ABSTRACT: A number of studies have found a positive relationship between British colonialism—specifically indirect rule—and economic development, but there is less consensus as to why indirect rule would produce better economic outcomes. This article develops three specific mechanisms to explain the relationship: the strength of traditional leaders, the salience of ethnic identities, and the legitimacy of local government, and test them using a geographic regression discontinuity research design on Cameroon’s internal Anglophone-Francophone border, a legacy of the country’s dual colonial heritage. We find the most evidence for the third mechanism, suggesting that indirect rule produced better economic outcomes because British colonialism was more likely to decentralize decision-making, which generated a stronger social contract between citizens and local government, imbuing the local state with more legitimacy.
Shortly after decolonization in the 1960s, scholars and practitioners began speculating about how the differences between French and British colonization would shape economic and political outcomes in sub-Saharan Africa.\(^1\) While British and French rule differed in a number of critical ways, much of the literature has focused on the legacies of direct and indirect rule. Recently, both cross-national and subnational studies have found that areas that were administered under British indirect rule have better levels of economic development today than areas administered under direct rule.\(^2\) However, there is far less consensus concerning how and why different forms of colonial rule have impacted development outcomes.

This article develops and tests three different mechanisms that may explain the relationship between indirect rule and better local level economic development. First, British indirect rule may have led to stronger local communities because it was more likely to empower traditional leaders and customary institutions. Within the postcolonial state, groups with stronger customary authorities may be better positioned to overcome collective action problems and provide local public goods because traditional leaders facilitate group coordination.\(^3\) Second, British indirect rule may have created stronger communities because it reified (or in many cases created) the importance of the ethnic

\(^1\) E.g. Crowder and Ikime 1970; Whittlesey 1937; Crowder 1968.

\(^2\) Lee and Schultz 2012; Iyer 2010; Bertocchi and Canova 2002.

\(^3\) Baldwin 2016.
community. Existing scholarship tells us that strong group identities generate a sense of in-group solidarity and that where and when strong identities are more salient, communities are better positioned to coordinate in the face of social dilemmas. Thus, stronger local economic outcomes in former British colonies may reflect indirect rule’s tendency to strengthen ethnic identities.

Finally, the third mechanism proposes that in comparison to direct rule, indirect rule may have generated a more robust local social contract between citizens and the state. This more relational mechanism builds on the tendency of the British colonial state to defer to local authorities on many issues, a contrast to the top-down directives of direct rule. This mechanism builds on arguments that local communities in British colonies were more empowered to act locally in order to make decisions for the community, and, in turn, that this legitimated local government institutions to ordinary citizens.

This article tests the relative merit of these three mechanisms by using a geographic regression discontinuity research design in Cameroon. Cameroon is the only African country home to regions that were colonized by both France and Britain. Originally colonized by Germany, France and Britain split German Kamerun into the

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4 McNamee 2016.
5 E.g. Singh 2011.
6 MacLean 2010; Logan 2009; Williams 2010.
French and British Cameroons after World War I. While French Cameroun was run as an individual colony, the British Cameroons were administered as a part of neighboring Nigeria. At independence in 1961, the southern British Cameroons voted to reunify with French Cameroon, and today, the area that was administered by the British now forms two of Cameroon’s ten regions: Northwest and Southwest regions. Taking the border between what is now Anglophone and Francophone Cameroon as exogenously created, we use it to arbitrate between the effects of direct and indirect rule, holding constant the postcolonial state.

In this way, we build on Lee and Schultz’s (2012) research design, replicating and expanding on their finding that today local economic development is stronger in Anglophone Cameroon. We then advance on their study by providing a novel set of hypotheses for explaining why different forms of colonial rule would affect development, turning to Afrobarometer data to test the proposed mechanisms linking indirect rule to better development outcomes. Adjudicating between the three proposed mechanisms, we find strong evidence to support the argument that indirect rule was better at imbuing the local state with legitimacy and authority through the construction of a local social contract. In contrast, we find considerably less support for the ideas that indirect rule produced stronger traditional authorities or ethnic communities.
The paper proceeds by explaining historical differences between direct and indirect rule in the former French and British African colonies. Section III develops the three proposed mechanisms connecting indirect rule with economic development. In Section IV we briefly review Cameroon’s colonial history before describing how we leverage this history to create a regression discontinuity centered on experiences with direct or indirect rule in Section V. We then introduce the data and research design before testing the theory, finding the most support for the third mechanism. We conclude with a discussion of the implications of these findings.

II. DIRECT AND INDIRECT RULE IN SUB-SAHARAN AFRICA

This article investigates the differential impact of the two primary modes of colonial rule – direct and indirect - introduced in Africa during the late 19th and early 20th centuries. The French system of direct rule was predicated on the philosophy of assimilationism: the belief that colonial subjects would become French citizens. Though subject to ever-extending time horizons, this principle informed the organizing logic of French colonial rule—the singularity of French authority would, over time, assimilate colonial subjects into French culture and political institutions. This philosophy brought with it a whole host of beliefs and policies that were distinct from British rule. First,

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because the French believed both that their cultural and political systems were universally superior *and* that they were applicable to all peoples, the French colonial state was highly centralized, with decision-making descending from Paris downwards to the colonial outposts. For example, the French divided their colonial states into *cantons* that only rarely corresponded to precolonial political boundaries, emphasizing homogenous and centralized French institutions over indigenous tradition.\(^8\) As a result, local decision-making was generally discouraged, and subjects were taught to see the colonial state as the sole site of political authority. Second, and relatedly, the French believed that political authority should be firmly vested in French colonial officers, while indigenous chiefs should serve as subordinate state agents, tasked with following the directives of the colonial officer. This belief inclined the French to disempower chiefs as key decision-makers. Finally, because of their paramount interest in identifying reliable intermediaries, the French frequently handpicked indigenous leaders when preexisting authorities proved unwilling to cooperate. This was possible because the French viewed indigenous structures and identity groups as things to be eliminated; eventually subjects would abandon ethnic or parochial identities in favor of French culture.

In contrast, the British did not believe that Africans would ever become Europeanized, and thus were not ideologically committed to importing British culture or

\(^8\) Crowder 1964, 199; Njoh 1997, 195.
political systems into their non-settler colonies. British colonial agents put considerable effort into locating ‘legitimate’ chiefs to serve as intermediaries and, in the process, many chiefs saw their authority strengthened during the colonial period, at times becoming more powerful than they had been before colonization. On the one hand, the British were far more interested than the French in identifying, cataloguing, and homogenizing indigenous ethnic communities so that they could be organized under specific indigenous leaders. On the other hand, indirect rule relied heavily on indigenous power structures to implement British rule, granting substantial autonomy to chiefs in rural areas while British colonial officers served in primarily advisory roles. Unlike in French colonies, where chiefs executed orders handed down from the metropole, most chiefs saw minimal British interference in local issues as long as they met British demands for taxation, labor and cash crop production. Not only did this empower local chiefs, but in direct contrast to French colonial philosophy, it also meant that political authority was not the sole property of the central colonial state, but that a fair amount of discretion was retained by local political structures.

