Local Ethnic Geography, Expectations of Favoritism, and Voting in Urban Ghana

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Abstract

African democracies are increasingly urban. While ethnicity is generally correlated with vote choice, recent research suggests there may be less ethnic voting in cities. But I show that voting for ethnically-affiliated parties is as common in some neighborhoods in urban Ghana as in rural areas, while virtually non-existent in other neighborhoods elsewhere within the same city. This intra-urban variation is not explained by differences in the salience of ethnic identities or other individual-level characteristics of voters themselves. Instead, it is influenced by the diversity and wealth of the local neighborhoods in which parties and voters interact. These neighborhood characteristics change otherwise similar voters’ expectations of the benefits they will receive from an ethnically-affiliated party when living in different places, producing intra-urban differences in the importance of ethnicity for vote choice.

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1 Introduction

Evidence for the close relationship between ethnicity and vote choice in Africa is often drawn from studies of rural areas. But urban areas in Africa are expanding rapidly. In West Africa alone, there are now 100 million more urban residents than in 1990. Although large pluralities of the electorate in many African counties now live in cities (United Nations 2014), including a majority in Ghana for the first time, we know much less about the relationship between ethnicity and vote choice in urban areas.

Modernization theories predict that the political importance of ethnicity should diminish as societies urbanize and develop due to a series of individual-level social transformations (Lerner 1958, Lipset 1960, Severino and Ray 2011). Urban voters are thought to place less emphasis on traditional identities and institutions like chieftaincy that bind them to ethnic groups. Wealthier and better educated voters, concentrated in Africa’s cities, are thought to be more policy-motivated, less likely to automatically support co-ethnics. Consistent with these hypotheses, recent studies show that ethnicity is less salient at an individual-level among urban Africans (Green 2014, Robinson 2014). Others find that there is less ethnic voting reported in national-level surveys in urban than rural areas (Conroy-Krutz 2009), and that class-based identities may instead be more politically important in cities (Resnick 2014). This paper suggests, however, that the relationship between ethnicity and vote choice will not uniformly erode as African democracies urbanize.

Changes in the social importance of ethnicity brought about by modernization should primarily affect the prevalence of ethnic voting if we assume an “expressive” theory of ethnic voting (Horowitz 1985), in which voters are thought to have innate preferences in favor of co-ethnic politicians. As social identities change and voters become better educated, innate preferences in favor of co-ethnic politicians are expected to diminish. Such a prediction is in contrast to the more dominant theory in recent literature on ethnic voting in Africa, however. Instrumental theories of ethnic voting argue instead that ethnicity is not an innately relevant variable for voters, but a means
to an end: voters support co-ethnics if they expect better performance – access to state spending – from them (Bates 1983, Posner 2005, Ferree 2006, Carlson 2015). In line with this view, I argue that urbanization in Africa does not affect the importance of ethnicity for vote choice directly through the individual-level transformations expected by modernization theories, but instead indirectly through patterns of distributive politics, which determine voters’ expectations of the benefits of electing ethnically-aligned politicians.

Patterns of distributive politics are not uniform within African cities, however, because urbanization creates heterogeneity in neighborhood characteristics. In particular, while cities are now home to a growing middle class, urbanization has also meant the rapid expansion of slums (UN-Habitat 2010). Moreover, while rural-urban migration has made some urban neighborhoods incredibly diverse, ethnically segregated enclaves also persist. Political parties engage with urban voters in these neighborhoods in different ways. In turn, there is neighborhood-level variation in voters’ incentives to support ethnically-aligned parties and candidates. As a result, where a voter lives within a city affects how she votes.

I develop a theory about how the interaction of two neighborhood characteristics – local ethnic composition and wealth – influences urban voters’ expectations about receiving the two types of goods commonly distributed where patronage politics is prevalent: local public (“club”) and private goods. The ability of politicians to reward ethnically homogeneous concentrations of co-ethnics with geographically excludable club goods – such as schools, roads, and water – is at the root of existing instrumental explanations for ethnic voting in rural Africa (Bates 1983, Posner 2005, Kimenyi 2006). Voters in diverse urban neighborhoods, however, are less likely to expect that club goods will be targeted on the basis of ethnicity, lowering incentives to support ethnically-affiliated parties. Voters also face incentives to vote across ethnic lines when living as a local minority in neighborhoods where they can benefit from club goods delivered to the local majority by the voters’ non-co-ethnic party (Ichino and Nathan 2013).

Neighborhood wealth moderates these effects of ethnic composition, however. In the poor-
est urban neighborhoods, dense concentrations of poverty allow politicians to distribute private benefits through clientelistic networks to a greater extent than in wealthier neighborhoods. These benefits disproportionately reach a party’s co-ethnics relative to groups aligned with the opposing party because ethnicity serves as a heuristic to parties for expected vote choice and vote buying transactions are not fully enforceable. Ethnic social networks also provide a foundation parties can use to build individual patronage relationships. In poorer neighborhoods where this type of private goods distribution is more possible, voters have incentives to continue supporting their ethnically-aligned party regardless of the ethnic composition of their neighborhood.

I explore this argument through analysis of voting in Ghana’s largest metropolitan area, Greater Accra. I examine presidential elections to study the contest with the greatest influence on distribution of state resources, and to hold candidate characteristics – such as ethnicity, policy programs, and economic performance – fixed, comparing voters facing the same choice across neighborhoods. I define ethnic voting as whether a voter supports an ethnically-aligned political party and measure neighborhood characteristics with localized census data.

Using original survey data, I show that urban neighborhoods where ethnicity almost perfectly predicts vote choice co-exist alongside neighborhoods where ethnicity and vote choice are largely uncorrelated. I find no evidence, however, that the mechanisms expected by a modernization hypothesis explain this variation. Individual-level characteristics such as wealth and education do not predict whether voters supporter ethnically-affiliated parties and there is no evidence of less ethnic voting among voters for whom ethnic identity is less salient.

Instead, the link between each voter’s ethnicity and the characteristics of their neighborhoods can account for the intra-urban variation in the importance of ethnicity for vote choice. I find that

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1Parliamentary elections in Ghana are ill-suited for examining the theory. Control over the overwhelming majority of state spending, even at the local level, depends on presidential, not parliamentary, elections. Moreover, many parliamentary contests are intra-ethnic, with candidates from the same locally dominant group, and the selection of parliamentary candidates is itself endogenous to neighborhood characteristics, complicating estimation of independent effects of neighborhood conditions on vote choice separate from differences between candidates in different places.
ethnic voting is less common among otherwise similar voters in two types of neighborhoods: diverse middle and upper class neighborhoods, where voters generally do not receive private goods and expect to receive similar amounts of club goods regardless of a party’s ethnic profile; and middle and upper class neighborhoods where a voter’s ethnic group is a local minority and the voter can expect to benefit instead from club goods targeted to that neighborhood by a non-co-ethnic party favoring the locally dominant group. At the same time, ethnic voting remains prevalent in slums, regardless of their ethnic composition, as well as in middle and upper class neighborhoods where a voter’s ethnic group is the local majority. An original survey experiment measuring the hypothesized mechanism finds that voters’ expectations of benefiting from each party vary across neighborhoods in line with the argument. In a final set of analyses I address concerns about selection and alternative mechanisms by examining the possibility of endogenous residential sorting and cross-ethnic socialization. I find little empirical support for these alternative explanations.

While I can only examine a single city, focusing on Greater Accra allows me to study the relationship between neighborhoods and voting using census data at a level of detail not possible in most African cities. I expect similar results to hold elsewhere as long as three underlying assumptions hold. First, there is variation in diversity and wealth within cities. Second, ethnicity is politicized and voters expect ethnic targeting of some state resources. Third, ethnic cleavages are not so ossified by violence or inequality that it is implausible to benefit from club goods targeted to a nearby group.

