

# Separate and Suspicious: Local Social and Political Context and Ethnic Tolerance in Kenya

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*Does living in close proximity to members of other ethnic groups make people more or less tolerant of ethnic differences? How does the interaction between local electoral competition and ethnic demography affect tolerance? This article examines these questions by combining survey data with new measures of local ethnic composition and political competition in Kenya. People living in ethnically diverse areas report higher levels of interethnic trust, while residentially segregated people are less trusting of members of other ethnic groups. There is little evidence that local electoral competition decreases tolerance even in ethnically diverse areas. This article has important implications for the study of the political and economic consequences of ethnic diversity and suggests that even in developing countries, where resource conflict, along ethnic lines, is acute and sometimes violent, sharing neighborhoods with members of different ethnic groups may lead to tolerance.*

Does living in close proximity to members of other ethnic groups make people more or less tolerant of ethnic differences?<sup>1</sup> To what extent does politics affect the relationship between tolerance and local ethnic composition? These questions have gained importance since the middle of the twentieth century because of increased concern about the implications of prejudice, international migration, and the creation of new ethnically diverse states. As a consequence of these political changes, an interest in the implications of local ethnic demography is shared by political scientists across most regions and subdisciplines. For example, there is an active debate in the literature on civil conflict regarding whether partition—the spatial separation of groups—is necessary to guarantee peace where conflict has already occurred (Kaufmann 1998). Scholars debating constitutional designs to promote ethnic peace disagree on whether institutions should encourage members of different groups to share the same political jurisdictions or place them in different jurisdictions (Horowitz 1991; Lijphart 1977).

The effect of local demography on attitudes has been studied extensively in the United States

because of the process of desegregation and the “Great Migration” of southern blacks to northern cities. Existing scholarship on ethnic tolerance in the United States focuses either on material or nonmaterial causes. Political scientists advancing nonmaterial explanations of the effect of local context draw from research on the origins of prejudice in sociology and social psychology. Scholars focusing on the material effects of local ethnic demography contend that ethnic diversity implies resource competition between members of different groups. This latter approach is consistent with research on ethnic politics in developing countries, which largely focuses on resource competition rather than on false or irrational beliefs as a source of ethnic intolerance.

Almost all research linking *local* ethnic context to attitudes considers Western cases, in part because of the political and logistical problems associated with collecting fine-grained data on ethnicity in poor, conflict-prone countries. Examining cases outside the West has the potential to make important contributions to research on the contextual determinants of tolerance. Poor countries present a hard test for the argument that diversity and interethnic contact

<sup>1</sup>The Institute for Social and Economic Research and Policy at Columbia University and the Hoover Institution at Stanford University provided research support. An online appendix with supplementary material is available at <http://journals.cambridge.org/jop>. Replication data will be available on publication at <http://www.columbia.edu/kk2432>.

produce tolerance because scarcity increases the stakes of resource competition. Many existing studies of the effect of local ethnic context on attitudes use ethnic demography to proxy for both resource and political competition. However, ethnic divisions vary in the degree to which they are politically salient. Research on local context and attitudes in new democracies allows for a better test of how electoral politics interacts with local ethnic demography. In many new democracies parties are weakly institutionalized, and the degree to which voting patterns reflect local ethnic composition varies greatly across time and space. Therefore, in these cases, we can examine whether the relationship between local ethnic demography and attitudes is affected by politicians' incentives to mobilize voters along ethnic lines.

Drawing on existing scholarship linking residential diversity to interethnic contact and attitudes, I examine whether ethnic diversity increases tolerance and ethnic segregation decreases tolerance in Kenya using survey data from the Afrobarometer Project. Because politicians sometimes exploit ethnic divisions in order to win office, I also explore whether people living in areas where elections are closely contested are less tolerant and how electoral competition interacts with ethnic diversity.

Because ethnicity is contentious, the Kenyan government collects, but does not officially circulate, data on local ethnic composition. Therefore, I created an original dataset capturing ethnic diversity and segregation using the voter register and matching voter names to groups. A map of polling stations I constructed allows me to measure both ethnic demography and voting patterns at a highly disaggregated level.

The central finding of this article is that people living in ethnically diverse settings express more trust in other ethnic groups. In addition, conditional on ethnic diversity, the spatial segregation of groups increases interethnic distrust in smaller jurisdictions. Although there may be an association between tolerance and living in ethnically diverse and residentially integrated settings, because tolerant people seek out diverse settings, I present evidence that this is unlikely to be an explanation for these findings in this case. I do not find a positive and statistically significant association between ethnic tolerance and electoral competition or any evidence of a positive interaction between ethnic demography and political competition.

This article makes several contributions to research on the implications of local ethnic demography. By establishing that local diversity can lead to tolerance in an especially hard case, this article suggests that research on ethnic politics in developing countries ought to focus

more on nonmaterial explanations for ethnic animosity. In addition, a positive association between local ethnic diversity and tolerance raises questions about the mechanisms by which ethnic diversity produces poor social outcomes, such as violence or the underprovision of public goods. Finally, the contrast between strong evidence that electoral competition increases the salience of ethnicity at the national level and the absence of evidence that it does so at the local level in this case suggests that further research is warranted on how institutions affect the geographic scale at which political competition increases ethnic divisions.

The article proceeds as follows. The following section reviews theoretical arguments and empirical findings in the existing literature on the impact living in ethnically diverse neighborhoods has on residents' attitudes and behavior. This section also makes a case for examining these questions in a poor, developing country and outlines the key hypotheses that will be tested here. The third section describes interethnic relations in Kenya, and the fourth section discusses the empirical strategy. The last section describes the main findings of this study and discusses alternative explanations.

## Local Context and Ethnic Tolerance

Existing research linking local ethnic diversity to individual attitudes and behavior tends to focus on either material or nonmaterial accounts of ethnic tolerance and salience. Material explanations for ethnic tolerance rest on the simple claim that intolerance is a consequence of competition over political and economic resources. Nonmaterial arguments that link local ethnic diversity to attitudes offer a wider range of micromechanisms drawn from social psychology and sociology. Although there are many theories of the origins of prejudice, the explanations most commonly applied in studies of local ethnic demography and tolerance focus on: (1) false (or irrational) beliefs about members of other ethnic groups; (2) challenges to social norms regarding the relative ranking of ethnic groups; or (3) a commonly held, psychological need to define identity in terms of group memberships (Allport 1954; Blumer 1958; Tajfel 1982).

The most common psychological explanation for the relationship between local ethnic diversity and tolerance draws on a theory suggesting that prejudice is a consequence of *false or irrational beliefs* (Allport 1954). If a lack of information produces intolerance, then interethnic contact can correct these false beliefs

under certain conditions.<sup>2</sup> Living in an ethnically diverse setting increases the *potential* for interethnic contact (Blau 1994). Therefore, research on local context presents an indirect test of the contact hypothesis.<sup>3</sup> Offering a sociological explanation for intolerance, Blumer (1958) argued that prejudice results from social norms producing a sense of group position, which becomes particularly acute when the ranking of groups is challenged. One implication of Blumer's theory of prejudice is that as the population of the subordinate group in a locality grows, members of the superordinate group become more prejudiced (Bobo and Hutchings 1996). Finally, Enos (2011) applies social identity theory to argue that the larger the presence of the members of other ethnic groups, the more salient group differences become.