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9 Mamdani 1996. Where such authority structures were absent, the British attempted to create new ones and, in these cases, indirect rule proved to be more difficult (see Migdal 1988 on Sierra Leone; Geschiere 1993).

10 Crowder 1964, 198.

11 Crowder 1968, 169.
Of course, these are ‘ideal types’ of each method of colonial administration. As described above, we see a theoretical project laid out in European capitals which must be recognized as distinct from colonial administration in practice.\(^\text{12}\) Certainly, the colonial state was thin in most areas of Africa, and much like the British, the French administration often relied heavily on indigenous intermediaries, such that while many attribute the primary difference between the two systems to the amount of power delineated to local chiefs, in reality the amount of power given to indigenous leaders and local authorities was arguably among the least uniform characteristics within either system.\(^\text{13}\) Still, whether we see indirect rule as disruptive to the precolonial past, or whether the precolonial past facilitated indirect rule, the British colonial administration spent considerable time identifying chiefs and their areas of rule when delimiting colonial districts; something in which the French expressed comparatively little interest.\(^\text{14}\) Thus, while both the British and French colonial state made use of indigenous chiefs, their broader structure of political authority – notably the relative degree of centralization or decentralization in political decision-making - varied considerably, with great consequence, we argue, for subsequent political and economic developments.

\(^\text{12}\) See for example Lawrence 2017, who argues that colonial policy was more directly shaped by politics within the colony than attributes of the colonized, a point recently argued by Gerring et al. 2011.

\(^\text{13}\) Herbst 2000; Lange 2004; Iyer 2010; Lechler and McNamee 2016; Lawrence 2017.

\(^\text{14}\) Gerring et al. 2011; Chiabi 1997, 27.
III. COLONIALISM AND ECONOMIC DEVELOPMENT: THREE CAUSAL MECHANISMS

In view of these differences in colonial administration, we explore the argument that indirect rule has produced better contemporary economic outcomes, focusing on why the relationship is so robust, particularly for sub-Saharan Africa. Drawing from a diverse set of studies on colonialism, customary authority, ethnicity, and state building, we develop three core mechanisms that might explain the empirical relationship between indirect rule and economic development: the power of traditional leaders, the strength of ethnic communities, and the legitimacy of local government. We discuss each in turn.

*The Strength of Traditional Leaders*

The first mechanism proposes that because indirect rule was predicated on bolstering the power and authority of traditional political actors, we should see stronger traditional authorities in British colonies today. Strong traditional leaders can generate better local development outcomes because they are well-positioned to help their communities overcome the collective action problem. In contrast to indirect rule, Blanton et al. (2001) note that traditional leaders in former French colonies “lacked both the leadership and the mobilizing structures necessary to mobilize their members

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for collective action aimed at advancing their claims on the post-colonial state” (479).

Consequently, the first mechanism rests on two primary assumptions: first, that indirect rule laid the groundwork for stronger, more authoritative chiefs in the contemporary period, and second, that these stronger community leaders are better positioned to coordinate economic development today than their less powerful counterparts in former directly-administered colonies.

Writing generally about customary authority in Africa, Mamdani (1996) has argued that colonial rule gave traditional authorities sweeping new powers in both British and French colonies, empowering them above and beyond their stations during the precolonial era. While most scholars agree that all forms of colonialism in Africa fundamentally altered the relationship between the customary authority and his subject—by both granting him new powers as well as decreasing his accountability to his people—scholars also argue that the British were more effective at empowering the chief by granting him more legitimacy. Thus, colonialism generally enhanced the scope of chiefs’ powers across the continent, but indirect rule produced leaders more capable of implementing these tasks because the British system preserved the premise of traditional sources of legitimate authority more than their French counterparts. Indeed, recent evidence has suggested that citizens living in areas administered under indirect

\[\text{Crowder and Ikime 1970.}\]
rule are more likely to contact and trust their traditional leaders today, suggesting that these chiefs have more authority and legitimacy.\textsuperscript{17}

As a result, strong traditional authorities should be better positioned to improve economic development because their enhanced authority serves as a coordination mechanism, capable of sanctioning free-riders and organizing action by producing common knowledge.\textsuperscript{18} Where the state is weak, as in much of sub-Saharan Africa, traditional leaders can help with the process of the coproduction of public goods, whereby the government pairs with local actors to generate and implement development projects.\textsuperscript{19} A classic example would be a local government allocating the concrete and building materials for a new classroom at the local school, and the community coming together to supply labor to build the classroom. A strong, legitimate traditional authority is well positioned to coordinate the provision of labor and sanction non-contributors. Hence, our first hypothesis:

**HYPOTHESIS 1:** Local economic development is better in areas that were administered under indirect rule because indirect rule strengthened traditional leaders. Hence today these communities are better positioned to overcome collective action problems to either coproduce or petition the state for local development projects.

\textsuperscript{17} Lechler and McNamee 2016.
\textsuperscript{18} Olson 1971; Baldwin 2016.
\textsuperscript{19} Ostrom 1996; Baldwin 2016.
Alternatively, recent work has increasingly questioned how stark the contrast was between the empowerment of chiefs in French and British colonies, arguing that variation within colonies was larger than across colonies.\(^{20}\) As the costs of the colonial project increased and colonial governors struggled to raise sufficient revenues from the colonies, the appeal of indirect rule—which decreased the need for a large colonial administration—became increasingly attractive to the French. The French turn from ‘assimilation’ to ‘association’ marked this pragmatic concern. If these arguments are correct, we may find that traditional authorities in British colonies today are not considerably more powerful than those in French colonies.

*The Solidarity of Ethnic Communities*

The second mechanism also centers on the ability of local communities to overcome the collective action problem in order to develop and produce strong economic outcomes. Instead of focusing on the top-down facilitation provided by traditional leaders, however, this second argument suggests that the collective action problem is resolved in a bottom-up fashion by virtue of strong in-group identities. Because British indirect rule focused heavily on identifying (or generating) and then reifying ‘ethnic

\(^{20}\) Lange 2004; Lawrence 2017; Herbst 2000, 81–89.
communities,’ ethnic identities today should be stronger in former British colonies.\textsuperscript{21} In contrast, French assimilationism was predicated on the sole legitimacy of the French state, generating a conceptualization of citizenship that was more statist or nationalist than ethnic.\textsuperscript{22} Indeed, using Afrobarometer data, McNamee (2016) finds that Namibian citizens in areas that were ruled indirectly are more likely to identify with their ethnic community than with their national identity compared to Namibians who were ruled directly under Apartheid.