This paper makes several contributions. Although a nascent literature documents overall rural-urban differences in voting and ethnic politics in Africa (Conroy-Krutz 2009, Harding 2010, Koter 2013b, Resnick 2014, Wahman and Boone 2015), a full understanding of these differences is not possible without considering variation within cities. Existing studies average over or ignore the intra-urban differences documented here, extrapolating from patterns that may only hold in specific parts of a city to make claims about urban politics in general. By instead considering this variation directly, I develop a more comprehensive explanation for how urban context influences voting.
I argue that differences in the prevalence of ethnic political competition are explained more by the incentives and constraints of distributive politics than by the individual-level socio-economic mechanisms predicted by modernization theories, suggesting that a modernization framework is inappropriate for analyzing the effects of urbanization in Africa.

More broadly, I suggest that we must account for local context when explaining vote choice in the developing world. A large literature examines the influence of neighborhoods on ethnic politics in the United States (e.g., Key 1949, Hopkins 2010, Enos 2016), but other than Ichino and Nathan (2013) and Kasara (2013), there have been few examinations of neighborhood effects on behavior in Africa. I extend the argument in Ichino and Nathan (2013) to account for differences between rural and urban areas in the prevalence of individual-level clientelism, developing more nuanced hypotheses about the impact of local context on voter behavior. Given the substantial urbanization occurring across the developing world, it is important that theories of the effects of neighborhood context account for behavior in both rural and urban areas.

2 Ethnic Voting in African Democracies

Implicitly or explicitly drawing from modernization theories, some studies expect less ethnic voting in urban areas in Africa, especially among the wealthier and better educated voters who are concentrated there (Conroy-Krutz 2009). These accounts suggest that as voters move into urban areas and become wealthier and better educated, the social salience of ethnicity should decline and ties to traditional ethnic institutions should weaken (Severino and Ray 2011, Green 2014). As ethnic identities lose salience and voters gain independence from ethnic elites, voters should become less beholden to ethnicity at the ballot box. These expectations are often implicitly rooted in “expressive” theories of ethnic voting, with voters supporting co-ethnics through allegiance to

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2Early Africanist research instead suggested the opposite: that ethnicity gained salience among rural-urban migrants (e.g., Wolpe 1974, Gugler and Flanagan 1978).
their group (Horowitz 1985).

Expressive explanations for ethnic voting find little empirical support in recent literature, however. Instrumental theories argue instead that voters support co-ethnics not from innate attachments, but because they expect better performance from them (Bates 1983, Posner 2005, Ferree 2006, Conroy-Krutz 2013, Carlson 2015). In this second theory, a candidate or party’s ethnic profile serves as an informational cue about the benefits voters can expect after the election; voters only disproportionately support co-ethnics when they expect more access to state resources from them. Even if urban voters place less emphasis on ethnic identity in daily life (Robinson 2014), instrumental incentives to support co-ethnics will persist in cities if voters expect favoritism in the distribution of valuable resources.

These expectations grow from a long record of ethnic favoritism in many countries\(^3\). This includes the distribution of private goods, but especially the distribution of club (local public) goods (Bates 1983, Posner 2005, Kimenyi 2006). When ethnic groups are clustered, as in much of rural Africa, club goods – with benefits excludable outside, but not within, a given area – can be targeted to specific groups based on where they are built. This can be an efficient means to favor homogeneous ethnically-aligned areas when local party organization is weak. Parties can reach many voters at once with a club good and monitor their behavior through aggregate election results, avoiding the organizational costs of individual-level patronage strategies (Chandra 2004, Ejdemyr et al. 2015, Gottlieb and Larreguy 2015, Rueda 2015).

An instrumental theory predicts geographic variation in ethnic voting if voters expect to receive different benefits in different places. Ichino and Nathan (2013) argues that when voters expect a party to target club goods to areas where its co-ethnics live, a voter’s probability of benefitting from a non-co-ethnic party is increasing in the population of that party’s ethnic groups in the surrounding

\(^{3}\)Although Kramon and Posner (2013) finds that the empirical record of favoritism is often mixed, many voters still believe there will be favoritism in resource distribution. Posner (2005) shows that voters in Zambia believe the government’s co-ethnics are systematically favored even when this is false; these beliefs are entrenched by past favoritism. The survey experiment below shows empirically that voters in urban Ghana have strong expectations of favoritism.
area. They find significant cross-ethnic voting when voters live as local minorities in rural areas of Ghana dominated by groups aligned with their non-co-ethnic party. Similar variation in ethnic voting within urban areas should also occur if voters expect to receive different types of resources from parties in different urban neighborhoods.

3 Expectations Across Urban Neighborhoods

3.1 Theoretical Framework

I begin with the simplifying assumption that voters support the party they expect to benefit from most after the election. In reality, voting behavior may also be affected by assessments of macro-economic performance, major policy proposals, and/or candidate characteristics (Posner and Simon 2002, Bratton et al. 2011). But while these variables may help explain aggregate shifts in election outcomes, they cannot explain systematic differences in vote choice between otherwise similar voters in nearby neighborhoods of the same city choosing among the same options in the same election – each of these features is held constant between these voters. What is not constant across neighborhoods are the types of patronage goods that each party is likely to deliver after the election. Predicting vote choice then requires a theory of distributive politics – of what voters in different neighborhoods expect to receive.

Consider a simplified example of a city with two ethnic groups – A and B – and six types of neighborhoods, as in Figure 1. There are neighborhoods made up mostly of each group, while others are more mixed. Within these neighborhoods (diverse, A dominated, B dominated), some are slums, while others are upper or middle class. Typical of most African cities, in poor neigh-

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4 They do not find this pattern in urban areas, but have a limited, non-representative sample of urban respondents and less detailed urban census data than in this study.

5 Aspects of government performance that have highly localized impacts usually pertain to the delivery of club (local public) goods and remain within the theory here.
borhoods, most residents are poor themselves, while upper and middle class neighborhoods have a mix of both poor and wealthier residents.

Each group has an affiliated party – party $A$ and party $B$ – competing in a single election, with all votes counting equally. Assume that the parties do not offer ideologically-differentiated policies – similar to most African parties – but attract support through patronage and service delivery, distributing private or local public (“club”) goods. After the election, the winning party gets a budget to allocate in each neighborhood; party leaders can vary its size across neighborhoods, but there is some non-negligible minimum to be spent at each place. This means that the winning party will have at least some resources to distribute in each neighborhood after the election, including in those that supported the other party. For each neighborhood, party leaders choose how much (above that minimum) and what type of good(s) to deliver after the election.

In neighborhoods where the parties do not have the organizational capacity to engage with voters on an individual level, club goods distribution is more cost effective than private goods distribution. For private goods distribution to be successful, a party must instead identify and monitor individual recipients through long-term relationships. In neighborhoods where these individual-level patronage relationships are easier to sustain, however, private goods distribution becomes relatively more viable, allowing parties to efficiently target specific voters with benefits and lock in their support without wasting resources on others who live nearby that are less likely to support the party. This trade-off is especially clear in neighborhoods where many voters who would benefit from a club good are from the ethnic group affiliated with the other party.

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6 Voters thus cannot take an $A$ victory for granted just because they live in a locally-$A$ neighborhood.

7 Many African countries, including Ghana, use formula-based central transfers to guarantee a minimum amount of spending in each local government unit, even if there is also broader favoritism across regions. Local governments are often still controlled by national-level appointees (Olowu and Wunsch 2004).

8 I consider private goods as a broad range of benefits – such as jobs, loans, and on-going assistance with basic expenses – that are often delivered by machine parties as part of sustained patronage relationships, not only as single-shot payments before elections. Unconditional handouts before elections are likely much less influential for vote choice (Guardado and Wantchekon 2014).
Consistent with patterns of ethnic favoritism, both parties avoid giving benefits to voters they expect will not support them. They thus have little incentive to provide club goods in neighborhoods where most residents are from the opposite party’s ethnic group. And because vote buying transactions are not fully enforceable, the parties are less likely to direct private goods to members of the opposite party’s group (Nichter 2008). Ethnicity affects distribution of resources primarily because it is a simplifying heuristic parties can use to identify likely supporters, but also because embeddedness in existing ethnic social structures can help party agents build patronage relationships with voters.

