.0349)	(0.0498)	(0.106)	(0.0927)	(0.132)
_Istate_21	0.0874**	0.111***	0.0874**	0.304***	0.284***	0.304***
	(0.0360)	(0.0315)	(0.0420)	(0.0838)	(0.0685)	(0.0991)
_Istate_22	0.0310	0.0357	0.0310	0.134***	0.135***	0.134**
	(0.0344)	(0.0335)	(0.0351)	(0.0509)	(0.0504)	(0.0549)
_Istate_23	0.0719**	0.0833***	0.0719**	0.0989*	0.0852*	0.0989
	(0.0315)	(0.0297)	(0.0342)	(0.0541)	(0.0500)	(0.0626)
_Istate_24	0.0437	0.0619*	0.0437	0.160**	0.142**	0.160*
	(0.0348)	(0.0318)	(0.0401)	(0.0697)	(0.0607)	(0.0847)
_Istate_25	-0.689***	-0.659***	-0.689***	-0.0571	-0.122	-0.0571
	(0.160)	(0.153)	(0.175)	(0.143)	(0.136)	(0.171)
_Istate_26	0.0749*	0.108***	0.0749	-0.239	-0.290**	-0.239
	(0.0455)	(0.0392)	(0.0580)	(0.155)	(0.143)	(0.193)
_Istate_27	0.0467	0.0695**	0.0467	0.325***	0.297***	0.325***
	(0.0374)	(0.0329)	(0.0445)	(0.0862)	(0.0737)	(0.107)
_Istate_28	0.0581	0.0909**	0.0581	0.350***	0.314***	0.350**
	(0.0442)	(0.0367)	(0.0556)	(0.117)	(0.0973)	(0.145)
_Istate_29	0.0803**	0.0937***	0.0803**	0.392***	0.380***	0.392***
	(0.0316)	(0.0294)	(0.0354)	(0.0602)	(0.0542)	(0.0703)
_Istate_30	0.0978**	0.132***	0.0978*	0.0667	0.0162	0.0667
	(0.0434)	(0.0384)	(0.0525)	(0.115)	(0.105)	(0.136)
_Istate_31	-0.983***	-0.893***	-0.983***	0.545*	0.563**	0.545
	(0.0807)	(0.0531)	(0.105)	(0.313)	(0.258)	(0.376)
_Istate_32	0.0596	0.0929**	0.0596	0.244**	0.201*	0.244
	(0.0460)	(0.0385)	(0.0586)	(0.124)	(0.107)	(0.156)
_Istate_33	0.0381	0.0433	0.0381	-0.0278	-0.0474	-0.0278
	(0.0305)	(0.0294)	(0.0323)	(0.0481)	(0.0475)	(0.0543)
_Istate_34	0.0614*	0.0758**	0.0614	0.324***	0.283**	0.324**
	(0.0344)	(0.0324)	(0.0399)	(0.121)	(0.120)	(0.135)
_Istate_35	0.0187	0.120***	0.0187	0.183	0.297	0.183
	(0.0764)	(0.0453)	(0.0983)	(0.295)	(0.233)	(0.349)
_Istate_12		0.147***			-0.323***	
		(0.0324)			(0.0929)	
_Istate_13		0.113***			0.149	
		(0.0311)			(0.0943)	
Constant	0.223	0.339*	0.223	-1.503***	-1.638***	-1.503***
	(0.211)	(0.196)	(0.258)	(0.360)	(0.351)	(0.533)
Observations	7,592	7,928	7,592	7,592	7,928	7,592
R-squared	0.113	0.135	0.113	0.341	0.351	0.341
Underidentification test (KP)	8.46	12.69	18.087	8.46	12.69	18.087
p-value	0.0036	0.0004	0	0.0036	0.0004	0
Weak identification test (KP)	13.82	18.11	18.021	13.82	18.11	18.021

Endogeneity test	3.43	1.871	0.688	1.871	1.7	0.951
p-value	0.064	0.1713	0.4069	0.1714	0.1923	0.3294

VARIABLES	lnwaterpax full model robust errors	lnwaterpax no density and rail robust errors	lnwaterpax full model bootstrap errors	lnhospbeds full model robust errors	lnhospbeds no density and rail robust errors	lnhospbeds full model bootstrap errors
gov	1.005	0.862	1.005	-0.0330	0.0366	-0.0330
	(0.784)	(0.566)	(0.980)	(0.129)	(0.0980)	(0.166)
lnpop	-1.184***	-1.144***	-1.184**	0.00718	-0.00438	0.00718
	(0.409)	(0.337)	(0.523)	(0.0568)	(0.0433)	(0.0837)
lndensity	0.0751		0.0751	0.0431		0.0431
	(0.179)		(0.199)	(0.0275)		(0.0316)
lnpropagrocult	-0.153	-0.0503	-0.153	0.0200	-0.0162	0.0200
	(0.373)	(0.283)	(0.465)	(0.0613)	(0.0492)	(0.0782)
ln5lakhcity	-0.0324	-0.0146	-0.0324	0.00604	0.00292	0.00604
	(0.0389)	(0.0335)	(0.0457)	(0.00607)	(0.00534)	(0.00730)
ln1lakhcity	0.00441	-0.00614	0.00441	-0.00279	-0.00174	-0.00279
	(0.0148)	(0.0134)	(0.0169)	(0.00218)	(0.00179)	(0.00258)
lnrlydist	-0.00138		-0.00138	0.00419***		0.00419***
	(0.00665)		(0.00704)	(0.00111)		(0.00123)
lnpopsq	0.0464***	0.0451***	0.0464***	1.60e-05	3.18e-05	1.60e-05
	(0.0127)	(0.0117)	(0.0159)	(0.00152)	(0.00125)	(0.00240)
lndensitysq	-0.00897		-0.00897	-0.00262		-0.00262
	(0.0111)		(0.0123)	(0.00168)		(0.00192)
lnpropagrcultsq	0.00103	0.0177	0.00103	0.00812	0.000849	0.00812
	(0.0689)	(0.0519)	(0.0857)	(0.0114)	(0.00912)	(0.0144)
ln5lakhcitysq	0.00621*	0.00381	0.00621	0.000466	0.00102**	0.000466
	(0.00359)	(0.00347)	(0.00391)	(0.000499)	(0.000471)	(0.000529)
ln1lakhcitysq	6.68e-05	0.00265	6.68e-05	0.00351***	0.00349***	0.00351***
	(0.00519)	(0.00570)	(0.00590)	(0.000798)	(0.000921)	(0.000971)
lnrlydistsq	-0.00212		-0.00212	0.00412***		0.00412**
	(0.00896)		(0.0108)	(0.00146)		(0.00185)
_Istate_2	-0.0401	0.0196	-0.0401	0.445***	0.430***	0.445***
	(0.313)	(0.269)	(0.379)	(0.0737)	(0.0695)	(0.0826)
_Istate_3	0.246	0.183	0.246	-0.0630**	-0.0666***	-0.0630**
	(0.238)	(0.229)	(0.247)	(0.0275)	(0.0243)	(0.0316)
_Istate_4	-1.007*	-1.198**	-1.007	-0.126	-0.0957	-0.126
	(0.608)	(0.540)	(0.707)	(0.0806)	(0.0635)	(0.103)
_Istate_5	-0.587***	-0.607***	-0.587***	-0.0487	-0.0467	-0.0487
	(0.195)	(0.190)	(0.208)	(0.0303)	(0.0288)	(0.0341)
_Istate_6	-0.524*	-0.567**	-0.524	-0.0871**	-0.0798**	-0.0871
	(0.298)	(0.256)	(0.346)	(0.0438)	(0.0361)	(0.0558)
_Istate_7	-0.839	-1.009**	-0.839	-0.109	-0.0830	-0.109
	(0.578)	(0.466)	(0.699)	(0.0925)	(0.0757)	(0.118)
_Istate_8	-0.319	-0.336	-0.319	0.0427	0.0528	0.0427
	(0.311)	(0.251)	(0.371)	(0.0501)	(0.0405)	(0.0633)
_Istate_9	-0.295	-0.347*	-0.295	-0.0749***	-0.0883***	-0.0749**
	(0.180)	(0.183)	(0.191)	(0.0259)	(0.0252)	(0.0299)
_Istate_10	-1.317***	-1.396***	-1.317***	-0.108**	-0.108**	-0.108*
	(0.306)	(0.270)	(0.364)	(0.0483)	(0.0424)	(0.0617)
_Istate_11	0.0227	0.00152	0.0227	0.110	0.132	0.110
	(0.267)	(0.282)	(0.336)	(0.162)	(0.158)	(0.178)
o._Istate_12	-			-		
o._Istate_13	-			-		
_Istate_14	1.276***	1.168***	1.276**	-0.229***	-0.101**	-0.229***
	(0.464)	(0.364)	(0.511)	(0.0545)	(0.0426)	(0.0694)
_Istate_15	-0.303	-0.277	-0.303	-0.226***	-0.180***	-0.226***
	(0.676)	(0.613)	(0.700)	(0.0432)	(0.0263)	(0.0515)
_Istate_16	0.855**	0.705**	0.855**	-0.0973	-0.0954*	-0.0973
	(0.356)	(0.319)	(0.428)	(0.0618)	(0.0530)	(0.0755)
_Istate_17	-1.328***	-1.415***	-1.328**	-0.124	-0.0429	-0.124
	(0.446)	(0.282)	(0.535)	(0.0811)	(0.0569)	(0.0981)
_Istate_18	0.0902	0.0551	0.0902	-0.0688	-0.0672*	-0.0688
	(0.270)	(0.238)	(0.316)	(0.0440)	(0.0385)	(0.0536)
_Istate_19	-0.958**	-1.074***	-0.958**	-0.0790	-0.0760	-0.0790
	(0.396)	(0.335)	(0.480)	(0.0650)	(0.0555)	(0.0822)
_Istate_20	-0.0966	-0.167	-0.0966	-0.0583	-0.0429	-0.0583
	(0.433)	(0.360)	(0.522)	(0.0705)	(0.0598)	(0.0903)
_Istate_21	-0.590*	-0.647**	-0.590	-0.0361	-0.0263	-0.0361
	(0.357)	(0.286)	(0.414)	(0.0546)	(0.0423)	(0.0685)
_Istate_22	-0.594***	-0.560***	-0.594***	0.00371	-0.00200	0.00371

	(0.190)	(0.190)	(0.191)	(0.0263)	(0.0248)	(0.0278)
_Istate_23	-0.570***	-0.594***	-0.570**	-0.152***	-0.151***	-0.152***
	(0.214)	(0.195)	(0.235)	(0.0320)	(0.0276)	(0.0389)
_Istate_24	0.375	0.366	0.375	-0.0684	-0.0656*	-0.0684
	(0.279)	(0.236)	(0.332)	(0.0435)	(0.0358)	(0.0552)
_Istate_25	-0.0238	-0.0904	-0.0238	-0.168*	-0.157*	-0.168
	(0.643)	(0.599)	(0.758)	(0.0902)	(0.0811)	(0.112)
_Istate_26	-1.118**	-1.183***	-1.118*	-0.187**	-0.166**	-0.187*
	(0.516)	(0.441)	(0.631)	(0.0858)	(0.0733)	(0.110)
_Istate_27	0.0114	-0.0450	0.0114	-0.0734	-0.0592	-0.0734
	(0.350)	(0.286)	(0.418)	(0.0559)	(0.0460)	(0.0713)
_Istate_28	0.944**	0.873**	0.944	-0.125	-0.101	-0.125
	(0.476)	(0.376)	(0.584)	(0.0771)	(0.0625)	(0.100)
_Istate_29	0.590**	0.562***	0.590**	0.00660	0.0136	0.00660
	(0.235)	(0.207)	(0.269)	(0.0379)	(0.0324)	(0.0456)
_Istate_30	0.848*	0.859**	0.848	-0.181**	-0.182**	-0.181*
	(0.441)	(0.381)	(0.527)	(0.0829)	(0.0757)	(0.101)
_Istate_31	-1.486	-1.650**	-1.486	-0.363**	-0.198*	-0.363*
	(1.008)	(0.663)	(1.245)	(0.163)	(0.116)	(0.210)
_Istate_32	-0.505	-0.548	-0.505	-0.0922	-0.0721	-0.0922
	(0.511)	(0.416)	(0.629)	(0.0829)	(0.0698)	(0.108)
_Istate_33	-0.151	-0.153	-0.151	-0.111***	-0.120***	-0.111***
	(0.185)	(0.183)	(0.201)	(0.0273)	(0.0258)	(0.0321)
_Istate_34	-0.388	-0.426	-0.388	0.0372	0.0268	0.0372
	(0.311)	(0.298)	(0.379)	(0.0758)	(0.0728)	(0.0880)
_Istate_35	2.321	2.207	2.321	-0.259	-0.0563	-0.259
	(2.041)	(1.888)	(2.330)	(0.167)	(0.117)	(0.214)
_Istate_12		5.376***			0.0592	
		(0.247)			(0.0566)	
_Istate_13		-1.285***			0.00916	
		(0.411)			(0.0844)	
Constant	3.439*	3.385*	3.439	-4.780***	-4.526***	-4.780***
	(1.974)	(1.773)	(2.511)	(0.228)	(0.236)	(0.367)
Observations	7,592	7,928	7,592	7,592	7,928	7,592
R-squared	0.243	0.295	0.243	0.145	0.167	0.145
Underidentification test (KP)	8.46	12.69	18.087	8.46	12.69	18.087
p-value	0.0036	0.0004	0	0.0036	0.0004	0
Weak identification test (KP)	13.82	18.11	18.021	13.82	18.11	18.021
Endogeneity test	0.055	0.003	0.045	0.937	0.47	1.051
p-value	0.8153	0.9588	0.8311	0.333	0.493	0.3053

Standard errors in parantheses
$***p < 0.01, **p < 0.05, *p < 0.1$
The instrument is statelaweffect

Table 28: Governance and low spillover development indicators with instrumental variable

VARIABLES	lnlit full model robust errors	lnlit no density and rail robust errors	lnlit full model bootstrap errors	lnHHbanking full model robust errors	lnHHbanking no density and rail robust errors	lnHHbanking full model bootstrap errors
gov	-0.0230	-0.00630	-0.0230	-0.484***	-0.348***	-0.484*
	(0.0355)	(0.0239)	(0.0557)	(0.148)	(0.0827)	(0.248)
lnpop	-0.0209	-0.0172	-0.0209	0.254***	0.189***	0.254*
	(0.0205)	(0.0158)	(0.0335)	(0.0797)	(0.0487)	(0.132)
lndensity	0.0344***		0.0344**	0.0113		0.0113
	(0.0131)		(0.0145)	(0.0405)		(0.0506)
lnpropagrocult	-0.0900***	-0.0977***	-0.0900***	0.0802	0.0294	0.0802
	(0.0179)	(0.0132)	(0.0270)	(0.0717)	(0.0434)	(0.119)
ln5lakhcity	0.00171	0.00159	0.00171	0.0141**	0.0113**	0.0141
	(0.00191)	(0.00166)	(0.00251)	(0.00646)	(0.00489)	(0.0101)
ln1lakhcity	-0.00240***	-0.00290***	-0.00240***	-0.000275	-0.00539**	-0.000275
	(0.000713)	(0.000596)	(0.000910)	(0.00292)	(0.00220)	(0.00399)
lnrlydist	-0.000488		-0.000488	-0.000124		-0.000124
	(0.000497)		(0.000546)	(0.00160)		(0.00187)
lnpopsq	0.00110	0.000899	0.00110	-0.00695***	-0.00513***	-0.00695*
	(0.000683)	(0.000583)	(0.00107)	(0.00256)	(0.00175)	(0.00393)
lndensitysq	-0.00223***		-0.00223**	-0.00287		-0.00287
	(0.000824)		(0.000912)	(0.00251)		(0.00310)
lnpropagrcultsq	-0.0110***	-0.0127***	-0.0110**	0.0296**	0.0190**	0.0296
	(0.00336)	(0.00248)	(0.00500)	(0.0133)	(0.00810)	(0.0219)
ln5lakhcitysq	-0.000876***	-0.00103***	-0.000876***	0.000271	0.000268	0.000271

	(0.000259)	(0.000252)	(0.000271)	(0.000764)	(0.000701)	(0.000872)
ln1lakhcitysq	0.000490*	0.000702**	0.000490	0.00459***	0.00604***	0.00459***
	(0.000279)	(0.000281)	(0.000356)	(0.00107)	(0.000961)	(0.00161)
lnrlydistsq	0.00116**		0.00116*	0.00696***		0.00696**
	(0.000464)		(0.000650)	(0.00175)		(0.00281)
_Istate_2	0.142***	0.143***	0.142***	0.217***	0.190***	0.217**
	(0.0162)	(0.0141)	(0.0224)	(0.0616)	(0.0419)	(0.0928)
_Istate_3	0.0267**	0.0307***	0.0267**	-0.216***	-0.191***	-0.216***
	(0.0119)	(0.0116)	(0.0132)	(0.0374)	(0.0295)	(0.0483)
_Istate_4	0.0115	0.0179	0.0115	-0.431***	-0.397***	-0.431**
	(0.0363)	(0.0319)	(0.0472)	(0.142)	(0.108)	(0.191)
_Istate_5	0.0598***	0.0615***	0.0598***	-0.0658	-0.0586*	-0.0658
	(0.0148)	(0.0148)	(0.0158)	(0.0413)	(0.0351)	(0.0509)
_Istate_6	0.0240	0.0298**	0.0240	-0.277***	-0.237***	-0.277***
	(0.0157)	(0.0138)	(0.0206)	(0.0559)	(0.0390)	(0.0842)
_Istate_7	0.0264	0.0264	0.0264	-0.445***	-0.414***	-0.445**
	(0.0280)	(0.0224)	(0.0410)	(0.109)	(0.0705)	(0.179)
_Istate_8	-0.0117	-0.00411	-0.0117	-0.365***	-0.303***	-0.365***
	(0.0164)	(0.0139)	(0.0221)	(0.0604)	(0.0394)	(0.0959)
_Istate_9	-0.0661***	-0.0688***	-0.0661***	-0.207***	-0.231***	-0.207***
	(0.0121)	(0.0120)	(0.0131)	(0.0346)	(0.0286)	(0.0445)
_Istate_10	-0.0256	-0.0220	-0.0256	-0.414***	-0.401***	-0.414***
	(0.0170)	(0.0152)	(0.0225)	(0.0619)	(0.0449)	(0.0951)
_Istate_11	0.103***	0.112***	0.103***	-0.134*	-0.129**	-0.134
	(0.0134)	(0.0140)	(0.0170)	(0.0724)	(0.0586)	(0.0956)
o._Istate_12	-			-		
o._Istate_13	-			-		
_Istate_14	0.0863***	0.118***	0.0863***	-1.221***	-1.015***	-1.221***
	(0.0209)	(0.0161)	(0.0259)	(0.0946)	(0.0759)	(0.124)
_Istate_15	0.299***	0.304***	0.299***	-0.231***	-0.155**	-0.231**
	(0.0160)	(0.0142)	(0.0195)	(0.0791)	(0.0737)	(0.0953)
_Istate_16	0.180***	0.187***	0.180***	-0.137*	-0.0988*	-0.137
	(0.0189)	(0.0164)	(0.0253)	(0.0758)	(0.0531)	(0.116)
_Istate_17	0.112***	0.130***	0.112***	-0.548***	-0.421***	-0.548***
	(0.0242)	(0.0175)	(0.0331)	(0.0947)	(0.0548)	(0.148)
_Istate_18	0.0781***	0.0857***	0.0781***	-0.359***	-0.332***	-0.359***
	(0.0159)	(0.0145)	(0.0198)	(0.0577)	(0.0436)	(0.0834)
_Istate_19	0.00866	0.0119	0.00866	-0.675***	-0.649***	-0.675***
	(0.0197)	(0.0166)	(0.0281)	(0.0753)	(0.0510)	(0.121)
_Istate_20	-0.0161	-0.0102	-0.0161	-0.390***	-0.344***	-0.390***
	(0.0223)	(0.0188)	(0.0315)	(0.0815)	(0.0540)	(0.131)
_Istate_21	0.0484***	0.0503***	0.0484**	-0.506***	-0.439***	-0.506***
	(0.0183)	(0.0153)	(0.0234)	(0.0660)	(0.0428)	(0.102)
_Istate_22	0.0811***	0.0820***	0.0811***	-0.400***	-0.376***	-0.400***
	(0.0114)	(0.0114)	(0.0121)	(0.0371)	(0.0316)	(0.0438)
_Istate_23	0.0535***	0.0551***	0.0535***	-0.354***	-0.332***	-0.354***
	(0.0124)	(0.0117)	(0.0150)	(0.0415)	(0.0308)	(0.0605)
_Istate_24	0.0684***	0.0739***	0.0684***	-0.381***	-0.329***	-0.381***
	(0.0150)	(0.0131)	(0.0202)	(0.0549)	(0.0376)	(0.0841)
_Istate_25	0.0882***	0.0918***	0.0882**	-0.596***	-0.567***	-0.596***
	(0.0263)	(0.0225)	(0.0371)	(0.156)	(0.131)	(0.218)
_Istate_26	0.0940***	0.0997***	0.0940**	-0.545***	-0.498***	-0.545***
	(0.0263)	(0.0214)	(0.0378)	(0.124)	(0.0924)	(0.182)
_Istate_27	0.116***	0.121***	0.116***	-0.354***	-0.309***	-0.354***
	(0.0177)	(0.0148)	(0.0249)	(0.0673)	(0.0442)	(0.108)
_Istate_28	-0.00761	0.000349	-0.00761	-0.613***	-0.541***	-0.613***
	(0.0230)	(0.0180)	(0.0343)	(0.0910)	(0.0567)	(0.148)
_Istate_29	0.0650***	0.0677***	0.0650***	-0.329***	-0.301***	-0.329***
	(0.0135)	(0.0123)	(0.0169)	(0.0469)	(0.0341)	(0.0679)
_Istate_30	0.116***	0.121***	0.116***	-0.262***	-0.208***	-0.262*
	(0.0214)	(0.0182)	(0.0303)	(0.0857)	(0.0587)	(0.137)
_Istate_31	0.0946**	0.138***	0.0946	-0.754***	-0.490***	-0.754**
	(0.0478)	(0.0305)	(0.0712)	(0.189)	(0.0955)	(0.314)
_Istate_32	0.171***	0.177***	0.171***	-0.398***	-0.324***	-0.398**
	(0.0243)	(0.0192)	(0.0365)	(0.0966)	(0.0613)	(0.161)
_Istate_33	0.0841***	0.0830***	0.0841***	-0.427***	-0.420***	-0.427***
	(0.0116)	(0.0114)	(0.0135)	(0.0368)	(0.0295)	(0.0503)
_Istate_34	0.106***	0.104***	0.106***	-0.371***	-0.376***	-0.371***
	(0.0203)	(0.0190)	(0.0262)	(0.0875)	(0.0706)	(0.115)
_Istate_35	0.0500	0.106***	0.0500	-0.575***	-0.230***	-0.575**
	(0.0442)	(0.0269)	(0.0633)	(0.168)	(0.0789)	(0.268)
_Istate_12		0.0484***			-0.0531	