Consequently, local communities in former British colonies may be better positioned to coordinate around questions of local development by virtue of the relative strength of their ethnic identities.\textsuperscript{23} This argument follows the recent turn to Social Identity Theory within political science. Most strongly associated with Tajfel (1981) and Turner et al. (1987), Social Identity Theory argues that identities generate behavioral incentives for individuals – including reorienting their preferences away from individual to group pay-offs – because group membership predisposes members to seek positive distinctiveness for their group.\textsuperscript{24} Political scientists have argued that groups who possess strong, shared identities can, in the words of Singh (2011), “generate a

\begin{footnotesize}
\begin{enumerate}
\item LeVine 1964a, 198; Whittlesey 1937.
\item Crowder 1964; Njoh 1997, 195.
\item See Kollock 1998.
\item See also Tajfel and Turner 1985; Brewer 1979.
\end{enumerate}
\end{footnotesize}
politics of the common good” (282). The ability of strong identities to help communities or elites overcome social dilemmas is now a robust finding, with recent work arguing that the relative presence or absence of strong social identities generates divergent development outcomes at the subnational level.\textsuperscript{25}

Two mechanisms receive particular attention in this literature. First, group identities can raise expectations about future reciprocity while, secondly, social networks threaten individuals with group sanction.\textsuperscript{26} Collective action is then often considered to be easier to achieve in groups with strong group identities because such groups can more credibly commit to the social sanctioning of free-riders.\textsuperscript{27} According to this logic, we should expect that citizens living in areas colonized by the British not only have stronger ethnic identities, but that the relative strength of ethnic in-groups should produce both more robust networks and norms of in-group reciprocity that help communities on the former British side of the border overcome the coordination dilemmas inherent in public goods delivery.

**HYPOTHESIS 2:** Compared to direct rule, indirect rule strengthened the importance of ethnic communities. Today, ethnic identities are more salient in areas colonized by the British, leading to higher levels of economic development because strong identities help

\textsuperscript{25} E.g. Ostrom 1990; Miguel and Gugerty 2005; Habyarimana et al. 2007; on subnational outcomes, Singh 2015; Wilfahrft Forthcoming.

\textsuperscript{26} Apicella et al. 2012; Dionne 2015.

\textsuperscript{27} Fearon and Laitin 1996; Habyarimana et al. 2007.
communities overcome collective action problems surrounding local public goods delivery.

Of course, it bears recognition that strongly identifying with local or ethnic identities over a national identity can enflame local parochialisms at the expense of economic development. It has long been argued that the ethnic character of economic redistribution in Africa has nefarious effects on national economic performance and state capacity. Empirically, recent work has emphasized the role of co-ethnic favoritism by the central state in Africa as a powerful driver of subnational variation in development outcomes.\textsuperscript{28} Thus, lack of evidence for the second hypothesis may indicate that the British reification of ethnic identity may actually have had a dampening effect on community economic development.

Localized Decision-Making, State Legitimation and the Social Contract

The final mechanism contends that indirect rule has produced better economic outcomes because it fostered more legitimate state institutions at the local level by virtue of the cultivation of a local social contract between citizens and government. This mechanism focuses on the British tendency to delegate substantial administrative autonomy to the local community, facilitating local state formation through both

\textsuperscript{28} E.g. Franck and Rainer 2012.
capacity building and by fostering the emergence of intra-colony political debate and contestation; a striking difference from the metropolitan orientation of French colonial politics.  

As a result, today we should expect to find more autonomous local control over community-level institutions and decision-making structures in former British colonies. Much like Mazrui’s (1983) argument about British legacies of ‘statehood,’ MacLean (2010) finds that while the state is consistently seen as paternalistic, the British colonial legacy in Ghana led citizens to “articulat[e] their notion of paternalism within a familial idiom of reciprocal duties between the ‘father’ and his children,” while in contrast, just across the border in French Côte d’Ivoire, citizens instead spoke of “a more straightforward, top-down paternalism reinforcing the perception of unequal levels of power between the state and local people” (205). Using a similar research design along the Niger-Nigeria border, Miles (1994, 311, 280-81) finds comparable differences in Hausa villages on either side of the border. Postcolonial Francophone Niger retained many attributes of the colonial system, with development projects initiated and managed by the central state. In Anglophone Nigeria, in contrast, development initiatives were more often locally initiated, with the local state a meaningful site of political coordination and contracting for citizens.

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29 Mazrui 1983.
In turn, where local institutions are legitimate and citizens are more engaged with community-based decision-making structures, local economic development should be more likely. At the micro-level, MacLean (2010) illustrates these causal linkages: not only are Ghanaians far more likely to believe that paying taxes is a central duty of citizenship, but local political institutions – state and traditional - “had greater authority and were more active in development initiatives and decision-making” (210). Thus, because local formal and informal institutions were more legitimate on the indirectly-ruled side of the border, they were also at the center of community-level development projects:

“When asked who were the most important individuals or groups in making decisions or developing policies for the village, Ghanaians most frequently cited village-level political institutions, whereas Ivoirians noted, often by name, individuals who were based outside of the village ... Ivoirians rarely mentioned the most local political authority, the sous-préfet (four percent), or mayor’s (six percent) office” (MacLean 2010, 213).

The third mechanism thus proposes that by decentralizing the locus of decision-making to the local community, indirect rule generated a more legitimate local state that, over time, generated state capacity and citizen engagement—a social contract—that improved community economic development:

**HYPOTHESIS 3:** Indirect rule generated a stronger local social contract through the devolution of political authority to the local level. Today the presence of more legitimate local state institutions promotes
economic development through their production of reciprocal relations between citizens and government.

IV. THE CREATION OF CAMEROON’S DUAL COLONIAL LEGACY

We arbitrate between these three mechanisms by developing a regression discontinuity (RD) research design in Cameroon. Originally colonized by Germany, Cameroon was split between the United Kingdom and France during World War I, when French and British troops drove the German colonial administration out of the colony in March of 1916. Because the British military had entered German Kamerun from Nigeria in the West, while French troops entered from their southeastern base in French Equatorial Africa (AEF), the British administered the western areas of Cameroon while the French administered the east.\(^\text{30}\)

It was only after the signing of the Treaty of Versailles that Britain and France formally negotiated how they would divide Germany’s former colonies. For Cameroon, negotiations started with the assumption that France and Britain would largely retain the areas they already occupied.\(^\text{31}\) Though neither country had grand ambitions for their newly acquired territories, Cameroon proved to be more important to France than to Britain, largely because the British were far more focused on retaining control over

\(^\text{30}\) Crowder 1968, 252.

\(^\text{31}\) Elango 2014, 117.
Tanzania (German East Africa) in order to maintain their domination over the Indian Ocean.\textsuperscript{32} As a result, by the end of negotiations, the British ceded much of its territory in Cameroon to the French including the lucrative seaport of Douala, to pursue their larger colonial strategy in East Africa.

In this way the actual drawing of the Picot line—as the border that separated French Cameroun from the British Cameroons is known (see Figure 1)—was not designed with an eye to local conditions. As the British Colonial Secretary, Lord Milner, noted, “The boundaries of the zones of occupation are haphazard and, as a permanent arrangement, would be quite intolerable. They cut across tribal and administrative division, take no account of economic conditions, and are in every way objectionable.”\textsuperscript{33} Despite Lord Milner’s protests, the final border was nearly identical to the original, creating two British territories, Northern and Southern Cameroons (together, the British Cameroons), with France’s control running from Douala in the southwest up to Lake Chad in the North.

