

# Where Local Kings Rule: Long-Term Impacts of Precolonial Institutions and Geography on Access to Public Infrastructure Services in Nigeria<sup>12</sup>

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## Introduction

Though a growing number of recent studies on the origins of African economic development literature have documented a positive relationship between precolonial institutions, in the form of precolonial ethnic state centralization, and modern development outcomes (Michalopoulos and Papaioanou, 2012; Gennaioli and Rainer, 2007; Osafo-Kwaako and Robinson, 2013), the mechanisms through which this positive association operates remain weakly understood. Additionally, there are no studies to date which explain the heterogeneity in current outcomes of formerly centralized precolonial states. The results of this paper suggest a nonlinear relationship between precolonial state centralization and current public service provision due to the interaction of precolonial centralization with the colonial and postcolonial governments under the so-called co-operative federalist political structures that defined much of colonized Africa. Specifically, I find that the relationship between precolonial ethnic state leaders and autocratic federal state leaders in the colonial and postcolonial eras determines public service access outcomes today. When co-operation was the equilibrium outcome between centralized precolonial ethnic state leaders and autocratic federal leaders, then public services were provided in centralized ethnic states through patronage relationships. When cooperation failed between parties, then ethnic state leaders were punished through underinvestment in goods and services whose allocation autocratic federal governments could control.

I focus on the case of Nigeria, the most populous country on the continent with over 160 million people currently to explain why the homelands of some of the most centralized former precolonial states (for example in the current Borno and Yobe administrative states shown in Figure 2 below) have some of the worst economic development and public service access rates in the country today, going against the prevailing narrative of a positive relationship between precolonial state centralization and current public service provision and development outcomes. In contrast with the current literature, I show that the mechanism through which precolonial state centralization (c. 1850) impacted current public service provision is not ‘local accountability’ as has been posited in previous research (Gennaioli and Rainer, 2007;

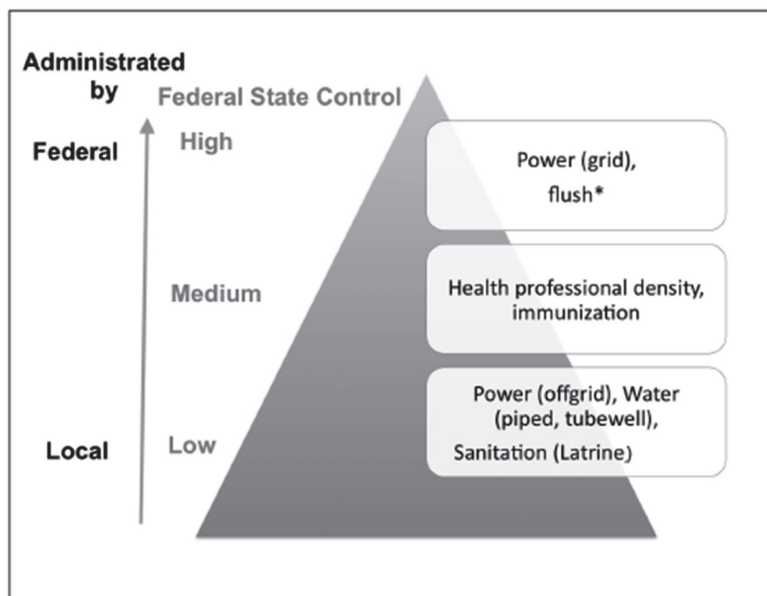
Herbst, 2000) but through payoffs from cooperation in a bilateral bargaining with cooperation ‘game’ between ethnic state leaders and federal authorities, first taking on the identity of the British colonial officials between 1885-1960 and then in the form of the military government between 1966-1999. When cooperation was the equilibrium outcome between centralized ethnic state leaders and autocratic federal authorities, public service provision was positive for centralized states for federally administrated public services under patronage relationships. When cooperation broke down, as it did between certain centralized ethnic state leaders and the military government, then a punishment regime was enacted by the federal military government leading to a negative relationship between centralization and access to federally administrated, high state control public infrastructure services in areas where non-cooperation was the dominant strategy (due to differential British colonial policy under indirect rule) of the centralized ethnic state leaders.