		(0.0165)			(0.0400)	
_Istate_13		0.174***			-0.381***	
		(0.0160)			(0.0638)	
Constant	-0.398***	-0.289***	-0.398**	-1.759***	-1.451***	-1.759***
	(0.110)	(0.0836)	(0.169)	(0.369)	(0.257)	(0.604)
Observations	7,592	7,928	7,592	7,587	7,923	7,587
R-squared	0.455	0.448	0.455	-0.001	0.121	-0.001
Underidentification test (KP)	8.46	12.69	18.087	8.43	12.67	18.025
p-value	0.0036	0.0004	0	0.0037	0.0004	0
Weak identification test (KP)	13.82	18.11	18.021	13.79	18.08	17.958
Endogeneity test	1.553	1.423	0.389	16.105	17.356	8.222
p-value	0.2127	0.2328	0.5326	0.0001	0	0.0041

VARIABLES	lnHHwater full model robust errors	lnHHwater no density and rail robust errors	lnHHwater full model bootstrap errors	lnHHelectr full model robust errors	lnHHelectr no density and rail robust errors	lnHHelectr full model bootstrap errors
gov	-0.479*	-0.273	-0.479	-0.187	-0.0581	-0.187
	(0.275)	(0.179)	(0.411)	(0.216)	(0.151)	(0.258)
lnpop	0.641***	0.624***	0.641**	0.165	0.101	0.165
	(0.190)	(0.151)	(0.251)	(0.187)	(0.163)	(0.198)
lndensity	-0.0138		-0.0138	-0.0863**		-0.0863**
	(0.0669)		(0.0857)	(0.0365)		(0.0416)
lnpropagrocult	-0.0227	-0.113	-0.0227	-0.156	-0.207***	-0.156
	(0.132)	(0.0919)	(0.195)	(0.101)	(0.0733)	(0.122)
ln5lakhcity	0.0123	0.00809	0.0123	0.00645	0.00400	0.00645
	(0.0113)	(0.00884)	(0.0165)	(0.00695)	(0.00527)	(0.00899)
ln1lakhcity	-0.00904*	-0.0175***	-0.00904	-0.000978	-0.00506***	-0.000978
	(0.00528)	(0.00451)	(0.00663)	(0.00277)	(0.00186)	(0.00356)
lnrlydist	-0.00402		-0.00402	-0.00150		-0.00150
	(0.00286)		(0.00325)	(0.00125)		(0.00146)
lnpopsq	-0.0222***	-0.0226***	-0.0222***	-0.00528	-0.00327	-0.00528
	(0.00657)	(0.00561)	(0.00805)	(0.00675)	(0.00618)	(0.00691)
lndensitysq	0.00220		0.00220	0.00543**		0.00543**
	(0.00412)		(0.00523)	(0.00224)		(0.00253)
lnpropagrcultsq	0.0111	-0.00211	0.0111	-0.0225	-0.0313**	-0.0225
	(0.0246)	(0.0170)	(0.0358)	(0.0185)	(0.0131)	(0.0224)
ln5lakhcitysq	0.00397***	0.00526***	0.00397***	-0.00351***	-0.00397***	-0.00351***
	(0.00139)	(0.00133)	(0.00152)	(0.000755)	(0.000777)	(0.000824)
ln1lakhcitysq	0.00102	-1.20e-05	0.00102	-0.000870	-0.00107	-0.000870
	(0.00196)	(0.00198)	(0.00268)	(0.00127)	(0.00136)	(0.00150)
lnrlydistsq	0.00472		0.00472	0.00279		0.00279
	(0.00321)		(0.00457)	(0.00232)		(0.00277)
_Istate_2	0.414***	0.351***	0.414***	0.101	0.0645	0.101
	(0.117)	(0.0919)	(0.160)	(0.0777)	(0.0594)	(0.0894)
_Istate_3	0.181***	0.206***	0.181**	-0.0669**	-0.0504**	-0.0669*
	(0.0672)	(0.0571)	(0.0842)	(0.0305)	(0.0227)	(0.0363)
_Istate_4	-0.127	0.0160	-0.127	-0.228*	-0.149*	-0.228
	(0.183)	(0.133)	(0.253)	(0.118)	(0.0783)	(0.143)
_Istate_5	0.151**	0.163***	0.151*	-0.0621**	-0.0468**	-0.0621*
	(0.0710)	(0.0608)	(0.0872)	(0.0254)	(0.0186)	(0.0334)
_Istate_6	-0.0821	-0.0215	-0.0821	-0.115*	-0.0743	-0.115
	(0.107)	(0.0837)	(0.144)	(0.0697)	(0.0517)	(0.0827)
_Istate_7	-0.557***	-0.430***	-0.557*	-0.239	-0.160	-0.239
	(0.207)	(0.154)	(0.299)	(0.154)	(0.116)	(0.182)
_Istate_8	-0.228**	-0.163*	-0.228	-0.132	-0.0796	-0.132
	(0.116)	(0.0861)	(0.164)	(0.0811)	(0.0588)	(0.0954)
_Istate_9	-0.0504	-0.0211	-0.0504	-0.470***	-0.459***	-0.470***
	(0.0663)	(0.0608)	(0.0823)	(0.0318)	(0.0315)	(0.0361)
_Istate_10	-0.140	-0.0644	-0.140	-0.793***	-0.747***	-0.793***
	(0.112)	(0.0897)	(0.160)	(0.0927)	(0.0789)	(0.106)
_Istate_11	0.0696	0.0464	0.0696	0.0851**	0.0955***	0.0851
	(0.109)	(0.0990)	(0.150)	(0.0394)	(0.0340)	(0.0607)
o._Istate_12	-			-		
o._Istate_13	-			-		
_Istate_14	-1.774***	-1.600***	-1.774***	-0.150*	-0.0667	-0.150
	(0.199)	(0.157)	(0.238)	(0.0881)	(0.0505)	(0.104)
_Istate_15	-0.609***	-0.571***	-0.609***	0.165***	0.214***	0.165**
	(0.159)	(0.129)	(0.189)	(0.0565)	(0.0293)	(0.0690)
_Istate_16	-0.489***	-0.461***	-0.489**	-0.123	-0.0725	-0.123
	(0.149)	(0.118)	(0.197)	(0.0963)	(0.0759)	(0.115)
_Istate_17	-1.088***	-1.003***	-1.088***	-0.156	-0.0802	-0.156

	(0.237)	(0.190)	(0.291)	(0.119)	(0.0667)	(0.140)
_Istate_18	-0.162	-0.113	-0.162	-0.331***	-0.291***	-0.331***
	(0.102)	(0.0833)	(0.138)	(0.0672)	(0.0535)	(0.0809)
_Istate_19	-1.137***	-1.060***	-1.137***	-0.443***	-0.391***	-0.443***
	(0.145)	(0.112)	(0.205)	(0.102)	(0.0800)	(0.122)
_Istate_20	-0.714***	-0.617***	-0.714***	-0.304***	-0.243***	-0.304**
	(0.156)	(0.119)	(0.220)	(0.114)	(0.0879)	(0.136)
_Istate_21	-0.710***	-0.656***	-0.710***	-0.339***	-0.280***	-0.339***
	(0.125)	(0.0904)	(0.173)	(0.0837)	(0.0581)	(0.0993)
_Istate_22	-0.438***	-0.445***	-0.438***	0.0204	0.0298*	0.0204
	(0.0669)	(0.0602)	(0.0784)	(0.0189)	(0.0155)	(0.0228)
_Istate_23	-0.497***	-0.465***	-0.497***	-0.0871*	-0.0596	-0.0871
	(0.0815)	(0.0676)	(0.107)	(0.0468)	(0.0366)	(0.0550)
_Istate_24	-0.0812	-0.0272	-0.0812	-0.104	-0.0617	-0.104
	(0.106)	(0.0810)	(0.146)	(0.0730)	(0.0553)	(0.0842)
_Istate_25	-0.279	-0.218	-0.279	-0.104	-0.0471	-0.104
	(0.195)	(0.153)	(0.290)	(0.136)	(0.111)	(0.162)
_Istate_26	-0.336*	-0.248*	-0.336	-0.123	-0.0563	-0.123
	(0.180)	(0.137)	(0.263)	(0.136)	(0.107)	(0.165)
_Istate_27	-0.186	-0.109	-0.186	-0.127	-0.0758	-0.127
	(0.126)	(0.0940)	(0.181)	(0.0908)	(0.0677)	(0.108)
_Istate_28	-0.684***	-0.581***	-0.684***	-0.112	-0.0397	-0.112
	(0.174)	(0.126)	(0.252)	(0.132)	(0.0982)	(0.155)
_Istate_29	-0.334***	-0.297***	-0.334***	-0.0923*	-0.0628	-0.0923
	(0.0894)	(0.0716)	(0.120)	(0.0550)	(0.0417)	(0.0647)
_Istate_30	-0.0977	-0.0503	-0.0977	-0.0487	0.0194	-0.0487
	(0.159)	(0.125)	(0.227)	(0.116)	(0.0927)	(0.138)
_Istate_31	-0.396	-0.166	-0.396	-0.102	0.0671	-0.102
	(0.364)	(0.223)	(0.539)	(0.264)	(0.157)	(0.317)
_Istate_32	-0.183	-0.0923	-0.183	-0.180	-0.110	-0.180
	(0.184)	(0.135)	(0.269)	(0.143)	(0.110)	(0.168)
_Istate_33	-0.724***	-0.716***	-0.724***	-0.0517	-0.0391	-0.0517
	(0.0729)	(0.0651)	(0.0923)	(0.0360)	(0.0324)	(0.0425)
_Istate_34	-0.172	-0.171*	-0.172	-0.0993	-0.0754	-0.0993
	(0.119)	(0.0985)	(0.166)	(0.0765)	(0.0671)	(0.0962)
_Istate_35	-0.528*	-0.315**	-0.528	-0.176	0.00766	-0.176
	(0.316)	(0.153)	(0.450)	(0.232)	(0.108)	(0.278)
_Istate_12		0.0575			0.106***	
		(0.0805)			(0.0280)	
_Istate_13		-0.697***			0.0852*	
		(0.177)			(0.0456)	
Constant	-4.408***	-4.376***	-4.408***	-0.818	-0.819	-0.818
	(0.909)	(0.788)	(1.172)	(0.897)	(0.845)	(0.950)
Observations	7,587	7,923	7,587	7,587	7,923	7,587
R-squared	0.294	0.343	0.294	0.441	0.470	0.441
Underidentification test (KP)	8.43	12.67	18.025	8.43	12.67	18.025
p-value	0.0037	0.0004	0	0.0037	0.0004	0
Weak identification test (KP)	13.79	18.08	17.958	13.79	18.08	17.958
Endogeneity test	6.195	4.787	2.598	0.823	0.258	1.512
p-value	0.0128	0.0287	0.107	0.3644	0.6117	0.2188

VARIABLES	lnHHlatr full model robust errors	lnHHlatr no density and rail robust errors	lnHHlatr full model bootstrap errors
gov	0.151	0.155	0.151
	(0.235)	(0.163)	(0.282)
lnpop	0.142	0.221	0.142
	(0.194)	(0.161)	(0.206)
lndensity	0.122**		0.122**
	(0.0497)		(0.0550)
lnpropagrocult	-0.512***	-0.532***	-0.512***
	(0.111)	(0.0804)	(0.135)
ln5lakhcity	-0.00726	-0.00686	-0.00726
	(0.00810)	(0.00637)	(0.0102)
ln1lakhcity	-0.00424	-0.00416*	-0.00424
	(0.00311)	(0.00224)	(0.00390)
lnrlydist	0.000546		0.000546
	(0.00175)		(0.00191)
lnpopsq	-0.00636	-0.00935	-0.00636
	(0.00692)	(0.00603)	(0.00704)
lndensitysq	-0.00429		-0.00429
	(0.00304)		(0.00334)
lnpropagrcultsq	-0.0813***	-0.0831***	-0.0813***

	(0.0204)	(0.0146)	(0.0248)
ln5lakhcitysq	-0.00267***	-0.00291***	-0.00267***
	(0.000878)	(0.000881)	(0.000924)
ln1lakhcitysq	-0.00275*	-0.00325**	-0.00275
	(0.00147)	(0.00156)	(0.00168)
lnrlydistsq	-0.000333		-0.000333
	(0.00258)		(0.00307)
_Istate_2	0.167*	0.169**	0.167
	(0.0900)	(0.0733)	(0.104)
_Istate_3	0.103**	0.0921**	0.103**
	(0.0453)	(0.0408)	(0.0494)
_Istate_4	0.0824	0.141	0.0824
	(0.135)	(0.0996)	(0.161)
_Istate_5	0.175***	0.178***	0.175***
	(0.0419)	(0.0391)	(0.0461)
_Istate_6	0.103	0.105	0.103
	(0.0813)	(0.0640)	(0.0926)
_Istate_7	0.0701	0.0985	0.0701
	(0.170)	(0.131)	(0.200)
_Istate_8	-0.0306	-0.0515	-0.0306
	(0.0937)	(0.0717)	(0.107)
_Istate_9	-0.115**	-0.0872*	-0.115**
	(0.0448)	(0.0452)	(0.0484)
_Istate_10	-0.185**	-0.156**	-0.185*
	(0.0923)	(0.0777)	(0.106)
_Istate_11	0.205***	0.247***	0.205**
	(0.0743)	(0.0681)	(0.0890)
o._Istate_12	-		
o._Istate_13	-		
_Istate_14	0.465***	0.511***	0.465***
	(0.102)	(0.0627)	(0.117)
_Istate_15	0.813***	0.728***	0.813***
	(0.0715)	(0.0550)	(0.0821)
_Istate_16	0.419***	0.405***	0.419***
	(0.107)	(0.0868)	(0.125)
_Istate_17	0.285**	0.273***	0.285*
	(0.136)	(0.0828)	(0.158)
_Istate_18	0.242***	0.254***	0.242***
	(0.0767)	(0.0636)	(0.0888)
_Istate_19	-0.0266	0.000660	-0.0266
	(0.114)	(0.0917)	(0.134)
_Istate_20	-0.381***	-0.375***	-0.381**
	(0.130)	(0.103)	(0.151)
_Istate_21	-0.319***	-0.361***	-0.319***
	(0.0994)	(0.0746)	(0.113)
_Istate_22	-0.318***	-0.349***	-0.318***
	(0.0399)	(0.0397)	(0.0424)
_Istate_23	-0.134**	-0.142***	-0.134**
	(0.0593)	(0.0508)	(0.0657)
_Istate_24	0.0655	0.0394	0.0655
	(0.0843)	(0.0669)	(0.0933)
_Istate_25	0.151	0.154	0.151
	(0.150)	(0.126)	(0.183)
_Istate_26	0.0709	0.0758	0.0709
	(0.153)	(0.123)	(0.184)
_Istate_27	-0.0432	-0.0438	-0.0432
	(0.103)	(0.0798)	(0.120)
_Istate_28	0.0862	0.0772	0.0862
	(0.145)	(0.109)	(0.169)
_Istate_29	-0.0624	-0.0694	-0.0624
	(0.0694)	(0.0575)	(0.0770)
_Istate_30	0.276**	0.238**	0.276*
	(0.130)	(0.107)	(0.154)
_Istate_31	0.573**	0.573***	0.573
	(0.291)	(0.175)	(0.349)
_Istate_32	0.300*	0.273**	0.300
	(0.157)	(0.121)	(0.183)
_Istate_33	-0.208***	-0.223***	-0.208***
	(0.0500)	(0.0475)	(0.0544)
_Istate_34	-0.0634	-0.0581	-0.0634
	(0.0944)	(0.0875)	(0.112)
_Istate_35	0.206	0.184	0.206

	(0.259)	(0.135)	(0.311)
_Istate_12		0.282***	
		(0.0487)	
_Istate_13		0.425***	
		(0.0636)	
Constant	-2.415**	-2.238***	-2.415**
	(0.955)	(0.834)	(1.011)
Observations	7,587	7,923	7,587
R-squared	0.431	0.417	0.431
Underidentification test (KP)	8.43	12.67	18.025
p-value	0.0037	0.0004	0
Weak identification test (KP)	13.79	18.08	17.958
Endogeneity test	0.228	0.527	0.24
p-value	0.6327	0.468	0.6239

Standard errors in parantheses
$***p < 0.01, **p < 0.05, *p < 0.1$
The instrument is statelaweffect

Table 29: Alternative instrument first stage- governance and state laws on ULB criteria

VARIABLES	gov full model robust errors	gov no density and rail robust errors	gov full model bootstrap errors
statelaweffectpropurb2	-0.404***	-0.554***	-0.404***
	(0.107)	(0.134)	(0.138)
lnpop	0.321***	0.255*	0.321***
	(0.119)	(0.137)	(0.122)
lndensity	-0.146**		-0.146**
	(0.0574)		(0.0576)
lnpropagrocult	0.471***	0.492***	0.471***
	(0.0182)	(0.0171)	(0.0187)
ln5lakhcity	0.0393***	0.0434***	0.0393***
	(0.00662)	(0.00712)	(0.00663)
ln1lakhcity	0.0134***	0.0123***	0.0134***
	(0.00278)	(0.00266)	(0.00276)
lnrlydist	0.00333*		0.00333*
	(0.00180)		(0.00189)
lnpopsq	-0.00391	0.000374	-0.00391
	(0.00574)	(0.00665)	(0.00590)
lndensitysq	0.00868**		0.00868**
	(0.00361)		(0.00362)
lnpropagrcultsq	0.0861***	0.0889***	0.0861***
	(0.00412)	(0.00393)	(0.00423)
ln5lakhcitysq	-0.00109	-0.000917	-0.00109
	(0.00101)	(0.00105)	(0.00100)
ln1lakhcitysq	0.00512***	0.00822***	0.00512***
	(0.000815)	(0.000785)	(0.000815)
lnrlydistsq	0.0109***		0.0109***
	(0.000770)		(0.000803)
_Istate_2	0.317***	0.332***	0.317***
	(0.0648)	(0.0631)	(0.0645)
_Istate_3	-0.107**	-0.108**	-0.107**
	(0.0501)	(0.0495)	(0.0502)
_Istate_4	-0.492***	-0.452***	-0.492***
	(0.0866)	(0.0693)	(0.0953)
_Istate_5	-0.0885	-0.0878	-0.0885
	(0.0580)	(0.0608)	(0.0593)
_Istate_6	-0.291***	-0.301***	-0.291***
	(0.0510)	(0.0508)	(0.0507)
_Istate_7	-0.686***	-0.733***	-0.686***
	(0.0517)	(0.0521)	(0.0525)
_Istate_8	-0.339***	-0.342***	-0.339***
	(0.0495)	(0.0487)	(0.0491)
_Istate_9	-0.101**	-0.151***	-0.101**
	(0.0454)	(0.0446)	(0.0452)
_Istate_10	-0.317***	-0.361***	-0.317***
	(0.0488)	(0.0481)	(0.0480)
_Istate_11	0.242*	0.386***	0.242*
	(0.136)	(0.141)	(0.146)
o._Istate_12	-		-

o._Istate_13	-		-
_Istate_14	-0.360***	-0.236***	-0.360***
	(0.0692)	(0.0687)	(0.0718)
_Istate_15	-0.216***	-0.0554	-0.216***
	(0.0623)	(0.0571)	(0.0643)
_Istate_16	-0.362***	-0.393***	-0.362***
	(0.0824)	(0.0812)	(0.0855)
_Istate_17	-0.494***	-0.355***	-0.494***
	(0.0879)	(0.0853)	(0.0888)
_Istate_18	-0.274***	-0.309***	-0.274***
	(0.0508)	(0.0505)	(0.0509)
_Istate_19	-0.452***	-0.511***	-0.452***
	(0.0442)	(0.0430)	(0.0441)
_Istate_20	-0.491***	-0.536***	-0.491***
	(0.0473)	(0.0462)	(0.0490)
_Istate_21	-0.361***	-0.349***	-0.361***
	(0.0515)	(0.0488)	(0.0508)
_Istate_22	-0.0274	-0.0234	-0.0274
	(0.0485)	(0.0474)	(0.0492)
_Istate_23	-0.177***	-0.188***	-0.177***
	(0.0462)	(0.0455)	(0.0464)
_Istate_24	-0.285***	-0.293***	-0.285***
	(0.0501)	(0.0495)	(0.0514)
_Istate_25	-0.529***	-0.620***	-0.529***
	(0.131)	(0.133)	(0.137)
_Istate_26	-0.524***	-0.574***	-0.524***
	(0.117)	(0.124)	(0.134)
_Istate_27	-0.396***	-0.418***	-0.396***
	(0.0461)	(0.0452)	(0.0469)
_Istate_28	-0.572***	-0.602***	-0.572***
	(0.0474)	(0.0463)	(0.0477)
_Istate_29	-0.217***	-0.225***	-0.217***
	(0.0469)	(0.0461)	(0.0468)
_Istate_30	-0.501***	-0.578***	-0.501***
	(0.0619)	(0.0607)	(0.0598)
_Istate_31	-0.822***	-0.495***	-0.822***
	(0.124)	(0.147)	(0.154)
_Istate_32	-0.613***	-0.670***	-0.613***
	(0.0460)	(0.0449)	(0.0465)
_Istate_33	-0.125***	-0.163***	-0.125***
	(0.0451)	(0.0443)	(0.0449)
_Istate_34	-0.255**	-0.329***	-0.255**
	(0.118)	(0.118)	(0.122)
_Istate_35	-0.964***	-0.545***	-0.964***
	(0.108)	(0.0913)	(0.127)
_Istate_12		0.162**	
		(0.0687)	
_Istate_13		-0.191**	
		(0.0763)	
Constant	-1.198*	-1.447**	-1.198*
	(0.704)	(0.690)	(0.713)
Observations	7,592	7,928	7,592
R-squared	0.559	0.546	0.559

Standard errors in parentheses
$***p < 0.01, **p < 0.05, *p < 0.1$

Table 30: Alternative instrument- governance and high spillover development indicators with instrumental variable

VARIABLES	lnrds full model robust errors	lnrds no density and rail robust errors	lnrds full model bootstrap errors	fire full model robust errors	fire no density and rail robust errors	fire full model bootstrap errors
gov	1.333**	1.260**	1.333	0.988***	0.771***	0.988***
	(0.662)	(0.580)	(0.816)	(0.236)	(0.152)	(0.327)
lnpop	-1.426***	-0.265	-1.426***	-0.364**	-0.256**	-0.364