\textsuperscript{32} Elango 2014, 120; Louis 1967, 59, 149. The colonial office was divided on this as many officials felt it was a major mistake to give Douala to the French (Louis 1967, 61–62).

\textsuperscript{33} Quoted in Louis 1967, 148.
While the Picot line follows some geographical contours, such as the Mungo River along the boundary of Southwest and Littoral regions, these features did not correspond to precolonial social or political boundaries. Rather, the partition often divided precolonial polities, particularly along the southern border. Numerous acephalous communities—the Mungo, Balong, Bakossi, and Mbo—were all divided as the Picot line cut through the Mungo Valley.34 Similarly, along the coast, the Bakolle, Bamboko, and Bakweri peoples fell on the British side of the border, despite belonging to the same ethno-linguistic group as the Duala, who ended up under French rule.35 Like

34 Johnson 1970, 42.
35 Ibid, 44. Ethnic and political considerations were taken more seriously along the northern border of the British Cameroons (Elango 2014, 1985), but this did not affect modern Cameroon’s internal border, as British Northern Cameroon voted to join Nigeria in 1961.
much of the rest of the partition of Africa, the drawing of the border between British Southern Cameroon and French Cameroun was mostly predicated on the vagaries of European politics, leaving local political, economic, and social considerations largely ignored.

Direct and Indirect rule in French and British Cameroons

Both French Cameroon and the British Cameroons were designated League of Nations mandate territories in 1922. Designed to eliminate the worst abuses of colonial power, the League was tasked with drawing up annual reports on the mandate territories, though it lacked the power to enforce policy. Following WWII, both Cameroons became United Nations’ trust territories, not dissimilar to their previous status as mandates. Though the trusteeship opened the territories to increased international scrutiny, the UN had little authority over how France and Britain administered their respective Cameroons and the colonial administrative structures in both territories were wholly modeled on each power’s other colonial possessions:

“The two Cameroons under separate administrations moved off in different directions, propelled by the force of colonial policies often diametrically opposed to one another. The artificial bisection of the territory created the reality of two distinctly different Cameroons, with different social, economic, and political traditions” (LeVine 1964, 35).

36 Rubin 1972, 46.
The French immediately began carving French Cameroun into traditional French administrative units (circonscriptions and subdivisions) without regard to existing German administrative borders or indigenous politics. They reorganized the German courts to resemble the system in the AEF and began staffing all administrative positions—in public works, maritime controls, railway management, finances, and customs—with French bureaucrats.\(^{37}\) Further, the French immediately worked to identify and undermine local power structures throughout the territory. In 1921, the native courts established by the Germans were scrapped, and a full-scale reorganization of the chieftaincy system was begun in 1922.\(^{38}\) The French openly discuss this strategy of direct rule in their 1922 Rapport Annuel: “The regional chiefs, a creation of the French administration, have only the authority which is delegated to them; they have no power of their own; they are above all administrative organs.”\(^{39}\) The French built a bureaucratic structure radiating downwards from the apex of the Ministère des Colonies, through the High Commissioner of Cameroun, down to the seventeen chefs de region, and finally to the 46 subdivision administrators, all posts held by French

\(^{37}\) LeVine 1964, 34.  
\(^{38}\) Ibid, 95.  
\(^{39}\) Quoted in LeVine 1964, 95.
nationals or, in a handful of cases, French-trained Cameroonians. Village chiefs were empowered only to implement the orders of their subdivision administrator.\textsuperscript{40}

In stark contrast, the British immediately began enthusiastically applying the principles of indirect rule on the other side of the border. LeVine (1964) notes the great lengths that the British went to in order to identify the appropriate traditional leaders throughout their new territory. The colonial authorities created dozens of assessments and intelligence reports on local social, economic, and political structures, and “by 1936, the government had recognized or created a wide variety of Native Authorities, most of them based upon a fairly accurate evaluation of the nature of the local socio-political structures” (198). The British also granted these leaders considerable new powers and autonomy. Historically centralized groups saw their leaders upheld and reinforced and historically decentralized communities saw the British prop up village heads and elders in an attempt to create viable community leaders.\textsuperscript{41} Having already spent twenty years developing the principles of indirect rule articulated by Lord Lugard at the turn of the century, as one of her last conquered colonies, in many ways, the British most clearly implemented indirect rule in Cameroon.

\textsuperscript{40} Ibid, 98.

\textsuperscript{41} Chem-Langhëë 2004, 10.
In 1960, Cameroun won its independence from France under the leadership of Ahmadou Ahidjo. In a 1961 plebiscite, British Southern Cameroun voted to reunify with French Cameroun as a federation while Northern British Cameroun voted to remain a region of Nigeria. Ahidjo gradually consolidated his rule over the next 20 years, running a single party autocracy and, in 1972, abolishing the federation between the Anglophone and Francophone regions to create a unified state. Today, the Northwest and Southwest ‘Anglophone’ regions of Cameroon remain administratively identical to the former southern British Cameroun and their border, with the Francophone Littoral, Ouest, and Adamaoua regions falling on the other side of the original Picot Line.

V. RESEARCH DESIGN

To test the potential mechanisms linking indirect rule to contemporary local development outcomes, we leverage a regression discontinuity design by using the border between Anglophone and Francophone regions of Cameroon, narrowing our sample to the country’s two Anglophone regions, Northwest and Southwest, and the Francophone regions of Littoral and Ouest that they border. These four regions are displayed in Figure 2.
We adopt a geographic RD design that explicitly models the two-dimensional nature of the treatment by conducting a series of local linear regressions at different bandwidths from the border.\textsuperscript{42} While a standard RD design assumes that distance to the cutoff point is one-dimensional—for example, that being five kilometers from the border is always equivalent—the effect of British colonization five kilometers from the border near the coast might, for a variety of reasons, be different from its effect five kilometers from the border further inland.\textsuperscript{43} Selecting bandwidths on either side of the cutoff point allows us to estimate a linear regression with varying slopes and intercepts on both sides.

\textsuperscript{42} Imbens and Lemieux 2008; Dell 2010; Mattingly 2017.

\textsuperscript{43} See Keele and Titiumik 2015.
of the border.\textsuperscript{44} One challenge of this approach is selecting appropriate bandwidths for analysis, which poses a trade-off between precision and bias.\textsuperscript{45} Because our data have small samples immediately adjacent to the border, we are limited in our ability to rely exclusively on observed variation at the cut-point. Thus, we employ a semiparametric approach, adopting Mattingly’s (2017) more transparent method of showing estimates at five-kilometer intervals from ten to eighty kilometers from the border to illustrate the sensitivity of our results to different distances from the border.\textsuperscript{46} Full model results for select bandwidths can be found in the Supplementary Materials. Following McCauley and Posner (2015), we address four possible threats to this research design:

\textit{Arbitrary Borders}. McCauley and Posner warn that seemingly exogenously-drawn African borders may not be entirely arbitrary. As detailed above, although the Picot line was drawn in Europe and should therefore be largely exogenous to indigenous sociopolitical realities, it is possible that other factors, notably natural features, may have both shaped the location of the border and influenced contemporary development.