Finally, the parties must also consider voter demands for different types of resources. I assume that middle class and poor voters both demand club goods from the parties, while demands for private goods are primarily from poor voters. Service delivery is poor in many African cities, even in middle class and wealthy neighborhoods, and this shapes demand for club goods. More prosperous voters can privately provide some club goods to themselves, for example paying for trucks to deliver clean water to their homes or buying generators for electricity. But this is an inefficient and often very expensive stop-gap in the absence of state provision. Voters who privately provide services out of necessity often still prefer that they were instead provided by the government.

In terms of private goods, existing theories commonly assume that the poor are influenced more by private transfers than the middle class and wealthy, both because of the diminishing marginal

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9The exact mix of goods to stronghold versus competitive neighborhoods or between core versus ethnically unaligned voters is not relevant for the predictions here as long as the parties adopt similar strategies as each other. The only assumption is that each avoids targeting resources to the core, ethnically-aligned groups of the opposing party. This assumption is shared by both “swing” and “core” targeting models (Cox and McCubbins 1986, Dixit and Londregan 1996).

10Importantly, the assumption is not that middle class voters value club goods more strongly than poor voters, only that both groups of voters positively weight expectations about the delivery of club goods in their voting calculations.

11I confirm this in the Supporting Information (SI) using data from the survey described below. I show that the most common demands that urban middle class voters place on the government are for club goods and local services, even among voters who currently privately provide some of these services. This may not apply to the wealthiest elite, but they remain a tiny fraction of the electorate and are not well represented in the survey data, which mainly provides comparisons between the poor and middle class.
utility of income (Stokes et al. 2013) and because poorer voters are thought to have shorter time horizons (Kitschelt 2000), with private benefits that directly address pressing economic needs often more immediately valuable than better services for their neighborhoods. For this latter reason, I assume that among some poor voters private goods may be valued more strongly in voting decisions than club goods.\(^{12}\)

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Figure 1: *Expectations and vote choice by neighborhood for an otherwise similar Group A voter.*

### 3.2 Predictions for Vote Choice

Under this framework, the ethnic composition of neighborhoods should influence where each party invests in club goods, while the wealth of neighborhoods affects distribution of private goods. In A dominated neighborhoods (column *ii* of Figure 1), party A will invest the most in club goods, as primarily A voters will benefit. The same holds for party B in B neighborhoods (column *iii*). Neither party promises many club goods in neighborhoods dominated by the other group. In diverse neighborhoods (column *i*), the parties cannot target club goods to a specific ethnic group because any benefits reach both groups. There is no systematic reason why one party is more likely

\(^{12}\)In the SI I show that the poor are significantly more likely to demand private goods than more prosperous respondents and that the majority of the poorest respondents in the survey demand private goods from the government either as, or more, frequently than club goods.
to favor diverse neighborhoods.

In wealthier neighborhoods (row 1), there will be little sustained private goods distribution. Relatively few voters in these neighborhoods demand private benefits or can be reached through social networks by clientelistic brokers (Koter 2013b, Luna 2014), and middle class voters may punish parties seen engaging in clientelism as corrupt (Weitz-Shapiro 2012). Poor voters who live in wealthier neighborhoods likely place similar demands on the parties for private goods as poor voters in poor neighborhoods. But it is harder for the parties to build sustained relationships with them given differences in settlement patterns and neighborhood structure that increase the cost of maintaining patronage networks.

In poorer neighborhoods (row 2), by contrast, private goods distribution is more feasible. There are large concentrations of poor voters in slums who highly value the private benefits that parties can provide. Through sheer population density and the closer social ties within slums, it becomes much easier for parties to become embedded in neighborhood social networks and sustain direct relationships with individual voters. Where maintaining these relationships is easier, private goods distribution can become relatively more efficient than club goods distribution, as described above. This is especially in neighborhoods where the other party’s ethnic groups dominate and club goods would primarily benefits voters from that group (row 2, column iii). A party’s local organization may be relatively weaker in these neighborhoods, but because all votes count equally everywhere in the election, a party still benefits from targeting some resources to co-ethnics who live in these neighborhoods to maintain their support rather than ignoring them and allowing them to vote for

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13 I demonstrate this empirically in the SI.

14 For example, as described in more detail below, neighborhoods leaders are less influential in wealthier neighborhoods and the poor who live there are often more transient, living as squatters and caretakers, less embedded in the local social structure. Each makes it more difficult for parties to monitor and engage with these voters over time.
the other party.\footnote{Moreover, because the winning party has some minimum budget to spend in each area (see above), the winning party will still have to spend some amount on neighborhoods and this can be more valuably channeled as private goods to the party’s co-ethnics who still live there rather than wasted by giving clubs that benefit co-ethnics of the other party, who will still vote for the other party because they will expect even more club goods if party B were in power.}

These differences in goods distribution inform a voter’s beliefs about what she is likely to receive. For club goods, a group A voter’s expectation of benefitting in diverse neighborhoods (column i) will not depend on the ethnic profile of each party because the neighborhood receives similar benefits regardless of which party wins. In A neighborhoods (column ii), mainly party A will be expected to deliver club goods. When living in a B neighborhood (column iii), party B is more likely to deliver club goods that benefit the A voter.

An A voter’s private goods expectations will depend on the wealth of her neighborhood. In upper or middle class neighborhoods (row 1), she expects little from either party, even if she is poor herself. By contrast, the A voter is in a poor neighborhood (row 2) can benefit from private goods from party A. This is even the case in poor neighborhoods where the A voter is in the local minority (row 2, column iii). Even if party A’s organization is relatively weaker in these neighborhoods than in its strongholds, party A will gain control over distribution of valuable private benefits in the neighborhood if it wins the election (see above). As one of the few A residents in the neighborhood, an A voter in a poor B neighborhood may be one of the first in line to benefit from party A’s victory. As a result, an A voter may get relatively more private benefits from party A when living in a poor neighborhood with fewer other A voters than when surrounded by many other potential recipients of party A’s private goods.

Predictions for vote choice come from adding together each cell of Figure\footnote{Moreover, because the winning party has some minimum budget to spend in each area (see above), the winning party will still have to spend some amount on neighborhoods and this can be more valuably channeled as private goods to the party’s co-ethnics who still live there rather than wasted by giving clubs that benefit co-ethnics of the other party, who will still vote for the other party because they will expect even more club goods if party B were in power.} Rather than ethnic voting being uncommon across the entire city, support for party A by an A voter will be relatively low in two types of neighborhoods: (a) in wealthier, diverse neighborhoods (row 1, column i), there is no difference in the club or private goods an A voter expects from either party, making her indifferent between parties; (b) in wealthier, B neighborhoods (row 1, column iii), the A
voter receives few private benefits from either party, but club goods from party $B$, encouraging cross-ethnic voting for party $B$.\footnote{16} In the other four neighborhoods, however, the $A$ voter still has incentives to support her co-ethnic party. Where there are many other $A$ voters (column $ii$), the voter will expect more benefits from party $A$ than $B$. In poor, diverse neighborhoods (row 2, column $i$), the voter expects private benefits from party $A$, pushing her to support party $A$. Finally, in poor, $B$ neighborhoods (row 2, column $iii$), the $A$ voter is likely poor herself. To the extent that this means she values private goods that address immediate needs over club goods for her neighborhood, she still has an incentive to vote more for party $A$.

Compare this to predictions for rural areas in Ichino and Nathan (2013). A similar pattern holds in the distribution of club goods. In comparison to urban slums, however, fewer rural voters are likely to receive private goods directly from each party. While there is non-conditional distribution of small gifts before elections, African parties typically lack the grassroots organizations in rural areas to engage in long-term patronage relationships with a large set of individual clients spread out over sparsely populated areas (van de Walle 2007). This is especially in the rural homelands of the opposite ethnic group – party $A$ will often lack the networks to reach many individual $A$ voters with private benefits in $B$ villages. Instead, as discussed above, while parties engage in clientelistic relationships in rural areas, this often is targeted as club goods to entire (relatively homogeneous) communities (Lindberg 2010). Moreover, private goods that are distributed are often delivered indirectly through chiefs or other traditional elites, absent in most urban neighborhoods (Lindberg 2010, Koter 2013a). As a result, spatial variation in vote choice in rural areas should predominately follow expectations about club goods.