The impact of local racial diversity has been most extensively studied in the United States. Key (1949) noted in his seminal study of Southern politics that both white racial prejudice and political participation were higher in localities with greater concentrations of blacks. Key argued that Southern whites living in majority black counties (the "black belt") were the most committed to maintaining restrictions on black suffrage. Following Key, scholars have further examined whether higher numbers of African Americans in a locality induce greater white political participation and prejudice (Glaser 1994; Taylor 1998; Voss 1996). In contrast, research outside the South has demonstrated a correlation between local racial diversity and tolerant attitudes regarding African Americans as well as a positive view on public policies that benefit them (Kinder and Mendelberg 1995; Welch, et al. 2001).

Early research on racial demography and tolerance focused on whites' attitudes towards blacks. Because African Americans possess both a lower economic status and a higher degree of social stigma, social scientists later expanded the scope of their inquiry to other ethnic groups and to other countries to account more fully for additional explanations of intolerance. For example, evidence from United States metropolitan

areas demonstrates the importance of resource competition by showing that both a person's socioeconomic status and the socioeconomic status of outgroup members residing within the neighborhood affect the relationship between racial diversity and racial attitudes (Cho and Baer 2011; Gay 2006; Oliver and Mendelberg 2000). In addition, Bobo and Hutchings (1996) and others have studied other nonwhite American racial groups. Their research demonstrates that the relationship between tolerance and living in an ethnically mixed neighborhood depends upon the identity and social status of the outgroup (Dixon 2006; Oliver and Wong 2003). Although blacks are the most stigmatized racial group in the United States, Bowyer (2009) finds that whites sharing neighborhoods with large numbers of Bangladeshis are more intolerant than those sharing neighborhoods with large numbers of Afro-Caribbeans; this suggests that national histories and local political context are important as well.

Research on the contextual determinants of tolerance has largely focused on examining western cases. The difficulty of getting neighborhood-level data on ethnic composition in poor, developing countries only partially accounts for this omission. The study of ethnic politics in places where group differences are not *racial* tend to ignore *prejudice* and focus instead on material causes of conflict between groups.<sup>4</sup> In developing countries, poverty exacerbates resource conflict, drawing scholars' attention to material differences across ethnic lines. Moreover, patronage politics and weak institutions provide politicians with an incentive to form coalitions along ethnic lines and, as a result, elite mobilization is an important focus of research on ethnic politics in the developing world (Bates 1983; Chandra 2004; Young 1965). Posner (2005), for example, has shown that ethnic identification and salience are shaped by electoral politics (Eifert, Miguel, and Posner 2010). In addition, the ethnic distinctions of interest to most scholars of ethnic politics outside the West lack centuries-old folk theories regarding why marginalized groups (e.g., blacks in the United States or the Roma in Europe) are *innately* inferior on *multiple* dimensions. Although what Horowitz (1985) calls "ranked" ethnic distinctions exist in some developing countries, they have not (with the exception of caste in India) been a

<sup>2</sup>The specific conditions under which interethnic contact decreases prejudice as outlined by Allport (1954), the earliest proponent of the "contact hypothesis," remain controversial. According to Pettigrew (1998), one problem with the theory is that the proliferation of conditions makes falsifiability impossible. The two conditions first suggested by Allport (1954) that have evoked the most scholarly interest are the requirement that individuals from ethnic groups be of *equal status* and that they be engaged in the pursuit of *common objectives*.

<sup>3</sup>Moreover, Bowyer (2009) argues that although propinquity measures the potential for contact and not contact directly, propinquity is less likely to be a consequence of self-selection than direct measures of contact.

<sup>4</sup>Varshney's research on Hindu-Muslim violence in India is an exception. He argues that interethnic contact can promote ethnic peace in villages but that more organized forms of interethnic association are required to prevent the escalation of ethnic violence in urban areas Varshney (2002).

major focus of ethnic politics research in the developing world.<sup>5</sup>

There are, however, clear benefits to extending the geographic scope of research on the impact of ethnic demography on attitudes. For one thing, developing countries present a hard test for theories linking local diversity to tolerance because poverty makes it more likely that ethnic diversity will produce resource competition. In addition, as Horowitz (1985) observes, ethnic identities have a territorial aspect implying special rights of residence, property ownership, and self-determination in a particular place. Therefore, diversity is less likely to produce tolerance where members of one group view themselves as “sons of the soil.”<sup>6</sup>

Research on local context in developing countries also allows for a better test of whether ethnic diversity has a different impact on attitudes when ethnicity is politicized. Although actual and potential political competition underlies most accounts of “racial threat” in American politics, measures of electoral competition are rarely included in these studies. Group size can be treated as a proxy for political competition because the partisan affiliations of the racial groups involved are fairly stable. In developing countries, however, parties are more weakly institutionalized, and the match between ethnic groups and political parties is more likely to vary over space and time, especially in subnational electoral jurisdictions.<sup>7</sup> In Kenya, for example, there are ethnically diverse parliamentary constituencies where a plurality support one candidate and ethnically homogenous constituencies where electoral contests are close.

Existing theories on the contextual determinants of tolerance suggest four hypotheses. First, if the pri-

mary cause of ethnic intolerance is false beliefs about members of other ethnic groups, we can expect that:

*H1:* People living in ethnically diverse local environments are more tolerant because they have greater *potential* contact with members of other ethnic groups.

*H2:* Given ethnic diversity, tolerance is lower where ethnic groups are *spatially segregated*.

Second, if political competition is an important cause of hostility along ethnic lines then:

*H3:* People living in areas where elections are closely contested will have lower levels of interethnic trust.

*H4:* Political competition will have the greatest effect on intolerance in ethnically diverse places.

I test these hypotheses using survey data from Kenya, a country that presents a hard test for arguments that ethnic diversity improves interethnic relations for reasons I describe in the following section.

## Interethnic Relations in Kenya

Several aspects of Kenya's postcolonial history make it a good place to examine the contextual determinants of ethnic tolerance. Kenya is a good case because it is similar to many other new democracies; access to state resources is the primary source of social mobility, and political competition occurs along ethnic lines.<sup>8</sup> In addition, local ethnic diversity varies greatly across the country, and ethnic settlement patterns have various historical origins. Moreover, Kenya presents a hard test for determinants of ethnic tolerance because interethnic trust is not common; there is a history of violence along ethnic lines, and both general and interethnic trust are low.