\textsuperscript{44} Jacob et al. 2012.

\textsuperscript{45} Ludwig and Miller 2007; Imbens and Kalyanaraman 2012.

\textsuperscript{46} Bandwidths for models using Afrobarometer data range from 20km to 80km. Given the limited number of clusters for the Afrobarometer, there are too few survey clusters at 10 or 15km to produce meaningful estimates.
outcomes.\textsuperscript{47} To ensure that the potential geographic confounders are in fact smooth along the border and do not ‘jump’ in any fashion, we examine the average altitude, precipitation, temperature and soil suitability of 5km grid squares on either side of Cameroon’s internal border. We find no statistically significant difference at the border.\textsuperscript{48}

\textit{Cluster Randomization.} A second concern is the issue of cluster randomization, which highlights the issue that randomization at the border did not occur at the level of the individual, but at the level of the ‘cluster’ or community. Because respondents in the DHS and Afrobarometer are sampled by cluster, distance to the border is ‘lumpy,’ with individual or household units within a cluster taking the same distance measure. This means that within-cluster outcomes may correlate as a function of their geographic proximity to each other, rather than the border. We take numerous steps to address this problem: centrally, we follow McCauley and Posner’s recommended conservative approach to analyze data by cluster mean instead of at the level of the individual for our estimation of indirect rule’s impact on economic development. Given the smaller

\textsuperscript{47} Like Lee and Schultz (2012) we also find little indication that the border was created with an eye to precolonial political conditions, nor does controlling for various levels of precolonial centralization – the subject of recent scholarly attention (e.g. Michalopoulos and Papaioannou 2013) – impact our findings. See Supplementary Materials.

\textsuperscript{48} See Figures A1.1 and A1.2 in the Supplementary Materials
number of clusters in the Afrobarometer data, however, we retain individual respondents as our unit of analysis, and include a polynomial function of geographic location – here estimated as a linear function of longitude and latitude as well as their interaction term. Nonetheless, results from cluster mean estimates are consistent (see Supplementary Materials).

*Compound Treatments.* A third concern when using a border in a regression discontinuity is the problem of compound treatments: the idea that borders might represent multiple ‘treatments’ resulting from both the colonial and postcolonial periods. For the latter concern, our design is especially advantageous; unlike other cross-border studies, for example of Ghana and Côte d’Ivoire (e.g MacLean 2010) or Zambia and Malawi (e.g. Posner 2004), our study holds the postcolonial state constant, specifically in regards to the major confounders of national institutions. Nonetheless, because the Anglophone-Francophone border overlaps with other administrative units,⁴⁹ the postcolonial experience of the Northwest, Southwest, Ouest and Littoral regions may still differ in important ways related to economic development.⁵⁰

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⁴⁹ Keele and Titiunik 2015, 133.
⁵⁰ A related concern is that Anglophone regions might fare better economically because of their proximity to Nigeria and Nigerian markets. Controlling for each cluster’s logged distance to the Nigerian border does not alter our results.
In particular, some of the most vocal opposition to the current regime is centered in the Northwest region. As a result, Cameroonians living on the Anglophone side of the border complain of receiving relatively fewer investments from the central government in comparison to their Francophone counterparts. We are sceptical that the immediate cross-border Francophone area has received better treatment from the central government than the Anglophone side for two reasons. First, the corridor between Douala and Bafoussam on the Francophone side of the border was historically the largest site of government opposition: during the late colonial and early postcolonial period, Bassa and Bamiléké territories were at the heart of the UPC insurrection, and the subsequent intense government repression lasted until the 1970s.\textsuperscript{51} It was not until the 1990s that claims of discrimination flipped, as Anglophones came to perceive themselves as specifically disadvantaged by the state. Secondly, what empirical evidence exists does not support the claim that the Anglophone regions receive disproportionately fewer resources than the Ouest or Littoral regions, excluding investments in Douala.\textsuperscript{52}

Nonetheless, one way to address these claims is to look at changes in the distribution of wealth measures across the border over time. Though Paul Biya becomes president in 1982, he only began to seriously reorganize government following a 1984

\textsuperscript{51} As detailed in the Supplementary Materials, controlling for respondents who are ethnically Bassa or Bamiléké does not alter our results.

\textsuperscript{52} Letsa 2017.
coup attempt, and by all reports, his reshuffling favored the south over the north. The Anglophone west largely remained out of Biya’s political calculus until the democratization period beginning in 1990, such that if discrimination specifically targeted the Anglophone regions, it is unlikely to have begun until after the political opening of the early 1990s, when these regions came out in open opposition to the regime. As shown in the Supplementary Materials with data from the first geo-referenced DHS round from 1991 and nightlight data from 1994 however, there is no evidence that the relative wealth of Francophone areas has shifted during the last twenty-five years of Biya’s rule. Further, if the central government really does favor the Francophone regions, this should bias the effect of the treatment against our predicted outcome because economic development would be better in the Francophone regions.

Nonetheless, we further minimize the issue of a compound postcolonial treatment by distinguishing between three different measures of economic outcomes: an index of private wealth as well as access to piped water, a public good that is co-produced within local communities, and electricity access, as measured by nightlight, which is provided by the central state. If there is indeed favoritism on the Francophone side of the border, we should see better provision of the latter centrally-allocated good on the French side. Conversely, private wealth and locally coproduced goods should be impacted by the mechanisms of indirect rule.
We also address the concern of compound *colonial* treatments.\textsuperscript{53} French and British colonization differed in a number of different ways apart from direct and indirect rule, and it is possible that these aspects of colonialism also affected economic trajectories. We add a series of controls to our models to address the most robust alternative arguments: first, numerous studies have argued that British education policies—particularly the role of the Protestant missions that largely accompanied British colonialism—have beneficially impacted current development when compared to former French colonies.\textsuperscript{54} Accordingly, we control for each survey cluster’s *Logged* Distance to a Protestant Mission (1960). Secondly, French and British economic investments varied across their colonies, and scholars argue that these investments have created spatial inequality in contemporary development outcomes, leading us to control

\textsuperscript{53} A related issue is that of timing. Though we take great care to establish the historicity of direct and indirect rule on either side of the border and take into account the possibilities of compound treatments across time, some compression of history is inevitable. Thus, it remains possible that indirect rule impacted development through some other, untheorized mechanism and that economic development affected attitudes, resulting in the erroneous conclusion that these attitudes are mechanisms, when in fact they are outcomes. Unfortunately, we cannot test this due to a lack of public opinion data for Cameroon prior to 2013. Nonetheless, we see no other contending theories that might link indirect rule to economic development and, crucially, we have no theoretical priors as to why economic development would produce the findings we document here.