\footnote{16}{In a context with two dominant parties affiliated with different ethnic groups, a vote for the other party by someone in those groups could be labeled “cross-ethnic” or “non-ethnic” voting. These are equivalent when there is not a viable party with no ethnic affiliation.}
4 Presidential Elections in Greater Accra

Ghana is undergoing significant urbanization. Since 1990, the metropolitan area of the capital, Accra, has grown from 1.5 to nearly 4 million people. Urbanization has produced wide variation in the wealth and ethnic composition of the city’s neighborhoods. Slums co-exist alongside middle class and wealthy neighborhoods. Many neighborhoods of the city are diverse, but there are also segregated enclaves for each major ethnic group.

Accra is the indigenous homeland of the Ga ethnic group. Although Ga chiefs hold traditional ownership over land, Gag have become a minority. As of 2010, the Greater Accra Region was 40% Akan, 27% Ga, and 20% Ewe, with the remaining 13% comprised mostly of Northern ethnic groups. Ga elites remain entrenched in local government, however, holding a clear majority of local assembly (city council) seats and leadership positions in district governments, as well as half of the city’s parliamentary seats (Nathan 2016). As discussed further below, this gives Ga voters privileged access to patronage benefits compared to other groups.

The National Democratic Congress (NDC) and New Patriotic Party (NPP) dominate Ghana’s presidential system. The opposition NPP draws strong support from the Akan. The ruling NDC draws support from the Ewe and many predominantly Muslim groups of northern Ghana, especially now that the NDC president is a Northerner[17] The NDC historically has also drawn most votes of the Ga (including the Dangme). Other smaller ethnic groups, such as the Guan, are not affiliated with either party. Ethnicity predicts vote choice in Ghana for those who have affiliated parties, but the correlation is imperfect[18] The survey data introduced below finds that 80% of Akans in Greater Accra supported the NPP in the 2012 presidential election, while 84% of Ewes, 17There are several dozen Northern groups. Not all are affiliated with the NDC. An over-arching Northern identity affiliated with the NDC is politically relevant in southern Ghana (including Accra), however, due to significant north-south cultural differences and the clustering of many Northerners in the south into slums known as “zongos,” which usually are NDC strongholds.
18While there is some rhetoric about a left-right cleavage, in reality there is little consistent ideological difference between the parties in policies they support (Riedl 2014).
67% of Northerners and 73% of Gas supported the NDC. Importantly, all votes in Ghana’s presidential elections count equally. Each party thus has an incentive to pursue votes everywhere, even in strongholds of the other party.

The country is divided into administrative districts, with parliamentary constituencies nested within these districts. Twelve districts and 28 constituencies cover urban Greater Accra. Constituencies are further sub-divided into Electoral Areas (wards). The urban neighborhoods examined below are measured at a scale smaller than these wards, with many neighborhoods per constituency. Control over most resources, even at the very local level, depends on the outcome of the presidential election. The president’s party controls every district government through the appointment of District Chief Executives (mayors), who are selected from among the local leaders of the president’s party. The national government gives a fixed minimum budget to each district. Each district also dedicates a fixed minimum budget to each Electoral Area within the district. This means that local leaders of the president’s party control resources that can be targeted as favoritism to different neighborhoods within each district and also that there is some minimum pool of resources to be distributed in every more local area within the district. Local ruling party leaders can draw on detailed personal knowledge about the distribution of ethnic groups when allocating resources within their home districts and also can observe polling station election results. Moreover, ethnicity is easily observable at an individual-level from surnames and languages spoken. In a context of ethnic partisan polarization, ethnicity provides parties with a simple indicator of expected partisanship and is a more useful cue than other individual-level indicators, such as

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19 Large urban districts are further divided into “sub-metropolitan assemblies,” corresponding to constituency boundaries. See the SI for the districts and constituencies within the Greater Accra metro area.

20 National control over local governments is common in Africa (Olowu and Wunsch 2004).

21 There are 3,654 polling stations in the Greater Accra metro area’s 28 parliamentary constituencies, with multiple polling stations per neighborhood. Interviews conducted during field research indicate that the parties also can draw on detailed demographic data when deciding where to campaign, for example by tabulating names by ethnic group using the voter’s register for each polling station. Interview with NPP parliamentary candidate, Greater Accra, 6 June 2012.
socio-economic class, which is only weakly correlated with vote choice in Ghana.

In addition, the major parties have permanent local organizations of party agents in each parliamentary constituency, although these organizations are often less active in rural strongholds of the opposing party. These organizations can be used to build clientelistic relationships, distributing private benefits to lock in voters’ support and mobilize turnout. This is especially prevalent in slums, where the party organizations are often deeply embedded into the social fabric of neighborhoods. Powerful informal leaders of Accra’s slums are often simultaneously leaders within each local party organization (Paller 2014), allowing parties to develop detailed knowledge about community members and facilitating long-term patronage relationships. Interviews with party agents and focus groups with residents across Greater Accra describe how party leaders in poor neighborhoods often help individual voters with basic expenses, from assistance paying school fees to funding weddings and funerals, as well as providing longer-term benefits such as jobs or loans and equipment needed to start small businesses. These latter benefits are often funneled through youth employment and micro-credit programs controlled by each district government.

Party agents and focus group respondents report that recipients of these benefits are often voters seen as core supporters of each party. Favoring these core groups of voters occurs in part because the interviews indicate that party agents distributing benefits are usually from the core ethnic groups of their party and thus have closer social ties to those groups. Party agents also describe providing these benefits as a means to reward core supporters for their support and keep them from leaving the party.

Data from the survey introduced below indicates that private goods distribution is more likely

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22 The (officially non-partisan) traditional chiefs who instead serve these leadership roles in village life are mostly absent in urban neighborhoods, except among the Ga.

23 The fieldwork included 47 semi-structured interviews with party agents and parliamentary candidates in a cross-section of Greater Accra, alongside 13 voter focus groups conducted across a range of neighborhoods.

24 Separately from these sustained patronage relationships, the parties also distribute small gifts non-conditionally in the immediate period before elections.

25 Interview with NDC party agent, La Dade Kotopon constituency, Greater Accra, 27 February 2014.
to be reported in poorer than wealthier parts of the city (see SI). There are still many poor residents living in the city’s wealthier neighborhoods (see below) and the difference across neighborhoods in reported rates of private goods distribution holds even among poor respondents (see SI). The interview evidence suggests this is for two reasons. Neighborhood social structures are different in wealthier neighborhoods than slums, with less daily interaction among neighbors and weaker community leaders who have less influence over residents. This makes it more difficult for parties to penetrate local networks and build long-term relationships with voters. Moreover, poor residents in wealthier neighborhoods are often more transient than those in more permanent slums, living as squatters, caretakers, and roadside shopkeepers, frequently moving homes. This mobility also makes it more difficult for parties to sustain relationships with individual voters, especially if past recipients of benefits cannot be found by the next election.

5 Data

I combine a survey of 1008 voters, conducted in November-December 2013, with geo-coded census data. The survey interviewed a representative sample of urban Greater Accra, reaching 21 respondents each in 48 sampling clusters in 10 parliamentary constituencies. The main explanatory variables are measured from enumeration area-level census data. Neighborhoods in any city are nebulous social constructs; people living in the same place often disagree about their neighborhood’s boundaries (Wong et al. 2012). Clear, agreed-upon definitions of neighborhood boundaries do not exist for Greater Accra. Census enumeration areas also provide an inappropriate means of defining neighborhoods because they are socially irrelevant demarcations of the census bureau and using them can suffer from the “modifiable areal unit problem”

26 Interview with NPP party agent, Okaikwei Central constituency, Greater Accra, 19 March 2014.
27 13 interviews are dropped due to enumerator errors, leaving $N = 995$. See the SI for sample and survey procedures.
28 This is from a 10% individual-level random sample of each enumeration area in the 2010 census.
(Openshaw 1983), in which imposing discrete boundaries on geographic data can bias a study’s results. I overcome these problems by defining neighborhood boundaries in a systematic and directly comparable way across all respondents that smooths census data over enumeration area boundaries to mitigate the areal unit problem while still capturing the demography around each respondent’s home at an appropriately localized scale for my theory.