	(0.308)	(0.274)	(0.421)	(0.155)	(0.105)	(0.230)
lndensity	0.757***		0.757***	0.0657		0.0657
	(0.148)		(0.168)	(0.0573)		(0.0671)
lnpropagrocult	-0.265	-0.521*	-0.265	-0.449***	-0.358***	-0.449***
	(0.318)	(0.292)	(0.391)	(0.114)	(0.0762)	(0.156)
ln5lakhcity	-0.00798	0.0286	-0.00798	-0.00510	0.000110	-0.00510
	(0.0344)	(0.0370)	(0.0389)	(0.0103)	(0.00802)	(0.0124)
ln1lakhcity	-0.0277*	-0.0337**	-0.0277*	-0.00432	0.000562	-0.00432
	(0.0154)	(0.0162)	(0.0164)	(0.00448)	(0.00355)	(0.00553)
lnrlydist	0.0106*		0.0106	-0.00341		-0.00341
	(0.00612)		(0.00653)	(0.00225)		(0.00261)
lnpopsq	0.0505***	0.0104	0.0505***	0.0156***	0.0129***	0.0156**
	(0.00939)	(0.00887)	(0.0130)	(0.00525)	(0.00379)	(0.00774)
lndensitysq	0.00682		0.00682	-0.00344		-0.00344
	(0.00953)		(0.0107)	(0.00360)		(0.00416)
lnpropagrcultsq	-0.0431	-0.0509	-0.0431	-0.0774***	-0.0606***	-0.0774***
	(0.0592)	(0.0541)	(0.0725)	(0.0210)	(0.0140)	(0.0288)
ln5lakhcitysq	0.00421	0.00201	0.00421	0.00176*	0.00197**	0.00176
	(0.00382)	(0.00456)	(0.00400)	(0.00107)	(0.000945)	(0.00118)
ln1lakhcitysq	-5.93e-05	-0.00694	-5.93e-05	-0.000459	0.000227	-0.000459
	(0.00468)	(0.00601)	(0.00522)	(0.00167)	(0.00160)	(0.00204)
lnrlydistsq	0.00402		0.00402	-0.00279		-0.00279
	(0.00775)		(0.00945)	(0.00272)		(0.00361)
_Istate_2	0.350	0.378	0.350	-1.056***	-0.988***	-1.056***
	(0.246)	(0.242)	(0.292)	(0.0880)	(0.0626)	(0.123)
_Istate_3	0.366***	0.136	0.366**	-0.527***	-0.542***	-0.527***
	(0.130)	(0.144)	(0.158)	(0.0510)	(0.0417)	(0.0659)
_Istate_4	0.333	1.306***	0.333	-0.107	-0.205**	-0.107
	(0.510)	(0.462)	(0.618)	(0.133)	(0.0839)	(0.189)
_Istate_5	-0.148	-0.123	-0.148	-0.387***	-0.404***	-0.387***
	(0.202)	(0.217)	(0.218)	(0.0625)	(0.0547)	(0.0762)
_Istate_6	0.561**	0.499**	0.561**	-0.141*	-0.194***	-0.141
	(0.220)	(0.217)	(0.271)	(0.0804)	(0.0587)	(0.109)
_Istate_7	0.467	0.854*	0.467	-0.0177	-0.157	-0.0177
	(0.475)	(0.453)	(0.588)	(0.166)	(0.116)	(0.233)
_Istate_8	0.763***	0.359	0.763**	-0.294***	-0.362***	-0.294**
	(0.246)	(0.234)	(0.303)	(0.0893)	(0.0616)	(0.122)
_Istate_9	0.536***	0.942***	0.536***	-0.460***	-0.469***	-0.460***
	(0.119)	(0.146)	(0.144)	(0.0402)	(0.0363)	(0.0534)
_Istate_10	0.573**	0.946***	0.573*	-0.304***	-0.357***	-0.304**
	(0.242)	(0.255)	(0.303)	(0.0890)	(0.0683)	(0.124)
_Istate_11	-1.308***	-0.621**	-1.308***	-0.332**	-0.322**	-0.332*
	(0.287)	(0.301)	(0.350)	(0.156)	(0.139)	(0.186)
o._Istate_12	-	-		-		
o._Istate_13	-	-		-		
_Istate_14	0.587**	1.150***	0.587	-0.398***	-0.376***	-0.398***
	(0.290)	(0.206)	(0.359)	(0.111)	(0.0818)	(0.144)
_Istate_15	2.107***	1.152***	2.107***	0.289***	0.215***	0.289***
	(0.238)	(0.281)	(0.277)	(0.0658)	(0.0368)	(0.0901)
_Istate_16	1.658***	1.336***	1.658***	0.257**	0.171*	0.257
	(0.299)	(0.298)	(0.362)	(0.124)	(0.0976)	(0.162)
_Istate_17	0.751**	0.565*	0.751	0.0515	-0.0707	0.0515
	(0.378)	(0.323)	(0.463)	(0.137)	(0.0832)	(0.187)
_Istate_18	1.232***	1.258***	1.232***	0.0827	0.0333	0.0827
	(0.215)	(0.226)	(0.261)	(0.0807)	(0.0631)	(0.108)
_Istate_19	-0.702**	-0.648*	-0.702*	-0.146	-0.249***	-0.146
	(0.334)	(0.331)	(0.406)	(0.112)	(0.0817)	(0.156)
_Istate_20	1.171***	1.123***	1.171***	-0.123	-0.223**	-0.123
	(0.346)	(0.342)	(0.430)	(0.123)	(0.0877)	(0.172)
_Istate_21	1.739***	1.044***	1.739***	0.0893	-0.00469	0.0893
	(0.263)	(0.252)	(0.319)	(0.0939)	(0.0631)	(0.128)
_Istate_22	0.599***	0.125	0.599***	-0.602***	-0.611***	-0.602***
	(0.107)	(0.128)	(0.121)	(0.0420)	(0.0381)	(0.0502)
_Istate_23	0.191	0.0576	0.191	0.0311	-0.00250	0.0311
	(0.161)	(0.171)	(0.190)	(0.0516)	(0.0389)	(0.0729)
_Istate_24	0.891***	0.425**	0.891***	-0.126	-0.181***	-0.126
	(0.213)	(0.209)	(0.266)	(0.0780)	(0.0549)	(0.110)
_Istate_25	0.794*	0.513	0.794	0.188	0.0686	0.188
	(0.430)	(0.479)	(0.533)	(0.213)	(0.184)	(0.259)
_Istate_26	1.733***	1.558***	1.733***	-0.120	-0.247**	-0.120
	(0.468)	(0.473)	(0.576)	(0.146)	(0.108)	(0.208)
_Istate_27	0.841***	0.750***	0.841**	-0.143	-0.222***	-0.143

	(0.278)	(0.270)	(0.345)	(0.0987)	(0.0688)	(0.139)
_Istate_28	1.128***	0.842**	1.128**	0.0979	-0.0189	0.0979
	(0.390)	(0.368)	(0.487)	(0.141)	(0.0961)	(0.197)
_Istate_29	0.315	0.153	0.315	-0.166***	-0.210***	-0.166*
	(0.213)	(0.220)	(0.246)	(0.0625)	(0.0465)	(0.0867)
_Istate_30	2.047***	1.222***	2.047***	-0.212*	-0.329***	-0.212
	(0.368)	(0.385)	(0.446)	(0.128)	(0.0966)	(0.176)
_Istate_31	1.983**	1.773***	1.983*	0.284	0.00630	0.284
	(0.830)	(0.639)	(1.029)	(0.318)	(0.208)	(0.433)
_Istate_32	2.391***	1.737***	2.391***	-0.0769	-0.210**	-0.0769
	(0.417)	(0.406)	(0.522)	(0.151)	(0.107)	(0.213)
_Istate_33	0.925***	0.601***	0.925***	-0.424***	-0.447***	-0.424***
	(0.126)	(0.149)	(0.155)	(0.0433)	(0.0369)	(0.0596)
_Istate_34	0.676**	0.511*	0.676**	-0.0872	-0.142	-0.0872
	(0.264)	(0.295)	(0.316)	(0.162)	(0.145)	(0.190)
_Istate_35	-0.297	-0.602	-0.297	0.493	0.231	0.493
	(1.386)	(1.314)	(1.596)	(0.331)	(0.239)	(0.428)
_Istate_12					-0.559***	
					(0.102)	
_Istate_13					-0.227**	
					(0.0938)	
Constant	1.892	0.479	1.892	1.281	0.969*	1.281
	(1.379)	(1.449)	(1.925)	(0.796)	(0.547)	(1.168)
Observations	7,592	7,867	7,592	7,592	7,928	7,592
R-squared	0.363	0.217	0.363	0.231	0.357	0.231
Underidentification test (KP)	10.061	12.832	21.207	10.061	15.323	21.207
p-value	0.0015	0.0003	0	0.0015	0.0001	0
Weak identification test (KP)	14.149	15.03	21.138	14.149	17.047	21.138
Endogeneity test	0.4234	0.4007	0.2713	9.1389	7.4721	9.9378
p-value	0.5152	0.5267	0.6025	0.0025	0.0063	0.0016

VARIABLES	drainage full model robust errors	drainage no density and rail robust errors	drainage full model bootstrap errors	HigherEduD full model robust errors	HigherEduD no density and rail robust errors	HigherEduD full model bootstrap errors
gov	-0.0598	0.00292	-0.0598	0.510***	0.477***	0.510**
	(0.0550)	(0.0371)	(0.0702)	(0.178)	(0.134)	(0.211)
lnpop	0.139***	0.107***	0.139***	0.215***	0.196***	0.215**
	(0.0414)	(0.0371)	(0.0496)	(0.0794)	(0.0630)	(0.104)
lndensity	-0.0145		-0.0145	-0.0566		-0.0566
	(0.0158)		(0.0175)	(0.0523)		(0.0554)
lnpropagrocult	0.0556**	0.0315	0.0556	-0.338***	-0.306***	-0.338***
	(0.0279)	(0.0205)	(0.0342)	(0.0863)	(0.0692)	(0.102)
ln5lakhcity	0.00230	0.000889	0.00230	0.00872	0.00923	0.00872
	(0.00237)	(0.00195)	(0.00281)	(0.00860)	(0.00759)	(0.00975)
ln1lakhcity	-0.00163	-0.00417***	-0.00163	0.000811	0.00277	0.000811
	(0.00138)	(0.00119)	(0.00155)	(0.00319)	(0.00274)	(0.00361)
lnrlydist	-3.00e-05		-3.00e-05	0.00364*		0.00364*
	(0.000967)		(0.00101)	(0.00209)		(0.00215)
lnpopsq	-0.00531***	-0.00437***	-0.00531***	-0.00659***	-0.00527***	-0.00659**
	(0.00148)	(0.00142)	(0.00169)	(0.00223)	(0.00203)	(0.00300)
lndensitysq	0.000834		0.000834	0.00286		0.00286
	(0.000983)		(0.00107)	(0.00324)		(0.00342)
lnpropagrcultsq	0.0116**	0.00700*	0.0116*	-0.0657***	-0.0607***	-0.0657***
	(0.00528)	(0.00394)	(0.00642)	(0.0160)	(0.0128)	(0.0188)
ln5lakhcitysq	-0.000167	-0.000555	-0.000167	-0.00272***	-0.00232**	-0.00272***
	(0.000484)	(0.000486)	(0.000489)	(0.000938)	(0.000902)	(0.000990)
ln1lakhcitysq	-0.000483	-0.000373	-0.000483	0.00236*	0.00358**	0.00236*
	(0.000565)	(0.000563)	(0.000602)	(0.00127)	(0.00141)	(0.00139)
lnrlydistsq	0.00151**		0.00151*	0.00379*		0.00379
	(0.000768)		(0.000916)	(0.00218)		(0.00252)
_Istate_2	0.127***	0.112***	0.127***	0.131	0.145*	0.131
	(0.0399)	(0.0358)	(0.0433)	(0.0882)	(0.0812)	(0.0972)
_Istate_3	0.0863***	0.0942***	0.0863***	0.107**	0.0932*	0.107*
	(0.0292)	(0.0278)	(0.0310)	(0.0527)	(0.0502)	(0.0570)
_Istate_4	0.0432	0.0760**	0.0432	0.00862	-0.0164	0.00862
	(0.0426)	(0.0338)	(0.0507)	(0.110)	(0.0869)	(0.132)
_Istate_5	0.0295	0.0373	0.0295	0.0138	0.0102	0.0138
	(0.0381)	(0.0367)	(0.0392)	(0.0564)	(0.0552)	(0.0585)
_Istate_6	0.0714**	0.0910***	0.0714**	0.159**	0.143**	0.159**
	(0.0326)	(0.0297)	(0.0362)	(0.0702)	(0.0621)	(0.0797)
_Istate_7	0.0327	0.0670*	0.0327	0.110	0.0685	0.110
	(0.0468)	(0.0389)	(0.0564)	(0.134)	(0.112)	(0.155)
_Istate_8	0.0731**	0.0988***	0.0731*	0.305***	0.291***	0.305***

	(0.0345)	(0.0307)	(0.0386)	(0.0740)	(0.0626)	(0.0840)
_Istate_9	0.0745**	0.0775***	0.0745**	-0.0932**	-0.123***	-0.0932*
	(0.0295)	(0.0286)	(0.0311)	(0.0454)	(0.0455)	(0.0492)
_Istate_10	0.0694**	0.0897***	0.0694*	0.171**	0.132*	0.171**
	(0.0342)	(0.0313)	(0.0378)	(0.0756)	(0.0689)	(0.0850)
_Istate_11	0.118***	0.129***	0.118***	-0.0502	-0.0242	-0.0502
	(0.0362)	(0.0328)	(0.0396)	(0.187)	(0.181)	(0.214)
o._Istate_12	-			-		
o._Istate_13	-			-		
_Istate_14	0.0637	0.111***	0.0637	-0.0418	0.0886	-0.0418
	(0.0392)	(0.0312)	(0.0435)	(0.102)	(0.0843)	(0.112)
_Istate_15	0.0872**	0.114***	0.0872**	0.0717	0.107	0.0717
	(0.0347)	(0.0299)	(0.0378)	(0.108)	(0.0957)	(0.115)
_Istate_16	0.0863**	0.117***	0.0863**	0.0851	0.0367	0.0851
	(0.0375)	(0.0337)	(0.0425)	(0.103)	(0.0946)	(0.113)
_Istate_17	-0.000360	0.0420	-0.000360	0.290**	0.336***	0.290**
	(0.0607)	(0.0543)	(0.0659)	(0.127)	(0.100)	(0.138)
_Istate_18	-0.0867**	-0.0657	-0.0867*	0.342***	0.312***	0.342***
	(0.0427)	(0.0403)	(0.0454)	(0.0684)	(0.0626)	(0.0759)
_Istate_19	-0.125***	-0.0917***	-0.125***	0.0691	0.0160	0.0691
	(0.0403)	(0.0354)	(0.0458)	(0.0902)	(0.0794)	(0.105)
_Istate_20	0.0746*	0.104***	0.0746	0.191*	0.154*	0.191
	(0.0391)	(0.0339)	(0.0455)	(0.100)	(0.0869)	(0.118)
_Istate_21	0.0852**	0.110***	0.0852**	0.301***	0.285***	0.301***
	(0.0350)	(0.0309)	(0.0393)	(0.0795)	(0.0652)	(0.0894)
_Istate_22	0.0308	0.0356	0.0308	0.134***	0.135***	0.134**
	(0.0344)	(0.0335)	(0.0351)	(0.0508)	(0.0504)	(0.0542)
_Istate_23	0.0709**	0.0830***	0.0709**	0.0973*	0.0859*	0.0973*
	(0.0311)	(0.0294)	(0.0331)	(0.0525)	(0.0488)	(0.0581)
_Istate_24	0.0420	0.0615**	0.0420	0.157**	0.143**	0.157**
	(0.0340)	(0.0312)	(0.0378)	(0.0665)	(0.0580)	(0.0764)
_Istate_25	-0.692***	-0.660***	-0.692***	-0.0625	-0.120	-0.0625
	(0.157)	(0.150)	(0.172)	(0.136)	(0.128)	(0.157)
_Istate_26	0.0713	0.107***	0.0713	-0.245*	-0.288**	-0.245
	(0.0438)	(0.0380)	(0.0524)	(0.138)	(0.130)	(0.169)
_Istate_27	0.0443	0.0688**	0.0443	0.321***	0.299***	0.321***
	(0.0362)	(0.0322)	(0.0412)	(0.0816)	(0.0695)	(0.0947)
_Istate_28	0.0547	0.0899**	0.0547	0.345***	0.316***	0.345***
	(0.0425)	(0.0357)	(0.0504)	(0.110)	(0.0908)	(0.128)
_Istate_29	0.0790**	0.0934***	0.0790**	0.390***	0.380***	0.390***
	(0.0311)	(0.0290)	(0.0339)	(0.0580)	(0.0525)	(0.0648)
_Istate_30	0.0947**	0.131***	0.0947**	0.0619	0.0184	0.0619
	(0.0419)	(0.0374)	(0.0480)	(0.109)	(0.0995)	(0.121)
_Istate_31	-0.990***	-0.895***	-0.990***	0.533*	0.567**	0.533
	(0.0774)	(0.0512)	(0.0948)	(0.302)	(0.250)	(0.346)
_Istate_32	0.0558	0.0919**	0.0558	0.238**	0.204**	0.238*
	(0.0442)	(0.0373)	(0.0530)	(0.117)	(0.0996)	(0.138)
_Istate_33	0.0374	0.0431	0.0374	-0.0290	-0.0468	-0.0290
	(0.0303)	(0.0291)	(0.0316)	(0.0470)	(0.0464)	(0.0512)
_Istate_34	0.0596*	0.0752**	0.0596	0.321***	0.285**	0.321**
	(0.0337)	(0.0317)	(0.0378)	(0.121)	(0.119)	(0.131)
_Istate_35	0.0123	0.119***	0.0123	0.173	0.299	0.173
	(0.0745)	(0.0444)	(0.0896)	(0.300)	(0.236)	(0.339)
_Istate_12		0.147***			-0.323***	
		(0.0325)			(0.0928)	
_Istate_13		0.113***			0.150	
		(0.0308)			(0.0935)	
Constant	0.215	0.336*	0.215	-1.517***	-1.631***	-1.517***
	(0.210)	(0.196)	(0.244)	(0.350)	(0.336)	(0.474)
Observations	7,592	7,928	7,592	7,592	7,928	7,592
R-squared	0.109	0.134	0.109	0.343	0.351	0.343
Underidentification test (KP)	10.061	15.323	21.207	10.061	15.323	21.207
p-value	0.0015	0.0001	0	0.0015	0.0001	0
Weak identification test (KP)	14.149	17.047	21.138	14.149	17.047	21.138
Endogeneity test	4.3458	2.1604	0.8999	2.0839	2.1322	1.0399
p-value	0.0371	0.1416	0.3428	0.1489	0.1442	0.3078

VARIABLES	lnwaterpax full model robust errors	lnwaterpax no density and rail robust errors	lnwaterpax full model bootstrap errors	lnhospbeds full model robust errors	lnhospbeds no density and rail robust errors	lnhospbeds full model bootstrap errors
gov	0.934	0.821	0.934	-0.0857	-0.00211	-0.0857