\textsuperscript{54} Albaugh 2014; Woodberry 2012.
for a cluster’s *Distance to the Colonial-Era built Railroad*, to account for the effects of proximity to colonial investments.\textsuperscript{55}

*Sorting at the Border.* Finally, we address McCauley and Posner’s fourth issue: potential sorting along the border, or the idea that ‘treated’ individuals from the Anglophone side may have migrated to the ‘non-treated’ side (or vice versa). In the early colonial period, specifically between the world wars, there is little evidence of *systematic* cross-border migration in one direction or another.\textsuperscript{56} Further, both the French and British tightened the border during WWI, restricting cross-border trade and migration. However, in the postcolonial period, migration to the Southwest region became more common, as laborers from across Cameroon came to work on the agricultural plantations clustered near the fertile region of Mount Cameroon. We address the potential impact of cross-border sorting induced by the colonial plantation economy in extensions in the supplementary materials by replicating our models with a distance measure to Mount Cameroon as well as by dropping clusters in the department of Fako (home to Mount Cameroon) altogether and find no effect.

Though we have taken great efforts to address potential threats to the ‘as-if random’ assumption of the Anglophone-Francophone Cameroonian border, the existing

\textsuperscript{55} Huillery 2009; Roessler et al., n.d.

\textsuperscript{56} Gardinier 1963, 58–59.
data makes it impossible to fully account for the complete arbitrariness of the border, compound treatments, and potential sorting. While we believe that the RD gives us excellent empirical leverage on the question of the effects of direct and indirect rule, we do not consider the methodological design to be causally identified in an experimental sense, and the following data and results should be interpreted accordingly.

VI. DATA

*Dependent Variables*

This article engages in a two-step research design. In the first stage, we replicate and extend the findings of Lee and Schultz (2012) that there are long-run disparities in local economic development between Francophone and Anglophone Cameroon. Lee and Schultz find that households on the Anglophone side of the border are wealthier, measured through an asset index, and that they are more likely to have access to locally coproduced public goods such as piped water.57 We replicate these findings and build on them by distinguishing between development outcomes driven by local versus central government actions. Because the mechanisms of indirect rule act specifically at the local level, we expect the positive effects of indirect rule on economic outcomes to be driven

57 Note that while Lee and Schultz (2012) declare this a locally-provided good, we think this is better conceptualized as a co-produced investment. The Cameroonian state is highly centralized, but today, water utilities are provided by a range of actors, including Local Government Councils, informal community groups and NGOs in addition to SNEC (Njoh 2003, 27, 56).
by local processes, and not development strategies of the central state, such as the highly-centralized decision to connect communities to the national electricity grid. In the second stage, we build on the existing literature by assessing the merits of the three proposed mechanisms for this relationship. Using the same geographic RD design with data from the Afrobarometer, we measure the relationship between colonial experience and the strength of traditional leaders, the cohesion of ethnic communities, and the legitimacy of local government.

*Economic Outcomes*. To measure economic development, we draw on the Demographic and Health Surveys (DHS) from 2004, the survey year employed by Lee and Schultz as well as the more recent 2011 survey. The DHS surveys are collected through a nationally stratified sample such that households have equal probability of being sampled within each national census enumeration zone; 10,462 households were surveyed in 2004, and 14,214 households in 2011.\(^5\) Each DHS survey records the coordinates of sampled villages, ‘jittering’ or displacing the coordinates by up to five kilometers in rural areas and up to two kilometers in urban areas to protect the confidentiality of respondents. Crucially, coordinates are only jittered within second-level administrative units, meaning that no sampling site could be reported as being on the wrong side of the border. This allows us to estimate the distance of each survey cluster to the

\(^{5}\) Institut National de la Statistique 2005; Institut National de la Statistique 2012.
Francophone-Anglophone border in addition to matching them to a range of control variables.

We regress two sets of dependent variables on the border to estimate the long-term effects of British colonial rule. First, we measure locally-influenced development outcomes in two ways. Using the DHS surveys, we examine the locally coproduced access to piped water. Following Lee and Schultz, we estimate this as the percent of households within each survey cluster who have access to piped water, either within their own compounds or in their neighborhoods. Second, we further examine the effect of the border on differences in private household wealth accumulation. Here again we follow Lee and Schultz (2012) by measuring household wealth as an additive index of whether a household possesses a car, motorcycle, bicycle, or radio as well as three measures of the quality of their home’s physical infrastructure: their floor material (from earthen floors to tiles or carpet), whether the home has a flush toilet, a latrine or no toilet facilities and, finally, the logged number of rooms used for sleeping.\(^\text{59}\) We calculate the cluster average and normalize the index around a mean of zero with a standard deviation of one.

\(^{59}\) This deviates from Lee and Schultz’s (2012) own measure in that we do not include possession that depends on proximity to an electric grid, notably a television, refrigerator or household electricity access itself.
We also draw on nightlight data from the Defense Meteorological Satellite Program’s Operational Linescan System (DMSP-OLS) Nighttime Lights data series.\textsuperscript{60} By looking at a central government provided service, we can separate between the logics of local versus top-down service provision, gaining important leverage on the potential postcolonial compound treatment of central government linguistic favoritism towards Francophone regions. The DMSP-OLS data captures human-generated light from 8:30-10:00 pm (local time), calculated at 30-arc second grids, roughly equivalent to about one kilometer. The dataset reports the yearly average, cleaned to eliminate distortion from interference, for example from lighting, cloud cover or gas flares. Though nightlight data is sensitive to bottom-censoring, research suggests that nightlight data accurately captures distinctions between electrified and unelectrified villages in rural areas of the continent.\textsuperscript{61} To process the nightlight data into a useable dependent variable, we construct five kilometers by five-kilometer grid cells in ArcGIS and extract the average score by each grid. Grid squares traversed by the border are split.

\textit{Causal Mechanisms:} For our main analysis, we turn to Rounds 5 and 6 of the Afrobarometer to test the mechanisms that might explain the macro-level relationship between indirect rule and economic development. The Afrobarometer ran its first survey

\textsuperscript{60} Earth Observation Group 1991; following Michalopoulos and Papaioannou 2013.

\textsuperscript{61} Henderson, Storeygard, and Weil 2012; Min et al. 2013.
in Cameroon in 2013 (Round 5), and a second in 2015 (Round 6). The surveys are designed to be nationally representative, and each of the rounds reached 1,200 respondents. The lowest sampling unit is the enumeration area (EA), within which the Afrobarometer interviews eight respondents, meaning that data are clustered geographically by EA. Merging the two survey rounds results in a total of 2,400 respondents across the country, or 720 respondents within the four regions we analyze, though our models have different numbers of observations based on whether the dependent variable is a question included in both rounds, or a question featured in only one of the two surveys.

We use several different public opinion questions to measure each mechanism. The questions were chosen to capture different aspects of each mechanism, while also including questions that measure attitudes as well as reported behavior. For the first causal mechanism, we include three questions designed to measure the strength of the local customary authority: trust in traditional leaders, beliefs about the corruption of traditional leaders, and contact with traditional leaders. Taken together, leaders who are more legitimate should be more highly trusted and not perceived to be corrupt, while leaders with more authority should receive more contact from ordinary citizens.