British colonial policy altered Kenya's ethnic landscape and introduced territorial notions of ethnic identity. The British alienated large parts of the country to European farmers, moving the Africans who lived there to ethnically exclusive native-reserve areas.<sup>9</sup> The creation of native reserves not only facilitated land alienation but was also consistent with the British administrators' belief that African social organization and social peace required that each tribe have

<sup>5</sup>For example, Horowitz (1985) refers to the “mixed stereotypes” that exist in unranked ethnic groups using the examples of the Kanuri attitudes towards the Ibo in Nigeria and the attitudes of the Sinhalese towards the Tamils in Sri Lanka. In the former case, the Ibo are “distrusted and despised” but admired for “their Western education, salaried jobs, and higher standards of living” and in the latter, Tamils are viewed as “poor and dirty” as well as “thrifty and diligent.”

<sup>6</sup>Although immigration produces diversity in the West, in these cases, social distance between natives and immigrants make it difficult to separate nationalism from racial prejudice.

<sup>7</sup>A recent study of ethnic voting in Ghana highlights some of the subtle differences between ethnic voting in national and subnational jurisdictions. Ichino and Nathan (2013) find that Ghanaians living amongst members of another ethnic group are more likely to support presidential candidates from that group because voters believe they will benefit from the nonexcludable resources those presidents will distribute to the region if elected.

<sup>8</sup>Although Kenya is commonly held to have 40 ethnic groups, there are seven groups that comprise more than 5% of the total population; these are, in order of their population size in 1989, Kikuyu (21%), Luhya (14%), Luo (12%), Kalenjin (11%), Kamba (11%), Kisii (5%), and Meru (5%).

<sup>9</sup>By the end of the colonial period in 1964, about half of the agricultural land in Kenya, mostly in the Rift Valley, had been transferred to Europeans (Okoth-Ogendo 1991; Sorrensen 1968).

a clearly defined territory. Therefore, British colonial authorities engaged in a careful construction and policing of tribal territories; limiting the in-migration of nonnative groups in many cases (Berman and Lonsdale 1992; Médard 1999). Although ethnicity and kinship were used to define subnational administrative boundaries, in some cases administrative boundaries created ethnic identities where none existed.<sup>10</sup>

Ethnic demography varies considerably across Kenya and is the result of very different historical processes. In addition to the colonial-era population movements described above, in the 50 years since the end of British colonial rule, the ethnic geography of Kenya has been changed by internal migration. Like other African countries, Kenya has had high rates of rural to urban migration, as well as economic migration to the Coast, an important tourist area. Population growth and the opening of the White Highlands to Africans also encouraged rural-to-rural migration, particularly by ethnic groups, like the Kikuyu and Kisii, who lived in densely populated areas where land prices were high.

Kenya also has a history of various kinds of low-intensity violence arising from land disputes, border disputes, cattle rustling, and other forms of criminality. Only some of this violence is explicitly ethnic in nature and/or linked to electoral politics. Postcolonial population movements, population growth, economic crisis, and the transition to multiparty politics in the 1990s made local ethnic demography more politically salient. Once multiple parties were allowed to compete for office in 1992, political coalitions formed along ethnic lines, and in both the Rift Valley and Coast provinces individuals were attacked for both their ethnic identity and partisan affiliation. In addition to displacing 400,000 people, ethnic clashes during the 1990s caused at least 2,000 deaths (Human Rights Watch 2002). In 2007, two years after the data I use was collected, a flawed presidential election triggered a political crisis lasting several weeks. During 2007–08, violence was more acute in areas that had a history of election-related violence, but the geographic scope of conflict was broader and the number of victims greater.<sup>11</sup> Therefore, although violence frequently takes place along ethnic lines in Kenya, the causes of conflict

are complex and include land scarcity, political corruption, and grievances regarding the distribution of land and economic opportunity.

Finally, as I will show below, Kenya is a low-trust place. Even before the post-election crisis of 2007, Kenya was ranked 14th out of 17 Afrobarometer countries in terms of general interpersonal trust. In addition, levels of interethnic trust in Kenya are lower than in all Afrobarometer countries except Nigeria.<sup>12</sup> Quantitative evidence aside, constitutional reforms enacted in response to the political crisis of 2007–08 embody a deep skepticism regarding the possibility of interethnic cooperation without strong institutional safeguards. For example, the 2010 Kenyan constitution devolves power to counties that conform to the relatively homogenous districts of the early independence period. In order to ensure that all groups get their fair share of national resources, the constitution sets a fixed amount of the general budget that is devolved to these counties and calls for ethnic diversity for a wide range of public posts. Although these institutional changes came after the collection of the data I analyze below, it is clear that Kenya presents a hard test for theories linking diversity to tolerance.

## Empirical Strategy

I measure ethnic diversity and segregation in a respondent's administrative location. Locations are the second smallest administrative divisions in Kenya. There are multiple locations within a district—the principle administrative jurisdiction—and within a constituency, an electoral jurisdiction represented by a single Member of Parliament. Excluding arid and semiarid districts, there are 1,999 locations; the average location has 13,300 residents and has an area of 102 square kilometers. Summary statistics for the individual- and location-level variables can be found in the appendix.

I take administrative locations as defined in 1999 and exclude all locations in arid and semiarid (ASAL) districts. Although these arid and semiarid areas cover a large portion of Kenya's land mass (37%), they house a relatively small proportion of the national population and of the 2005 Afrobarometer sample (7% in both cases). These areas are excluded from the analysis because conceptualizing and measuring the local ethnic context in these areas is complicated by the fact that

<sup>10</sup>The Luhya, a linguistically diverse group in western Kenya, are the most notable example of the effect of common administration on group identification. Were (1967) attributes the present size and composition of the Luhya subtribes to administrative reorganization by the British.

<sup>11</sup>Approximately 1,100 people were killed and 350,000 displaced KNCHR (2008).

<sup>12</sup>An important caveat is that countries covered by the Afrobarometer were relatively politically stable and democratic at the time these surveys were conducted.

they are sparsely populated, and many residents are transhumant pastoralists served by mobile polling stations. It is important to note, however, that levels of ethnic tolerance in ASAL and non-ASAL districts are not significantly different.<sup>13</sup>

The relationship between tolerance, local context, and other individual-level characteristics is represented below:

$$\text{Ethnic Tolerance}_{igj} \sim \alpha + \beta \text{Ethnic Context}_{gj} + X'_{igj}\delta + Z'_j\gamma + \varepsilon_{igj}, \quad (1)$$

where *Ethnic Tolerance*<sub>igj</sub> is measured for individual *i* from ethnic group *g* residing in location *j*. *Ethnic Context*<sub>gj</sub> is a measure of the ethnic composition of the locality in which an individual lives. The vector *Z*'<sub>*j*</sub> contains other location-level measures of ethnic context. The vector *X*'<sub>igj</sub> represents individual characteristics that may affect tolerance. I estimate ordered logit models because respondents may select one of four ranked responses characterizing their degree of trust in members of other ethnic groups. Because the key relationship of interest is whether local context affects an individual-level attribute, I need a model that accounts for the hierarchical structure of the data. I report standard errors clustered at the level of the location.<sup>14</sup>

### Local Ethnic Context

Data on local ethnic composition are politically sensitive, and the Kenya National Bureau of Statistics does not officially release such information for this reason. I use data from the 2006 Register of Voters and a map of polling stations I created to measure local ethnic composition. The Register, which is publicly available, contains the names of registered voters and their polling station. Names in Kenya are associated with particular ethnic groups and are used socially as a gauge of ethnic identity. Therefore, I match names to groups in the register. For details on the name matching process, see the data appendix.