My measurement of neighborhoods follows the approach in Reardon and O’Sullivan (2004). I calculate weighted averages of census characteristics from the enumeration areas around each survey respondent, with data from enumeration areas closer to the respondent weighted higher, and those outside a given radius weighted as 0. This means that each neighborhood is measured relative to each respondent’s own location. The main radius used is 500 meters around each respondent. I use this small radius for several reasons. First, given the structure of Ghanaian local governments, much of the opportunity for favoritism involves targeting by local party leaders to areas within districts. Second, many club goods have benefits at a small scale within cities due to high population density, benefitting areas much smaller than entire districts, constituencies, or even wards. Third, local variation in neighborhood characteristics becomes unobservable as the level of aggregation increases.

Neighborhood wealth is calculated from a factor analysis of census questions on assets, education, and employment. Diversity is measured as 1 minus the Herfindahl fractionalization index. Population density is calculated for the enumeration areas covered by each respondent’s sampling cluster. At an individual level, wealth, education, and employment status are measured through similar indices, with factor analyses of survey questions on assets and separately on ed-

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29 See the SI for details of this process, which accounts for differences in population density. The average constituency is 29.8 sq. km, much larger than these 0.79 sq. km radii.

30 Variables that only measure service provision are excluded. The index includes: % with running water (privately provided by wealthier residents via tanker or borehole); % with a flush toilet, % with electricity (available to all who can afford it), % in a single-family home (excluding informal structures); % with a computer; % adults with more than a middle school education; and % adults employed in the formal or public sectors. The index is scaled in standard deviations from the city-wide mean of 0.
ucation level and type of employment. There is significant variation in the neighborhoods of the survey respondents, as well as in their own wealth, education and employment status (see SI). Importantly, because there are sufficient numbers of poor voters living amidst otherwise wealthy neighborhoods, it is possible to estimate relationships between neighborhood wealth and voting while controlling for individual wealth. The wealth and ethnic diversity of neighborhoods also are not strongly correlated, such that the six types in Figure are in the sample.

6 Empirical Results

6.1 Vote Choice

The main outcome is whether a voter’s ethnicity predicts how she voted in the 2012 presidential election. I define ethnic voting as support for the presidential candidate of the party affiliated with each respondent’s group. For Akans, this means support for the NPP, while for Ewe, Ga, and Northerners, support for the NDC. Respondents who do not have an affiliated party are dropped when the outcome is ethnic voting.

Respondents were asked to mark their vote choice in 2012 on a confidential ballot, obscured from the enumerator, and to place it in a sealed box. This replicates a procedure from Carlson.

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31 The assets index includes: owning a car, television, computer, having running water, a flush toilet, electricity, and a home security gate. The variables in the education/employment index are: having more than a middle school education, fluency in English, and being employed in the formal or public sector.

32 In areas with above average ethnic fractionalization, the wealth index ranges from -1.1 to 2.4. In areas with below average fractionalization, the range is -1.4 to 3.0.

33 This is similar to Huber’s (2012) group-based definition of ethnic voting. Where no group is large enough to win on its own, many African parties combine support from multiple groups (Arriola 2012). Defining ethnic voting in these settings based only on a match between candidate and voter arbitrarily understates the influence of ethnicity. When over 90% of Ewe in the rural Volta Region voted for non-Ewe NDC presidential candidates in Ghana’s last four elections, or super-majorities of Kalenjin voted for a Luo and then Kikuyu in Kenya’s two recent elections, ethnicity overwhelmingly explains these voters’ choices, even though the candidates were not Ewe or Kalenjin. In the SI, however, I re-estimate the main results below for only co-ethnics of the two candidates and find similar results.

34 181 respondents are from two groups. They are coded as members of the first group mentioned when defining ethnic voting and I then control for being from the other in the analysis.
(2014, 2015a) that has been shown to mitigate desirability and non-response bias in self-reported vote data. Non-response was only 4% using this procedure, significantly lower than non-response in questions on vote choice in the Afrobarometer and other surveys (Carlson 2014). The responses also closely match real election results, suggesting there was little post-hoc over-reporting of support for one party.\(^{35}\) Vote choice is only measured for respondents who reported turning out in the election; the survey does not ask respondents to speculate about how they hypothetically might vote, as with standard “If the election were held today...” questions. Finally, the main findings are robust to including enumerator fixed effects to account for potential influence of the enumerators (see SI).

Seventy-six percent (76%) of respondents reported supporting their affiliated party, with significant variation across the 48 sampling clusters: in 13 locations, over 85% of respondents reported support for their ethnically-affiliated party, but in 7 locations, the rate was below 60%, with little correlation between ethnicity and vote choice. The theory makes two central predictions to explain this variation: (a) there will be less ethnic voting in more diverse neighborhoods, primarily when they are wealthier; and (b) there will be cross-ethnic voting when voters are surrounded by affiliated with a non-co-ethnic party, especially in wealthier neighborhoods.

To test the first prediction, I regress a binary indicator for support for each respondent’s affiliated party on neighborhood- and individual-level predictors. The preferred specifications are multi-level logistic regressions, which partially pool intercepts by sampling location to account for clustering in the sample (Gelman and Hill 2007).\(^{36}\) Models follow the form:

\[
P(y_i) = \text{logit}^{-1}(\alpha_j + \theta_k + \beta_1 \text{Fractionalization}_i + \beta_2 \text{NeighWealth}_i + \beta_3 \text{Density}_j + \beta_4 \text{Fractionalization}_i \ast \text{NeighWealth}_i + X_i \delta)
\]

\(^{35}\)53% of respondents reported voting for the NDC and 45% for the NPP, compared to 52% and 47% in the same constituencies in official results.

\(^{36}\)Results are robust to instead clustering standard errors by location.
where \(i\) indexes respondents, \(j\) indexes sampling clusters, and \(k\) indexes constituencies. \(y_i\) is an indicator for voting for the ethnically-aligned party. \(Fractionalization_i\), \(NeighWealth_i\), and \(Density_j\) are defined above. I include parliamentary constituency fixed effects, \(\theta_{k[j]}\), to control for baseline differences in party organizations and local governments. \(^{37}\) \(X_i\) is a matrix of individual-level controls: the assets and education/employment indices, age, gender, and whether the respondent is Muslim, indicator variables for each ethnic group, whether respondents or their immediate family are party members, and whether a respondent reported her ethnicity as the type of identity she feels “closest to,” to measure the individual salience of ethnicity. To control for endogenous sorting (see below), I also include indicators for whether a respondent found her current home through family or ethnic group ties and the number of years each respondent lived in the neighborhood. \(^{38}\)

In Table 1, I find no evidence consistent with the individual-level mechanisms of modernization theory. The wealth and education/employment indices do not predict ethnic voting; middle class voters are just as likely as the poor to vote for ethnically-affiliated parties. \(^{39}\) Moreover, the salience of ethnic identity at an individual level does not predict whether respondents vote for an ethnically-affiliated party, inconsistent with “expressive” theories of ethnic voting and predictions that changes in social identity should reduce ethnic voting. \(^{40}\)

When controlling for these individual-level characteristics, however, I find greater diversity in each voters’ neighborhood predicts lower support for co-ethnic parties in column 1 of Table 1 \((p = 0.08)\), consistent with less ethnic voting in more diverse neighborhoods. A 1 standard deviation (10.7 percentage point) increase in fractionalization around each respondent is associated

\(^{37}\)It is also possible that features of each concurrent parliamentary race have spillover effects on presidential voting. I control for this in the SI.
\(^{38}\)Two additional indicators control for interview quality: whether enumerators made logistical errors (12% of interviews) or noted respondents were uncooperative (10%).
\(^{39}\)I also show this using additional measures of education (see SI).
\(^{40}\)Social identification is measured as in Eifert et al. (2010) (see SI).
Table 1: Support for Co-Ethnic Party in the 2012 Presidential Election