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62 For all models, therefore, standard errors are clustered by enumeration area.

63 Full question wordings and response distributions can be found in the Supplementary Materials.
For the second causal mechanism, we use three questions that capture the salience of the respondent’s ethnic identity and how this salience might impact ethnic communities. The first question asks the respondent to choose between their national or their ethnic identity, where citizens in the former British colony would be more likely than citizens in the former French colony to identify with their ethnic identity. We also include two questions that probe the potential ramifications of this ethnic salience for the relevant political and economic outcomes outlined in the second mechanism. First, we use a question unique to the survey run in Cameroon that asks the respondent the extent to which belonging to a particular ethnic group helps people rise to top positions in public office. The second question asks the respondent about whether an elected leader is “obliged to help their home community first” or whether leaders “should not do anything that favors their own group over others.” Strong ethnic identities are theorized to produce better economic outcomes because of their ability to mobilize behavior towards in-group members. Thus, the second mechanism would predict that stronger ethnic communities would value ethnic networks and ‘take care of each other’ before others.

Finally, for the third mechanism we include two sets of questions: one set intended to capture the relations between ordinary citizens and local government, and a second that measures citizen perceptions of the performance and legitimacy of the local
government. First, the survey asks the respondent how much they think that local government councilors listen to what “people like you have to say.” We also include a behavioral question about how often the respondent has contacted an official at a local government agency during the past year. We would expect citizens of the former British colony to have a more decentralized and reciprocal relationship with their councilors than citizens of the former French colony, contacting the government more frequently and believing that local councilors listen to their constituents. The survey also asks how much the respondent approves of the job of their local councilor in general. Finally, the survey asks the respondent how well the local government is maintaining roads, local markets, health standards, and to what extent the local government is able to keep the community clean and effectively manage the use of land. We include all of these questions, with the expectation that citizens living in areas administered under indirect rule should generally be more supportive of the work of their local government because of the more decentralized nature of local decision-making. The following section outlines the control variables we use with the RD design framework.

*Control Variables.* Given the threats to the exogeneity of the border outlined in the previous section, we include a number of controls. First, given the recent renewal in interest in ecological determinants of development outcomes, we control for a set of
geographic factors that may impact the favorability of the local environment to
development. In particular, we include the cluster’s altitude, average temperature and
precipitation and the suitability of local soils for agriculture, measured as the average
soil Cation Exchange Capacity (CEC) at a five-centimeter depth, where most
agricultural activity takes place.

In addition to these ecological controls, we control for population by using the
WorldPop spatial population data, estimating the number of people living in 100m grid
squares. We calculate this by summing the total population falling within 5km grid
squares and assigning the logged grid value to each survey cluster. We additionally
include a dummy variable for whether or not a cluster is reported as rural as opposed to
urban.

We also control for a survey cluster’s relative proximity to the state, notably the
distance from the regional capital and distance from Yaoundé, Cameroon’s capital, of
each cluster to address the concern of Herbst (2000) and others that the power of the
colonial and postcolonial state have been felt more strongly near centers of power than
further away. If a village’s relative distance from administrative centers determines

64 Sachs and Malaney 2002; Fenske 2014.
67 Importantly, Cameroon’s contemporary regional capitals correspond with colonial district offices.
their visibility to the state, this may explain both their relative level of social service access and their relative exposure to the colonial treatment itself. Similarly, a measure of a survey cluster’s distance from the coast approximates relative exposure to early coastal trade, notably the slave economy.

For the second stage analysis of the three mechanisms, additional individual-level controls come from the Afrobarometer survey data. First, these include the respondent’s gender (female) and age. Older citizens may have more proximate experiences with colonialism, with those around 70 years or older actually having come of age during colonial rule. In general, however, the sample is quite young: the average age is 33 years, and less than one percent of the sample is 70 years or older. Models also include the respondent’s level of education, which varies on a ten-point scale from ‘no formal education’ to ‘graduate degree,’ in order to account for the potential compound treatment of differences in colonial education.

VII. RESULTS

Divergent Economic Outcomes

Figure 3 shows the estimates from the first set of models estimating the effects of British versus French rule on economic outcomes. The x-axis shows estimates at five-kilometer bandwidth intervals with the vertical axis displaying estimated coefficients of
falling on the formerly British side of the border. Given the small sample size within ten kilometers of the border, we begin our estimation at the ten-kilometer mark and move upwards to eighty kilometers, where we should expect sampling clusters to be less comparable. Our findings mirror those of Lee and Schultz: household wealth and locally co-produced water are more prevalent in regions that were colonized by the British, and the effect is strongest close to the border. Estimates indicate that households on the former British side of the border are wealthier, as measured by their asset index; Anglophone households within ten kilometers of the border see an increase in their average access to drinking water by well over a third of a standard deviation. Similarly, households on the former British side of the border are wealthier, as measured by their asset index; Anglophone DHS clusters within eighty kilometers of the country’s internal border have, on average, approximately a forty-four percentage point increase in cluster-average asset index scores, but this number jumps to eighty-nine percentage points when looking at clusters less than fifteen-kilometers from the border (using the unstandardized dependent variable). Consistent with our expectations, there is not any evidence that access to central government provided electricity, as measured by nightlight data, differs across the border.68

68 Results are replicated with the entire country sample in the Supplementary Materials.
Testing the Mechanisms

To evaluate our three proposed mechanisms, we turn to public opinion data from the Afrobarometer. Our first hypothesis suggests that economic development is improved by strong traditional authorities who can help overcome the collective action problem in order to produce economic development through local-level coproduction.

Figure 4 presents data for the first mechanism, revealing the that for all three measures of the strength of traditional leaders, the effect of indirect rule hovers at zero and is not statistically significant for nearly all bandwidths. Controlling for a host of ecological and demographic factors, citizens on the former-British side of the border are not any more or less likely than citizens on the former-French side of the border to trust traditional
leaders, believe that traditional leaders are corrupt, or contact a traditional leader. Taken together, the evidence does not provide much support for the idea that indirect rule produced better economic outcomes because it empowered traditional leaders.

Figure 4: Local Linear Estimates for the Average Treatment Effect of Hypothesis 1
Indirect Rule Strengthens Traditional Leaders

The second mechanism predicts that indirect rule increased the salience of ethnic identity and the strength of ethnic communities. Figure 5 presents the estimates for the three dependent variables that capture a respondent’s attachment to and beliefs about ethnic identity. In contrast to the first mechanism, the data provides mixed evidence for the second mechanism. On the one hand, Figure 5a reveals that when compared to citizens on the direct rule side of the border, citizens on the indirect rule side of the
border are considerably more likely to identify with their ethnic group than as a ‘Cameroonian.’ This finding lends support to the argument that indirect rule strengthened ethnic identities.