The advantage of measuring ethnic composition at the polling-station level is that it allows us to ex-

amine ethnic patterns across subunits within a small area (the administrative location). While it would be possible to measure both diversity and segregation at a higher level of aggregation, locations are an ideal unit because of their small size and correspondence with many people's conception of their neighborhood. Locations, as neighborhoods, have a social meaning for their residents. Locations generally share a chief, an office that is largely administrative in Kenya, and are often coterminous with wards represented by local councillors.

*Ethnic Fractionalization* in location *j* is measured using a standard index of fractionalization which measures the probability that two randomly selected people in location *j* will come from two different ethnic groups. That is,

$$\text{Ethnic Fractionalization}_j = 1 - \sum_{g=1}^G \pi_{gj}^2, \quad (2)$$

where  $\pi_{gj}$  is the proportion of people in location *j* who are members of group *g*.

Segregation is the unequal distribution of ethnic groups across parts of a region. An active debate on the best way to measure segregation that is related to debates concerning the measurement of economic inequality, a closely related concept (Hutchens 2001). Because American scholars studying segregation are most concerned about the segregation between two groups—generally blacks and whites—most measures of segregation in the literature are not well-suited to a multi-group setting (Frankel and Volij 2011).

The measure of segregation used in this article is *Theil's Information Index (Entropy Index)*, which captures how much *additional information* is learned about a person's ethnicity from knowing the subregion in which they reside. This index is well-suited to measuring segregation when there are several ethnic groups (Frankel and Volij 2011; Reardon and Firebaugh 2002). Region A is more segregated than region B if knowing a person's subregion within region A reduces one's uncertainty about their ethnic identity to a greater extent in region A than in region B. Where groups are perfectly segregated across subregions, knowing a person's subregion allows us to perfectly predict their ethnic identity; if groups are perfectly integrated, knowing a person's locality adds no additional information about their ethnicity.

The measure of uncertainty about ethnic identity used to calculate *Theil's Information Index (H)* is *Entropy*, which is itself a measure of ethnic diversity, taking on its maximum value when the population is

<sup>13</sup>The *p*-value on a two-sided difference of means test on *Interethnic Trust* is 0.19.

<sup>14</sup>An alternative approach would be to estimate a multilevel model. However, I did not use this approach because I am not primarily interested in estimating location-level differences in levels of interethnic trust and/or the cross-level interaction between local ethnic context and individual-level attributes.

evenly distributed across groups, equalling 0 if everyone is from the same group.<sup>15</sup>

The measure of segregation used here relates ethnic composition at the polling station and to ethnic composition in the location. *Theil's Information Index* ( $H_j$ ) for location  $j$  is:

$$H_j = 1 - \frac{\sum_{k=1}^K \left( \frac{\text{Proportion of Location } j}{\text{Voters Registered in Polling Station } k} \right) \left( \frac{\text{Entropy of Ethnic Distribution in Polling Station } k}{\text{Entropy of Ethnic Distribution in Location } j} \right)}{\left( \frac{\text{Entropy of Ethnic Distribution in Location } j}{\text{Entropy of Ethnic Distribution in Location } j} \right)} \quad (3)$$

$H_j$  can also be expressed as

$$H_j = 1 - \frac{\sum_{k=1}^K \pi_{kj} \sum_{g=1}^G \pi_{kgj} \ln \frac{1}{\pi_{kgj}}}{\sum_{g=1}^G \pi_{gj} \ln \frac{1}{\pi_{gj}}}, \quad (4)$$

where  $\pi_{kj}$  is the proportion of registered voters in location  $j$  registered at polling station  $k$ , and  $\pi_{kgj}$  is the proportion of registered voters at polling station  $k$  who come from group  $g$ . The value of  $H$  ranges from 0 (perfect integration) to 1 (perfect segregation).

Both ethnic diversity and ethnic segregation are higher in areas that experienced high degrees of immigration in the postindependence period, particularly cities and areas that were alienated to white settlers in the colonial period and resettled by Africans after independence. In addition, both ethnic segregation and diversity are higher along the boundaries of what were native reserve areas, which were designed to be ethnically exclusive in the colonial period. These spatial patterns increase my confidence in the validity of these measures of ethnic demography.

### Ethnic Tolerance

In order to measure an individual's ethnic tolerance, I use a question from the 2005 Kenyan Afrobarometer survey that asks respondents how much they trust Kenyans from other ethnic groups. The options available to respondents were: "not at all"; "a little"; "somewhat"; or "a lot."

<sup>15</sup>If  $\pi_{gj}$  is the proportion of people in location  $j$  who are members of group  $g$ , then the *Entropy* of location  $j$  is:

$$\text{Entropy}_j = \sum_{g=1}^G \pi_{gj} \ln \frac{1}{\pi_{gj}}.$$

I use respondents' reported levels of interethnic trust as a measure of ethnic tolerance. It is easier to gauge prejudiced attitudes regarding a single minority (e.g., blacks, Muslims, etc.) than it is to measure prejudiced attitudes toward *all* members of other ethnic groups because, in the former case, one can measure whether individuals accept culturally well-established folk theories regarding the negative traits of members of one ethnic group. Rudolph and Popp (2010) note that, like tolerance, trust is an "affective orientation" towards others. Therefore, people who have high levels of interethnic trust are more likely to be tolerant towards members of other ethnic groups. There is a possibility that measures of *trust* between members of different ethnic groups capture respondents' general willingness to trust others. However, when a respondent's *Generalized Trust*, their belief that most people can be trusted, is controlled for, the relationship between *Interethnic Trust* local ethnic context and political competition remains unchanged (see the appendix).

## Findings

### Ethnic Tolerance and the Local Ethnic Environment

The main finding of this article is that people sharing neighborhoods with members of other ethnic groups express greater interethnic trust. The estimate of the effect of *Ethnic Fractionalization* is positive and robust to several different specifications consistent with Hypothesis 1. In addition, residents of *segregated* neighborhoods are less trusting of members of other ethnic groups even when the underlying ethnic diversity of the location is controlled for (H2). Table 1 presents results from estimating an ordered logit model in which the outcome is *Interethnic Trust*. Figure 1 plots the predicted probability of the four responses to the question on interethnic trust against *Ethnic Fractionalization* and *Segregation* for a 40-year-old Kisii woman with no secondary education living in a rural area, holding all location-level variables at their means (Table 1, Column 2). Figure 1 demonstrates that the predicted probability of answering "not at all" and "just a little" increases with increasing diversity and decreases at higher levels of ethnic segregation. This pattern is the opposite for responses to "somewhat" and "a lot."