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ethnic Fractionalization (500m)</strong></td>
<td>-2.513$^3$</td>
<td>-3.522$^*$</td>
<td>-3.506$^*$</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1.428)</td>
<td>(1.528)</td>
<td>(1.529)</td>
<td></td>
</tr>
<tr>
<td><strong>Neigh. Wealth (500m)</strong></td>
<td>-0.163</td>
<td>2.091$^1$</td>
<td>2.066$^5$</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.170)</td>
<td>(1.165)</td>
<td>(1.164)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1.740)</td>
<td>(1.739)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Pos. NDC Econ. Performance</strong></td>
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<tr>
<td></td>
<td></td>
<td>(0.262)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Pop. Density (by cluster)</strong></td>
<td>-0.007</td>
<td>-0.011</td>
<td>-0.011</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.007)</td>
<td>(0.007)</td>
<td>(0.007)</td>
<td></td>
</tr>
<tr>
<td><strong>Assets/Wealth Index</strong></td>
<td>0.074</td>
<td>0.066</td>
<td>0.036</td>
<td>0.064</td>
</tr>
<tr>
<td></td>
<td>(0.107)</td>
<td>(0.108)</td>
<td>(0.108)</td>
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</tr>
<tr>
<td><strong>Education/Employ. Index</strong></td>
<td>-0.083</td>
<td>-0.073</td>
<td>-0.092</td>
<td>-0.079</td>
</tr>
<tr>
<td></td>
<td>(0.104)</td>
<td>(0.105)</td>
<td>(0.103)</td>
<td>(0.105)</td>
</tr>
<tr>
<td><strong>Ethnic Identity “Closest”</strong></td>
<td>-0.083</td>
<td>-0.078</td>
<td>-0.095</td>
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<tr>
<td></td>
<td>(0.181)</td>
<td>(0.181)</td>
<td>(0.179)</td>
<td>(0.181)</td>
</tr>
<tr>
<td><strong>Moved for Family / Ethnicity</strong></td>
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<td>0.053</td>
<td>0.054</td>
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</tr>
<tr>
<td></td>
<td>(0.205)</td>
<td>(0.206)</td>
<td>(0.205)</td>
<td>(0.206)</td>
</tr>
<tr>
<td><strong>Age</strong></td>
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<td>0.010</td>
<td>0.010</td>
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<td></td>
<td>(0.008)</td>
<td>(0.008)</td>
<td>(0.008)</td>
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</tr>
<tr>
<td><strong>Muslim</strong></td>
<td>0.137</td>
<td>0.141</td>
<td>0.020</td>
<td>0.126</td>
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<td></td>
<td>(0.374)</td>
<td>(0.374)</td>
<td>(0.370)</td>
<td>(0.375)</td>
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<tr>
<td><strong>Male</strong></td>
<td>-0.110</td>
<td>-0.119</td>
<td>-0.084</td>
<td>-0.124</td>
</tr>
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<td></td>
<td>(0.182)</td>
<td>(0.182)</td>
<td>(0.181)</td>
<td>(0.183)</td>
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<tr>
<td><strong>Ewe</strong></td>
<td>0.439$^†$</td>
<td>0.465$^†$</td>
<td>0.403</td>
<td>0.452$^‡$</td>
</tr>
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<td>(0.266)</td>
<td>(0.268)</td>
<td>(0.267)</td>
<td>(0.269)</td>
</tr>
<tr>
<td><strong>Northerner</strong></td>
<td>-0.836$^⋆$</td>
<td>-0.859$^⋆$</td>
<td>-0.865$^⋆$</td>
<td>-0.860$^⋆$</td>
</tr>
<tr>
<td></td>
<td>(0.388)</td>
<td>(0.389)</td>
<td>(0.386)</td>
<td>(0.389)</td>
</tr>
<tr>
<td><strong>Ga</strong></td>
<td>-0.420$^†$</td>
<td>-0.402$^†$</td>
<td>-0.356</td>
<td>-0.406$^†$</td>
</tr>
<tr>
<td></td>
<td>(0.235)</td>
<td>(0.236)</td>
<td>(0.232)</td>
<td>(0.236)</td>
</tr>
<tr>
<td><strong>Years in neighborhood</strong></td>
<td>0.005</td>
<td>0.006</td>
<td>0.006</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.008)</td>
<td>(0.008)</td>
<td>(0.008)</td>
<td></td>
</tr>
<tr>
<td><strong>Party member</strong></td>
<td>0.226</td>
<td>0.242</td>
<td>0.223</td>
<td>0.241</td>
</tr>
<tr>
<td></td>
<td>(0.202)</td>
<td>(0.203)</td>
<td>(0.201)</td>
<td>(0.203)</td>
</tr>
<tr>
<td><strong>Constituency FEs</strong></td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>N</td>
<td>797</td>
<td>797</td>
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<td>797</td>
</tr>
</tbody>
</table>

***p < 0.001, **p < 0.01, *p < 0.05, †p < 0.1. Logistic regressions partially pooled by sampling location. The outcome is 2012 vote choice for each respondent’s co-ethnic party; those who did not vote in 2012 or who do not have a co-ethnic party are dropped from this analysis. Akan is the omitted, baseline ethnicity category. Note that the minimum value of ethnic fractionalization in the data is 0.38, not 0.

with a 6.4 percentage point decrease in the probability of voting for a co-ethnic party (95% CI: -12.0, -0.0)$^{41}$

In column 2 of Table I I interact fractionalization and neighborhood wealth. Consistent with

$^{41}$All predicted probabilities (including in each figure) are calculated as in Hanmer and Kalkan (2013), holding individual-level wealth and all other covariates fixed.
the predictions above, I find that ethnic voting is less common at high levels of diversity in wealthier neighborhoods \((p = 0.051)\). Figure 2 shows that there is significantly less ethnic voting after a 1 standard deviation increase in diversity around each respondent in wealthier neighborhoods, but no difference in poorer neighborhoods. The effect of neighborhood wealth is also signed as predicted. There is not a significant difference in ethnic voting from a 1 standard deviation increase in wealth in the most homogeneous neighborhoods, but a predicted 7.7 percentage point decrease in ethnic voting \((p = 0.051, 95\% \text{ CI: -16.3, 1.0})\) after similarly increasing wealth in the most diverse neighborhoods.

Figure 2: First differences in the probability of voting for co-ethnic party after a 1 standard deviation increase in fractionalization, by neighborhood wealth, with 95% confidence intervals.

The interaction between neighborhood diversity and wealth in Figure 2 persists after controlling for other variables expected to affect voting. In column 4, I repeat the model from column 2 while adding an indicator for whether each respondent evaluates the incumbent NDC government’s economic performance positively. I show in the SI that macro-economic performance evaluations are positively correlated with voting for the incumbent NDC. Column 4 of Table 1 shows, how-
ever, that controlling for these performance evaluations does not alter the relationship between neighborhood characteristics and support for co-ethnic parties.

For the second main prediction of the theory, I find less ethnic voting in wealthier neighborhoods where respondents are more likely to benefit from club goods from their non-co-ethnic party. I change the outcome variable to a binary indicator for NDC vote and replace fractionalization with the share of the population from each ethnic group around each respondent. While there are not clear differences in the full sample, this changes once Ga respondents are removed.

As described in Section 4, the minority Ga occupy a unique position in Greater Accra. As indigenes, Gas have greater access to patronage benefits than other residents regardless of where they live. Gas are significantly overrepresented in both elected and appointed local government positions under the NDC, including as the DCE (mayor) in each district in the survey sample, and were also similarly overrepresented under past NPP governments (Nathan 2016). Clientelism to Ga voters is targeted to the Ga through chiefs and family heads, who are more powerful than for other groups in Greater Accra, providing networks that both parties use to distribute goods, especially the NDC. This allows for higher rates of both club and private goods distribution to Ga communities relative to other voters.\footnote{I find that whether Ga respondents have close ties to traditional chiefs is a strong predictor of vote choice for the NDC, while ties to traditional leaders do not predict vote choice for other respondents (see SI). Chiefs for non-indigenous groups are not active within Accra.} If voting is influenced by differences in expectations of benefits between the parties, Ga are least likely to be sensitive to the composition of other groups around them. And because Ga control over local governments under both parties may lead to some favoritism to Ga communities regardless of the presidential election outcome (Nathan 2016), proximity to Ga may not alter the voting behavior of other voters.