In contrast however, the theorized implications of this ethnic salience are not borne out in the data. Figure 5b suggests that despite the greater attachment to their ethnic identities, Cameroonians on the indirect side of the border are perhaps slightly less likely than Cameroonians on the former French side to believe that ethnic networks help people “to rise to top positions in public office in this country,” although this result
is not statistically significant at most bandwidths. This contradicts the logic of the second mechanism, which relies on the idea that homogenious ethnic communities improve the provision of public goods because of the strength of the networks they produce. In addition, as Figure 5c reveals, citizens on the formerly British side of the border are not any more or less likely than their counterparts on the French side to believe that elected officials should help their own groups before they help others. Again, this contradicts the logic of the second mechanism because we should expect indirect rule to produce strong in-group identities that lead to in-group preference. Thus, although it appears that indirect rule did indeed produce more salient ethnic identities, it is less clear that these identities have produced the strong in-group reciprocity norms that are theorized to generate better economic outcomes.

Finally, Figures 6 and 7 present evidence for the third mechanism, which contends that because of its decentralized decision-making structure, indirect rule led to better economic outcomes because it imbued communities with stronger local social contracts, imparting greater legitimacy on the local state. Figure 6a shows that citizens living in areas colonized by indirect rule are more likely to believe that local councilors listen to ordinary people, though this is the least robust finding in the set of measures. The relationship is strongest at the narrowest bandwidths, but moves in and out of statistical significance at wider bandwidths. All else equal, within 30 kilometers of the
border, citizens on the former-British side of the border report that their local
government councilor actually listens to ordinary citizens, scoring 0.35 points higher on
the four-point scale than citizens who live on the former-French side (p = 0.032).

Citizens on the former British side of the border are also more likely to approve
of the job of their local assemblyman. On a four-point scale from ‘completely approve to
‘completely disapprove,’ within 30 kilometers of the border, the average citizen on the
former-British side ‘approved’ of the job of their while the average citizen on the former-
French side of the border ‘disapproved.’ Finally, all else equal, citizens living on the side
of the border colonized under indirect rule are also more likely to contact government
officials than are citizens on the direct rule side of the border. Even though few citizens
contact government agencies (of all Cameroonians across two survey rounds, only 12.3
percent reported any contact), indirect rule still has an effect on citizen engagement
with local government. Within 30 kilometers, on a four-point scale from ‘never’ to
‘often,’ the average citizen on the former-British side scored 0.20 points higher than the
average citizen on the former-French side. Together, Figure 6 suggests that Anglophones
are more likely to see their local officials as responsive, reflecting a stronger social
contract.
Further evidence can be found in performance assessments of the local government in Figure 7. This series of five questions asks the respondent how well the local government is at: 1) maintaining local roads, 2) maintaining local markets, 3) maintaining health standards, 4) keeping the community clean, and 5) managing the use of land. For all five questions, and across nearly every bandwidth specification, Anglophones are considerably more likely to approve of the job of their local government. On a four-point scale “very badly” to “very well,” the effect of being on the side of border colonized under indirect rule ranges from 0.76 to 0.97 points higher. For each question, the average Francophone respondent replied that the local government was doing “fairly badly” at managing the problem, while the average Anglophone
responded that the local government was doing “fairly well.” Taken together, this set of questions provides more evidence that indirect rule produced stronger ties between ordinary citizens and the institutions of local government.

Across the three hypotheses, we find the most support for Hypothesis 3. We do not find strong evidence to suggest that citizens on the indirectly-ruled side of the border trust or contact their traditional authorities more than citizens on the directly-ruled side of the border, nor that they are less likely to think that traditional leaders are corrupt. The second mechanism contends that indirect rule produced better economic outcomes because of its impact on ethnic identities. Although we find evidence that Anglophone citizens do indeed identify more with their ethnic group, this identification
does not appear to translate into stronger ethnic communities on the whole. Rather, citizens on the indirectly-ruled side of the border are not any more or less likely to believe that ethnic networks as important to accessing the top government jobs, or that elected officials should first and foremost serve their own communities.

In contrast, we find consistent evidence for the third mechanism, which argues that indirect rule produced a stronger social contract between citizens and the local state by devolving local decision-making, evidenced by more legitimate local governments that are bolstered by reciprocal relations between citizen and state. Citizens on the indirectly-ruled side of the border are generally more likely to approve of the job of their elected assemblyman, to approve of their local government’s work on a host of issues, to believe that their assemblyman listens to the people, and, finally, to contact the government. Taken together, these results provide a solid foundation for the argument that indirect rule produced more legitimate local governments. We therefore conclude that the third mechanism is the most likely pathway from indirect rule to economic development.
VIII. CONCLUSIONS

The existing literature on colonialism has argued that indirect rule has produced better contemporary economic outcomes for citizens than direct rule. We replicate this finding through a geographic RD design in Cameroon along an internal boundary between two areas of the country colonized by Britain and France. We push current theories forward by developing three mechanisms for the observed relationship, testing the strength of each using the same RD design. Because indirect rule focused heavily on legitimizing and empowering existing local authorities while direct rule centered on cultural assimilation and the undermining of these same local authorities, we propose that these different processes could have affected development for different reasons.

First, the empowerment of pre-existing authorities would likely produce strong traditional authorities today. In turn, communities with strong leaders may be better positioned to overcome the collective action problem in order to produce better local development outcomes. Second, indirect rule may instead lead to development because it strengthened ethnic identification, and, in turn, the presence of strong group identities facilitates in-group cooperation towards group goals. Third, indirect rule may have produced better economic outcomes by imbuing the local state with legitimacy and generating a more robust local social contract. By relying on the legitimacy of local

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69 Iyer 2010; Lee and Schultz 2012; Grier 1999.
leaders to implement the functions of local government, indirect rule may have produced more legitimate local institutions in the postcolonial era, which in turn are better positioned to deliver development.

The evidence provides the most support for the third mechanism. Citizens who today live in areas that were originally colonized by the British and administered under indirect rule are more likely to approve of the work of their local government, contact the government and believe that the local government listens to ordinary people. Together, we believe that these findings strongly support the argument that indirect rule produced legitimate local governments better positioned to provide development. We find less evidence for the relationship between indirect rule and strong traditional leaders and ethnic communities.

Modern states that experienced direct rule thus face specific challenges that are less problematic for states administered under indirect rule. Given the findings of this study, it is incumbent upon former French colonies to work to legitimize the institutions of local governance. The trend towards decentralization in the multiparty era is a step in the right direction. Unfortunately, not all of these efforts were fully implemented, particularly in Africa’s more autocratic states, such as Cameroon. The concentration of power in the hands of the executive branch is a notorious issue in African politics, and not only is it problematic for democracy, human rights, and economic growth, it may
even affect local community efforts at economic development. As Africa’s postcolonial states continue to evolve, decentralization of state authority to the community level will likely be key to revitalizing the legitimacy of local government, particularly in states that experienced direct rule.
APPENDIX

1. DHS and Afrobarometer Survey Clusters

**Figure A1: Survey Clusters, with 10km intervals from border**

a. DHS Clusters

b. Afrobarometer Clusters
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