The study uses a novel survey dataset to measure public service provision outcomes and the results of this paper can be summarized as below:

- H0: Precolonial state centralization has, on average, a positive effect on federally administrated (medium and high federal state control) goods, or goods for which cooperative centralized ethnic state leaders were better positioned then and today to bargain for access with federal authorities (patronage relationships). There is no effect of precolonial ethnic state centralization on locally administrated (low federal state control) goods where there is multilateral bargaining among different Local Government Area (LGA) actors and no involvement of centralized ethnic state-leaders in good provision.
- H1: The main hypothesis is that the effect of centralization on access to federally administrated, high federal state control goods is negative for non-cooperative ethnic state leaders subject to a subsequent punishment regime by autocratic federal military governments. I test the specification presented in the Results section below where, following the Nigerian historiography, my constructed supermajority Muslim indicator (measured as administrative states with Muslim populations of greater than 70% of the total state population as of 1952) is a proxy for, what I term, pre-independence centralization and subsequent non-cooperation of the centralized ethnic state with the military regime in the 1976 demolition of the ‘ethnic state leader/traditional leader’ system in favor of a democratically elected Local Government Area (LGA) system (more on the history is covered in subsequent sections and in the Appendix). I test the results in H0 and H1 with an OLS and IV specification, adapting Fenske’s ecological diversity index (Fenske, 2014) as an instrument for

precolonial state centralization in the IV case; results remain significant in both. As a supplement to this, I test and find that the ‘punishment’ is worse in centralized, non-cooperating ethnic states not favored by the military.

As an addendum, individuals from centralized, supermajority states where the punishment regime was enacted in the 1976-1999 period of federal military rule seem less likely to report ‘trust’ in federal institutions than their non-punished counterparts in centralized areas, based on information from the 2012 Afrobarometer survey. This result suggests that one consequence of the punishment regime was a negative impact on social capital between the federal government and individuals from punished areas. IV notwithstanding, since this study is based on outcomes from only 1 year of (cross-sectional) data from 2012, I argue for very strong, statistically significant negative association between centralization and access to federally administrated, high state control goods for ethnic states that did not cooperate with the federal military regime and very strong, statistically significant positive association between centralization and access to federally administrated goods when cooperation was the dominant strategy for ethnic state leaders. Figure 1 below shows a schematic of the classification of public service types covered in this paper by federal administrated vs. locally administrated and by level of federal state control of the good, where medium and high federal state control goods are federally administrated and low state control goods are locally administrated.



**Figure 1.** Schematic of the administration and extent of state control of public services mentioned in the paper.

Note, the division of goods into federally and locally administrated categories reflects policy choices made by the federal government rather than any technological capacity for provision of the public service at the local or federal levels. The schematic captures a snapshot of administration and control of goods in the 2012 period for which the survey data was conducted. The classification of ‘medium’ or ‘high’ for federally administrated goods reflects direct investments made and the length of time the good has spent under federal state control. So high state control goods like grid based power access reflect investments made from starting in 1886 and largely in 1950 through the present and flush toilet access reflects investments made largely around 1977 through the 1980s in Nigeria by the federal, most notably military, regime. On the other hand medium federal state control goods like immunization availability have been mostly administrated by the local government (LGA), with exceptions; a notable one being in 2012, the year of our survey data, where the federal government spearheaded administration of immunization availability with the first ever national vaccine summit hosted in this year (Johns Hopkins, 2012) and directly solicited ethnic state/traditional leaders’ participation/cooperation in ensuring maximum availability of the vaccines. Locally administrated goods like pit latrine access and most water access at public primary schools have generally been under the responsibilities of the LGA in Nigeria and offgrid access at public primary schools, our primary unit of observation would also fall under the general purview of the LGA authority as well. Understanding the drivers behind the negative results for formerly centralized states and the historical mechanisms through which unequal access to public goods in the country have manifested is a crucial first step for an assessment of ways to solve these inequities, and potentially stem much of the violence erupting in those regions in Nigeria today. The results of the paper highlight a point that has been made by economists (Acemoglu and Robinson, 2014; 2001) historians (Falola, OgunDIRAN, 2005), political geographers and ecologists (Agnew, 2008; Robbins, 2011) and political scientists (Herbst, 2000; Mamdani, 1996) on the long-term impacts of historical institutions and geography on current development outcomes and point to the need for a further reexamination of the current role of ethnic state or traditional leaders and the implications of their relationship with national entities on development outcomes in the country today.