	(0.768)	(0.556)	(0.904)	(0.121)	(0.0894)	(0.149)
lnpop	-1.157***	-1.131***	-1.157**	0.0270	0.00816	0.0270
	(0.401)	(0.335)	(0.490)	(0.0552)	(0.0399)	(0.0741)
lndensity	0.0641		0.0641	0.0349		0.0349
	(0.176)		(0.192)	(0.0267)		(0.0294)
lnpropagrocult	-0.119	-0.0301	-0.119	0.0446	0.00271	0.0446
	(0.368)	(0.279)	(0.432)	(0.0579)	(0.0452)	(0.0704)
ln5lakhcity	-0.0293	-0.0126	-0.0293	0.00833	0.00482	0.00833
	(0.0384)	(0.0330)	(0.0433)	(0.00574)	(0.00492)	(0.00670)
ln1lakhcity	0.00535	-0.00565	0.00535	-0.00210	-0.00128	-0.00210
	(0.0147)	(0.0135)	(0.0163)	(0.00211)	(0.00172)	(0.00241)
lnrlydist	-0.00116		-0.00116	0.00435***		0.00435***
	(0.00664)		(0.00699)	(0.00113)		(0.00123)
lnpopsq	0.0459***	0.0450***	0.0459***	-0.000348	-0.000102	-0.000348
	(0.0126)	(0.0118)	(0.0152)	(0.00155)	(0.00117)	(0.00214)
lndensitysq	-0.00831		-0.00831	-0.00213		-0.00213
	(0.0109)		(0.0119)	(0.00164)		(0.00179)
lnpropagrcultsq	0.00712	0.0213	0.00712	0.0126	0.00428	0.0126
	(0.0680)	(0.0513)	(0.0799)	(0.0108)	(0.00841)	(0.0130)
ln5lakhcitysq	0.00610*	0.00375	0.00610	0.000381	0.000955**	0.000381
	(0.00358)	(0.00346)	(0.00383)	(0.000505)	(0.000469)	(0.000526)
ln1lakhcitysq	0.000432	0.00300	0.000432	0.00378***	0.00382***	0.00378***
	(0.00510)	(0.00560)	(0.00549)	(0.000772)	(0.000858)	(0.000899)
lnrlydistsq	-0.00134		-0.00134	0.00470***		0.00470***
	(0.00879)		(0.0101)	(0.00139)		(0.00168)
_Istate_2	-0.0179	0.0330	-0.0179	0.461***	0.443***	0.461***
	(0.311)	(0.268)	(0.349)	(0.0742)	(0.0693)	(0.0803)
_Istate_3	0.239	0.178	0.239	-0.0685**	-0.0706***	-0.0685**
	(0.238)	(0.229)	(0.246)	(0.0282)	(0.0245)	(0.0311)
_Istate_4	-1.046**	-1.219**	-1.046*	-0.156**	-0.116**	-0.156*
	(0.526)	(0.476)	(0.623)	(0.0754)	(0.0570)	(0.0934)
_Istate_5	-0.593***	-0.610***	-0.593***	-0.0534*	-0.0501*	-0.0534
	(0.195)	(0.190)	(0.205)	(0.0312)	(0.0293)	(0.0341)
_Istate_6	-0.545*	-0.579**	-0.545*	-0.102**	-0.0912***	-0.102**
	(0.294)	(0.253)	(0.329)	(0.0425)	(0.0344)	(0.0516)
_Istate_7	-0.887	-1.039**	-0.887	-0.145	-0.111	-0.145
	(0.565)	(0.458)	(0.644)	(0.0881)	(0.0702)	(0.107)
_Istate_8	-0.343	-0.350	-0.343	0.0251	0.0398	0.0251
	(0.305)	(0.248)	(0.348)	(0.0483)	(0.0384)	(0.0580)
_Istate_9	-0.302*	-0.353*	-0.302	-0.0800***	-0.0939***	-0.0800***
	(0.180)	(0.182)	(0.188)	(0.0265)	(0.0250)	(0.0297)
_Istate_10	-1.340***	-1.411***	-1.340***	-0.125***	-0.122***	-0.125**
	(0.302)	(0.267)	(0.344)	(0.0467)	(0.0399)	(0.0567)
_Istate_11	0.0275	0.00751	0.0275	0.114	0.138	0.114
	(0.266)	(0.282)	(0.322)	(0.164)	(0.160)	(0.181)
o._Istate_12	-			-		
o._Istate_13	-			-		
_Istate_14	1.250***	1.159***	1.250**	-0.248***	-0.111***	-0.248***
	(0.459)	(0.362)	(0.500)	(0.0529)	(0.0418)	(0.0641)
_Istate_15	-0.320	-0.281	-0.320	-0.239***	-0.184***	-0.239***
	(0.671)	(0.612)	(0.696)	(0.0426)	(0.0266)	(0.0488)
_Istate_16	0.829**	0.688**	0.829**	-0.117*	-0.111**	-0.117
	(0.350)	(0.315)	(0.404)	(0.0611)	(0.0513)	(0.0714)
_Istate_17	-1.364***	-1.430***	-1.364***	-0.150*	-0.0575	-0.150
	(0.436)	(0.277)	(0.504)	(0.0800)	(0.0563)	(0.0917)
_Istate_18	0.0708	0.0425	0.0708	-0.0833*	-0.0792**	-0.0833*
	(0.266)	(0.235)	(0.301)	(0.0429)	(0.0368)	(0.0500)
_Istate_19	-0.990**	-1.095***	-0.990**	-0.103*	-0.0957*	-0.103
	(0.389)	(0.329)	(0.448)	(0.0621)	(0.0516)	(0.0748)
_Istate_20	-0.132	-0.189	-0.132	-0.0844	-0.0639	-0.0844
	(0.425)	(0.354)	(0.488)	(0.0672)	(0.0557)	(0.0822)
_Istate_21	-0.616*	-0.661**	-0.616	-0.0552	-0.0398	-0.0552
	(0.351)	(0.282)	(0.393)	(0.0527)	(0.0402)	(0.0631)
_Istate_22	-0.596***	-0.560***	-0.596***	0.00235	-0.00280	0.00235
	(0.190)	(0.190)	(0.191)	(0.0275)	(0.0254)	(0.0288)
_Istate_23	-0.582***	-0.602***	-0.582**	-0.161***	-0.158***	-0.161***
	(0.212)	(0.194)	(0.226)	(0.0318)	(0.0270)	(0.0369)
_Istate_24	0.356	0.354	0.356	-0.0832**	-0.0766**	-0.0832
	(0.275)	(0.233)	(0.314)	(0.0423)	(0.0342)	(0.0509)
_Istate_25	-0.0648	-0.119	-0.0648	-0.199**	-0.183**	-0.199*
	(0.636)	(0.593)	(0.722)	(0.0881)	(0.0771)	(0.106)
_Istate_26	-1.159**	-1.211***	-1.159*	-0.218***	-0.191***	-0.218**

	(0.507)	(0.435)	(0.592)	(0.0811)	(0.0679)	(0.0999)
_Istate_27	-0.0166	-0.0620	-0.0166	-0.0941*	-0.0752*	-0.0941
	(0.344)	(0.282)	(0.393)	(0.0535)	(0.0430)	(0.0648)
_Istate_28	0.904*	0.848**	0.904*	-0.155**	-0.124**	-0.155*
	(0.467)	(0.370)	(0.543)	(0.0732)	(0.0578)	(0.0903)
_Istate_29	0.575**	0.553***	0.575**	-0.00485	0.00489	-0.00485
	(0.232)	(0.205)	(0.255)	(0.0374)	(0.0316)	(0.0428)
_Istate_30	0.813*	0.835**	0.813	-0.207**	-0.204***	-0.207**
	(0.432)	(0.374)	(0.494)	(0.0807)	(0.0725)	(0.0942)
_Istate_31	-1.573	-1.694***	-1.573	-0.427***	-0.239**	-0.427**
	(0.990)	(0.653)	(1.162)	(0.156)	(0.109)	(0.192)
_Istate_32	-0.548	-0.576	-0.548	-0.124	-0.0979	-0.124
	(0.501)	(0.409)	(0.585)	(0.0787)	(0.0646)	(0.0977)
_Istate_33	-0.160	-0.159	-0.160	-0.117***	-0.127***	-0.117***
	(0.184)	(0.182)	(0.196)	(0.0276)	(0.0254)	(0.0311)
_Istate_34	-0.408	-0.442	-0.408	0.0223	0.0125	0.0223
	(0.306)	(0.295)	(0.362)	(0.0771)	(0.0724)	(0.0863)
_Istate_35	2.247	2.179	2.247	-0.314*	-0.0819	-0.314
	(2.158)	(1.947)	(2.396)	(0.163)	(0.116)	(0.200)
_Istate_12		5.379***			0.0625	
		(0.248)			(0.0577)	
_Istate_13		-1.293***			0.00118	
		(0.411)			(0.0838)	
Constant	3.338*	3.312*	3.338	-4.854***	-4.594***	-4.854***
	(1.973)	(1.760)	(2.401)	(0.225)	(0.218)	(0.325)
Observations	7,592	7,928	7,592	7,592	7,928	7,592
R-squared	0.244	0.295	0.244	0.101	0.149	0.101
Underidentification test (KP)	10.061	15.323	21.207	10.061	15.323	21.207
p-value	0.0015	0.0001	0	0.0015	0.0001	0
Weak identification test (KP)	14.149	17.047	21.138	14.149	17.047	21.138
Endogeneity test	0.0211	0.0005	0.0198	2.0756	1.3301	2.3975
p-value	0.8846	0.9823	0.888	0.1497	0.2488	0.1215

Standard errors in parentheses
$***p < 0.01, **p < 0.05, *p < 0.1$
The instrument is statelaweffect2

Table 31: Alternative instrument- governance and low spillover development indicators with instrumental variable

VARIABLES	lnlit full model robust errors	lnlit no density and rail robust errors	lnlit full model bootstrap errors	lnHHbanking full model robust errors	lnHHbanking no density and rail robust errors	lnHHbanking full model bootstrap errors
gov	-0.0207	-0.00203	-0.0207	-0.460***	-0.314***	-0.460***
	(0.0310)	(0.0208)	(0.0441)	(0.129)	(0.0730)	(0.177)
lnpop	-0.0218	-0.0185	-0.0218	0.245***	0.177***	0.245**
	(0.0193)	(0.0153)	(0.0281)	(0.0731)	(0.0451)	(0.102)
lndensity	0.0347***		0.0347**	0.0150		0.0150
	(0.0130)		(0.0139)	(0.0387)		(0.0439)
lnpropagrocult	-0.0911***	-0.0998***	-0.0911***	0.0690	0.0127	0.0690
	(0.0158)	(0.0117)	(0.0217)	(0.0630)	(0.0388)	(0.0853)
ln5lakhcity	0.00160	0.00138	0.00160	0.0131**	0.00965**	0.0131*
	(0.00171)	(0.00151)	(0.00208)	(0.00595)	(0.00458)	(0.00728)
ln1lakhcity	-0.00243***	-0.00295***	-0.00243***	-0.000590	-0.00579***	-0.000590
	(0.000670)	(0.000576)	(0.000787)	(0.00272)	(0.00211)	(0.00323)
lnrlydist	-0.000495		-0.000495	-0.000201		-0.000201
	(0.000494)		(0.000529)	(0.00156)		(0.00169)
lnpopsq	0.00111*	0.000914	0.00111	-0.00679***	-0.00501***	-0.00679**
	(0.000670)	(0.000579)	(0.000932)	(0.00242)	(0.00165)	(0.00327)
lndensitysq	-0.00225***		-0.00225**	-0.00309		-0.00309
	(0.000817)		(0.000880)	(0.00241)		(0.00270)
lnpropagrcultsq	-0.0112***	-0.0131***	-0.0112***	0.0276**	0.0159**	0.0276*
	(0.00298)	(0.00223)	(0.00405)	(0.0117)	(0.00727)	(0.0157)
ln5lakhcitysq	-0.000872***	-0.00102***	-0.000872***	0.000308	0.000322	0.000308
	(0.000255)	(0.000249)	(0.000262)	(0.000754)	(0.000688)	(0.000789)
ln1lakhcitysq	0.000478*	0.000667**	0.000478	0.00447***	0.00576***	0.00447***
	(0.000263)	(0.000262)	(0.000304)	(0.000992)	(0.000892)	(0.00123)
lnrlydistsq	0.00114***		0.00114**	0.00670***		0.00670***
	(0.000423)		(0.000536)	(0.00156)		(0.00204)

_Istate_2	0.141***	0.141***	0.141***	0.210***	0.179***	0.210***
	(0.0153)	(0.0135)	(0.0192)	(0.0566)	(0.0387)	(0.0728)
_Istate_3	0.0269**	0.0312***	0.0269**	-0.213***	-0.187***	-0.213***
	(0.0118)	(0.0115)	(0.0125)	(0.0356)	(0.0280)	(0.0411)
_Istate_4	0.0127	0.0201	0.0127	-0.417***	-0.379***	-0.417**
	(0.0362)	(0.0320)	(0.0438)	(0.140)	(0.107)	(0.168)
_Istate_5	0.0600***	0.0618***	0.0600***	-0.0636	-0.0556*	-0.0636
	(0.0147)	(0.0148)	(0.0153)	(0.0396)	(0.0333)	(0.0440)
_Istate_6	0.0247*	0.0311**	0.0247	-0.270***	-0.227***	-0.270***
	(0.0149)	(0.0135)	(0.0178)	(0.0510)	(0.0362)	(0.0629)
_Istate_7	0.0279	0.0295	0.0279	-0.429***	-0.390***	-0.429***
	(0.0257)	(0.0209)	(0.0338)	(0.0972)	(0.0640)	(0.128)
_Istate_8	-0.0110	-0.00267	-0.0110	-0.357***	-0.292***	-0.357***
	(0.0154)	(0.0134)	(0.0188)	(0.0544)	(0.0362)	(0.0705)
_Istate_9	-0.0658***	-0.0682***	-0.0658***	-0.205***	-0.226***	-0.205***
	(0.0119)	(0.0119)	(0.0125)	(0.0329)	(0.0269)	(0.0369)
_Istate_10	-0.0249	-0.0205	-0.0249	-0.407***	-0.388***	-0.407***
	(0.0160)	(0.0145)	(0.0193)	(0.0562)	(0.0413)	(0.0715)
_Istate_11	0.103***	0.111***	0.103***	-0.136*	-0.134**	-0.136
	(0.0134)	(0.0140)	(0.0156)	(0.0698)	(0.0557)	(0.0838)
o._Istate_12	-			-		
o._Istate_13	-			-		
_Istate_14	0.0872***	0.119***	0.0872***	-1.212***	-1.007***	-1.212***
	(0.0201)	(0.0159)	(0.0228)	(0.0902)	(0.0755)	(0.103)
_Istate_15	0.300***	0.304***	0.300***	-0.225***	-0.152**	-0.225***
	(0.0157)	(0.0142)	(0.0180)	(0.0758)	(0.0730)	(0.0826)
_Istate_16	0.181***	0.188***	0.181***	-0.128*	-0.0847*	-0.128
	(0.0178)	(0.0157)	(0.0216)	(0.0692)	(0.0488)	(0.0869)
_Istate_17	0.114***	0.131***	0.114***	-0.536***	-0.408***	-0.536***
	(0.0226)	(0.0170)	(0.0279)	(0.0864)	(0.0517)	(0.111)
_Istate_18	0.0787***	0.0870***	0.0787***	-0.352***	-0.321***	-0.352***
	(0.0152)	(0.0141)	(0.0175)	(0.0534)	(0.0410)	(0.0658)
_Istate_19	0.00971	0.0141	0.00971	-0.664***	-0.631***	-0.664***
	(0.0181)	(0.0155)	(0.0233)	(0.0672)	(0.0461)	(0.0875)
_Istate_20	-0.0149	-0.00785	-0.0149	-0.378***	-0.325***	-0.378***
	(0.0205)	(0.0176)	(0.0263)	(0.0725)	(0.0487)	(0.0952)
_Istate_21	0.0493***	0.0518***	0.0493**	-0.498***	-0.427***	-0.498***
	(0.0172)	(0.0147)	(0.0200)	(0.0595)	(0.0394)	(0.0743)
_Istate_22	0.0811***	0.0821***	0.0811***	-0.399***	-0.376***	-0.399***
	(0.0114)	(0.0114)	(0.0118)	(0.0361)	(0.0306)	(0.0398)
_Istate_23	0.0539***	0.0559***	0.0539***	-0.350***	-0.326***	-0.350***
	(0.0120)	(0.0115)	(0.0135)	(0.0385)	(0.0288)	(0.0473)
_Istate_24	0.0691***	0.0752***	0.0691***	-0.374***	-0.319***	-0.374***
	(0.0142)	(0.0127)	(0.0172)	(0.0499)	(0.0347)	(0.0636)
_Istate_25	0.0895***	0.0947***	0.0895***	-0.582***	-0.544***	-0.582***
	(0.0242)	(0.0209)	(0.0311)	(0.145)	(0.122)	(0.180)
_Istate_26	0.0954***	0.103***	0.0954***	-0.531***	-0.475***	-0.531***
	(0.0241)	(0.0201)	(0.0312)	(0.108)	(0.0829)	(0.136)
_Istate_27	0.117***	0.123***	0.117***	-0.345***	-0.295***	-0.345***
	(0.0163)	(0.0140)	(0.0207)	(0.0601)	(0.0401)	(0.0782)
_Istate_28	-0.00630	0.00289	-0.00630	-0.599***	-0.521***	-0.599***
	(0.0208)	(0.0167)	(0.0278)	(0.0804)	(0.0508)	(0.106)
_Istate_29	0.0655***	0.0687***	0.0655***	-0.324***	-0.294***	-0.324***
	(0.0129)	(0.0120)	(0.0149)	(0.0432)	(0.0319)	(0.0526)
_Istate_30	0.117***	0.123***	0.117***	-0.250***	-0.188***	-0.250**
	(0.0196)	(0.0170)	(0.0249)	(0.0764)	(0.0529)	(0.0991)
_Istate_31	0.0975**	0.143***	0.0975*	-0.725***	-0.454***	-0.725***
	(0.0425)	(0.0277)	(0.0575)	(0.166)	(0.0850)	(0.223)
_Istate_32	0.172***	0.180***	0.172***	-0.383***	-0.301***	-0.383***
	(0.0219)	(0.0176)	(0.0296)	(0.0852)	(0.0548)	(0.115)
_Istate_33	0.0844***	0.0837***	0.0844***	-0.424***	-0.414***	-0.424***
	(0.0113)	(0.0112)	(0.0125)	(0.0346)	(0.0277)	(0.0408)
_Istate_34	0.107***	0.106***	0.107***	-0.364***	-0.363***	-0.364***
	(0.0198)	(0.0186)	(0.0238)	(0.0837)	(0.0674)	(0.0990)
_Istate_35	0.0524	0.109***	0.0524	-0.549***	-0.208***	-0.549***
	(0.0407)	(0.0265)	(0.0531)	(0.149)	(0.0714)	(0.196)
_Istate_12		0.0481***			-0.0559	
		(0.0165)			(0.0387)	
_Istate_13		0.175***			-0.374***	
		(0.0158)			(0.0620)	
Constant	-0.394***	-0.281***	-0.394***	-1.725***	-1.390***	-1.725***

	(0.106)	(0.0807)	(0.146)	(0.342)	(0.238)	(0.475)
Observations	7,592	7,928	7,592	7,587	7,923	7,587
R-squared	0.456	0.449	0.456	0.028	0.151	0.028
Underidentification test (KP)	10.061	15.323	21.207	10.036	15.297	21.153
p-value	0.0015	0.0001	0	0.0015	0.0001	0
Weak identification test (KP)	14.149	17.047	21.138	14.13	17.028	21.083
Endogeneity test	1.7548	1.2774	0.4063	18.2889	17.2594	8.7739
p-value	0.1853	0.2584	0.5239	0	0	0.0031

VARIABLES	lnHHwater full model robust errors	lnHHwater no density and rail robust errors	lnHHwater full model bootstrap errors	lnHHelectr full model robust errors	lnHHelectr no density and rail robust errors	lnHHelectr full model bootstrap errors
gov	-0.358	-0.166	-0.358	-0.139	-0.0159	-0.139
	(0.235)	(0.160)	(0.298)	(0.200)	(0.141)	(0.223)
lnpop	0.595***	0.589***	0.595***	0.147	0.0868	0.147
	(0.177)	(0.148)	(0.205)	(0.187)	(0.164)	(0.192)
lndensity	0.00480		0.00480	-0.0789**		-0.0789**
	(0.0627)		(0.0726)	(0.0335)		(0.0362)
lnpropagrocult	-0.0793	-0.166**	-0.0793	-0.178*	-0.228***	-0.178*
	(0.114)	(0.0828)	(0.143)	(0.0937)	(0.0682)	(0.105)
ln5lakhcity	0.00710	0.00280	0.00710	0.00438	0.00192	0.00438
	(0.00983)	(0.00796)	(0.0120)	(0.00589)	(0.00446)	(0.00706)
ln1lakhcity	-0.0106**	-0.0187***	-0.0106**	-0.00161	-0.00556***	-0.00161
	(0.00485)	(0.00436)	(0.00541)	(0.00250)	(0.00170)	(0.00297)
lnrlydist	-0.00441		-0.00441	-0.00165		-0.00165
	(0.00275)		(0.00296)	(0.00121)		(0.00132)
lnpopsq	-0.0214***	-0.0222***	-0.0214***	-0.00494	-0.00312	-0.00494
	(0.00627)	(0.00561)	(0.00695)	(0.00681)	(0.00627)	(0.00689)
lndensitysq	0.00108		0.00108	0.00499**		0.00499**
	(0.00389)		(0.00446)	(0.00207)		(0.00222)
lnpropagrcultsq	0.000681	-0.0117	0.000681	-0.0266	-0.0351***	-0.0266
	(0.0213)	(0.0154)	(0.0264)	(0.0171)	(0.0122)	(0.0193)
ln5lakhcitysq	0.00416***	0.00542***	0.00416***	-0.00344***	-0.00391***	-0.00344***
	(0.00135)	(0.00131)	(0.00139)	(0.000743)	(0.000774)	(0.000783)
ln1lakhcitysq	0.000403	-0.000907	0.000403	-0.00111	-0.00142	-0.00111
	(0.00180)	(0.00186)	(0.00212)	(0.00120)	(0.00129)	(0.00132)
lnrlydistsq	0.00340		0.00340	0.00227		0.00227
	(0.00280)		(0.00341)	(0.00214)		(0.00237)
_Istate_2	0.377***	0.316***	0.377***	0.0859	0.0508	0.0859
	(0.105)	(0.0859)	(0.125)	(0.0730)	(0.0567)	(0.0793)
_Istate_3	0.193***	0.216***	0.193***	-0.0621**	-0.0462**	-0.0621*
	(0.0614)	(0.0534)	(0.0703)	(0.0287)	(0.0219)	(0.0321)
_Istate_4	-0.0604	0.0730	-0.0604	-0.202*	-0.127*	-0.202*
	(0.157)	(0.118)	(0.192)	(0.108)	(0.0727)	(0.123)
_Istate_5	0.161**	0.173***	0.161**	-0.0578**	-0.0430**	-0.0578**
	(0.0647)	(0.0565)	(0.0736)	(0.0232)	(0.0175)	(0.0287)
_Istate_6	-0.0475	0.0102	-0.0475	-0.102	-0.0619	-0.102
	(0.0959)	(0.0778)	(0.113)	(0.0654)	(0.0492)	(0.0724)
_Istate_7	-0.475***	-0.352**	-0.475**	-0.206	-0.129	-0.206
	(0.181)	(0.141)	(0.222)	(0.143)	(0.109)	(0.158)
_Istate_8	-0.188*	-0.126	-0.188	-0.116	-0.0655	-0.116
	(0.102)	(0.0792)	(0.125)	(0.0762)	(0.0560)	(0.0837)
_Istate_9	-0.0389	-0.00572	-0.0389	-0.466***	-0.453***	-0.466***
	(0.0610)	(0.0568)	(0.0699)	(0.0304)	(0.0306)	(0.0325)
_Istate_10	-0.102	-0.0252	-0.102	-0.778***	-0.732***	-0.778***
	(0.0989)	(0.0820)	(0.122)	(0.0882)	(0.0759)	(0.0956)
_Istate_11	0.0618	0.0310	0.0618	0.0821**	0.0895***	0.0821
	(0.0984)	(0.0916)	(0.122)	(0.0344)	(0.0310)	(0.0512)
o._Istate_12	-			-		
o._Istate_13	-			-		
_Istate_14	-1.730***	-1.574***	-1.730***	-0.133	-0.0565	-0.133
	(0.190)	(0.156)	(0.211)	(0.0828)	(0.0491)	(0.0906)
_Istate_15	-0.579***	-0.560***	-0.579***	0.177***	0.218***	0.177***
	(0.152)	(0.127)	(0.169)	(0.0529)	(0.0288)	(0.0600)
_Istate_16	-0.444***	-0.416***	-0.444***	-0.105	-0.0550	-0.105
	(0.133)	(0.109)	(0.155)	(0.0906)	(0.0723)	(0.101)
_Istate_17	-1.027***	-0.963***	-1.027***	-0.132	-0.0642	-0.132
	(0.223)	(0.186)	(0.251)	(0.111)	(0.0633)	(0.121)
_Istate_18	-0.129	-0.0801	-0.129	-0.318***	-0.278***	-0.318***
	(0.0912)	(0.0769)	(0.109)	(0.0631)	(0.0508)	(0.0709)
_Istate_19	-1.083***	-1.005***	-1.083***	-0.422***	-0.369***	-0.422***