History affects a locality's ethnic composition, and this raises the possibility that other contextual

TABLE 1 Interethnic Trust and the Local Context

	[1]	[2]	[3]	[4]	[5]	[6]
Ethnic Fractionalization	1.22** (0.54)	1.41*** (0.48)	1.98*** (0.50)	1.98*** (0.51)	1.26*** (0.49)	1.27*** (0.49)
Segregation (Theil's Index)		-1.70** (0.78)	-1.82** (0.71)	-1.93 (2.27)	-1.78** (0.74)	-1.83*** (0.70)
Parliamentary Margin (2002)	-0.22 (0.31)	-0.25 (0.31)	0.19 (0.42)	0.17 (0.58)	-0.26 (0.31)	-0.26 (0.31)
Urban	-0.28 (0.18)	-0.31* (0.18)	-0.29* (0.17)	-0.29* (0.17)	-0.26 (0.18)	-0.26 (0.18)
Proportion Migrants	-1.02** (0.51)	-1.17** (0.49)	-1.08** (0.47)	-1.08** (0.48)	-1.10** (0.50)	-1.11** (0.50)
Coethnic Interviewer	-0.31* (0.17)	-0.31* (0.17)	-0.31* (0.17)	-0.31* (0.17)	-0.34** (0.17)	-0.34** (0.17)
Government Belief	0.12 (0.12)	0.11 (0.12)	0.11 (0.12)	0.11 (0.12)	0.13 (0.12)	0.13 (0.12)
Violence Index	-0.02 (0.06)	-0.02 (0.06)	-0.02 (0.07)	-0.02 (0.06)	0.28** (0.13)	0.31** (0.13)
Ethnic Fractionalization x Margin			-1.58* (0.90)	-1.57* (0.93)		
Segregation x Margin				0.39 (7.67)		
Ethnic Fractionalization x Violence Index					-0.93*** (0.26)	-0.91*** (0.26)
Segregation x Violence Index						-0.65 (0.87)
Number of Clusters	97	97	97	97	97	97
N	1133	1133	1133	1133	1133	1133
AIC	2737	2736	2735	2737	2727	2728

Note: The table shows ordered logit coefficients. Standard errors clustered at the level of the administrative location are in parentheses. All models include controls for respondent gender, secondary education, status as an agricultural worker, age, age-squared, as well as dummies for the following ethnic groups: Kalenjin, Kamba, Kikuyu, Kisii, Kuria, Luhya, Luo, and Maasai. \* $p < 0.10$ , \*\* $p < 0.05$ , \*\*\* $p < 0.01$ .

variables confound the relationship between local ethnic demography and ethnic attitudes. Urban areas are more ethnically diverse, and it may be the case that people who live in cities are more openminded. However, the positive association between ethnic diversity and tolerance remains once urbanness is controlled for, and in contrast to the pattern in the West, city dwellers are less tolerant of members of other ethnic groups (Table 1). In addition, ethnic diversity may be the result of high in-migration, and people may be more trusting towards people with whom they have a long history of interacting. Barr (1999), for example, demonstrates that the Zimbabweans who settled in new villages after 1980 exhibit lower levels of interpersonal trust than people in older villages in behavioral games. The data support the claim that interethnic trust is lower when the proportion of the population who are recent migrants (*Proportion Migrants*) is higher, but recent in-migration

cannot fully account for the positive association between *Ethnic Fractionalization* and *Interethnic Trust*.<sup>16</sup>

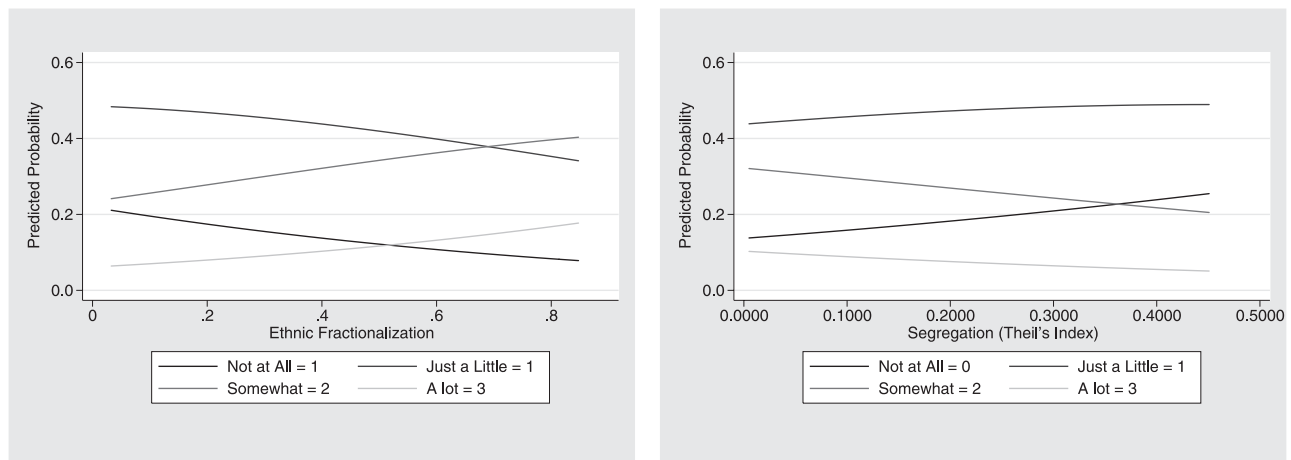
Kenya has a history of interethnic violence, and it tends to occur in ethnically diverse areas. To examine the relationship between diversity, conflict, and tolerance, one would ideally measure the incidence of violence before 2005 in each of the locations in this study. Lacking reliable local-level estimates of the incidence of violence before 2005, I control for respondents' exposure to and fear of violence.<sup>17</sup> This method

<sup>16</sup>*Proportion Migrants* is the percent of the residents in a location who were born outside that district in the 1999 census.

<sup>17</sup>Ethnic conflict is extremely hard to measure accurately for small areas. Public sources, such as newspapers or government reports, tend to focus on the worst-affected areas. An earlier attempt made by the author to code violent incidents before 2002 demonstrated that newspapers frequently locate incidents in larger administrative jurisdictions.



**FIGURE 1** Predicted Probabilities of Each Category of *Interethnic Trust* by Ethnic Diversity and Segregation



*Note:* Predicted probabilities calculated for a 40-year-old Kisii woman with no secondary education and living in a rural area with all other covariates held at their means, using estimates from the model in Table 1, Column 2.

of measuring violence has two advantages. First, even when interethnic violence does occur in a location, not everyone is affected in the same way. Second, violence that is not explicitly political may reduce tolerance. Factor analysis was used on three questions to construct an index of a respondent's exposure to violence.<sup>18</sup> There is no negative and statistically significant association between the violence index and interethnic trust. However, ethnic diversity increases tolerance to a lesser extent amongst those with a higher exposure to violence (Table 1, Column 5).