Once Gas are removed, I find evidence of cross-ethnic voting in neighborhoods dominated by the other party’s ethnic groups. Figure 3 shows that increasing the Akan population around each respondent predicts lower NDC support (greater NPP support), particularly at higher levels of neighborhood wealth – even among respondents affiliated with the NDC. This is consistent
Figure 3: Change in the probability of voting for the NDC after a 1 standard deviation increase in the population share of each of the listed groups (Y-axis) across different levels of neighborhood-level wealth (X-axis), while individual-level wealth (and all other covariates) are held fixed. Includes 95% confidence intervals. Corresponding table is in the SI.

...with all respondents voting more often for the NPP in Akan neighborhoods where only the NPP is expected to deliver club goods. Similarly, a higher Ewe and Northern population – or Northern population alone – both predict more NDC support, especially at higher neighborhood wealth, even among Akan respondents. In the bottom-right panel of Figure 3, however, I find no similar relationship between NDC vote and the Ga population in each neighborhood.

43 In the SI, I restrict the sample by ethnic group in Figure 3 and find generally similar results.
44 The percentage of Ewes in all neighborhoods in the survey sample is too low to estimate this separately for Ewe population share.
6.2 The Mechanism: Favoritism Expectations

The proposed mechanism for these patterns is voters’ expectations about which party is more likely to benefit them. I measure these expectations using a survey experiment similar to an “endorsement experiment.” Each respondent was read a prompt about a hypothetical activity to be conducted by the government and asked if they expected that they (or their families) would benefit. The first treatment cued whether the activity would be done by the NDC or an NPP government, had they won in 2012. The second treatment was the project – one of three examples each of either a private or a club good.[45] Collapsing across examples, this makes 4 conditions (NDC v. NPP, club v. private goods).[46] The treatment effect of interest is the difference in the proportion of respondents expecting to benefit from their co-ethnic party versus their non-co-ethnic party for each good.[47] This is the causal effect on anticipated benefits from switching between a co-ethnic and non-co-ethnic government. This can also be re-labeled as the difference in expectations between the NDC and NPP for all respondents. Each treatment effect thus measures the relative difference in expectations between parties, not the overall amount of goods expected.

Consistent with instrumental theories, respondents have clear overall expectations of favoritism from their co-ethnic party. I estimate the co-ethnic party treatment effect in multi-level logistic regression models with the same predictors as above, where the outcome is expecting to benefit

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45 Multiple examples were used to average over idiosyncratic features of any specific good. They are: loans, job training, or financial assistance for private goods; school construction, water pipes, or drains and public toilets for club goods. All six are among the most common goods respondents reported politicians delivering in their neighborhoods in open-response questions.

46 To address the risk that respondents would answer more favorably about preferred parties due to partisanship (Carlson 2016), prompts began with discussion of scarcity to decouple answers about the specific example from judgments of a party overall. Respondents were willing to admit they would not receive goods from a favored party: 50% of NDC voters and 52% of NPP voters said they would not benefit from the good from their party. Example wording is: “The national government has limited resources, so when they do something like [EXAMPLE], they can’t do it everywhere. They have to do it in some places first before going to other places. If the NDC government was [EXAMPLE], do you think that neighborhoods like this would get it or would they do it more in other places? I’m asking for your personal opinion.” See the SI for wording of each prompt.

47 $T = 1$ for Akans asked about the NPP and Ewes, Northerners, and Gas asked about the NDC. Balance statistics are in the SI.
from the good in the prompt (see SI). Respondents are 13.7 percentage points (95% CI: 7.8, 19.4) more likely to expect to benefit from their co-ethnic than non-co-ethnic party.

More importantly, expecting to benefit from a co-ethnic party in the experiment is strongly correlated with actual ethnic voting. Among those receiving the co-ethnic party treatment ($T = 1$), respondents were 20.6 percentage points more likely (95% CI: 12.6, 28.0) to vote for that party when answering that they expected to benefit from the example good. In the reverse condition ($T = 0$), I similarly find that respondents are 20.7 percentage points more likely (95% CI: 11.5, 31.0) to report cross-ethnic voting for the non-co-ethnic party when expecting that it would benefit them instead.

Not only are expectations in the experiment correlated with ethnic voting, but the treatment effects vary across neighborhoods in patterns consistent with the theory and the results for vote choice. I discuss the results for the experimental questions about club goods and private goods separately. For club goods, I find that the co-ethnic party treatment effect for club goods is smaller at higher levels of neighborhood diversity. Panel (a) of Figure 4 shows the expected difference in club goods from a co-ethnic versus non-co-ethnic party declines as local diversity increases, consistent with voters expecting no difference in the club goods they will get from either party in more diverse neighborhoods.

Also as in Figure 1, respondents are more likely to expect club goods from the party not affiliated with their ethnic group when surrounded by more co-ethnics of that party 48 Restricting to non-Gas for comparability to Figure 5, I reclassify the treatment effect as the difference between the NDC and NPP cues for club goods and interact an indicator for the NDC treatment with the population share of each ethnic group. I estimate these models for all neighborhoods, as well as after splitting the sample by the mean value of the neighborhood wealth index (-0.1), to test the double interaction between neighborhood composition, wealth, and the NDC treatment (see SI).

48 This only holds in wealthier neighborhoods, but this is where club goods expectations are most important for vote choice under the theory.
Figure 4: First differences for the co-ethnic party treatment effect for questions about: (a) club goods expectations, by ethnic fractionalization; and (b) private goods expectations, by percentage of population in the local neighborhood from ethnic groups affiliated with the respondent’s co-ethnic party. Both panels include 95% confidence intervals. See SI for the regression table.

Moving from the 10th to 90th percentile of the Akan percentage in neighborhoods with above average wealth results in a predicted 26.7 point increase in expected favoritism for club goods from the Akan-affiliated NPP over the NDC ($p = 0.08, 95\% \text{ CI: } -56.8, 3.3$), regardless of each respondent’s own ethnicity. Similarly, moving from the 10th to 90th percentile of Northern population in neighborhoods with above average wealth results in a 31.2 percentage point shift in expectations of favoritism for club goods towards the Northern-affiliated NDC ($p = 0.053, 95\% \text{ CI: } -3.7, 63.4$), although there is limited variation in the percentage of Northerners in the wealthiest neighborhoods with which to estimate this relationship. Also mirroring Figure 3, expectations about club goods do not vary across the share of Gas in the neighborhood.

Results of the survey experiment for private goods are also consistent with the theory. This is

49 Expectations for Ga respondents alone also match the results for vote choice (see SI).
shown in two ways. First, I find that respondents’ expectations about private goods in the survey experiment only correlate with their support for ethnically-affiliated parties in poorer neighborhoods where respondents report that private goods distribution actually happens (see SI). This is consistent with private goods expectations primarily influencing ethnic voting in poor neighborhoods, as predicted in Figure 1, but not in wealthier neighborhoods, where these goods are rarely distributed (as noted above). \(^{50}\)

Second, in the theory section above I argue that voters may be particularly likely to benefit from private goods distribution from their ethnically-affiliated party when they live in a poor neighborhood in which they are in the local ethnic minority. As one of the few co-ethnics of the government living in these neighborhoods, minority group voters in these neighborhoods may be first in line to benefit from private goods that their co-ethnic party gains control over if it wins the election, such as the government job and loan programs discussed in Section 4. Consistent with this argument, in Panel (b) of Figure 4 I interact the co-ethnic party treatment in the experiment with the percentage of residents in the respondent’s neighborhood from ethnic groups affiliated with the respondent’s co-ethnic party. I show that expectations of ethnic favoritism in the distribution of private goods are largest in neighborhoods where respondents are in the local minority. This means, for example, that Akan voters particularly expect to benefit from private goods from the NPP instead of the NDC in poor neighborhoods with few other Akans. This can explain why there is still significant ethnic voting in poor neighborhoods even when voters are in the local ethnic minority. \(^{51}\)

\(^{50}\)In wealthier neighborhoods, the survey experiment asks a question about who respondents think would benefit from hypothetical private goods distribution that rarely occurs in practice.