### **Conclusions, Further Research and Policy Implications**

In this research, I find evidence for a negative relationship between precolonial state centralization and public service provision as a development outcomes under certain conditions unexamined in the previous literature. The results indicate that the heterogeneity in development outcomes for precolonial centralized ethnic states reflected in differential public service provision in much of colonized Africa can be explained within the context of cooperative/patronage and non-cooperative/punishment relationships with a negative

relationship between precolonial ethnic state centralization and current development found in some areas. I use the Nigeria case as a quasi-natural experiment along with a novel survey dataset to investigate this heterogeneity in outcomes of precolonial ethnic states. The political theory, empirical analysis and historiographic evidence, all appear to point to the existence of a punishment regime, defined by not so benign neglect, under the autocratic federal military government where high federal state control services were provided when cooperation between precolonial centralized ethnic states and the autocratic federal regime was in effect, and under-provided for non-cooperating centralized ethnic states in the cooperative federalist system that existed between autocratic federal states and centralized ethnic states in Nigeria and much of colonized Africa. Another contribution to the literature is to present centralization as a dynamic process and underline the role of colonial policy in the pre-independence “hyper-centralization” of certain precolonial centralized ethnic states, under British colonial policy, with implications for the failure of cooperation with the subsequent military regime. A further contribution of this research is to attempt to present a structured approach to the understanding of the mechanisms underlying the effects of precolonial centralization on current development outcomes.

Though we use ecological diversity as an instrument for centralization here, further research

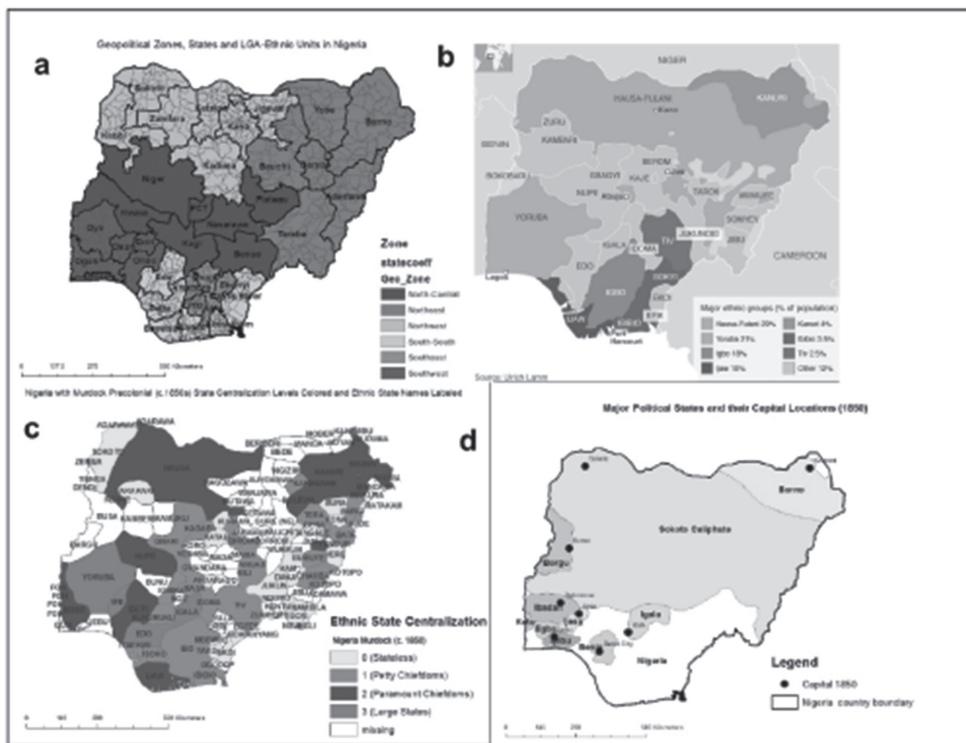


Figure 2. Nigeria: the actors 1850-Present

is needed to examine the drivers of the precolonial centralization variable used. One study has suggested examining the role of interstate warfare (following Tilly's "war makes states, states make war" hypothesis (Tilly, 1985)) in state centralization by examining the use of plants for poisons and medicines in so-called 'biological warfare' (Akiwunmi and Filaba, 2005) to strengthen state sovereignty; there is potential for using ethnobotanic records and environmental historical modeling of plant distribution to gain more insight into the role of environmentally backed interstate warfare in precolonial state centralization.

On the policy implications, this study also touches on the potentially important roles of current non-state actors like traditional leaders in facilitating public service expansion in the country by capitalizing on historic social capital in formerly centralized ethnic states reflected in attitudes as the ones presented in the 2008 Afrobarometer Nigeria survey where almost 60% of respondents felt that traditional leader influence in local government should increase. Finally, particularly given the recent outbreaks of violence and social upheaval in those areas, there might be some role for an affirmative action policy aimed at improving development outcomes for areas that suffered from underinvestment under the military punishment regime though further work is needed to understand the full extent of this throughout the country.

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## Notes

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