As noted above, ethnic diversity and segregation can be defined in several different ways. Table 2 shows that the findings on ethnic diversity and segregation are robust to different conceptualizations. Some scholars believe that ethnic polarization—the degree to which ethnic groups fall into roughly equal-sized blocks—is more likely to cause conflict than simple diversity. However, there is a positive but not robust association between interethnic trust and polarization, as measured by Montalvo and Reynal-Querol (2005) (Table 2, Columns 1 and 2). Local ethnic context may be viewed as a feature of an area as a whole, something experienced by all residents regardless of their ethnic group (*Ethnic Context<sub>j</sub>*). Alternatively, the same ethnic environment may be experienced differently, depending

on an individual's ethnic identity (*Ethnic Context<sub>ij</sub>*).<sup>19</sup> Measures of local ethnic context that define demography in terms of the distribution of a respondent's coethnics confirm my main findings as *Proportion Coethnics in Location* and the *Dissimilarity Index (DI)* are the same; in all cases, diversity and segregation negatively correlate with *Interethnic Trust* (Table 2, Columns 1 and 2).

A potential disadvantage of using the voter register is that local ethnic demography might affect which people register to vote. Using these estimates of local ethnic composition, to predict whether or not a respondent was registered to vote in the last election, I find no relationship between local ethnic diversity, polarization, and group size and reported registration (see appendix). Moreover, if people are less likely to register to vote where they are demographic minority, then true ethnic diversity is likely higher than my estimates of it, biasing the positive coefficient on ethnic diversity downwards.

Although locations are a good description of what respondents are likely to view as their neighborhood, one concern with the analysis of contextual effects is that the findings may change if the the scale or the zoning of neighborhoods changes. I do not have

<sup>18</sup>The three questions measure how often over the past year the respondent feared crime, had something stolen from their house, or had a member of their household experience a physical attack.

<sup>19</sup>The difference between the two ways of thinking about local context is subtle. On the first account, a person's interethnic attitudes are affected by the ways in which *all other* people who do *not* share his or her ethnic identity are distributed across an area, and on the second account, all ethnic others are treated identically as coming from a *different* group than the respondent.

TABLE 2 Alternative Measures of Local Ethnic Composition

	[1]	[2]	[3]	[4]
Ethnic Polarization (Reyna-Querol Index)	0.87 (0.60)	1.39** (0.55)		
Segregation (Theil's Index)		-2.78*** (1.02)		
Proportion Coethnics in Location			-0.71*** (0.27)	-0.75** (0.33)
Segregation (Dissimilarity Index)				-0.77* (0.42)
Number of Clusters	97	97	97	96
N	1133	1133	1057	1030
AIC	2739	2735	2557	2480

Note: The table shows ordered logit coefficients. Standard errors clustered at the level of the administrative location are in parentheses. All models include controls for respondent gender, secondary education, status as an agricultural worker, age, age-squared, violence/crime exposure, beliefs about origin of survey, the proportion of migrants in a location, respondent and interviewer coethnicity, whether a location falls in an urban area, as well as dummies for the following ethnic groups: Kalenjin, Kamba, Kikuyu, Kisii, Kuria, Luhya, Luo, and Maasai. \* $p < 0.10$ , \*\* $p < 0.05$ , \*\*\* $p < 0.01$ .

the kind of data that would allow me to explore the effect of zoning locations differently, but it is possible to test for whether defining an individual's social context at a different *geographic scale* changes the main findings of the article. Following Cho and Baer (2011), I examined broader definitions of interethnic context, absorbing a respondent's location of residence with one, two, and three of its nearest neighbors. Increasing the *scale* of "neighborhoods" reduces the coefficients on the ethnic context variables, and segregation is not a statistically significant predictor of interethnic trust at larger scales.<sup>20</sup>

### Political Competition

Existing research on ethnic politics suggests that the political interests of elites affect mass attitudes towards members of other ethnic groups (H3). Using the winner's *Margin of Victory* in an administrative location in the 2002 parliamentary elections as a proxy for the degree to which people in a location diverge politically, I find no evidence for a positive relationship between interethnic trust and political competition measured in a number of different ways at the local level. I included measures of local electoral competition for presidential elections and the *Effective Number of Parties* as an alternative to *Margin of Victory*. I also examined the competitiveness of civic elections for a subsample of respondents. Because

there is frequently no one-to-one match between locations and wards, I restricted the sample to the 61% of respondents living in locations that contain only one electoral ward. In this smaller sample, I find that the more competitive civic elections correlate with decreased interethnic trust but that the main findings on local ethnic demography remain unchanged (see the appendix). Candidates' incentives to emphasize ethnic divisions may depend on the demography and competitiveness of the constituency as a whole (recall that administrative locations are subunits of parliamentary constituencies). Table 3 repeats the analysis measuring these variables at the constituency level. As with findings at the location level, people in diverse electoral constituencies are more likely to report that they trust members of other ethnic groups. Constituency-level segregation, however, has no effect on *Interethnic Trust*, and it may be the case that segregation at the very local level is more important for ethnic tolerance than segregation over larger areas.

Because many parliamentary jurisdictions are ethnically homogenous, voters are more likely in parliamentary than in presidential elections to be presented with a choice between candidates who share their ethnic identity. Although one might expect that what matters for interethnic trust is the degree to which people support different presidential candidates, this contention finds no support in the data (Table 3, Column 2). Ethnic and partisan alliances in Kenya vary from election to election. The 2002 election pitted a multiethnic coalition against an incumbent party on the decline, while in 1997 more people had ethnically identified parties they could support. However, results

<sup>20</sup>I calculate a location's nearest neighbor by measuring distances between the central point in each location (see appendix).

**TABLE 3 Interethnic Trust and Political Competition at the Constituency-Level**

	[1]	[2]	[3]	[4]	[5]	[6]
Constituency Ethnic Fractionalization	1.30*** (0.45)	1.24*** (0.44)	1.35*** (0.50)	0.83 (0.52)	1.36*** (0.45)	3.70 (2.32)
Constituency Segregation (Theil's Index)	-0.37 (1.11)	-0.43 (1.17)	-0.54 (1.12)	-0.05 (1.13)	-1.05 (1.07)	-0.87 (1.16)
Margin (Parliamentary 2002)	0.35 (0.36)					
Ethnic Fractionalization x Margin (Parliamentary 2002)	-0.33 (5.12)					
Margin (Presidential 2002)		0.02 (0.42)				
Ethnic Fractionalization x Margin (Presidential 2002)		-1.24 (2.34)				
Margin (Parliamentary 1997)			0.18 (0.35)			
Ethnic Fractionalization x Margin (Parliamentary 1997)			-0.71 (0.95)			
Margin (Presidential 1997)				-0.55* (0.33)		
Ethnic Fractionalization x Margin (Presidential 1997)				-0.31 (1.54)		
Constituency Development Funds per Capita					0.14 (0.11)	0.26* (0.15)
Ethnic Fractionalization x CDF per Capita						-0.33 (0.33)
Number of Clusters	98	98	98	98	98	98
N	1141	1141	1141	1141	1141	1141
AIC	2756	2757	2757	2753	2754	2755