	(0.127)	(0.101)	(0.154)	(0.0946)	(0.0751)	(0.105)
_Istate_20	-0.654***	-0.559***	-0.654***	-0.281***	-0.220***	-0.281**
	(0.137)	(0.109)	(0.166)	(0.106)	(0.0828)	(0.118)
_Istate_21	-0.666***	-0.618***	-0.666***	-0.321***	-0.265***	-0.321***
	(0.110)	(0.0831)	(0.132)	(0.0780)	(0.0550)	(0.0856)
_Istate_22	-0.435***	-0.443***	-0.435***	0.0217	0.0307**	0.0217
	(0.0629)	(0.0575)	(0.0701)	(0.0178)	(0.0153)	(0.0201)
_Istate_23	-0.476***	-0.446***	-0.476***	-0.0788*	-0.0520	-0.0788
	(0.0738)	(0.0633)	(0.0865)	(0.0443)	(0.0354)	(0.0486)
_Istate_24	-0.0474	0.00367	-0.0474	-0.0907	-0.0496	-0.0907
	(0.0936)	(0.0746)	(0.113)	(0.0691)	(0.0532)	(0.0748)
_Istate_25	-0.209	-0.144	-0.209	-0.0767	-0.0180	-0.0767
	(0.167)	(0.136)	(0.214)	(0.126)	(0.104)	(0.141)
_Istate_26	-0.265*	-0.177	-0.265	-0.0951	-0.0283	-0.0951
	(0.156)	(0.124)	(0.194)	(0.127)	(0.101)	(0.142)
_Istate_27	-0.139	-0.0642	-0.139	-0.108	-0.0583	-0.108
	(0.110)	(0.0855)	(0.136)	(0.0847)	(0.0639)	(0.0935)
_Istate_28	-0.615***	-0.517***	-0.615***	-0.0853	-0.0146	-0.0853
	(0.151)	(0.114)	(0.188)	(0.123)	(0.0929)	(0.136)
_Istate_29	-0.307***	-0.272***	-0.307***	-0.0819	-0.0533	-0.0819
	(0.0801)	(0.0666)	(0.0953)	(0.0518)	(0.0399)	(0.0571)
_Istate_30	-0.0367	0.0127	-0.0367	-0.0247	0.0441	-0.0247
	(0.139)	(0.113)	(0.170)	(0.108)	(0.0873)	(0.120)
_Istate_31	-0.248	-0.0518	-0.248	-0.0435	0.112	-0.0435
	(0.317)	(0.204)	(0.402)	(0.243)	(0.146)	(0.272)
_Istate_32	-0.109	-0.0204	-0.109	-0.151	-0.0821	-0.151
	(0.159)	(0.123)	(0.199)	(0.134)	(0.104)	(0.147)
_Istate_33	-0.709***	-0.698***	-0.709***	-0.0458	-0.0323	-0.0458
	(0.0668)	(0.0610)	(0.0777)	(0.0343)	(0.0312)	(0.0379)
_Istate_34	-0.138	-0.131	-0.138	-0.0858	-0.0598	-0.0858
	(0.104)	(0.0899)	(0.131)	(0.0715)	(0.0639)	(0.0844)
_Istate_35	-0.401	-0.243*	-0.401	-0.126	0.0358	-0.126
	(0.275)	(0.140)	(0.337)	(0.214)	(0.102)	(0.241)
_Istate_12		0.0485			0.102***	
		(0.0765)			(0.0269)	
_Istate_13		-0.674***			0.0939**	
		(0.175)			(0.0439)	
Constant	-4.235***	-4.184***	-4.235***	-0.750	-0.743	-0.750
	(0.873)	(0.774)	(0.985)	(0.897)	(0.850)	(0.932)
Observations	7,587	7,923	7,587	7,587	7,923	7,587
R-squared	0.326	0.360	0.326	0.460	0.475	0.460
Underidentification test (KP)	10.036	15.297	21.153	10.036	15.297	21.153
p-value	0.0015	0.0001	0	0.0015	0.0001	0
Weak identification test (KP)	14.13	17.028	21.083	14.13	17.028	21.083
Endogeneity test	4.8458	3.0574	1.954	0.5319	0.0514	0.9961
p-value	0.0277	0.0804	0.1622	0.4658	0.8207	0.3183

VARIABLES	lnHHlatr full model robust errors	lnHHlatr no density and rail robust errors	lnHHlatr full model bootstrap errors
gov	0.198	0.193	0.198
	(0.218)	(0.151)	(0.245)
lnpop	0.124	0.208	0.124
	(0.192)	(0.160)	(0.197)
lndensity	0.129***		0.129**
	(0.0486)		(0.0531)
lnpropagrocult	-0.534***	-0.551***	-0.534***
	(0.103)	(0.0745)	(0.117)
ln5lakhcity	-0.00931	-0.00869	-0.00931
	(0.00723)	(0.00570)	(0.00841)
ln1lakhcity	-0.00486*	-0.00460**	-0.00486
	(0.00289)	(0.00212)	(0.00338)
lnrlydist	0.000394		0.000394
	(0.00174)		(0.00184)
lnpopsq	-0.00603	-0.00922	-0.00603
	(0.00693)	(0.00605)	(0.00693)
lndensitysq	-0.00473		-0.00473
	(0.00298)		(0.00324)
lnpropagrcultsq	-0.0853***	-0.0864***	-0.0853***
	(0.0189)	(0.0135)	(0.0216)
ln5lakhcitysq	-0.00259***	-0.00285***	-0.00259***
	(0.000878)	(0.000885)	(0.000905)
ln1lakhcitysq	-0.00299**	-0.00356**	-0.00299**

	(0.00141)	(0.00147)	(0.00152)
lnrlydistsq	-0.000853		-0.000853
	(0.00239)		(0.00267)
_Istate_2	0.152*	0.157**	0.152
	(0.0865)	(0.0711)	(0.0946)
_Istate_3	0.108**	0.0958**	0.108**
	(0.0447)	(0.0405)	(0.0472)
_Istate_4	0.108	0.160*	0.108
	(0.126)	(0.0927)	(0.142)
_Istate_5	0.179***	0.181***	0.179***
	(0.0414)	(0.0390)	(0.0441)
_Istate_6	0.117	0.116*	0.117
	(0.0773)	(0.0613)	(0.0833)
_Istate_7	0.102	0.126	0.102
	(0.160)	(0.124)	(0.176)
_Istate_8	-0.0148	-0.0389	-0.0148
	(0.0889)	(0.0686)	(0.0962)
_Istate_9	-0.111**	-0.0818*	-0.111**
	(0.0442)	(0.0444)	(0.0463)
_Istate_10	-0.170*	-0.142*	-0.170*
	(0.0876)	(0.0740)	(0.0949)
_Istate_11	0.202***	0.242***	0.202**
	(0.0774)	(0.0697)	(0.0906)
o._Istate_12	-		
o._Istate_13	-		
_Istate_14	0.482***	0.520***	0.482***
	(0.0960)	(0.0608)	(0.104)
_Istate_15	0.825***	0.732***	0.825***
	(0.0704)	(0.0550)	(0.0768)
_Istate_16	0.437***	0.421***	0.437***
	(0.102)	(0.0835)	(0.112)
_Istate_17	0.309**	0.287***	0.309**
	(0.128)	(0.0793)	(0.140)
_Istate_18	0.255***	0.266***	0.255***
	(0.0728)	(0.0607)	(0.0798)
_Istate_19	-0.00527	0.0198	-0.00527
	(0.107)	(0.0859)	(0.118)
_Istate_20	-0.357***	-0.354***	-0.357***
	(0.122)	(0.0969)	(0.133)
_Istate_21	-0.302***	-0.347***	-0.302***
	(0.0940)	(0.0710)	(0.100)
_Istate_22	-0.316***	-0.348***	-0.316***
	(0.0402)	(0.0400)	(0.0422)
_Istate_23	-0.126**	-0.135***	-0.126**
	(0.0574)	(0.0496)	(0.0607)
_Istate_24	0.0787	0.0501	0.0787
	(0.0804)	(0.0643)	(0.0843)
_Istate_25	0.178	0.180	0.178
	(0.142)	(0.119)	(0.162)
_Istate_26	0.0987	0.101	0.0987
	(0.144)	(0.116)	(0.161)
_Istate_27	-0.0247	-0.0283	-0.0247
	(0.0970)	(0.0754)	(0.106)
_Istate_28	0.113	0.0995	0.113
	(0.136)	(0.103)	(0.149)
_Istate_29	-0.0521	-0.0610	-0.0521
	(0.0666)	(0.0557)	(0.0704)
_Istate_30	0.300**	0.260***	0.300**
	(0.123)	(0.100)	(0.136)
_Istate_31	0.631**	0.612***	0.631**
	(0.270)	(0.162)	(0.302)
_Istate_32	0.329**	0.298***	0.329**
	(0.147)	(0.114)	(0.161)
_Istate_33	-0.202***	-0.217***	-0.202***
	(0.0489)	(0.0464)	(0.0511)
_Istate_34	-0.0500	-0.0443	-0.0500
	(0.0916)	(0.0851)	(0.103)
_Istate_35	0.256	0.209	0.256
	(0.244)	(0.131)	(0.274)
_Istate_12		0.279***	
		(0.0487)	
_Istate_13		0.433***	

		(0.0622)	
Constant	-2.347**	-2.172***	-2.347**
	(0.945)	(0.829)	(0.972)
Observations	7,587	7,923	7,587
R-squared	0.423	0.410	0.423
Underidentification test (KP)	10.036	15.297	21.153
p-value	0.0015	0.0001	0
Weak identification test (KP)	14.13	17.028	21.083
Endogeneity test	0.5535	1.092	0.5734
p-value	0.4569	0.296	0.4489

Standard errors in parentheses
$***p < 0.01, **p < 0.05, *p < 0.1$
The instrument is statelaweffect2

Appendix D. Factors affecting change in governance form

Table 32: Factors affecting likelihood of conversion

	probit- urban covariates		probit- full model		probit- without select covariates		LPM- full model	
VARIABLES	dydx- at means	dydx- avg	dydx- at means	dydx- avg	dydx- at means	dydx- avg	robust errors	bootstrap errors
lnpop	0.0112	0.0805***	0.00212	0.0743***	0.00559	0.0806***	0.0330***	0.0330**
	(0.0363)	(0.0156)	(0.00337)	(0.0181)	(0.0192)	(0.0166)	(0.0126)	(0.0132)
lndensity	0.00191	0.0137	0.000824	0.0288*			0.0128	0.0128
	(0.00641)	(0.0124)	(0.00137)	(0.0155)			(0.00924)	(0.00935)
lnpropagrocult	0.00165	0.0119	0.000515	0.0180*	0.000807	0.0116	0.0128	0.0128*
	(0.00549)	(0.00926)	(0.000860)	(0.0104)	(0.00283)	(0.00880)	(0.00802)	(0.00762)
ln1lakhcity	0.00571	0.0412***	0.00126	0.0441***	0.00259	0.0374***	0.0190***	0.0190***
	(0.0185)	(0.00931)	(0.00198)	(0.0109)	(0.00891)	(0.00918)	(0.00432)	(0.00439)
lnrlydist	-0.000797	-0.00575**	-0.000148	-0.00518**			-0.00438	-0.00438
	(0.00261)	(0.00223)	(0.000242)	(0.00238)			(0.00290)	(0.00295)
lnrds			-0.000302	-0.0105			-0.00645	-0.00645
			(0.000539)	(0.00899)			(0.00517)	(0.00576)
fire			0.000227	0.00794	9.75e-05	0.00141	0.0201	0.0201
			(0.000692)	(0.0208)	(0.00128)	(0.0178)	(0.0228)	(0.0238)
HigherEduD			0.00200	0.0700***	0.00418	0.0603***	0.0434***	0.0434***
			(0.00314)	(0.0235)	(0.0144)	(0.0206)	(0.0143)	(0.0154)
lnwaterpax			9.43e-05	0.00330			0.00215	0.00215
			(0.000203)	(0.00484)			(0.00402)	(0.00396)
lnhospbeds			-0.00102	-0.0357			-0.0199	-0.0199
			(0.00212)	(0.0489)			(0.0263)	(0.0270)
lnlit			-0.000729	-0.0255	-0.00436	-0.0629	-0.00562	-0.00562
			(0.00302)	(0.101)	(0.0161)	(0.0879)	(0.0635)	(0.0683)
lnHHwater			-0.000915	-0.0320*	-0.00195	-0.0282*	-0.0191**	-0.0191**
			(0.00153)	(0.0171)	(0.00681)	(0.0157)	(0.00837)	(0.00785)
lnHHelectr			0.00228	0.0797	0.00801	0.116*	0.0246**	0.0246**
			(0.00403)	(0.0703)	(0.0277)	(0.0625)	(0.0118)	(0.0124)
lnHHlatr			0.000998	0.0349	0.00227	0.0327	0.0218	0.0218
			(0.00188)	(0.0373)	(0.00809)	(0.0318)	(0.0170)	(0.0174)
_Istate_3	-	-	-	-	-	-	0.00111	0.00111
							(0.0219)	(0.0213)
_Istate_5	-	-	-	-	-	-	-0.0340	-0.0340
							(0.0257)	(0.0250)
_Istate_6	0.0273	0.197	0.00520	0.182	0.0148	0.213	0.0673	0.0673
	(3.450)	(25.52)	(0.304)	(10.80)	(1.531)	(22.81)	(0.0654)	(0.0687)
_Istate_7	-	-	-	-	-	-	-0.0479*	-0.0479*
							(0.0270)	(0.0276)
_Istate_8	0.0123	0.0888	0.00142	0.0498	0.00808	0.117	-0.00573	-0.00573
	(3.498)	(25.52)	(0.307)	(10.80)	(1.554)	(22.81)	(0.0358)	(0.0348)
_Istate_9	-	-	-	-	-	-	-0.0150	-0.0150
							(0.0176)	(0.0189)
_Istate_10	0.0288	0.208	0.00461	0.161	0.0185	0.266	0.189	0.189
	(3.445)	(25.52)	(0.304)	(10.80)	(1.519)	(22.81)	(0.167)	(0.190)
o._Istate_12	-	-	-	-	-	-		
o._Istate_13	-	-	-	-	-	-		
_Istate_14	-	-	-	-	-	-	0.0249	0.0249
							(0.0253)	(0.0273)
_Istate_16	0.0361	0.261	0.00392	0.137	0.0151	0.218	0.163	0.163
	(3.422)	(25.52)	(0.305)	(10.80)	(1.530)	(22.81)	(0.170)	(0.172)
_Istate_17	-	-	-	-	-	-	-0.0288	-0.0288
							(0.0256)	(0.0299)
_Istate_18	0.0174	0.126	0.00235	0.0821	0.0114	0.164	0.0976	0.0976
	(3.482)	(25.52)	(0.307)	(10.80)	(1.543)	(22.81)	(0.0876)	(0.0947)
_Istate_19	0.00810	0.0584	0.000710	0.0248	0.00783	0.113	0.00182	0.00182
	(3.511)	(25.52)	(0.308)	(10.80)	(1.554)	(22.81)	(0.0213)	(0.0215)
_Istate_20	-	-	-	-	-	-	-0.0260	-0.0260
							(0.0204)	(0.0203)
_Istate_21	-	-	-	-	-	-	-0.0365	-0.0365
							(0.0297)	(0.0316)
_Istate_22	0.0436	0.315	0.00885	0.309	0.0250	0.361	0.651***	0.651***
	(3.398)	(25.52)	(0.300)	(10.80)	(1.497)	(22.81)	(0.133)	(0.143)
_Istate_23	0.0194	0.140	0.00309	0.108	0.0119	0.172	0.0516	0.0516
	(3.475)	(25.52)	(0.306)	(10.80)	(1.541)	(22.81)	(0.0409)	(0.0407)

_Istate_24	0.0199	0.144	0.00337	0.118	0.0126	0.182	0.0689	0.0689
	(3.474)	(25.52)	(0.306)	(10.80)	(1.539)	(22.81)	(0.0560)	(0.0515)
_Istate_26	-	-	-	-	-	-	0.936***	0.936***
							(0.0282)	(0.0282)
_Istate_27	0.0125	0.0903	0.000677	0.0237	0.00639	0.0922	-0.0104	-0.0104
	(3.497)	(25.52)	(0.308)	(10.80)	(1.559)	(22.81)	(0.0255)	(0.0252)
_Istate_28	0.0149	0.108	6.12e-05	0.00214	0.00600	0.0866	0.0420	0.0420
	(3.490)	(25.52)	(0.309)	(10.80)	(1.561)	(22.81)	(0.0283)	(0.0315)
_Istate_29	0.0211	0.152	0.00424	0.148	0.0102	0.148	0.278	0.278
	(3.470)	(25.52)	(0.305)	(10.80)	(1.546)	(22.81)	(0.271)	(0.289)
_Istate_30	-	-	-	-	-	-	0.00434	0.00434
							(0.0399)	(0.0507)
_Istate_31	-	-	-	-	-	-	-0.0730*	-0.0730*
							(0.0409)	(0.0438)
_Istate_32	-	-	-	-	-	-	-0.0480	-0.0480*
							(0.0296)	(0.0280)
_Istate_33	-	-	-	-	-	-	-0.0248	-0.0248
							(0.0352)	(0.0354)
_Istate_35	-	-	-	-	-	-	-0.0674**	-0.0674*
							(0.0327)	(0.0347)
_Istate_12							0.907***	0.907***
							(0.0379)	(0.0401)
_Istate_13							0.868***	0.868***
							(0.0332)	(0.0348)
Constant							-0.498***	-0.498***
							(0.168)	(0.170)
Observations	679	679	600	600	679	679	887	887
R/Pseudo R-squared	0.4428	0.4428	0.5136	0.5136	0.4782	0.4782	0.458	0.458

Standard errors in parentheses
$***p < 0.01, **p < 0.05, *p < 0.1$

Appendix E. Difference-in-differences

Table 33: Difference-in-differences- high spillover development indicators

VARIABLES	lnrds	lnrds full model	lnrds	lnrds	lnrds no density and rail	lnrds	lnrds	lnrds full model	lnrds
	fe- robust	fe- bootstrap	fe- cluster	fe- robust	fe- bootstrap	fe- cluster	re- robust	re- bootstrap	re- cluster
DID	0.796***	0.796***	0.796**	0.507**	0.507**	0.507	0.841***	0.841***	0.841**
	(0.234)	(0.234)	(0.301)	(0.243)	(0.249)	(0.309)	(0.201)	(0.188)	(0.342)
ConvertedCTgroup	-	-	-	-	-	-	-0.186	-0.186	-0.186
							(0.186)	(0.188)	(0.255)
year	-0.121*	-0.121*	-0.121	-0.176**	-0.176**	-0.176	-0.110*	-0.110*	-0.110
	(0.0689)	(0.0687)	(0.362)	(0.0712)	(0.0701)	(0.412)	(0.0618)	(0.0627)	(0.351)
lnpop	-1.549	-1.549	-1.549	-0.427	-0.427	-0.427	-0.135	-0.135	-0.135
	(1.681)	(1.859)	(2.771)	(1.721)	(1.761)	(3.045)	(0.991)	(0.990)	(0.653)
lndensity	1.367***	1.367*	1.367**				0.994**	0.994**	0.994**
	(0.527)	(0.785)	(0.497)				(0.410)	(0.436)	(0.481)
lnpropagrocult	0.127	0.127	0.127	-0.0309	-0.0309	-0.0309	0.146	0.146	0.146
	(0.373)	(0.378)	(0.314)	(0.387)	(0.396)	(0.327)	(0.221)	(0.240)	(0.240)
ln1lakhcity	0.112	0.112	0.112**	-0.0404	-0.0404	-0.0404	-0.0158	-0.0158	-0.0158
	(0.0771)	(0.0900)	(0.0508)	(0.0853)	(0.0891)	(0.0249)	(0.0470)	(0.0479)	(0.0288)
lnrlydist	-0.0110	-0.0110	-0.0110				-0.0109	-0.0109	-0.0109
	(0.0483)	(0.0497)	(0.0300)				(0.0172)	(0.0176)	(0.0196)
lnpopsq	0.0527	0.0527	0.0527	0.0320	0.0320	0.0320	-0.0126	-0.0126	-0.0126
	(0.0854)	(0.0939)	(0.151)	(0.0858)	(0.0877)	(0.165)	(0.0507)	(0.0508)	(0.0346)
lndensitysq	-0.0235	-0.0235	-0.0235				-0.00867	-0.00867	-0.00867
	(0.0342)	(0.0489)	(0.0315)				(0.0254)	(0.0271)	(0.0291)
lnpropagrcultsq	0.00771	0.00771	0.00771	-0.00802	-0.00802	-0.00802	0.0423	0.0423	0.0423
	(0.0642)	(0.0648)	(0.0504)	(0.0663)	(0.0680)	(0.0531)	(0.0390)	(0.0425)	(0.0415)
ln1lakhcitysq	-0.0239	-0.0239	-0.0239*	-0.00494	-0.00494	-0.00494	0.0158*	0.0158*	0.0158**
	(0.0155)	(0.0167)	(0.0130)	(0.0169)	(0.0176)	(0.00969)	(0.00872)	(0.00898)	(0.00612)
lnrlydistsq	0.0155	0.0155	0.0155				0.00895	0.00895	0.00895
	(0.0147)	(0.0153)	(0.0130)				(0.00610)	(0.00594)	(0.00804)
_Istate_3	-	-	-	-	-	-	1.181	1.181	1.181***
							(0.837)	(0.907)	(0.0926)
_Istate_5	-	-	-	-	-	-	0.383	0.383	0.383***
							(0.907)	(0.982)	(0.0967)
_Istate_6	-	-	-	-	-	-	0.874	0.874	0.874***
							(0.843)	(0.897)	(0.114)
_Istate_7	-	-	-	-	-	-	0.439	0.439	0.439*
							(0.842)	(0.938)	(0.232)
_Istate_8	-	-	-	-	-	-	0.957	0.957	0.957***
							(0.836)	(0.903)	(0.0734)
_Istate_9	-	-	-	-	-	-	1.049	1.049	1.049***
							(0.838)	(0.904)	(0.106)
_Istate_10	-	-	-	-	-	-	1.689**	1.689*	1.689***
							(0.856)	(0.925)	(0.149)
_Istate_14	-	-	-	-	-	-	1.538*	1.538	1.538***
							(0.864)	(0.943)	(0.250)
_Istate_16	-	-	-	-	-	-	2.176**	2.176**	2.176***
							(0.873)	(0.925)	(0.111)
_Istate_17	-	-	-	-	-	-	1.395	1.395	1.395***
							(0.892)	(0.989)	(0.158)
_Istate_18	-	-	-	-	-	-	1.948**	1.948**	1.948***
							(0.832)	(0.912)	(0.111)
_Istate_19	-	-	-	-	-	-	0.865	0.865	0.865***
							(0.839)	(0.927)	(0.138)
_Istate_20	-	-	-	-	-	-	1.645**	1.645*	1.645***
							(0.832)	(0.898)	(0.104)
_Istate_21	-	-	-	-	-	-	1.208	1.208	1.208***
							(0.900)	(0.942)	(0.0714)
_Istate_22	-	-	-	-	-	-	1.396*	1.396	1.396***
							(0.848)	(0.930)	(0.147)
_Istate_23	-	-	-	-	-	-	0.781	0.781	0.781***
							(0.840)	(0.918)	(0.0667)
_Istate_24	-	-	-	-	-	-	1.453*	1.453	1.453***
							(0.835)	(0.920)	(0.103)
_Istate_26	-	-	-	-	-	-	1.953**	1.953**	1.953***