\(^{51}\)Figure 1 suggests that voters should have expectations of ethnic favoritism in private goods distribution in poor neighborhoods at all levels of ethnic fractionalization (all columns of Figure 1). Consistent with this prediction, I also find that expectations of favoritism about private goods in the survey experiment are constant across levels of neighborhood fractionalization.
7 Alternative Explanations

Neighborhoods are not randomly assigned. The selection, or sorting, process of voters into neighborhoods may confound any correlation between neighborhoods and voting. And even if these correlations are real, a different mechanism, such as cross-ethnic socialization, may be operating. Importantly, each of these alternative explanations – sorting and contact – likely operates as much in poor neighborhoods of the city as in middle or upper class neighborhoods: there is little reason respondents would sort based on partisanship in wealthy neighborhoods but not also in poor neighborhoods, and there is likely more direct interaction among neighbors in dense slums than wealthier neighborhoods. This is inconsistent with the interaction terms above between neighborhood ethnic composition and wealth above. If the results were explained by sorting or social contact, the correlation between ethnic context and vote choice should be at least as strong in poor as in wealthier neighborhoods, not the opposite. Nonetheless, I test and find little support for both alternatives below.

7.1 Endogenous Sorting

Two different types of sorting could confound the results. First, voters could have explicitly selected into neighborhoods by partisanship, creating a spurious correlation between neighborhoods and voting. Second, voters may have implicitly sorted if their ability to choose locations was constrained by individual characteristics which also affect vote choice.

In the first type of sorting, Akans who support the NDC could be more likely to move to non-Akan neighborhoods. Respondents were asked open-ended questions about how they came to their current homes. Zero listed partisanship as a motivation for choosing their location.\textsuperscript{52} Greater Accra suffers from a housing shortage, with high rents relative to income, and real estate markets are

\textsuperscript{52} 10.8\% listed access to public services among their reasons for choosing a neighborhood. The main results hold when either controlling for this or dropping these respondents entirely (see SI).
informal, with high costs to re-location. Residents face a limited menu of neighborhood options, constraining the extent to which they can explicitly sort based on non-economic factors like partisanship. Moreover, if this type of sorting is a confounder, there should be a correlation between having moved (and thus actively chosen a neighborhood) and vote choice. Re-estimating Table including an indicator for whether a respondent moved shows no correlation between moving and ethnic voting (see SI).

Some respondents are better able to sort than others, however. I identify the respondents most likely to have been able to sort on non-price factors if they had wanted to in several ways. Respondents were asked if they had considered living in other neighborhoods when searching for a home, or only considered one community. Overall, 20.3% overall reported searching in multiple neighborhoods, which indicates having chosen a neighborhood among alternatives. There are no differences in the results when controlling for this and explicitly choosing neighborhoods is not correlated with ethnic voting (see SI). Wealth is also a key determinant of the ability to chose neighborhoods. All analyses above already control for measures of wealth, employment, and education. I also drop the top 25% of the sample on the assets or education/employment indices, removing those likely to have had the widest range of neighborhood choices (Hopkins and Williamson 2012). All results remain the same (see SI).

That many residents are constrained, however, raises concern over the second type of sorting. By far the most common means respondents reported finding housing was through family members or co-ethnics; 75% of respondents came to their current locations to join family or people from their home town or ethnic group. This would account for the results if voters with closer ties to their ethnic group, or for whom ethnic identity is more salient, are both more likely to find housing where more family and co-ethnics live, and also more likely to vote for ethnically-aligned parties. Respondents who found their homes through these ties are not more likely to live in less diverse

53Ghanaian landlords typically require two years rent in advance and tenants have little recourse to reclaim it, constraining sorting. Even in the United States, concerns over neighborhood quality, commuting, and housing costs trump preferences for living near co-partisans (Nall and Mumolo 2013).
neighborhoods, however, inconsistent with this being a confounder. All models already control for whether respondents moved for these reasons and this does not predict voting (Table 1).54

The results may also be due to ties to rural areas.55 Earlier literature attributes the politicization of ethnicity in urban areas to a struggle among rural-urban migrants to capture wealth and target it back to rural homelands (Gugler and Flanagan 1978, Bates 1983). This would explain the results if respondents in neighborhoods with larger populations from their own ethnic groups are more likely to have these rural ties, and vote for co-ethnic parties because of them. I control for ties to rural areas in three ways. First, results in Table 1 and Figure 2 are robust to controlling for whether respondents regularly visit home regions outside Accra. Respondents were also asked if they prefer that the government focus more resources on the community where they live now or the community “they hail from.” Controlling for whether respondents prefer that state resources be targeted outside Greater Accra does not change the findings and is not correlated with ethnic voting. I also control for the percent of each respondent’s life lived in Greater Accra, as a measure of recency of rural-urban migration, and find no differences.

7.2 Socialization and Contact

A different mechanism could also explain the results. Voters in more diverse neighborhoods will have more socialization with other ethnic groups. This could explain the results if these voters develop more positive views about other groups and become more likely to vote for parties affiliated with them.56 The most direct form of cross-ethnic contact is when voters have family members or share their homes with people from other ethnic groups. The survey recorded the ethnicity of the other people in each respondent’s household; 24.5% of respondents live with family or other

54 In addition, all results already control for the individual salience of ethnicity (Eifert et al. 2010) and it also does not predict voting behavior.

55 The majority (55%) of respondents in the survey were born in Greater Accra and are not migrants.

56 Kasara (2013) shows how inter-ethnic contact affects trust in Kenya. Ichino and Nathan (2013) finds no correlation between these same attitudes and vote choice in Ghana, however.
household members from a group aligned with their non-co-ethnic party. Re-estimating Figures 2 and 3 controlling for this returns substantively identical results, however, and this does not predict vote choice (see SI). Among respondents with the most contact with other ethnic groups, the relationship between neighborhood characteristics and voting is unchanged.

In addition, a socialization mechanism would explain the results if the neighborhood variables used here are proxies for voters’ social ties. These variables are likely poor measures of social networks, however. All urban residents likely have regular interactions with people from other groups, regardless of the specific composition of the neighborhood within 500 meters of their home. This is especially the case for the 36% of respondents who commute to work in a different neighborhood. For those spending much of their time away from home, a variable measuring the ethnic composition of the neighborhood directly around their home is least likely to accurately measure their social network. If the results are only due to social ties, correlations between neighborhood characteristics and voting should be significantly weaker for these respondents. I repeat the analysis interacting an indicator variable for those respondents who commute to work elsewhere with the neighborhood characteristics variables (see SI). I find no interactions – among those who do commute, correlations between neighborhood characteristics and voting behavior are the same as for those who do not, suggesting that differences in social ties are unlikely to explain the results.

8 Conclusion

Modernization accounts predict that African democracies will transition away from ethnic competition as they continue to urbanize. But rather than uniformly less ethnic voting in urban areas, I find significant within-urban variation in ethnic voting. This is not explained by the mechanisms expected by modernization theories: differences in voters’ wealth, education, or ethnic social identification. Instead, this variation is due to differences in voters’ instrumental expectations of the resources they will receive in different places within the same city.
Ultimately, these results suggest that rather than consistently reducing ethnic political competition, urban growth may be pulling ethnic politics in two directions at once. Even as urbanization creates more diverse, middle class neighborhoods where I find the connection between ethnicity and vote choice is fraying, urbanization also means the rapid expansion of slums (UN-Habitat 2010), where incentives for ethnic voting are being reinforced. Ethnic voting also remains common in ethnically segregated neighborhoods, even when they are wealthy. We cannot point to the wealthy, diverse neighborhoods alone and claim that modernization theory’s predictions are being borne out, while ignoring the remainder of these cities. As urban slums grow and ethnic segregation persists, political dynamics in the neighborhoods with significant ethnic voting are just as much outcomes of urbanization as in the neighborhoods without it. Accounts of the political effects of urbanization must recognize that these realities can co-exist next to each other in the same city at the same time.
References