*Note:* The table shows ordered logit coefficients. Standard errors clustered at the level of the administrative location are in parentheses. All models include controls for respondent gender, secondary education, status as an agricultural worker, age, age-squared, violence/crime exposure, beliefs about origin of survey, the proportion of migrants in a location, respondent and interviewer coethnicity, whether a location falls in an urban area, as well as dummies for the following ethnic groups: Kalenjin, Kamba, Kikuyu, Kisii, Kuria, Luhya, Luo, and Maasai. \* $p < 0.10$ , \*\* $p < 0.05$ , \*\*\* $p < 0.01$ .

at the both the presidential and parliamentary level are the same for both elections (Table 3, Columns 3 and 4).<sup>21</sup> In both cases, the effect of electoral competition on interethnic trust is not statistically different from zero.<sup>22</sup>

Although ethnic voting is common in Kenya, and ethnic diversity is positively associated with local elec-

toral competitiveness, there is not a simple one-to-one match between ethnic diversity and the closeness of electoral outcomes. Therefore, it is possible that the impact of electoral competition on tolerance may be higher in diverse settings (H4). At both the location and the constituency level and across different electoral races and years, the interaction between electoral competitiveness is either not statistically significant or indicates that ethnic diversity leads to less ethnic tolerance in uncompetitive areas rather than competitive ones (Tables 1 and 3).

The absence of a positive association between electoral competition and interethnic tolerance is surprising given research that shows ethnic identities in Africa become more *salient* as national elections approach (Eifert, Miguel, and Posner 2010). Unfortunately, the question used by Eifert, Miguel, and Posner (2010) was not asked in this round of

<sup>21</sup>I do not use local-level measures of electoral competitiveness for 1997 because electoral results were not collected at the polling-station-level in these elections, and the dataset contains a large number of errors as a result.

<sup>22</sup>I also tried to gauge the *stakes* associated with winning electoral office in each constituency by measuring the value of Constituency Development Funds per capita in each of these constituencies. Constituencies in which MPs could expect to control more money are not more likely to have lower levels of ethnic tolerance (Table 3, Columns 5 and 6).

the Afrobarometer. To bring my analysis closer to theirs, and as a robustness check on my main findings, I use a question that measures the extent to which people identify in ethnic, rather than national terms. Measuring the salience of ethnicity in this way, the findings on electoral competitiveness remain the same (Table 4). Significantly, the findings on diversity and segregation remain the same when the outcome variable is changed from ethnic trust to national identification; people are more likely to identify in national terms in diverse locations and less likely likely to do so in segregated settings. In general, the findings on ethnic identification are consistent with those on interethnic trust.

### Alternative Explanations

I use observational data on attitudes and ethnic demography, raising the question of whether the effect

of local ethnic demography on attitudes can be treated as causal. If ethnic prejudice is frowned upon, respondents may misrepresent how tolerant they are, especially if residential mobility is high and tolerance determines residential choices. Below I discuss whether the social desirability bias and residential sorting can account for these findings.

Although ethnicity shapes many social interactions, many Kenyans deplore “tribalism” and its effects on public life, raising the possibility that respondents overstate the degree to which they are tolerant of members of other ethnic groups. The actual and assumed identity of the interviewer allows us to explore whether this is the case. It is clear that respondents report lower levels of interethnic trust when interviewed by members of their own ethnic group (Table 1). Indeed, this finding suggests that other studies using these Afrobarometer surveys to

TABLE 4 National vs. Ethnic Identification and Local Ethnic Context

	[1]	[2]	[3]	[4]
Ethnic Fractionalization	0.97 (0.60)	1.39*** (0.43)	1.35*** (0.52)	1.38** (0.54)
Segregation (Theil's Index)		-3.95*** (0.72)	-3.94*** (0.72)	-5.12* (2.98)
Margin of Victory	0.27 (0.27)	0.21 (0.26)	0.18 (0.41)	-0.01 (0.57)
Urban	-0.51* (0.29)	-0.58** (0.27)	-0.58** (0.27)	-0.59** (0.28)
Coethnic Interviewer	0.12 (0.13)	0.15 (0.13)	0.15 (0.13)	0.15 (0.13)
Government Belief	-0.11 (0.10)	-0.12 (0.10)	-0.12 (0.10)	-0.12 (0.10)
Violence Index	-0.18*** (0.05)	-0.19*** (0.05)	-0.19*** (0.05)	-0.19*** (0.05)
Proportion Migrants	-0.09 (0.58)	-0.41 (0.49)	-0.42 (0.50)	-0.43 (0.49)
Ethnic Fractionalization x Margin			0.11 (1.02)	0.17 (1.02)
Segregation x Margin				4.26 (11.07)
Number of Clusters	97	97	97	97
Observations	1147	1147	1147	1147
AIC	3155	3142	3144	3146

*Note:* The outcome variable is a respondent's identification with national rather than ethnic groups, that is, their response to the question, “Let us suppose that you had to choose between being a [Ghanaian/Kenyan/etc.] and being a X [respondent's identity group]. Which of these two groups do you feel most strongly attached to?” This variable equals 1 if the respondent answers that they feel only like a member of their ethnic group, equals 2 if they identify more with their ethnic than national identity, equals 3 if they feel equally members of their ethnic and national group, equals 4 if they identify more with their national than their ethnic identity, and equals 5 if they feel only like a member of their national group. Standard errors clustered at the level of the administrative location are in parentheses. All models include controls for respondent gender, secondary education, and status as an agricultural worker, age, age-squared, as well as dummies for the following ethnic groups: Kalenjin, Kamba, Kikuyu, Kisii, Kuria, Luhya, Luo, and Maasai. \* $p < 0.10$ , \*\* $p < 0.05$ , \*\*\* $p < 0.01$ .