							(0.850)	(0.923)	(0.216)
_Istate_27	-	-	-	-	-	-	1.258	1.258	1.258***
							(0.833)	(0.897)	(0.0980)
_Istate_28	-	-	-	-	-	-	1.616*	1.616*	1.616***
							(0.835)	(0.910)	(0.0946)
_Istate_29	-	-	-	-	-	-	-1.221	-1.221	-1.221***
							(0.941)	(0.991)	(0.0865)
_Istate_30	-	-	-	-	-	-	2.588***	2.588***	2.588***
							(0.836)	(0.895)	(0.0763)
_Istate_31	-	-	-	-	-	-	1.600*	1.600*	1.600***
							(0.865)	(0.912)	(0.229)
_Istate_32	-	-	-	-	-	-	2.771***	2.771***	2.771***
							(0.833)	(0.902)	(0.128)
_Istate_33	-	-	-	-	-	-	1.844**	1.844**	1.844***
							(0.833)	(0.904)	(0.109)
_Istate_34	-	-	-	-	-	-	-0.879	-0.879	-0.879***
							(0.853)	(0.927)	(0.218)
_Istate_35	-	-	-	-	-	-	0.618	0.618	0.618
							(0.887)	(0.927)	(0.388)
_Istate_12	-	-	-	-	-	-	1.556*	1.556*	1.556***
							(0.867)	(0.941)	(0.309)
_Istate_13	-	-	-	-	-	-	-3.497***	-3.497***	-3.497***
							(0.851)	(0.918)	(0.193)
Constant	1.520	1.520	1.520	2.205	2.205	2.205	-5.558	-5.558	-5.558*
	(7.887)	(8.325)	(12.60)	(8.664)	(8.910)	(14.63)	(4.492)	(4.340)	(3.197)
Observations	2,297	2,297	2,297	2,361	2,361	2,361	2,297	2,297	2,297
Within R-squared	0.049	0.049	0.049	0.008	0.008	0.008	0.0382	0.0382	0.0382

VARIABLES	fire	fire full model	fire	fire	fire no density and rail	fire	fire	fire full model	fire
	fe- robust	fe- bootstrap	fe- cluster	fe- robust	fe- bootstrap	fe- cluster	re- robust	re- bootstrap	re- cluster
DID	0.281***	0.281***	0.281**	0.200***	0.200***	0.200**	0.285***	0.285***	0.285***
	(0.0805)	(0.0831)	(0.102)	(0.0562)	(0.0578)	(0.0881)	(0.0798)	(0.0845)	(0.108)
ConvertedCTgroup	-	-	-	-	-	-	0.122	0.122	0.122
							(0.0785)	(0.0760)	(0.119)
year	-0.0451***	-0.0451***	-0.0451*	-0.0471***	-0.0471***	-0.0471*	-0.0221**	-0.0221**	-0.0221
	(0.0127)	(0.0128)	(0.0237)	(0.0121)	(0.0118)	(0.0230)	(0.0102)	(0.00907)	(0.0214)
lnpop	0.708	0.708	0.708	0.638	0.638	0.638	0.112	0.112	0.112
	(0.479)	(0.478)	(0.685)	(0.443)	(0.460)	(0.600)	(0.186)	(0.191)	(0.228)
lndensity	0.0510	0.0510	0.0510				0.0904	0.0904	0.0904
	(0.171)	(0.245)	(0.205)				(0.0838)	(0.0990)	(0.0824)
lnpropagrocult	0.0756	0.0756	0.0756	0.0754	0.0754	0.0754	0.140**	0.140***	0.140**
	(0.0879)	(0.0882)	(0.0897)	(0.0837)	(0.0833)	(0.0843)	(0.0545)	(0.0532)	(0.0628)
ln1lakhcity	-0.0222	-0.0222	-0.0222	-0.0124	-0.0124	-0.0124	-0.0136	-0.0136	-0.0136*
	(0.0236)	(0.0253)	(0.0170)	(0.0137)	(0.0147)	(0.0108)	(0.0113)	(0.0112)	(0.00735)
lnrlydist	0.00728	0.00728	0.00728				0.00491	0.00491	0.00491
	(0.00998)	(0.00993)	(0.0116)				(0.00416)	(0.00430)	(0.00429)
lnpopsq	-0.0304	-0.0304	-0.0304	-0.0269	-0.0269	-0.0269	-0.00213	-0.00213	-0.00213
	(0.0248)	(0.0246)	(0.0352)	(0.0228)	(0.0237)	(0.0303)	(0.00949)	(0.00970)	(0.0115)
lndensitysq	-0.00338	-0.00338	-0.00338				-0.00773	-0.00773	-0.00773
	(0.0117)	(0.0157)	(0.0138)				(0.00538)	(0.00625)	(0.00515)
lnpropagrcultsq	0.0194	0.0194	0.0194	0.0179	0.0179	0.0179	0.0363***	0.0363***	0.0363***
	(0.0152)	(0.0153)	(0.0161)	(0.0144)	(0.0145)	(0.0149)	(0.00981)	(0.00962)	(0.0131)
ln1lakhcitysq	0.000741	0.000741	0.000741	-0.00110	-0.00110	-0.00110	0.00550***	0.00550***	0.00550***
	(0.00391)	(0.00427)	(0.00265)	(0.00246)	(0.00250)	(0.00193)	(0.00203)	(0.00206)	(0.00124)
lnrlydistsq	0.00237	0.00237	0.00237				0.00495***	0.00495***	0.00495***
	(0.00271)	(0.00269)	(0.00312)				(0.00142)	(0.00149)	(0.00134)
_Istate_3	-	-	-	-	-	-	-0.0129	-0.0129	-0.0129
							(0.194)	(0.206)	(0.0174)
_Istate_5	-	-	-	-	-	-	-0.139	-0.139	-0.139***
							(0.188)	(0.201)	(0.0248)
_Istate_6	-	-	-	-	-	-	-0.251	-0.251	-0.251***
							(0.181)	(0.198)	(0.0318)
_Istate_7	-	-	-	-	-	-	-0.274	-0.274	-0.274***
							(0.182)	(0.195)	(0.0389)
_Istate_8	-	-	-	-	-	-	-0.255	-0.255	-0.255***
							(0.179)	(0.194)	(0.0257)
_Istate_9	-	-	-	-	-	-	0.108	0.108	0.108***
							(0.185)	(0.199)	(0.0249)
_Istate_10	-	-	-	-	-	-	-0.138	-0.138	-0.138***
							(0.183)	(0.204)	(0.0415)

_Istate_14	-	-	-	-	-	-	-0.321*	-0.321	-0.321***
							(0.180)	(0.198)	(0.0472)
_Istate_16	-	-	-	-	-	-	-0.0361	-0.0361	-0.0361
							(0.224)	(0.248)	(0.0431)
_Istate_17	-	-	-	-	-	-	-0.0605	-0.0605	-0.0605
							(0.223)	(0.231)	(0.0504)
_Istate_18	-	-	-	-	-	-	0.263	0.263	0.263***
							(0.188)	(0.199)	(0.0221)
_Istate_19	-	-	-	-	-	-	-0.170	-0.170	-0.170***
							(0.180)	(0.196)	(0.0216)
_Istate_20	-	-	-	-	-	-	-0.182	-0.182	-0.182***
							(0.180)	(0.196)	(0.0218)
_Istate_21	-	-	-	-	-	-	-0.0104	-0.0104	-0.0104
							(0.192)	(0.201)	(0.0160)
_Istate_22	-	-	-	-	-	-	-0.301	-0.301	-0.301***
							(0.206)	(0.214)	(0.0785)
_Istate_23	-	-	-	-	-	-	-0.128	-0.128	-0.128***
							(0.181)	(0.194)	(0.0216)
_Istate_24	-	-	-	-	-	-	-0.0520	-0.0520	-0.0520*
							(0.186)	(0.202)	(0.0268)
_Istate_25	-	-	-	-	-	-			
_Istate_26	-	-	-	-	-	-	0.368*	0.368*	0.368***
							(0.188)	(0.200)	(0.117)
_Istate_27	-	-	-	-	-	-	-0.179	-0.179	-0.179***
							(0.180)	(0.195)	(0.0282)
_Istate_28	-	-	-	-	-	-	0.0450	0.0450	0.0450
							(0.184)	(0.201)	(0.0386)
_Istate_29	-	-	-	-	-	-	-0.180	-0.180	-0.180***
							(0.181)	(0.196)	(0.0194)
_Istate_30	-	-	-	-	-	-	-0.334*	-0.334*	-0.334***
							(0.179)	(0.189)	(0.0231)
_Istate_31	-	-	-	-	-	-	-0.197	-0.197	-0.197**
							(0.289)	(0.313)	(0.0894)
_Istate_32	-	-	-	-	-	-	-0.291	-0.291	-0.291***
							(0.180)	(0.193)	(0.0310)
_Istate_33	-	-	-	-	-	-	-0.210	-0.210	-0.210***
							(0.180)	(0.194)	(0.0253)
_Istate_34	-	-	-	-	-	-	-0.517***	-0.517**	-0.517***
							(0.191)	(0.204)	(0.128)
_Istate_35	-	-	-	-	-	-	-0.153	-0.153	-0.153*
							(0.424)	(0.467)	(0.0876)
_Istate_12	-	-	-	-	-	-	0.0890	0.0890	0.0890
							(0.224)	(0.225)	(0.133)
_Istate_13	-	-	-	-	-	-	-0.452**	-0.452**	-0.452***
							(0.195)	(0.206)	(0.135)
Constant	-3.914*	-3.914*	-3.914	-3.339	-3.339	-3.339	-0.801	-0.801	-0.801
	(2.206)	(2.164)	(2.902)	(2.141)	(2.230)	(2.926)	(0.892)	(0.919)	(0.985)
Observations	2,297	2,297	2,297	2,385	2,385	2,385	2,297	2,297	2,297
Within R-squared	0.056	0.056	0.056	0.045	0.045	0.045	0.0379	0.0379	0.0379

VARIABLES	HigherEduD	HigherEduD	HigherEduD	HigherEduD	HigherEduD	HigherEduD	HigherEduD	HigherEduD	HigherEduD
		full model			no density and rail			full model	
	fe- robust	fe- bootstrap	fe- cluster	fe- robust	fe- bootstrap	fe- cluster	re- robust	re- bootstrap	re- cluster
DID	0.0659	0.0659	0.0659	-0.00902	-0.00902	-0.00902	0.0193	0.0193	0.0193
	(0.0629)	(0.0626)	(0.0716)	(0.0617)	(0.0616)	(0.0758)	(0.0587)	(0.0546)	(0.0660)
ConvertedCTgroup	-	-	-	-	-	-	0.216***	0.216***	0.216**
							(0.0655)	(0.0622)	(0.0888)
year	0.0511***	0.0511***	0.0511**	0.0450***	0.0450***	0.0450*	0.0447***	0.0447***	0.0447*
	(0.0155)	(0.0153)	(0.0242)	(0.0148)	(0.0152)	(0.0258)	(0.0142)	(0.0137)	(0.0244)
lnpop	-0.634	-0.634	-0.634	-0.734*	-0.734	-0.734	0.0440	0.0440	0.0440
	(0.440)	(0.471)	(0.456)	(0.426)	(0.449)	(0.434)	(0.213)	(0.209)	(0.208)
lndensity	0.116	0.116	0.116				0.156	0.156	0.156
	(0.146)	(0.225)	(0.142)				(0.127)	(0.148)	(0.138)
lnpropagrocult	-0.0879	-0.0879	-0.0879	-0.114	-0.114	-0.114	0.0513	0.0513	0.0513
	(0.100)	(0.103)	(0.117)	(0.0970)	(0.0976)	(0.114)	(0.0699)	(0.0679)	(0.0879)
ln1lakhcity	-0.0237	-0.0237	-0.0237	-0.00443	-0.00443	-0.00443	-0.000458	-0.000458	-0.000458
	(0.0182)	(0.0195)	(0.0140)	(0.0140)	(0.0142)	(0.00430)	(0.0123)	(0.0136)	(0.00713)
lnrlydist	0.00337	0.00337	0.00337				0.00846*	0.00846*	0.00846
	(0.00888)	(0.00916)	(0.00814)				(0.00511)	(0.00490)	(0.00549)
lnpopsq	0.0346	0.0346	0.0346	0.0399*	0.0399*	0.0399*	0.00537	0.00537	0.00537
	(0.0230)	(0.0245)	(0.0231)	(0.0222)	(0.0232)	(0.0220)	(0.0108)	(0.0105)	(0.0103)

lndensitysq	-0.00616	-0.00616	-0.00616				-0.0108	-0.0108	-0.0108
	(0.0105)	(0.0148)	(0.00988)				(0.00783)	(0.00920)	(0.00816)
lnpropagrcultsq	-0.0112	-0.0112	-0.0112	-0.0165	-0.0165	-0.0165	0.00588	0.00588	0.00588
	(0.0173)	(0.0177)	(0.0200)	(0.0167)	(0.0168)	(0.0190)	(0.0121)	(0.0119)	(0.0151)
ln1lakhcitysq	0.00854**	0.00854**	0.00854**	0.00408	0.00408	0.00408**	0.00486**	0.00486**	0.00486**
	(0.00371)	(0.00376)	(0.00337)	(0.00318)	(0.00324)	(0.00198)	(0.00228)	(0.00238)	(0.00210)
lnrlydistsq	0.00309	0.00309	0.00309				0.00526***	0.00526***	0.00526***
	(0.00285)	(0.00296)	(0.00289)				(0.00178)	(0.00179)	(0.00159)
_Istate_3	-	-	-	-	-	-	-0.0919	-0.0919	-0.0919***
							(0.251)	(0.264)	(0.0329)
_Istate_5	-	-	-	-	-	-	-0.0391	-0.0391	-0.0391
							(0.269)	(0.289)	(0.0418)
_Istate_6	-	-	-	-	-	-	-0.163	-0.163	-0.163***
							(0.254)	(0.262)	(0.0423)
_Istate_7	-	-	-	-	-	-	-0.192	-0.192	-0.192***
							(0.248)	(0.264)	(0.0533)
_Istate_8	-	-	-	-	-	-	-0.0998	-0.0998	-0.0998***
							(0.247)	(0.264)	(0.0382)
_Istate_9	-	-	-	-	-	-	-0.134	-0.134	-0.134***
							(0.245)	(0.259)	(0.0413)
_Istate_10	-	-	-	-	-	-	0.0822	0.0822	0.0822*
							(0.256)	(0.274)	(0.0427)
_Istate_14	-	-	-	-	-	-	-0.131	-0.131	-0.131***
							(0.274)	(0.293)	(0.0454)
_Istate_16	-	-	-	-	-	-	0.0618	0.0618	0.0618
							(0.307)	(0.321)	(0.0384)
_Istate_17	-	-	-	-	-	-	0.122	0.122	0.122**
							(0.297)	(0.318)	(0.0531)
_Istate_18	-	-	-	-	-	-	0.112	0.112	0.112***
							(0.247)	(0.264)	(0.0380)
_Istate_19	-	-	-	-	-	-	-0.110	-0.110	-0.110***
							(0.242)	(0.258)	(0.0412)
_Istate_20	-	-	-	-	-	-	-0.0869	-0.0869	-0.0869**
							(0.244)	(0.257)	(0.0383)
_Istate_21	-	-	-	-	-	-	0.0599	0.0599	0.0599**
							(0.255)	(0.276)	(0.0262)
_Istate_22	-	-	-	-	-	-	-0.359	-0.359	-0.359***
							(0.256)	(0.276)	(0.0735)
_Istate_23	-	-	-	-	-	-	-0.248	-0.248	-0.248***
							(0.243)	(0.256)	(0.0338)
_Istate_24	-	-	-	-	-	-	-0.205	-0.205	-0.205***
							(0.245)	(0.262)	(0.0395)
_Istate_26	-	-	-	-	-	-	-0.822***	-0.822***	-0.822***
							(0.249)	(0.267)	(0.113)
_Istate_27	-	-	-	-	-	-	0.112	0.112	0.112***
							(0.244)	(0.261)	(0.0403)
_Istate_28	-	-	-	-	-	-	0.104	0.104	0.104**
							(0.246)	(0.257)	(0.0468)
_Istate_29	-	-	-	-	-	-	0.149	0.149	0.149***
							(0.247)	(0.262)	(0.0341)
_Istate_30	-	-	-	-	-	-	-0.206	-0.206	-0.206***
							(0.250)	(0.261)	(0.0371)
_Istate_31	-	-	-	-	-	-	0.0926	0.0926	0.0926
							(0.282)	(0.300)	(0.0836)
_Istate_32	-	-	-	-	-	-	0.0114	0.0114	0.0114
							(0.246)	(0.261)	(0.0486)
_Istate_33	-	-	-	-	-	-	-0.115	-0.115	-0.115***
							(0.243)	(0.259)	(0.0396)
_Istate_34	-	-	-	-	-	-	0.290	0.290	0.290***
							(0.249)	(0.268)	(0.107)
_Istate_35	-	-	-	-	-	-	-0.398	-0.398	-0.398***
							(0.306)	(0.328)	(0.0883)
_Istate_12	-	-	-	-	-	-	-0.133	-0.133	-0.133
							(0.277)	(0.299)	(0.122)
_Istate_13	-	-	-	-	-	-	0.337	0.337	0.337***
							(0.250)	(0.266)	(0.129)
Constant	2.421	2.421	2.421	3.409*	3.409	3.409	-1.129	-1.129	-1.129
	(2.053)	(2.116)	(2.042)	(2.044)	(2.164)	(2.152)	(1.047)	(1.095)	(1.010)
Observations	2,297	2,297	2,297	2,385	2,385	2,385	2,297	2,297	2,297
Within R-squared	0.027	0.027	0.027	0.018	0.018	0.018	0.0183	0.0183	0.0183

	lnwaterpax	lnwaterpax	lnwaterpax	lnwaterpax	lnwaterpax	lnwaterpax	lnwaterpax	lnwaterpax	lnwaterpax

VARIABLES	full model			no density and rail			full model		
	fe- robust	fe- bootstrap	fe- cluster	fe- robust	fe- bootstrap	fe- cluster	re- robust	re- bootstrap	re- cluster
DID	1.311***	1.311***	1.311	1.082***	1.082***	1.082	0.410	0.410	0.410
	(0.380)	(0.387)	(1.120)	(0.324)	(0.330)	(0.882)	(0.354)	(0.353)	(0.884)
ConvertedCTgroup	-	-	-	-	-	-	0.118	0.118	0.118
							(0.292)	(0.302)	(0.476)
year	-0.112	-0.112	-0.112	-0.0736	-0.0736	-0.0736	-0.273***	-0.273***	-0.273
	(0.0919)	(0.0935)	(0.456)	(0.0887)	(0.0917)	(0.459)	(0.0855)	(0.0853)	(0.613)
lnpop	6.356*	6.356*	6.356**	5.103	5.103	5.103	-0.0837	-0.0837	-0.0837
	(3.447)	(3.800)	(3.063)	(3.305)	(3.480)	(3.322)	(1.027)	(1.109)	(1.063)
lndensity	-1.407	-1.407	-1.407				-0.797	-0.797	-0.797
	(1.175)	(1.869)	(1.746)				(0.542)	(0.622)	(0.531)
lnpropagrocult	0.484	0.484	0.484	0.403	0.403	0.403	0.618**	0.618**	0.618**
	(0.467)	(0.480)	(0.497)	(0.465)	(0.476)	(0.470)	(0.251)	(0.246)	(0.284)
ln1lakhcity	-0.0282	-0.0282	-0.0282	-0.0124	-0.0124	-0.0124	0.0141	0.0141	0.0141
	(0.0596)	(0.0719)	(0.0365)	(0.0687)	(0.0725)	(0.0315)	(0.0380)	(0.0344)	(0.0273)
lnrlydist	0.198***	0.198***	0.198**				0.0292*	0.0292*	0.0292
	(0.0693)	(0.0662)	(0.0861)				(0.0164)	(0.0175)	(0.0195)
lnpopsq	-0.440**	-0.440**	-0.440***	-0.371**	-0.371**	-0.371**	-0.00372	-0.00372	-0.00372
	(0.180)	(0.197)	(0.155)	(0.173)	(0.183)	(0.143)	(0.0530)	(0.0572)	(0.0484)
lndensitysq	0.110	0.110	0.110				0.0485	0.0485	0.0485
	(0.0754)	(0.114)	(0.116)				(0.0338)	(0.0387)	(0.0338)
lnpropagrcultsq	-0.000472	-0.000472	-0.000472	-0.0246	-0.0246	-0.0246	0.121***	0.121***	0.121**
	(0.0846)	(0.0855)	(0.0865)	(0.0836)	(0.0863)	(0.0805)	(0.0442)	(0.0421)	(0.0564)
ln1lakhcitysq	0.00608	0.00608	0.00608	0.00389	0.00389	0.00389	0.0113	0.0113	0.0113
	(0.0150)	(0.0165)	(0.0149)	(0.0171)	(0.0175)	(0.0161)	(0.00741)	(0.00733)	(0.00711)
lnrlydistsq	0.0242	0.0242	0.0242				0.0128**	0.0128**	0.0128
	(0.0208)	(0.0195)	(0.0239)				(0.00617)	(0.00612)	(0.00831)
_Istate_3	-	-	-	-	-	-	0.558	0.558	0.558***
							(1.015)	(1.118)	(0.117)
_Istate_5	-	-	-	-	-	-	0.258	0.258	0.258
							(0.984)	(1.143)	(0.240)
_Istate_6	-	-	-	-	-	-	-0.271	-0.271	-0.271
							(0.952)	(1.152)	(0.171)
_Istate_7	-	-	-	-	-	-	0.505	0.505	0.505**
							(0.992)	(1.169)	(0.239)
_Istate_8	-	-	-	-	-	-	0.0128	0.0128	0.0128
							(0.955)	(1.129)	(0.121)
_Istate_9	-	-	-	-	-	-	0.0410	0.0410	0.0410
							(0.960)	(1.137)	(0.149)
_Istate_10	-	-	-	-	-	-	-0.854	-0.854	-0.854***
							(0.954)	(1.110)	(0.134)
_Istate_14	-	-	-	-	-	-	1.235	1.235	1.235***
							(1.035)	(1.210)	(0.304)
_Istate_16	-	-	-	-	-	-	2.631**	2.631**	2.631***
							(1.140)	(1.316)	(0.116)
_Istate_17	-	-	-	-	-	-	-0.907	-0.907	-0.907***
							(0.958)	(1.160)	(0.268)
_Istate_18	-	-	-	-	-	-	0.199	0.199	0.199*
							(0.950)	(1.136)	(0.110)
_Istate_19	-	-	-	-	-	-	-0.522	-0.522	-0.522***
							(0.949)	(1.130)	(0.127)
_Istate_20	-	-	-	-	-	-	0.0548	0.0548	0.0548
							(0.951)	(1.133)	(0.152)
_Istate_21	-	-	-	-	-	-	-0.748	-0.748	-0.748***
							(0.960)	(1.148)	(0.0877)
_Istate_22	-	-	-	-	-	-	-0.193	-0.193	-0.193
							(0.973)	(1.142)	(0.158)
_Istate_23	-	-	-	-	-	-	-0.469	-0.469	-0.469***
							(0.956)	(1.122)	(0.102)
_Istate_24	-	-	-	-	-	-	0.714	0.714	0.714***
							(0.954)	(1.123)	(0.130)
_Istate_26	-	-	-	-	-	-	0.265	0.265	0.265
							(0.963)	(1.171)	(0.269)
_Istate_27	-	-	-	-	-	-	0.250	0.250	0.250
							(0.948)	(1.131)	(0.166)
_Istate_28	-	-	-	-	-	-	2.063**	2.063*	2.063***
							(0.962)	(1.146)	(0.180)
_Istate_29	-	-	-	-	-	-	1.182	1.182	1.182***
							(0.956)	(1.147)	(0.221)
_Istate_30	-	-	-	-	-	-	0.902	0.902	0.902***
							(0.954)	(1.144)	(0.147)
_Istate_31	-	-	-	-	-	-	2.340**	2.340**	2.340***