TABLE 5 Residential Sorting and Social Desirability

	[1]	[2]	[3]	[4]
Ethnic Fractionalization	1.42*** (0.52)	2.03** (0.52)	2.09** (0.74)	1.33** (0.60)
Segregation (Theil's Index)	-0.92 (1.03)	-3.21*** (0.76)	-1.77 (2.77)	-1.91*** (0.70)
Proportion Migrants	-1.16** (0.49)	-1.13** (0.51)	-0.17 (1.07)	-1.04** (0.52)
Coethnic Interviewer	-0.22 (0.27)	-0.32* (0.17)	-0.32* (0.17)	-0.26 (0.17)
Government Belief	0.11 (0.12)	0.30 (0.19)	0.11 (0.12)	0.20* (0.12)
Ethnic Fractionalization x Coethnic Interviewer	0.04 (0.66)			
Segregation x Coethnic Interviewer	-1.78 (1.28)			
Ethnic Fractionalization x Government Belief		-1.21*** (0.44)		
Segregation x Government Belief		3.29*** (1.09)		
Ethnic Fractionalization x Proportion Migrants			-2.18 (1.49)	
Segregation x Proportion Migrants			-1.44 (10.55)	
Minority				1.17** (0.49)
Ethnic Fractionalization x Minority				-1.16* (0.67)
Segregation x Minority				-5.16 (5.84)
Number of Clusters	97	97	97	97
N	1133	1133	1133	1057
AIC	2739	2731	2738	2557

*Note:* The table shows ordered logit coefficients. Standard errors clustered at the level of the administrative location are in parentheses. All models include controls for respondent gender, secondary education, status as an agricultural worker, age, age-squared, violence/crime exposure, beliefs about origin of survey, respondent and interviewer coethnicity, whether a location falls in an urban area, winner margin of victory, as well as dummies for the following ethnic groups: Kalenjin, Kamba, Kikuyu, Kisii, Kuria, Luhya, Luo, and Maasai. \* $p < 0.10$ , \*\* $p < 0.05$ , \*\*\* $p < 0.01$ .

gauge attitudes regarding ethnicity ought to take interviewer identity into account.

But can social desirability bias account for the main findings of this article? In order for this to be the case, people would have to be most likely to underreport negative attitudes about members of other ethnic groups in ethnically mixed settings. If it were the case that people are more likely to over-report ethnic tolerance in ethnically diverse places, we would expect to see a negative interaction between interviewer coethnicity and ethnic diversity, and this is not the case (Table 5, Column 1). Moreover, respondents' reported levels of trust are unaffected by their

belief that the survey was commissioned by the government in most models (Table 5).<sup>23</sup>

Another way of probing the possibility of social desirability bias presents is to replace the question on interethnic trust with a question that also captures ethnic tolerance but has less social stigma attached to it. Table 4 shows that there is

<sup>23</sup>Moreover, people who think they are being interviewed by the government report *less* interethnic trust in ethnically diverse locations (Table 5, Column 2). Again, it is difficult to know how to interpret this relationship because people who believe they have been lied to by enumerators are relatively untrusting.

no identity-of-the-interviewer effect in response to the question regarding whether respondents identify in national rather than ethnic terms. Although questions on national identification are less controversial, respondents living in both ethnically diverse and integrated settings are more likely to be national, rather than ethnic, identifiers.

Is it the case that people living in diverse and integrated settings are more tolerant because tolerant people seek out diverse settings? It is difficult to prove causal claims regarding the effect of local context on ethnic attitudes because local contexts arise out of the interdependent residential choices made by a large number of people and their parents (Schelling 1971). However, real residential choices are hard to change in an experimental setting. Lawrence, Kling, and Liebman (2007) take advantage of a unique program randomly assigning housing vouchers (the Moving to Opportunity Program) to examine the health effect of moving people from areas in which poverty is highly concentrated, and Gay (2012) examines the effect of the same program on political participation.<sup>24</sup> In addition, Ananat (2011) and Enos (2010) use an instrumental variable approach for specific cities or exploit exogenous variation in ethnic composition.

Given these data, I cannot demonstrate conclusively that local integration and diversity *cause* ethnic tolerance. However, there are several reasons to believe that residential sorting is unlikely to account for the findings presented here. The best test of this claim would be to examine whether migrants living in ethnically diverse areas were more tolerant than migrants living in homogenous areas. However, using these data, it is not possible to know a respondent's migration status, and I can only conduct an indirect test. Although *Interethnic Trust* is lower in high in-migration areas, neither *Ethnic Fragmentation* nor *Segregation (Theil's Index)* has a different effect on *Interethnic Trust* in high and low in-migration areas (Table 5, Column 3). In addition, if the most tolerant individuals were sorting into ethnically diverse areas, one would observe *more* tolerant attitudes amongst ethnic minorities living in diverse areas. By contrast, ethnic minorities (defined as members of groups with a share of the population smaller than 30%) are less, rather than more, likely to be tolerant in ethnically diverse settings (Table 5, Column 4).

<sup>24</sup>Experimental approaches can more easily manipulate subjects' perceptions of local demography. Enos (2011), for example, increases the salience of racial demography by informing voters about the turnout of outgroup members and finds a causal relationship between perceptions of Latino mobilization on African American turnout rates.

## Conclusion

Using new data on local social and political context in Kenya, this article has examined two important contextual sources of ethnic tolerance—local ethnic demography and political competition. People living in ethnically diverse areas are more trusting of members of other groups, and this finding is robust to measuring diversity in different ways and at different scales. I also find that ethnic segregation—the degree to which people living in an area are spatially separated by ethnic group—is negatively associated with interethnic trust, although segregation matters at a smaller scale.

The finding of a positive association between interethnic trust and residential integration in this case has implications for research on the contextual determinants of attitudes. As argued above, in Kenya, and other developing countries like it, resource scarcity sets up a hard test for the notion that diversity can produce tolerance. Although residential propinquity does not guarantee ethnic contact, the findings of this article are consistent with theories that focus on interethnic contact as the factor linking ethnic diversity to tolerance.

A considerable body of research associates both national and local ethnic diversity with socially undesirable outcomes, including both violence and the underprovision of public goods. This article, along with others that find a positive association between diversity and tolerance in the United States, suggest that additional research is needed on how individual attitudes translate into aggregate local-level outcomes. As suggested by Green and Seher (2003), research on ethnic conflict, in particular, would benefit from a closer study of the effect of mass attitudes. Because communal violence is frequently carried out by a minority of the population, a closer examination of the conditions under which these individuals and groups fomenting violence benefit from public hostility towards members of other ethnic groups is warranted.

Elite mobilization is an important source of conflict between ethnic groups. Politicians may have a greater incentive to highlight ethnic differences in electorally competitive areas. I did not find a positive relationship between electoral competitiveness despite measuring it at different jurisdictions and for different election years and races. Although the absence of evidence is not evidence of an absence, existing research on political competition and the salience of ethnicity at the national level makes this result especially surprising. Therefore, this article raises an additional question for future research—how do political institutions

affect the scale at which political competition produces interethnic conflict? For example, proponents of decentralization in ethnically divided societies suggest that it promotes ethnic peace by removing the zero-sum nature of national electoral contests. Other scholars argue that it simply shifts the locus of political competition and conflict to local levels (Horowitz 1991; Lijphart 1977). Understanding how institutions affect the link between local ethnic composition and the salience of ethnicity is particularly important for new democracies considering constitutional reform. Therefore, this article makes an additional contribution to research on ethnic politics by noting that research on the contextual determinants of racial attitudes in the West has important links to debates in comparative politics regarding the institutions best suited to promoting peace in ethnically divided countries.

## Acknowledgments

I thank Michael Bratton, Lucy Goodhart, Jeffrey Lax, three anonymous reviewers, and the editors for helpful comments. I also thank Kate Redburn and Benjamin Clark for research assistance.

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