							(0.990)	(1.149)	(0.435)
_Istate_32	-	-	-	-	-	-	-0.0341	-0.0341	-0.0341
							(0.952)	(1.153)	(0.252)
_Istate_33	-	-	-	-	-	-	3.590***	3.590***	3.590***
							(0.951)	(1.146)	(0.183)
_Istate_34	-	-	-	-	-	-	0.0612	0.0612	0.0612
							(0.966)	(1.161)	(0.243)
_Istate_35	-	-	-	-	-	-	0.723	0.723	0.723
							(1.122)	(1.288)	(0.450)
_Istate_12	-	-	-	-	-	-	5.350***	5.350***	5.350***
							(1.128)	(1.262)	(0.565)
_Istate_13	-	-	-	-	-	-	-1.317	-1.317	-1.317***
							(0.991)	(1.179)	(0.479)
Constant	-18.41	-18.41	-18.41	-16.60	-16.60	-16.60	1.271	1.271	1.271
	(16.23)	(16.87)	(21.48)	(15.79)	(16.60)	(20.56)	(4.997)	(5.353)	(6.502)
Observations	2,255	2,255	2,255	2,339	2,339	2,339	2,255	2,255	2,255
Within R-squared	0.084	0.084	0.084	0.080	0.080	0.080	0.0213	0.0213	0.0213

VARIABLES	lnhospbeds	lnhospbeds full model	lnhospbeds	lnhospbeds	lnhospbeds no density and rail	lnhospbeds	lnhospbeds	lnhospbeds full model	lnhospbeds
	fe- robust	fe- bootstrap	fe- cluster	fe- robust	fe- bootstrap	fe- cluster	re- robust	re- bootstrap	re- cluster
DID	-0.0385	-0.0385	-0.0385	-0.0232	-0.0232	-0.0232	-0.0141	-0.0141	-0.0141
	(0.0444)	(0.0457)	(0.0456)	(0.0356)	(0.0363)	(0.0316)	(0.0380)	(0.0394)	(0.0385)
ConvertedCTgroup	-	-	-	-	-	-	0.0191	0.0191	0.0191
							(0.0383)	(0.0388)	(0.0390)
year	-0.0194*	-0.0194*	-0.0194	-0.0221**	-0.0221**	-0.0221	-0.0301***	-0.0301***	-0.0301
	(0.0105)	(0.0103)	(0.0224)	(0.0101)	(0.00977)	(0.0197)	(0.00901)	(0.00891)	(0.0234)
lnpop	-0.682	-0.682	-0.682	-0.592	-0.592	-0.592	-0.0524	-0.0524	-0.0524
	(0.420)	(0.430)	(0.490)	(0.407)	(0.400)	(0.462)	(0.154)	(0.163)	(0.160)
lndensity	0.165	0.165	0.165*				0.0878	0.0878	0.0878
	(0.174)	(0.183)	(0.0880)				(0.0562)	(0.0626)	(0.0629)
lnpropagrocult	0.0758	0.0758	0.0758	0.0658	0.0658	0.0658	0.0166	0.0166	0.0166
	(0.0547)	(0.0550)	(0.0722)	(0.0508)	(0.0520)	(0.0662)	(0.0292)	(0.0299)	(0.0401)
ln1lakhcity	0.00303	0.00303	0.00303	0.00355	0.00355	0.00355	0.00741***	0.00741***	0.00741***
	(0.00334)	(0.00404)	(0.00386)	(0.00257)	(0.00274)	(0.00330)	(0.00241)	(0.00258)	(0.00265)
lnrlydist	0.00279	0.00279	0.00279				-0.00105	-0.00105	-0.00105
	(0.00475)	(0.00481)	(0.00487)				(0.00245)	(0.00262)	(0.00214)
lnpopsq	0.0343*	0.0343	0.0343	0.0297	0.0297	0.0297	0.00221	0.00221	0.00221
	(0.0204)	(0.0210)	(0.0238)	(0.0198)	(0.0194)	(0.0225)	(0.00763)	(0.00818)	(0.00792)
lndensitysq	-0.0102	-0.0102	-0.0102*				-0.00529	-0.00529	-0.00529
	(0.0108)	(0.0114)	(0.00554)				(0.00356)	(0.00383)	(0.00409)
lnpropagrcultsq	0.0122	0.0122	0.0122	0.0102	0.0102	0.0102	0.00709	0.00709	0.00709
	(0.00925)	(0.00923)	(0.0126)	(0.00859)	(0.00869)	(0.0113)	(0.00520)	(0.00536)	(0.00743)
ln1lakhcitysq	0.00175	0.00175	0.00175	0.00154	0.00154	0.00154	0.00228**	0.00228***	0.00228**
	(0.00168)	(0.00176)	(0.00184)	(0.00148)	(0.00145)	(0.00154)	(0.000886)	(0.000851)	(0.00106)
lnrlydistsq	-7.36e-06	-7.36e-06	-7.36e-06				0.00112	0.00112	0.00112
	(0.00137)	(0.00132)	(0.00112)				(0.000885)	(0.000821)	(0.000789)
_Istate_3	-	-	-	-	-	-	0.0855*	0.0855*	0.0855***
							(0.0503)	(0.0473)	(0.0165)
_Istate_5	-	-	-	-	-	-	0.0132	0.0132	0.0132
							(0.0362)	(0.0396)	(0.0213)
_Istate_6	-	-	-	-	-	-	0.0185	0.0185	0.0185
							(0.0323)	(0.0383)	(0.0246)
_Istate_7	-	-	-	-	-	-	0.0167	0.0167	0.0167
							(0.0354)	(0.0404)	(0.0229)
_Istate_8	-	-	-	-	-	-	0.160***	0.160***	0.160***
							(0.0416)	(0.0458)	(0.0214)
_Istate_9	-	-	-	-	-	-	0.116***	0.116**	0.116***
							(0.0445)	(0.0514)	(0.0223)
_Istate_10	-	-	-	-	-	-	-0.00296	-0.00296	-0.00296
							(0.0305)	(0.0365)	(0.0239)
_Istate_14	-	-	-	-	-	-	-0.0357	-0.0357	-0.0357
							(0.0422)	(0.0447)	(0.0394)
_Istate_16	-	-	-	-	-	-	-0.0147	-0.0147	-0.0147
							(0.0306)	(0.0349)	(0.0265)
_Istate_17	-	-	-	-	-	-	-0.00670	-0.00670	-0.00670
							(0.0406)	(0.0461)	(0.0383)
_Istate_18	-	-	-	-	-	-	0.112***	0.112***	0.112***
							(0.0336)	(0.0391)	(0.0164)
_Istate_19	-	-	-	-	-	-	0.00551	0.00551	0.00551
							(0.0302)	(0.0340)	(0.0194)

_Istate_20	-	-	-	-	-	-	0.101***	0.101**	0.101***
							(0.0357)	(0.0403)	(0.0186)
_Istate_21	-	-	-	-	-	-	0.178**	0.178**	0.178***
							(0.0741)	(0.0857)	(0.0151)
_Istate_22	-	-	-	-	-	-	0.0816*	0.0816	0.0816***
							(0.0451)	(0.0504)	(0.0314)
_Istate_23	-	-	-	-	-	-	0.0405	0.0405	0.0405**
							(0.0345)	(0.0390)	(0.0162)
_Istate_24	-	-	-	-	-	-	0.117***	0.117***	0.117***
							(0.0400)	(0.0432)	(0.0198)
_Istate_26	-	-	-	-	-	-	0.313***	0.313***	0.313***
							(0.0396)	(0.0424)	(0.0422)
_Istate_27	-	-	-	-	-	-	0.0756**	0.0756**	0.0756***
							(0.0339)	(0.0377)	(0.0234)
_Istate_28	-	-	-	-	-	-	0.0638*	0.0638*	0.0638**
							(0.0358)	(0.0384)	(0.0269)
_Istate_29	-	-	-	-	-	-	0.0260	0.0260	0.0260
							(0.0339)	(0.0377)	(0.0208)
_Istate_30	-	-	-	-	-	-	0.0991	0.0991	0.0991***
							(0.148)	(0.139)	(0.0251)
_Istate_31	-	-	-	-	-	-	-0.0620	-0.0620	-0.0620
							(0.0659)	(0.0668)	(0.0409)
_Istate_32	-	-	-	-	-	-	0.0482	0.0482	0.0482*
							(0.0354)	(0.0384)	(0.0288)
_Istate_33	-	-	-	-	-	-	0.0285	0.0285	0.0285
							(0.0319)	(0.0361)	(0.0270)
_Istate_34	-	-	-	-	-	-	0.0340	0.0340	0.0340
							(0.0435)	(0.0438)	(0.0483)
_Istate_35	-	-	-	-	-	-	-0.0377	-0.0377	-0.0377
							(0.0895)	(0.0968)	(0.0473)
_Istate_12	-	-	-	-	-	-	0.316***	0.316***	0.316***
							(0.0787)	(0.0819)	(0.0443)
_Istate_13	-	-	-	-	-	-	-0.0914*	-0.0914*	-0.0914*
							(0.0490)	(0.0528)	(0.0469)
Constant	-1.727	-1.727	-1.727	-1.503	-1.503	-1.503	-4.696***	-4.696***	-4.696***
	(2.201)	(2.247)	(2.528)	(2.078)	(2.041)	(2.369)	(0.790)	(0.835)	(0.858)
Observations	2,025	2,025	2,025	2,102	2,102	2,102	2,025	2,025	2,025
Within R-squared	0.024	0.024	0.024	0.023	0.023	0.023	0.0123	0.0123	0.0123

Standard errors in parentheses
$***p < 0.01, **p < 0.05, *p < 0.1$

Table 34: Difference-in-differences- low spillover development indicators

VARIABLES	lnlit	lnlit	lnlit	lnlit	lnlit	lnlit	lnlit	lnlit	lnlit
		full model			no density and rail			full model	
	fe- robust	fe- bootstrap	fe- cluster	fe- robust	fe- bootstrap	fe- cluster	re- robust	re- bootstrap	re- cluster
DID	-0.0187*	-0.0187*	-0.0187*	-0.0184**	-0.0184**	-0.0184*	-0.0192*	-0.0192*	-0.0192*
	(0.0103)	(0.0108)	(0.0101)	(0.00792)	(0.00791)	(0.00915)	(0.0105)	(0.0108)	(0.0112)
ConvertedCTgroup	-	-	-	-	-	-	0.00242	0.00242	0.00242
							(0.0211)	(0.0209)	(0.0212)
year	0.0573***	0.0573***	0.0573***	0.0591***	0.0591***	0.0591***	0.0593***	0.0593***	0.0593***
	(0.00206)	(0.00205)	(0.00645)	(0.00201)	(0.00204)	(0.00668)	(0.00185)	(0.00194)	(0.00685)
lnpop	0.370***	0.370***	0.370***	0.371***	0.371***	0.371***	0.207***	0.207***	0.207***
	(0.101)	(0.104)	(0.127)	(0.0973)	(0.0997)	(0.126)	(0.0696)	(0.0650)	(0.0712)
lndensity	-0.0283	-0.0283	-0.0283				0.0225	0.0225	0.0225
	(0.0214)	(0.0327)	(0.0274)				(0.0176)	(0.0229)	(0.0193)
lnpropagrocult	-0.0109	-0.0109	-0.0109	-0.00988	-0.00988	-0.00988	-0.00974	-0.00974	-0.00974
	(0.0130)	(0.0129)	(0.0158)	(0.0129)	(0.0124)	(0.0159)	(0.0122)	(0.0112)	(0.0140)
ln1lakhcity	-0.00317	-0.00317	-0.00317	-0.000839	-0.000839	-0.000839	-0.00351*	-0.00351	-0.00351**
	(0.00197)	(0.00230)	(0.00208)	(0.00147)	(0.00148)	(0.00200)	(0.00197)	(0.00217)	(0.00169)
lnrlydist	-0.000536	-0.000536	-0.000536				-0.000634	-0.000634	-0.000634
	(0.00131)	(0.00131)	(0.00155)				(0.00103)	(0.00107)	(0.00106)
lnpopsq	-0.0180***	-0.0180***	-0.0180***	-0.0176***	-0.0176***	-0.0176**	-0.0101***	-0.0101***	-0.0101***
	(0.00522)	(0.00533)	(0.00650)	(0.00499)	(0.00510)	(0.00639)	(0.00357)	(0.00335)	(0.00365)
lndensitysq	0.00230	0.00230	0.00230				-0.000983	-0.000983	-0.000983
	(0.00156)	(0.00217)	(0.00202)				(0.00118)	(0.00144)	(0.00128)
lnpropagrcultsq	-0.000941	-0.000941	-0.000941	-0.000690	-0.000690	-0.000690	-4.17e-05	-4.17e-05	-4.17e-05
	(0.00219)	(0.00219)	(0.00276)	(0.00218)	(0.00209)	(0.00274)	(0.00209)	(0.00192)	(0.00252)

ln1lakhcitysq	7.70e-05	7.70e-05	7.70e-05	-0.000159	-0.000159	-0.000159	-0.000128	-0.000128	-0.000128
	(0.000450)	(0.000490)	(0.000487)	(0.000381)	(0.000413)	(0.000415)	(0.000409)	(0.000444)	(0.000497)
lnrlydistsq	-2.00e-05	-2.00e-05	-2.00e-05				0.000112	0.000112	0.000112
	(0.000414)	(0.000400)	(0.000484)				(0.000343)	(0.000349)	(0.000360)
_Istate_3	-	-	-	-	-	-	0.0475	0.0475	0.0475***
							(0.0946)	(0.102)	(0.00810)
_Istate_5	-	-	-	-	-	-	-0.0240	-0.0240	-0.0240**
							(0.0980)	(0.102)	(0.00991)
_Istate_6	-	-	-	-	-	-	-0.0597	-0.0597	-0.0597***
							(0.0974)	(0.103)	(0.0104)
_Istate_7	-	-	-	-	-	-	-0.0491	-0.0491	-0.0491***
							(0.0950)	(0.0993)	(0.0115)
_Istate_8	-	-	-	-	-	-	-0.0769	-0.0769	-0.0769***
							(0.0980)	(0.102)	(0.00889)
_Istate_9	-	-	-	-	-	-	-0.102	-0.102	-0.102***
							(0.0967)	(0.103)	(0.0105)
_Istate_10	-	-	-	-	-	-	-0.123	-0.123	-0.123***
							(0.118)	(0.130)	(0.0105)
_Istate_14	-	-	-	-	-	-	0.0311	0.0311	0.0311***
							(0.0942)	(0.100)	(0.0120)
_Istate_16	-	-	-	-	-	-	0.0604	0.0604	0.0604***
							(0.0953)	(0.0994)	(0.00933)
_Istate_17	-	-	-	-	-	-	0.0319	0.0319	0.0319**
							(0.0954)	(0.101)	(0.0130)
_Istate_18	-	-	-	-	-	-	0.0234	0.0234	0.0234***
							(0.0950)	(0.101)	(0.00882)
_Istate_19	-	-	-	-	-	-	-0.0730	-0.0730	-0.0730***
							(0.0946)	(0.100)	(0.0106)
_Istate_20	-	-	-	-	-	-	-0.0837	-0.0837	-0.0837***
							(0.0946)	(0.101)	(0.00871)
_Istate_21	-	-	-	-	-	-	0.0211	0.0211	0.0211***
							(0.0949)	(0.101)	(0.00707)
_Istate_22	-	-	-	-	-	-	-0.0452	-0.0452	-0.0452***
							(0.0966)	(0.101)	(0.0164)
_Istate_23	-	-	-	-	-	-	-0.0151	-0.0151	-0.0151*
							(0.0948)	(0.101)	(0.00790)
_Istate_24	-	-	-	-	-	-	-0.0218	-0.0218	-0.0218**
							(0.0959)	(0.102)	(0.00922)
_Istate_26	-	-	-	-	-	-	0.0734	0.0734	0.0734***
							(0.0956)	(0.101)	(0.0223)
_Istate_27	-	-	-	-	-	-	0.0414	0.0414	0.0414***
							(0.0943)	(0.101)	(0.00985)
_Istate_28	-	-	-	-	-	-	-0.108	-0.108	-0.108***
							(0.0949)	(0.101)	(0.0104)
_Istate_29	-	-	-	-	-	-	0.0120	0.0120	0.0120
							(0.0957)	(0.102)	(0.00804)
_Istate_30	-	-	-	-	-	-	0.0572	0.0572	0.0572***
							(0.0943)	(0.0998)	(0.00877)
_Istate_31	-	-	-	-	-	-	0.0719	0.0719	0.0719***
							(0.0953)	(0.0997)	(0.0162)
_Istate_32	-	-	-	-	-	-	0.123	0.123	0.123***
							(0.0944)	(0.100)	(0.0111)
_Istate_33	-	-	-	-	-	-	-0.0227	-0.0227	-0.0227**
							(0.0947)	(0.101)	(0.00998)
_Istate_34	-	-	-	-	-	-	-0.00747	-0.00747	-0.00747
							(0.0964)	(0.102)	(0.0221)
_Istate_35	-	-	-	-	-	-	0.0436	0.0436	0.0436**
							(0.0939)	(0.0982)	(0.0191)
_Istate_12	-	-	-	-	-	-	-0.00411	-0.00411	-0.00411
							(0.0973)	(0.102)	(0.0248)
_Istate_13	-	-	-	-	-	-	-0.00356	-0.00356	-0.00356
							(0.0963)	(0.102)	(0.0256)
Constant	-2.046***	-2.046***	-2.046***	-2.170***	-2.170***	-2.170***	-1.385***	-1.385***	-1.385***
	(0.476)	(0.473)	(0.585)	(0.478)	(0.491)	(0.623)	(0.334)	(0.312)	(0.340)
Observations	2,297	2,297	2,297	2,385	2,385	2,385	2,297	2,297	2,297
Within R-squared	0.559	0.559	0.559	0.560	0.560	0.560	0.553	0.553	0.553

VARIABLES	lnHHwater	lnHHwater full model	lnHHwater	lnHHwater	lnHHwater no density and rail	lnHHwater	lnHHwater	lnHHwater full model	lnHHwater
	fe- robust	fe- bootstrap	fe- cluster	fe- robust	fe- bootstrap	fe- cluster	re- robust	re- bootstrap	re- cluster
DID	-0.110	-0.110	-0.110	-0.0568	-0.0568	-0.0568	-0.0646	-0.0646	-0.0646
	(0.0708)	(0.0713)	(0.0815)	(0.0472)	(0.0502)	(0.0670)	(0.0572)	(0.0585)	(0.0698)

ConvertedCTgroup	-	-	-	-	-	-	-0.142	-0.142	-0.142*
							(0.0865)	(0.0930)	(0.0788)
year	0.122***	0.122***	0.122***	0.121***	0.121***	0.121***	0.143***	0.143***	0.143***
	(0.0187)	(0.0186)	(0.0251)	(0.0195)	(0.0200)	(0.0261)	(0.0160)	(0.0156)	(0.0292)
lnpop	1.680**	1.680**	1.680**	2.061***	2.061***	2.061**	1.302***	1.302***	1.302***
	(0.709)	(0.736)	(0.773)	(0.681)	(0.694)	(0.751)	(0.377)	(0.388)	(0.329)
lndensity	0.351	0.351	0.351				0.342**	0.342**	0.342
	(0.234)	(0.318)	(0.375)				(0.159)	(0.170)	(0.249)
lnpropagrocult	-0.00130	-0.00130	-0.00130	-0.00274	-0.00274	-0.00274	0.0406	0.0406	0.0406
	(0.140)	(0.142)	(0.139)	(0.132)	(0.127)	(0.128)	(0.0962)	(0.0888)	(0.119)
ln1lakhcity	0.0127	0.0127	0.0127**	0.0601**	0.0601**	0.0601***	0.0285	0.0285	0.0285*
	(0.0130)	(0.0150)	(0.00567)	(0.0259)	(0.0269)	(0.0128)	(0.0256)	(0.0280)	(0.0153)
lnrlydist	0.00974	0.00974	0.00974				-0.00575	-0.00575	-0.00575
	(0.0131)	(0.0134)	(0.0118)				(0.00672)	(0.00628)	(0.00903)
lnpopsq	-0.0704*	-0.0704*	-0.0704	-0.0910***	-0.0910**	-0.0910**	-0.0603***	-0.0603***	-0.0603***
	(0.0364)	(0.0377)	(0.0427)	(0.0350)	(0.0360)	(0.0400)	(0.0190)	(0.0195)	(0.0168)
lndensitysq	-0.0233	-0.0233	-0.0233				-0.0214**	-0.0214**	-0.0214
	(0.0150)	(0.0194)	(0.0226)				(0.00983)	(0.0104)	(0.0140)
lnpropagrcultsq	0.00927	0.00927	0.00927	0.00981	0.00981	0.00981	0.0150	0.0150	0.0150
	(0.0236)	(0.0239)	(0.0232)	(0.0223)	(0.0216)	(0.0207)	(0.0167)	(0.0150)	(0.0194)
ln1lakhcitysq	0.00276	0.00276	0.00276	-0.00569	-0.00569	-0.00569***	-0.00129	-0.00129	-0.00129
	(0.00272)	(0.00293)	(0.00214)	(0.00489)	(0.00517)	(0.00181)	(0.00434)	(0.00447)	(0.00163)
lnrlydistsq	0.00459	0.00459	0.00459				0.00188	0.00188	0.00188
	(0.00422)	(0.00429)	(0.00423)				(0.00244)	(0.00248)	(0.00206)
_Istate_3	-	-	-	-	-	-	0.0554	0.0554	0.0554
							(0.203)	(0.224)	(0.0477)
_Istate_5	-	-	-	-	-	-	-0.0436	-0.0436	-0.0436
							(0.205)	(0.230)	(0.0466)
_Istate_6	-	-	-	-	-	-	-0.136	-0.136	-0.136**
							(0.221)	(0.235)	(0.0621)
_Istate_7	-	-	-	-	-	-	-0.276	-0.276	-0.276***
							(0.213)	(0.230)	(0.0890)
_Istate_8	-	-	-	-	-	-	-0.429*	-0.429*	-0.429***
							(0.224)	(0.241)	(0.0436)
_Istate_9	-	-	-	-	-	-	-0.126	-0.126	-0.126*
							(0.206)	(0.230)	(0.0683)
_Istate_10	-	-	-	-	-	-	-0.0831	-0.0831	-0.0831
							(0.217)	(0.239)	(0.0635)
_Istate_14	-	-	-	-	-	-	-1.400***	-1.400***	-1.400***
							(0.384)	(0.432)	(0.168)
_Istate_16	-	-	-	-	-	-	-0.675**	-0.675**	-0.675***
							(0.265)	(0.312)	(0.0531)
_Istate_17	-	-	-	-	-	-	-1.051***	-1.051***	-1.051***
							(0.314)	(0.360)	(0.142)
_Istate_18	-	-	-	-	-	-	-0.235	-0.235	-0.235***
							(0.204)	(0.229)	(0.0488)
_Istate_19	-	-	-	-	-	-	-1.075***	-1.075***	-1.075***
							(0.210)	(0.227)	(0.0669)
_Istate_20	-	-	-	-	-	-	-0.619***	-0.619***	-0.619***
							(0.209)	(0.224)	(0.0496)
_Istate_21	-	-	-	-	-	-	-0.581***	-0.581**	-0.581***
							(0.218)	(0.237)	(0.0369)
_Istate_22	-	-	-	-	-	-	-0.484**	-0.484**	-0.484***
							(0.233)	(0.243)	(0.0625)
_Istate_23	-	-	-	-	-	-	-0.600***	-0.600**	-0.600***
							(0.212)	(0.234)	(0.0322)
_Istate_24	-	-	-	-	-	-	-0.356*	-0.356	-0.356***
							(0.212)	(0.228)	(0.0406)
_Istate_26	-	-	-	-	-	-	-0.251	-0.251	-0.251**
							(0.220)	(0.235)	(0.111)
_Istate_27	-	-	-	-	-	-	-0.199	-0.199	-0.199***
							(0.205)	(0.225)	(0.0560)
_Istate_28	-	-	-	-	-	-	-0.791***	-0.791***	-0.791***
							(0.211)	(0.239)	(0.0583)
_Istate_29	-	-	-	-	-	-	-0.311	-0.311	-0.311***
							(0.211)	(0.225)	(0.0473)
_Istate_30	-	-	-	-	-	-	-0.103	-0.103	-0.103***
							(0.203)	(0.228)	(0.0325)
_Istate_31	-	-	-	-	-	-	-0.300	-0.300	-0.300***
							(0.259)	(0.280)	(0.110)
_Istate_32	-	-	-	-	-	-	-0.153	-0.153	-0.153**
							(0.207)	(0.227)	(0.0621)
_Istate_33	-	-	-	-	-	-	-1.080***	-1.080***	-1.080***
							(0.217)	(0.236)	(0.0598)

_Istate_34	-	-	-	-	-	-	-0.152	-0.152	-0.152
							(0.222)	(0.233)	(0.103)
_Istate_35	-	-	-	-	-	-	-0.310	-0.310	-0.310**
							(0.234)	(0.256)	(0.152)
_Istate_12	-	-	-	-	-	-	-0.191	-0.191	-0.191**
							(0.229)	(0.258)	(0.0959)
_Istate_13	-	-	-	-	-	-	-0.293	-0.293	-0.293***
							(0.220)	(0.243)	(0.0952)
Constant	-11.83***	-11.83***	-11.83***	-12.31***	-12.31***	-12.31***	-8.581***	-8.581***	-8.581***
	(3.400)	(3.398)	(3.352)	(3.360)	(3.398)	(3.568)	(1.805)	(1.770)	(1.539)
Observations	2,294	2,294	2,294	2,382	2,382	2,382	2,294	2,294	2,294
Within R-squared	0.126	0.126	0.126	0.132	0.132	0.132	0.1161	0.1161	0.1161

VARIABLES	lnHHelectr	lnHHelectr full model	lnHHelectr	lnHHelectr	lnHHelectr no density and rail	lnHHelectr	lnHHelectr	lnHHelectr full model	lnHHelectr
	fe- robust	fe- bootstrap	fe- cluster	fe- robust	fe- bootstrap	fe- cluster	re- robust	re- bootstrap	re- cluster
DID	-0.0613**	-0.0613**	-0.0613*	-0.0764***	-0.0764***	-0.0764*	-0.0700***	-0.0700***	-0.0700
	(0.0253)	(0.0257)	(0.0337)	(0.0231)	(0.0239)	(0.0439)	(0.0217)	(0.0202)	(0.0451)
ConvertedCTgroup	-	-	-	-	-	-	0.0836***	0.0836***	0.0836**
							(0.0252)	(0.0246)	(0.0385)
year	0.120***	0.120***	0.120***	0.128***	0.128***	0.128***	0.132***	0.132***	0.132***
	(0.00847)	(0.00841)	(0.0376)	(0.00789)	(0.00768)	(0.0402)	(0.00737)	(0.00741)	(0.0401)
lnpop	-0.277	-0.277	-0.277	-0.376	-0.376	-0.376	0.0625	0.0625	0.0625
	(0.532)	(0.541)	(0.924)	(0.546)	(0.551)	(0.954)	(0.157)	(0.161)	(0.223)
lndensity	-0.288	-0.288	-0.288				0.0207	0.0207	0.0207
	(0.175)	(0.283)	(0.230)				(0.0506)	(0.0592)	(0.0600)
lnpropagrocult	-0.00142	-0.00142	-0.00142	0.00978	0.00978	0.00978	-0.000899	-0.000899	-0.000899
	(0.0548)	(0.0559)	(0.0813)	(0.0532)	(0.0543)	(0.0792)	(0.0389)	(0.0371)	(0.0826)
ln1lakhcity	0.00359	0.00359	0.00359	0.0147**	0.0147**	0.0147***	0.00348	0.00348	0.00348
	(0.00642)	(0.00721)	(0.00357)	(0.00647)	(0.00634)	(0.00218)	(0.00746)	(0.00723)	(0.00459)
lnrlydist	0.000366	0.000366	0.000366				-0.000587	-0.000587	-0.000587
	(0.00590)	(0.00603)	(0.00454)				(0.00244)	(0.00238)	(0.00308)
lnpopsq	0.0162	0.0162	0.0162	0.0231	0.0231	0.0231	-0.00235	-0.00235	-0.00235
	(0.0276)	(0.0279)	(0.0466)	(0.0289)	(0.0292)	(0.0485)	(0.00794)	(0.00820)	(0.0110)
lndensitysq	0.0202*	0.0202	0.0202				-0.00334	-0.00334	-0.00334
	(0.0114)	(0.0176)	(0.0155)				(0.00326)	(0.00380)	(0.00387)
lnpropagrcultsq	0.00381	0.00381	0.00381	0.00603	0.00603	0.00603	0.00722	0.00722	0.00722
	(0.00979)	(0.00991)	(0.0147)	(0.00946)	(0.00960)	(0.0143)	(0.00709)	(0.00674)	(0.0167)
ln1lakhcitysq	0.00112	0.00112	0.00112	0.000485	0.000485	0.000485	-0.00385***	-0.00385***	-0.00385**
	(0.00126)	(0.00137)	(0.00194)	(0.00130)	(0.00135)	(0.00200)	(0.00128)	(0.00128)	(0.00190)
lnrlydistsq	-0.00137	-0.00137	-0.00137				-0.000474	-0.000474	-0.000474
	(0.00195)	(0.00203)	(0.00182)				(0.000983)	(0.000921)	(0.000823)
_Istate_3	-	-	-	-	-	-	-0.00113	-0.00113	-0.00113
							(0.0241)	(0.0273)	(0.00985)
_Istate_5	-	-	-	-	-	-	-0.0247	-0.0247	-0.0247
							(0.0248)	(0.0274)	(0.0172)
_Istate_6	-	-	-	-	-	-	-0.0455	-0.0455	-0.0455***
							(0.0369)	(0.0395)	(0.0122)
_Istate_7	-	-	-	-	-	-	-0.0888**	-0.0888**	-0.0888***
							(0.0426)	(0.0432)	(0.0146)
_Istate_8	-	-	-	-	-	-	-0.0195	-0.0195	-0.0195
							(0.0253)	(0.0277)	(0.0227)
_Istate_9	-	-	-	-	-	-	-0.154***	-0.154***	-0.154***
							(0.0329)	(0.0368)	(0.0228)
_Istate_10	-	-	-	-	-	-	-0.562***	-0.562***	-0.562***
							(0.110)	(0.133)	(0.0333)
_Istate_14	-	-	-	-	-	-	-0.0134	-0.0134	-0.0134
							(0.0416)	(0.0422)	(0.0266)
_Istate_16	-	-	-	-	-	-	-0.287***	-0.287***	-0.287***
							(0.0614)	(0.0677)	(0.0117)
_Istate_17	-	-	-	-	-	-	-0.0492	-0.0492	-0.0492
							(0.0410)	(0.0450)	(0.0359)
_Istate_18	-	-	-	-	-	-	-0.260***	-0.260***	-0.260***
							(0.0409)	(0.0430)	(0.0217)
_Istate_19	-	-	-	-	-	-	-0.363***	-0.363***	-0.363***
							(0.0305)	(0.0302)	(0.0230)
_Istate_20	-	-	-	-	-	-	-0.141***	-0.141***	-0.141***
							(0.0271)	(0.0309)	(0.0164)
_Istate_21	-	-	-	-	-	-	-0.212***	-0.212***	-0.212***
							(0.0344)	(0.0407)	(0.0226)
_Istate_22	-	-	-	-	-	-	-0.133***	-0.133***	-0.133***
							(0.0371)	(0.0414)	(0.0144)

_Istate_23	-	-	-	-	-	-	-0.0282	-0.0282	-0.0282*
							(0.0214)	(0.0255)	(0.0163)
_Istate_24	-	-	-	-	-	-	-0.0272	-0.0272	-0.0272**
							(0.0238)	(0.0275)	(0.0124)
_Istate_26	-	-	-	-	-	-	-0.000985	-0.000985	-0.000985
							(0.0310)	(0.0341)	(0.0360)
_Istate_27	-	-	-	-	-	-	-0.0150	-0.0150	-0.0150
							(0.0230)	(0.0266)	(0.0110)
_Istate_28	-	-	-	-	-	-	-0.0416*	-0.0416	-0.0416***
							(0.0237)	(0.0268)	(0.00855)
_Istate_29	-	-	-	-	-	-	-0.0277	-0.0277	-0.0277**
							(0.0228)	(0.0263)	(0.0129)
_Istate_30	-	-	-	-	-	-	0.0145	0.0145	0.0145
							(0.0258)	(0.0294)	(0.0271)
_Istate_31	-	-	-	-	-	-	0.0462	0.0462	0.0462
							(0.0500)	(0.0524)	(0.0549)
_Istate_32	-	-	-	-	-	-	-0.0774***	-0.0774***	-0.0774***
							(0.0258)	(0.0289)	(0.0144)
_Istate_33	-	-	-	-	-	-	-0.0511**	-0.0511*	-0.0511***
							(0.0236)	(0.0262)	(0.0130)
_Istate_34	-	-	-	-	-	-	-0.115***	-0.115***	-0.115***
							(0.0319)	(0.0319)	(0.0270)
_Istate_35	-	-	-	-	-	-	0.00262	0.00262	0.00262
							(0.0668)	(0.0701)	(0.0433)
_Istate_12	-	-	-	-	-	-	-0.0179	-0.0179	-0.0179
							(0.0458)	(0.0465)	(0.0471)
_Istate_13	-	-	-	-	-	-	-0.0577*	-0.0577*	-0.0577*
							(0.0340)	(0.0344)	(0.0311)
Constant	1.885	1.885	1.885	1.179	1.179	1.179	-0.463	-0.463	-0.463
	(2.712)	(2.757)	(4.442)	(2.573)	(2.589)	(4.633)	(0.735)	(0.743)	(1.057)
Observations	2,294	2,294	2,294	2,382	2,382	2,382	2,294	2,294	2,294
Within R-squared	0.239	0.239	0.239	0.242	0.242	0.242	0.2092	0.2092	0.2092

VARIABLES	lnHHlatr	lnHHlatr full model	lnHHlatr	lnHHlatr	lnHHlatr no density and rail	lnHHlatr	lnHHlatr	lnHHlatr full model	lnHHlatr
	fe- robust	fe- bootstrap	fe- cluster	fe- robust	fe- bootstrap	fe- cluster	re- robust	re- bootstrap	re- cluster
DID	-0.0624	-0.0624	-0.0624	-0.0904***	-0.0904***	-0.0904*	-0.0313	-0.0313	-0.0313
	(0.0429)	(0.0417)	(0.0543)	(0.0308)	(0.0316)	(0.0447)	(0.0389)	(0.0390)	(0.0412)
ConvertedCTgroup	-	-	-	-	-	-	0.00614	0.00614	0.00614
							(0.0513)	(0.0566)	(0.0468)
year	0.168***	0.168***	0.168***	0.165***	0.165***	0.165***	0.170***	0.170***	0.170***
	(0.0104)	(0.0103)	(0.0330)	(0.0100)	(0.0105)	(0.0306)	(0.00889)	(0.00930)	(0.0299)
lnpop	0.725*	0.725	0.725*	0.749**	0.749*	0.749*	0.607***	0.607**	0.607**
	(0.409)	(0.452)	(0.419)	(0.369)	(0.383)	(0.417)	(0.232)	(0.252)	(0.236)
lndensity	0.0453	0.0453	0.0453				0.143	0.143	0.143
	(0.173)	(0.256)	(0.201)				(0.167)	(0.183)	(0.173)
lnpropagrocult	-0.0550	-0.0550	-0.0550	-0.0552	-0.0552	-0.0552	-0.0790	-0.0790	-0.0790
	(0.0900)	(0.0867)	(0.0907)	(0.0853)	(0.0831)	(0.0852)	(0.0734)	(0.0651)	(0.0763)
ln1lakhcity	-0.00363	-0.00363	-0.00363	0.00284	0.00284	0.00284	-0.00746	-0.00746	-0.00746**
	(0.00445)	(0.00548)	(0.00425)	(0.00411)	(0.00443)	(0.00347)	(0.00480)	(0.00572)	(0.00290)
lnrlydist	0.00149	0.00149	0.00149				-0.00264	-0.00264	-0.00264
	(0.00691)	(0.00677)	(0.00604)				(0.00469)	(0.00465)	(0.00407)
lnpopsq	-0.0289	-0.0289	-0.0289	-0.0298	-0.0298	-0.0298	-0.0267**	-0.0267**	-0.0267**
	(0.0212)	(0.0233)	(0.0218)	(0.0191)	(0.0198)	(0.0213)	(0.0116)	(0.0126)	(0.0116)
lndensitysq	-0.00289	-0.00289	-0.00289				-0.00623	-0.00623	-0.00623
	(0.0105)	(0.0153)	(0.0127)				(0.0101)	(0.0111)	(0.0103)
lnpropagrcultsq	-0.00351	-0.00351	-0.00351	-0.00347	-0.00347	-0.00347	-0.00393	-0.00393	-0.00393
	(0.0147)	(0.0143)	(0.0145)	(0.0140)	(0.0137)	(0.0135)	(0.0120)	(0.0105)	(0.0123)
ln1lakhcitysq	0.00345**	0.00345**	0.00345	0.00240*	0.00240	0.00240	0.00167	0.00167	0.00167
	(0.00159)	(0.00165)	(0.00247)	(0.00143)	(0.00147)	(0.00219)	(0.00127)	(0.00119)	(0.00241)
lnrlydistsq	0.00274	0.00274	0.00274				0.00192	0.00192	0.00192
	(0.00218)	(0.00216)	(0.00205)				(0.00162)	(0.00158)	(0.00145)
_Istate_3	-	-	-	-	-	-	0.224	0.224	0.224***
							(0.266)	(0.296)	(0.0421)
_Istate_5	-	-	-	-	-	-	0.169	0.169	0.169***
							(0.268)	(0.299)	(0.0541)
_Istate_6	-	-	-	-	-	-	0.0770	0.0770	0.0770
							(0.272)	(0.303)	(0.0580)
_Istate_7	-	-	-	-	-	-	0.0325	0.0325	0.0325
							(0.271)	(0.307)	(0.0769)
_Istate_8	-	-	-	-	-	-	-0.261	-0.261	-0.261***
							(0.302)	(0.322)	(0.0479)

_Istate_9	-	-	-	-	-	-	0.00811	0.00811	0.00811
							(0.268)	(0.292)	(0.0549)
_Istate_10	-	-	-	-	-	-	-0.0412	-0.0412	-0.0412
							(0.294)	(0.345)	(0.0464)
_Istate_14	-	-	-	-	-	-	0.339	0.339	0.339***
							(0.275)	(0.303)	(0.0562)
_Istate_16	-	-	-	-	-	-	0.442*	0.442	0.442***
							(0.266)	(0.289)	(0.0405)
_Istate_17	-	-	-	-	-	-	0.143	0.143	0.143*
							(0.278)	(0.310)	(0.0733)
_Istate_18	-	-	-	-	-	-	0.305	0.305	0.305***
							(0.265)	(0.292)	(0.0417)
_Istate_19	-	-	-	-	-	-	-0.00979	-0.00979	-0.00979
							(0.265)	(0.294)	(0.0516)
_Istate_20	-	-	-	-	-	-	-0.210	-0.210	-0.210***
							(0.267)	(0.299)	(0.0515)
_Istate_21	-	-	-	-	-	-	-0.271	-0.271	-0.271***
							(0.281)	(0.321)	(0.0351)
_Istate_22	-	-	-	-	-	-	-0.274	-0.274	-0.274***
							(0.286)	(0.317)	(0.0478)
_Istate_23	-	-	-	-	-	-	-0.0668	-0.0668	-0.0668*
							(0.268)	(0.297)	(0.0376)
_Istate_24	-	-	-	-	-	-	-0.0493	-0.0493	-0.0493
							(0.276)	(0.312)	(0.0452)
_Istate_26	-	-	-	-	-	-	0.112	0.112	0.112
							(0.270)	(0.298)	(0.0826)
_Istate_27	-	-	-	-	-	-	-0.0423	-0.0423	-0.0423
							(0.266)	(0.294)	(0.0562)
_Istate_28	-	-	-	-	-	-	-0.145	-0.145	-0.145**
							(0.267)	(0.293)	(0.0601)
_Istate_29	-	-	-	-	-	-	0.148	0.148	0.148***
							(0.274)	(0.306)	(0.0416)
_Istate_30	-	-	-	-	-	-	0.120	0.120	0.120**
							(0.270)	(0.295)	(0.0504)
_Istate_31	-	-	-	-	-	-	0.165	0.165	0.165*
							(0.278)	(0.302)	(0.0958)
_Istate_32	-	-	-	-	-	-	0.306	0.306	0.306***
							(0.265)	(0.296)	(0.0701)
_Istate_33	-	-	-	-	-	-	-0.272	-0.272	-0.272***
							(0.269)	(0.296)	(0.0565)
_Istate_34	-	-	-	-	-	-	-0.321	-0.321	-0.321***
							(0.269)	(0.297)	(0.0800)
_Istate_35	-	-	-	-	-	-	0.0143	0.0143	0.0143
							(0.287)	(0.314)	(0.107)
_Istate_12	-	-	-	-	-	-	0.325	0.325	0.325***
							(0.274)	(0.294)	(0.0774)
_Istate_13	-	-	-	-	-	-	0.451*	0.451	0.451***
							(0.269)	(0.293)	(0.0633)
Constant	-5.098***	-5.098***	-5.098**	-5.055***	-5.055***	-5.055**	-4.755***	-4.755***	-4.755***
	(1.804)	(1.866)	(2.171)	(1.815)	(1.865)	(2.066)	(1.109)	(1.186)	(1.402)
Observations	2,294	2,294	2,294	2,382	2,382	2,382	2,294	2,294	2,294
Within R-squared	0.350	0.350	0.350	0.353	0.353	0.353	0.3424	0.3424	0.3424

Standard errors in parentheses
$***p < 0.01, **p < 0.05, *p < 0.1$

Table 35: Differences-in-differences- without additional covariates

VARIABLES	lnrds	fire	HigherEduD	lnwaterpax	lnhospbeds	lnlit	lnHHwater	lnHHelectr	lnHHlatr
DID	0.598***	0.221***	0.00234	0.555*	-0.0195	-0.0171**	-0.0222	-0.0582***	-0.0674**
	(0.216)	(0.0578)	(0.0584)	(0.310)	(0.0338)	(0.00860)	(0.0421)	(0.0164)	(0.0284)
year	-0.137**	-0.0317***	0.0494***	-0.366***	-0.0256***	0.0630***	0.157***	0.135***	0.186***
	(0.0606)	(0.00954)	(0.0134)	(0.0836)	(0.00784)	(0.00172)	(0.0158)	(0.00738)	(0.00801)
Constant	0.847***	0.152***	0.264***	-2.858***	-4.498***	-0.229***	-0.803***	-0.234***	-0.497***
	(0.0292)	(0.00474)	(0.00650)	(0.0412)	(0.00433)	(0.000844)	(0.00755)	(0.00352)	(0.00386)
Observations	2,361	2,385	2,385	2,339	2,102	2,386	2,382	2,382	2,382
Within R-squared	0.006	0.025	0.012	0.017	0.014	0.534	0.083	0.229	0.320

Standard errors in parentheses
$***p < 0.01, **p < 0.05, *p < 0.1$